

**SUBMITTAL TO THE BOARD OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**



FROM: Executive Office

SUBMITTAL DATE:
December 30, 2015

SUBJECT: Departmental Quarterly Water Conservation Update. All Districts [\$0]

RECOMMENDED MOTION: That the Board of Supervisors receive and file the attached Departmental Quarterly Water Conservation Update.

BACKGROUND:

Summary

The attached Departmental Quarterly Water Conservation Update highlights the current and ongoing efforts that each applicable county department has undertaken in the past three months to conserve water where possible. As the drought persists, even with upcoming strong El Niño conditions, county departments continue to find ways to maximize water savings, educate stakeholders, and leverage grant opportunities where feasible in order to reduce the county's overall water consumption. Also included in the attached report is the latest snapshot of Southern California's water supply conditions for the State Water Project and Colorado River Watershed as published periodically by the Metropolitan Water District of Southern California.

Departmental Concurrence


Steven Horn
Senior Management Analyst

FINANCIAL DATA	Current Fiscal Year:	Next Fiscal Year:	Total Cost:	Ongoing Cost:	POLICY/CONSENT (per Exec. Office)
COST	\$ 0	\$ 0	\$ 0	\$ 0	Consent <input checked="" type="checkbox"/> Policy <input type="checkbox"/>
NET COUNTY COST	\$ 0	\$ 0	\$ 0	\$ 0	

SOURCE OF FUNDS: N/A

Budget Adjustment: N/A

For Fiscal Year: N/A

C.E.O. RECOMMENDATION:

APPROVE

County Executive Office Signature

BY: 
Alex Gann

MINUTES OF THE BOARD OF SUPERVISORS

- A-30
- Positions Added
- 4/5 Vote
- Change Order



Riverside County Departmental Water Conservation Update

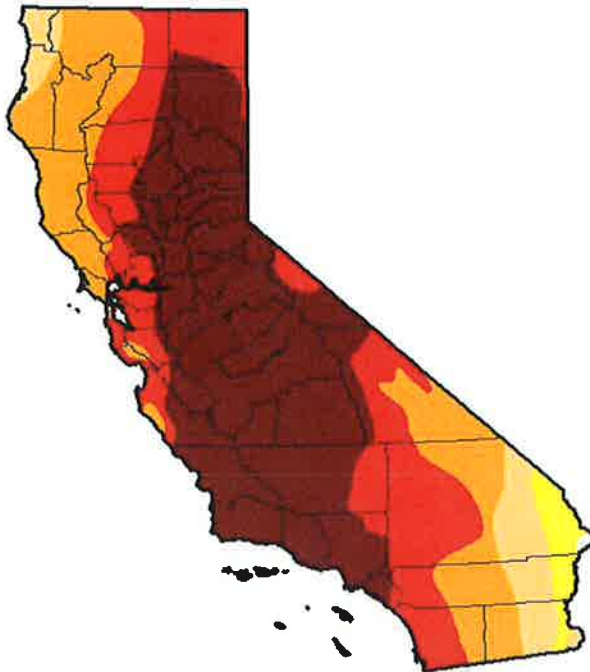
As shown in the graphic below, the majority of California, including Riverside County, remains in a moderate to extreme drought condition. This condition has changed little since the previous water conservation update in September. However, recent developments with El Niño (i.e., Pacific Ocean warming) indicate a higher probability of increased precipitation over the historical average, which may provide some relief to the current drought condition. The effects of El Niño as it relates to increased precipitation in Southern California have historically been observed in late winter to early spring. As elaborated on the following pages, County departments continue their water use reductions, informational outreach to the regulated business community, and strengthening of partnerships with local water agencies. The County Executive Office, together with multiple county departments, continues to stay engaged with the Riverside County Water Task Force.

U.S. Drought Monitor California

December 15, 2015

(Released Thursday, Dec. 17, 2015)

Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.14	99.86	97.33	90.53	69.09	44.84
Last Week 12/8/2015	0.14	99.86	97.33	82.26	69.09	44.84
3 Months Ago 9/15/2015	0.14	99.86	97.33	92.36	71.08	46.00
Start of Calendar Year 12/30/2014	0.00	100.00	98.12	94.34	77.94	32.21
Start of Water Year 9/29/2015	0.14	99.86	97.33	92.36	71.08	46.00
One Year Ago 12/16/2014	0.00	100.00	98.41	94.42	77.94	32.21

Intensity:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

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

Author:

Richard Tinker
CPC/NOAA/NWS/NCEP



<http://droughtmonitor.unl.edu/>



Riverside County Departmental Water Conservation Update

Departmental Water Conservation Status Updates

Economic Development Agency/Facilities Management (EDA/FM)

The EDA Energy Division is working with Western Municipal Water District (WMWD) to provide recycled water for irrigation to the Department of Public Health facility located at 14539 Innovation Drive, in Riverside (RV0376). WMWD has conducted several successful tests on the proposed system and submitted those to the State Water Board for review and approval. Once approved by the State Water Board, WMWD will connect the new recycled water supply, where appropriate. WMWD's goal is to have recycled water to the site and the surrounding area within the next 6 months.

