Yucaipa Valley Water District

Notice and Agenda of a Board Workshop

Tuesday, February 23, 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 Mandatory Restrictions to Achieve a 36% Reduction in Potable Urban Water Use [Workshop Memorandum No. 16-036 - Page 5 of 119]

B. Overview of the Sustainable Groundwater Management Act and Proposed Basin Boundary Revisions [Workshop Memorandum No. 16-037 - Page 34 of 119]

C. Overview of the Bunker Hill Conjunctive Use Project and a Draft Memorandum of Understanding for the Proposed Project [Workshop Memorandum No. 16-038 - Page 46 of 119]

V. Operational Updates

A. Overview of Operational Activities in Preparation and Response to the 2016 Winter Storm Events [Workshop Memorandum No. 16-039 - Page 57 of 119]

B. Status Report on the Sewer Collection System Monitoring Network [Workshop Memorandum No. 16-040 - Page 71 of 119]

Any person with a disability who requires accommodation in order to participate in this meeting should telephone Erin Anton 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 related to an item on this agenda submitted to the Board of Directors after distribution of the workshop packet are available for public inspection during normal business hours at the District office located at 12770 Second Street, Yucaipa. Meeting material is also be available on the District's website at www.yvwd.dst.ca.us

C. Status Report on the Increased Implementation and Distribution of Weather-Based Wi-Fi Irrigation Controllers for Residential Water Customers of the Yucaipa Valley Water District [Workshop Memorandum No. 16-041 - Page 75 of 119]

VI. 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. 16-042 - Page 92 of 119]

B. Status Report on the Digester Cleaning and Cover Replacement Project at the Wochholz Regional Water Recycling Facility [Workshop Memorandum No. 16-043 - Page 96 of 119]

C. Status Report on the Coating Repairs to the 48" Influent Pipeline at the Yucaipa Valley Regional Water Filtration Facility [Workshop Memorandum No. 16-044 - Page 100 of 119]

D. Status Report on the Installation of New Recycled Water Services and Recycled Water Pipelines Throughout the Service Area of the Yucaipa Valley Water District [Workshop Memorandum No. 16-045 - Page 101 of 119]

VII. Administrative Issues

A. Notice Regarding the Preparation of the 2015 Yucaipa Valley Water District Urban Water Management Plan [Workshop Memorandum No. 16-046 - Page 107 of 119]

B. Authorization to Solicit Prices for the Purchase of Three Multi-Function Copiers [Workshop Memorandum No. 16-047 - Page 109 of 119]

VIII. Director Comments

IX. Adjournment

Staff Report

Yucaipa Valley Water District

Presentations

Yucaipa Valley Water District

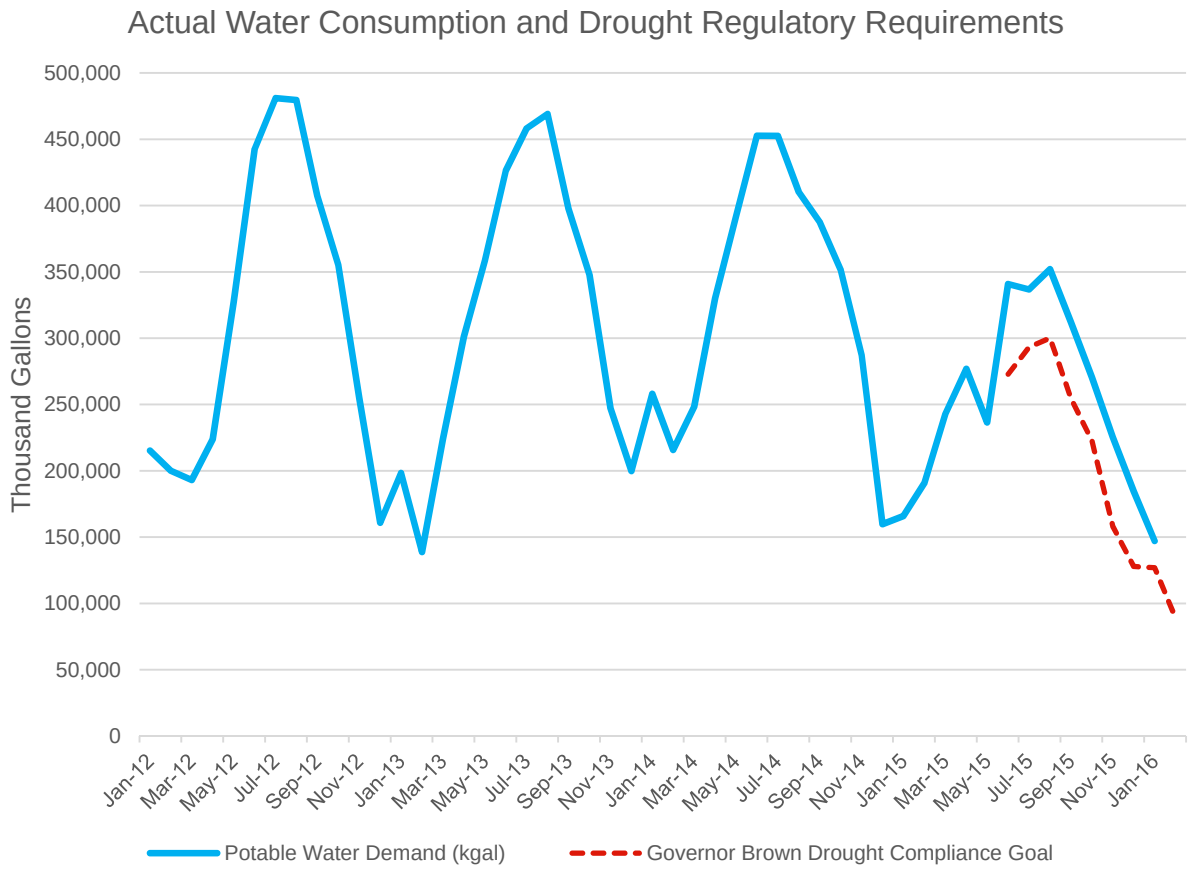
Yucaipa Valley Water District

Workshop Memorandum 16-036

Date: **February 23, 2016**

Subject: **Overview of the California Drought and Yucaipa Valley Water District's Action Plan Related to the State Water Resources Control Board Mandatory Restrictions to Achieve a 36% Reduction in Potable Urban Water Use**

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 will require the Yucaipa Valley Water District to achieve a 36% reduction from the amount of drinking water produced in 2013. In order to achieve this level of water conservation, the Yucaipa Valley Water District will need to provide water based on the following water demand curve.



The chart above illustrates the difference between Governor Brown's Drought Compliance Goal in 2014 at a 25% reduction, and in 2015 at a 36% reduction in potable water use based on the 2013 baseline period.

To achieve Governor Brown's Drought Compliance Goal of a 36% reduction in potable water use from the 2013 baseline period, the Yucaipa Valley Water District has initiated numerous drought conservation programs and conducted a series of monthly community workshops to provide information to our customers.

On February 2, 2016, the State Water Resources Control Board extended the water conservation regulations. While a great deal of press attention has been focusing on the relief provided by the State Water Resources Control Board, the following facts were developed prior to the adoption of the extended conservation regulations:

- Based on the proposed amended water conservation regulations, the statewide water conservation goal for the 412 regulated water agencies will change from an average of 24.7% to an average of 23.4%, or a combined overall reduction in water conservation of 1.3% statewide.

- The City of Redlands, Yucaipa Valley Water District and Beaumont Cherry Valley Water District will all remain at a 36% water conservation requirement with the proposed regulations.
    - The neighboring agencies of City of Banning, East Valley Water District, Eastern Municipal Water District, and City of San Bernardino are required to meet a water conservation requirement of 28%.
    - Mutual water companies with less than 3,000 service connections within the boundaries of the City of Redlands, Yucaipa Valley Water District and Beaumont Cherry Valley Water District are required to meet a water conservation requirement of 25%.

- The original emergency water conservation regulations required 67 water agencies statewide to meet a 36% water conservation reduction. The proposed water

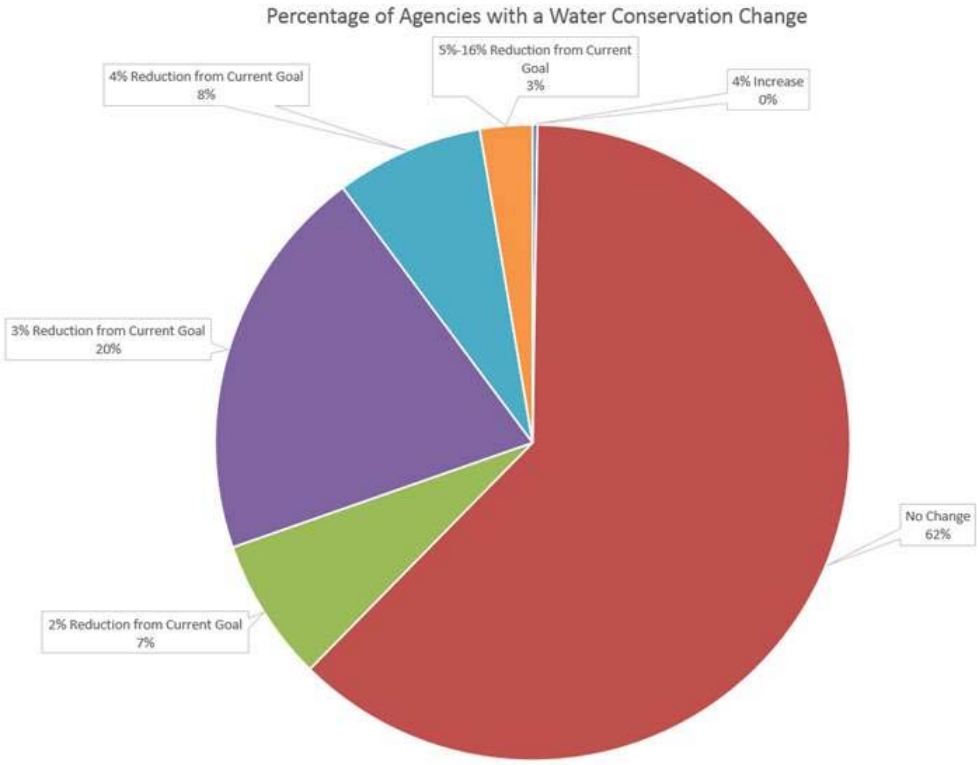
SWRCB Required Water Conservation Goal	Original Conservation Standard (Released 7/17/15)	DRAFT Adjusted Conservation Standard
Required 36% Reduction	67	25
Required 34% Reduction	0	8
Required 33% Reduction	0	25
Required 32% Reduction	62	28
Required 30% Reduction	0	10
Required 29% Reduction	0	18
Required 28% Reduction	81	52
Required 26% Reduction	0	10
Required 25% Reduction	1	23
Required 24% Reduction	45	36
Required 22% Reduction	0	1
Required 21% Reduction	0	11
Required 20% Reduction	61	58
Required 18% Reduction	0	2
Required 17% Reduction	0	5
Required 16% Reduction	42	40
Required 13% Reduction	0	5
Required 12% Reduction	22	24
Required 10% Reduction	0	1
Required 8% Reduction	27	26
Required 4% Reduction	4	4
	412	412

conservation regulations will require only 25 water agencies statewide to meet a 36% reduction. The City of Redlands, Yucaipa Valley Water District and Beaumont Cherry Valley Water District are the three local water agencies that are still required to meet the 36% water conservation reduction.

- There are 412 water agencies that are directly impacted by the State Water Resources Control Board Emergency Water Conservation Regulations. Based on the proposed changes,
  - o One water agency (City of Seal Beach) will experience an increase by 4% from their current water conservation goal of 8%;
  - o The vast majority of water agencies (256 agencies, or 62.1%) will see no change to their water conservation regulations. This includes the City of Redlands and the Yucaipa Valley Water District, so both will remain at a 36% water conservation goal;
  - o Thirty water agencies (or 7.3%) will see a 2% reduction in their water conservation regulations;
  - o Eighty three water agencies (or 20.1%) will see a 3% reduction in their water conservation regulations;

- The distribution of changes to water agencies is shown below:

Proposed Change by SWRCB	Number of Agencies that will See a Change in	Percentage of Agencies with a Water Conservatio
4% Increase	1	0.2%
No Change	256	62.1%
2% Reduction from Current Goal	30	7.3%
3% Reduction from Current Goal	83	20.1%
4% Reduction from Current Goal	31	7.5%
5%-16% Reduction from Current Goal	11	2.7%
	412	

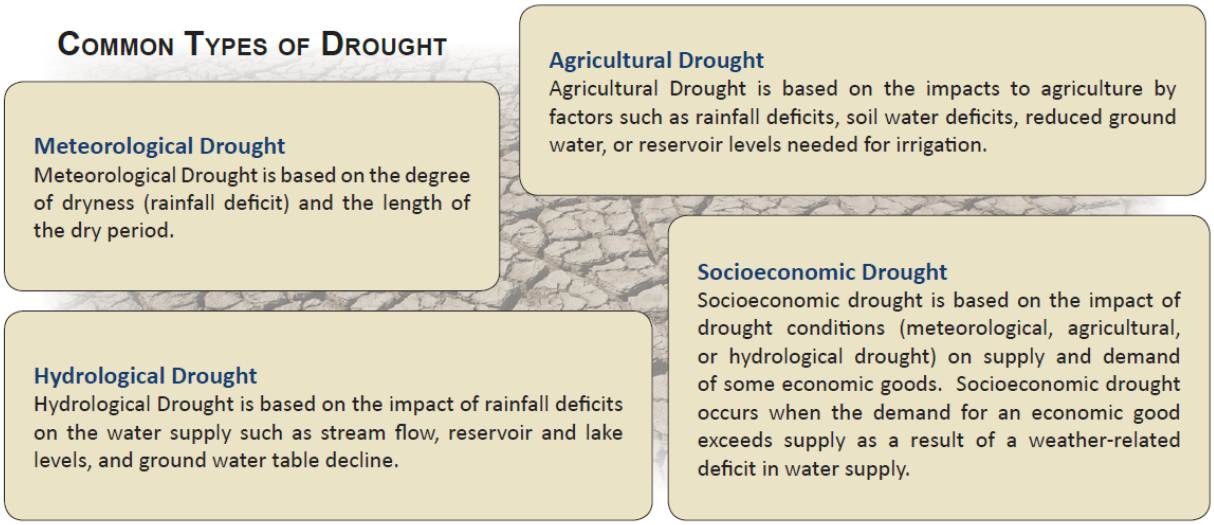


The purpose of this agenda item is to discuss the ongoing and evolving implementation strategy for our community.

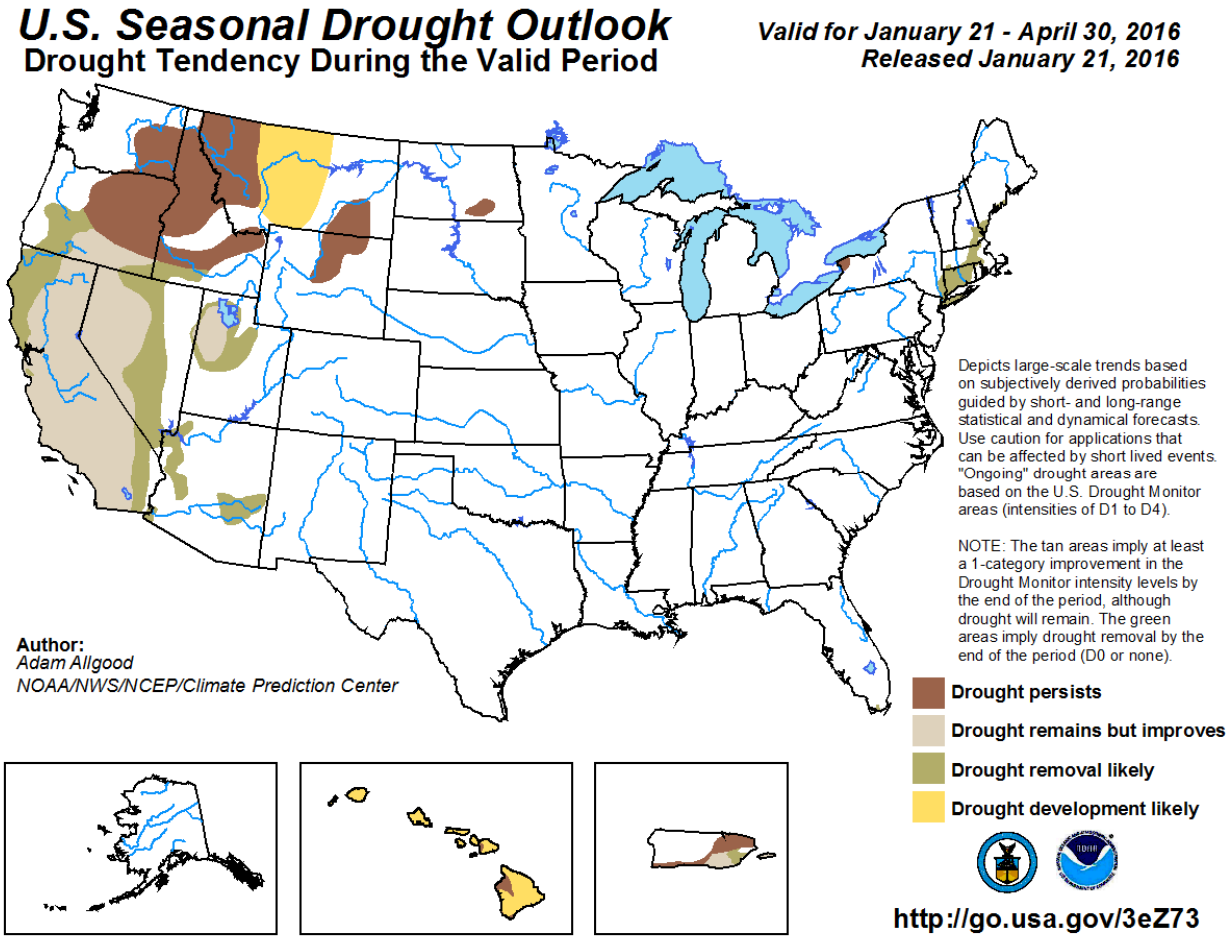
Drought Status and Update

The U.S. Seasonal Drought Outlook shows predicted trends for areas experiencing drought, as well as indicating areas where new droughts may develop. The NOAA Climate Prediction Center issues this monthly product in conjunction with their long-lead temperature and precipitation outlooks on the first and third Thursday of each month and when weather events warrant an interim update. The general large-scale trends depicted are based on numerous indicators, including short and long-range forecasts. A discussion detailing the atmospheric, hydrologic, and climatic conditions affecting the drought trends is included.

Human factors, such as water demand and water management, can exacerbate the impact that drought has on a region. Because of the interplay between a natural drought event and various human factors, drought means different things to different people. In practice, drought is defined in a number of ways that reflect various perspectives and interests.



Additional information can be found at: www.drought.unl.edu/DroughtBasics/TypesofDrought.aspx



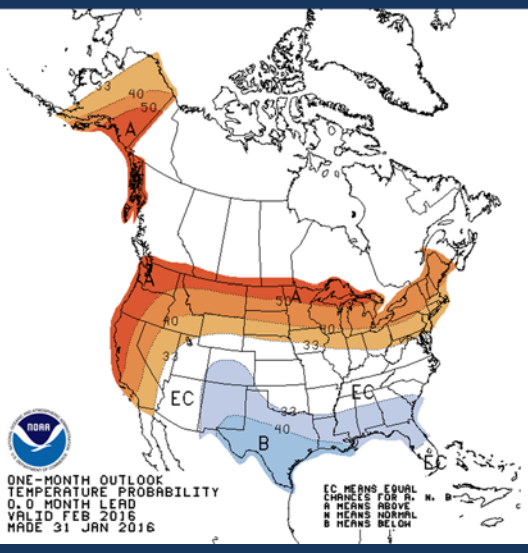
Latest Seasonal Assessment - During the past four weeks, widespread heavy rain and mountain snowfall resulted in significant drought reductions across the Northwest. Drought relief also occurred across parts of northern California, the Great Basin, and the Desert Southwest. In contrast, drier than normal conditions promoted short term drought development across parts of the northern High Plains. East of the Mississippi, a potent winter storm removed all remaining drought areas across Indiana, Michigan, and Ohio. While above-normal precipitation alleviated drought across northern New Jersey and eastern Pennsylvania, moderate drought conditions persisted across southeastern New England and near Niagara Falls. During the next 3.5 months, El Niño conditions favor continued drought improvement or removal across southern Oregon, California, the Great Basin, and the Southwest, while an anticipated dry signal supports drought persistence across the Northwest. Despite this dry signal on the seasonal time scale, short range forecasts indicate heavy precipitation across the Pacific Northwest and Intermountain West, which would likely limit additional drought development. Drought expansion becomes more likely across the eastern Rockies and adjacent High Plains, however, where incipient snowpack conditions are poorest and the ENSO signal is strongest. Forecasts favoring wetness at all time scales along the Eastern Seaboard make drought removal the most likely outcome across southeastern New England, while an eastward shifted storm track due to El Niño favors drought persistence near Niagara Falls. Continued drought expansion is likely across Hawaii due to the strong El Niño, while a wetter than normal dry season across Puerto Rico may support drought reductions in areas where drought conditions are less entrenched.

Forecaster: Adam Allgood

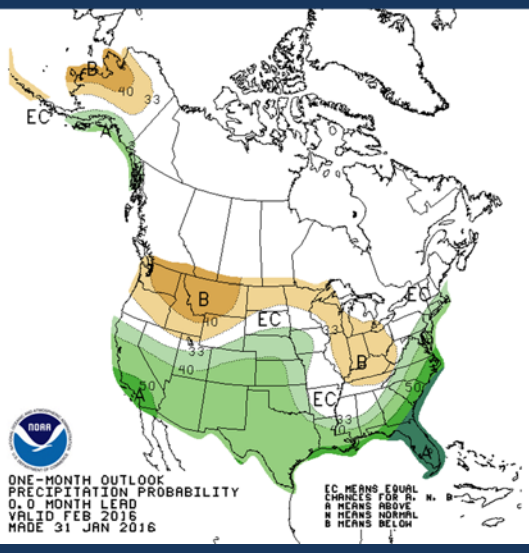
Next Seasonal Drought Outlook issued: February 18, 2016 at 8:30 AM EST
Source: http://www.cpc.ncep.noaa.gov/products/expert_assessment/sdo_summary.php

The National Weather Service and the National Oceanic and Atmospheric Administration provides regular predictions for temperature and precipitation forecasts throughout the United States. The following charts show the temperature and precipitation probability for the next month, as well as a compilation of future forecasts for temperature and precipitation.

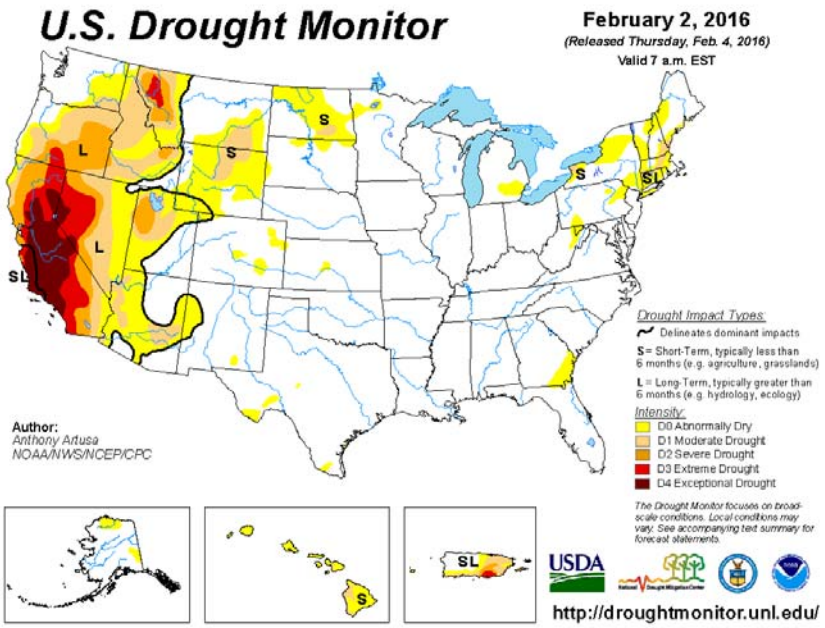
Temperature Probability
February 2016



Precipitation Probability
February 2016

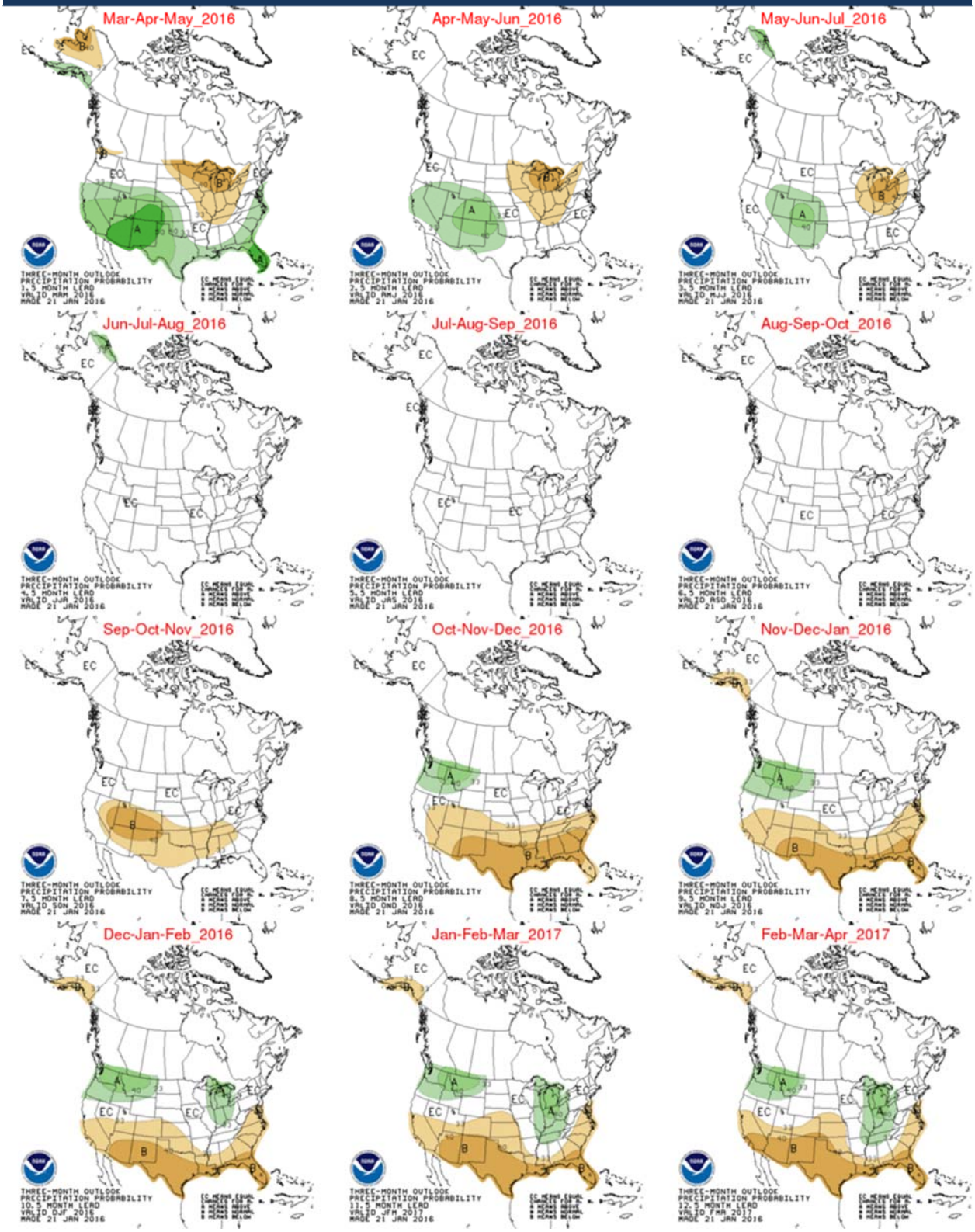


United Stated Drought Monitor Illustration



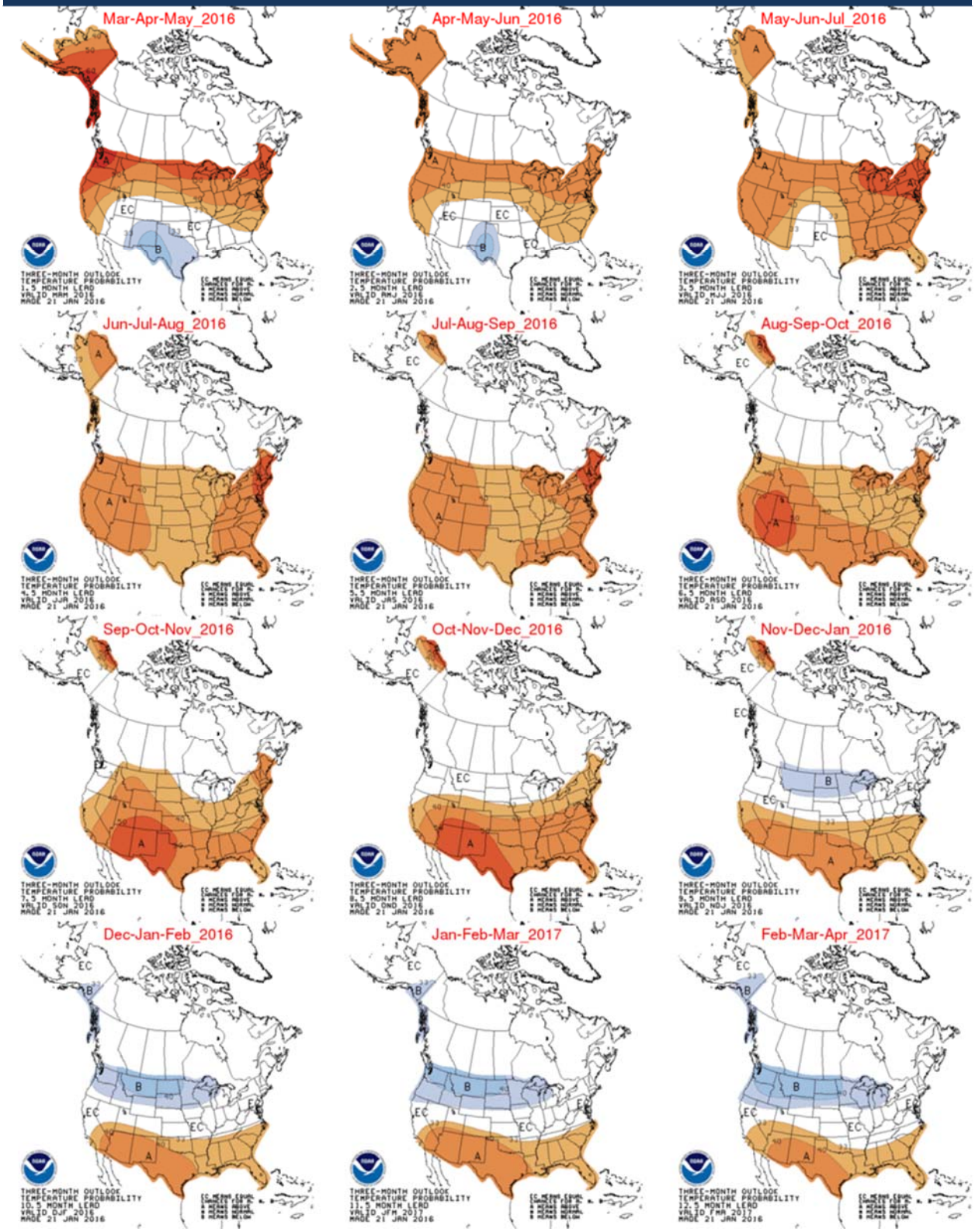
NOAA Multi-Season Precipitation Predictions - Three Month, Rolling Periods

http://www.cpc.ncep.noaa.gov/products/predictions/multi_season/13_seasonal_outlooks/color/p.gif



NOAA Multi-Season Temperature Predictions - Three Month, Rolling Periods

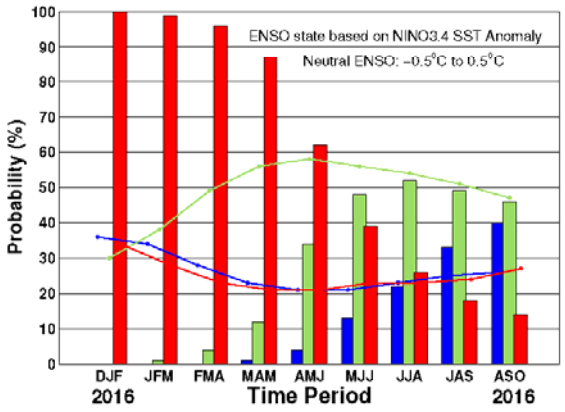
http://www.cpc.ncep.noaa.gov/products/predictions//multi_season/13_seasonal_outlooks/color/t.gif



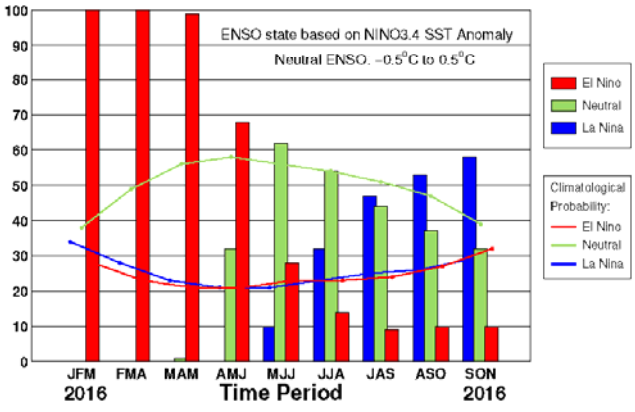
ENSO *QUICK LOOK* **January 21, 2016 A monthly summary of the status of El Niño, La Niña and the Southern Oscillation, or "ENSO",** based on NINO3.4 index (120-170W, 5S-5N)

During mid-January 2015 the tropical Pacific SST was at a strong El Niño level, having peaked in November and December. All atmospheric variables strongly support the El Niño pattern, including weakened trade winds and excess rainfall in the east-central tropical Pacific. The consensus of ENSO prediction models indicate continuation of strong El Niño conditions during the January-March 2016 season in progress. The beginning of a gradual weakening of the SST anomaly is underway, with the event dissipating to neutral conditions by late spring or early summer 2016.

