## Statewide Drought Update Julie Saare-Edmonds California Department of Water Resources









Yosemite Conservancy and Sacramento Bee





# January 2014 Snow Survey Echo Summit



### January 2013

### January 2014

Even though the winter of 2012-2013 was a dry year, the snowpack in January 2013 was significantly higher than January 2014. A few spring storms improved snow conditions somewhat. Lake Tahoe is circled for reference.

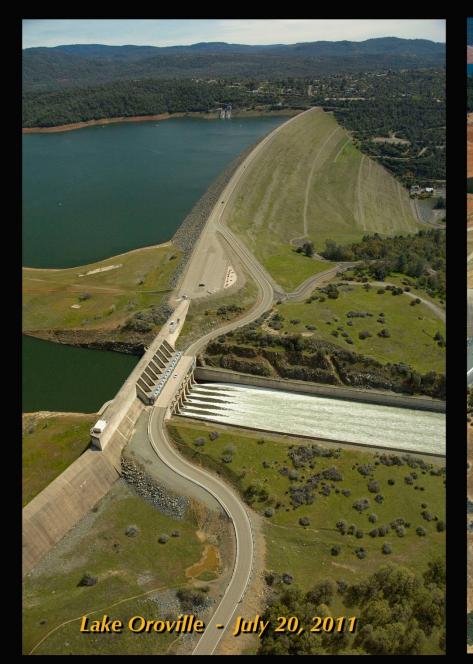


### Feb 2014 (after a few storms)

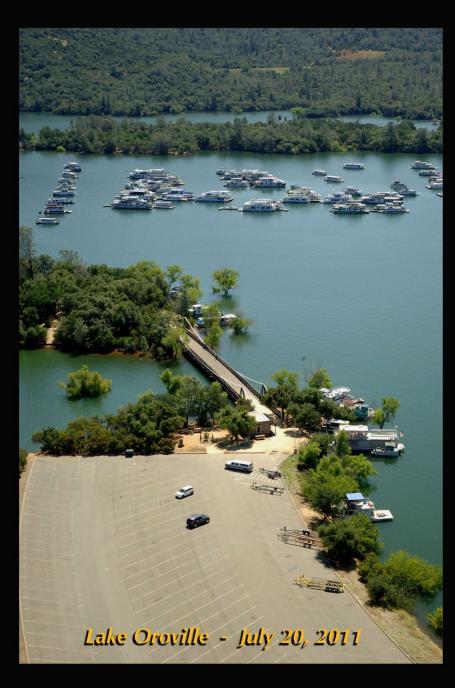
January 31, 3015

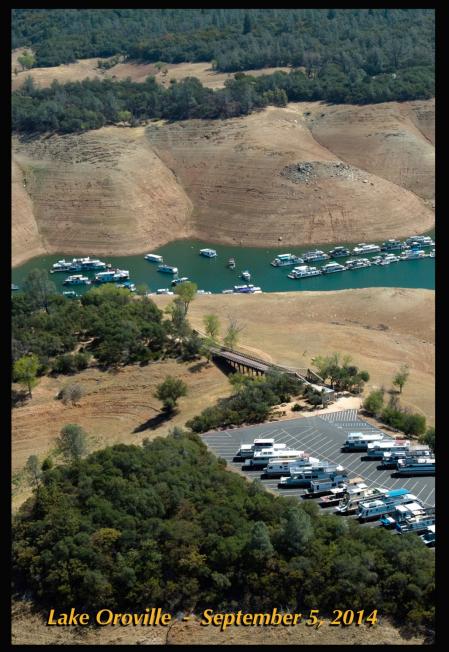


# **April 1- Snow Survey-No Snow**

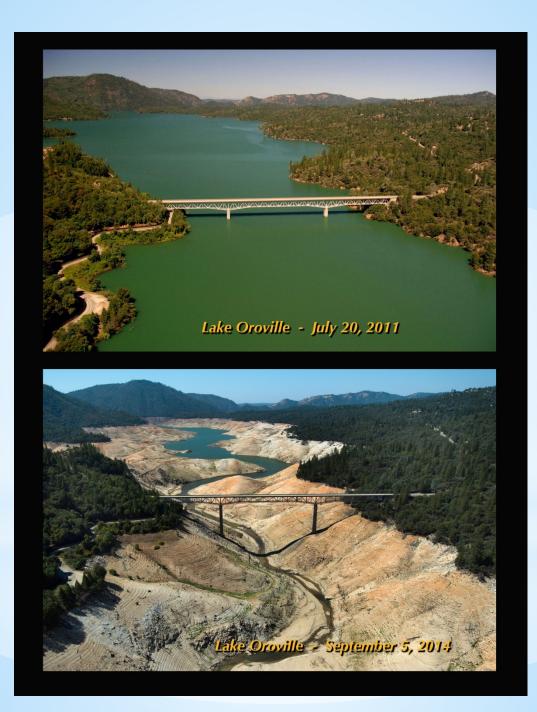














San Luis Reservoir –off stream storage



## The State Water Project includes 34 storage facilities, reservoirs and lakes; 20 pumping plants; 4 pumping-generating plants; 5 hydroelectric power plants; and about 701 miles of open canals and pipelines.