The Energy Division is also giving scrutiny to water bills and drought fines. Where the water budget or drought fines are suspect, division staff is challenging the validity of the bill. In many cases, the water agencies do not have the correct building information or accurate landscaping square footage. Some water agencies are backlogged with similar requests for changes. However, the division was successful in obtaining an \$11,732.65 refund based on the water agency adjusting its records on the building's information.

In partnership with the Maintenance Division, the Energy Division is participating in Metropolitan Water District's Public Agency Landscape Program. This program will fund the installation of high efficiency water devices at various county facilities. This program is unique in that it provides the County with initial funding to do the work. After all rebates have been received, work will begin. The following facilities have been identified as prime candidates for efficiency measures. Results of these efforts will be reported in the subsequent quarter.

Riverside Historical Court House	4050 Main St
Presley Detention Center	4000 Orange St
Fleet Services	4293 Orange St
Public Defender	4200 Orange St
Veterans Services	4342 Orange St
Downtown Law Building	3960 Orange St
Riverside County Innovation Center	3450 14th St
Simons Building	3610 11th St
Law Library	3535 10th St
Criminal Justice Building	3575 11th St
Transportation Land Management Agency	3525 14th St
Riverside County Administrative Center	4080 Lemon St
District Court	3470 12th St
12th St Parking Structure	3535 12 St



Riverside County Departmental Water Conservation Update

Department of Environmental Health (DEH)

The Department of Environmental Health continues to promote water conservation efforts with its on-going education and outreach both on our website and during routine inspections of food and pool facilities that we regulate. Our staff continues to provide informational bulletins related to water conservation, gray water usage, and to assist those impacted by the drought as it pertains to programs under our authority.

Flood Control and Water Conservation District (District)

The District continues to tune and refine countywide water conservation website to assist residents and businesses with links to Riverside County specific water conservation rebates, tools and other information. It may be accessed here:

<http://www.floodcontrol.co.riverside.ca.us/DroughtPortal/Default.aspx>

The District is continuing to develop grant funded stormwater capture projects including the Beaumont Cherry Valley Water District Line 16 project, which will collect stormwater tributary to Marshall Creek and deliver it to recharge basins operated by the Water District. Our grant supported Bautista Recharge Basin expansion partnership with Lake Hemet Water District is also ongoing. The District is also collaborating with local water agencies on non-grant funded projects to increase the stability and safe yield of local water resources by repurposing existing and future District facilities. Partnerships include:

- Western Municipal Water District: Arlington Desalter Expansion.
- City of Riverside: Evaluation of Columbia, Marlborough, Box Springs and Kansas basins for recharge potential.
- City of Corona: Coldwater Canyon groundwater recharge enhancement study and Lincoln/Cota Basin Diversion Project
- Eastern Municipal Water District: San Jacinto River Recharge Basins
- Lake Hemet Water District: Little Lake Basin Recharge Retrofit
- Elsinore Valley Municipal Water District: Elsinore Line A Basin Recharge Project

The District has also just completed infiltration and percolation testing of several other dams and detention basins to determine their recharge viability. This information will be shared with local water agencies in an effort to identify additional partnership opportunities.



Riverside County Departmental Water Conservation Update

Regional Parks and Open Space District (Parks)

Parks has completed or has several ongoing measures to enhance their water conservation programs and outreach throughout their areas of responsibility. These measures include:

- Turf Conversion: Converted ~1 acre of turf at Rancho Jurupa, Cover Waterpark, and the DropZone Waterpark to hardscape and drought tolerant landscaping.
- Turf Management: continued reduced irrigation frequencies between 25% and 50% from the prior year.
- Indoor Measures: repaired plumbing leaks and broken sprinkler heads at all park and recreation sites and replaced four toilets with new low flow models at Lake Cahuilla recreation area.
- Public Education: Continued outreach to customers regarding water conservation efforts at all facilities.
- Grants: confirmed \$305,000 award from the Department of Water Resources for the Upper Santa Margarita Watershed Integrated Regional Watershed Management Plan Proposition 84 2015 Implementation Grant to convert additional turf at Lake Skinner to drought tolerant plants and add educational signage.
- Other outdoor conservation: Splash pads and water park facilities have been turned off for the winter. Additionally, Lake Skinner's splash pad will be reconstructed with newer equipment, which will increase the water use efficiency and reduce water runoff of this very popular attraction.