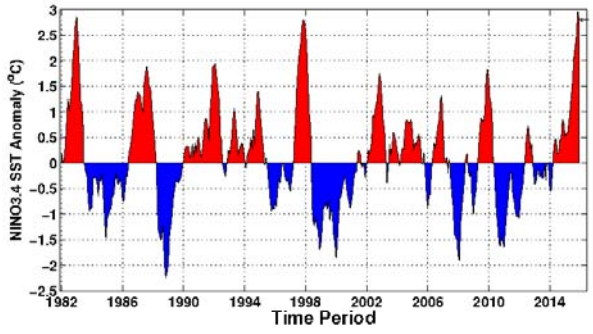
Early-Jan CPC/IRI Consensus Forecast[1]



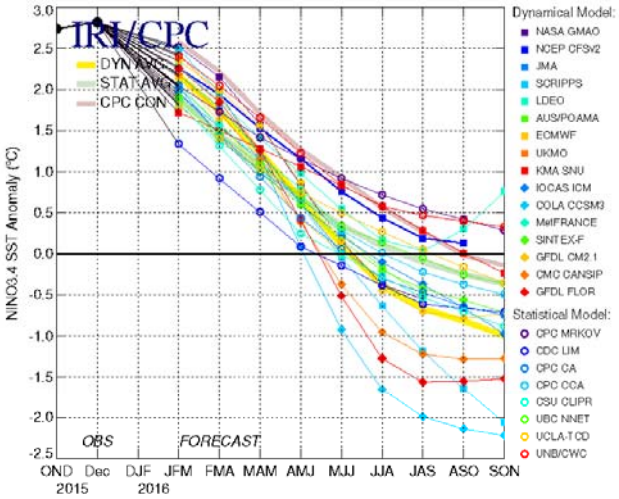
Mid-Jan IRI/CPC Plume-Based Forecast[2]



Historical NINO3.4 SST Anomaly



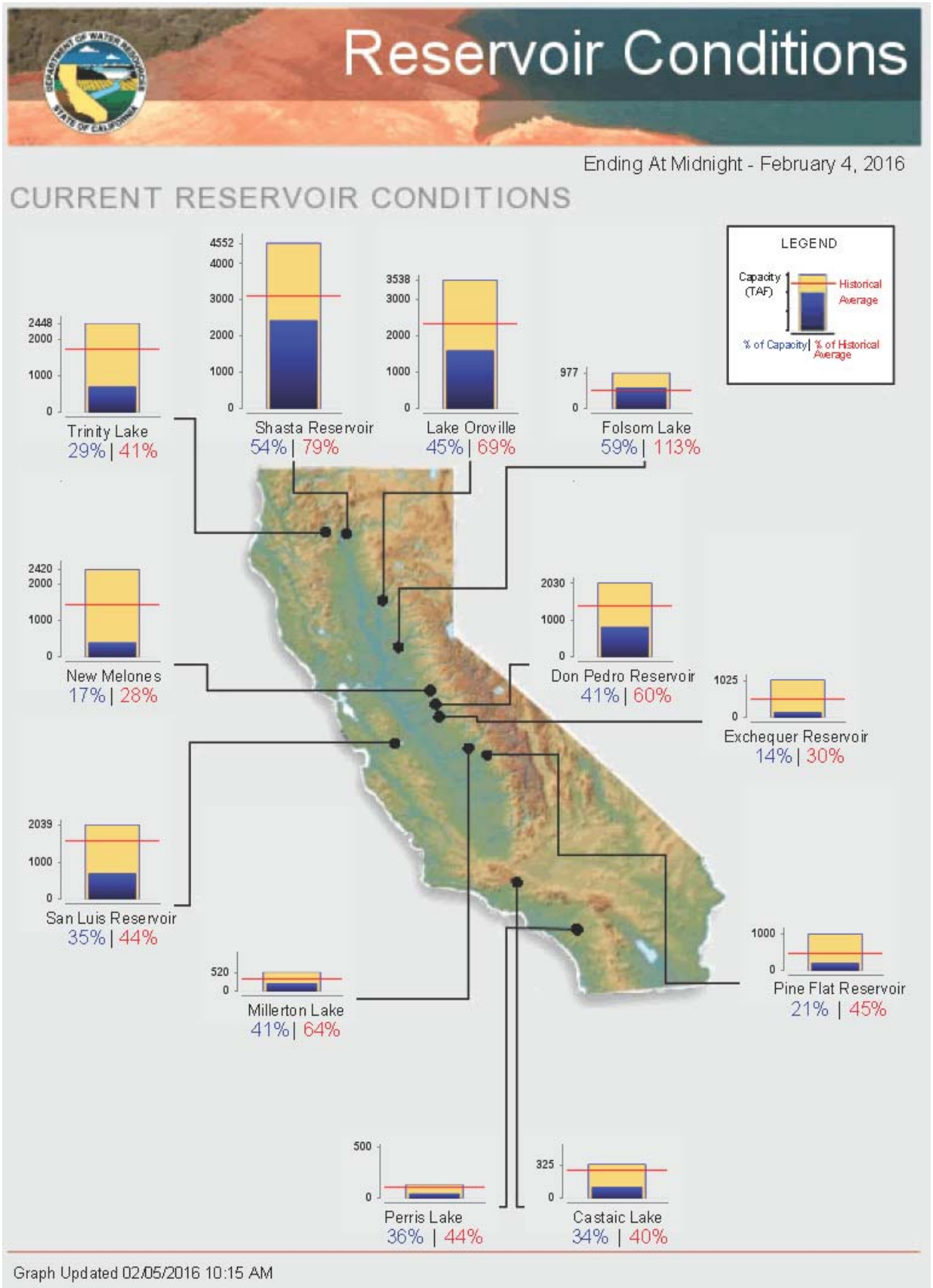
Mid-Jan 2016 Plume of Model ENSO Predictions



Historically Speaking

El Niño and La Niña events tend to develop during the period Apr-Jun and they:
- Tend to reach their maximum strength during Dec-Feb
- Typically persist for 9-12 months, though occasionally persisting for up to 2 years
- Typically recur every 2 to 7 years

[1]Based on a consensus of CPC and IRI forecasters, in association with the official CPC/IRI ENSO Diagnostic Discussion.


Reservoir Conditions
Ending At Midnight - February 4, 2016
CURRENT RESERVOIR CONDITIONS
LEGEND
Capacity (TAF)
Historical Average
% of Capacity
% of Historical Average
Trinity Lake
29% | 41%
Shasta Reservoir
54% | 79%
Lake Oroville
45% | 69%
Folsom Lake
59% | 113%
New Melones
17% | 28%
Don Pedro Reservoir
41% | 60%
Exchequer Reservoir
14% | 30%
San Luis Reservoir
35% | 44%
Millerton Lake
41% | 64%
Pine Flat Reservoir
21% | 45%
Perris Lake
36% | 44%
Castaic Lake
34% | 40%
Graph Updated 02/05/2016 10:15 AM

Water Boards

Media Release

State Water Board Adopts Extended Emergency Water Conservation Regulation

Extended Regulation Gives More Flexibility to Water Suppliers to Meet Conservation Targets

FOR IMMEDIATE RELEASE
Feb. 2, 2016

Contact: George Kostyrko
gkostyrko@waterboards.ca.gov

SACRAMENTO – With California still experiencing severe drought despite recent rains, the State Water Resources Control Board (State Water Board) today adopted an extended and revised emergency regulation to ensure that urban water conservation continues in 2016.

The regulation extends restrictions on urban water use through October 2016 while providing urban water suppliers more flexibility in meeting their conservation requirements. It also directs staff to report back on additional flexibility once more complete water supply information is known in April. The action follows Governor Edmund G. Brown Jr.'s Nov. 13, 2015, Executive Order directing the State Water Board to extend the emergency water conservation regulation should drought conditions persist through January 2016.

"After four years of extreme drought, there is still a need for Californians to keep up their stellar conservation practices," said Felicia Marcus, chair of the State Water Resources Control Board. "This updated regulation acknowledges that need, while making adjustments in response to feedback from water suppliers and others. If we continue to receive a lot of rain and snow in February and March, we may scale back the conservation requirements further, drop them, or move to another approach."

Under the revised regulation, statewide water conservation is expected to exceed 20 percent compared to 2013 water use. The revised regulation responds to calls for greater consideration of certain factors that influence water use in different parts of the state, including hotter-than-average climate, population growth, and significant investments in new local, drought resilient water sources such as wastewater reuse and desalination.

Due to the severity of the water deficits over the past four years, many of California's reservoirs and groundwater basins remain depleted, and the need for continued water conservation persists. Today's action serves as the fourth iteration of the emergency regulation since the State Water Board first instituted statewide conservation requirements in July 2014.

Water Boards

Media Release

The State Water Board will continue to track water conservation efforts for each of the state's urban water suppliers (those with more than 3,000 connections) on a monthly basis. Compliance with individual water supplier conservation requirements will continue to be based on cumulative savings since June 2015. Cumulative tracking means that conservation savings will be added together from one month to the next, including conservation achieved under the Board's May 5, 2015, emergency regulation, and compared to the amount of water used during the same months in 2013.

Summary of Conservation Regulation Adjustments

The updated emergency regulation continues to specify how much water communities must conserve based on their residential gallons per capita per day (R-GPCD) data (from July through September 2014), and provides recognition for certain factors affecting water use, along with other changes detailed below:

- Credits and adjustments to urban water suppliers' conservation standards are now available. They range from 2 percentage points to a maximum of 8 percentage points. In some cases, water suppliers are automatically credited based on conditions in their service areas. In other cases, water suppliers must supply specific information to support and determine the size of an adjustment.
- The regulation provides credits in three ways:
  1) Considering the differences in climate affecting different parts of the state;
  2) Providing a mechanism to reflect water-efficient growth experienced by urban areas; and
  3) Recognizing significant investments made by suppliers toward creating new, local, drought-resilient sources of potable water supply.
- The regulation creates penalties for homeowners' associations or community service organizations that block, stifle or threaten homeowners from reducing or eliminating the watering of vegetation or lawns during a declared drought emergency in violation of existing law.

This regulation extends the original framework that has resulted in a statewide water conservation rate of 25.5 percent over a seven-month period, according to December conservation data released earlier today. Even assuming all of the 400-plus water agencies receive the applicable credits offered in this regulation, the statewide cumulative conservation rate is still projected to exceed 20 percent.

"We expect a savings rate greater than 20 percent, but perhaps not quite achieving the prior call for 25 percent," said Marcus. "We anticipated this might occur with any tweaks to our existing regulation. This regulation should still allow this state to save more than 1 million acre-feet of water through October 2016 – which is enough water to serve an average of two million California families. While we are hopeful that we are turning the corner on this drought, the

truth is that it's just too soon tell. Any additional water we can conserve to today will serve us well tomorrow if the drought continues."

For additional information and examples of how the credits would be calculated and applied, please see the fact sheet.

Next Steps

The regulation will now be submitted to the Office of Administrative Law, which will review and approve or deny the regulation. If approved by the Office of Administrative Law, the regulation will take effect immediately and remain in effect for 270 days from the approval date.

For more information, please visit the Emergency Water Conservation website.

To learn more about the state's drought response, visit Drought.CA.Gov.

Every Californian should take steps to conserve water. Find out how at SaveOurWater.com.

###

STATE WATER RESOURCES CONTROL BOARD
RESOLUTION NO. 2016-0007

TO ADOPT AN EMERGENCY REGULATION FOR
STATEWIDE URBAN WATER CONSERVATION

WHEREAS:

1. On April 25, 2014, Governor Edmund G. Brown Jr. issued an executive order (April 2014 Proclamation) to strengthen the State's ability to manage water and habitat effectively in drought conditions, and called on all Californians to redouble their efforts to conserve water. The April 2014 Proclamation finds that the continuous severe drought conditions present urgent challenges across the State, including water shortages in communities and for agricultural production, increased wildfires, degraded habitat for fish and wildlife, threat of saltwater contamination, and additional water scarcity, if drought conditions continue into 2015. It orders that any provision of the governing document, architectural or landscaping guidelines, or policies of a common interest development will be void and unenforceable to the extent it has the effect of prohibiting compliance with the water-saving measures contained in this directive, or any conservation measure adopted by a public agency or private water company. The April 2014 Proclamation also suspends the environmental review required by the California Environmental Quality Act to allow the emergency regulation and other actions to take place as quickly as possible;

2. The April 2014 Proclamation refers to the Governor's Proclamation No. 1-17-2014, issued on January 17, 2014, declaring a drought State of Emergency to exist in California due to severe drought conditions (January 2014 Proclamation). The January 2014 Proclamation finds that dry conditions and lack of precipitation present urgent problems to drinking water supplies and cultivation of crops, which put farmers' long-term investments at risk. The conditions also threaten the survival of animals and plants that rely on California's rivers, including many species in danger of extinction. The January 2014 Proclamation also calls on all Californians to reduce their water usage by 20 percent;

3. On December 22, 2014, in light of the continued lack of rain, Governor Brown issued Executive Order B-28-14, which extends the California Environmental Quality Act suspension through May 31, 2016 for Water Code section 13247 and certain activities identified in the January 2014 and April 2014 proclamations;

4. On April 1, 2015, Governor Brown issued Executive Order B-29-15 that directs the State Water Board to impose restrictions on urban water suppliers to achieve a statewide 25 percent reduction in potable urban usage through February 2016; require commercial, industrial, and institutional users to implement water efficiency measures; prohibit irrigation with potable water of ornamental turf in public street medians; and prohibit irrigation with potable water outside newly constructed homes and buildings that is not delivered by drip or microspray systems; along with other directives;

5. On May 5, 2015, the State Water Resources Control Board (State Water Board) adopted Board Resolution No. 2015-0032 and an Emergency Regulation to address specific provisions of Executive Order B-29-2015 that included a mandatory 25 percent statewide reduction in potable urban water use between June 2015 and February 2016. To implement the Executive Order, the Emergency Regulation placed each urban water supplier in a conservation tier, ranging between 4 and 36 percent, based residential per capita water use for the months of July – September 2014. Resolution No. 2015-0032 also directed staff to work with stakeholders to further develop and consider a range of factors that contribute to water use, including but not limited to climate, growth, investment in local, drought resilient supplies, and others for adjustment to the current emergency regulation should it need to be extended into 2016;

6. On November 13, 2015, Governor Brown issued Executive Order B-36-15 calling for an extension of urban water use restrictions until October 31, 2016, should drought conditions persist through January 2016. This Executive Order also directs the State Water Board to consider modifying the restrictions to address uses of potable and non-potable water, as well as to incorporate insights gained from the existing restrictions;

7. As of January 15, 2016, the state has experienced some much-needed snow and rainfall in December and January; However, surface and groundwater storage remains depleted, precipitation has been inconsistent, and snowpack is about average, and the full hydrologic water conditions for 2016 will not be known until April 2016;

8. Water Code section 1058.5 grants the State Water Board the authority to adopt emergency regulations in certain drought years in order to: "prevent the waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion, of water, to promote water recycling or water conservation, to require curtailment of diversions when water is not available under the diverter's priority of right, or in furtherance of any of the foregoing, to require reporting of diversion or use or the preparation of monitoring reports";

9. On July 15, 2014, the State Water Board adopted an emergency regulation to support water conservation (Resolution No. 2014-0038), and that regulation became effective July 28, 2014 upon approval by the Office of Administrative Law (OAL);

10. On March 17, 2015, the State Water Board amended and readopted the emergency regulation to support water conservation (Resolution No. 2015-0013), which became effective March 27, 2015 upon approval by OAL;

11. On May 5, 2015, the State Water Board amended and readopted the emergency regulation to support water conservation (Resolution No. 2015-0032), which became effective May 18, 2015 upon approval by OAL and expires February 13, 2016;

12. State Water Board estimates that suppliers and their customers will save more than one million acre-feet of water in response to the extended regulation. This savings will be in addition to the 1.2 million acre-feet the State is on track to have saved from June 2015 through February 2016;

13. Under the May 5, 2015 emergency regulation, urban water suppliers, large and small, have reduced statewide potable water usage more than 25 percent compared to 2013, through the significant efforts of the suppliers and their customers;

14. In many areas, 50 percent or more of daily water use is for lawns and outdoor landscaping. Outdoor water use is generally discretionary, and many irrigated landscapes will survive while receiving a decreased amount of water;

15. Although urban water suppliers have placed restrictions on outdoor watering, the State Water Board continues to receive reports of excessive outdoor water use, and not all suppliers have achieved their conservation standards under the May 5, 2015 emergency regulation;

16. Water conservation is the easiest, most efficient and most cost-effective way to quickly reduce water demand and extend supplies into the next year, providing flexibility for all California communities. Water saved this summer is water available later in the season or next year, reducing the likelihood of even more severe water shortages should the drought continue;

17. Education and enforcement against water waste is a key tool in conservation programs. When conservation becomes a social norm in a community, the need for enforcement is reduced or eliminated;

18. Public information and awareness is critical to achieving conservation goals, and the Save Our Water campaign, run jointly by the Department of Water Resources (DWR) and the Association of California Water Agencies, is an excellent resource for conservation information and messaging that is integral to effective drought response (http://saveourwater.com);

19. Many California communities are facing social and economic hardship due to this drought. The rest of us can make adjustments to our water use, including landscape choices that conserve even more water;

20. The California Constitution declares, at article X, section 2, that the water resources of the state must be put to beneficial use in a manner that is reasonable and not wasteful. Relevant to the current drought conditions, the California Supreme Court has clarified that "what may be a reasonable beneficial use, where water is present in excess of all needs, would not be a reasonable beneficial use in an area of great scarcity and great need. What is a beneficial use at one time may, because of changed conditions, become a waste of water at a later time." (*Tulare Dist. v. Lindsay Strathmore Dist*. (1935) 3 Cal.2d 489, 567.) In support of water conservation, the legislature has, through Water Code section 1011, deemed reductions in water use due to conservation as equivalent to reasonable beneficial use of that water. Accordingly, this regulation is in furtherance of article X, section 2 during this drought emergency. This temporary emergency regulation is not to be used in any future administrative or judicial proceedings as evidence or finding of waste and unreasonable use of any individual water user or water supplier subject to this regulation, and are not to affect or otherwise limit any rights to water conserved under applicable law, including without limitation, water conserved consistent with Water Code section 1011;

21. Directive two of the Governor's April 1, 2015 Executive Order directs the State Water Board to consider the relative per capita usage of each urban water supplier's service area and require that areas with high per capita use achieve proportionally greater reductions than areas with low per capita use;

22. On December 21, 2015, the State Water Board issued a draft framework proposing modest adjustments to the May 5 emergency regulation structure, keeping the increasing levels of required water reduction based upon residential per capita per day use (R-GPCD), and adding several credits that reduce a supplier's required water reduction based on certain conditions. The State Water Board solicited public comments on the proposed framework and received over 200 comments, primarily relating to the levels and types of credits and consideration of updated drought conditions in April 2016, at which time more information will be available on 2016 snowpack and reservoir levels;

23. On January 15, 2016 the State Water Board issued draft regulatory language for public comment based on the December 21, 2015 framework and the comments received. The draft regulatory language reflected careful consideration of all comments including those directed at the levels of required reduction. The draft regulatory language extends the May 2015 emergency regulation, that otherwise would expire on February 13, 2016, and provides modest equity credits and adjustments to address geographic climate differences, new growth, and investments made in new, local, drought resilient potable water supplies;

24. On January 22, 2016, the State Water Board initiated the formal emergency rulemaking process by issuing public notice that it would consider the adoption of the emergency regulation at the Board's regularly-scheduled February 2, 2016 public meeting, in accordance with applicable State laws and regulations. The State Water Board also distributed for public review and comment a Finding of Emergency that complies with State laws and regulations;

25. As discussed above, the State Water Board is adopting the extended emergency regulation as directed by the Governor in Executive Order B-36-15 based on the need for prompt action to prevent the waste and unreasonable use of water and to promote conservation because the May 15 emergency regulation is set to expire on February 13, 2016, emergency drought conditions still exist, and stakeholders have requested reasonable and modest adjustments to the existing emergency regulation; and

26. Nothing in the regulation or in the enforcement provisions of the regulation precludes a local agency from exercising its authority to adopt more stringent conservation measures. Moreover, the Water Code does not impose a mandatory penalty for violations of the regulation adopted by this resolution, and local agencies retain the enforcement discretion in enforcing the regulation to the extent authorized. Local agencies are encouraged to develop their own progressive enforcement practices to promote conservation.

THEREFORE BE IT RESOLVED THAT:

1. The State Water Board readopts California Code of Regulations, title 23, sections 863, 864, 865 and 866, as appended to this resolution as an emergency regulation;

2. State Water Board staff will submit the regulation to OAL for final approval;

3. If, during the approval process, State Water Board staff, the State Water Board, or OAL determines that minor corrections to the language of the regulation or supporting documentation are needed for clarity or consistency, the State Water Board Executive Director or the Executive Director's designee may make such changes;

4. This regulation shall remain in effect for 270 days after filing with the Secretary of State unless the State Water Board determines that it is no longer necessary due to changed conditions, or unless the State Water Board renews the regulation due to continued drought conditions as described in Water Code section 1058.5;

5. In consideration of the fact that Executive Order B-36-15 directs the State Water Board to extend restrictions to achieve statewide reductions in urban potable water usage if drought conditions persist through January 2016, and the fact that in many years a significant portion of the state's rainfall and snowpack occur in February and March, the State Water Board directs staff to monitor and evaluate available data on precipitation, snowpack, reservoir storage levels, and other factors and report back to the Board in March and April, 2016 and, if conditions warrant, bring a proposal for rescission or adjustment of this regulation to the Board no later than the second regularly-scheduled May 2016 Board meeting;

6. The State Water Board directs staff to provide the Board with monthly updates on the implementation of the emergency regulation and its effect;

7. The State Water Board directs staff to condition funding upon compliance with the emergency regulation, to the extent feasible;

8. The State Water Board directs staff to work with DWR and the Save Our Water campaign to disseminate information regarding the emergency regulation; and

9. The State Water Board directs staff to update the electronic reporting portal to include data fields for reporting required by the emergency regulation.

THEREFORE BE IT FURTHER RESOLVED THAT:

10. The State Water Board shall work with DWR, the Public Utilities Commission, and other agencies to support urban water suppliers' actions to implement rates and pricing structures to incent additional conservation, as required by directive eight in the Governor's April 1, 2015 Executive Order. The Fourth District Court of Appeal's recent Decision in *Capistrano Taxpayer Association Inc. v. City of San Juan Capistrano* (G048969) does not foreclose the use of conservation-oriented rate structures;

11. The State Water Board calls upon water suppliers to:

    a. ensure that adequate personnel and financial resources exist to implement conservation requirements not only for 2016, but also for another year of drought should it occur. Water suppliers that face budget shortfalls due to reduced sales should take immediate steps to raise necessary revenues in a way that actively promotes continued conservation;

    b. expedite implementation of new conservation programs by minimizing internal review periods and utilizing emergency authorities, as appropriate;

    c. consider the relative water use and conservation practices of their customers and target those with higher water use to achieve proportionally greater reductions than those with low use;

    d. minimize financial impacts to low-income customers;

    e. preserve safe indoor water supplies in areas with very low R-GPCD and where necessary to protect public health and safety;

    f. promote low-water use methods of preserving appropriate defensible space in fire-prone areas, consistent with local fire district requirements;

    g. educate customers on the preservation of trees;

    h. promote on-site reuse of water; and

    i. promptly notify staff of the supplier's need for an alternate method of compliance pursuant to resolved paragraph 18.

12. The State Water Board calls upon all businesses within California's travel and tourism sectors to inform visitors of California's drought situation and actions visitors should take to conserve water;

13. The State Water Board calls upon all homeowners' associations to support and cooperate with water suppliers' and their residents' efforts to conserve water in community apartment projects, condominium projects, planned developments, and stock cooperatives statewide;

14. The State Water Board commends wholesale water agencies that have set aggressive conservation targets for their retail water suppliers and who have invested heavily in subsidizing efficiency measures such as turf and toilet rebates, recycled water production, and other potable water augmentation measures;

15. The State Water Board commends water suppliers that have made investments to boost drought-resistant supplies, such as advanced treated recycled water and desalination. Those investments help to make communities more resilient in the face of drought and the Board is committed to moving towards a more resilience based approach to emergency water conservation and in any permanent measures going forward;

16. The State Water Board commends the many water suppliers that have taken steps and made systemic changes that have led to them surpassing their 20x2020 conservation targets as well as their emergency conservation targets. Long-term conservation efforts are critical to maintaining economic and social well-being, especially in light of the impacts of climate change on California's hydrology;

17. During this drought emergency, heightened conservation that extends urban resilience is necessary. The State Water Board's focus is primarily on immediate reductions in outdoor water use. Some short-term conservation efforts, such as landscape conversions and installation of efficient appliances, will also support long-term conservation objectives, and are encouraged wherever possible;

18. The State Water Board recognizes that some commercial and industrial customers, while accounting for a significant portion of total use in a service area, have already taken steps to significantly reduce their water consumption and cannot further reduce their use without substantial impacts. However, the Board also recognizes that in many areas there are significant opportunities for reductions in water use by industries and commercial enterprises that have yet to take action, especially those with large areas of non-functional turf. The Board directs staff to respond promptly upon receipt of any request for alternate enforceable methods of compliance. If the supplier believes the conservation standard is unachievable due to firm commercial and industrial water use and residential use reductions that would affect public health and safety, it should provide any supporting information or documentation for an alternate method of compliance;

19. Some water suppliers have called for further refinement of the tiers and have called for an approach that provides greater recognition for early investments in conservation; the development of local, drought resistant water supplies that include banked groundwater; regional compliance mechanisms; differing regional water supply conditions; climate; and health and safety needs. These suggestions and many others have been considered in the context of the current drought emergency, will inform any revisions to these emergency regulations during the spring as the 2016 water supply information becomes more complete, and are separately important considerations for the development of a more comprehensive long-term conservation framework. The State Water Board directs staff to continue working with stakeholders on further refinement of these emergency water conservation regulations to be considered in tandem with an assessment of where the current winter precipitation leaves us; and

20. The California Water Action Plan calls for making conservation a way of life, increasing regional water self-reliance, and expanding storage capacity, among other actions. Long term water security will depend on implementing a range of actions and the State Water Board recognizes that these actions must advance in a complementary manner such that one action does not impede the progress of another. The State Water Board recognizes that conservation requirements implemented in response to critical drought conditions differ from those actions needed to optimize urban water use efficiency and build resilience over the long-term. Resilience to drought requires a combination of water efficiency and the development of new sustainable supplies, such as recycling, stormwater capture and re-use, local storage to capture water in wet years for use in dry years, and other actions. However, the effect of climate change on California weather patterns and snowpack will undoubtedly put increased pressure on the water supply and pose greater risk for extreme weather conditions, including longer and more severe

droughts. It is imperative that State agencies and water suppliers have the information and mechanisms needed to best respond to critical drought emergencies and that all sources of urban water be used efficiently over the long-term. Staff is directed to engage the Department of Water Resources in developing a proposed framework for enhanced urban water conservation, efficiency and resilience. Staff is directed to report back to the Board on options for transitioning to a more resilience-based approach to dealing with the future by May 1 after continuing conversations with stakeholders and the Department of Water Resources.

CERTIFICATION

The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on February 2, 2016.

AYE:	Chair Felicia Marcus Vice Chair Frances Spivy-Weber Board Member Steven Moore
NAY:	None
ABSENT:	Board Member Tam M. Doduc Board Member Dorene D'Adamo
ABSTAIN:	None

Jeanine Townsend
Clerk to the Board

ADOPTED TEXT OF EMERGENCY REGULATION

Article 22.5. Drought Emergency Water Conservation.

Sec. 863. Findings of Drought Emergency.

(a) The State Water Resources Control Board finds as follows:

(1) On January 17, 2014, the Governor issued a proclamation of a state of emergency under the California Emergency Services Act based on drought conditions;

(2) On April 25, 2014, the Governor issued a proclamation of a continued state of emergency under the California Emergency Services Act based on continued drought conditions;

(3) On April 1, 2015, the Governor issued an Executive Order that, in part, directs the State Board to impose restrictions on water suppliers to achieve a statewide 25 percent reduction in potable urban usage through February, 2016; require commercial, industrial, and institutional users to implement water efficiency measures; prohibit irrigation with potable water of ornamental turf in public street medians; and prohibit irrigation with potable water outside newly constructed homes and buildings that is not delivered by drip or microspray systems;

(4) On November 13, 2015, the Governor issued an Executive Order that directs the State Board to, if drought conditions persist through January 2016, extend until October 31, 2016 restrictions to achieve a statewide reduction in potable usage;

(45) The drought conditions that formed the basis of the Governor's emergency proclamations continue to exist; and

~~(5) The present year is critically dry and has been immediately preceded by two or more consecutive below normal, dry, or critically dry years; and~~

(6) The 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 likely be necessary to prevent waste and unreasonable use of water and to further promote conservation.

Authority: Section 1058.5, Water Code.
References: Cal. Const., Art., X § 2; Sections 102, 104, 105, and 275, Water Code; *Light v. State Water Resources Control Board* (2014) 226 Cal.App.4th 1463.

Sec. 864. End-User Requirements in Promotion of Water Conservation.

(a) To prevent the waste and unreasonable use of water and to promote water conservation, each of the following actions is prohibited, except where necessary to address an immediate health and safety need or to comply with a term or condition in a permit issued by a state or federal agency:

(1) The application of potable water to outdoor landscapes in a manner that causes runoff such that water flows onto adjacent property, non-irrigated areas, private and public walkways, roadways, parking lots, or structures;

(2) The use of a hose that dispenses potable water to wash a motor vehicle, except where the hose is fitted with a shut-off nozzle or device attached to it that causes it to cease dispensing water immediately when not in use;

(3) The application of potable water to driveways and sidewalks; and

(4) The use of potable water in a fountain or other decorative water feature, except where the water is part of a recirculating system;

(5) The application of potable water to outdoor landscapes during and within 48 hours after measurable rainfall;

(6) The serving of drinking water other than upon request in eating or drinking establishments, including but not limited to restaurants, hotels, cafes, cafeterias, bars, or other public places where food or drink are served and/or purchased;

(7) The irrigation with potable water of ornamental turf on public street medians; and

(8) The irrigation with potable water of landscapes outside of newly constructed homes and buildings in a manner inconsistent with regulations or other requirements established by the California Building Standards Commission and the Department of Housing and Community Development.

(b) To promote water conservation, operators of hotels and motels shall provide guests with the option of choosing not to have towels and linens laundered daily. The hotel or motel shall prominently display notice of this option in each guestroom using clear and easily understood language.

(c) Immediately upon this subdivision taking effect, all commercial, industrial and institutional properties that use a water supply, any portion of which is from a source other than a water supplier subject to section 865, shall either:

(1) Limit outdoor irrigation of ornamental landscapes or turf with potable water to no more than two days per week; or

(2) Reduce potable water usage supplied by sources other than a water supplier by 25 percent for the months of June 2015 through ~~February~~October 2016 as compared to the amount used from those sources for the same months in 2013.

(d) The taking of any action prohibited in subdivision (a) or (e), or the failure to take any action required in ~~subdivisions~~ subdivision (b) or (c), is an infraction, punishable by a fine of up to five hundred dollars ($500) for each day in which the violation occurs. The fine for the infraction is in addition to, and does not supersede or limit, any other remedies, civil or criminal.

