

Notice and Agenda of a Board Workshop

Tuesday, September 27, 2016 at 4:00 p.m.

MEETING LOCATION: District Administration Building

12770 Second Street, Yucaipa

MEMBERS OF THE BOARD: Director Ken Munoz, Division 1

Director Bruce Granlund, Division 2

Director Jay Bogh, Division 3

Director Lonni Granlund, Division 4 Director Tom Shalhoub, Division 5

I. Call to Order

II. Public Comments At this time, members of the public may address the Board of Directors on matters within its jurisdiction; however, no action or significant discussion may take place on any item not on the meeting agenda.

III. Staff Report

IV. Presentations

- A. Overview of the California Drought and Yucaipa Valley Water District's Action Plan Related to the State Water Resources Control Board Water Conservation Restrictions [Workshop Memorandum No. 16-136 Page 5 of 73]
- B. Overview of the Yucaipa Valley Water District's Strategic Plan for a Sustainable Future, the Sustainable Groundwater Management Act and Related Water Resource Issues [Workshop Memorandum No. 16-137 Page 34 of 73]

V. Capital Improvement Projects

- A. Status Report on the Construction of a 6.0 Million Gallon Drinking Water Reservoir R-12.4
 Calimesa [Workshop Memorandum No. 16-138 Page 42 of 73]
- B. Status Report on the Digester Cleaning and Cover Replacement Project at the Wochholz Regional Water Recycling Facility [Workshop Memorandum No. 16-139 Page 49 of 73]

VI. Policy Issues

A. Discussion Regarding Potential On-Bill Financing for Recycled Water Connection Improvements to Ridgeview Elementary School [Workshop Memorandum No. 16-140 -Page 53 of 73]

Any person with a disability who requires accommodation in order to participate in this meeting should contact the District office at (909) 797-5117, at least 48 hours prior to the meeting in order to make a request for a disability-related modification or accommodation.

Materials that are provided to the Board of Directors after the workshop packet is compiled and distributed will be made available for public review during normal business hours at the District office located at 12770 Second Street, Yucaipa. Meeting materials are also available on the District's website at www.yvwd.dst.ca.us

VII. Administrative Issues

- A. Overview of a Joint Infrastructure Agreement with the City of Yucaipa for Uptown Water System Improvements [Workshop Memorandum No. 16-141 Page 56 of 73]
- B. Overview of a Joint Infrastructure Agreement with the City of Yucaipa for Sewer System Improvements on Lower Yucaipa Boulevard [Workshop Memorandum No. 16-142 Page 60 of 73]
- C. Discussion Regarding the Appointment of an Alternative Representative to the San Bernardino Valley Municipal Water District's Advisory Commission [Workshop Memorandum No. 16-143 Page 63 of 73]
- VIII. Director Comments
- IX. Adjournment

Staff Report



Presentations





ucaipa Valley Water District Workshop Memorandum 16-136

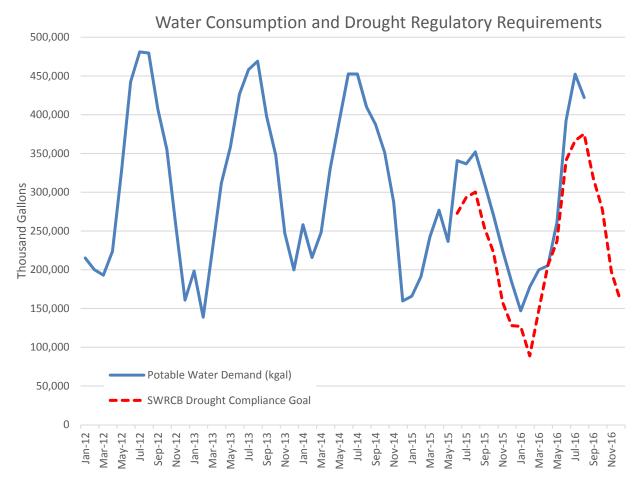
Date: September 27, 2016

Subject: Overview of the California Drought and Yucaipa Valley Water District's

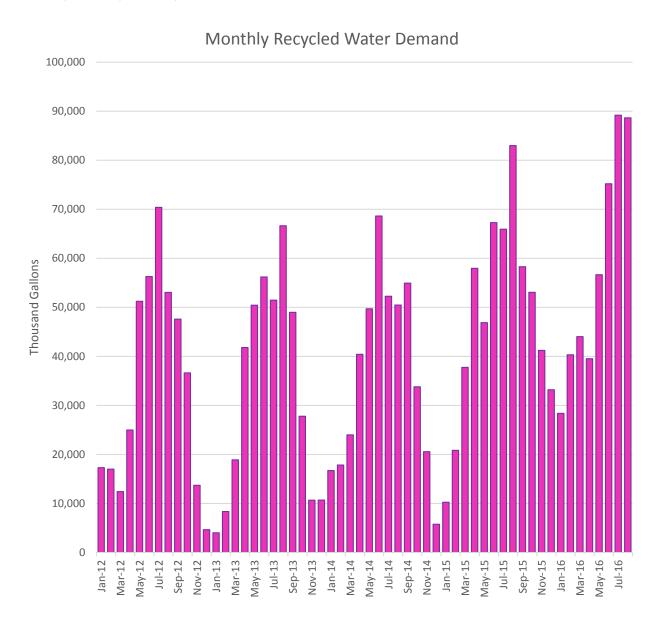
Action Plan Related to the State Water Resources Control Board Water

Conservation Restrictions

On May 5, 2015, the State Water Resources Control Board ("SWRCB") adopted emergency regulations to achieve a 25% statewide reduction in potable urban water use. These stringent water use regulations required the Yucaipa Valley Water District to achieve a 36% reduction from the amount of drinking water produced in 2013. In March 2016, the SWRCB modified the emergency water conservation requirements for Yucaipa Valley Water District to a 34% reduction from the amount of drinking water produced in 2013. In June 2016, the District self-certified a water conservation reduction of 20%. Each level of regulated water conservation requirement is illustrated in the chart below as the red-dashed line.



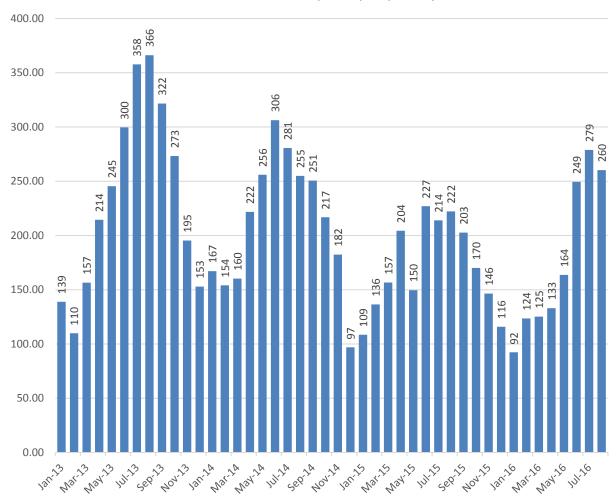
During the current drought, the Yucaipa Valley Water District has been able to increase the amount of recycled water delivered throughout our service area. The chart below shows the monthly delivery quantity to District customers.



The customers of the Yucaipa Valley Water District responded accordingly and significantly reduced the amount of drinking water consumed per person. As shown below, the per capita drinking water consumption dropped significantly from 366 R-GPCD¹ in August 2013 to 222 R-GPCD in August 2015, representing a decrease of 39%. However, due to the hot weather this summer and the eased water conservation requirements statewide, the R-GPCD jumped significantly.

¹ R-GPCD - Residential gallons per capita per day.

Monthly Water Consumption Residential Gallons per Capita per Day





Self-Certification of Supply Reliability for Three Additional Years of Drought Pursuant to Section 864.5 of Title 23 of the California Code of Regulations for the Yucaipa Valley Water District

Supporting Analysis and Calculations June 20, 2016

Background

On April 1, 2015, Governor Brown issued Executive Order B-29-15 that directed the State Water Resources Control Board to impose water supplier restrictions to achieve a statewide 25 percent reduction in potable urban usage through February 2016. As a result of this Executive Order, the Yucaipa Valley Water District was required to achieve an emergency water conservation standard of 36% based on a reported Residential Gallons per Capita per Day (R-GPCD) of 265.0 for the period of July 2014 to September 2014. The regulations were approved by the State of California, Office of Administrative Law on May 18, 2015 and required compliance with the emergency water conservation standard through February 2016.

On November 13, 2015, Governor Brown issued Executive Order B-36-15 that directed the State Water Resources Control Board to extend water conservation restrictions until October 31, 2016 if drought conditions persist through January 2016. The State of California, Office of Administrative Law subsequently approved regulations that provided more flexibility to urban water suppliers by considering specific factors that influence water use throughout California. The regulations changed the emergency water conservation standard for the Yucaipa Valley Water District from a 36% conservation standard to a 34% conservation standard based on monthly water use during the same month in Calendar Year 2013.

On May 9, 2016, Governor Brown issued Executive Order B-37-16 that directed the State Water Resources Control Board to extend water conservation restrictions through January 2017 and make adjustments in recognition of the differing water supply conditions throughout California. This Executive Order is based on the likelihood that drought conditions will likely continue for the foreseeable future and additional action by both the State Water Resources Control Board and local water suppliers will be necessary to prevent waste and the unreasonable use of water. Based on the recently released regulations, Urban Water Retail Suppliers are required to develop a localized "stress test" approach to ensure at least a three year supply of water is available to customers under the ongoing drought conditions.

The Yucaipa Valley Water District recognizes the importance of the newly enacted regulations and has based the data sources and calculations on the following requirements and assumptions:

- The current conditions to use in the self-certification calculations are as of October 1, 2016.
- The precipitation in Water Year 2017 mirrors that of Water Year 2013, precipitation in Water Year 2018 mirrors that of Water Year 2014, precipitation in Water Year 2019 mirrors that of Water Year 2015. (Section 864.5(b)(1)). Only precipitation data from the California Data Exchange Center (e.g., http://cdec.water.ca.gov/cgi-progs/prevprecip/PRECIPOUT), or CIMIS station data or an equivalent source may be used. **Do not average precipitation**.

State Water Resources Control Board – Self-Certification Statement Yucaipa Valley Water District – June 20, 2016

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- There are no temporary change orders that increase the availability of water to any urban water supplier are issued by the State Water Resources Control Board in the next three years.
- Potable water supply only includes sources of supply available to the supplier that could realistically be
 used for potable drinking water purposes during the time period identified in the regulation.
- If a water source is not of sufficient quality to be realistically treated and use as potable water by the
 water retailer, it shall not be included as a water supply.
- Consider requirements and assumptions that are used that impact supply reliability, for example, in the
 case of groundwater, if your water agency has its own requirement not to lower the water level of an
 aquifer below a certain amount, provide an explanation in the "Notes and comments".
- Groundwater: use the quantity of groundwater that is accessible, without addition of new wells or completion of treatment projects that would fall outside the three-year projection period (2016-17 through 2018-19).
- If new diversions or treatment equipment or facilities will come on-line between now until the end of Water Year 2019, sufficient evidence must be provided to indicate is it going to be implemented (e.g., funds have been allocated, contract with a builder has been approved).
- If a water supply is dedicated for another purpose (e.g., agriculture) and is therefore committed for another use, it is not available and shall be subtracted for the subtotal of water supplies.
- Identify all sources of data used (e.g., "our water product information is from Supervisor Control and Data Acquisition (SCADA)" and include a link to the source and identify a pinpoint citation to the pertinent information).
- Provide supporting documentation the covers each water source. For example, when the amount of water
 obtained from one river is summed in one number and there are multiple diversion or treatment points,
 then the supporting documentation shall describe each diversion and/or treatment point and the amount
 of water from each that are summed together and equal the amount on the worksheet.
- Recycled water for purple pipe systems is not a potable supply and is not included as a supply on Worksheet 1. You may use the "Notes and Comments" section in this section to describe non-potable recycled water

Given the requirements and assumptions above, the Yucaipa Valley Water District decided to take a conservative approach by adding <u>additional stress to the anticipated water sources of supply</u> thereby implementing a proactive water conservation strategy for our community. Without the certainty of knowing what the future holds for our water resources, it is prudent and reasonable to increase the probability of severe/extreme drought conditions in California.