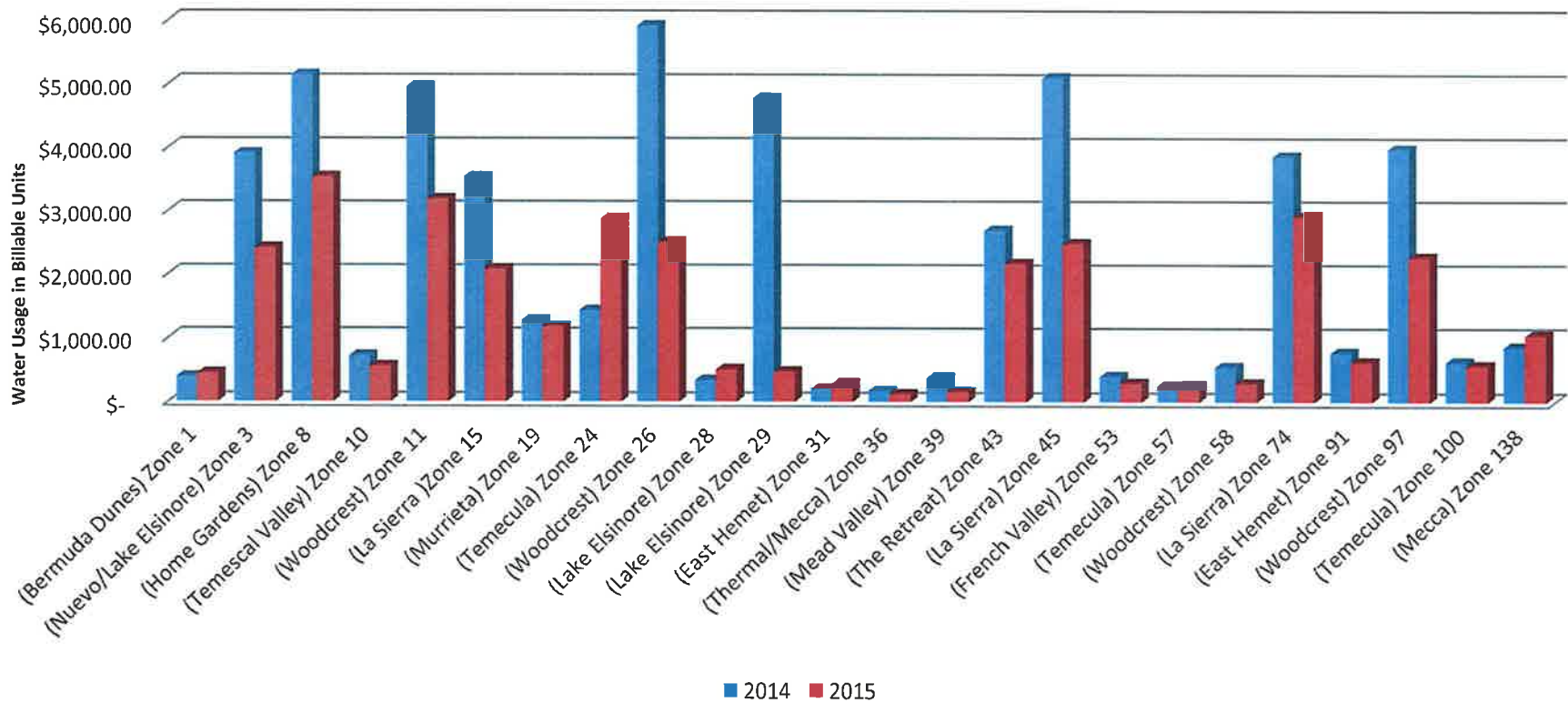
Transportation Department (Trans)

As the administrator for County Maintained Landscape and Lighting Maintenance District 89-1-Consolidated, Trans reports that increased conservation measures across all zones this reporting quarter has yielded a 39% decrease in the volume of water used which corresponds to a 36% reduction in cost. The period of savings is from August, September, and October of 2014 vs the same months of 2015. The matrix and the graphs below highlight addition details of these savings.