(e)(1) To prevent the waste and unreasonable use of water and to promote water conservation, any homeowners' association or community service organization or similar entity is prohibited from:

(A) Taking or threatening to take any action to enforce any provision of the governing documents or architectural or landscaping guidelines or policies of a common interest development where that provision is void or unenforceable under section 4735, subdivision (a) of the Civil Code; or

(B) Imposing or threatening to impose a fine, assessment, or other monetary penalty against any owner of a separate interest for reducing or eliminating the watering of vegetation or lawns during a declared drought emergency, as described in section 4735, subdivision (c) of the Civil Code.

(2) As used in this subdivision:

(A)"Architectural or landscaping guidelines or policies" includes any formal or informal rules other than the governing documents of a common interest development.

(B)"Homeowners' association" means an "association" as defined in section 4080 of the Civil Code.

(C)"Common interest development" has the same meaning as in section 4100 of the Civil Code.

(D)"Community service organization or similar entity" has the same meaning as in section 4110 of the Civil Code.

(E) "Governing documents" has the same meaning as in section 4150 of the Civil Code.

(F) "Separate interest" has the same meaning as in section 4185 of the Civil Code.

(3) If a disciplinary proceeding or other proceeding to enforce a rule in violation of subdivision (e)(1) is initiated, each day the proceeding remains pending shall constitute a separate violation of this regulation.

Authority: Section 1058.5, Water Code.
References: Cal. Const., Art., X § 2; Sections 4080, 4100, 4110, 4150, 4185, and 4735, Civil Code; Sections 102, 104, 105, 275, 350, and 10617, Water Code; *Light v. State Water Resources Control Board* (2014) 226 Cal.App.4th 1463.

Sec. 865. Mandatory Actions by Water Suppliers.

(a) As used in this section:

(1) "Distributor of a public water supply" has the same meaning as under section 350 of the Water Code, except it does not refer to such distributors when they are functioning solely in a wholesale capacity, but does apply to distributors when they are functioning in a retail capacity.

(2) "R-GPCD" means residential gallons per capita per day.

(3) "Total potable water production" means all potable water that enters into a water supplier's distribution system, excluding water placed into storage and not withdrawn for use during the reporting period, or water exported outsider the supplier's service area.

(4) "Urban water supplier" means a supplier that meets the definition set forth in Water Code section 10617, except it does not refer to suppliers when they are functioning solely in a wholesale capacity, but does apply to suppliers when they are functioning in a retail capacity.

(b) In furtherance of the promotion of water conservation each urban water supplier shall:

(1) Provide prompt notice to a customer whenever the supplier obtains information that indicates that a leak may exist within the end-user's exclusive control.

(2) Prepare and submit to the State Water Resources Control Board by the 15th of each month a monitoring report on forms provided by the Board. The monitoring report shall include the amount of potable water the urban water supplier produced, including water provided by a wholesaler, in the preceding calendar month and shall compare that amount to the amount produced in the same calendar month in 2013. The monitoring report shall specify the population served by the urban water supplier, the percentage of water produced that is used for the residential sector, descriptive statistics on water conservation compliance and enforcement efforts, and the number of days that outdoor irrigation is allowed, and monthly commercial, industrial and institutional sector use.

The monitoring report shall also estimate the gallons of water per person per day used by the residential customers it serves.

(c)(1) To prevent the waste and unreasonable use of water and to meet the requirements of the Governor's ~~April 1~~November 13, 2015 Executive Order, each urban water supplier shall reduce its total potable water production by the percentage identified as its conservation standard in this subdivision. Each urban water supplier's conservation standard considers its service area's relative per capita water usage.

(2) Each urban water supplier whose source of supply does not include groundwater or water imported from outside the hydrologic region in which the water supplier is located, and that has a minimum of four years' reserved supply available may, submit to the Executive Director for approval a request that, in lieu of the reduction that would otherwise be required under paragraphs (3) through (10), the urban water supplier shall reduce its total potable water production by 4 percent for each month as compared to the amount used in the same month in 2013. Any such request shall be accompanied by information showing that the supplier's sources of supply do not include groundwater or water imported from outside the hydrologic region and that the supplier has a minimum of four years' reserved supply available.

(3) Each urban water supplier whose average July-September 2014 R-GPCD was less than 65 shall reduce its total potable water production by 8 percent for each month as compared to the amount used in the same month in 2013.

(4) Each urban water supplier whose average July-September 2014 R-GPCD was 65 or more but less than 80 shall reduce its total potable water production by 12 percent for each month as compared to the amount used in the same month in 2013.

(5) Each urban water supplier whose average July-September 2014 R-GPCD was 80 or more but less than 95 shall reduce its total potable water production by 16 percent for each month as compared to the amount used in the same month in 2013.

(6) Each urban water supplier whose average July-September 2014 R-GPCD was 95 or more but less than 110 shall reduce its total potable water production by 20 percent for each month as compared to the amount used in the same month in 2013.

(7) Each urban water supplier whose average July-September 2014 R-GPCD was 110 or more but less than 130 shall reduce its total potable water production by 24 percent for each month as compared to the amount used in the same month in 2013.

(8) Each urban water supplier whose average July-September 2014 R-GPCD was 130 or more but less than 170 shall reduce its total potable water production by 28 percent for each month as compared to the amount used in the same month in 2013.

(9) Each urban water supplier whose average July-September 2014 R-GPCD was 170 or more but less than 215 shall reduce its total potable water production by 32 percent for each month as compared to the amount used in the same month in 2013.

(10) Each urban water supplier whose average July-September 2014 R-GPCD was 215 or more shall reduce its total potable water production by 36 percent for each month as compared to the amount used in the same month in 2013.

(d)(1) Beginning June 1, 2015, each urban water supplier shall comply with the conservation standard specified in subdivision (c), as modified by subdivision (f).

(2) Compliance with the requirements of this subdivision shall be measured monthly and assessed on a cumulative basis through October 2016.

(e)(1) Each urban water supplier that provides potable water for commercial agricultural use meeting the definition of Government Code section 51201, subdivision (b), may subtract the amount of water provided for commercial agricultural use from its potable water production total, provided that any urban water supplier that subtracts any water provided for commercial agricultural use from its total potable water production shall:

(A) Impose reductions determined locally appropriate by the urban water supplier, after considering the applicable urban water supplier conservation standard specified in subdivision (c), for commercial agricultural users meeting the definition of Government Code section 51201, subdivision (b) served by the supplier;

(B) Report its total potable water production pursuant to subdivision (b)(2) of this section, the total amount of water supplied for commercial agricultural use, and shall identify the reduction imposed on its commercial agricultural users and each recipient of potable water for commercial agricultural use;

(C) Certify that the agricultural uses it serves meet the definition of Government Code section 51201, subdivision (b); and

(D) Comply with the Agricultural Water Management Plan requirement of paragraph 12 of the April 1, 2015 Executive Order for all commercial agricultural water served by the supplier that is subtracted from its total potable water production.

(2) Submitting any information pursuant to subdivision (e)(1)(B), (C), (D) or (~~C~~E) of this section that is found to be materially false by the ~~board~~Board is a violation of this regulation, punishable by civil liability of up to five hundred dollars ($500) for each day in which the violation occurs. Every day that the error goes uncorrected constitutes a separate violation. Civil liability for the violation is in addition to, and does not supersede or limit, any other remedies, civil or criminal.

(f) In consideration of the differences in climate affecting different parts of the state, growth experienced by urban areas and significant investments that have been made by some suppliers towards creating new, local, drought-resilient sources of potable water supply, an urban water supplier's conservation standard identified in subdivision (c) shall be reduced by an amount, not to exceed eight (8) percentage points total, as follows:

(1) For an urban water supplier whose service area evapotranspiration (ETo) for the months of July through September exceeds the statewide average evapotranspiration, as determined by the Board, for the same months by five (5) percent or more, the supplier's conservation standard identified in subdivision (c) shall be reduced:

(A) By two (2) percentage points if the supplier's service area evapotranspiration exceeds the statewide average by five (5) percent or more but less than ten (10) percent;

(B) By three (3) percentage points if the supplier's service area evapotranspiration exceeds the statewide average by ten (10) percent or more but less than twenty (20) percent;

(C) By four (4) percentage points if the supplier's service area evapotranspiration exceeds the statewide average by twenty (20) percent or more.

(D) Statewide average evapotranspiration is calculated as the arithmetic mean of all urban water suppliers' service area default evapotranspiration values for the months of July through September. Default service area evapotranspiration will be based on the California Irrigation Management System (CIMIS) ETo Zones Map zone for which the supplier's service area has the greatest area of overlap. In lieu of applying its default

service area evapotranspiration, a supplier may use specific data from CIMIS stations within its service area that have at least a five-year period of record, or a three year continuous period of record, to identify a more specifically-applicable evapotranspiration for its service area. If no CIMIS station exists within the supplier's service area, a weather station of comparable accuracy, meeting the preceding period of record requirements, may be used. To qualify for the in-lieu climate adjustment the supplier shall submit the following data to the Board by March 15, 2016 for each station: station ID; station location; and monthly average evapotranspiration, in inches per month, for July, August, and September for either the five-year period of record or the three-year continuous period of record.

(2) To account for water efficient growth experienced in the state since 2013, urban water suppliers' conservation standards shall be reduced by the product of the percentage change in potable water production since 2013 and the percentage reduction in potable water use required pursuant to subdivision (c), rounded to the nearest whole percentage point. Change in potable water production since 2013 shall be calculated as the sum of the following:

(A) The number of additional permanent residents served since January 1, 2013, multiplied the average residential water use per person for that supplier's service area during the months of February through October, 2015, in gallons; and

(B) The number of new commercial, industrial and institutional connections since January 1, 2013, multiplied by the average commercial, industrial and institutional water use per connection for that supplier's service area during the months of February through October, 2015, in gallons.

(C) To qualify for the growth credit the supplier shall submit to the Board the following data by March 15, 2016: the number of additional permanent residents served since January 1, 2013; the area of new residential landscaping, in square feet, served by a supplier's service connections since January 1, 2013; and the number of new commercial, industrial and institutional connections since January 1, 2013.

(3) For an urban water supplier that supplies, contracts for, or otherwise financially invests in, water from a new local, drought-resilient source of supply, the use of which does not reduce the water available to another legal user of water or the environment, the conservation standard identified in subdivision (c) shall be reduced:

(A) By one (1) percentage point if the supplier's qualifying source of supply is one (1) percent or more but less than two (2) percent of the supplier's total potable water production;

(B) By two (2) percentage points if the supplier's qualifying source of supply is two (2) percent or more but less than three (3) percent of the supplier's total potable water production;

(C) By three (3) percentage points if the supplier's qualifying source of supply is three (3) percent or more but less than four (4) percent of the supplier's total potable water production;

(D) By four (4) percentage points if the supplier's qualifying source of supply is four (4) percent or more but less than five (5) percent of the supplier's total potable water production;

(E) By five (5) percentage points if the supplier's qualifying source of supply is five (5) percent or more but less than six (6) percent of the supplier's total potable water production;

(F) By six (6) percentage points if the supplier's qualifying source of supply is six (6) percent or more but less than seven (7) percent of the supplier's total potable water production;

(G) By seven (7) percentage points if the supplier's qualifying source of supply is seven (7) percent or more but less than eight (8) percent of the supplier's total potable water production;

(H) By eight (8) percentage points if the supplier's qualifying source of supply is eight (8) percent or more of the supplier's total potable water production;

(I) To qualify for this reduction the supplier must certify, and provide documentation to the Board upon request, demonstrating the percent of its total potable water production that comes from a local, drought-resilient source of supply developed after 2013, the supplier's investment in that local, drought-resilient source of supply, and that the use of that supply does not reduce the water available to another legal user of water or the environment. To qualify for this reduction a supplier shall submit the required certification to the Board by March 15, 2016;

(J) Certifications that do not meet the requirements of subdivision (f)(3)(I), including certifications for which documentation does not support that the source of supply is a local, drought-resilient source of supply, the use of which does not reduce the water available to another legal user of water or the environment, will be rejected. Submitting a certification or supporting documentation pursuant to subdivision (f)(3)(F) that is found to be materially false by the Board is a violation of this regulation, punishable by civil liability of up to five hundred dollars ($500) for each day in which the violation occurs. Every day that the error goes uncorrected constitutes a separate violation. Civil liability for the violation is in addition to, and does not supersede or limit, any other remedies, civil or criminal.

(4) No supplier's conservation standard shall drop below eight (8) percent as a consequence of the reductions identified in this subdivision. No reduction pursuant to this subdivision shall be applied to any urban water supplier whose conservation standard is four (4) percent based on subdivision (c)(2).

(~~f~~g)(1) To prevent waste and unreasonable use of water and to promote water conservation, each distributor of a public water supply that is not an urban water supplier shall take one or more of the following actions:

(A) Limit outdoor irrigation of ornamental landscapes or turf with potable water by the persons it serves to no more than two days per week; or

(B) Reduce by 25 percent reduction its total potable water production relative to the amount produced in 2013.

(2) Each distributor of a public water supply that is not an urban water supplier shall submit a report by ~~December 15, 2015~~September 15, 2016, on a form provided by the Board, that either confirms compliance with subdivision (~~f~~g)(1)(A) or identifies total potable water production, by month, from ~~June~~December 2015 through ~~November~~August, ~~2015~~2016, and total potable water production, by month, for the same months in 2013.

Authority: Section 1058.5, Water Code.
References: Cal. Const., Art., X § 2; Sections 102, 104, 105, 275, 350, 1846, 10617 and 10632, Water Code; *Light v. State Water Resources Control Board* (2014) 226 Cal.App.4th 1463.

Sec. 866. Additional Conservation Tools.

(a)(1) To prevent the waste and unreasonable use of water and to promote conservation, when a water supplier does not meet its conservation standard required by section 865 the Executive Director, or the Executive Director's designee, may issue conservation orders requiring additional actions by the supplier to come into compliance with its conservation standard.

(2) A decision or order issued under this article by the ~~board~~Board or an officer or employee of the ~~board~~Board is subject to reconsideration under article 2 (commencing with section 1122) of chapter 4 of part 1 of division 2 of the California Water Code.

(b) The Executive Director, or his designee, may issue an informational order requiring water suppliers, or commercial, industrial or institutional properties that receive any portion of their supply from a source other than a water supplier subject to section 865, to submit additional information relating to water production, water use or water conservation. The failure to provide the information requested 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 pursuant to Water Code section 1846.

(c) Orders issued under previous versions of this subdivision shall remain in effect and shall be enforceable as if adopted under this version.

Authority: Section 1058.5, Water Code.
References: Cal. Const., Art., X § 2; Sections 100, 102, 104, 105, 174, 186, 187, 275, 350, 1051, 1122, 1123, 1825, 1846, 10617 and 10632, Water Code; *Light v. State Water Resources Control Board* (2014) 226 Cal.App.4th 1463.

Yucaipa Valley Water District

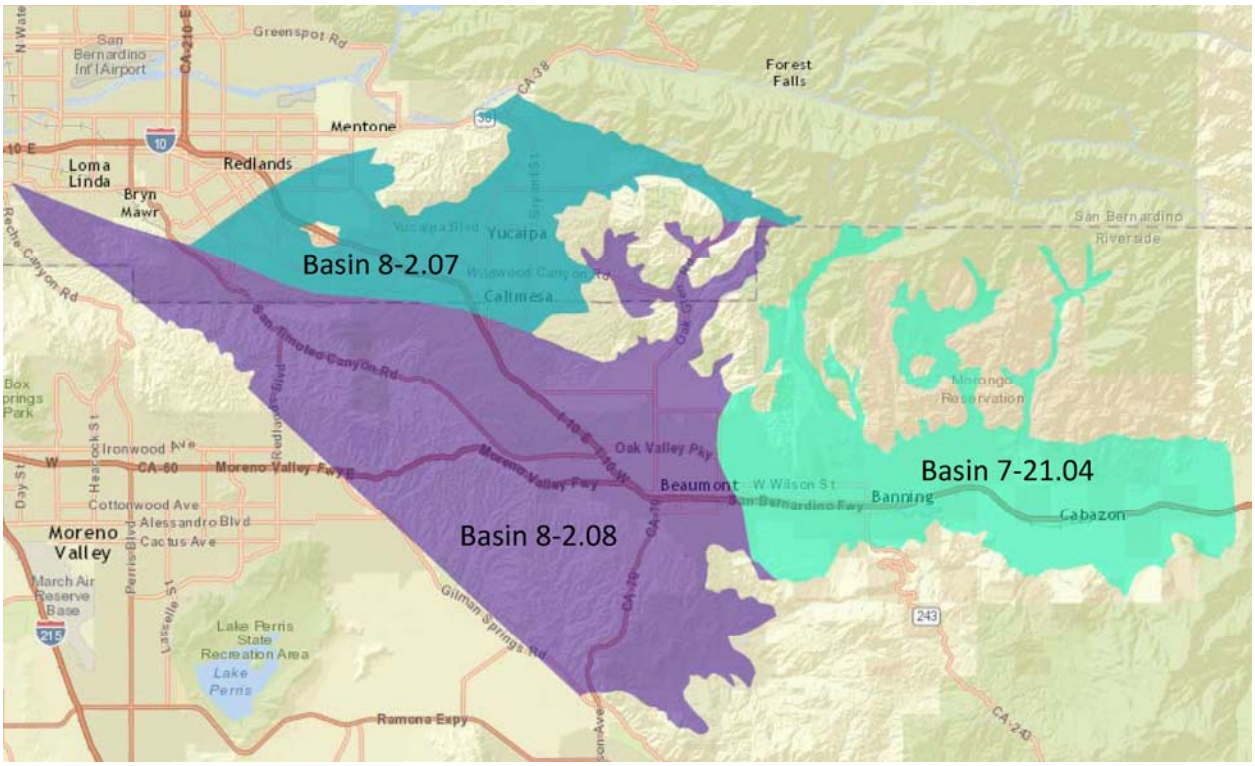
Workshop Memorandum 16-037

Date: **February 23, 2016**

Subject: **Overview of the Sustainable Groundwater Management Act and Proposed Basin Boundary Revisions**

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.



By January 1, 2016, the Department of Water Resources is required to adopt emergency regulations that specify the information required to comply with Water Code 10722.2, which outlines the process that local agencies need to follow when requesting modifications to existing boundaries of groundwater basins and subbasins. The basin boundary regulations also identify

the methodology and criteria that will be applied by the Department of Water Resources when reviewing and approving the modification requests.

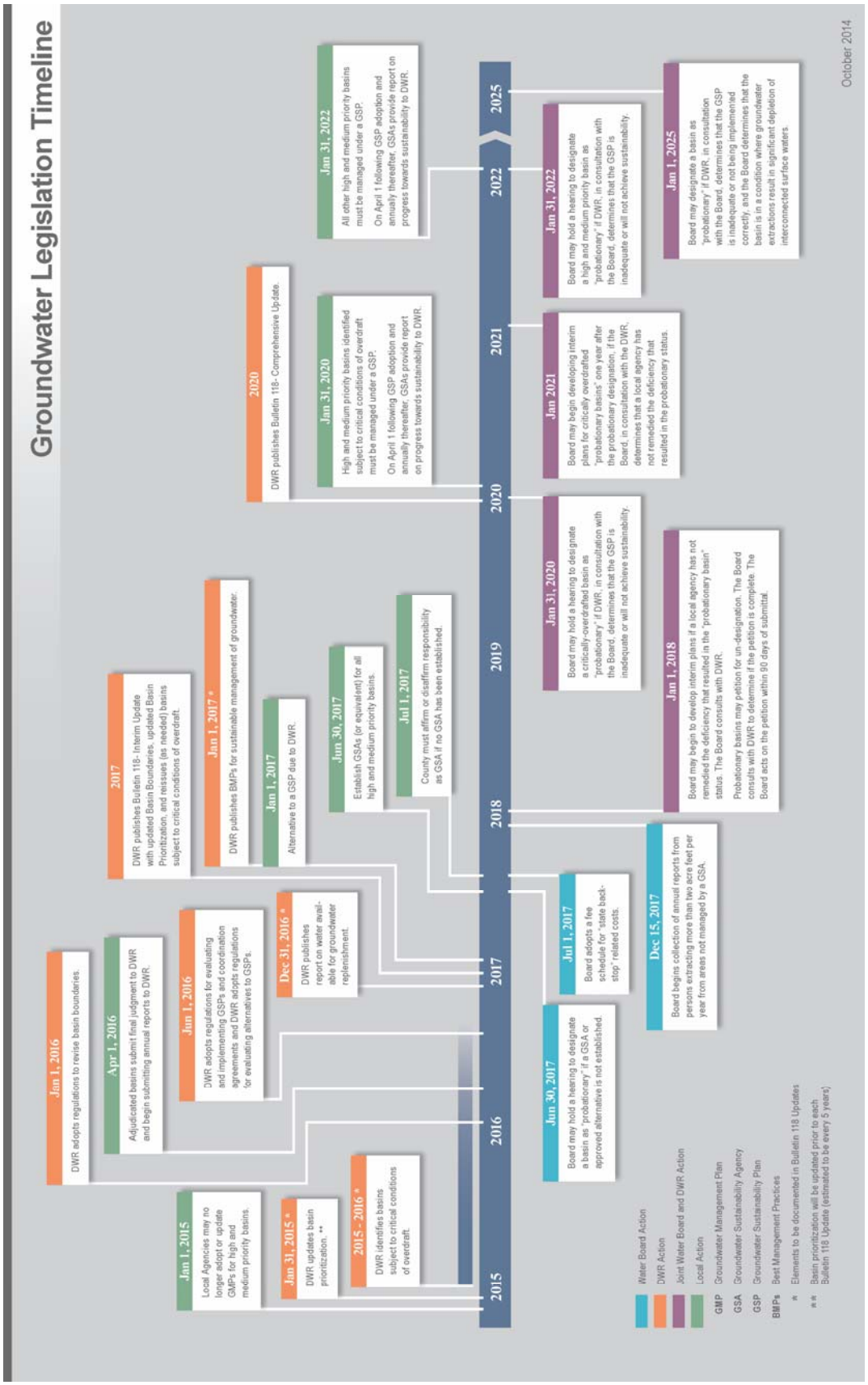
Timeline for Adopting Basin Boundary Emergency Regulations

The following is the anticipated schedule and next steps for adopting the regulations:

Events	Schedule*
Informational update on basin boundary emergency regulations presented to the California Water Commission (CWC)	July 15, 2015
Draft basin boundary emergency regulations released on DWR website	July 17, 2015
Informational update on basin boundary emergency regulations presented to the CWC	August 19, 2015
Public meeting and webinar presenting the draft basin boundary emergency regulations. Location: Byron Room, California EPA Building, Sacramento	August 31, 2015
Public meeting presenting the draft basin boundary emergency regulations. Location: Bakersfield Community College, Bakersfield	September 2, 2015
Public meeting presenting the draft basin boundary emergency regulations. Location: The Delhi Center, Santa Ana	September 3, 2015
Deadline for comment on draft emergency regulations	September 4, 2015
Informational update on basin boundary emergency regulations presented to the CWC	September 16, 2015
Formal Notice of Proposed Rulemaking and supporting information	October – November, 2015
Presentation of proposed emergency regulations to CWC for adoption	October – November, 2015
Submission of adopted emergency regulations to Office of Administrative Law	October – November, 2015
Basin boundary modification requests accepted by DWR within 90 day period	January 1, 2016

*All dates are subject to change.

The purpose of this agenda item is to discuss the next steps necessary for the Yucaipa Valley Water District to achieve compliance with the Sustainable Groundwater Management Act.


Groundwater Legislation Timeline
Jan 1, 2016
DWR adopts regulations to revise basin boundaries.
Apr 1, 2016
Adjudicated basins submit final judgment to DWR and begin submitting annual reports to DWR.
Jun 1, 2016
DWR adopts regulations for evaluating and implementing GSPs and coordination agreements and DWR adopts regulations for evaluating alternatives to GSPs.
Dec 31, 2016 *
DWR publishes report on water available for groundwater replenishment.
2017
DWR publishes Bulletin 118- Interim Update with updated Basin Boundaries, updated Basin Prioritization, and reissues (as needed) basins subject to critical conditions of overdraft.
Jan 1, 2017 *
DWR publishes BMPs for sustainable management of groundwater.
Jan 1, 2017
Alternative to a GSP due to DWR.
Jun 30, 2017
Establish GSAs (or equivalent) for all high and medium priority basins.
Jul 1, 2017
County must affirm or disaffirm responsibility as GSA if no GSA has been established.
Jan 1, 2015
Local Agencies may no longer adopt or update GMPs for high and medium priority basins.
Jan 31, 2015 *
DWR updates basin prioritization. **
2015 - 2016 *
DWR identifies basins subject to critical conditions of overdraft.
Jun 30, 2017
Board may hold a hearing to designate a basin as "probationary" if a GSA or approved alternative is not established.
Jul 1, 2017
Board adopts a fee schedule for "state back-stop" related costs.
Dec 15, 2017
Board begins collection of annual reports from persons extracting more than two acre feet per year from areas not managed by a GSA.
Jan 1, 2018
Board may begin to develop interim plans if a local agency has not remedied the deficiency that resulted in the "probationary basin" status. The Board consults with DWR.
Probationary basins may petition for un-designation. The Board consults with DWR to determine if the petition is complete. The Board acts on the petition within 90 days of submittal.
2020
DWR publishes Bulletin 118- Comprehensive Update.
Jan 31, 2020
High and medium priority basins identified subject to critical conditions of overdraft must be managed under a GSP.
On April 1 following GSP adoption and annually thereafter, GSAs provide report on progress towards sustainability to DWR.
Jan 31, 2020
Board may hold a hearing to designate a critically-overdrafted basin as "probationary" if DWR, in consultation with the Board, determines that the GSP is inadequate or will not achieve sustainability.
Jan 2021
Board may begin developing interim plans for critically overdrafted "probationary basins" one year after the probationary designation, if the Board, in consultation with the DWR, determines that a local agency has not remedied the deficiency that resulted in the probationary status.
Jan 31, 2022
All other high and medium priority basins must be managed under a GSP.
On April 1 following GSP adoption and annually thereafter, GSAs provide report on progress towards sustainability to DWR.
Jan 31, 2022
Board may hold a hearing to designate a high and medium priority basin as "probationary" if DWR, in consultation with the Board, determines that the GSP is inadequate or will not achieve sustainability.
Jan 1, 2025
Board may designate a basin as "probationary" if DWR, in consultation with the Board, determines that the GSP is inadequate or not being implemented correctly, and the Board determines that the basin is in a condition where groundwater extractions result in significant depletion of interconnected surface waters.
2015
2016
2017
2018
2019
2020
2021
2022
2025
Water Board Action
DWR Action
Joint Water Board and DWR Action
Local Action
GMP Groundwater Management Plan
GSA Groundwater Sustainability Agency
GSP Groundwater Sustainability Plan
BMPs Best Management Practices
* Elements to be documented in Bulletin 118 Updates
** Basin prioritization will be updated prior to each Bulletin 118 Update (estimated to be every 5 years)
October 2014

Association of California Water Agencies
Since 1910
Leadership • Advocacy
Information • Service

SUSTAINABLE GROUNDWATER MANAGEMENT ACT OF 2014

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 www.acwa.com
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

Sustainable Groundwater Management Act

PROPOSED BASIN BOUNDARY EMERGENCY REGULATIONS

California Department of Water Resources

http://water.ca.gov/groundwater/sgm/basin_boundaries.cfm

In September 2014, the Governor signed into law the Sustainable Groundwater Management Act (SGMA). The Department has developed a program and is currently implementing new and expanded responsibilities identified in SGMA. One of these responsibilities is developing emergency regulations to modify groundwater basin boundaries. SGMA established a process for local agencies to request that DWR revise the boundaries of a groundwater basin or subbasin, including the creation of new subbasins. California's existing groundwater basins and subbasins are described and delineated in **DWR's Bulletin 118-Update 2003**; – and the key definitions of basin, subbasin, and aquifer used in the emergency regulation are as follows:

- A **basin** refers to an area specifically defined as a basin or "groundwater basin" in Bulletin 118, and shall refer generally to an aquifer or stacked series of aquifers with reasonably well-defined boundaries in a lateral direction, based on features that significantly impede groundwater flow, and a definable bottom, as further defined or characterized in Bulletin 118
- A **subbasin** refers to an area specifically defined as a subbasin or "groundwater subbasin" in Bulletin 118, and shall refer generally to any subdivision of a basin based on geologic and hydrologic barriers or institutional boundaries, as further described or defined in Bulletin 118.
- An **Aquifer** refers to a three-dimensional body of porous and permeable sediment or sedimentary rock that contains sufficient saturated material to yield significant quantities of groundwater to wells and springs, as further defined or characterized in Bulletin 118.

By January 1, 2016, DWR is required to adopt emergency regulations that specify the information required to comply with Water Code §10722.2, which outlines the process that local agencies shall follow when requesting modifications to existing boundaries of groundwater basins and subbasins or the creation of new subbasins . The emergency regulations also identify the methodology and criteria that will be applied by DWR when evaluating modification requests. In general, DWR will apply the following criteria when evaluating boundary modification requests.

- How to assess the likelihood that the proposed basin can be sustainably managed.
- How to assess whether the proposed basin would limit the sustainable management of adjacent basins.
- How to assess whether there is a history of sustainable management of groundwater levels in the proposed basin.

Existing groundwater basin and subbasin boundaries have been defined and revised based on the best available information during each past update of Bulletin 118. The emergency regulations create a process that builds off this historical knowledge and provides a mechanism to modify basin and subbasin boundaries or create new subbasins based on new scientific information and local groundwater management knowledge to improve coordination and promote statewide sustainable groundwater management.

The emergency regulations have been organized in a manner to encompass the variety of modifications that may be requested by a local agency (Requesting Agency). The requirements for each boundary modification vary according to the type of modification requested. Requesting Agencies are required to the greatest extent practicable, combine all boundary modification requests that affect the same basin or subbasin and coordinate with other affected local agencies and affected public water systems, as necessary, to present the information as a single request.

1

SUMMARY OF REGULATION ARTICLES

The emergency regulations will be part of the California Code of Regulations Title 23 - Waters, Division 2 - Department of Water Resources, Chapter 1.5 – Groundwater Management, Subchapter 1 – Groundwater Basin Boundaries, and are arranged into seven articles. The following is a brief summary of each article:

1. **Introductory Provisions**: Provides the authority and intent of the subchapter.
2. **Definitions**: Provides definitions to key terms used in the regulations.
3. **Boundary Modification Categories**: Provides a description for characterizing the type of modification being requested.
4. **Procedures for Modification Request and Public Input**: Describes procedural requirements related to boundary modification requests and public input to those requests.
5. **Supporting Information**: Description of the required information to support the proposed basin modification.
6. **Methodology and Criteria for Evaluation**: Description of the criteria by which information provided in Article 5 will be evaluated.
7. **Adoption of Boundary Modification**: Procedure for the adoption of boundary modifications by DWR.

MODIFICATION TYPES

There are two types of basin modifications, scientific and jurisdictional, each with specific requirements to justify the modification request. The following is a description and graphical representation of the types of basin or subbasin modifications:

Scientific	Hydrogeologic
Jurisdictional	Internal
	Consolidation
	Subdivision

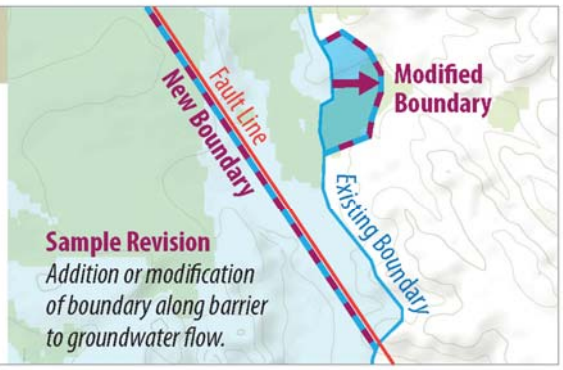
Scientific Modifications: A scientific modification to a basin or subbasin boundary involves the addition, deletion, or relocation of a boundary based on the geologic or hydrologic conditions that define a groundwater basin or subbasin.

Jurisdictional Modifications: A jurisdictional modification involves the addition, deletion, or relocation of a basin or subbasin boundary that is not a scientific modification but promotes sustainable groundwater management.

Examples of Modification Types

SCIENTIFIC

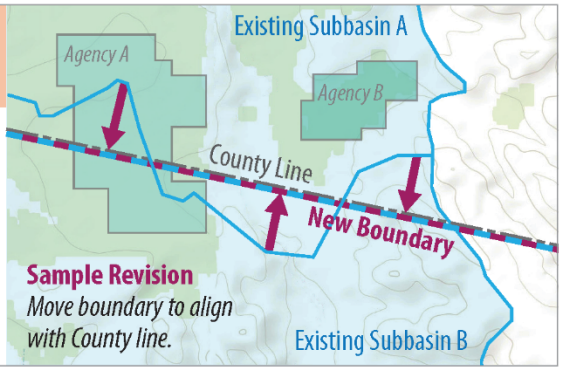
A **scientific** revision to a basin boundary consists of the addition, deletion, or relocation of a boundary based on the geologic or hydrologic conditions that define that basin.