Determine the Annual Total Potable Water Demand

Available Water Supplies - Wholesaler Supplied

The Yucaipa Valley Water District relied upon water production data generated monthly by the Water Resources Department to tabulate the amount of potable water production in calendar year 2013 and calendar year 2014. The total amount of potable water produced by the Yucaipa Valley Water District is provided below.

	Potable Water	Potable Water	Calculated Annual
	Production for	Production for	Potable Water
	Calendar Year 2013	Calendar Year 2014	Demand
Potable Water Production (acre feet)	12,040	12,011	12,026

Estimate the Annual Total Potable Water Supply

The Yucaipa Valley Water District receives imported water from two State Water Contractors: San Bernardino Valley Municipal Water District and San Gorgonio Pass Water Agency.





Both State Water Contractors have provided the Yucaipa Valley Water District with anticipated water deliveries for Water Years 2017, 2018, and 2019 as shown below:

	San Bernardino Valley Municipal Water District	San Gorgonio Pass Water Agency	Total Wholesale Supply by Water Year
Water Year 2017 (acre feet)	7,763	500	8,263
Water Year 2018 (acre feet)	4,324	500	4,824
Water Year 2019 (acre feet)	4,997	500	5,497
Total Anticipated Supply (acre feet)	17,084	1,500	18,584

Internet reference for San Bernardino Valley Municipal Water District: http://www.sbvmwd.com/home/showdocument?id=4188 Internet reference for San Gorgonio Pass Water Agency: http://www.sqpwa.com/wp-content/uploads/2016/06/SWRCB-Emergency-Conservation-Regs-Three-Year-Projection-June-2016.pdf

In order to perform the "stress test" of the water supply sources based on the SWRCB criteria outlined above, the Yucaipa Valley Water District reduced the anticipated quantity of imported supply included in SWRCB Worksheet 1: Total Available Water Supply for Individual Water Supplier to represent an average of the lowest two years of imported water projected to be delivered to Yucaipa Valley Water District by the San Bernardino Valley Municipal Water District [7,763 + 4,324 + 4,997 = 17,084 / 3 = 4,661 acre feet per year]. This conservative approach will directly reduce the calculated imported water supply from the San Bernardino Valley Municipal Water District by 3,101 acre feet over the next three years [17,084 – 13,983 = 3,101].

	San Bernardino Valley Municipal Water District	Total Wholesale Supply by Water Year	
Water Year 2017 (acre feet)	7,763 <u>4,661</u>	500	8,263 <u>5,161</u>
Water Year 2018 (acre feet)	4,324 4,661	500	4,824 5,161
Water Year 2019 (acre feet)	4,997 4,661	500	5,497 5,161
Total Anticipated Supply (acre feet)	17,08 4 <u>13,983</u>	1,500	18,58 4 <u>15,483</u>

The calculated reduction in imported water does not mean the water supply will not be used by the Yucaipa Valley Water District. Rather, by de-obligating the dependency of 3,101 acre feet of imported water supply, the Yucaipa Valley Water District will purchase this water supply and recharge the local groundwater supply to hedge against unexpected water supply issues during the next three years, or to reduce the impacts of future drought conditions beyond Water Year 2019.

Available Water Supplies - Surface Water Sources

The Yucaipa Valley Water District receives potable water from the Oak Glen Surface Water Filtration Facility. Based on the SWRCB criteria outlined above, the quantity of potable water for the "Stress test" will be less than the anticipated quantity of potable water received from these surface water sources of supply.

	Anticipated Quantity of Potable Water from the Oak Glen Surface Water Filtration Facility	"Stress Test" Quantity of Potable Water from the Oak Glen Surface Water Filtration Facility						
Water Year 2017 (acre feet)	240	220						
Water Year 2018 (acre feet)	229	220						
Water Year 2019 (acre feet)	234	220						
Total Anticipated Supply (acre feet)	703	660						

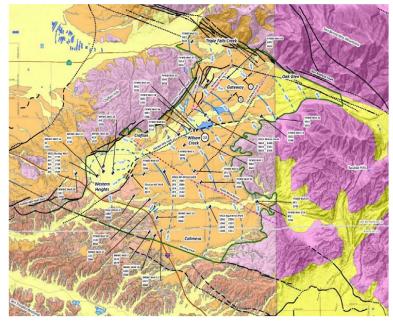
The Yucaipa Valley Water District believes that based on the criteria required for the self-certification, the quantity of water provided by the Oak Glen Surface Water Filtration Facility will be consistent at 220 acre feet per year for the next three water years. The difference between the anticipated quantity of potable water from surface water sources of 43 acre feet [703 acre feet – 660 acre feet = 43 acre feet] will provide additional surface water supplies that can be recharged into the local groundwater supply for future use.

Available Water Supplies - Local Groundwater Water Sources

The Yucaipa Valley Water District produces groundwater from local groundwater basins. In recent years, the following quantity of local groundwater was produced by the Yucaipa Valley Water District:

- Calendar Year 2013:
 - 7,243 acre feet
- Calendar Year 2014:
 - 9,027 acre feet
- Calendar Year 2015:
 - o 4,905 acre feet

Based on the SWRCB criteria outlined above, the quantity of potable water for the "Stress test" from groundwater sources will be based on the least amount of water received from groundwater sources of supply over the past three years, or 4,905 acre feet per year. By reducing the reliance on local



groundwater supplies for the next three years, the Yucaipa Valley Water District estimates that approximately 1,500 acre feet to 2,000 acre feet of groundwater can be saved each year for future use. The specific quantity depends on the amount of groundwater produced by other water producers that have access to the Yucaipa Groundwater Basins.

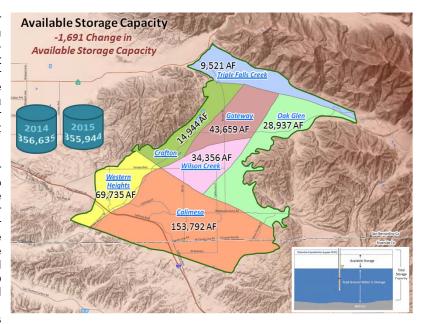
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	"Stress Test" Quantity of Treated Water from local groundwater sources
Water Year 2017 (acre feet)	4,905
Water Year 2018 (acre feet)	4,905
Water Year 2019 (acre feet)	4,905
Total Anticipated Supply (acre feet)	14,715

The Yucaipa Valley Water District believes that based on the criteria required for the self-certification, the 4,905 acre feet of groundwater produced per year will result in sustainable groundwater levels and a possibility that groundwater levels may increase throughout the Yucaipa basin area.

The reduction in groundwater production over the past two years has resulted in more groundwater in storage. For example, from calendar year 2014 to calendar year 2015, the change in storage space above the groundwater table decreased from 356,635 acre feet to 355,944 acre feet. This is a good indicator that an additional 1,691 acre feet of groundwater was



saved in the local groundwater basin. Additional information about the Yucaipa Basin area and the reports prepared by the Yucaipa Valley Water District can be downloaded from the following link:

http://documents.yvwd.dst.ca.us/government/california/self-certification/140417 yucaipa sy full report geoscience.pdf

On June 15, 2016, the Yucaipa Valley Water District Board of Directors authorized the continuation and refinement of the original study. Information about the future anticipated scope of work can be downloaded from the following link:

http://documents.yvwd.dst.ca.us/government/california/self-certification/160615 16-058 geoscience.pdf

These reports provide important groundwater monitoring data that will be available to monitor the conditions of the groundwater basins in the future.



State Water Resources Control Board Posts 36-Month Urban Water Supply Stress Test Submissions

On May 18, the State Water Resources Control Board adopted a statewide water conservation approach that allows urban water suppliers to replace their prior state-assigned percentage target reduction with a localized "stress test" approach based on a showing of whether they have at least a three-year water supply under extended drought conditions.

The revised emergency regulation followed significantly improved water supply conditions in most of the state and recognition that urban water suppliers are now better positioned to respond to drought impacts following their experiences conserving upwards of 24 percent of their water use over the past 13 months than they were in mid-2015.

The revised regulation requires individual urban water suppliers to self-certify the level of available water supplies they have assuming three additional dry years. Wholesale water agencies were also required to include documentation about how regional supplies would fare under three additional dry years. Both urban water suppliers and wholesale suppliers are required to report the underlying basis for their assertions, and urban water suppliers are required to continue reporting their conservation levels. The State Water Board has not independently verified the information, but reserves the ability to reject certifications later found to be erroneous.

Several Benefits to Three Year "Stress Test" Effort

The purpose of the three-year "stress test" was to acknowledge both the level of water supplies available to different areas, through improved hydrology and/or significant investments in new supplies, e.g., recycled water, groundwater banking, local surface and groundwater storage, desalination, stormwater capture, or other methods. By choosing a three-year conservative planning horizon, the state could step back this year from its unprecedented specific target setting.

Water suppliers that would experience shortage conditions in 2019 under the three-dry-years assumptions must meet a state-imposed conservation standard equal to the shortage level. For example, a supplier with a 12 percent shortage will now have a 12 percent conservation standard. Water suppliers whose submittals show no shortage conditions are limited to their 2013 water use and are encouraged to conserve more.

Submitting a self-certification was optional. Water suppliers that did not submit self-certifications will retain their conservation standard from March 2016, which 32 decided to accept. Others, even if they meet the "stress test," are expected to and have retained either a percentage or other requirement-based conservation program. The State Water Board will continue to monitor and require reporting of water use and conservation results monthly throughout the year.







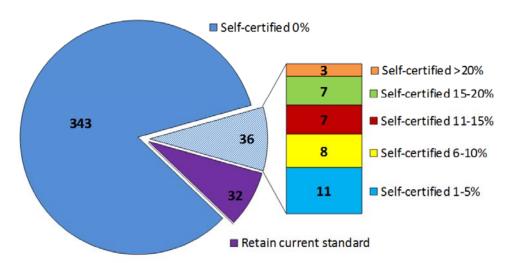
All state-imposed conservation standards will be in place through January 2017, at which point the State Water Board will evaluate water supply conditions and the level of conservation savings and determine whether addition emergency conservation regulations are necessary. Executive Order B-37-16 directs the State Water Board to be prepared to reestablish mandatory conservation levels if conditions warrant.