Riverside County Departmental Water Conservation Update

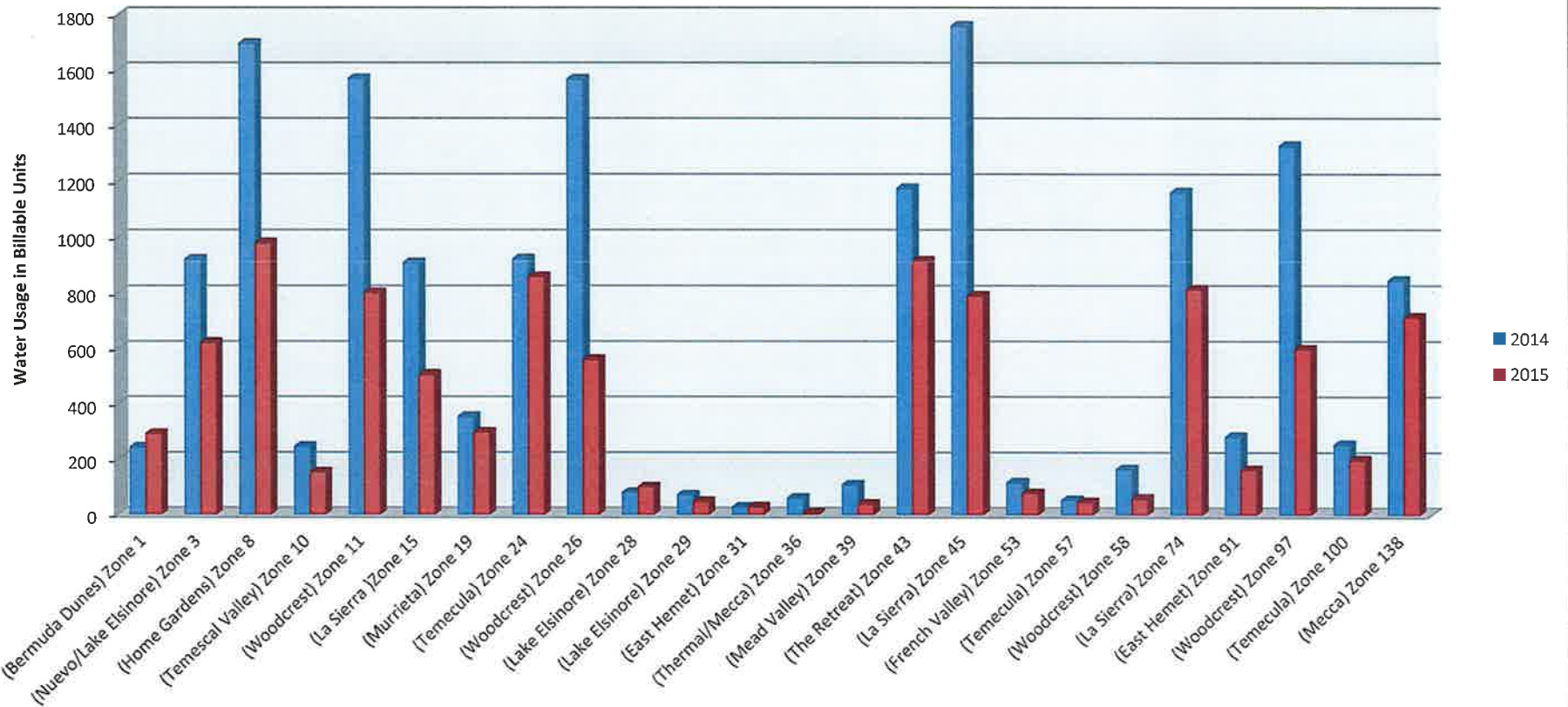
County Maintained L&LMD 89-1-Consolidated Zones August, September & October Water Costs





Riverside County Departmental Water Conservation Update

County Maintained L&LMD 89-1-Consolidated Zones
August, September & October
Water Usage





Riverside County Departmental Water Conservation Update

Water Use Reductions

The matrix below represents the current water use reductions, with corresponding fee savings for the departments that manage a majority of the water use at County facilities.

Dep.	Base Year Q2 FY 2014-2015 Usage CCF*	Current Year Q2 FY 2015-2016 Usage CCF	Usage Reduction (%)	Base Year Q2 FY 2014- 2015 Cost	Current Year Q2 FY 2015- 2016 Cost	Cost Reduction (%)
EDA/FM	234,181	194,832	17%	\$ 649,088.00	\$ 566,909.00	13%
Parks	49,721	32,972	34%	\$ 99,189.00	\$ 54,902.00	45%
Trans	15,905	9,658	39%	\$ 52,258.90	\$ 33,284.33	36%
<i>Total</i>	299,807	237,462	30%	\$ 800,535.90	\$ 655,095.33	31%

*1 CCF = 748 Gallons

Total Gallons Saved this Quarter: **46,634,060**
Compared to last year (same period)

Total Cost Savings this Quarter: **\$ 145,440.57**
Compared to last year (same period)

Rebate Program

The Executive Office, County Counsel, and EDA continue to explore options and the feasibility of creating a rebate incentive program for those residents in the unincorporated portions of the county that do not otherwise belong to a water utility that offers such rebates. EDA staff continues to work through the dynamics and complexities of a proposed program with County Counsel.