2

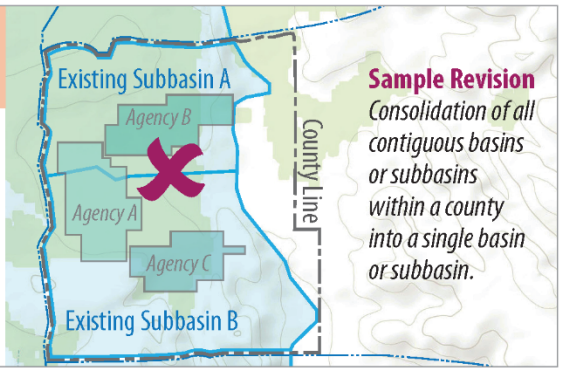
INTERNAL
(Jurisdictional)

Internal Boundary Revision refers to any boundary modification that would adjust the location of a boundary between subbasins, within a basin, or the shared boundary between adjacent basins.



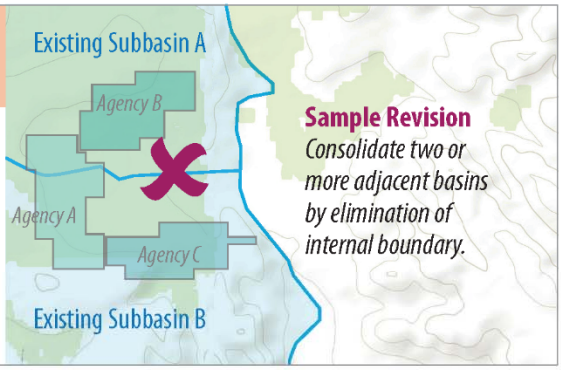
COUNTY BASIN CONSOLIDATION
(Jurisdictional)

County Basin Consolidation means the consolidation of all contiguous basins or subbasins within a county into a single basin or subbasin whose boundaries do not extend beyond those of the county.



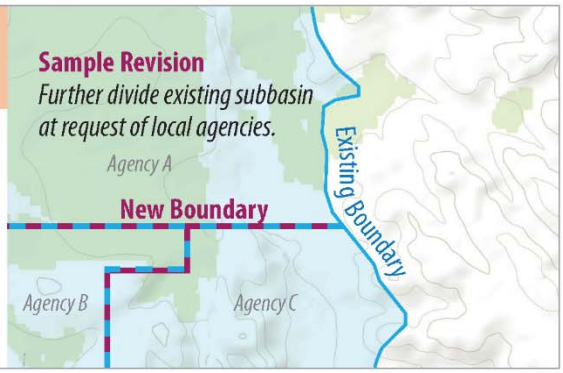
BASIN CONSOLIDATION
(Jurisdictional)

Basin Consolidation refers to any boundary modification that would reduce the number of subbasins within a basin, or merge two or more adjacent basins, but would change only shared boundaries and would not change the external boundary of any basin or subbasin.



BASIN SUBDIVISION
(Jurisdictional)

Basin Subdivision refers to any boundary modification that would increase the number of subbasins within a basin or subbasin.



3

REQUIRED COMPONENTS OF BOUNDARY MODIFICATION

The information submitted by a Requesting Agency to justify a boundary modification will be evaluated using the criteria described in SGMA (Water Code § 10722.2(c)(1)-(3)). The criteria are general, as described below, but provide a context in which to present information to support the boundary modification request.

- How to assess the likelihood that the proposed basin can be sustainably managed.
- How to assess whether the proposed basin would limit the sustainable management of adjacent basins.
- How to assess whether there is a history of sustainable management of groundwater levels in the proposed basin.

All of the following three components are required for boundary modifications relate to Water Code §10722.2(a):

Component 1 – General Information

A Requesting Agency will be required to provide general information including: contact information, evidence of statutory or other legal authority of the agency, a narrative description of the proposed boundary modification and a copy of an adopted board resolution initiating the boundary modification request. This information is important as it provides the opportunity to explain what type of boundary modification is being proposed and an explanation of how the boundary modification will promote sustainable groundwater management in the proposed basin or subbasin. It also provides for the evaluation of eligibility as a local agency and provides contact information to assure that the boundary modification request is coordinated properly.

Component 2 – Notification, Consultation, and Public and Local Agency Input

A Requesting Agency will need to demonstrate evidence of notification and consultation with local agencies and public water systems and, along with DWR, provide opportunities for public input. The purpose of these requirements are to establish communication and coordination between local agencies, public water systems, and the public on each boundary modification. This will allow DWR to receive and evaluate relevant comments, both for and against a boundary modification, from as any entities and individuals as possible in order to make the most informed decision when approving boundary modification requests. Key requirements for notification, consultation, and local agency and public input are described below and in more detail in Article 4 and 5 of the regulations:

Public Input (§343.12) - Any person may provide information to support or oppose a proposed boundary modification request and DWR will consider such comments as part of its evaluation of a boundary modification request.

Local Agency Input (§344.8) - All requests are required to include the following (Article 5):

- Evidence that the requesting agency provided information to affected local agencies and affected public water systems regarding the proposed boundary modification as required by Section 344.4 and provided those affected local agencies and affected public water systems an opportunity to comment in support or opposition.
- Copies of all comments and documents from affected local agencies and affected public water systems in support of or opposition to the proposed modification.
- Any evidence the Requesting Agency believes will rebut any opposition to the proposed boundary modification or otherwise assist the Department in its evaluation.

Any affected local agency or affected public water system that elects to support or oppose the proposed boundary modification is required to provide the requesting agency with one of the following:

- A copy of a resolution formally adopted by the decision-making body of the affected local agency or affected public water system.
- A letter signed by an executive officer or other official with appropriate delegated authority who represents the affected local agency or affected public water system.

4

A request that involves basin subdivision pursuant to Section 342.4(c) shall provide information demonstrating that the proposed boundary modification is supported by at least three-fourths of the local agencies and public water systems in the affected basins.

The level of detail provided by public input and by an affected local agency or affected public water system in support or opposition to a proposed boundary modification need not be as comprehensive as that contained in the request, but the support or opposition must rely on similar scientific and technical information as the particular boundary modification request to which it is addressed, and will be evaluated by the Department using the same criteria.

Component 3 – Technical Information

Technical information describing and supporting the three criteria identified in Water Code § 10722.2(c) is required for boundary modification. Requesting Agencies are required to provide evidence to justify the modification of a basin boundary and show compliance with the legislative intent of the SGMA. The technical supporting information required for each modification types are illustrated in the boundary modification process graphic below and described in detail in Article 5.

STAKEHOLDER INPUT OPPORTUNITIES

Local agencies, as defined in the SGMA, are eligible to request boundary modifications. The emergency regulations have been established to provide multiple opportunities for stakeholder input and notification of basin modification requests. The initial opportunity is direct communication with the Requesting Agency or an affected local agency through typical hearing processes at the local level. The notice, consultation, and public and local agency input components require at least one public meeting to occur prior to all boundary modification requests.

The emergency regulations includes a Public Input provision (§343.12), which defines a process for any person to provide information to support or oppose a proposed boundary modification request after a request is officially submitted to the DWR.

After DWR evaluates all boundary modification requests, DWR will make a draft list of approved boundary modifications available on its website and will hold at least one public meeting to present and discuss the proposed boundary modifications. Another opportunity to provide input is when DWR presents the draft list of approved boundary modifications to the California Water Commission (CWC) for hearing and comment.

NEXT STEPS FOR ADOPTING REGULATIONS

The following are the anticipated next steps for adopting the emergency regulations:

October 21, 2015 – Presentation of proposed emergency regulations to CWC for adoption.

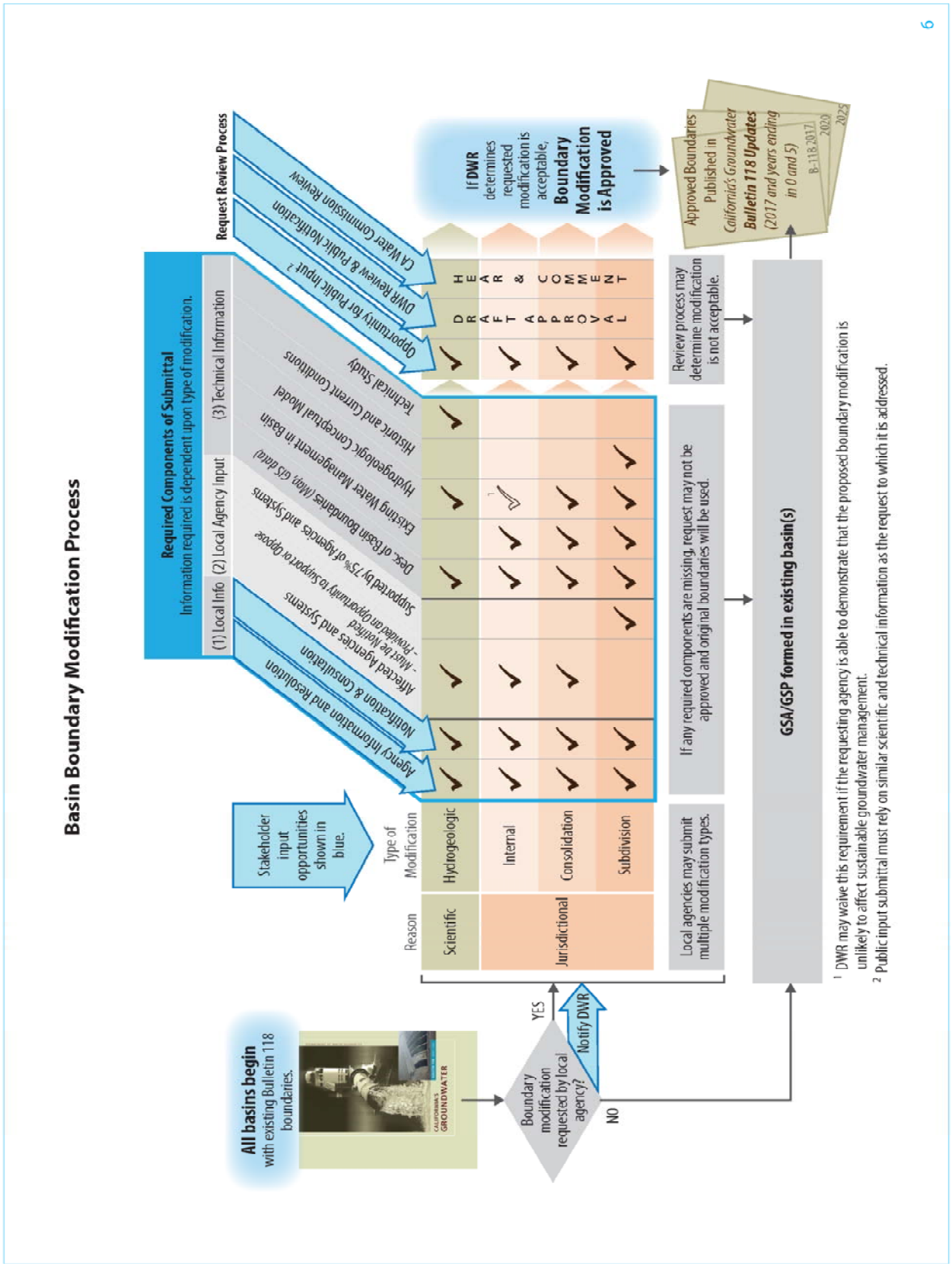
October – November, 2015 – Formal Notice of Proposed Rulemaking and supporting information.

October – November, 2015 – Submission of adopted emergency regulations to Office of Administrative Law.

January 1, 2016 – Boundary modification requests accepted by DWR within 90 day period.

*All dates are subject to change

5


Basin Boundary Modification Process
All basins begin with existing Bulletin 118 boundaries.
Boundary modification requested by local agency?
YES
Notify DWR
NO
Stakeholder input opportunities shown in blue.
Reason
Scientific
Jurisdictional
Type of Modification
Hydrogeologic
Internal
Consolidation
Subdivision
Local agencies may submit multiple modification types.
Agency Information and Resolution
Notification & Consultation
- Affected Agencies and Systems - Must be Notified - Provided an opportunity to support or oppose
Supported by 75% of Agencies and Systems
Desc. of Basin Boundaries (Map, GIS data)
Existing Water Management in Basin
Hydrogeologic Conceptual Model
History and Current Conditions
Technical Study
Required Components of Submittal
Information required is dependent upon type of modification.
(1) Local Info
(2) Local Agency Input
(3) Technical Information
Request Review Process
Opportunity for Public Input [2]
DWR Review & Public Notification
CA Water Commission Review
DRAFT & APPROVAL
THE AR & COMMENT
If any required components are missing, request may not be approved and original boundaries will be used.
Review process may determine modification is not acceptable.
If DWR determines requested modification is acceptable, Boundary Modification is Approved
GSA/GSP formed in existing basin(s)
Approved Boundaries Published in California's Groundwater Bulletin 118 Updates (2017 and years ending in 0 and 5)
B-118 2017
2020
2025
[1] DWR may waive this requirement if the requesting agency is able to demonstrate that the proposed boundary modification is unlikely to effect sustainable groundwater management.
[2] Public input submittal must rely on similar scientific and technical information as the request to which it is addressed.
6

Yucaipa Valley Water District

Workshop Memorandum 16-038

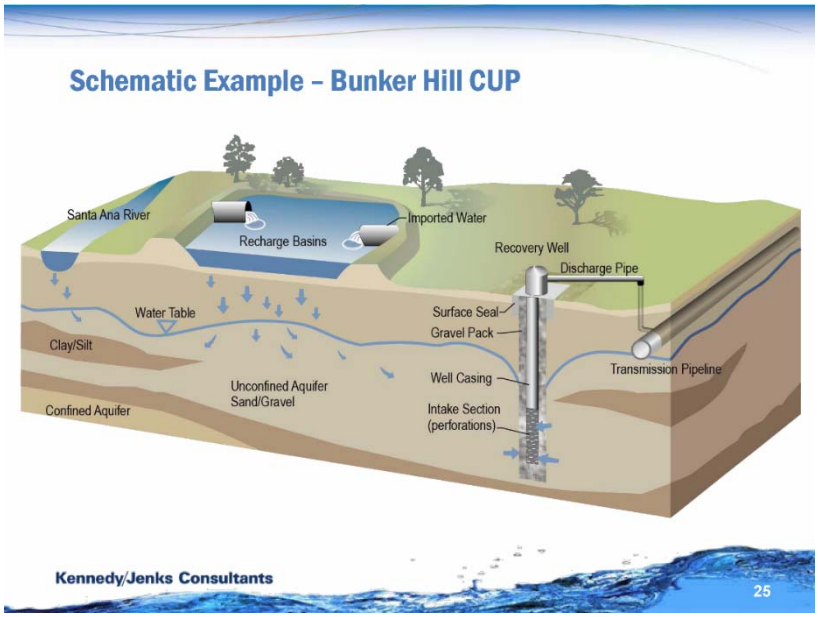
Date: **February 23, 2016**

Subject: **Overview of the Bunker Hill Conjunctive Use Project and a Draft Memorandum of Understanding for the Proposed Project**

The Yucaipa Valley Water District operates a local conjunctive use project in the Yucaipa groundwater basins where the groundwater aquifer system is managed as an underground storage reservoir. During wet years, when more surface water is available, surface water is stored underground by recharging the aquifers with surplus water. The coordinated management of surface and groundwater supplies increases the yield of both supplies and enhances water reliability in an economic and environmentally responsible manner.

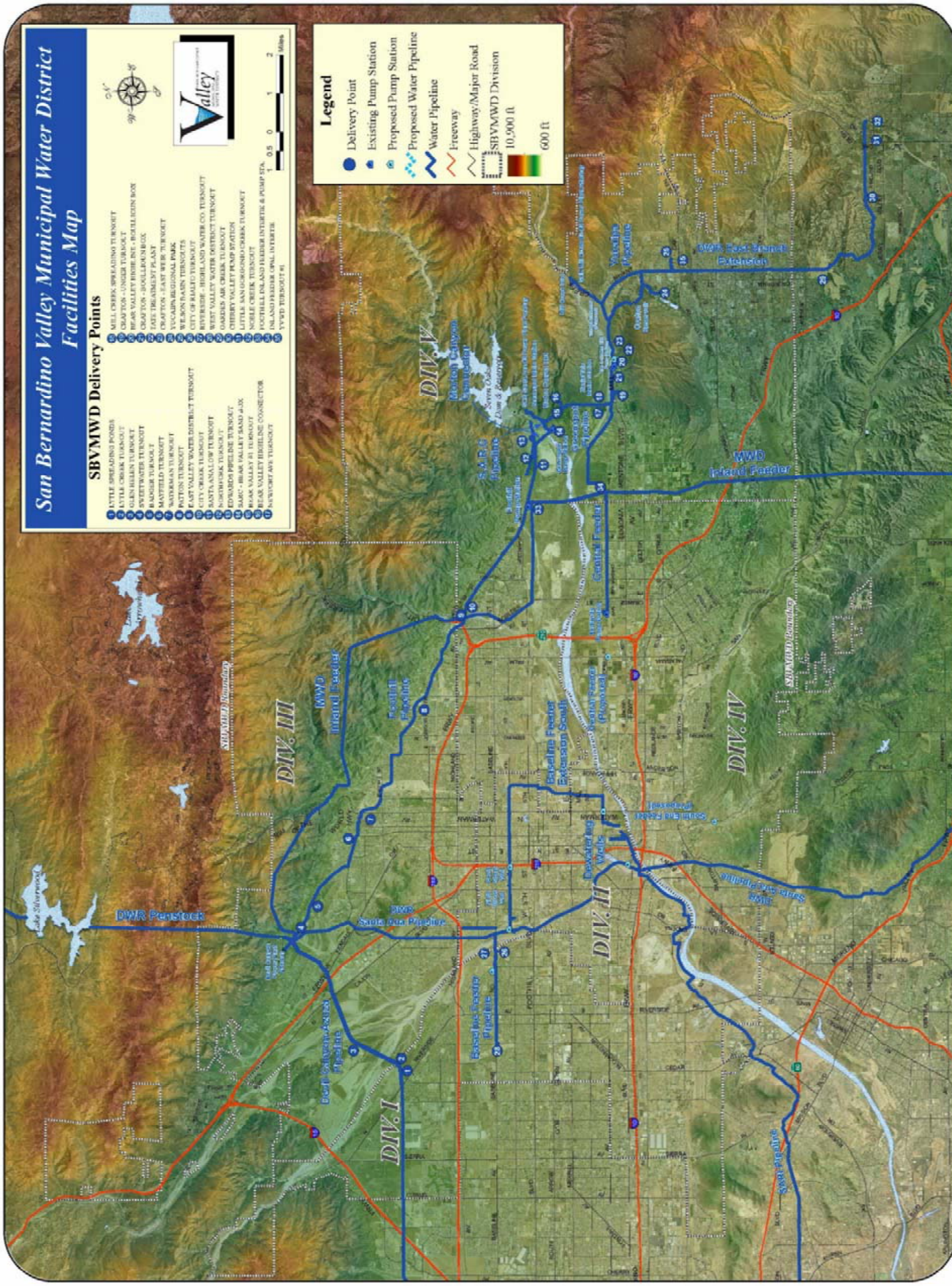
The Yucaipa Valley Water District's conjunctive use program is a significant way to diversify our water supply portfolio. The benefits of our conjunctive use project are:

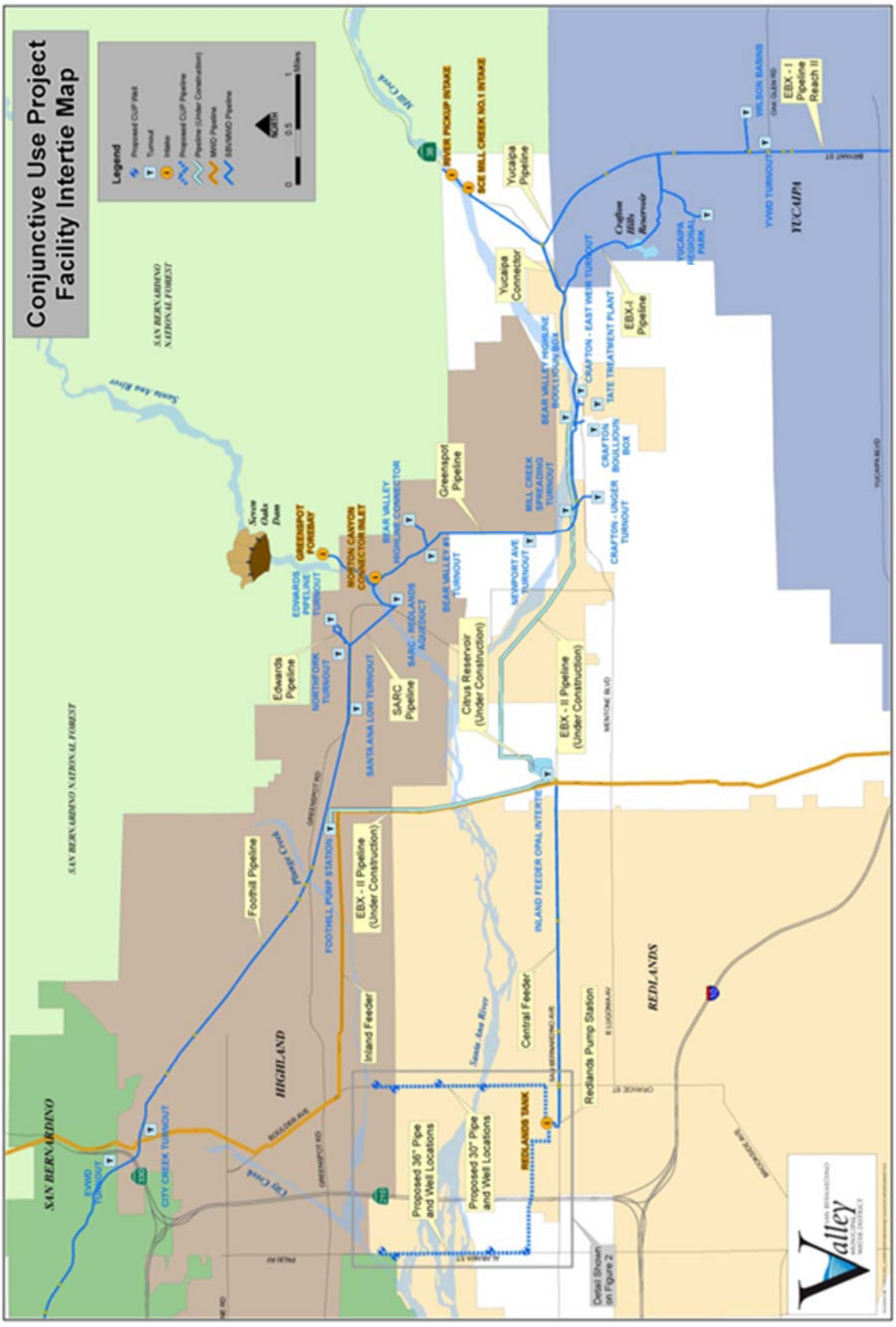
- Operational flexibility for groundwater production;
- Increased yield of the basin;
- More efficient use of surplus surface water during wet years;
- Better distribution of water resources; and
- Increased reliability.

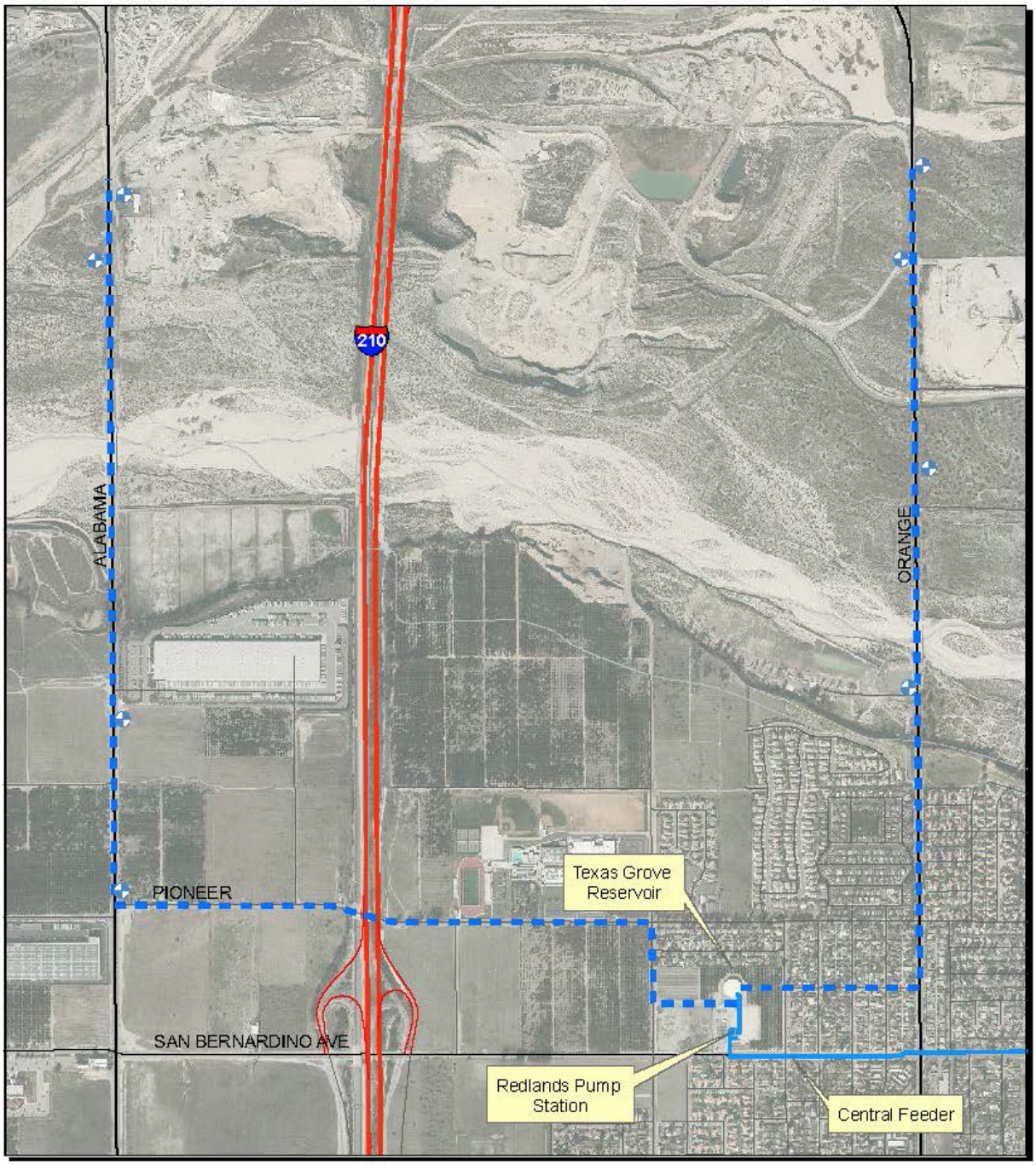


On September 17, 2013, the San Bernardino Valley Municipal Water District and the San Gorgonio Pass Water Agency conducted a joint board meeting that included a discussion about a proposed Bunker Hill Conjunctive Use Project.

The purpose of this agenda item is to present and explore the concepts of conjunctive use and how these programs can improve the overall sustainability of the Yucaipa Valley Water District.


San Bernardino Valley Municipal Water District
Facilities Map
SBVMWD Delivery Points
Legend
Delivery Point
Existing Pump Station
Proposed Pump Station
Proposed Water Pipeline
Water Pipeline
Freeway
Highway/Major Road
SBVMWD Division
10,900 ft
600 ft
DIV. I
DIV. II
DIV. III
DIV. IV
DIV. V
DWR Penstock
MWD Inland Feeder
DWR East Branch Extension


Conjunctive Use Project
Facility Intertie Map
Legend
SAN BERNARDINO NATIONAL FOREST
SAN BERNARDINO
HIGHLAND
REDLANDS
YUCAIPA
Santa Ana River
Mill Creek
Plunge Creek
Lytle Creek
Foothill Pipeline
Edwards Pipeline
SARC Pipeline
Greenspot Pipeline
Yucaipa Pipeline
Yucaipa Connector
Inland Feeder
Central Feeder
EBX - II Pipeline (Under Construction)
EBX-I Pipeline
EBX - I Pipeline Reach III
Citrus Reservoir (Under Construction)
Chaffee Hills Reservoir
Redlands Pump Station
Proposed 36" Pipe and Well Locations
Proposed 30" Pipe and Well Locations
Detail Shown on Figure 2
Seven Oaks Dam
RIVER PICKUP INTAKE
BOE MILL CREEK NO.1 INTAKE
GREENSPOT FOREBAY
MORTON CANYON CONNECTOR INLET
BEAR VALLEY HIGHLINE CONNECTOR
BEAR VALLEY #1 TURNOUT
EDWARDS PIPELINE TURNOUT
NORTH FORK TURNOUT
SANTA ANA LOW TURNOUT
SARC - REDLANDS AQUEDUCT
NEWPORT AVE TURNOUT
MILL CREEK SPREADING TURNOUT
BEAR VALLEY PIPELINE BOULEVARD BOX
CRAFTON - EAST WEIR TURNOUT
CRAFTON - UNGER TURNOUT
CRAFTON BOULEVARD BOX
CRAFTON - TATE TREATMENT PLANT
YUCAIPA REGIONAL PARK
YVWD TURNOUT
WILSON BASINS
FOOTHILL PUMP STATION
INLAND FEEDER OPAL INTERTIE
REDLANDS TANK
CITY CREEK TURNOUT
FOWD TURNOUT
Valley



Proposed and Existing Conjuctive Use Facilities

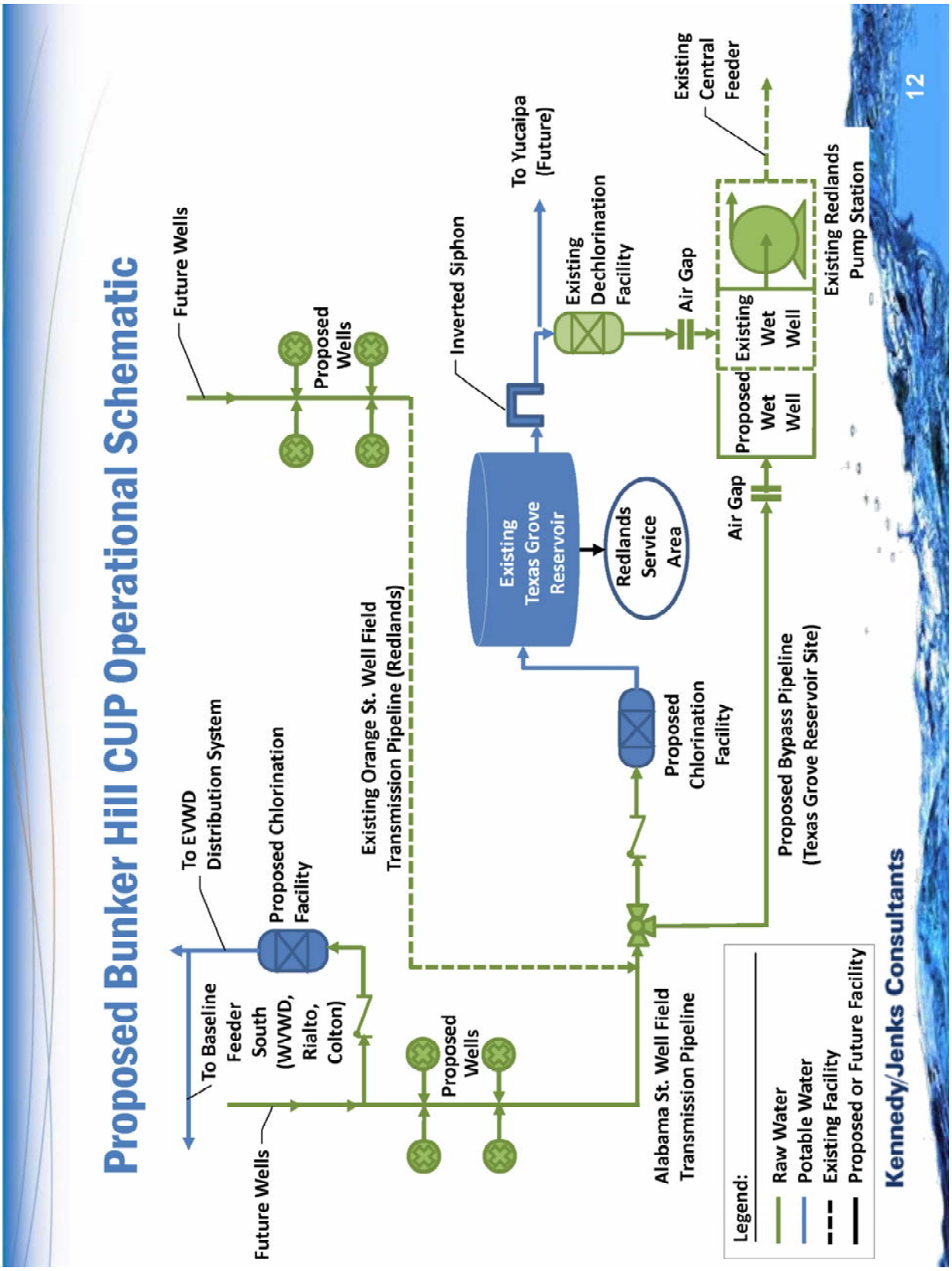
0 0.25 0.5 Miles

Central Feeder Proposed Pipeline

Proposed Well

N W E S

Aerial Imagery Date: Feb, 2012


Proposed Bunker Hill CUP Operational Schematic
Future Wells
Proposed Wells
Inverted Siphon
To Yucaipa (Future)
Existing Dechlorination Facility
Air Gap
Existing Central Feeder
Existing Redlands Pump Station
Proposed Wet Well
Existing Wet Well
Air Gap
Existing Texas Grove Reservoir
Redlands Service Area
To EVWD Distribution System
Proposed Chlorination Facility
Existing Orange St. Well Field Transmission Pipeline (Redlands)
Proposed Chlorination Facility
Proposed Bypass Pipeline (Texas Grove Reservoir Site)
To Baseline Feeder South (WVWD, Rialto, Colton)
Proposed Wells
Future Wells
Alabama St. Well Field Transmission Pipeline
Legend:
Raw Water
Potable Water
Existing Facility
Proposed or Future Facility
Kennedy/Jenks Consultants
12

DRAFT: November 23, 2015
For Discussion Purposes Only; Not for Attribution

Memorandum of Understanding
For the Bunker Hill Basin Conjunctive Use Project

This Memorandum of Understanding for the Bunker Hill Basin Conjunctive Use Project ("**MOU**") is entered into and effective this __ day of _____, 2015 by and among the City of Colton ("**Colton**"), the City of Redlands ("**Redlands**"), the City of Rialto ("**Rialto**"), the City of Riverside Public Utilities ("**RPU**"), the City of San Bernardino Municipal Water Department ("**SBMWD**"), East Valley Water District ("**East Valley**"), San Bernardino Valley Municipal Water District ("**Valley District**"), Western Municipal Water District of Riverside County ("**Western**"), West Valley Water District ("**WVWD**"), South Mesa Water Company ("**SMWC**"), San Gorgonio Pass Water Agency ("**SGPWA**"), Western Heights Water Company, Elsinore Valley Municipal Water District ("**EVMWD**"), and Yucaipa Valley Water District ("**Yucaipa Valley**"), each of which is referred to as a "**Party.**"

Recitals

A. In September 2014, the California Legislature enacted the Sustainable Groundwater Management Act of 2014 (SGMA), which established a statewide framework for the sustainable management of groundwater resources.