Hundreds of Submitted, Individual Self Certified Tests Reviewed

State Water Board staff reviewed the self-certification submittals to ensure they were complete, well-documented, and clear. Since the June 22 submission deadline, staff has worked to follow up with suppliers whose self-certifications were inadequate.

Nearly all of the water suppliers that were contacted about an inadequate self-certification furnished additional information. However, nine suppliers' submissions are still inadequate, and these suppliers were issued Informational Orders on August 16, 2016. Those suppliers will have to provide the identified additional information to the State Water Board. Suppliers that do not provide complete self-certifications may have them rejected, and be returned to their March 2016 conservation standard. If a supplier does not respond to an Information Order within 30 days, the supplier may also face monetary penalties.

The majority of suppliers projected sufficient potable water supply under three additional years of drought and passed the "stress test", meaning zero percent state-mandated conservation standard compared to 2013. Thirty-six suppliers identified new conservation standards based on supply shortfall from "stress test" results. Thirty-two urban water suppliers did not submit "stress test" and retain March 2016 conservation standard. The figure below shows the results of the self-certifications and status of conservation standards.



*The above results include one supplier new to reporting that also submitted "stress test" information, bringing the total number of urban water suppliers to 411.



More than 4.2 million Californians are served by the 68 urban water suppliers that will have a state-mandated conservation standard, either based on the "stress test" results or because suppliers opted to keep their existing conservation standard.

Despite the conservation standard of zero percent, the majority of water suppliers reported water savings in June 2016 compared to June 2013. In the Bay Area, Contra Costa Water District, Dublin San Ramon Services District, and Alameda County Water District are among 17 water suppliers that passed their "stress test" and reported water conservation above 25 percent in June 2016. Additionally, several agencies opted to maintain voluntary conservation standards above the requirements based on the "stress test" results.

The regulation keeps in place the monthly reporting requirements and specific prohibitions against certain water uses. Those prohibitions include watering down a sidewalk with a hose instead of using a broom or a brush, or overwatering a landscape to where water is running off the lawn, over a sidewalk and into the gutter. Prohibitions directed to the hospitality industry also remain in place. Prohibitions against homeowners associations taking action against homeowners during a declared drought remain as well. As directed by Governor Brown's Executive Order B-37-16, the Board will separately take action to make some of these requirements and prohibitions permanent.

The adopted regulation is the result of review of many meetings, written and oral comments from a public workshop on <u>April 20</u> to receive input on conservation needs through the summer and fall, and lessons learned since the Water Board first adopted drought emergency water conservation regulations.

Governor and Board Actions Achieved Historic Conservation Statewide In his April 1, 2015 Executive Order, Governor Brown mandated a 25 percent water use reduction by users of urban water supplies across California.

In May 2015, the State Water Board adopted an emergency regulation requiring a cumulative 25 percent reduction in overall potable urban water use over the following 9 months. The May 2015 Emergency Regulation used a sliding scale for setting conservation standards, so that communities that have already reduced their residential gallons per capita per day (R-GPCD) through past conservation had lower mandates than those that had not made such gains since the last major drought. Conservation tiers for urban water suppliers were set between eight percent and 36 percent, based on residential per capita water use for the months of July - September 2014.

During this time, statewide water conservation was <u>unprecedented</u>. In those 10 months alone, the state realized nearly a 24 percent savings in water use as compared to same months in 2013, resulting in some 1.30 million acre-feet of water conserved throughout California, enough to supply 6.5 million people with water for an entire year.



On Feb. 2, 2016, based on Governor Brown's <u>November 2015 Executive Order</u>, the State Water Board approved an updated and extended emergency regulation that continued mandatory reductions through October.

The <u>February 2016 Emergency Regulation</u> responded to calls for continuing the conservation structure that has spurred such dramatic savings, while providing greater consideration of some localized factors that influence water needs around the state: climate differences, population growth and significant investments in new local, drought-resilient water supplies such as potable wastewater reuse and desalination. The February Emergency Regulation was superseded by the Board's May 18 emergency regulation. Under the new reporting structure adopted by the Board May 18, water districts will continue to <u>report water use</u>, but had the option of identifying a new conservation standard based on any shortfall in projected supply over three drought years.

The State Water Board's May 18 emergency regulation responded in part to Governor Brown's May 9, 2016 Executive Order directing actions aimed at using water wisely, reducing water waste, and improving water use efficiency for the years and decades ahead. The Executive Order, in part, directed the State Water Board to extend the emergency regulations for urban water conservation through the end of January 2017. As called for in his Executive Order, it is anticipated the State Water Board will be working closely with the Department of Water Resources and other agencies to define and establish water efficiency standards for the state to ensure a more reliable water supply and to make state water users more resilient and prepared over the long-term.

(This fact sheet was last updated August 15, 2016)



Background

- Emergency urban water conservation regulation extended and modified in May 2016
- requirements from May 2015 emergency regulation Continued prohibitions and other end-user
- Self-Certification approach for urban water suppliers
- Conservation standard based on "stress-test" of water supply reliability
- Option to keep existing conservation standard

Self-Certification of Supply Reliability "Stress Test"

- Water supply analysis based on three additional years of drought using 2013-2015 hydrologic conditions
- Use 2013-2014 potable demand levels
- Set conservation standard commensurate with level of shortage at end of third year (2019)
- Wholesale agencies required to provide water availability estimates

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"Stress Test" Submissions

48 wholesalers provided information

portal/docs/emergency_reg/wholesale_websites/wholesale_websites.pdf http://www.waterboards.ca.gov/water_issues/programs/conservation_

- 378 out of 411 urban water suppliers, plus one supplier new to reporting, completed the "stress-test"
- Two aggregated self-certifications:
- San Diego County Water Authority (22 suppliers)
- Water Facilities Authority (5 suppliers; Chino/Ontario area

Review Process

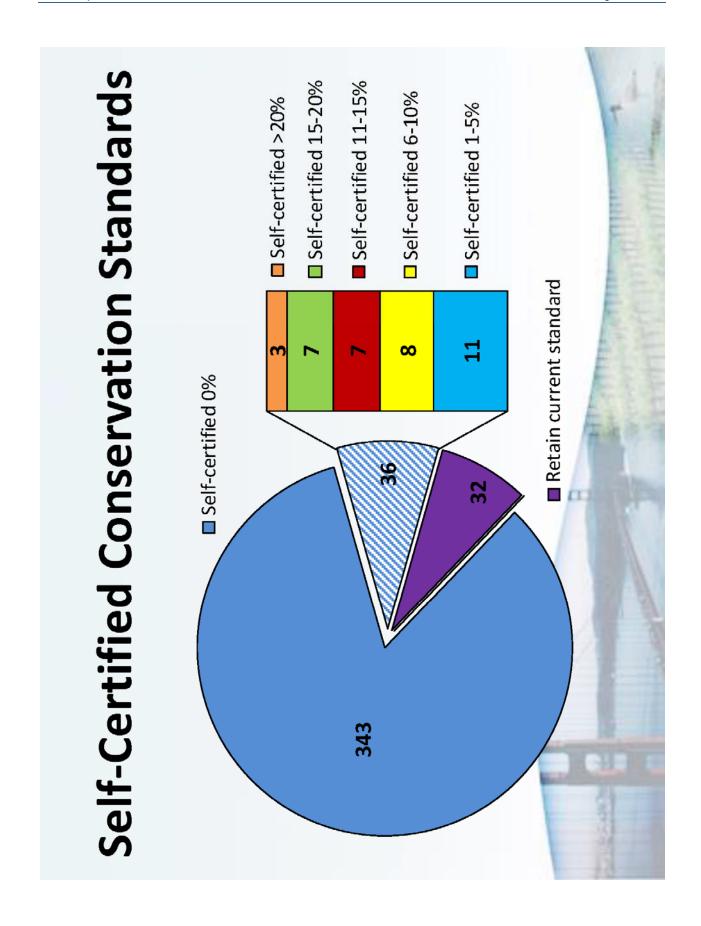
- Outreach to suppliers that did not self-certify
- Review of submissions for completeness and well-documented analysis
- Informal follow-up for required documents and clarifying information
- Nine Information Orders issued to suppliers with incomplete submissions

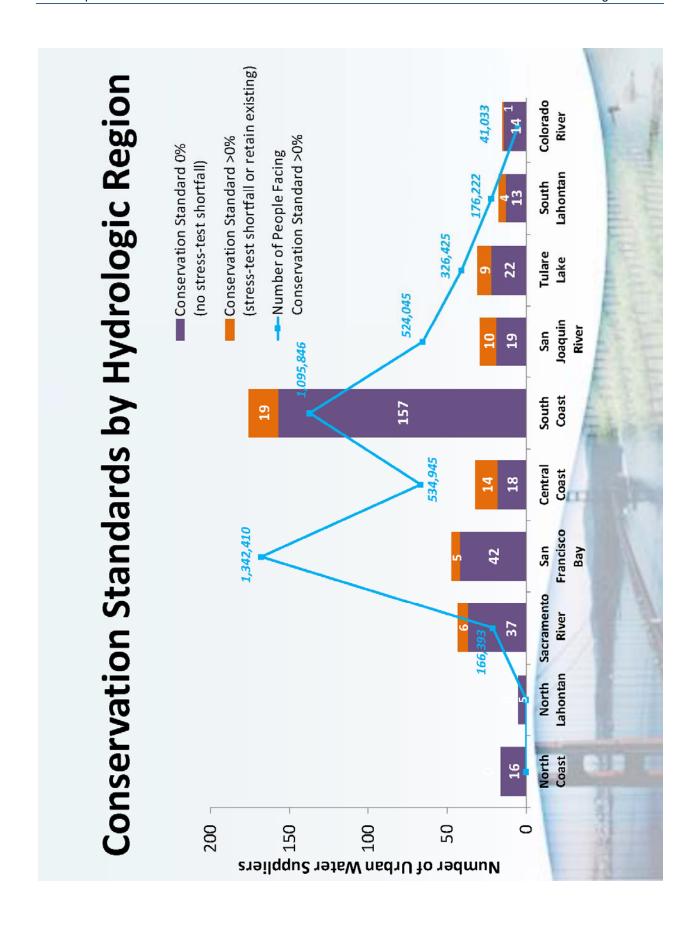
Review Process

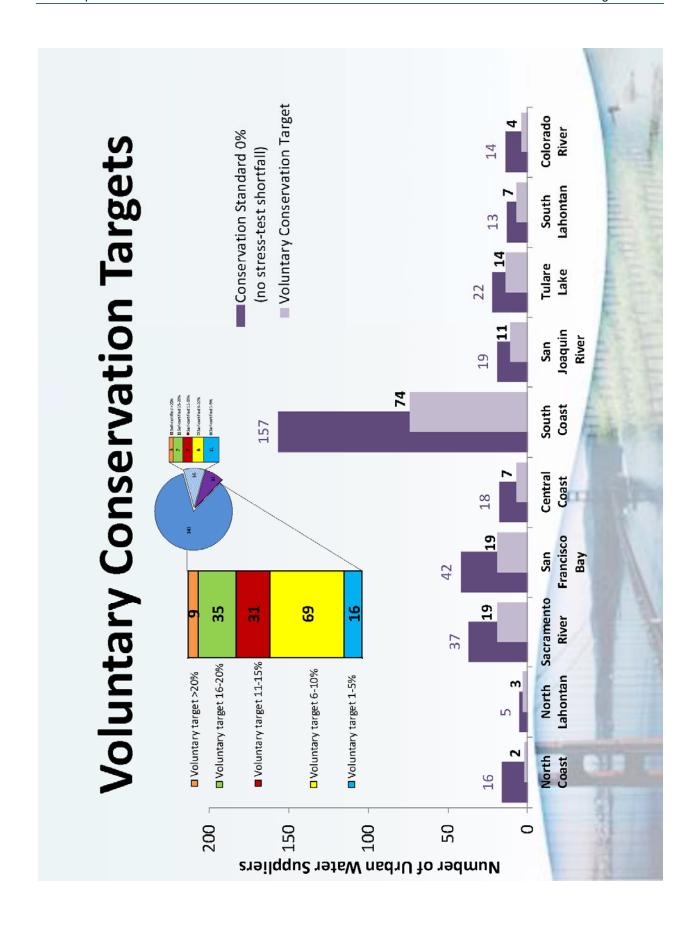
Examples where follow up was necessary:

- Groundwater availability was unclear
- Calculations did not include supporting documentation
- Water supplier information did not match wholesaler information







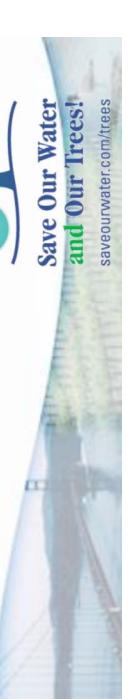


Summary

- 32 suppliers (8 percent) will retain existing standards
- Under three additional years of drought
- 343 suppliers (84 percent) self-certified sufficient supply
- 36 suppliers (8 percent) indicated a supply shortage
- Information Orders to nine suppliers to verify water availability claims or request additional data

Next Steps

- Monitor conservation levels
- Long-term Water Conservation and Efficiency actions
- Board Workshop in October
- Develop permanent water waste prohibitions
- Plan for potential extended emergency regulation to begin February 2017







State Water Resources Control Board

September 2, 2016

Sent via Electronic and U.S. Mail

Mr. Joseph Zoba General Manager Yucaipa Valley Water District 12770 2nd Street Yucaipa, CA 92399 jzoba@yvwd.dst.ca.us

SUBJECT: NOTICE OF VIOLATION FOR FAILURE TO MEET WATER CONSERVATION STANDARD AND ORDER FOR ADDITIONAL INFORMATION

On May 5, 2015, the State Water Resources Control Board (State Water Board) adopted Resolution 2015-0032, an Emergency Regulation for Statewide Urban Water Conservation (Emergency Regulation) pursuant to Water Code section 1058.5. On May 9, 2016, the Governor issued Executive Order B-37-16 directing the State Water Board to adjust and extend its emergency water conservation regulations through the end of January 2017 in recognition of the differing water supply conditions for many communities. In response to the Governor's order, the State Water Board adopted a revised Emergency Regulation on May 18, 2016 that required urban water suppliers to submit information certifying supply reliability for three additional years of drought pursuant to California Code of Regulations, title 23, section 864.5.

The Emergency Regulation requires each urban water supplier to "reduce its total potable water production by the percentage identified as its conservation standard," pursuant to the California Code of Regulations, title 23, section 864.5(a)(5).

Section 866(b) of the Emergency Regulation provides the State Water Board with the authority to issue Information Orders requiring urban water suppliers to submit additional information related to water production, water use, or water conservation.

Our records indicate that the **Yucaipa Valley Water District** (District) submitted the information to the State Water Board as required by section 864.5 of the Emergency Regulation. The State Water Board's Office of Research, Planning, and Performance has reviewed the information submitted by the District and has applied the self-certified conservation standard of 20 percent compared to water produced in 2013, effective June 1, 2016. Compliance is now assessed on a cumulative basis starting in June 2016.

As of July 2016, the District has not met the conservation standard. You should immediately take additional steps to enhance water conservation efforts and ensure that the conservation requirement is met in the few months between now and January 2017.

Furthermore, I am issuing the District an Informational Order under section 866(b) that requires the District to provide the State Water Board information relating to water production, water use,

FELICIA MARCUS, CHAIR | THOMAS HOWARD, EXECUTIVE DIRECTOR

1001 | Street, Sacramento, CA 95814 | Mailing Address: P.O. Box 100, Sacramento, CA 95812-0100 | www.waterboards.ca.gov



Yucaipa Valley Water District

- 2 -

September 2, 2016

and water conservation efforts. Please see Attachment A for the information you are required to provide by **October 3, 2016**. Please provide this information electronically to Ms. Jasmine Oaxaca at jasmine.oaxaca@waterboards.ca.gov. Failure to provide the information within 30 days, or any additional time extension granted, is a violation subject to civil liability of up to \$500 per day, for each day the violation continues.

If you have questions, please contact Dr. Matthew Buffleben at (916) 341-5891, or by email at matthew.buffleben@waterboards.ca.gov.

Sincerely,

Christian M. Carrigan, Director Office of Enforcement

Attachment

cc: (via email only)

Dr. Matthew Buffleben, Chief Special Investigations Unit Office of Enforcement matthew.buffleben@waterboards.ca.gov

Ms. Jasmine Oaxaca, PE Special Investigations Unit Office of Enforcement jasmine.oaxaca@waterboards.ca.gov

Mr. Max Gomberg Climate and Conservation Manager Office of Research, Planning, and Performance max.gomberg@waterboards.ca.gov

ATTACHMENT A

Information Order

- Describe any and all actions approved by your governing board since April 1, 2015, to increase
 conservation.
- 2. Does your agency have conservation programs that specifically target the following customer classes?
 - A. Residential Single Family
 - B. Residential Multi-Family
 - C. Commercial
 - D. Industrial
 - E. Institutional
- 3. Does your agency have an active leak detection and repair program? (If yes, please describe, including budget and personnel assigned).
- **4.** Does your agency run conservation outreach and education programs? (If yes, please describe and answer the questions below).
 - A. Annual budget
 - B. Has the budget increased since April 1, 2015?
 - C. Which of the following messaging pathways are used?
 - i. Mailers (including billing inserts)
 - ii. Door hangers
 - iii. Phone calls
 - iv. Radio
 - v. TV
 - vi. Newspaper
 - vii. Community Events (e.g., street fairs, neighborhood meetings, business association meetings)
 - viii. Email
 - ix. Website
 - x. Programs in Schools
 - xi. Business Partnerships
 - xii. Billboards
 - D. Average number of hours per month dedicated to conservation education and outreach
 - E. Number of personnel that work on education and outreach more than half-time.
 - i. Does your agency use student interns?
 - F. Are conservation education and outreach programs offered in languages other than English? (If yes, list languages).
 - **G.** Are any conservation and outreach programs targeted to populations whose primary language is not English? (If yes, please describe).
- **5.** Does your agency run any conservation programs jointly with other entities? (E.g. have you partnered with your electric service provider?).
 - **A.** Does your agency collaborate with any service organizations? (E.g. Americorps, California Conservation Corps). (If yes, please describe).

ATTACHMENT A

- **6.** Does your agency run any appliance rebate programs? If yes, please describe the rebate amount for each appliance below and provide the total rebate budget.
 - A. Washing Machines
 - B. Dishwashers
 - C. Toilets
 - D. Faucet aerators & showerheads
 - E. Commercial laundry
 - F. Commercial/Institutional Kitchens (e.g. pre-rinse spray valves)
 - G. Other
- 7. Does your agency run any water efficient landscape programs? (If yes, check below and provide a description of the program including amount available for rebates and total amount budgeted for these programs).
 - A. Landscape Audits
 - B. Turf Removal Rebates
 - C. Water-Wise Gardening Classes/Informational Materials
- 8. Does your agency have personnel dedicated to water waste enforcement? (If yes, please describe your enforcement program and answer the questions below).
 - A. Number of personnel that work on enforcement more than half-time
 - i. Do any of these personnel speak languages commonly spoken in the community?
 - B. Average number of hours spent on enforcement per week
 - C. Average number of enforcement patrols per week
 - **D.** Average number of hours spent responding to water waste complaints from residents since April 1, 2015.
 - E. Monthly enforcement budget
 - F. Capacity to receive water waste complaints by the following methods:
 - i. Phone
 - ii. Letter
 - iii. Email
 - iv. Web Portal
 - v. Mobile Application
 - G. Average response time for investigating a water waste complaint
 - H. Average response time for responding to a report of a leaking pipe
 - I. Fine structure for repeat violations
- 9. Which type of rate structure does your agency use for residential customers?
 - A. Flat Rate
 - B. Uniform Rate
 - C. Inclining Block Rate (Tiered Rate)
 - D. Seasonal Rate
 - E. Allocation-Based Rate
 - F. Other

ATTACHMENT A

- **10.** Has your agency instituted any type of drought rate or pricing (e.g. drought surcharge) since June 1, 2014? (If yes, please describe).
- 11. What rates and pricing mechanisms are used to incent conservation by non-residential customers?
- 12. When was the last time your agency modified its rate structure?
- 13. What is your agency's billing frequency?
- 14. Provide a complete copy of your agency's rate/tariff
- 15. Provide a complete copy of your agency's conservation ordinance/rules
- 16. Are all your residents on water meters?
 - A. If no, is there a plan in place to install meters?



ucaipa Valley Water District Workshop Memorandum 16-137

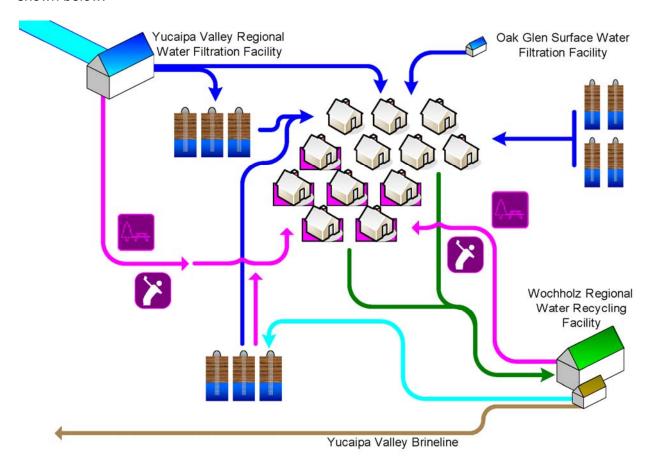
Date: September 27, 2016

Subject: Overview of the Yucaipa Valley Water District's Strategic Plan for a

Sustainable Future, the Sustainable Groundwater Management Act

and Related Water Resource Issues

On August 20, 2008, the Board of Directors adopted Resolution No. 11-2008 establishing a strategic plan for the management, integration and preservation of water resources ("Sustainability Plan"). This Sustainability Plan embodied the concepts of water resource management and the full integration of services offered by the Yucaipa Valley Water District as shown below.