Ordinance 859.3 Update

On July 21, 2015, the Board unanimously approved adoption of Ordinance 859.3, an Urgency Ordinance of the County of Riverside amending ordinance 859.2 Water Efficient Landscape Requirements. This ordinance update took effect immediately, and among other provisions, prohibited the use of natural turf grass in front yards of new residential subdivisions. Staff is proposing to bring a clean-up revision addressing new and revised State requirements that took affect December 1, 2015 to the Board during the first quarter of the New Year and report on its implementation. The State requirements referenced are those in the revised California Code of Regulations Title 23, Division 2, Chapter 2.7. Model Water Efficient Landscape Ordinance (MWEL0).



WATER SUPPLY CONDITIONS CRA

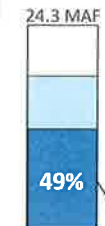
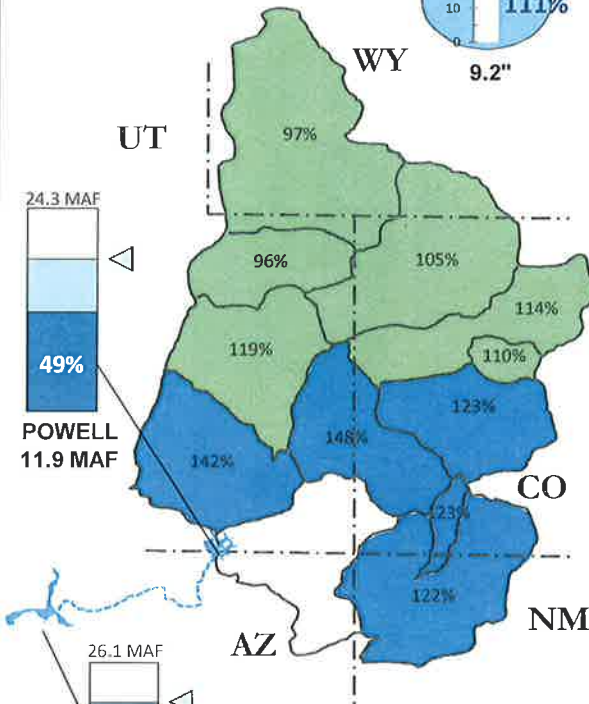
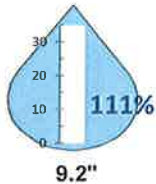
As of: 12/27/2015

2015 Colorado River

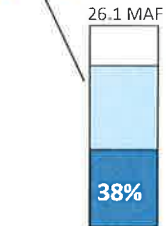
925,000 AF

74% of full CRA

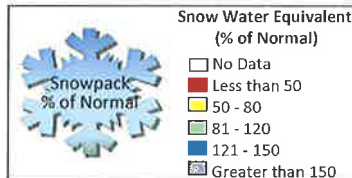
Does not include storage withdrawals or other adjustments