B. In the Upper Santa Ana River Groundwater Basin, as defined by the California Department of Water Resources' Bulletin 118, there are a number of groundwater basins: the Arlington Basin, Rialto-Colton Basin (including the area commonly known as No Man's Land), the Riverside Basin, the San Bernardino Basin Area (including the Bunker Hill Basin and the Lytle Basin), the San Timoteo Basin and the Yucaipa Basin, surface water and groundwater supplies are governed by a number of judicial decrees and contracts, including but not limited to the *Orange County* Judgment, the *Western* Judgment, and the 1961 decree governing the Rialto-Colton Basin.

C. The Parties to this MOU wish to collaborate in an effort to build on the foundation of existing laws and regulations, contracts and judicial decrees, and the recent enactment of SGMA to develop a cooperative effort to conjunctively manage surface water and groundwater in the Bunker Hill Basin so as to improve their drought resilience and water supply reliability.

D. The Parties wish to memorialize their commitments by means of this MOU.

Understandings

1. *Term.* This MOU shall remain in full force and effect until December 31, 2016 unless terminated earlier by a written agreement signed by all of the Parties.

   a. It is the Parties' intent to develop one or more detailed agreements for the projects to be studied under the auspices of this MOU by December 31, 2016.

b. In the event that any Party chooses to withdraw from this MOU, the MOU shall remain in force among the remaining Parties.

c. Nothing in this MOU shall be construed to interfere with or prohibit two or more Parties, either acting independently or with all or a portion of the other Parties or with non-Parties, from developing one or more projects that would serve to conjunctively manage surface water and groundwater in the Bunker Hill Basin so as to improve drought resilience and water supply reliability. Such projects may, but need not, be the subject of a detailed agreement of the type referred to in subparagraph (a) above.

2. *Project Development.* As a general matter, the Parties wish to develop plans for: (i) the physical systems necessary to use the Bunker Hill Basin conjunctively to enhance water supply reliability and flexibility for the region, and (ii) an equitable cost allocation for these physical systems for potential participants based on classes of service and value.

a. *Project Facilities.* The Parties agree to evaluate the feasibility and cost of the facilities listed on Exhibit A, which is attached hereto and incorporated herein by reference. The Parties understand that the goal of this effort is to develop up to 35,000 afy of new dry-year yield. Any additional capacity as a result of design refinement and operation optimization will be shared proportionally among the Parties based on their respective participation levels.

b. *Operational Scenarios.* As part of the evaluation of the facilities listed on Exhibit A, the Parties agree also to evaluate a range of operational scenarios wherein the Parties would import wet-year water for direct or in-lieu recharge and subsequent extraction. Recharge shall take place in advance of extraction and any extraction amounts will be subject to the loss factor described below.

c. *Financing.* The Parties will develop a coordinated financing plan for the proposed facilities that will include, without limitation, seeking bond funding, state loan funds, and imposing appropriate fees and assessments.

d. *Loss Factor.* The Parties understand that a loss factor currently estimated to be approximately 10% will be scientifically developed based on anticipated evapotranspiration and reduced natural recharge due to the project. The loss factor will be applied accordingly upon implementation of the project. The factor may be revisited from time to time as deemed necessarily by the Parties.

e. *Cost Allocation.* The Parties will develop an equitable cost-allocation proposal for consideration by all Parties no later than June 30, 2016. The proposed cost-allocation will be generally based on the following principles:

(1) Up to 70% of the cost will be paid by participants receiving a firm supply, with 20% of the cost being paid by participants receiving an interruptible

supply. The remaining 10% of the cost will be paid by Valley District as the basin manager; or

(2) Up to 55% of the cost will be paid by Parties with peak capacity rights (May through October deliveries) while Parties with off-peak capacity rights will pay up to 35% of the cost for deliveries from November through April. The remaining 10% of the cost will be paid by Valley District as the basin manager.

(3) Each Party may purchase a quantity of water to be supplied on either a firm or interruptible basis, on a peak or non-peak capacity, or a combination thereof. The Party's costs will be based on its selection of a type of supply, the capacity being used and the quantity. A sample proposed cost-allocation is attached hereto as Exhibit B for illustrative purposes only.

(4) The Parties understand that the cost allocation will be developed and refined collaboratively. The final cost allocation and methodology may be different than identified from those above when fully developed.

3. *Schedule.* The Parties agree that they will use their best efforts to complete the project evaluation described in paragraph 2 above no later than June 30, 2016 so as to allow for the negotiation of definitive project agreement(s) and for the approval of those agreement(s) by governing boards no later than December 31, 2016.

4. *Water Rights and Prior Agreements.* Nothing in this MOU shall be construed to create or confer any new rights to the groundwater basin to any of the Parties or to interfere with or divest any non-Party of any right to the groundwater basin that may exist as of the effective date of this MOU. This MOU shall not operate to validate or invalidate, modify or affect any Party's water rights or any Party's obligations under any agreement, contract or memorandum of understanding/agreement entered into prior to the effective date of this MOU. Each Party to this MOU reserves any and all claims and causes of action respecting its water rights and/or any agreement, contract or memorandum of understanding/agreement; any and all defenses against any water rights claims or claims under any agreement, contract or memorandum of understanding/agreement; and any claims arising from contamination or water quality degradation.

5. *Cost-Sharing.* Each Party agrees that it will devote sufficient staff time and other resources to actively participate in this effort. If a Party wishes to involve counsel in the review or development of the project agreement(s), all such costs will be borne only by that Party. The Parties shall agree on how the technical/consultant costs associated with implementing this MOU will be funded, which allocation is likely to be based on the Parties' respective participation levels.

1426177.2

6. *Withdrawal.* Any Party may withdraw by providing the other Parties with sixty days' written notice of withdrawal. Such Party's withdrawal shall be conditioned upon the Party's payment of its proportionate share of the costs of this effort, as described in paragraph ___ above, up through and including the date of its notice of withdrawal.

7. *General Provisions*

a. *Authority.* Each signatory of this MOU represents that s/he is authorized to execute this MOU on behalf of the Party for which s/he signs. Each Party represents that it has legal authority to enter into this MOU and to perform all obligations under this MOU.

b. *Amendment.* This MOU may be amended or modified only by a written instrument executed by each of the Parties to this MOU.

c. *Jurisdiction and Venue.* This MOU shall be governed by and construed in accordance with the laws of the State of California, except for its conflicts of law rules. Any suit, action, or proceeding brought under the scope of this MOU shall be brought and maintained to the extent allowed by law in the County of San Bernardino, California.

d. *Headings.* The paragraph headings used in this MOU are intended for convenience only and shall not be used in interpreting this MOU or in determining any of the rights or obligations of the Parties to this MOU.

e. *Construction and Interpretation.* This MOU has been arrived at through negotiations and each Party has had a full and fair opportunity to revise the terms of this MOU. As a result, the normal rule of construction that any ambiguities are to be resolved against the drafting Party shall not apply in the construction or interpretation of this MOU.

f. *Entire Agreement.* This MOU constitutes the entire agreement of the Parties with respect to the subject matter of this MOU and supersedes any prior oral or written agreement, understanding, or representation relating to the subject matter of this MOU.

g. *Partial Invalidity.* If, after the date of execution of this MOU, any provision of this MOU is held to be illegal, invalid, or unenforceable under present or future laws effective during the term of this MOU, such provision shall be fully severable. However, in lieu thereof, there shall be added a provision as similar in terms to such illegal, invalid or unenforceable provision as may be possible and be legal, valid and enforceable.

h. *Successors and Assigns.* This MOU shall be binding on and inure to the benefit of the successors and assigns of the respective Parties to this MOU. No Party

1426177.2

may assign its interests in or obligations under this MOU without the written consent of the other Parties, which consent shall not be unreasonably withheld or delayed.

i. *Waivers.* Waiver of any breach or default hereunder shall not constitute a continuing waiver or a waiver of any subsequent breach either of the same or of another provision of this MOU and forbearance to enforce one or more of the remedies provided in this MOU shall not be deemed to be a waiver of that remedy.

j. *Attorneys' Fees and Costs.* The prevailing Party in any litigation or other action to enforce or interpret this MOU shall be entitled to reasonable attorneys' fees, expert witnesses' fees, costs of suit, and other and necessary disbursements in addition to any other relief deemed appropriate by a court of competent jurisdiction.

k. *Necessary Actions.* Each Party agrees to execute and deliver additional documents and instruments and to take any additional actions as may be reasonably required to carry out the purposes of this MOU.

l. *Compliance with Law.* In performing their respective obligations under this MOU, the Parties shall comply with and conform to all applicable laws, rules, regulations and ordinances.

m. *Third Party Beneficiaries.* This MOU shall not create any right or interest in any non-Party or in any member of the public as a third party beneficiary.

n. *Counterparts.* This MOU may be executed in one or more counterparts, each of which shall be deemed to be an original, but all of which together shall constitute but one and the same instrument.

o. *Notices.* All notices, requests, demands or other communications required or permitted under this MOU shall be in writing unless provided otherwise in this MOU and shall be deemed to have been duly given and received on: (i) the date of service if served personally or served by electronic mail or facsimile transmission on the Party to whom notice is to be given at the address(es) provided below, (ii) on the first day after mailing, if mailed by Federal Express, U.S. Express Mail, or other similar overnight courier service, postage prepaid, and addressed as provided below, or (iii) on the third day after mailing if mailed to the Party to whom notice is to be given by first class mail, registered or certified, postage prepaid, addressed as follows:

Notice Information

Signature Blocks

1426177.2

Operational Updates

Yucaipa Valley Water District

Yucaipa Valley Water District

Workshop Memorandum 16-039

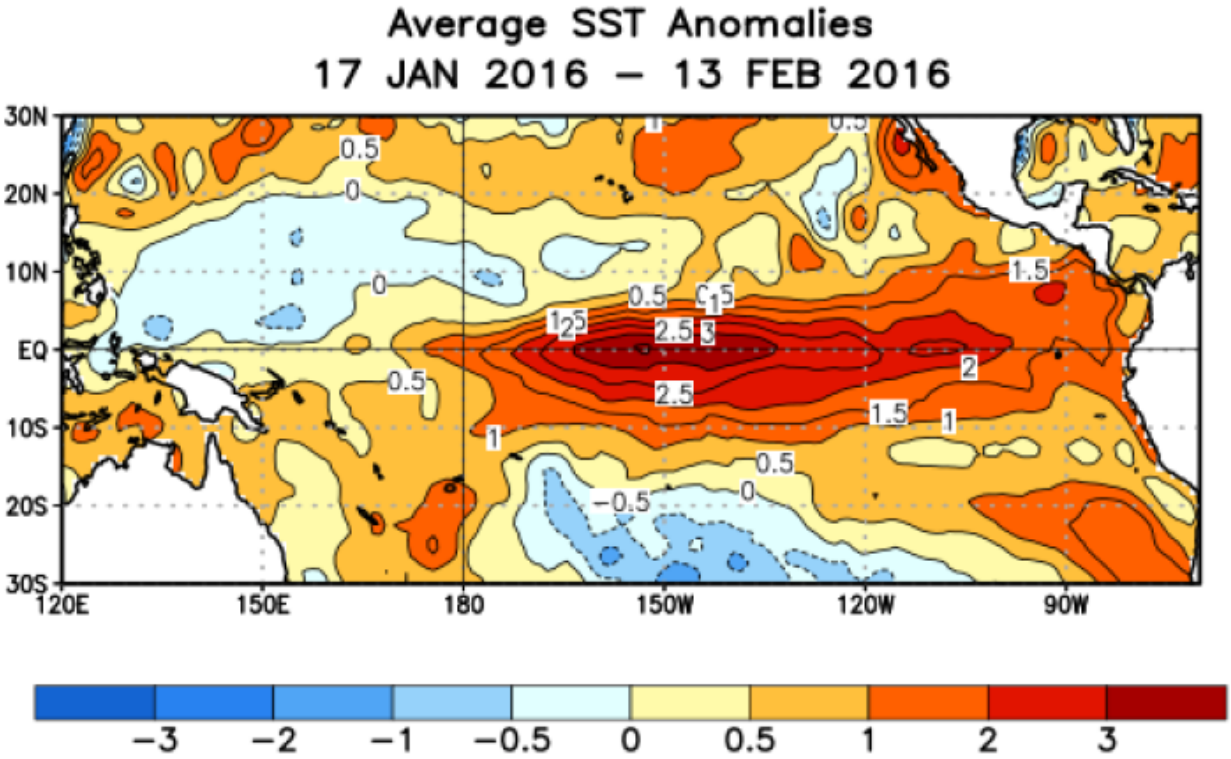
Date: **February 23, 2016**

Subject: **Overview of Operational Activities in Preparation and Response to the 2016 Winter Storm Events**

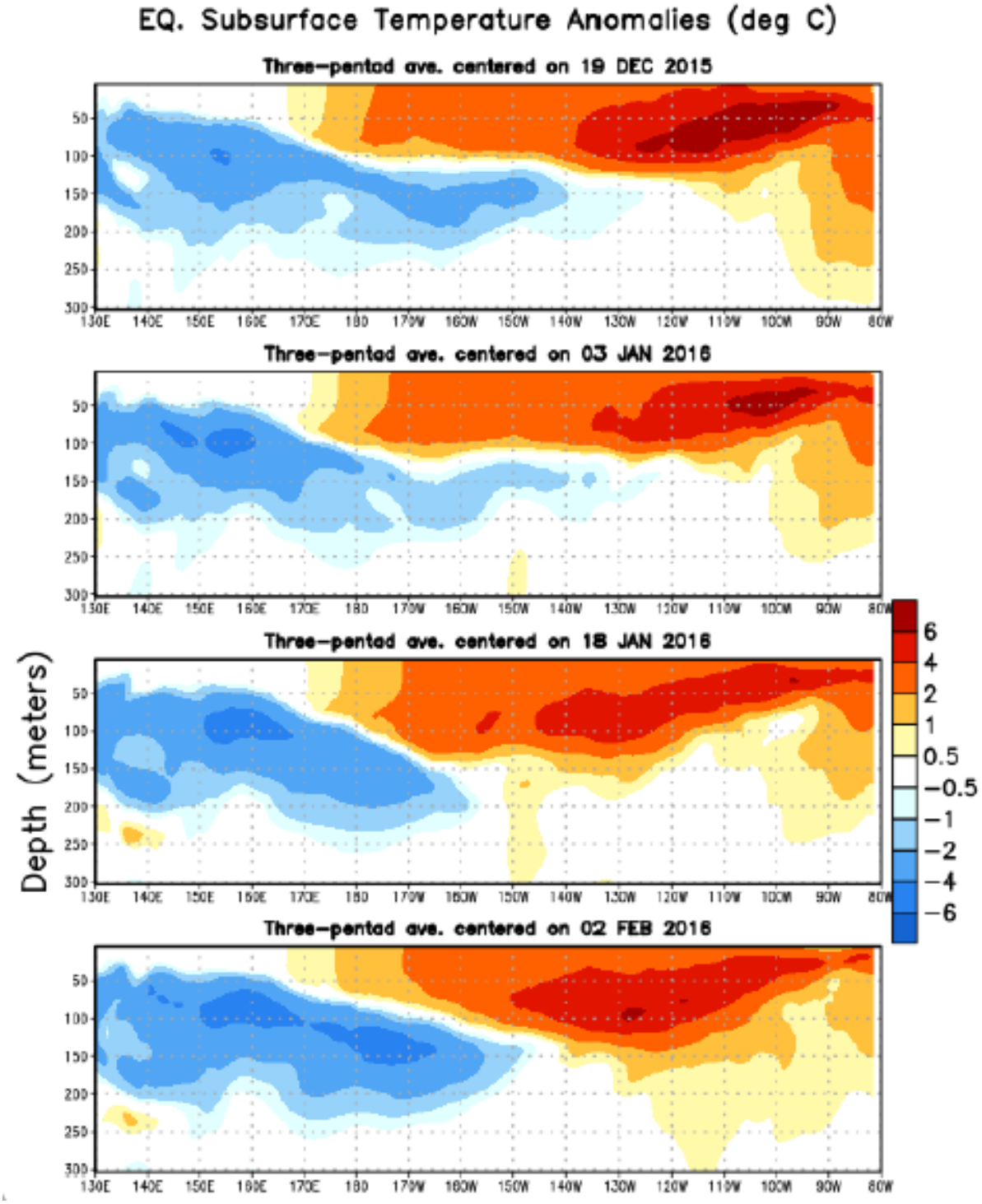
The Yucaipa Valley Water District has been actively preparing for the El Nino weather conditions by reanalyzing all of the District facilities to identify potential problems associated with severe winter weather conditions and initiating appropriate mitigation strategies.

While the impacts from the predicted El Nino conditions have not resulted in above average precipitation in southern California, the snowpack in northern California is slightly above the historical average.

The El Nino conditions still currently exist in the Pacific Ocean as the illustration below for the sea surface temperatures for the past four week are above average conditions.



In addition to the sea surface temperatures, the subsurface temperatures at the equator have remained fairly consistent over the last two months.



The purpose of this agenda item is to provide an update on storm related issues and projects to reinforce facilities consistent with the preparation advised by the Santa Ana Regional Water Quality Control Board.

CALIFORNIA Water Boards

EDMUND G. BROWN JR. GOVERNOR

MATTHEW RODRIQUEZ SECRETARY FOR ENVIRONMENTAL PROTECTION

Santa Ana Regional Water Quality Control Board

October 16, 2015

By Electronic Mail

Attention: Sewage Collection System Owners and Operators Enrolled Under the State Water Resources Control Board Order No. 2006-0003-DWQ

Subject: Collection System Preparation for Anticipated 2015-2016 El Nino Rainy Season

The Santa Ana Regional Water Quality Control Board (Santa Ana Regional Board) is sending you this courtesy reminder to prepare your sanitary sewer collection system for the 2015-2016 rainy season.

As you know, municipalities and other public entities that own and operate a sewage collection system within the Santa Ana Regional Board jurisdiction (Region) are regulated under the Statewide General Waste Discharge Requirements (WDR) for Sanitary Sewer System, Order No. 2006-0003- DWQ[1] (General Order). The General Order prohibits the discharge of untreated or partially treated wastewater to the waters of the United States. The General Order also requires the development and implementation of sanitary sewer management plans (SSMPs) that contain requirements for operation and maintenance of collection systems and for reporting and mitigating sanitary sewer overflows (SSOs). Proper collection system operation and maintenance includes the periodic or continuing process to identify problems including proactive identification and elimination of inflow and infiltration and structural vulnerabilities to prevent or minimize SSOs during rain events.

For months, the National Oceanic and Atmospheric Administration (NOAA) has been predicting that El Nino, a condition that occurs when a band of warm ocean water develops in the Pacific Ocean that causes changes in rainfall, will continue through the Northern Hemisphere during the winter of 2015-2016. As with past El Nino years, this weather pattern has the potential to produce higher than average rainfall amounts in the Region.

Since the prediction for El Nino has been anticipated for quite some time, the Regional Board is notifying all Enrollees in the Region to ensure that necessary actions to prevent SSOs during the rainy season has been taken. You are reminded that failure to demonstrate that adequate preventative measures were taken that could have minimized or prevented a known or otherwise anticipated wet weather problem that resulted in an SSO may result in civil monetary penalties pursuant to the California Water Code.

[1] As amended by Order Nos. 2008-0002-EXEC and 2013-0058-EXEC

We appreciate your urgent attention in this matter to protect public health and water quality. Should you have any questions or comments please contact the Regional Board staff assigned to your facility in the enclosed list.

Sincerely,

Kurt V. Berchtold
Executive Officer

Enclosure: List of Enrollees under Order No. 2006-0003-DWQ and Regional Board Staff Assignment

2015-2016 El Nino Rainy Season Notice Mailing List
Enrollees Under Order No. 2006-0003-DWQ and Regional Board Staff Contact

Agency	Contact	Email Address	Staff Assigned to Discharger/Facility
CA Dept of Corrections & Rehab	David Huskey	david.huskey@cdcr.ca.gov	Kathleen Fong 951-774-0114
Corona City	Tom Moody	tom.moody@ci.corona.ca.us	kathleen.fong@waterboards.ca.gov
Eastern Municipal Water District	Jayne Joy	joyj@emwd.org	
Edgemont Community Services Dist	Jessica Pfalmer	jessicaecsd@yahoo.com	
Elsinore Valley MWD	John Vega	jvega@evmwd.net	
Elsinore Valley MWD	Dennis McBride	dmcbride@evmwd.net	
Hemet City	Victor Monz	vmonz@cityofhemet.org	
Home Garden Sanitary District	Janey Gress	hgsd@sbcglobal.net	
Idyllwild Water District	Tom Lynch	tom@idyllwildwater.com	
Lake Hemet Municipal Water District	Mike Gow	mgow@lhmwd.org	
Lee Lake Water District	Jeff Pape	jeffp@llwd.org	
Norco City	Bill Thompson	bthompson@ci.norco.ca.us	
Perris City	Daryl Hartwill	dhartwill@cityofperris.org	

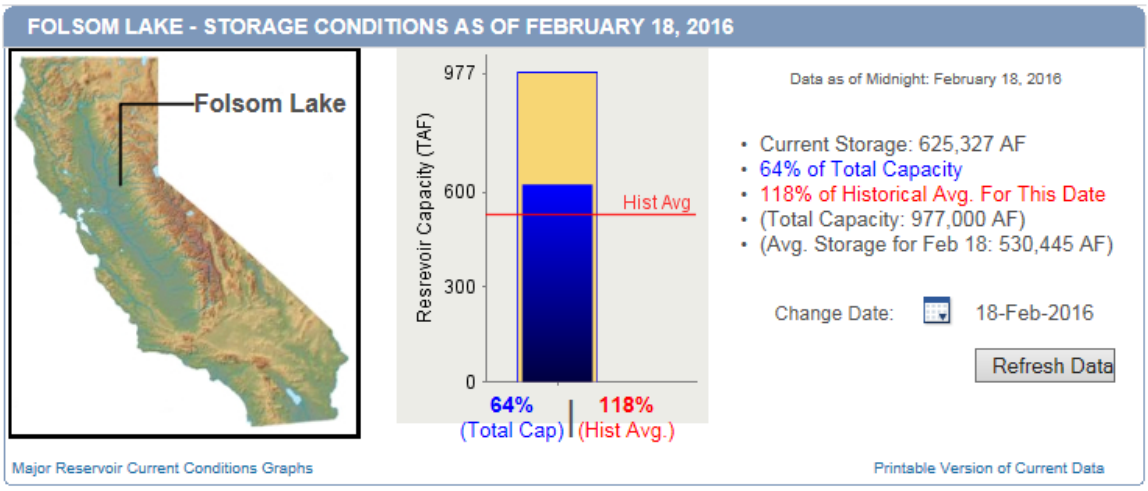
Agency	Contact	Email Address	Staff Assigned to Discharger/Facility
Beaumont City	Public Works	kdunbar@utilitypartnersllc.com	Najah Amin 951-320-6362
CA State Parks Inland Empire District	Jerry Weatherman	jerry.weatherman@parks.ca.gov	najah.amin@waterboards.ca.gov
Colton City	Gary Ethridge	gethridge@ci.colton.ca.us	
CSU San Bernardino	Jon Mohoroski	jmohoros@csusb.edu	
East Valley Water District	Thomas R. Holliman	tholliman@eastvalley.org	
Grand Terrace City	Martin Guerrero	mguerrero@cityofgrandterrace.org	
Jurupa Community Services District	Todd Corbin	tcorbin@jcsd.us	
Loma Linda City	Lynette Arreola	rhandy@lomalinda-ca.gov	
Patton State Hospital	Steve Nerkowski	steven.nerkowski@dsh.ca.gov	
Redlands City	Chris Diggs	cdiggs@cityofredlands.org	
Rialto City	Julie Carver	jcarver@rialtoca.gov	
Riverside City	Regulatory Compliand	cjustice@riversideca.gov	
Rubidoux Community Services District	Brian Jennings	bjennings@rcsd.org	
San Bernardino City Public Services	Randy Kuettle	kuettle_ra@sbcity.org	
San Bernardino Community College Distr	Kelly Goodrich	kgoodric@sbccd.cc.ca.us	
San Bernardino County Sheriff	Doyle Jenkins	jbaldwin@sdd.sbcounty.gov	
San Jacinto City	Dan Mudrovich	dmudrovich@sanjacinto.ca.us	
UC Riverside	Russell Vernon	russell.vernon@ucr.edu	
Western Municipal Water District	Brenda Meyer	bmeyer@wmwd.com	
Western Riverside Cnty Regional WA	Steve Schultz	sschultz@wmwd.com	
Yucaipa Valley Water District	Jack Nelson	jnelson@yvwd.dst.ca.us	

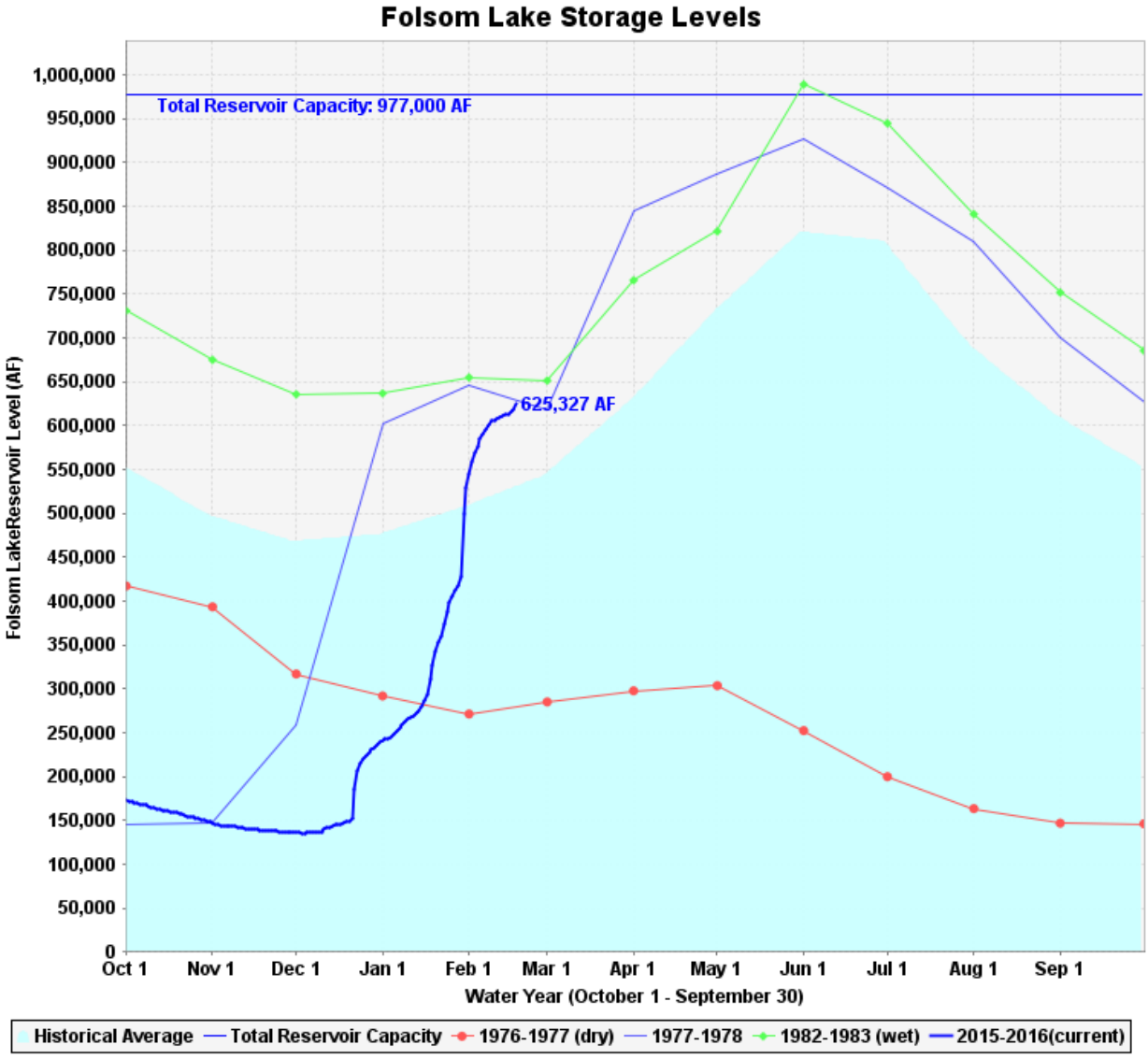
Agency	Contact	Email Address	Staff Assigned to Discharger/Facility
Anaheim City	Jonathan Heffernan	jheffernan@anaheim.net	**Julio Lara**
Brea City	Will Wenz	willw@ci.brea.ca.us	**951-782-4901**
Buena Park City	Jim Biery	jbiery@buenapark.com	julio.lara@waterboards.ca.gov
Chino Hills City	Mike Maestas	mmaestas@chinohills.org	
Costa Mesa Sanitary District	Steve Cano	scano@cmsdca.gov	
CSU Fullerton	Curtis P. Plotkin	cplotkin@fullerton.edu	