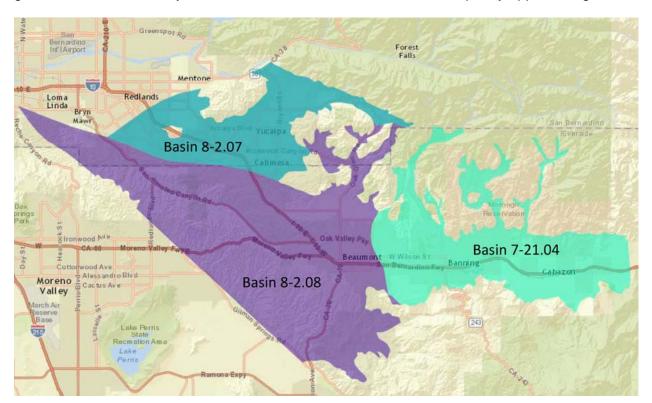
Recognizing that water resources would become more strained and less available in the future, the Board of Directors authorized the construction of fully integrated infrastructure system that would be coupled with the following specific goals and strategies to provide a roadmap for a long-term sustainable future for our service area. The following topics are specifically addressed in the Sustainability Plan:

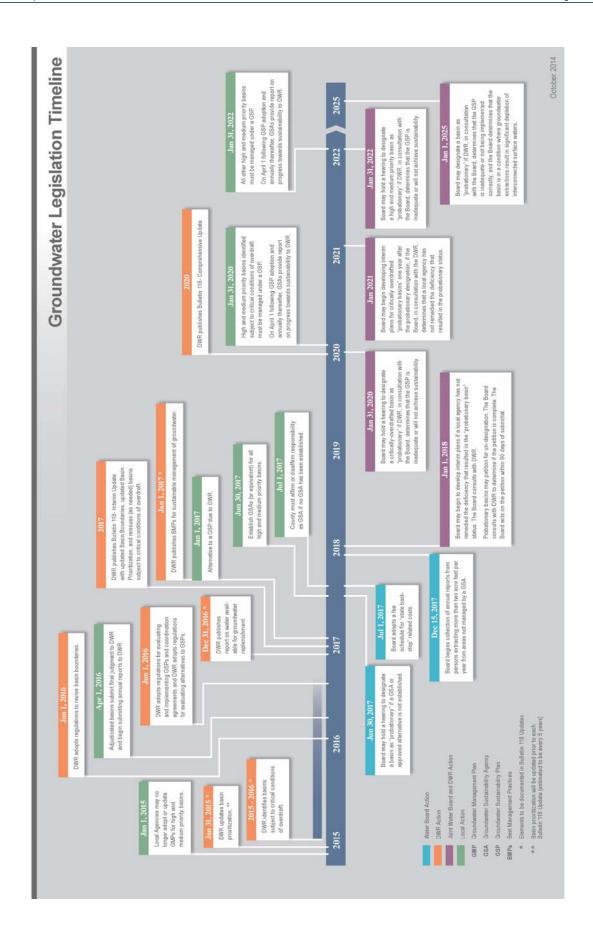
- Planning and Development;
- Surface Water Supplies;
- Groundwater Supplies;
- Recycled Water;
- Water Conservation and Use Efficiency;
- Allocation of Imported Supplemental Water;
- Compatibility with Water Shortage Response Stages;
- Growth and Development;
- Watershed Management;
- Energy Management;
- Pollution Prevention; and
- Infrastructure Management.

The <u>District's Sustainability Plan</u> is available online from our website at <u>www.yvwd.dst.ca.us</u>.

On Sept. 16, 2014, Governor Jerry Brown signed into law a three-bill legislative package, known as the Sustainable Groundwater Management Act of 2014 (the "Act"). The Act provides a framework for sustainable management of groundwater supplies by local authorities, with a limited role for state intervention only if necessary to protect the resource. The Act protects existing surface water and groundwater rights and does not impact current drought response measures.

The Act requires the formation of local groundwater sustainability agencies (GSAs) that must assess conditions in their local water basins and adopt locally-based management plans. While the Act provides substantial time - 20 years - for GSAs to implement plans and achieve long-term groundwater sustainability there are a number of milestones that are quickly approaching.





On July 27, 2015, the San Gorgonio Pass Water Agency ("SGPWA") adopted a Facility Capacity Fee that consists of an infrastructure charge of \$171 per equivalent dwelling unit and a fee to purchase additional water rights of \$6,231 per acre foot¹.

While the District should be commended for the foresight and implementation of a strategic plan prepared the District for the obstacles and regulations that followed in subsequent years should be commended, our work if far from finished. The District staff will be presenting issues and solutions that will require: (1) an update to the Sustainability Plan; (2) dedication of staff resources specifically focused on water resource management; (3) operational plans that maintain the maximum benefit commitments required by the Regional Water Quality Control Board for Yucaipa, San Timoteo and Beaumont; (4) dedication of staff resources for the large-scale implementation of dual-plumbed homes; and (5) financial resources sufficient to support items 1-4 plus the ongoing maintenance of existing infrastructure together with planned infrastructure improvements.

¹ The San Gorgonio Pass Water Agency ("SGPWA") published rate for the purchase of new water rights at \$6,231 per acre foot will need to be calculated for each new development since the purchase of new water rights will be directly dependent on the State Water Project annual average reliability factor and the amount of water rights needed to serve each project. For example, a new dual-plumbed hone will only need to purchase water rights for the drinking water portion of the anticipated water demand and not to meet irrigation needs. The SGPWA published cost for the purchase of water rights of \$6,231 does not include the cost of transporting water in the State Water Project for delivery to the Yucaipa Valley Water District.





Frequently Asked Questions

Q: What is the Sustainable Groundwater Management Act of 2014?

A: The Sustainable Groundwater Management Act of 2014 is a comprehensive three-bill package that includes AB 1739 (Dickinson), SB 1168 (Pavley), and SB 1319 (Pavley) and sets the framework for statewide long-term sustainable groundwater management by local authorities.

It requires the formation of new groundwater sustainability agencies (GSAs) tasked with assessing the conditions in their local basins and adopting locally-based sustainable management plans. It provides for limited state intervention only when a GSA is not formed and / or fails to create and implement a plan that will result in groundwater sustainability within 20 years.

Q: What authority will GSAs have?

A: GSAs are empowered to utilize a number of new management tools to achieve the sustainability goal. For example, GSAs may require registration of groundwater wells, mandate annual extraction reports from individual wells, impose limits on extractions, and assess fees to support creation and adoption of a groundwater sustainability plan (GSP). GSAs also may request a revision of a groundwater basin boundary, including the establishment new subbasins.

A GSA may adopt a single plan covering an entire basin or may combine several plans from multiple agencies.

Q: Is there any funding available to assist GSAs?

A: If approved by voters, Proposition 1 – the Water Quality, Supply and Infrastructure Improvement Act of 2014 – would provide \$100 million in funding to help create and implement GSPs.

Q: When do sustainable groundwater management plans have to be completed and implemented?

A: GSPs for critically overdrafted basins must be completed and adopted by the GSA by Jan. 31, 2020. GSPs for high- and medium-priority basins not in overdraft must be completed and adopted by the GSA by Jan. 31, 2022. All high- and medium-priority groundwater basins must achieve sustainability within 20 years of GSP adoption.

Q: Who determines whether a groundwater sustainability plan is sufficient?

A: The Department of Water Resources (DWR) is tasked with reviewing GSPs for compliance. If DWR determines that an adequate GSP has not been adopted or that it is not being implemented in a way

Prepared by the Association of California Water Agencies <u>www.acwa.com</u>
October 2014

Frequently Asked Questions

that will achieve sustainability within 20 years, then the State Water Resources Control Board may designate the basin "probationary."

After receiving notice from the State Board, local authorities will have 180 days to address GSP deficiencies. If the plan is brought into compliance the state will remove the "probationary" designation and will have no further authority to intervene.

If the deficiencies are not addressed by the GSA, the State Board is authorized to create an interim plan that would remain in effect only until the GSA could assume responsibility with a compliant plan that will achieve sustainability.

Q: What does sustainable groundwater management mean?

A: The aim of the legislation is to have groundwater basins managed within the sustainable yield of each basin. The legislation defines "sustainable groundwater management" as the management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results, which are defined as any of the following effects:

- Chronic lowering of groundwater levels (not including overdraft during a drought, if a basin is otherwise managed)
- Significant and unreasonable reductions in groundwater storage
- Significant and unreasonable seawater intrusion
- Significant and unreasonable degradation of water quality
- Significant and unreasonable land subsidence
- Surface water depletions that have significant and unreasonable adverse impacts on beneficial uses

Q: Isn't this basically a state takeover of groundwater?

A: No. At its core, the legislation provides a framework for the improved management of groundwater supplies by local authorities. In fact, it provides protection *against* state intervention, provided that local agencies develop and implement groundwater sustainability plans as required by the legislation. Significantly, the legislation provides tools and authorities some agencies have previously lacked to manage for sustainability. In addition, it provides substantial time (20 years from the time a GSP is adopted) to take the actions necessary to achieve sustainability.

Q: Does this legislation take away the ability of growers to pump groundwater if the current drought continues?

A: No. The legislation will not affect the ability of local water managers and water users to get through the current drought. The legislation allows local managers time to get on the path of sustainability. It recognizes that implementation of local groundwater sustainability plans may take up to 20 years.

Frequently Asked Questions

Q: How does this legislation affect existing water and property rights?

A: The legislation does not change existing groundwater rights. Groundwater rights will continue to be subject to regulation under article 10, section 2, of the California Constitution.

Q: Will this legislation make future adjudications more complicated?

A: No. In fact, it is possible that future adjudications would be made easier because there will be more data and information about the basin and pumpers available. Although it is important to note that the legislation will restrict public release of information related to individual groundwater pumpers.

Q: Does this legislation allocate groundwater for environmental and habitat purposes?

A: The legislation does not allocate water for any purpose. There is no expansion of water rights and the public trust doctrine does not apply to groundwater. Local agencies may choose to address this issue in their plans, if they desire.

Q: Why doesn't this legislation address groundwater recharge as a beneficial use of surface water?

A: Groundwater recharge is currently accomplished by filing a petition with the State Board that demonstrates the water would be put to beneficial use. ACWA members have been working on legislative language to address this matter but have not yet reached agreement on any recommendations.

Q: Where can I get more information on groundwater sustainability?

A: Information is available from the following resources:

California Department of Water Resources Groundwater Information Center http://www.water.ca.gov/groundwater/

ACWA's Recommendations for Achieving Groundwater Sustainability
http://www.acwa.com/content/groundwater/acwa-recommendations-achieving-groundwater-sustainability

California Water Foundation Information / Recommendations on Groundwater Sustainability www.californiawaterfoundation.org

Capital Improvement Projects

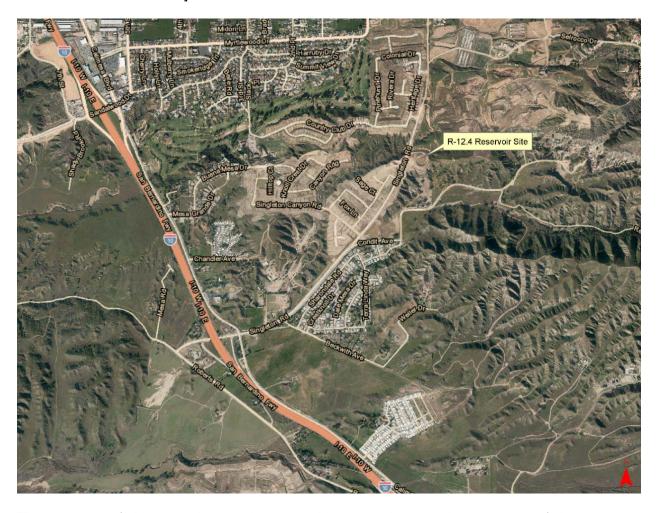


Date: September 27, 2016

Subject: Status Report on the Construction of a 6.0 Million Gallon Drinking

Water Reservoir R-12.4 - Calimesa

At the regular meeting on July 16, 2014, the Board authorized the solicitation of bids for the construction of a 6.0 Million Gallon R-12.4 Reservoir located on Singleton Road in Calimesa [Director Memorandum No. 14-060]. On November 19, 2014, the Board of Directors awarded the construction contract for the reservoir facility to Gateway Pacific Contractors [Director Memorandum No. 14-091].