The Project provides supplemental water to approximately 25 million Californians and about 750,000 acres of irrigated farmland through 29 urban and agricultural contractors. Grapevine



San Luis

california Aqueduct

\* Federal
\* USBR -Shasta, Folsom
\* USACOE-Englebright, Mendocino, Sonoma
\* Energy Utilities
\* PG&E-Spaulding, Almanor
\* SMUD- Union valley, Ice House
\* Water and Electrical Utilities
\* EBMUD-Pardee

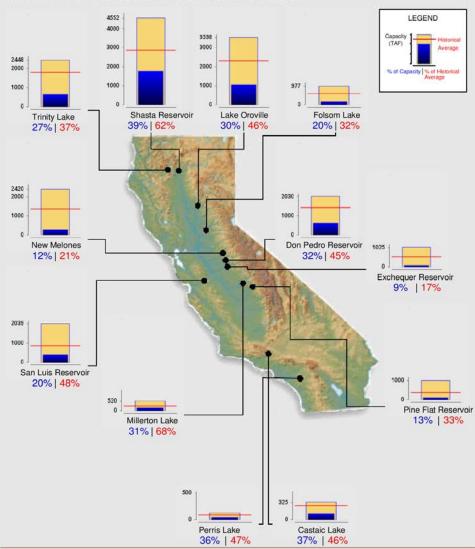
\* Local lakes, rivers and creeks

\* Groundwater

# \*Other sources make up the rest.



Ending At Midnight - September 2, 2015



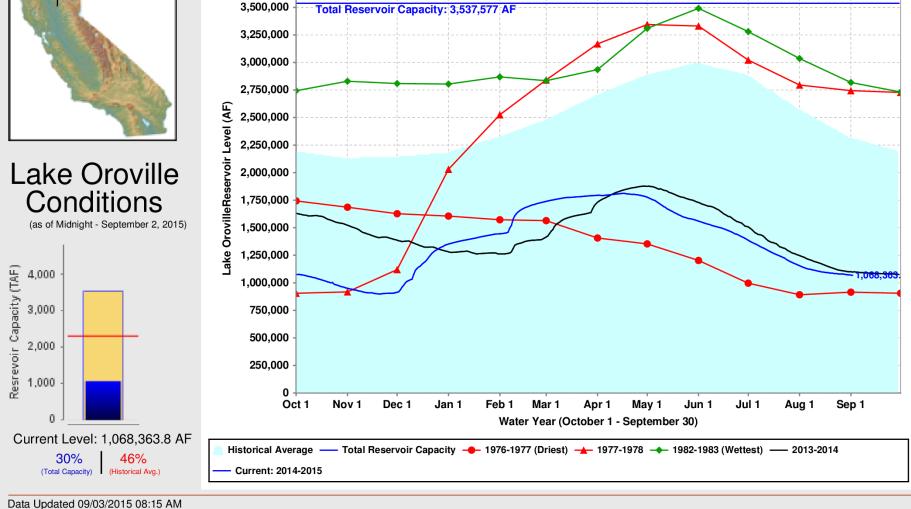
### CURRENT RESERVOIR CONDITIONS

Graph Updated 09/03/2015 08:15 AM

# Reservoir Conditions - Lake Oroville

Lake Oroville Levels: Various Past Water Years and Current Water Year, Ending At Midnight September 2, 2015





# **Reservoir Conditions - Folsom Lake**

Folsom Lake Levels: Various Past Water Years and Current Water Year, Ending At Midnight September 2, 2015