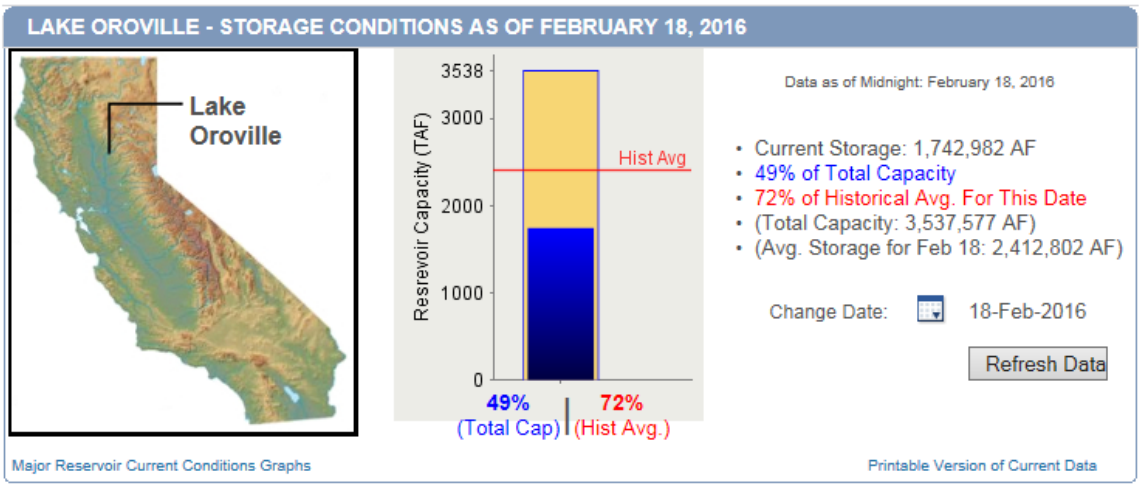
2015-2016 El Nino Rainy Season Notice Mailing List
Enrollees Under Order No. 2006-0003-DWQ and Regional Board Staff Contact

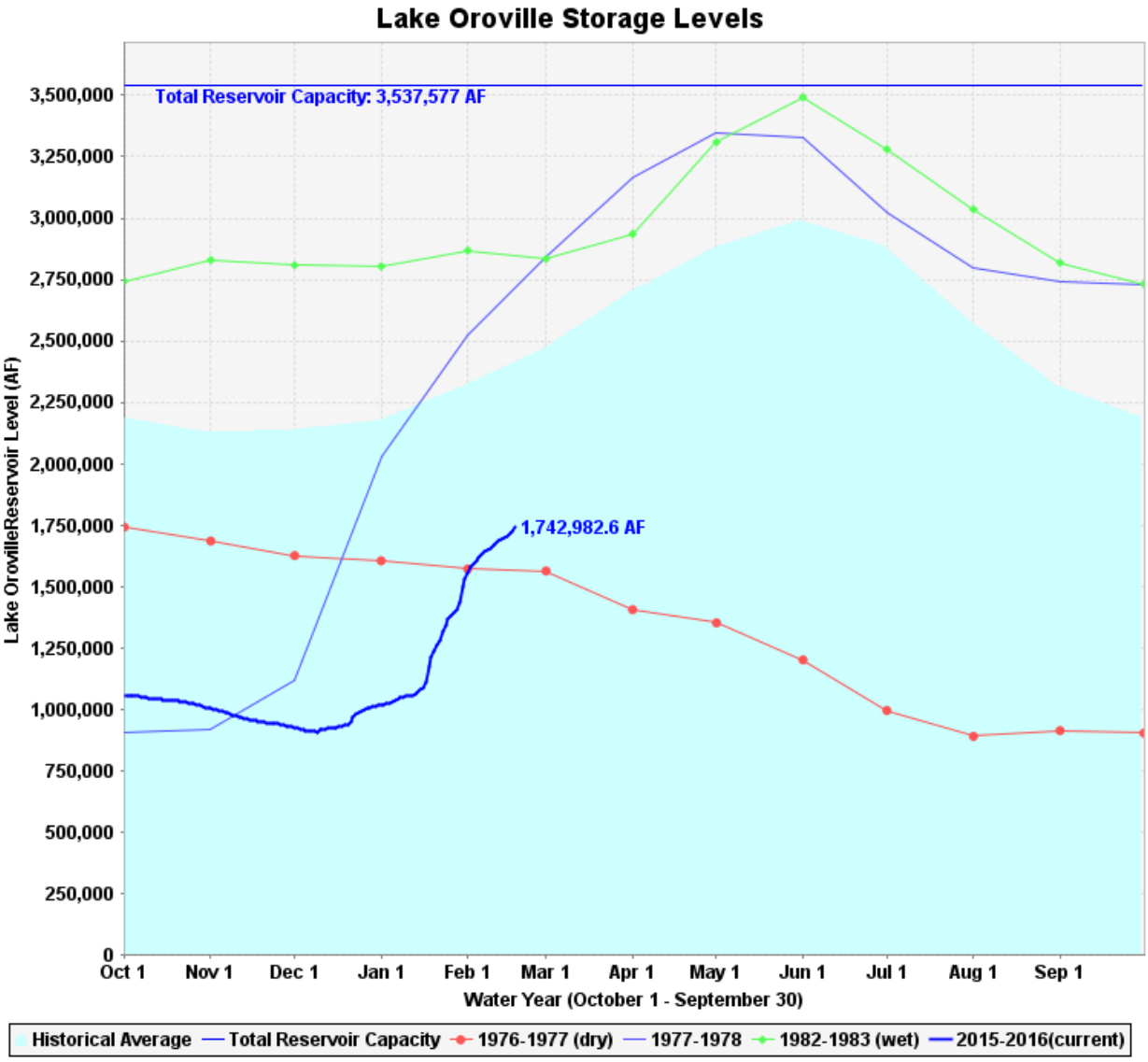
Agency	Contact	Email Address	Staff Assigned to Discharger/Facility
Cypress City	Matt Burton	MBurton@ci.cypress.ca.us	**Julio Lara**
El Toro Water District	Robert R Hill	nadiar@etwd.com	**951-782-4901**
Upland City	Acquanetta Warren	awarren@ci.upland.ca.us	julio.lara@waterboards.ca.gov
Fullerton City	William Roseberry	billr@ci.fullerton.ca.us	
Garden Grove Sanitary District	Bill Murray	publicworks@ci.garden-grove.ca.us	
Huntington Beach City	Brian Ragland, PE	brian.ragland@surfcity-hb.org	
Inland Empire Utilities Agency	Chris Berch	cberch@ieua.org	
La Habra City	Brian Jones	brianj@lahabracity.com	
La Palma City	Jeff C Moneda	jeffm@cityoflapalma.org	
Irvine Ranch Water District	Kevin Burton	burton@irwd.com	
Midway City Sanitation District	Ken Robbins	krobbins@mcsandist.com	
Newport Beach City	George Murdoch	gmurdoch@newportbeachca.gov	
Orange City	Gene Estrada	gestrada@cityoforange.com	
Placentia City	Gerry Hubble	ghubble@placentia.org	
Rossmoor/Los Alamitos Area Sanitary Dis	Susan Bell	sewerdistrict@aol.com	
Santa Ana City	Nabil Saba	nsaba@ci.santa-ana.ca.us	
Santa Ana Watershed Project Authority	Karen Williams	kwilliams@sawpa.org	
Seal Beach City	Sean Crumby	scrumby@sealbeachca.gov	
Stanton City	Robert Doss	bdoss@ci.stanton.ca.us	
Sunset Beach Sanitary District	Tom Dawes	info@sunsetbeachsd.org	
UC Irvine	Marc Gomez	magomez@uci.edu	
Villa Park City	Akram Hindiyeh	ahindiyeh@villapark.org	
Orange County Sanitation District	Nick Arhontes	narhontes@ocsd.com	
Yorba Linda Water District	John DeCriscio	jdecriscio@ylwd.com	
CA Dept of Corrections & Rehab	Lawerence Dimock	lawrence.dimock@cdcr.ca.gov	
CA Dept of Corrections & Rehab	John Dickson	john.dickson@cdcr.ca.gov	
CA Dept of Corrections & Rehab	Michael Thompson	michael.thompson@cdcr.ca.gov	
Ontario City	Mohamed El-Amamy	melamamy@ci.ontario.ca.us	
Cucamonga Valley Water District	John Bosler	johnb@cvwdwater.com	
Chino City	Jim Hill	jhill@cityofchino.org	
Fontana City	Todd Heagstedt	theagste@fontana.org	
Montclair City	Michael C. Hudson	mhudson@cityofmontclair.org	
Irvine Ranch Water District	Lyndy Lewis	lewis@irwd.com	
CA Dept of Parks & Rec Winterhaven	Steve Scott	steve.scott@parks ca.gov	
San Bernardino Cnty Dept of Airports	Mitch Kinser	mkinser@airports.sbcounty.gov	
CA Dept of Parks & Rec San Clemente	Steve Scott	steve.scott@parks.ca.gov	

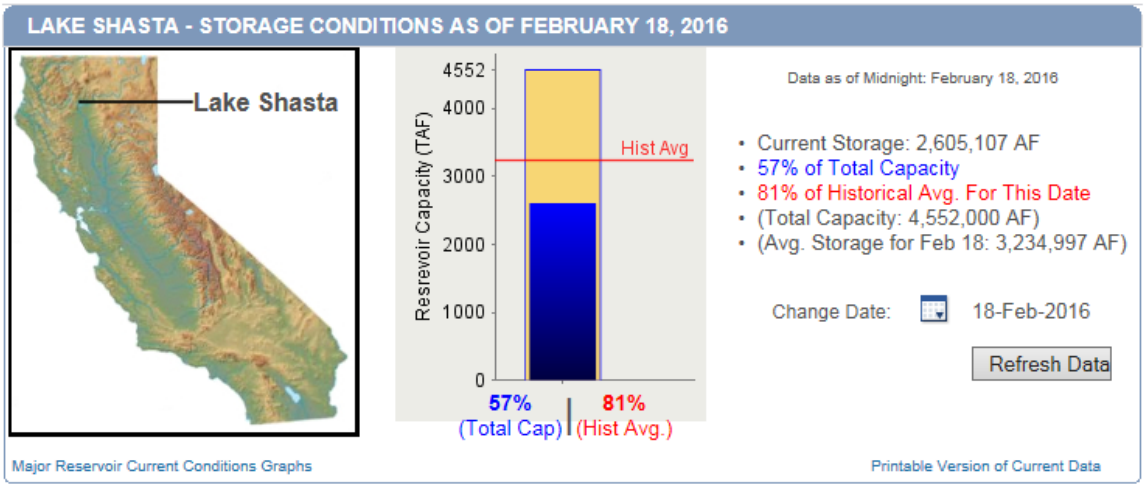
Agency	Contact	Email Address	Staff Assigned to Discharger/Facility
Arrowhead Regional Medical Center	Tim Plumb	plumbt@armc.sbcounty.gov	**Bill Norton**
Big Bear Area Regional WWA	Joe Hanford	ops@bbarwa.org	**951-782-4381**
Big Bear City Community Services Dist	Nathan Zamorano	nzamorano@bbccsd.org	bill.norton@waterboards.ca.gov
Big Bear Lake City	Kevin Sebourn	ksebourn@citybigbearlake.com	
Running Springs Water District	Joan C. Eaton	jeaton@runningspringswd.com	
San Bernardino Cnty Special Districts	Manuel M Benitez	mbenitez@sdd.sbcounty.gov	
San Bernardino Cnty Special Districts	Manuel Benitez	mbenitez@sdd.sbcounty.gov	
San Bernardino Cnty Special Districts	Steve Samaras	ssamaras@sdd.sbcounty.gov	

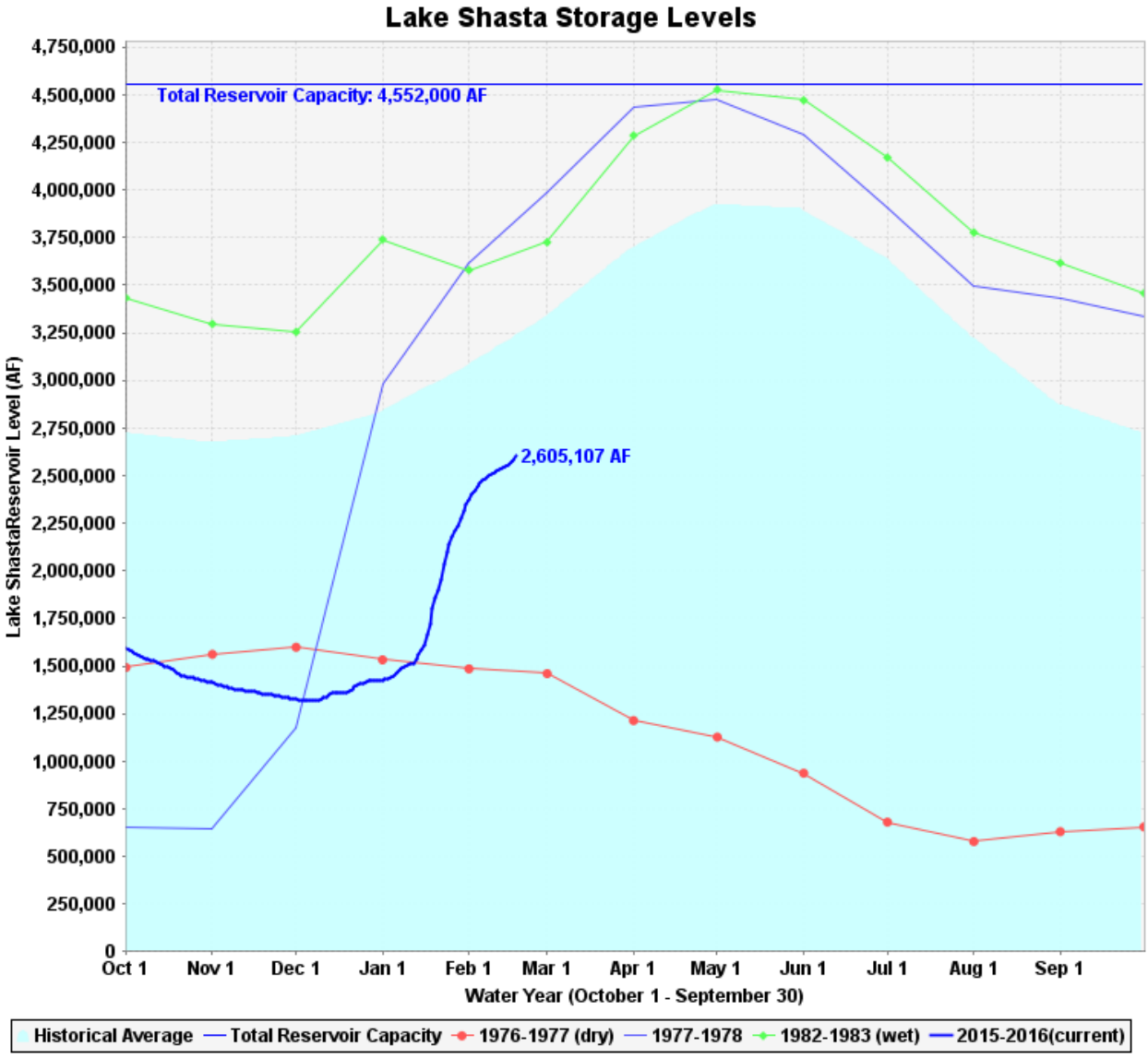

FOLSOM LAKE - STORAGE CONDITIONS AS OF FEBRUARY 18, 2016
Folsom Lake
977
600
300
0
Resrevoir Capacity (TAF)
Hist Avg
64%
(Total Cap)
118%
(Hist Avg.)
Data as of Midnight: February 18, 2016
Current Storage: 625,327 AF
64% of Total Capacity
118% of Historical Avg. For This Date
(Total Capacity: 977,000 AF)
(Avg. Storage for Feb 18: 530,445 AF)
Change Date:
18-Feb-2016
Refresh Data
Major Reservoir Current Conditions Graphs
Printable Version of Current Data


Folsom Lake Storage Levels
Total Reservoir Capacity: 977,000 AF
625,327 AF
Folsom LakeReservoir Level (AF)
1,000,000
950,000
900,000
850,000
800,000
750,000
700,000
650,000
600,000
550,000
500,000
450,000
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
0
Oct 1
Nov 1
Dec 1
Jan 1
Feb 1
Mar 1
Apr 1
May 1
Jun 1
Jul 1
Aug 1
Sep 1
Water Year (October 1 - September 30)
Historical Average
Total Reservoir Capacity
1976-1977 (dry)
1977-1978
1982-1983 (wet)
2015-2016(current)


LAKE OROVILLE - STORAGE CONDITIONS AS OF FEBRUARY 18, 2016
Lake Oroville
3538
3000
2000
1000
0
Resrevoir Capacity (TAF)
Hist Avg
49%
72%
(Total Cap)
(Hist Avg.)
Data as of Midnight: February 18, 2016
Current Storage: 1,742,982 AF
49% of Total Capacity
72% of Historical Avg. For This Date
(Total Capacity: 3,537,577 AF)
(Avg. Storage for Feb 18: 2,412,802 AF)
Change Date:
18-Feb-2016
Refresh Data
Major Reservoir Current Conditions Graphs
Printable Version of Current Data


Lake Oroville Storage Levels
Total Reservoir Capacity: 3,537,577 AF
1,742,982.6 AF
3,500,000
3,250,000
3,000,000
2,750,000
2,500,000
2,250,000
2,000,000
1,750,000
1,500,000
1,250,000
1,000,000
750,000
500,000
250,000
0
Lake OrovilleReservoir Level (AF)
Oct 1
Nov 1
Dec 1
Jan 1
Feb 1
Mar 1
Apr 1
May 1
Jun 1
Jul 1
Aug 1
Sep 1
Water Year (October 1 - September 30)
Historical Average
Total Reservoir Capacity
1976-1977 (dry)
1977-1978
1982-1983 (wet)
2015-2016(current)


LAKE SHASTA - STORAGE CONDITIONS AS OF FEBRUARY 18, 2016
Lake Shasta
4552
4000
3000
2000
1000
0
Resrevoir Capacity (TAF)
Hist Avg
57%
(Total Cap)
81%
(Hist Avg.)
Data as of Midnight: February 18, 2016
Current Storage: 2,605,107 AF
57% of Total Capacity
81% of Historical Avg. For This Date
(Total Capacity: 4,552,000 AF)
(Avg. Storage for Feb 18: 3,234,997 AF)
Change Date:
18-Feb-2016
Refresh Data
Major Reservoir Current Conditions Graphs
Printable Version of Current Data


Lake Shasta Storage Levels
Total Reservoir Capacity: 4,552,000 AF
2,605,107 AF
Lake ShastaReservoir Level (AF)
4,750,000
4,500,000
4,250,000
4,000,000
3,750,000
3,500,000
3,250,000
3,000,000
2,750,000
2,500,000
2,250,000
2,000,000
1,750,000
1,500,000
1,250,000
1,000,000
750,000
500,000
250,000
0
Oct 1
Nov 1
Dec 1
Jan 1
Feb 1
Mar 1
Apr 1
May 1
Jun 1
Jul 1
Aug 1
Sep 1
Water Year (October 1 - September 30)
Historical Average
Total Reservoir Capacity
1976-1977 (dry)
1977-1978
1982-1983 (wet)
2015-2016(current)

Yucaipa Valley Water District

Director Memorandum 16-0xx

Date: March 2, 2016

Prepared By: Brent Anton, Engineering Manager

Subject: Change Order No. 1 and Notice of Completion for the Contract with Pacific Hydrotech Corporation for the Construction of Support Structures for the Existing Sewer Bridge Crossing Yucaipa Creek

Recommendation: That the Board approves Change Order No. 1 and authorizes the filing of the Notice of Completion and release of the retention amount of $24,230.50 thirty-five days after the recorded date.

At the regular board meeting on January 6, 2016, the Board awarded an emergency construction contract to Pacific Hydrotech for a sum not to exceed $524,906 [Director Memorandum No. 16-006].

Change Order No. 1 adjusts the contract for the elimination of painting, field welding and cutting, and excess labor costs for overtime and Sunday work resulting in a decrease in the amount of $40,296 for a revised contact amount of $484,610.

	Contract Changes	Contract Amount	Percentage Change from Original Bid Amount	Reference
Original Bid Amount		$524,906	- -	DM 16-006
Change Order No. 1	($40,296)	$484,610	7.7% decrease	DM 16-0xx

The project is now complete and based on the letter from Krieger & Stewart; District staff recommends that the Board authorizes the filing of the Notice of Completion and release of the retention amount of $24,230.50 thirty-five days after the recorded date.

C.O. NO. 1

PAGE 1 OF 2

CONTRACT CHANGE ORDER NO. 1

CONTRACT 21" Sewer Transmission Pipeline Support Structure
DATED January 6, 2016 BY AND BETWEEN Yucaipa Valley Water District (OWNER), AND Pacific Hydrotech Corporation (CONTRACTOR), is hereby directed to make the following change(s) in Contract Work:

ITEM NO.	DESCRIPTION OF CHANGE	DECREASE $	INCREASE $
1.	Eliminate Bid Item 111 - Painting of Support Structure.	$8,000.00	
2.	Eliminate Bid Item 112 - Provide certified welder to perform field welding and cutting.	$13,000.00	
3.	Reduce Bid Item 114 - Excess labor costs for overtime work.	$10,560.00	
4.	Eliminate Bid Item 115 - Excess labor costs for Sunday work.	$8,736.00	

Total DECREASE in Contract Amount	$40,296.00
Total INCREASE in Contract Amount	$0.00
Net change in Contract Amount	($40,296.00)
Contract Amount Prior to Change	$524,906.00
Contract Amount Adjusted for Change	$484,610.00

Rev 0614
21" Sewer Transmission Pipeline Support Structure

Change Order Form S-1

CONTRACT CHANGE ORDER NO 1 PAGE 2 OF 2

By reason of Change Order No. 1, time of completion shall be adjusted as follows:

Adjusted Contract Completion Date shall be: February 20, 2016.

All provisions of the Contract shall apply hereto, and shall become effective when fully executed (signed and dated) by both parties.

Recommended by (Engineer) Patricia M. Vitale Date: 2-17-16

Accepted by (Contractor) Jonathan Wilson Date: 2/17/16

Approved by (Owner) _____ Date: _____

Remarks _____

KRIEGER & STEWART
Engineering Consultants

February 17, 2016

818-96.1 F/C

Brent Anton
Yucaipa Valley Water District
P.O. Box 730
Yucaipa, CA 92399

Subject: 21" Sewer Transmission Pipeline Support Structure
Recommendation of Acceptance of Contract Work

Dear Mr. Anton:

All work required to be performed by Pacific Hydrotech Corporation for the 21" Sewer Transmission Pipeline Support Structure Project is essentially complete and the final Contract Amount for same is set forth as follows:

Original Contract Amount:	$524,906.00
Contract Change Order No. 1:	($40,296.00)
Final Contract Amount:	$484,610.00

Since the Contract Work has been essentially completed in accordance with the Contract Documents, we recommend the District accept said Work. Subsequent to Board acceptance, a Notice of Completion should be filed and thereafter, following the lien period, the District should make final payment (i.e. release retained amount), provided no Stop Notices have been filed.

If you have any questions, please call.

Sincerely,

KRIEGER & STEWART

Patrick M. Watson

PMW/
818-96-RECACCEPT

cc: Linda Kilday, Yucaipa Valley Water District

3602 University Avenue, Riverside, California 92501-3331
Tel: (951) 684-6900 • Fax: (951) 684-6986 • www.kriegerandstewart.com

Record Without Fee
Per Govt. Code 6103

Recording Requested By:
Yucaipa Valley Water District

And When Recorded Mail To:
Yucaipa Valley Water District
P.O. Box 730
Yucaipa, CA 92399

SPACE ABOVE THIS LINE FOR RECORDERS USE

NOTICE OF COMPLETION

Project Number/CMMS Number: P-03-303
Director Memorandum Number for Authorization: DM 16-006
Director Memorandum Number for Notice of Completion: DM 16-

Notice pursuant to Civil Code Section 3093, must be filed within 10 days after completion.
Notice is hereby given that:

1. The undersigned is owner or corporate officer of the owner of the interest in the property hereinafter described:
2. The full name of the owner is Yucaipa Valley Water District
3. The full address of the owner is 12770 Second Street, Yucaipa, CA 92399
4. The Nature of the Interest or Estate of the Undersigned is: In Fee
5. A work performed hereinafter described was completed on February 17, 2016. The work done was: Rest Stop Sewer Bridge Replacement
6. The name of the contractor for such work was: Pacific Hydrotech
   January 06, 2016
   (Date of Contract)
7. The property on which said work was complete in the City of Yucaipa
   County of San Bernardino, State of CA, and is described as APN: 0301-221-09
8. The street address of said property is 32400 Outer Highway 10
   (if no street address has been assigned, insert "none")

Dated February 18, 2016

Brent Anton, Engineering Manager
Yucaipa Valley Water District

Verification

I, the undersigned, say: I am the General Manager of the Declarant of the foregoing Notice of Completion; I have read said Notice of Completion and know the comments thereof; the same is true to my knowledge. I declare under penalty of perjury that the foregoing is true and correct.

Executed on March 2, 2016 at Yucaipa, CA.

Joseph B. Zoba, General Manager
Yucaipa Valley Water District

Yucaipa Valley Water District

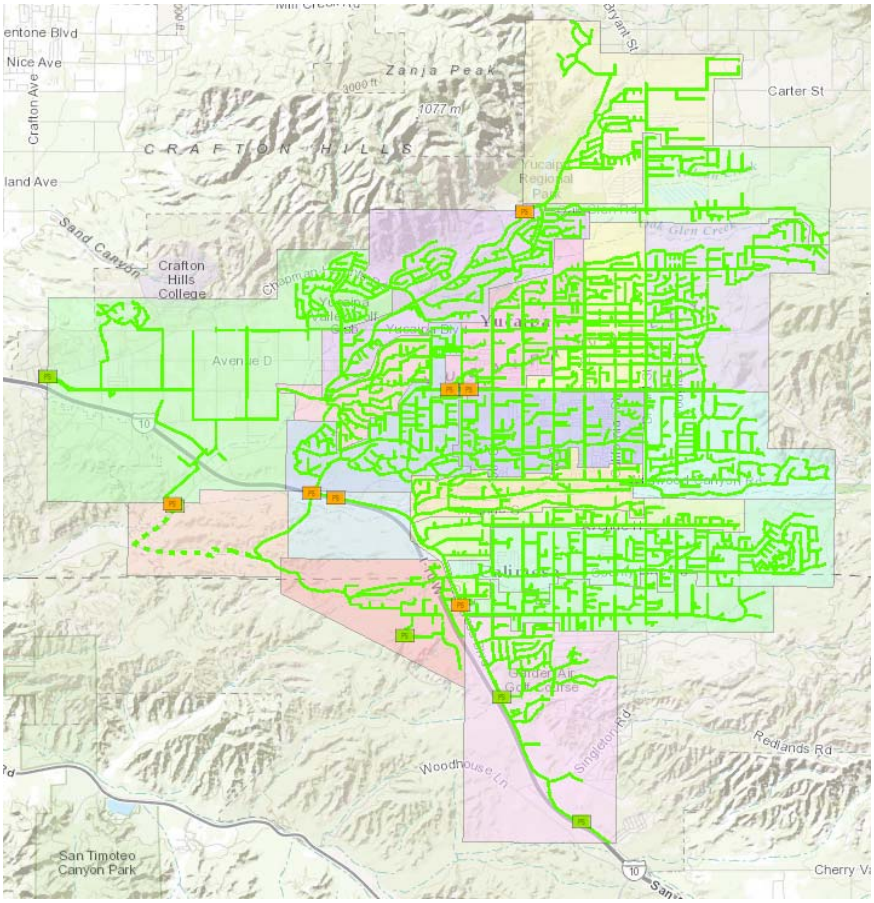
Workshop Memorandum 16-040

Date: **February 23, 2019**

Subject: **Status Report on the Sewer Collection System Monitoring Network**

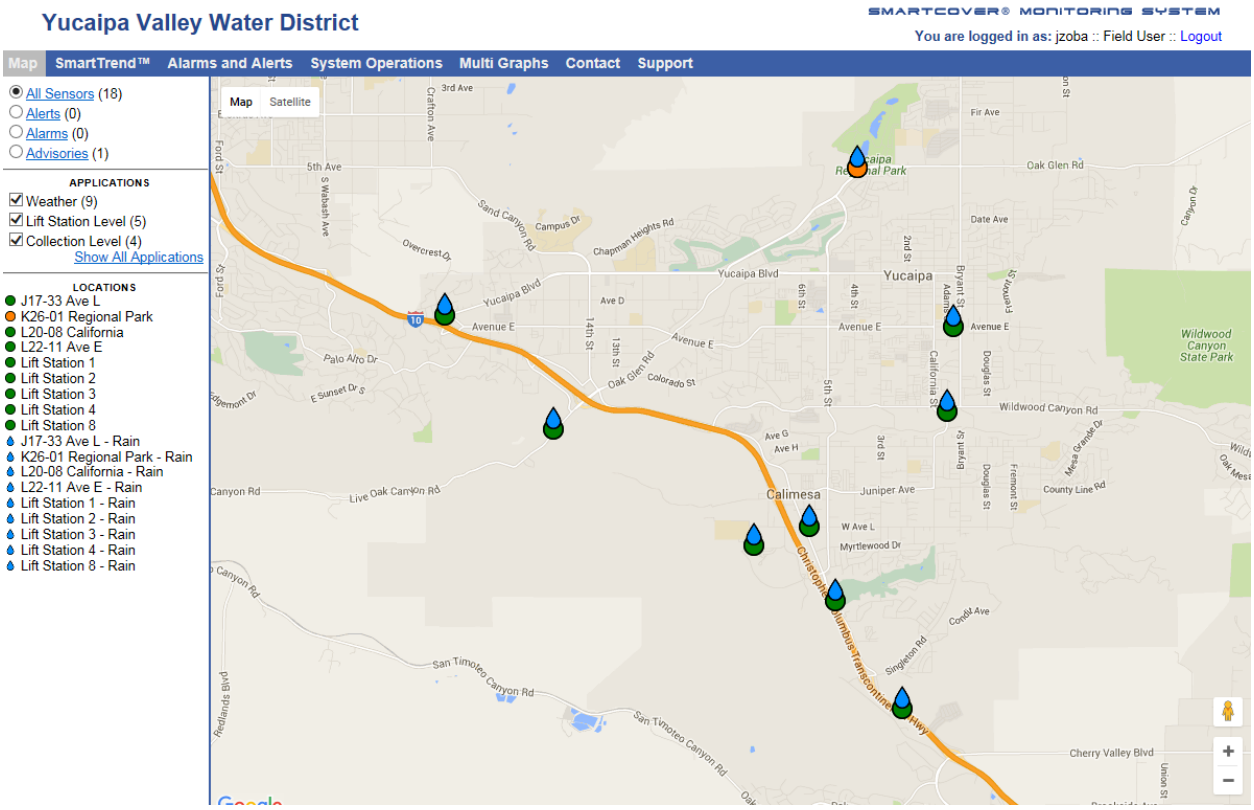
In 2000, the District conducted an inflow and infiltration study of our sewer collection system which established the flow characteristics of seventeen sewer collection sub-basins throughout the District. Shortly after the study was completed, the Board of Directors authorized the purchase of six flow monitors to be installed in the sewer collection system for monitoring purposes. On October 27, 2015, the District staff presented Workshop Memorandum No. 15-212 that included a recommendation to purchase three additional flow monitors to expand the collection system monitoring network.

The map to the right shows the subbasins and the existing flow monitors located throughout our sewer collection system.



On October 16, 2015, the Yucaipa Valley Water District received correspondence from the Santa Ana Regional Water Quality Control Board (attached) requiring the District to take the appropriate actions to prevent a sanitary sewer overflow during the predicted El Nino season.

On November 4, 2015, the Board of Directors authorized the purchase and activation of SmartCover systems to monitor the sewer collection system and lift stations for infiltration issues. The SmartCover system uses the Iridium Satellite array as a communication link to provide data about the collection system from any computer, tablet or smartphone. This system actively monitors the collection system at various locations and is capable of sending an alarm if there is a surcharge event. The diagram below illustrates an alarm set point based on flow levels in a manhole.



The other benefit of this system is that it provides intrusion detection and manhole security. The manhole cover contains a wireless level monitoring system capable of issuing instant alarms and historical data logging capabilities. Intrusion detection, caused by vandals, unauthorized contractors, or illegal dumping, is detected at the manhole or any other point of entry. This is achieved using four acceleration sensors and a microelectromechanical accelerometer. The unit will send an intrusion alarm to emergency personnel when a disturbance occurs at the point of entry, providing sufficient time for response or mitigation.

The unauthorized dumping or discharging of any pollutant, storm water, or any other substance whatsoever into a sanitary sewer or into the waters of the United States is illegal. Often times the sanitary sewer agency is responsible for any repercussions from the unauthorized dumping. Using this system for intrusion detection gives the District notice that an unauthorized intrusion is taking place so that response personnel can respond appropriately and stop, catch or document that an incident occurred.

Policy Considerations

The District staff is in the process of preparing a policy to require the installation of SmartCovers in all new developments to assist with the ongoing operation and maintenance of the sewer collection system.

CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Santa Ana Regional Water Quality Control Board

October 16, 2015

By Electronic Mail

Attention: Sewage Collection System Owners and Operators Enrolled Under the State Water Resources Control Board Order No. 2006-0003-DWQ

Subject: Collection System Preparation for Anticipated 2015-2016 El Nino Rainy Season

The Santa Ana Regional Water Quality Control Board (Santa Ana Regional Board) is sending you this courtesy reminder to prepare your sanitary sewer collection system for the 2015-2016 rainy season.