The purpose of this agenda item is to provide an update on the progress of the reservoir construction project.











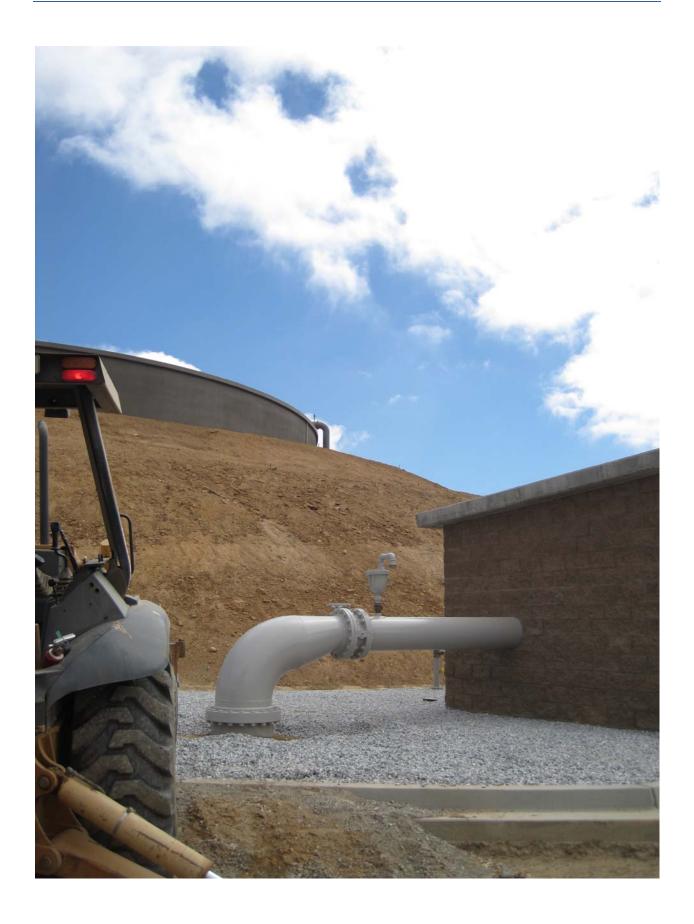














Workshop Memorandum 16-139

Date: September 27, 2016

Subject: Status Report on the Digester Cleaning and Cover Replacement

Project at the Wochholz Regional Water Recycling Facility

The Yucaipa Valley Water District operates and maintains four anaerobic digesters for sludge conditioning, each with a diameter of 45 feet and a side water depth of 22 feet, yielding a working capacity of approximately 262,000 gallons per digester. The digesters treat sludge drawn from both the primary clarifiers and from the dissolved air flotation thickeners. Digested sludge flows by gravity and can be stored temporarily in a sludge holding tank before being conveyed to the belt presses for dewatering. To keep the digesters functioning properly they should be cleaned every 8-10 years in order to remove the accumulated build-up of sand, grit, and other debris.

Projects	Construction Timeline	Summary of Work
Wastewater Treatment Plant	1976-design 1984-constr	 Construction of Digester Nos. 1 and 2 and appurtenant equipment, (e.g. heaters) Digester No. 1 equipped with a fixed cover and Digester No. 2 equipped with a floating cover
Stage I Expansion Project	1992	 Construction of Digester Nos. 3 and 4 Both Digester No. 3 and Digester No. 4 equipped with fixed covers
Digester No. 2 Cover Modifications	1994	 Digester No. 2 cover converted from floating to fixed configuration
Digester Cleaning	2004	Digester Nos. 1-4 Cleaning
Digester Coating	2005	Digester Nos. 1-4 Coating of Cover
Digester and Sludge Holding Tank Modifications Project	2005	 Digester Nos. 1-4 and Digester Holding Tank Pump Mix System installation

When the digesters were cleaned in 2005, the District staff assessed the condition of the digesters and related equipment. Based on corrosion identified at this time, the District made a decision to replace at least two covers the next time the digesters were scheduled to be cleaned.

In 2015, the District staff worked with RMC to develop a construction bid schedule that included a series of construction alternatives for cleaning and/or replacement of the digester covers. After carefully evaluating the cleaning/construction bids received for this project, the Board of Directors decided to award a construction contract to Pascal & Ludwig for the cleaning and replacement of four digester covers for a sum not to exceed \$2,175,000. [DM 15-041]

The purpose of this agenda item is to provide an update on the status of the construction project.









Policy Issues





Yucaipa Valley Water District Workshop Memorandum 16-140

Date: September 27, 2016

Subject: Discussion Regarding Potential On-Bill Financing for Recycled Water

Connection Improvements to Ridgeview Elementary School

Yucaipa Valley Water District strives to develop and advance innovative and effective public policies in an effort to improve the overall management of our water resources.

The District staff has been working together with the staff at the Yucaipa Calimesa Joint Unified School District to convert the play fields at Ridgeview Elementary School from drinking water to recycled water. While recycled water is available for the school in Sunnyside Drive, the elevation of the play fields will require the installation of an irrigation pump to provide sufficient pressure to allow the existing sprinkler system to function properly.



The purpose of this agenda item is to discuss the establishment of a pilot program to utilize onbill financing as a method to accommodate the installation of a recycled water pump at this site. Using on-bill financing, the water district to pay for the installation of the irrigation pump and the school district would reimburse the water district from the differential between drinking water rates and recycled water rates over time. If the Board of Directors decided to implement this program, the on-bill financing program would only be available to local governments such as the Yucaipa-Calimesa Unified School District, City of Yucaipa and the City of Calimesa at a fixed interest rate with a provision to discontinue irrigation water service for non-payment. By limiting the availability of this program to local government agencies, the District significantly reduces the risk of non-payment and the risks associated with the transfer of property ownership.

Administrative Issues





Date: September 27, 2016

Overview of a Joint Infrastructure Agreement with the City of Yucaipa Subject:

for Uptown Water System Improvements

The Yucaipa Valley Water District staff has been coordinating roadway and water system improvements with the City of Yucaipa for the construction of the proposed Performing Arts Center under construction on Yucaipa Boulevard. The attached agreement will provide both entities with a coordinated approach to make sure the improvements completed will not impact the other entity.

1ST STREET, ACACIA AVENUE AND MIDBLOCK ALLEY WATER AND SEWER UTILITIES AGREEMENT BY AND BETWEEN THE CITY OF YUCAIPA AND THE YUCAIPA VALLEY WATER DISTRICT

The City of Yucaipa, a Municipal Corporation, hereinafter referred to as "City", and Yucaipa Valley Water District, a Special District, hereinafter referred to as "District", hereby mutually agree as follows:

I. Purpose of Agreement:

The City is preparing to construct a 13,500 square foot "Performing Arts Center" on a group of vacant parcels located at the southwest corner of California Street and Acacia Avenue in the City of Yucaipa. The District has existing pipelines and easements within the limits of the project that need to be relocated. In support of the project, the District will be relocating and/or replacing the interfering pipelines by means of a separate District construction project. Said project will consist of the installation of approximately 200 linear feet of 8-inch waterline in 1st Street from the alley way to Acacia Ave, the installation of approximately 810 linear feet of 8-inch waterline in Acacia Ave from 1st Street to the alley way east of California Street, and the installation of approximately 330 linear feet of 8-inch waterline in the alley between 1st Street and the future Yucaipa Performing Arts Center site, In addition, and as part of the same construction contract, the District will be installing approximately 1,000 linear feet of 30-inch waterline in 1st Street and Acacia Ave (from 2nd Street to 1st Street). The attached Exhibit "A" shows the proposed pipelines.

With the cooperation of the City, upon completion of the pipeline project, the City will pave portions of 1st Street, Acacia Avenue and the alley between 1st Street and the future Yucaipa Performing Arts Center site as part of its Pavement Management Program. The limits of paving are also shown on attached Exhibit "A".

II. Scope of Agreement:

In exchange for:

- The City's paving on 1st Street, Acacia Avenue (from 2nd Street to the alley way 200' east of California Street), and the alley between 1st Street and the future Yucaipa Performing Arts Center.
- The City providing a 20 foot wide utility/waterline easement to YVWD under, over and across the City owned properties along the alley between 1st Street and the future Yucaipa Performing Arts Center.
- The City reimbursing the District for the cost of the water service(s) and fire service(s) required for the new development (said services will be included in the District's construction contract as separate bid items).
- The City removing the existing 8-inch waterline located within the boundaries of the Performing Arts Center Project after the waterline is abandoned by the

District.

- The City abandoning the existing sewer laterals installed for APN's 0303-253-22 and 0303-252-26, 5 laterals total) in accordance with District standards.
- The City paying the Development Capacity Charges for water and sewer service.

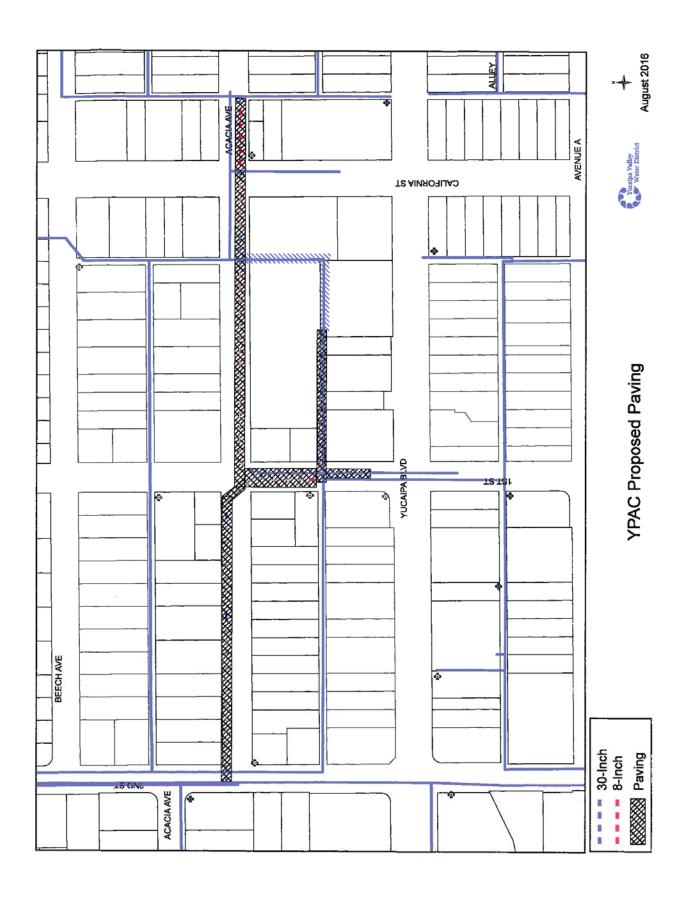
The District will:

- A. Maintain existing temporary paving for a maximum of sixty (60) days or until start of the City Pavement Management Program for the affected streets, whichever occurs sooner.
- B. Lower all existing manholes and water valves in the work zone and compensate the City for reasonable costs associated with adjusting manholes and water valves to new street grade.
- C. Remove, cap and abandon the existing waterline from the east end of the alley between 1st Street and the future Yucaipa Performing Arts Center to Acacia Avenue, and replace same with a new 8" waterline.
- D. Install the 1,010 linear feet of 8-inch waterline in 1st Street from the alley to Acacia Street and in Acacia Avenue from 1st Street to the alley just east of California Street.
- E. Vacate their 15' wide easement from the alleyway to Acacia Ave.