POWELL
11.9 MAF



MEAD
10.06 MAF
1080.62 FT



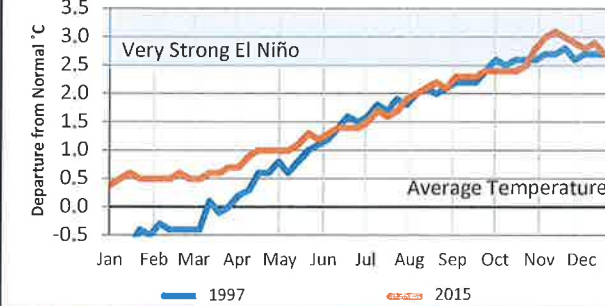
Turn page for more CRA Data

Flip Over for SWP Data

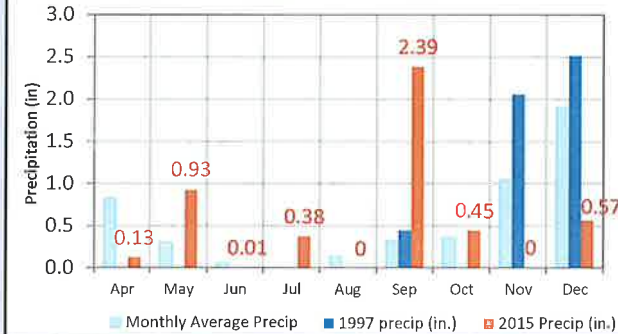
1997-98 vs. 2015-16 El Niño Signal

Sea Surface Temperature

Pacific Ocean Niño Region 3.4



Downtown Los Angeles Precip



Diamond Valley Lake Storage

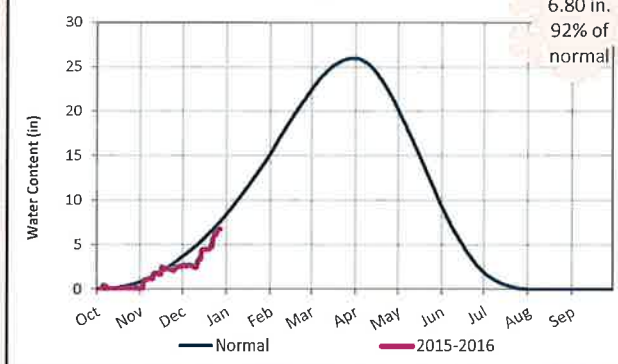
Capacity: 810 TAF

79 TAF less in storage than this time last year

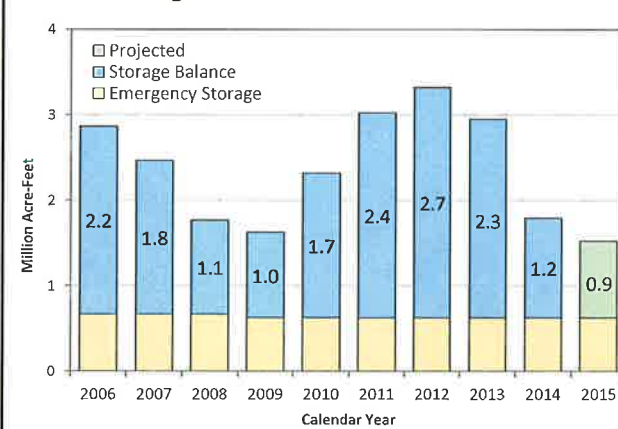


Southern Sierra Snowpack

6.80 in.
92% of normal



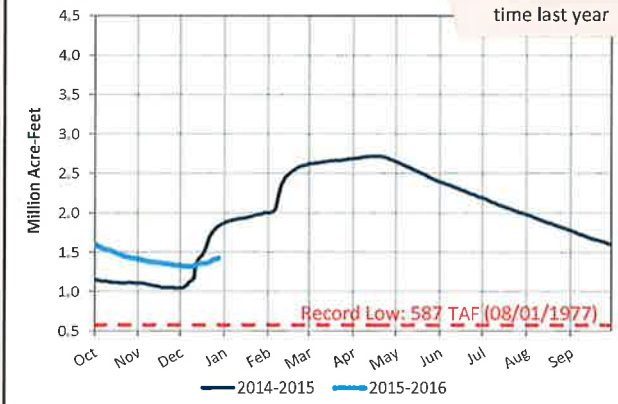
MWD Storage Reserve Levels



Lake Shasta Reservoir Storage

Capacity: 4.55 MAF

400 TAF less in storage than this time last year



This report is produced by the Water Resource Management group and contains information from various federal, state, and local agencies. Metropolitan cannot guarantee the accuracy or completeness of this information. Readers should refer to the relevant state, federal, and local agencies for additional or for the most up to date water supply information. Reservoirs, lakes, aqueducts, maps, watersheds, and all other visual representations on this report are not drawn to scale.