As you know, municipalities and other public entities that own and operate a sewage collection system within the Santa Ana Regional Board jurisdiction (Region) are regulated under the Statewide General Waste Discharge Requirements (WDR) for Sanitary Sewer System, Order No. 2006-0003- DWQ[1] (General Order). The General Order prohibits the discharge of untreated or partially treated wastewater to the waters of the United States. The General Order also requires the development and implementation of sanitary sewer management plans (SSMPs) that contain requirements for operation and maintenance of collection systems and for reporting and mitigating sanitary sewer overflows (SSOs). Proper collection system operation and maintenance includes the periodic or continuing process to identify problems including proactive identification and elimination of inflow and infiltration and structural vulnerabilities to prevent or minimize SSOs during rain events.

For months, the National Oceanic and Atmospheric Administration (NOAA) has been predicting that El Nino, a condition that occurs when a band of warm ocean water develops in the Pacific Ocean that causes changes in rainfall, will continue through the Northern Hemisphere during the winter of 2015-2016. As with past El Nino years, this weather pattern has the potential to produce higher than average rainfall amounts in the Region.

Since the prediction for El Nino has been anticipated for quite some time, the Regional Board is notifying all Enrollees in the Region to ensure that necessary actions to prevent SSOs during the rainy season has been taken. You are reminded that failure to demonstrate that adequate preventative measures were taken that could have minimized or prevented a known or otherwise anticipated wet weather problem that resulted in an SSO may result in civil monetary penalties pursuant to the California Water Code.

[1] As amended by Order Nos. 2008-0002-EXEC and 2013-0058-EXEC

We appreciate your urgent attention in this matter to protect public health and water quality. Should you have any questions or comments please contact the Regional Board staff assigned to your facility in the enclosed list.

Sincerely,

Kurt V. Berchtold
Executive Officer

Enclosure: List of Enrollees under Order No. 2006-0003-DWQ and Regional Board Staff Assignment

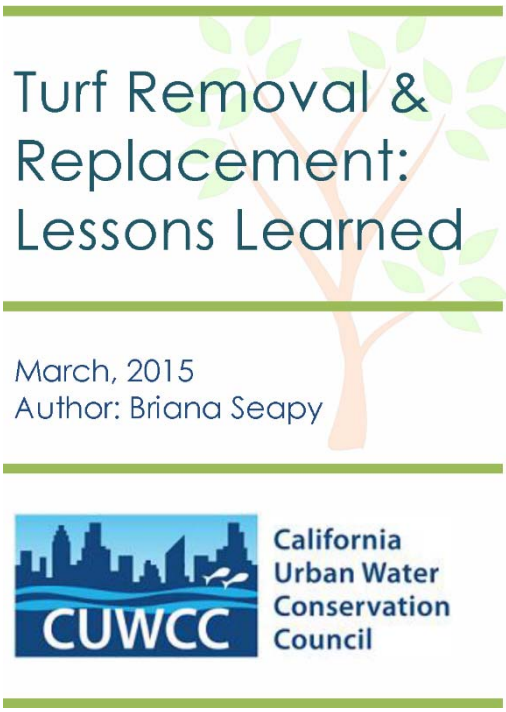
Yucaipa Valley Water District

Workshop Memorandum 16-041

Date: **February 23, 2016**

Subject: **Status Report on the Increased Implementation and Distribution of Weather-Based Wi-Fi Irrigation Controllers for Residential Water Customers of the Yucaipa Valley Water District**

A report from the California Urban Water Conservation Council, *Turf Removal and Replacement: Lessons Learned*, describes program implementation and estimated water savings from turf-based water conservation programs. The report offers qualitative and quantitative context for turf-removal programs, describes the challenges of program implementation and provides guidance to optimize program outcomes.

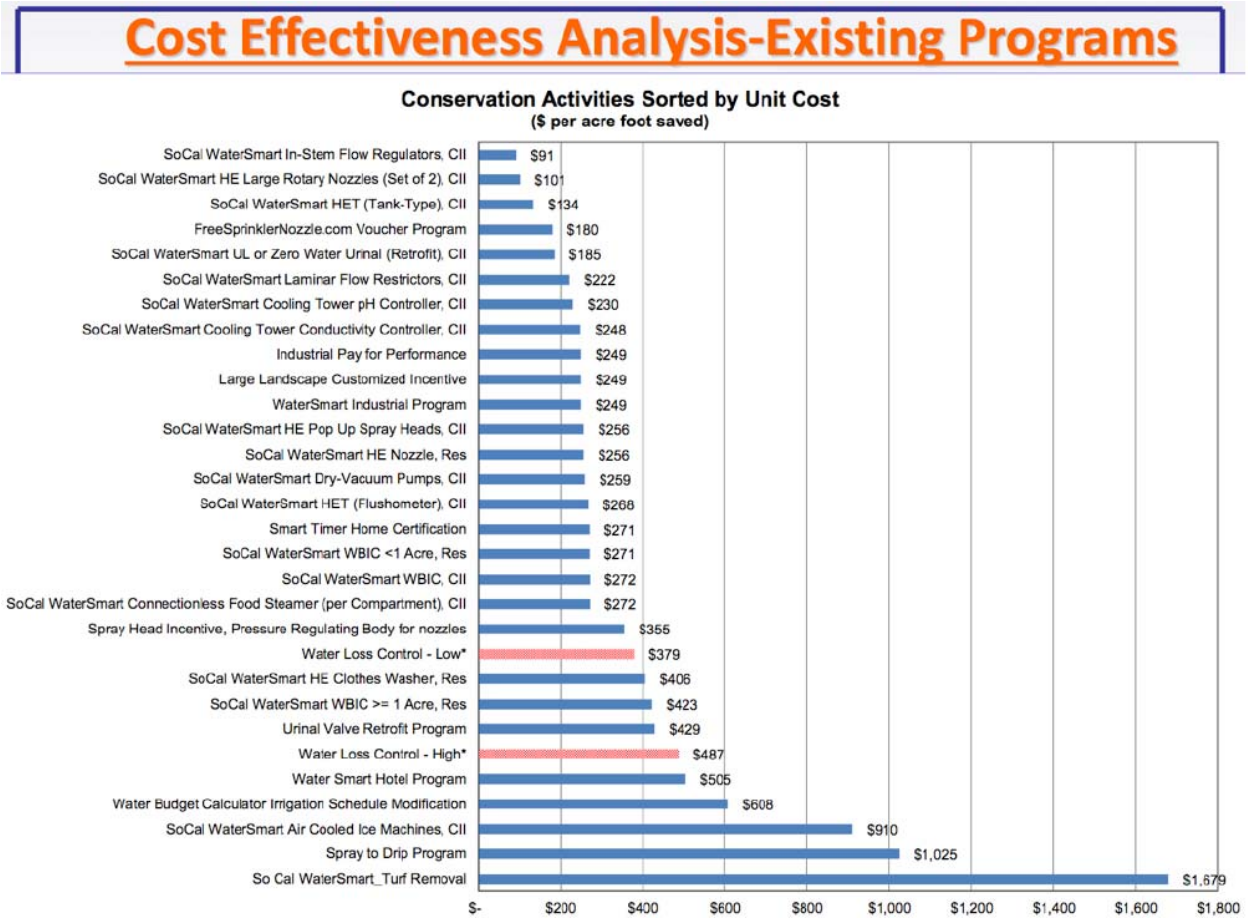


Turf-based landscape programs involve two steps: turf removal and turf replacement. The results of this type of water conservation program are highly variable based on customers' aesthetic desires, location, financial commitment, and the availability of landscape materials. The report found that the average rebate resulted in a cost of about $1,500 per acre foot of water saved. As public agencies continue to support, fund and implement turf removal programs during this drought, it is important to continue to review and evaluate the success of these programs to ensure policies are implemented in a manner that fully protect the funds ratepayers entrust with governmental agencies.

Appendix A of the report provides an overall evaluation of the cost effectiveness of various water conservation programs which range from $91 per acre foot of water saved to about $1,700 per acre foot of water saved. The water conservation programs at the top of the chart would be considered more effective than the water conservation programs at the bottom of the chart.

Appendix A: Conservation Program Cost Effectiveness

The following chart, created using the *Alliance for Water Efficiency's Water Conservation Tracking Tool* and presented by Joe Berg from the Municipal Water District of Orange County at the 2014 WaterSmart Innovations Conference, details the relative cost per acre foot (AF) of water saved for various water conservation programs. The turf rebate program value is found at the bottom of the chart, indicating that it is the most expensive program alternative evaluated in this study with a cost of $1,679/AF water saved. It should be noted that since 2014, cost effectiveness numbers may have changed.



An audit report released by Ron Galperin, Controller for the City of Los Angeles on November 20, 2015, found that the "turf replacement program gave DWP the lowest return on investment, in terms of gallons of water saved per dollar spent, than other conservation programs by a wide margin. Auditors calculated the DWP spent nearly $16 million on non-turf replacement programs in FY 2014-15 that were expected to save between 1,717 and 7,728 gallons per dollar over their estimated lifetimes. Turf replacement programs, on the other hand, were expected to save only an estimated 350 gallons per dollar spent over the lifetime of DWP's nearly $18 million investment in FY 2014-15".

The Yucaipa Valley Water District Approach

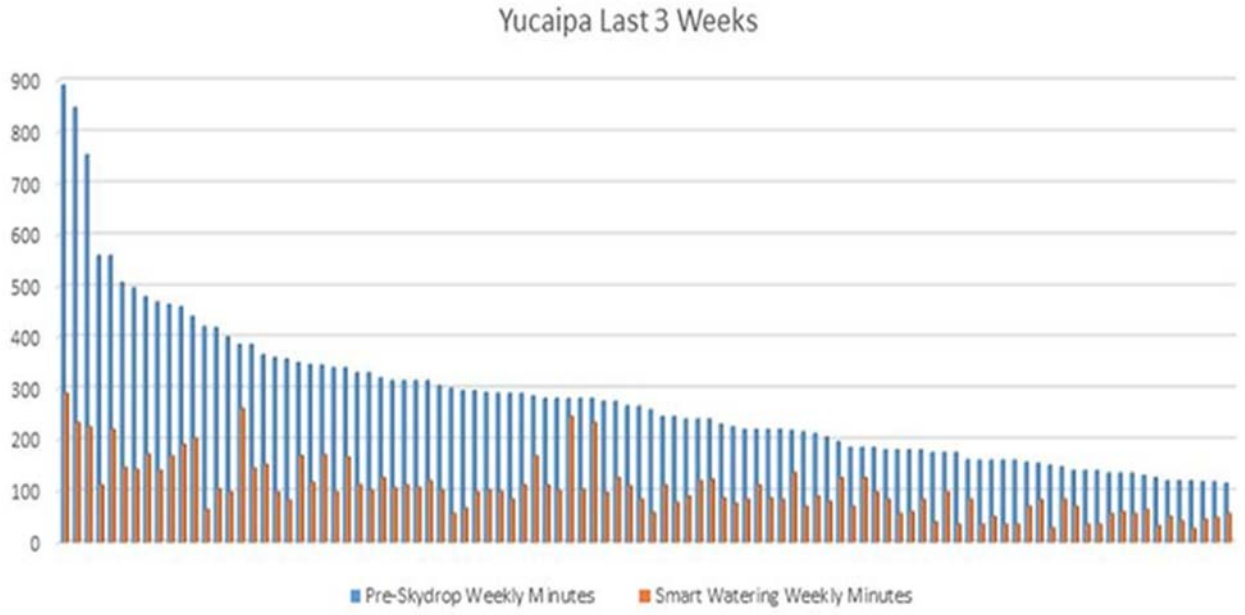
In response to the drought, the Yucaipa Valley Water District implemented a multi-prong approach to achieve a 36% water conservation goal set by the State Water Resources Control Board. While we continuously review all programs, we have identified that the use of Wi-Fi based irrigation controllers for residential water customers has the ability to quickly reduce our drinking water demands in a cost effective manner.

At the board workshop on April 28, 2015, the District staff demonstrated how the Wi-Fi based irrigation controller developed by Skydrop uses a home Wi-Fi system to provide localized weather data to control the amount of water used for outdoor irrigation. This technology will automatically

adjust irrigation sprinklers to reduce the amount of water used when it is not needed based on weather conditions, soil type, sprinkler type and even landscaped slopes.

Typically, irrigation accounts for 60% to 70% of the total residential water demands each year. If the Wi-Fi-based irrigation controllers can increase irrigation efficiency and reduce outdoor irrigation water by 50%, then we are well on our way to meet the Governor's call for a 36% water reduction in our service area.

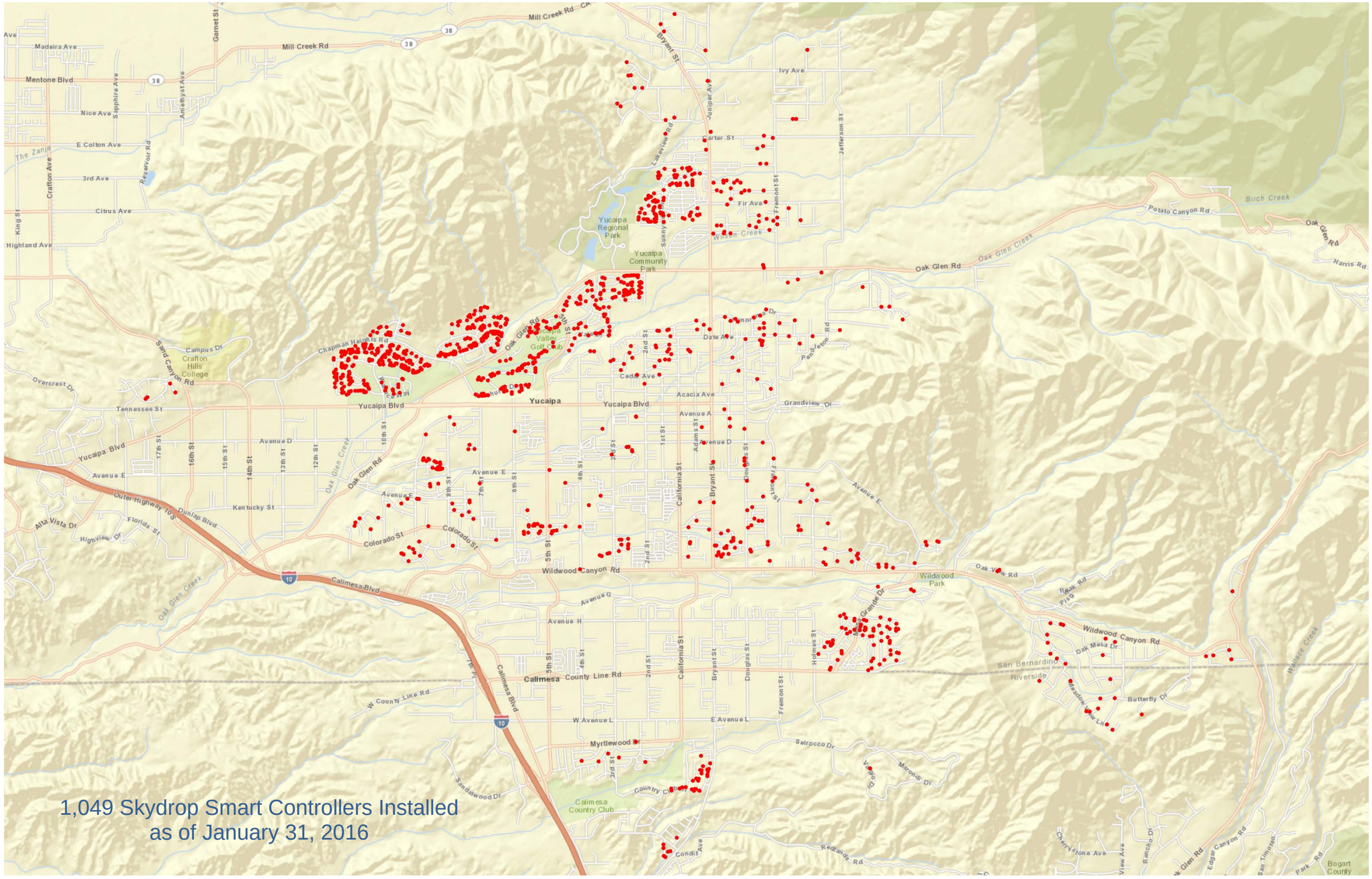
Based on recent installations of the Skydrop system, the technicians working on the project tracked the difference between irrigation system runtime minutes per zone for 100 homes. The chart below shows the total number of irrigation minutes per customer for their existing irrigation time (blue) compared to the total number of irrigation minutes per customer for the Skydrop system (orange).



This data shows that the existing/old irrigation timers were programmed to provide 27,955 minutes of irrigation water compared to the Skydrop controllers providing 10,396 minutes of irrigation water. Assuming a delivery rate of 14 gallons per zonal minute, the old irrigation timers would deliver 391,370 gallons of water compared to 145,544 gallons of water from the Skydrop system. The Skydrop system further improves upon this estimation due to its ability to only run specific zones and not all zones that are commonly programmed into older irrigation timers.

While other communities are responding to the drought by providing rebates for turf removal and landscaping changes, the District will is pursuing an alternative that is quickly implemented and can be widely distributed throughout our service area. While turf removal programs cost about $1,500 per acre foot of water saved, the Wi-Fi based irrigation controller will cost about $155 per acre foot of water saved.

During this agenda item, the District staff will present the implementation plan to facilitate the distribution of the irrigation controllers to residential customers with the purchase of 500 additional Skydrop units for distribution in the Wildwood Canyon area plus an additional purchase of 500 Skydrop units for targeted installation to our highest residential water users. (GL 02-5-06-54099)


1,049 Skydrop Smart Controllers Installed
as of January 31, 2016
Mill Creek Rd
Mentone Blvd
Nice Ave
E Colton Ave
3rd Ave
Citrus Ave
Highland Ave
Madeira Ave
Garnet St
Sapphire Ave
Amethyst Ave
Reservoir Rd
Crafton Ave
King St
The Zanja
Bryant St
Ivy Ave
Juniper Ave
Carter St
Jefferson St
Fremont St
Fir Ave
Lakeview Rd
Sunnyslope
Wilson Creek
Yucaipa Regional Park
Yucaipa Community Park
Oak Glen Rd
Oak Glen Creek
Potato Canyon Rd
Birch Creek
Harris Rd
Chapman Heights Rd
Campus Dr
Crafton Hills College
Sand Canyon Rd
Overcrest Dr
Tennessee St
Yucaipa Blvd
Yucaipa
Oak Glen Rd
Sunset Valley Golf Club
Date Ave
Cedar Ave
Acacia Ave
Avenue A
Grandview Dr
Penbrook Rd
Manor Dr
Avenue D
Avenue E
Avenue F
Avenue G
Avenue H
Outer Highway 10 S
Dunlap Blvd
Kentucky St
Alta Vista Dr
Highview Dr
Florida St
Colorado St
Wildwood Canyon Rd
Calimesa Blvd
Oak Glen Creek
W County Line Rd
Calimesa County Line Rd
W Avenue L
E Avenue L
Myrtlewood Dr
Sandalwood Dr
Calimesa Country Club
Country Club Dr
Condit Ave
Redlands Rd
Wildwood Park
Oak View Rd
Rock Rd
Pine Grande Dr
Holmes St
Wildwood Canyon Rd
Oak Mesa Dr
San Bernardino
Riverside
Meadow View Ln
Butterfly Dr
Sirocco Dr
Marondi Dr
Cherrystone Ave
View Ave
Ranch Dr
Edgar Canyon Rd
San Timoteo
Park Rd
Bogart County
Walnut Creek
1st St
2nd St
3rd St
4th St
5th St
6th St
7th St
8th St
9th St
10th St
11th St
12th St
13th St
14th St
15th St
16th St
17th St
7th Pl

Yucaipa Valley Water District

skydrop
SMART SPRINKLER CONTROLLER

It is no secret that California is experiencing a drought and as a result, residents of the Yucaipa Valley Water District are dealing with important water restrictions placed upon us by the State of California. Reducing your water usage by the required 36% may seem overwhelming but you're not alone! In an effort to work together to meet these restrictions, the Yucaipa Valley Water District has paid for the equipment and installation of the Skydrop Water Management System at your home.

Together with the Skydrop certified installers, we will replace your old sprinkler timer with a state-of-the-art Skydrop Controller that is up to 50% more efficient than what you are currently using. Skydrop's smart sprinkler controller combines comprehensive zone settings with real-time weather data to determine the soil moisture level and automatically adjust the watering duration and frequency. Keeping lawns green and healthy year round while conserving water. Making this much needed change will not only save you money, it will help us all work together to meet the mandated water reduction restrictions, setting you up for a greener future in more ways than one!

To schedule a time to upgrade your sprinkler controller please call the Yucaipa Valley Water District at 909-797-5117 or for more information go to www.yvwd.dst.ca.us/skydrop-faq.

Skydrop.com | 1-844-Skydrop

skydrop™

SMART SPRINKLER CONTROLLER

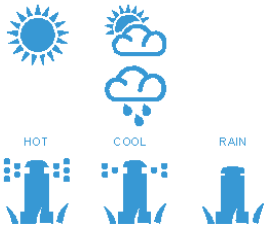
Maximizing water conservation while maintaining beautiful landscapes.

Smart Watering Sprinkler Controller

Monitors hyper-local weather data and calculates water loss in your soil to adjust your watering schedule.

Easy to use interface, accessible through the Skydrop controller, smartphone, tablet, or computer.

Automatically sets optimal watering levels for your lawn, garden, or xeriscaped yard.



It pays to be smart

Use up to 50% less water with the Skydrop smart controller.

Why is YVWD doing this?

On May 5, 2015, the State Water Resources Control Board adopted emergency regulations to achieve a 36% reduction from the amount of drinking water produced in 2013. These regulations were readopted by the State Water Resources Control Board on February 2, 2016.

Is this mandatory?

No, it is not mandatory but is strongly encouraged because of the drought and the regulations set by the State Water Resources Control Board.

Do I have to pay anything?

No, YVWD has paid for the basic service in full.

I like to be in control of my water settings, will I still be able to do that?

Yes.

What is in it for me?

- Already paid for equipment and service valued at $380 that you don't pay for
- Up to a 50% reduction from your current water usage on the exterior of the home
- A healthier and greener yard
- Less time spent controlling your sprinkler controller

How does the Skydrop work and what makes it different from what I have now?

Great question. Please go to skydrop.com and all your questions will be answered.

I still have more questions.

Give Skydrop a call at (385) 265-2050 and we will walk you through it.

Skydrop.com | 1-844-Skydrop

skydrop

Smart Sprinkler Controller

If you are frustrated with you current controller, tired of fighting with outdated user interfaces and confusing programming menus, the Skydrop WiFi controller will revolutionize the way you approach your home and garden irrigation.

Skydrop is more intelligent than other so-called "smart-controllers"; doing more than simply turning sprinkler zones on-and-off at programmed times the way most controllers do, built from the ground up to be an all-in-one solution for all your irrigation and conservation needs.

Not only is the Skydrop WiFi Smart controller the smartest piece of technology in your yard, it's also the most attractive! The contemporary design incorporates modern aesthetics with practical functionality. Skydrop's alloy metal wheel is actually the controllers input interface, making programming the device slick and intuitive to operate. Skydrop's utra-smooth motion of the wheel gliding underhand feels great reflecting the solid build quality and thoughtful design.

If you already have a sprinkler controller the Skydrop is a cinch to swap out. Anyone with a screwdriver and 30-minutes can have a Skydrop up and running in their yard, saving them time and money immediately.

WHAT'S IN THE BOX?

- Skydrop smart sprinkler controller with 4.3" LCD screen
- Wall Plate featuring tool free wiring
- Installation Guide
- 24 VAC power supply
- Mounting screws for wood / drywall

FEATURES & BENEFITS

- 8 Station Smart Controller plus Master Valve / Pump
- Expandable to 16 Stations with expansion unit (Coming Soon)
- Makes adjustments to comply with regional watering restrictions
- Connects to real time hyper-local weather reports and forecasts
- Adapts the watering schedule based on variable inputs
- Can be controlled from any web-enables device or computer

TECHNICAL SPECS

- 8 Station Smart Controller plus Master Valve / Pump
- Expandable to 16 Stations with expansion unit (Coming Soon)
- Makes adjustments to comply with regional watering restrictions
- Connects to real time hyper-local weather reports and forecasts
- Adapts the watering schedule based on variable inputs
- Can be controlled from any web-enables device or computer

NETWORKING

- 802.11b
- 802.11g
- 802.11n (2.4 Ghz only)

Available on the App Store GET IT ON Google play

skydrop

Anywhere Access

ACCESS FROM ANY WEB-ENABLED DEVICE

You can manage your Skydrop smart controller using the controller itself, your preferred mobile device, or web browser. By connecting the Skydrop controller to your Wi-Fi network you can change settings or water at any time or any place.

WI-FI ENABLED

By connecting the Skydrop WiFi controller to your Wi-Fi network Skydrop WiFi Timer you can change settings or water your landscape or lawn at any time or from any place.

AUTOMATED WATERING

No one has time to be constantly adjusting and updating the water schedule for their lawn. Skydrops' proprietary algorithm gathers a variety of hyper-local data points creating from them a comprehensive and efficient watering schedule – dynamically adapting schedules without any intervention on your part throughout the season.

BEAUTIFULLY SIMPLE

The beautifully simple user interface makes Skydrop easy to navigate and setup. Gone are the days of struggling to understand and setup your lawn's irrigation. Skydrop can help you take back control of your yard, once and for all.

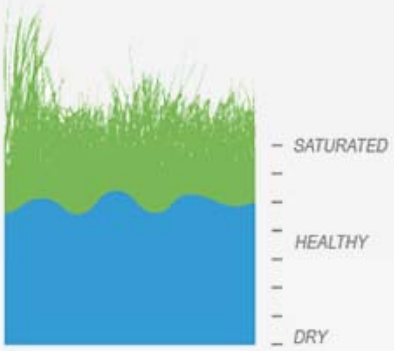
skydrop is Environment Friendly

SKYDROP SAVES WATER & MONEY

Local weather changes can have drastic, daily implications on how much water is needed for any lawn or landscape. Skydrop automatically adjusts watering schedules to reduce wasteful watering, which will save you water and money.

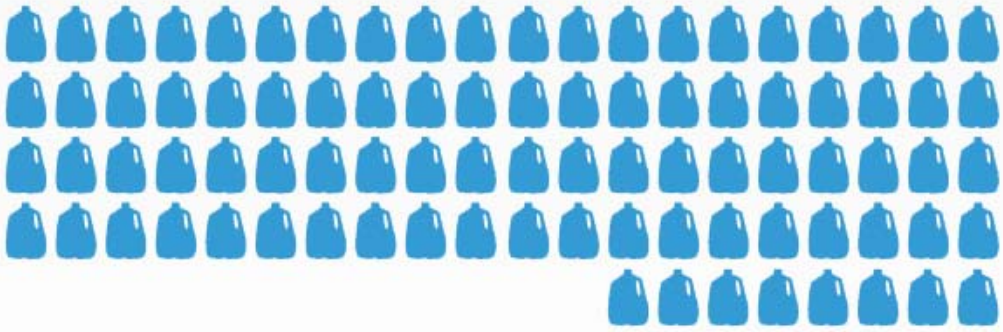
NO MORE WASTEFUL WATERING

Nothing is more wasteful than having your sprinklers on while it's raining. It's bad for the environment, and it costs you money!



WATER SMARTER

The Skydrop WiFi Smart controller helps you determine how much water your lawn needs. It actually calculates how much moisture your lawn is losing each day, and sets watering times accordingly, making sure your grass always has the optimum amount of water it needs to stay green and healthy.



IMAGINE USING 50% LESS WATER

The EPA estimates that about 30% of a household's water is used for irrigation. Over 50% of that irrigation water is wasted through over watering and evaporation. With Skydrop, those inefficiencies will be reduced by up to 50% by watering only by need, rather than watering by a set weekly schedule.

RON GALPERIN
CONTROLLER

November 20, 2015

Honorable Eric Garcetti, Mayor
Honorable Michael Feuer, City Attorney
Honorable Members of the Los Angeles City Council
All Angelenos

Re: Audit of DWP Customer-Based Water Conservation Programs

Dear Colleagues and Fellow Angelenos:

As we prepare for the possibility of heavy rains this winter, we should keep in mind that El Nino-produced storms in California could bring us only a temporary respite from a protracted drought. Droughts are to be expected in our state and scientists have found evidence from centuries ago that some of them have lasted for decades. As temperatures rise due to climate change, our natural weather cycles are expected to become more extreme.

Currently, City of Los Angeles customers of the Department of Water and Power (DWP) use more than 435 million gallons of water per day, 85% of which comes from hundreds of miles away. Stocks we depend on from Northern California, the Eastern Sierras and the Colorado River have been diminishing. Last year, California's snowpack was only 35% of normal. This year, it peaked at 17% of normal, a modern-record low.

What if those conditions persisted for a long while? How would we continue to quench the thirst of our semi-arid City of 4 million people and our region of more than 20 million? Hence the imperatives that we reduce our dependence on far-away supplies and our uses thereof.

Our Record of Conservation So Far

As a community, Angelenos have responded with extraordinary verve to calls to cut back on water use from the Governor and Mayor. Collectively, Los Angeles City

200 N. MAIN STREET, SUITE 300, LOS ANGELES, CA 90012 • (213) 978-7200 • CONTROLLER.LACITY.ORG

customers have cut back on water use by nearly 17% during the last two years, reducing average per person daily consumption from 131 gallons to 109. This is truly remarkable, given that, before these cuts, we were already using the same amount of water we did when there were a million fewer of us.

Today, I am releasing an audit that examines various customer incentive and rebate programs under the auspices of the DWP, which spent $24.7 million on such programs in FY 2013-14 and $40.2 million in FY 2014-15. This year's DWP budget calls for spending $59 million on water conservation programs. Our principal water wholesaler, the Metropolitan Water District, has also increased its spending on such programs. MWD, which spent only $18 million on rebates and incentives in all of Southern California in Fiscal Year 2013-14, increased that to $131 million in FY 2014-15, of which $43 million went to pay for rebates and incentives in the City of Los Angeles alone. Earlier this year, MWD added more than $300 million for all of Southern California. These expenditures covered the costs of providing customers with free water-saving devices such as faucet aerators and low flow showerheads, providing customers with rebates for installing low-flow toilets and washing machines, and for replacing water-hungry lawns with more drought tolerant landscapes.

DWP reported that, as a result of its direct water conservation programs, 4,210 acre-feet of water were saved in Fiscal Year 2013-14. That works out to about one gallon per capita per day. In Fiscal Year 2014-15, DWP reported saving 7,197 acre-feet of water, which works out to 1.6 gallons per capita per day. The DWP's turf replacement program, which saved the second most water among DWP's four financial incentive programs, accounted for water savings of about half a gallon per person per day. During this same period, Angelenos voluntarily cut their overall water use by 22 gallons per person per day.

One can't help but think that the direct savings from the rebate programs were a relative drop in the bucket.

DWP's Turf Replacement Investment Was Largely a Gimmick

Auditors found that DWP does not adequately prioritize water conservation projects based on which are the most cost effective. The key component of DWP's conservation program last year--turf replacement--targeted outdoor water use, which constitutes about half of residential water use. But evidence suggests that the turf replacement program, called "Cash in Your Lawn," was largely a gimmick--a device intended to attract attention and publicity.

It in some ways worked as intended. By paying more to provide customers an initial opportunity to get involved in water conservation--in hopes that participation and

behavior might continue--it had value as an advertising campaign that helped stimulate major public interest in the drought. But this came at a rather high cost and, arguably at the cost of some fairness. Aid was distributed Citywide but was most concentrated in the western San Fernando Valley. As well as ordinary ratepayers, beneficiaries included some affluent households and some private golf courses. One particular contractor benefited handsomely.

If money is no object, turf replacement rebates are a relatively expedient way to save substantial amounts of water, But, of course, money is an object. Auditors found that the turf replacement program gave DWP the lowest return on investment, in terms of gallons of water saved per dollar spent, than other conservation programs, by a wide margin. Auditors calculated that DWP spent nearly $16 million on *non-turf replacement programs* in FY 2014-15 that were expected to save between 1,717 and 7,278 gallons per dollar over their estimated lifetimes. Turf replacement programs, on the other hand, were expected to save only an estimated 350 gallons per dollar spent over the lifetime of DWP's nearly $18 million investment in FY 2014-15. (These expenses do not include administrative and certain other costs.) That does not take into account the cost of additional turf replacement rebates paid by the MWD. These lifetime estimates are based on DWP's reports of its spending and estimates of the life expectancy of residential turf replacement (forecast at 10 years) versus the life expectancy of other major rebate programs (forecast at up to 19 years).