IN WITNESS WHEREOF, the City of Yucaipa and the Yucaipa Valley Water District have executed this Agreement the day and year written below.

The City and District hereby agree to the full performance of the covenants and conditions contained herein.

City of Yucaipa	Yucaipa Valley Water District
Raymond Casey, City Manager	
Raymond Casey, City Manager	Joseph Zoba, General Manager
Dated: 9/15/16	Dated:





Yucaipa Valley Water District Workshop Memorandum 16-142

Date: September 27, 2016

Subject: Overview of a Joint Infrastructure Agreement with the City of Yucaipa

for Sewer Improvements on Lower Yucaipa Boulevard

The Yucaipa Valley Water District staff has been coordinating roadway and sewer system improvements with the City of Yucaipa for the roadway widening of Yucaipa Boulevard and Interstate 10. The attached agreement will provide both entities with a coordinated approach to make sure the improvements completed will not impact the other entity.

YUCAIPA BOULEVARD SEWER UTILITY AGREEMENT BY AND BETWEEN THE CITY OF YUCAIPA AND THE YUCAIPA VALLEY WATER DISTRICT

The City of Yucaipa, a Municipal Corporation, hereinafter referred to as "City", and Yucaipa Valley Water District, a Special District, hereinafter referred to as "District", hereby mutually agree as follows:

I. Purpose of Agreement:

The City of the Yucaipa is preparing to proceed with the widening and reconstruction of Yucaipa Blvd from 18th Street to Ave E/Hampton Road (Yucaipa Blvd Widening Project). In conjunction with this project, the District is a preparing to proceed with a sewer installation project to install approximately 2,400 linear feet of 8-inch sewer in Yucaipa Boulevard between 18th Street and Avenue E/Hampton Road; and on Ridgecrest Drive from Yucaipa Boulevard to Sierra Linda Street.

With the cooperation of the City, upon completion of the sewer installation project, the City will pave Yucaipa Boulevard as part of its Yucaipa Boulevard Widening Project.

II. Scope of Agreement:

In exchange for:

- The City's paving on Yucaipa Boulevard between 18th Street and Avenue E/Hampton Road.
- The City providing the paving and removals on Yucaipa Boulevard between 18th Street and Avenue E/Hampton Road for the proposed sewer.
- The City providing the preparation and implementation of the storm water pollution prevention plan, temporary traffic control plan, and construction staging plan for Yucaipa Boulevard between 18th Street and Avenue E/Hampton Road.
- The City providing construction management for the Yucaipa Blvd Widening Project during the time period when the District's contractor is constructing the new sewer pipeline.
- The City paying sewer capacity charges (connection fees) and front footage fees for those properties that have septic tanks removed and connections to the sewer pipeline installed due to interferences with the City's Yucaipa Blvd Widening Project. Sewer capacity charges will be based on the total number of equivalent dwelling units (EDU's) located on the property being connected.

The District will:

- A. Install the proposed sewer on Yucaipa Boulevard and Ridgecrest Drive.
- B. Work with the City to disconnect/remove/abandon existing septic systems on properties affected by the Yucaipa Boulevard Widening Project and provide

connection to the new sewer on Yucaipa Boulevard.

IN WITNESS WHEREOF, the City of Yucaipa and the Yucaipa Valley Water District have executed this Agreement the day and year written below.

The City and District hereby agree to the full performance of the covenants and conditions contained herein.

City of Yucaipa	Yucaipa Valley Water District
Margel Horas	
Raymond Casey, City Manager	Joseph Zoba, General Manager
Dated: 9/15/16	Dated:



ucaipa Valley Water District Workshop Memorandum 16-143

Date: September 27, 2016

Subject: Discussion Regarding the Appointment of an Alternative

Representative to the San Bernardino Valley Municipal Water

District's Advisory Commission

The Yucaipa Valley Water District currently has assigned Director Jay Bogh as the primary representative to the Advisory Commission on Water Policy ("Advisory Commission") at the San Bernardino Valley Municipal Water District. An alternative member is not currently assigned to the Advisory Commission.

There would be an advantage to assigning a second board member to the Advisory Commission to ensure a quorum is available in order to conduct the meetings

Director Comments



Adjournment





FACTS ABOUT THE YUCAIPA VALLEY WATER DISTRICT

Service Area Size: 40 square miles (sphere of influence is 68 square miles)

Elevation Change: 3,140 foot elevation change (from 2,044 to 5,184 feet)

Number of Employees: 5 elected board members

62 full time employees

Operating Budget: Water Division - \$13,397,500

Sewer Division - \$11,820,000

Recycled Water Division - \$537,250 Total Annual Budget - \$25,754,750

Number of Services: 12,434 water connections serving 17,179 units

13,559 sewer connections serving 20,519 units

64 recycled water connections

Water System: 215 miles of drinking water pipelines

27 reservoirs - 34 million gallons of storage capacity

18 pressure zones

12,000 ac-ft annual water demand (3.9 billion gallons)

Two water filtration facilities:

- 1 mgd at Oak Glen Surface Water Filtration Facility

- 12 mgd at Yucaipa Valley Regional Water Filtration Facility

Sewer System: 8.0 million gallon treatment capacity - current flow at 4.0 mgd

205 miles of sewer mainlines

5 sewer lift stations

4,500 ac-ft annual recycled water prod. (1.46 billion gallons)

Recycled Water: 22 miles of recycled water pipelines

5 reservoirs - 12 million gallons of storage

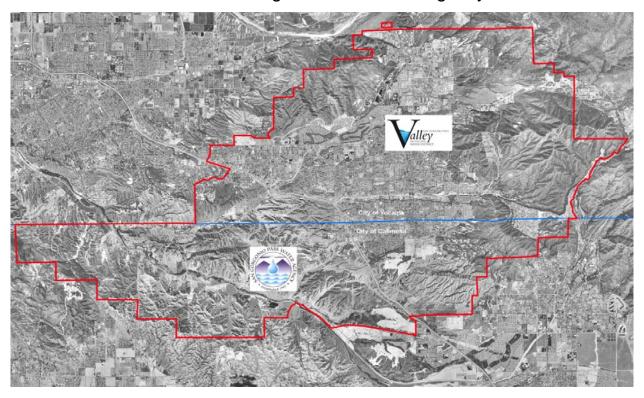
1,200 ac-ft annual recycled demand (0.4 billion gallons)

Brine Disposal: 2.2 million gallon desalination facility at sewer treatment plant

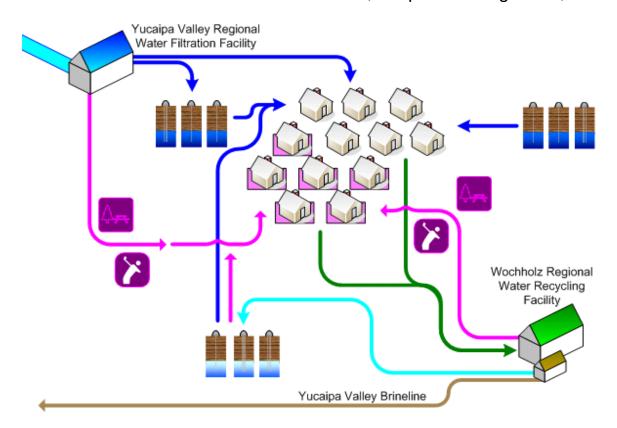
1.108 million gallons of Inland Empire Brine Line capacity

0.295 million gallons of treatment capacity in Orange County

State Water Contractors: San Bernardino Valley Municipal Water District San Gorgonio Pass Water Agency



Sustainability Plan: A Strategic Plan for a Sustainable Future: The Integration and Preservation of Resources, adopted on August 20, 2008.



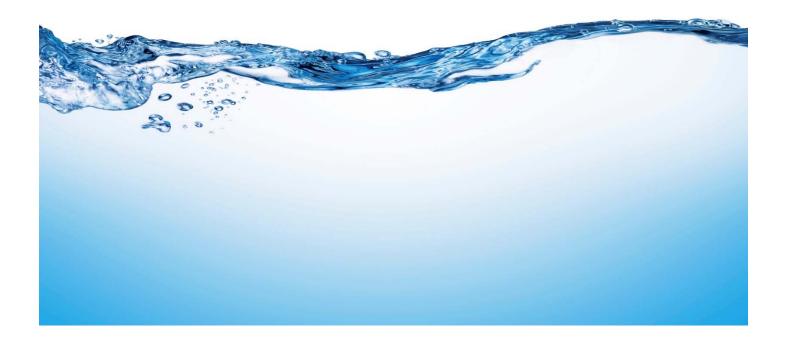


THE MEASUREMENT OF WATER PURITY

- **One part per hundred** is generally represented by the percent (%). This is equivalent to about fifteen minutes out of one day.
- One part per thousand denotes one part per 1000 parts.

 This is equivalent to about one and a half minutes out of one day.
- One part per million (ppm) denotes one part per 1,000,000 parts. This is equivalent to about 32 seconds out of a year.
- **One part per billion** (ppb) denotes one part per 1,000,000,000 parts. This is equivalent to about three seconds out of a century.
- One part per trillion (ppt) denotes one part per 1,000,000,000,000 parts.

 This is equivalent to about three seconds out of every hundred thousand years.
- One part per quadrillion (ppq) denotes one part per 1,000,000,000,000,000 parts. This is equivalent to about two and a half minutes out of the age of the Earth (4.5 billion years).





GLOSSARY OF COMMONLY USED TERMS

Every profession has specialized terms which generally evolve to facilitate communication between individuals. The routine use of these terms tends to exclude those who are unfamiliar with the particular specialized language of the group. Sometimes jargon can create communication cause difficulties where professionals in related fields use different terms for the same phenomena.

Below are commonly used water terms and abbreviations with commonly used definitions. If there is any discrepancy in definitions, the District's Regulations Governing Water Service is the final and binding definition.

Acre Foot of Water - The volume of water (325,850 gallons, or 43,560 cubic feet) that would cover an area of one acre to a depth of 1 foot.

Activated Sludge Process – A secondary biological sewer treatment process where bacteria reproduce at a high rate with the introduction of excess air or oxygen, and consume dissolved nutrients in the wastewater.

Annual Water Quality Report - The document is prepared annually and provides information on water quality, constituents in the water, compliance with drinking water standards and educational material on tap water. It is also referred to as a Consumer Confidence Report (CCR).

Aquifer - The natural underground area with layers of porous, water-bearing materials (sand, gravel) capable of yielding a supply of water; see Groundwater basin.

Backflow - The reversal of water's normal direction of flow. When water passes through a water meter into a home or business it should not reverse flow back into the water mainline.