191,611 A

Sep 1



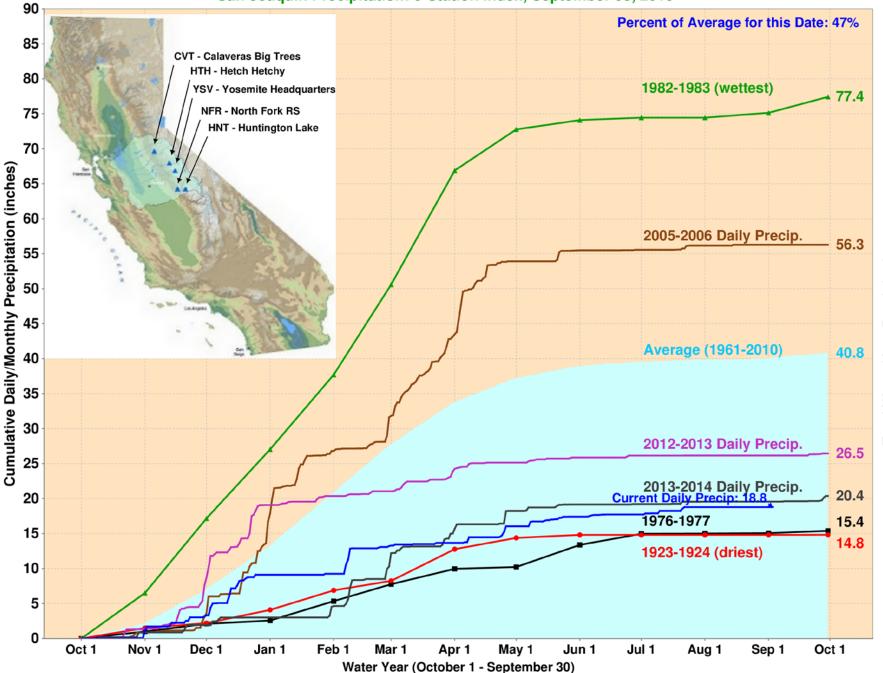
1,000,000

950,000 900,000 850,000

800,000 750,000 Folsom LakeReservoir Level (AF) 700,000 650,000 600,000 Folsom Lake 550,000 Conditions 500,000 450,000 (as of Midnight - September 2, 2015) 400,000 1,000 350,000 Resrevoir Capacity (TAF) 300,000 250,000 750 200,000 150,000 500 100,000 50.000 250 0 Mar 1 Oct 1 Nov 1 Dec 1 Jan 1 May 1 Jun 1 Jul 1 Aug 1 Feb 1 Apr 1 0 Water Year (October 1 - September 30) Current Level: 191,611 AF Historical Average — Total Reservoir Capacity 🔶 1976-1977 (Driest) 📥 1977-1978 🔶 1982-1983 (Wettest) — 2013-2014 20% 32% (Total Capacity) (Historical Avg.) Current: 2014-2015

Total Reservoir Capacity: 977,000 AF

### San Joaquin Precipitation: 5-Station Index, September 03, 2015



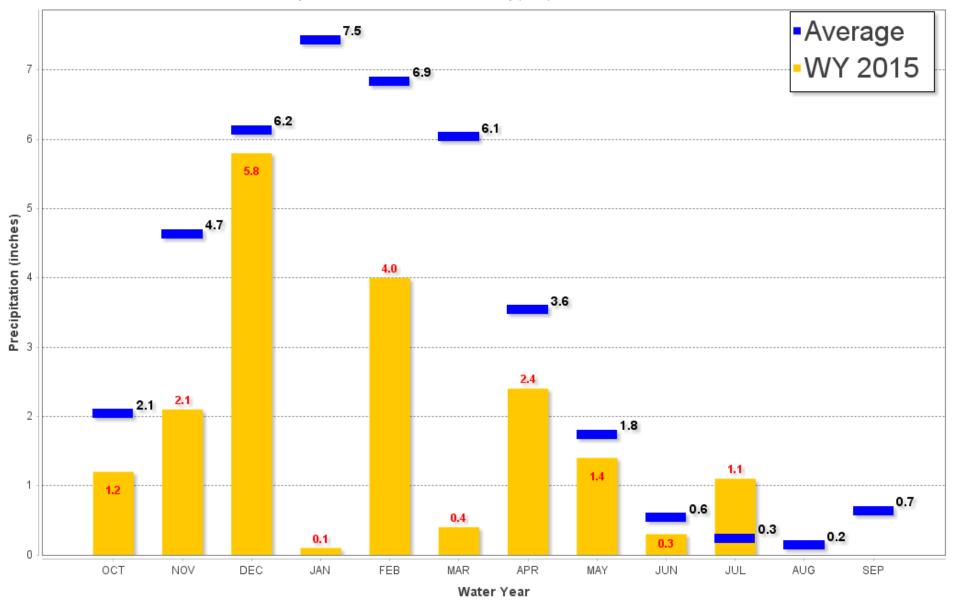
**Total Water Year Precipitation** 



## San Joaquin 5-Station

### Precipitation Index for Water Year 2015 - Updated on September 3, 2015 08:30 AM

Note: Monthly totals may not add up to seasonal total because of rounding Water Year Monthly totals are calculated based on Daily precipitation data from 12am to 12am PST