How Interest in Turf Rebates Swelled and Fell Off

The turf replacement program, which had been around for several years, attracted little attention until last Fall when both DWP and MWD dramatically raised the amounts of rebates they were offering. MWD doubled its rebate from $1 to $2 per square foot of residential lawns removed. DWP increased its rebate from $1 per square foot to $1.75. Thus, homeowners could claim combined rebates of up to $3.75 per square foot for replacing lawns with gravel, drought resistant plants and/or artificial turf. A similar pattern held true for lawn replacements for businesses, which were paid up to $3 per square foot from both agencies combined. This did not reflect ratepayers' total costs. Since DWP ratepayers pay MWD for the water DWP purchases, part of what MWD offered DWP customers in rebates originated with DWP ratepayers.

Here is a breakdown of the program's trajectory to date. DWP statistics show that less than one percent of all DWP's 700,000 residential and commercial customers received turf replacement rebates during the two most recently completed fiscal years. In FY 2013-14, 1,236 residential customers and 14 business customers received them. But those numbers surged in FY 2014-15, when 5,320 residential customers and 106 business customers received the rebates. In the first two months of this fiscal year, DWP reported those numbers continued to grow, with an additional 2,579 residential

customers and 28 businesses receiving checks for completed projects. That extended the turf rebate participation rate to two percent of DWP's approximately 480,000 *residential* customers. To be fair, that number does not fully reflect the program's appeal in that it does not count an additional 24,093 DWP residential customers whose applications are still in queue, according to the MWD. If two-thirds of those customers follow through on their projects that would appreciably boost participation to almost seven percent of DWP residential customers.

The California Urban Water Conservation Council estimates that there are 2.5 million acres of turf grass in California. If we were to take the turf replacement rebate program to its logical extreme, and issue rebates of $3 per square foot to replace all of that, we would have to spend $403 billion, which is about two thirds of the national defense budget.

My office believes that transparency is important and that public monies used for incentives should be a matter of public record. DWP, however, has not released detailed information about who the turf rebate recipients are, citing ratepayers' privacy rights. MWD, however, has released information about DWP customers receiving rebates, with names and precise addresses redacted. In the case of customers of most other Southern California water agencies outside the City of Los Angeles, MWD has also provided names. Disclosures of who received turf replacement rebates in these jurisdictions outside the City have shown that recipients have included owners of high-value residences as well as exclusive country clubs. Some private golf courses are known to have been recipients in the City as well.

Last year, seeking to spike interest in conservation, MWD tapped its reserves and appropriated a two-year total of $450 million for water conservation incentives and rebates for Fiscal Years 2014-15 and 2015-16. By this month, MWD reported that it had spent or committed almost all of that money. It had paid out or was committed to pay out $277 million throughout Southern California for turf replacement rebates alone. MWD has stopped taking new applications for them. But DWP is still offering $1.75 per square foot. Officials told my office, however, that, since MWD dropped out, applications by DWP ratepayers have dropped off by 80%.

Turf replacement rebates may have helped to alter cultural norms for the better as neighbors eyed one another's newly landscaped yards, but there have been criticisms too--including observations that surfaces such as gravel and artificial turf increase surface temperatures and promote a lack of watering that can kill nearby trees dependent on residual water from lawns.

A Sobering and Encouraging Review

In examining this program and DWP's various other incentives--including less expensive, longstanding and more cost-effective rebates for low-flow toilets and efficient washing machines--my office received information that was both sobering and encouraging. The sobering part was that all of DWP's incentive programs combined cut per capita water use by only 2.6 gallons per day over two years.

The encouraging part was that, during the same period, Angelenos voluntarily cut their overall water use by a remarkable 22 gallons per person per day. That means Angelenos, acting without special financial incentives, accounted for 88% of the cuts in reducing per capita daily use. This has been an overwhelmingly civic-minded response. It also suggests, as our audit indicates, that public education about the need to conserve can be an even more powerful tool than financial incentives.

Giving Ratepayers More Choices

Ironically, increased conservation has meant that DWP took in less money than expected. The utility announced last month that it would have to implement a small upward rate adjustment to make up the difference and keep the system running. The DWP is also seeking a longer-term rate increase that will ask all of us to pay more.

As an alternative to current rebate and incentive programs, what if we were to let creativity reign and structure financial incentives beyond the current two-tiered and even the proposed four-tiered system of rates? We could reward ratepayers for using less water, however they accomplished it, regardless of whether they participated in a formal rebate program. In other words, what if we were to promote more choices?

That might stimulate even more interest in conservation. But for a program like that to flourish, ratepayers would need to be able to measure their own progress on a daily--or even a minute to minute basis. The technology to do that is available, but not in use.

Meters and Submeters

Practically speaking, it is very difficult for ratepayers now to monitor their usage effectively. Current water meters record usage only in 7.48 gallon increments and bi-monthly water bills, only in 748 gallon increments. It's difficult to get immediate gratification from, say, taking a shorter shower when you can't figure out how much water—and money--you saved. But so-called "smart meters" and submetering technologies exist that could measure in much smaller increments and give instant feedback to ratepayers and to utility billing systems capable of generating discounts..

Smart meters and submeters rely on WiFi or cell phone technologies to communicate directly to utilities and customers, who can access the information in real time on their computers and smartphones.

Some other major water systems around the country and state have already started installing smart meters. But DWP, the nation's largest municipal utility, is behind. DWP's electrical power side, which is its biggest revenue generator, is unfortunately thinking of installing smart meters that won't work for the water side. The electrical side may have unique needs, but installing smart electric meters, without having smart water metering technology, would be a terribly missed opportunity.

Further, I suggest that DWP explore providing incentives for the installation of water meters or submeters for more tenant households. DWP reports that it has about 700,000 meters but there are about 1.4 million households in the City. Households that don't have meters are typically in multi-unit buildings with only one meter per building. Using smart meters or submeters in individual apartments would provide a way for these households too to keep tabs on how much they use.

How Do We Increase Our Supply of Water?

We draw only about 11% of our water from our principal local source--an underground water basin that covers much of the San Fernando Valley. This aquifer, called the San Fernando Groundwater Basin, is currently so polluted that less than one third of the DWP's 115 wells can be used. It has been polluted since the 1940s when a largely unregulated aircraft industry dumped contaminants without due care. Efforts to clean this up, which have been going on for decades, have not yet succeeded in containing the spread of the underground contaminated plume.

Our primary sources for water are hundreds of miles away. We have had to reduce the amount of water we take from the Owens Valley, a source near the Eastern Sierras, because of adverse environmental impacts. Our other major northern California source, the Sacramento-San Joaquin Delta, is in ecological danger and the state has restricted withdrawals. Our third major source, the Colorado River Basin, may also be in trouble.

Taking these factors into account, City water planners have charted courses intended to reduce our need to import so much. The Mayor has set a laudable goal of reducing by 50% the amount we buy from MWD by 2024. MWD's prices have doubled in the last dozen years, and will only continue to increase.

A Time to Think Bigger?

Honorable Eric Garcetti, Mayor
Honorable Michael Feuer, City Attorney
Honorable Members of the Los Angeles City Council
All Angelenos
November 20, 2015
Page **7** of **7**

I support the efforts that are currently underway to expand the removal of solids from sewage water so that more of it can be safely recycled for landscaping and industrial uses, and to capture more water during rainstorms so that it can be used to decontaminate and replenish our groundwater basin. We should consider expanding these efforts. For example, the City discharges 255,000 acre feet of sewage water per year into the ocean. The City has set a goal for itself, 20 years from now, to recycle 49,000 more acre feet per year of this wastewater. DWP says that setting a higher goal would cost too much in increased energy use and pipeline construction. But we believe that, notwithstanding, there is potential to increase that amount.

We should also consider the obvious fact of the ocean as a water source. The DWP has largely ruled out desalination because of concern over high cost and environmental impacts. But desalination technology is improving and the City should keep an open mind.

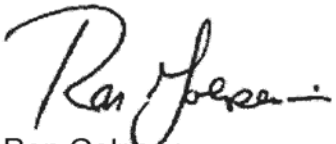
In Conclusion

Angelenos have altered, at this time, their water use habits for the better through greater awareness of the seriousness of our problem and through incentives. But the questions are: Is this permanent and, if not, how do we make it so? Moreover, we need a rate system that will encourage people to conserve.

There is definitely room for incentives. But we should consider providing them based on how much water people save, not on which rebate or incentive program they participate in. And, as we invest in incentives to reduce overuse of water, we must also invest in enhancing supplies.

While we face challenges, we also have opportunities to find new ways of meeting our goals and lead the nation in intelligent use of precious resources.

Respectfully Submitted,



Ron Galperin
CITY CONTROLLER

Capital Improvement Projects

Yucaipa Valley Water District

Yucaipa Valley Water District

Workshop Memorandum 16-042

Date: **February 23, 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.


12/29/2015


CAUTION
GATEWAY PACIFIC

Yucaipa Valley Water District

Workshop Memorandum 16-043

Date: **February 23, 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.


SCHMIDT


DOOSAN

Yucaipa Valley Water District

Workshop Memorandum 16-044

Date: **February 23, 2016**

Subject: **Status Report on the Coating Repairs to the 48" Influent Pipeline at the Yucaipa Valley Regional Water Filtration Facility**

During the regular inspections of the Yucaipa Valley Regional Water Filtration Facility, the District staff inspects the 48" diameter welded steel epoxy coated feed pipeline for imperfections and possible issues. The constant repair of any imperfections will maintain the long-term integrity and functionality of the influent pipeline.

On July 1, 2015, the Board of Directors approved a proposal with Harper & Associates for engineering, project management and inspection services related to a coating repair project at the Yucaipa Valley Regional Water Filtration Facility [Director Memorandum No. 15-062].

On December 16, 2015, the Board of Directors approved a contract with J. Colon Coatings for a sum not to exceed $61,215 to complete the pipeline repairs. [Director Memorandum No. 15-112]

The purpose of this agenda item is to provide an update on the status of the pipeline coating repairs.

Date: 2016-01-25

Spot of corrosion on the interior of the pipe

Surface preparation on the interior of the pipe

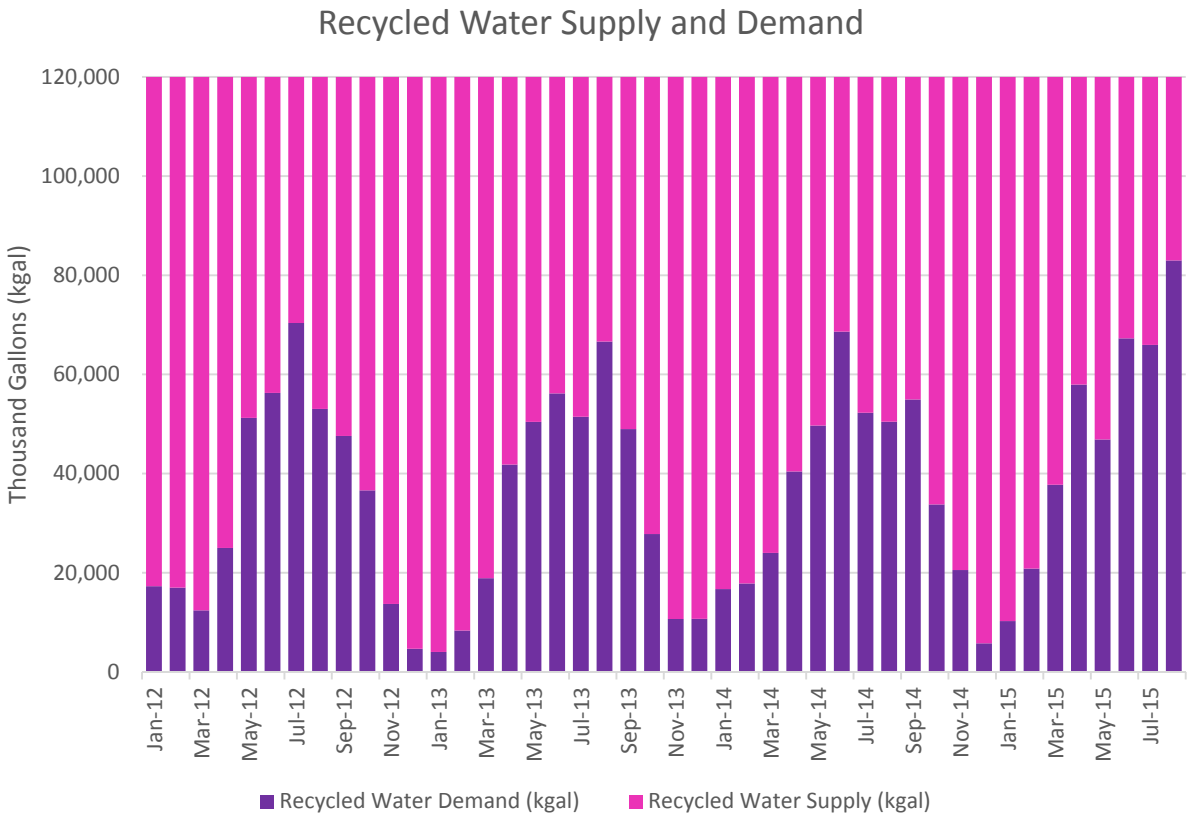
Yucaipa Valley Water District

Workshop Memorandum 16-045

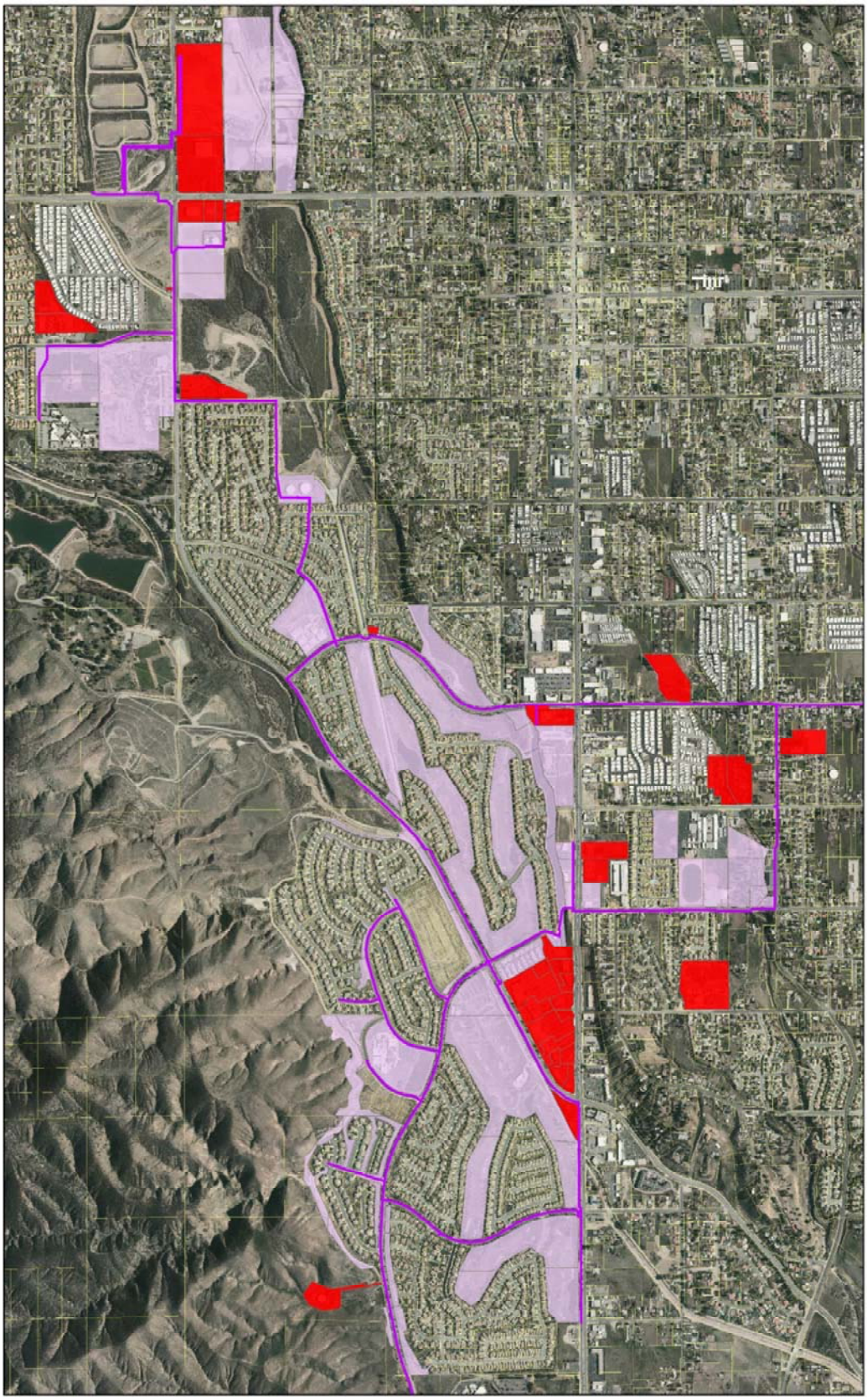
Date: **February 23, 2016**

Subject: **Status Report on the Installation of New Recycled Water Services and Recycled Water Pipelines Throughout the Service Area of the Yucaipa Valley Water District**

Over the past decade, the Yucaipa Valley Water District has been expanding the recycled water system to reduce the amount of potable water used by our community. Currently the District uses only a portion of the total recycled water available for our community. By increasing the availability of the recycled water supply to new properties, the District will be able to protect the entire community against current and future drought impacts.



The District staff is working closely with property owners to facilitate new service connections to the existing recycled water system. The following map shows some of the targeted customers in the Yucaipa portion of our service area. The red parcels indicate properties planning for a new or expanded recycled water connection. The pink parcels are already connected to the recycled water system.



On June 17, 2015, the Board of Directors authorized the District staff to solicit bids for the construction of new recycled water pipelines and service connections to the existing recycled water system [Director Memorandum No. 15-057].

On September 16, 2015, the Board of Directors awarded a construction contract to Weka for a sum not to exceed $411,536.

Financial Considerations:

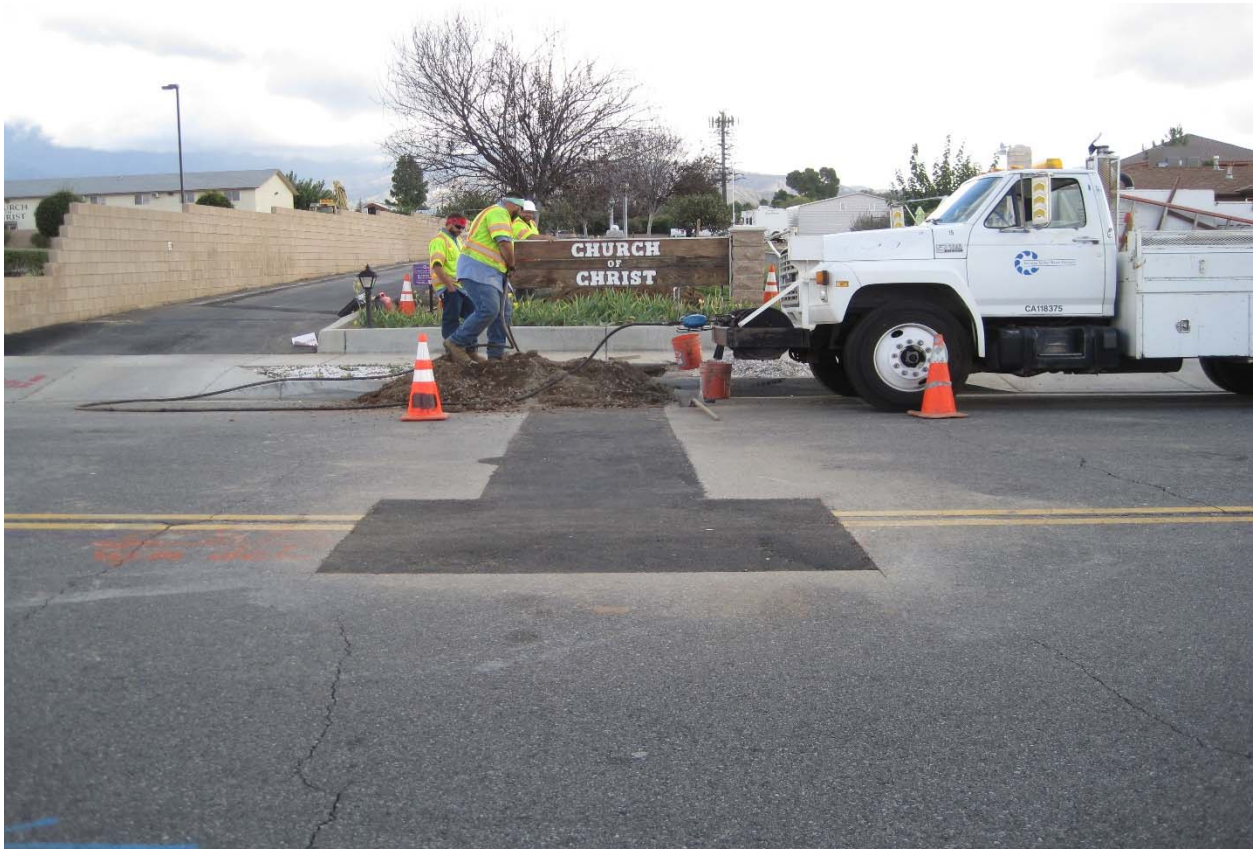
Funding for this project will be from recycled water depreciation reserves.

Additional Information

In addition to new recycled water service connections, the District staff is working on a long-term plan to significantly expand the recycled water system as shown on the following map. Milestones and future decisions related to the expansion of the recycled water system will be provided in subsequent updates and memorandums.


11.09.2015 11:42


11.09.2015 14:23


CHURCH
OF
CHRIST

Administrative Issues

Yucaipa Valley Water District

Yucaipa Valley Water District

Workshop Memorandum 16-046

Date: **February 23, 2016**

Subject: **Notice Regarding the Preparation of the 2015 Yucaipa Valley Water District Urban Water Management Plan**

Water Suppliers must coordinate the preparation of their Urban Water Management Plan with other appropriate agencies in the area, to the extent practicable. California Water Code Section 10620(d)(2) and California Water Code Section 10642 requires that agencies coordinate their planning documents and provide outreach to other agencies and the community.

Retail water agencies are encouraged to solicit participation from other agencies responsible for developing related reports or planning documents such as General Plans, Water Master Plans, Groundwater Management Plans, or Public Water Service reports. Such coordination ensures consistency in planning and reporting. The following letter is an example of the correspondence being distributed to agencies and organizations.

[Letterhead]

February xx, 2016

Ms. Christine Kelley
Director, Land Use Services Department
County of San Bernardino
385 N. Arrowhead Avenue – 1st Floor
San Bernardino, CA 92415-0182

Subject: 2015 Yucaipa Valley Water District Urban Water Management Plan

Dear Ms. Kelley:

Yucaipa Valley Water District is in the process of developing the 2015 Urban Water Management Plan. The Urban Water Management Planning Act requires every "urban water supplier" of a certain size to prepare and adopt an Urban Water Management Plan (UWMP) at least once every five years. The UWMP is a planning document in which water suppliers evaluate and compare their water supply and reliability to their existing and projected demands. A complete UWMP is necessary for Yucaipa Valley Water District to remain eligible for state drought water bank assistance and is a requirement of state grant and loan funding programs.

The 2015 UWMP will include an update of anticipated water demands in the Yucaipa Valley Water District service area which includes portions of San Bernardino and Riverside County. Water demand projections will rely upon growth and population estimates from local land use plans and state and regional agencies. Yucaipa Valley Water District is encouraging participation by land use agencies, water use agencies, and other interested parties in the UWMP. **Yucaipa Valley Water District would like to extend to your agency an opportunity to meet with us to go over the various elements of the Urban Water Management Plan, including assumptions about future population, future water demand, future water supplies, and upcoming water conservation programs.**

We anticipate that a draft UWMP will be available for public review starting in May 2016 and our agency will hold a public hearing in June 2016, prior to adoption of the UWMP. Hence we would like to solicit your input in the near future.

If your agency would like to learn more about Yucaipa Valley Water District's Urban Water Management Plan, please contact Jennifer Ares at (909) 790-3301.

Sincerely,

Jennifer Ares
Water Resource Manager

Yucaipa Valley Water District

Workshop Memorandum 16-047

Date: **February 23, 2016**

Subject: **Authorization to Solicit Prices for the Purchase of Three Multi-Function Copiers**

On July 26, 2011, the District purchased two Konica-Minolta C652 (65 copies per minute) multi-function copiers for the District office for a total cost of $23,500. With the purchase of the new copiers, the District staff relocated older copiers to the Yucaipa Valley Regional Water Filtration Facility and the Wochholz Regional Water Recycling Facility.

A Minolta DI-850 (85 copies per minute) originally purchased on August 30, 2004 for a purchase price of $30,405 was relocated to the Yucaipa Valley Regional Water Filtration Facility until it failed in August 2012 after producing 1,471,433 copies. This device is no longer operational and not work the cost of repairing.

A Minolta DI-520 (52 copies per minute) originally purchased on July 26, 2000 for a purchase price of $21,497 was relocated to the Wochholz Regional Water Recycled Facility until it failed in September 2012 after producing 1,053,380 copies. This device is no longer operational and not worth the cost of repairing.

The two copiers at the District office have produced the following number of copies:

- Administration Copier - 1,052,854 copies (549,302 color plus 503,552 black/white)
- Engineering Copier - 184,123 copies (65,914 color plus 118,209 black/white).

Having two copiers at the District office provides the necessary redundancy for the administrative functions. In the future, the District staff will improve the load balancing between the two units to extend the life of both pieces of equipment.

The District staff is recommending the purchase of three new copiers. Two will be located at the District office and one will be located at the Yucaipa Valley Regional Water Filtration Facility. All three will be multi-function copiers and sized according to the anticipated demand.

The existing Administration Copier located at the District office with 1,052,854 copies will be relocated to the Public Works Department.

The existing Engineering Copier located at the District office with 184,123 copies will be relocated to the Wochholz Regional Water Recycling Facility.

If the Board of Directors agree to proceed with this procurement, a Request for Proposals will be prepared and presented at a future board meeting.

Director Comments

Yucaipa Valley Water District

Adjournment

Yucaipa Valley Water District

Yucaipa Valley Water District

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

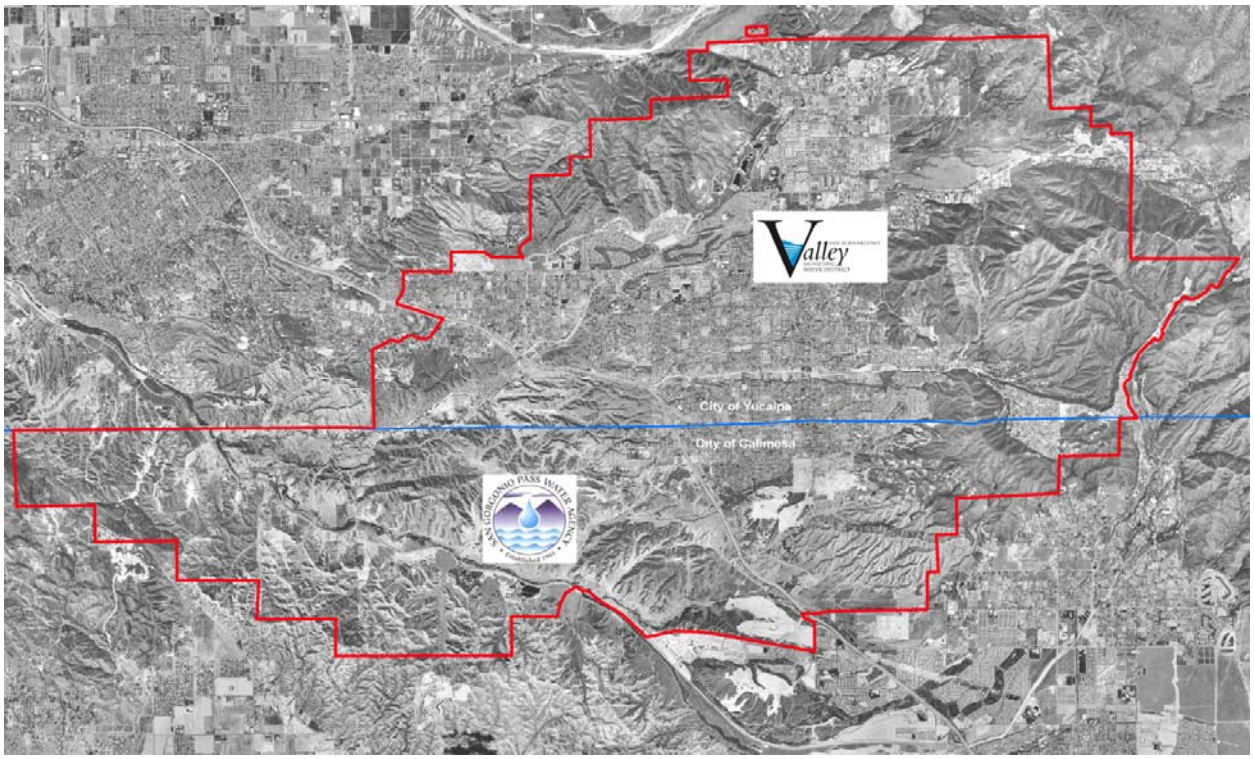
Water System:
215 miles of drinking water pipelines
27 reservoirs - 34 million gallons of storage capacity
18 pressure zones
12,000 ac-ft annual water demand (3.9 billion gallons)
Two water filtration facilities:
- 1 mgd at Oak Glen Surface Water Filtration Facility
- 12 mgd at Yucaipa Valley Regional 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)

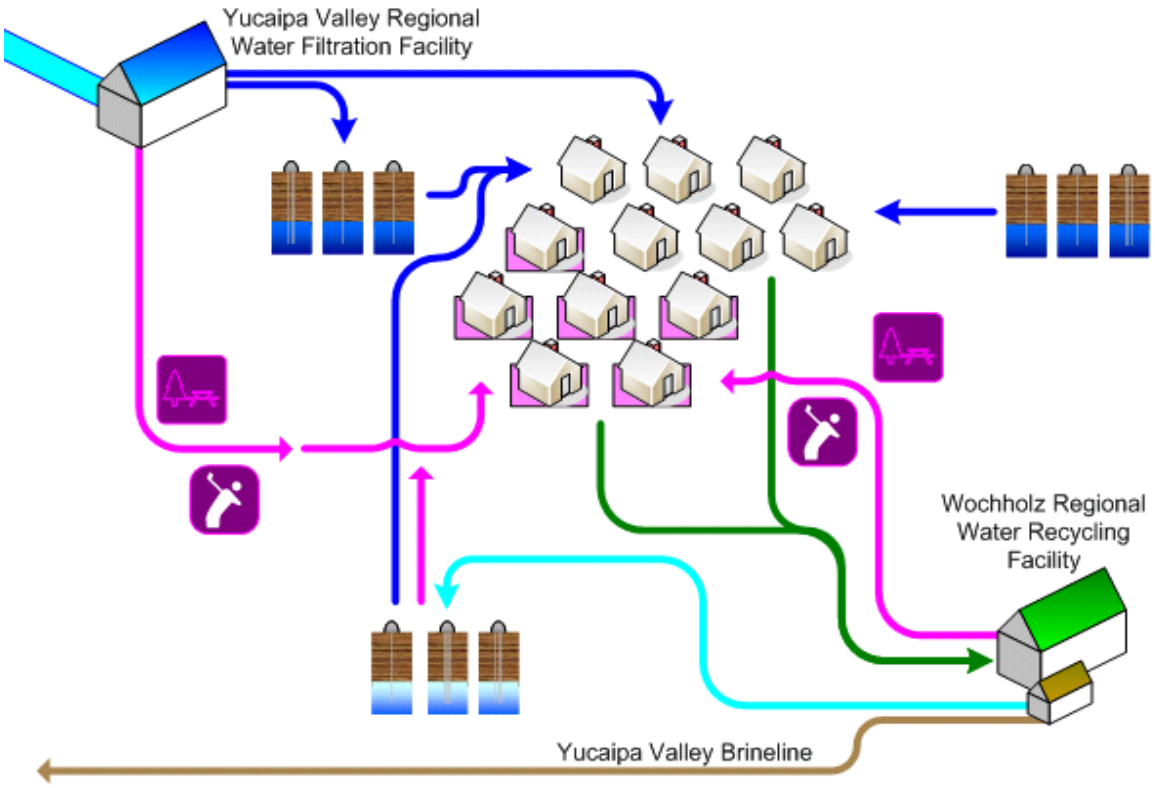
Recycled Water:
22 miles of recycled water pipelines
5 reservoirs - 12 million gallons of storage
1,200 ac-ft annual recycled demand (0.4 billion gallons)

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.



Yucaipa Valley Water District

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).

Yucaipa Valley Water District

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 1½” 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.

Yucaipa Valley Water District

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