http://www.mwdh2o.com/PDF_About_Your_Water/2.2.4_water_supply_conditions.pdf



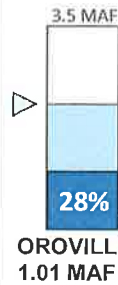
WATER SUPPLY CONDITIONS SWP

As of: 12/27/2015

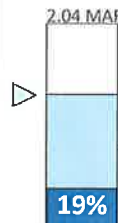
2015 SWP Allocation

382,300 AF

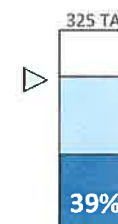
20% of Table A



OROVILLE
1.01 MAF



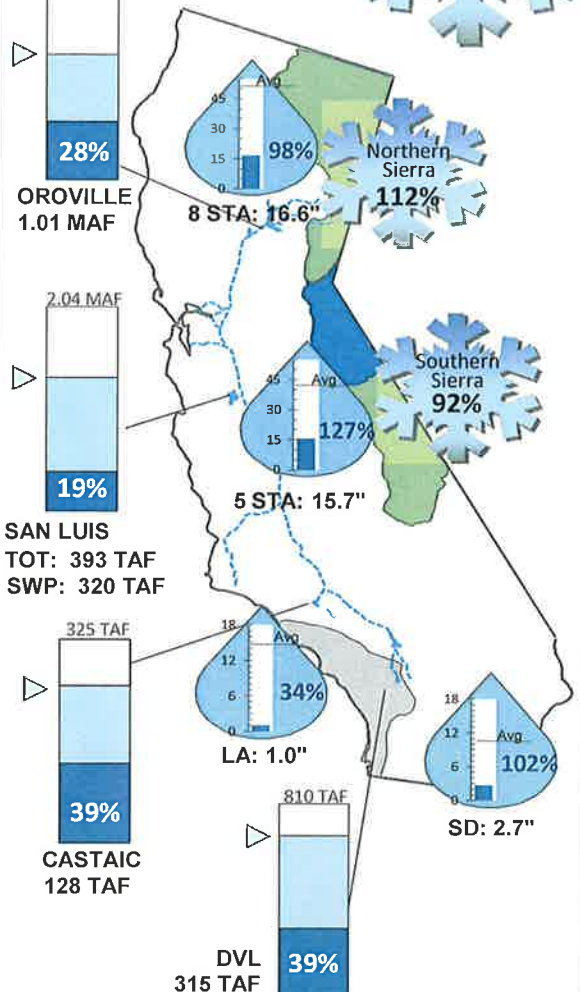
SAN LUIS
TOT: 393 TAF
SWP: 320 TAF



CASTAIC
128 TAF



DVL
315 TAF

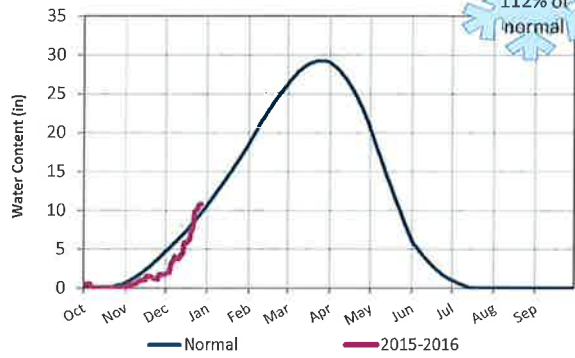


Flip Over for CRA Data

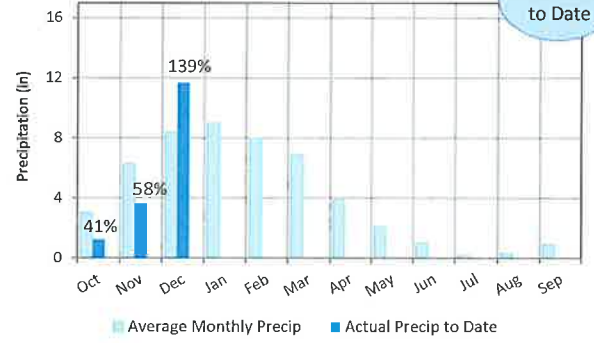
Turn page for more SWP Data

State Water Project Resources

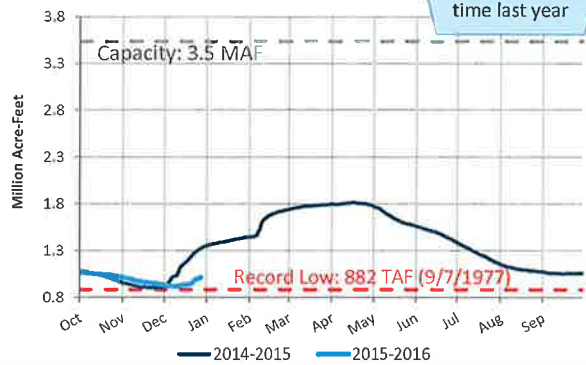
Northern Sierra Snowpack



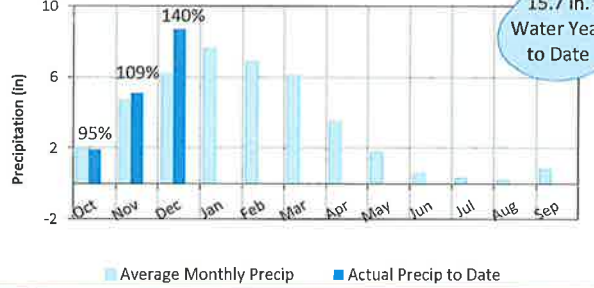
8 Station Index Precip



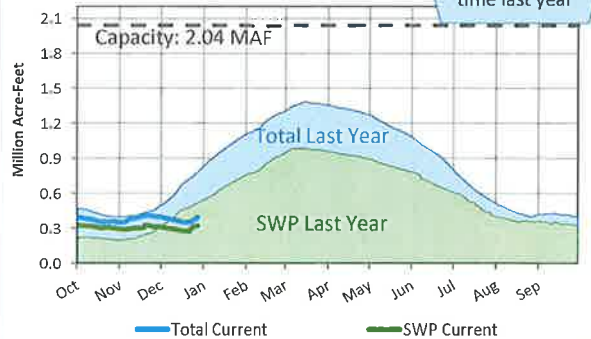
Oroville Reservoir Storage



5 Station Index Precip



San Luis Reservoir Storage