Best Management Practices (BMPs) - Methods or techniques found to be the most effective and practical means in achieving an objective. Often used in the context of water conservation.

Biochemical Oxygen Demand (BOD) – The amount of oxygen used when organic matter undergoes decomposition by microorganisms. Testing for BOD is done to assess the amount of organic matter in water.

Biosolids – Biosolids are nutrient rich organic and highly treated solid materials produced by the sewer treatment process. This high-quality product can be used as a soil amendment on farm land or further processed as an earth-like product for commercial and home gardens to improve and maintain fertile soil and stimulate plant growth.

Catch Basin – A chamber usually built at the curb line of a street, which conveys surface water for discharge into a storm sewer.

Capital Improvement Program (CIP) – Projects for repair, rehabilitation, and replacement of assets. Also includes treatment improvements, additional capacity, and projects for the support facilities.

Collector Sewer – The first element of a wastewater collection system used to collect and carry wastewater from one or more building sewer laterals to a main sewer.

Coliform Bacteria – A group of bacteria found in the intestines of humans and other animals, but also occasionally found elsewhere and is generally used as an indicator of sewage pollution.

Combined Sewer Overflow – The portion of flow from a combined sewer system, which discharges into a water body from an outfall located upstream of a wastewater treatment plant, usually during wet weather conditions.

Combined Sewer System– Generally older sewer systems designed to convey both sewage and storm water into one pipe to a wastewater treatment plant.

Conjunctive Use - The coordinated management of surface water and groundwater supplies to maximize the yield of the overall water resource. Active conjunctive use uses artificial recharge, where surface water is intentionally percolated or injected into aquifers for later use. Passive conjunctive use is to simply rely on surface water in wet years and use groundwater in dry years.

Consumer Confidence Report (CCR) - see Annual Water Quality Report.

Cross-Connection - The actual or potential connection between a potable water supply and a non-potable source, where it is possible for a contaminant to enter the drinking water supply.

Disinfection By-Products (DBPs) - The category of compounds formed when disinfectants in water systems react with natural organic matter present in the source water supplies. Different disinfectants produce different types or amounts of disinfection byproducts. Disinfection byproducts for which regulations have been established have been identified in drinking water, including trihalomethanes, haloacetic acids, bromate, and chlorite

Drought - a period of below average rainfall causing water supply shortages.

Dry Weather Flow – Flow in a sanitary sewer during periods of dry weather in which the sanitary sewer is under minimum influence of inflow and infiltration.

Fire Flow - The ability to have a sufficient quantity of water available to the distribution system to be delivered through fire hydrants or private fire sprinkler systems.

Gallons per Capita per Day (GPCD) - A measurement of the average number of gallons of water use by the number of people served each day in a water system. The calculation is made by dividing the total gallons of water used each day by the total number of people using the water system.

Groundwater Basin - An underground body of water or aquifer defined by physical boundaries.

Groundwater Recharge - The process of placing water in an aquifer. Can be a naturally occurring process or artificially enhanced.

Hard Water - Water having a high concentration of minerals, typically calcium and magnesium ions.

Hydrologic Cycle - The process of evaporation of water into the air and its return to earth in the form of precipitation (rain or snow). This process also includes transpiration from plants, percolation into the ground, groundwater movement, and runoff into rivers, streams and the ocean; see Water cycle.

Infiltration – Water other than sewage that enters a sewer system and/or building laterals from the ground through defective pipes, pipe joints, connections, or manholes. Infiltration does not include inflow. See *Inflow*.

Inflow - Water other than sewage that enters a sewer system and building sewer from sources such as roof vents, yard drains, area drains, foundation drains, drains from springs and swampy areas, manhole covers, cross connections between storm drains and sanitary sewers, catch basins, cooling towers, storm waters, surface runoff, street wash waters, or drainage. Inflow does not include infiltration. See *Infiltration*.

Inflow / Infiltration (I/I) – The total quantity of water from both inflow and infiltration.

Mains, Distribution - A network of pipelines that delivers water (drinking water or recycled water) from transmission mains to residential and commercial properties, usually pipe diameters of 4" to 16".

Mains, Transmission - A system of pipelines that deliver water (drinking water or recycled water) from a source of supply the distribution mains, usually pipe diameters of greater than 16".

Meter - A device capable of measuring, in either gallons or cubic feet, a quantity of water delivered by the District to a service connection.

Overdraft - The pumping of water from a groundwater basin or aquifer in excess of the supply flowing into the basin. This pumping results in a depletion of the groundwater in the basin which has a net effect of lowering the levels of water in the aquifer.

Peak Flow – The maximum flow that occurs over a specific length of time (e.g., daily, hourly, instantaneously).

Pipeline - Connected piping that carries water, oil or other liquids. See Mains, Distribution and Mains, Transmission.

Point of Responsibility, Metered Service - The connection point at the outlet side of a water meter where a landowner's responsibility for all conditions, maintenance, repairs, use and replacement of water service facilities begins, and the District's responsibility ends.

Potable Water - Water that is used for human consumption and regulated by the California Department of Public Health.

Pressure Reducing Valve - A device used to reduce the pressure in a domestic water system when the water pressure exceeds desirable levels.

Pump Station - A drinking water or recycled water facility where pumps are used to push water up to a higher elevation or different location.

Reservoir - A water storage facility where water is stored to be used at a later time for peak demands or emergencies such as fire suppression. Drinking water and recycled water systems will typically use concrete or steel reservoirs. The State Water Project system considers lakes, such as Shasta Lake and Folsom Lake to be water storage reservoirs.

Runoff - Water that travels downward over the earth's surface due to the force of gravity. It includes water running in streams as well as over land.

Sanitary Sewer System - Sewer collection system designed to carry sewage, consisting of domestic, commercial, and industrial wastewater. This type of system is not designed nor intended to carry water from rainfall, snowmelt, or groundwater sources. See *Combined Sewer System*.

Sanitary Sewer Overflow – Overflow from a sanitary sewer system caused when total wastewater flow exceeds the capacity of the system. See *Combined Sewer Overflow*.

Santa Ana River Interceptor (SARI) Line – A regional brine line designed to convey 30 million gallons per day of non-reclaimable wastewater from the upper Santa Ana River basin to the sewer treatment plant operated by Orange County Sanitation District.

Secondary Treatment – Biological sewer treatment, particularly the activated-sludge process, where bacteria and other microorganisms consume dissolved nutrients in wastewater.

Supervisory Control and Data Acquisition (SCADA) - A computerized system which provides the ability to remotely monitor and control water system facilities such as reservoirs, pumps and other elements of water delivery.

Service Connection - The water piping system connecting a customer's system with a District water main beginning at the outlet side of the point of responsibility, including all plumbing and equipment located on a parcel required for the District's provision of water service to that parcel.

Sludge – Untreated solid material created by the treatment of sewage.

Smart Irrigation Controller - A device that automatically adjusts the time and frequency which water is applied to landscaping based on real-time weather such as rainfall, wind, temperature and humidity.

Special District - A political subdivision of a state established to provide a public services, such as water supply or sanitation, within a specific geographic area.

Surface Water - Water found in lakes, streams, rivers, oceans or reservoirs behind dams.

Total Suspended Solids (TSS) – The amount of solids floating and in suspension in water or sewage.

Transpiration - The process by which water vapor is released into the atmosphere by living plants.

Trickling Filter – A biological secondary treatment process in which bacteria and other microorganisms, growing as slime on the surface of rocks or plastic media, consume nutrients in primary treated sewage as it trickles over them.

Underground Service Alert (USA) - A free service that notifies utilities such as water, telephone, cable and sewer companies of pending excavations within the area (dial 8-1-1 at least 2 working days before you dig).

Urban Runoff - Water from city streets and domestic properties that typically carries pollutants into the storm drains, rivers, lakes, and oceans.

Valve - A device that regulates, directs or controls the flow of water by opening, closing or partially obstructing various passageways.

Wastewater – Any water that enters the sanitary sewer.

Water Banking - The practice of actively storing or exchanging in-lieu surface water supplies in available groundwater basin storage space for later extraction and use by the storing party or for sale or exchange to a third party. Water may be banked as an independent operation or as part of a conjunctive use program.

Water cycle - The continuous movement water from the earth's surface to the atmosphere and back again; see Hydrologic cycle.

Water Pressure - Pressure created by the weight and elevation of water and/or generated by pumps that deliver water to the tap.

Water Service Line - The pipeline that delivers potable water to a residence or business from the District's water system. Typically the water service line is a 1" to $1\frac{1}{2}$ " diameter pipe for residential properties.

Watershed - A region or land area that contributes to the drainage or catchment area above a specific point on a stream or river.

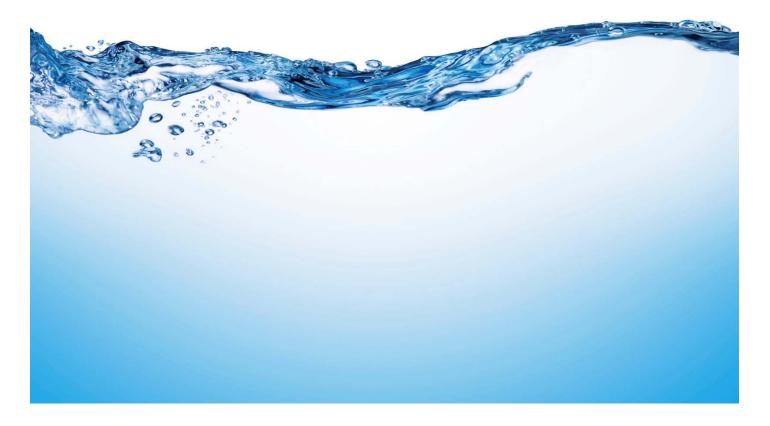
Water Table - The upper surface of the zone of saturation of groundwater in an unconfined aquifer.

Water Transfer - A transaction, in which a holder of a water right or entitlement voluntarily sells/exchanges to a willing buyer the right to use all or a portion of the water under that water right or entitlement.

Water Well - A hole drilled into the ground to tap an underground water aquifer.

Wetlands - Lands which are fully saturated or under water at least part of the year, like seasonal vernal pools or swamps.

Wet Weather Flow – Dry weather flow combined with stormwater introduced into a combined sewer system, and dry weather flow combined with infiltration/inflow into a separate sewer system.





COMMONLY USED ABBREVIATIONS

AQMD Air Quality Management District

BOD Biochemical Oxygen Demand

CARB California Air Resources Board

CCTV Closed Circuit Television

CWA Clean Water Act

EIR Environmental Impact Report

EPA U.S. Environmental Protection Agency

FOG Fats, Oils, and Grease

GPD Gallons per day

MGD Million gallons per day

O & M Operations and Maintenance

OSHA Occupational Safety and Health Administration

POTW Publicly Owned Treatment Works

PPM Parts per million

RWQCB Regional Water Quality Control Board

SARI Santa Ana River Inceptor

SAWPA Santa Ana Watershed Project Authority

SBVMWD San Bernardino Valley Municipal Water District
SCADA Supervisory Control and Data Acquisition system

SSMP Sanitary Sewer Management Plan

SSO Sanitary Sewer Overflow

SWRCB State Water Resources Control Board

TDS Total Dissolved Solids

TMDL Total Maximum Daily Load
TSS Total Suspended Solids

WDR Waste Discharge Requirements

YVWD Yucaipa Valley Water District