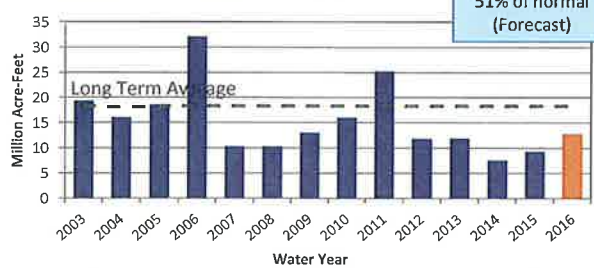


Other SWP Contract Supplies for 2015 (AF)

Transfer Supplies*	12,000
Multi Year Pool	1,000
Pool A/B (Purchased)	0
Article 56 (Prior Cal. Year(s) CO)	36,000

* Assumes 20% losses

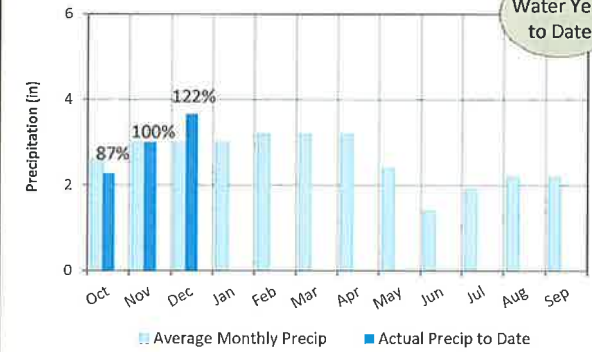
Sacramento River Runoff



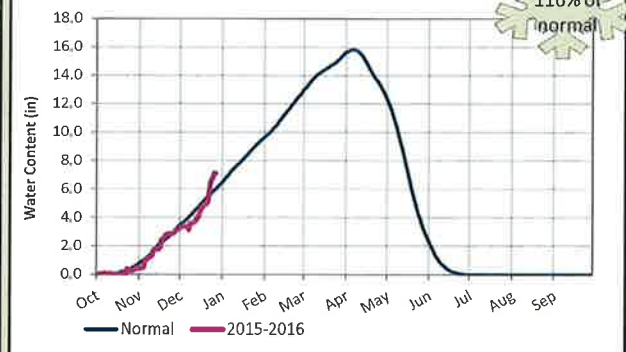
Colorado River Resources

As of: 12/27/2015

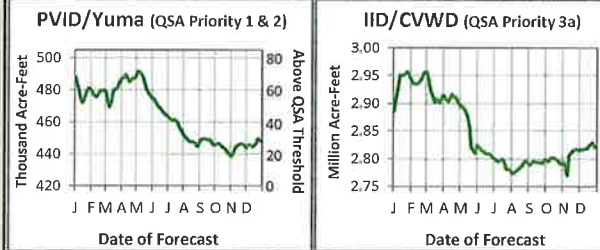
Upper Colorado Basin Precip



Upper Colorado Basin Snowpack



2015 Colorado River Ag Use Forecast



Lake Powell Storage

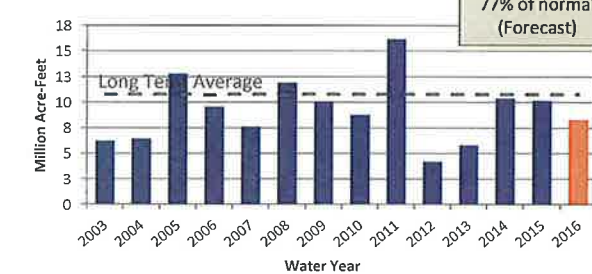


Lake Mead Shortage/Surplus Outlook

	2016	2017	2018	2019	2020
Shortage	0%	18%	52%	65%	59%
Surplus	0%	0%	6%	7%	15%

Likelihood based on results from the August 2015 USBR Colorado River Simulation System model run

Powell Unregulated Inflow



Lake Mead Storage