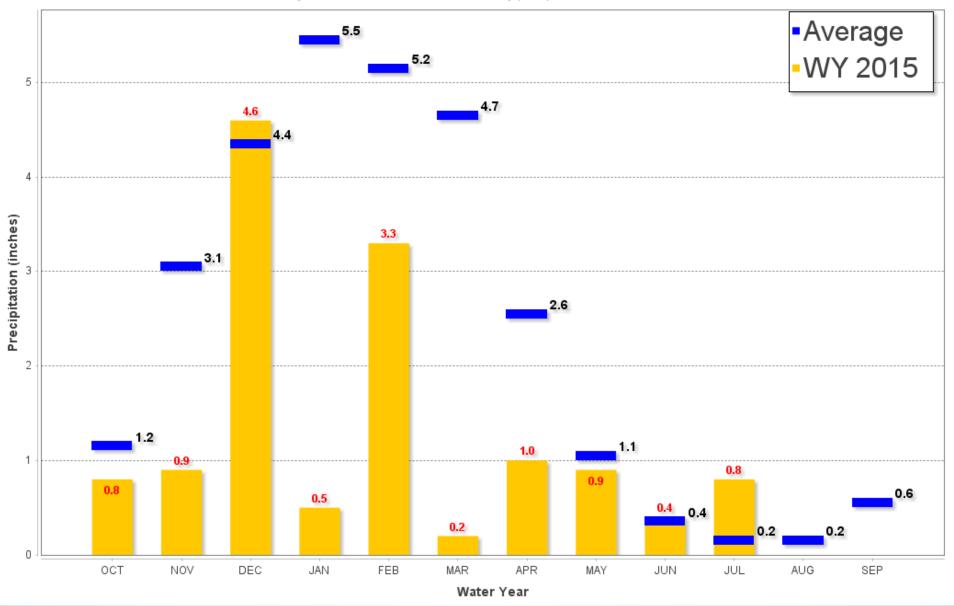




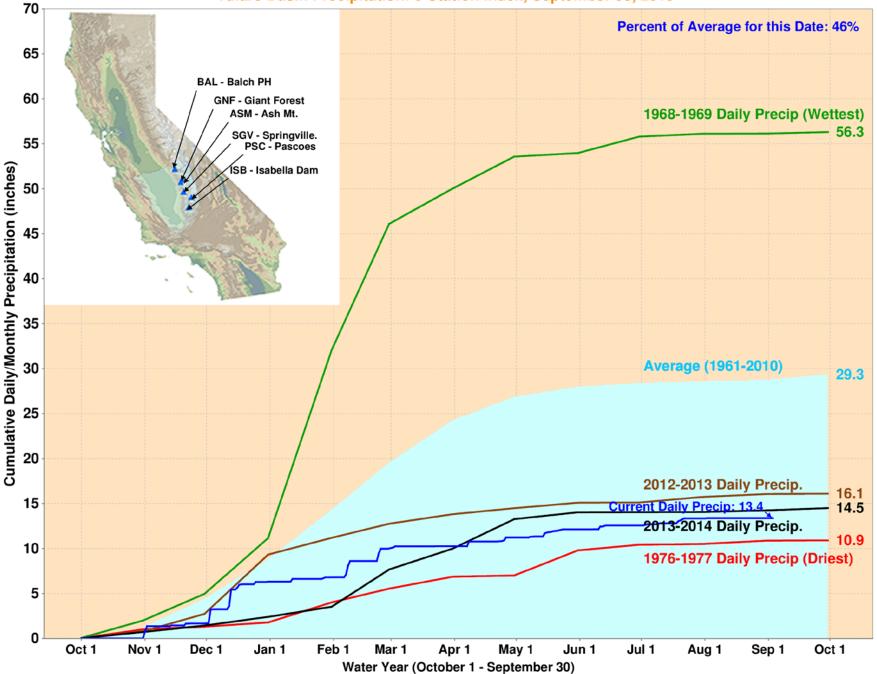
## **Tulare Basin 6-Station**

### Precipitation Index for Water Year 2015 - Updated on September 3, 2015 08:30 AM

Note: Monthly totals may not add up to seasonal total because of rounding Water Year Monthly totals are calculated based on Daily precipitation data from 12am to 12am PST



### Tulare Basin Precipitation: 6-Station Index, September 03, 2015



**Total Water Year Precipitation** 



# \* Landscapes are Important.









After the Governor's drought declaration the Department of General Services cut back on lawn irrigation and stopped irrigating in areas without trees.

# \*HOA's can't prohibit drought response

\*Prohibits an HOA from imposing a fine or assessment against a member (homeowner) for reducing or eliminating irrigation during a drought emergency declared by the Governor or local government.

# \*HOA's can't prohibit Cash for Grass

\*An HOA's landscaping guidelines or policies are void and unenforceable if it prohibits the use of low water plants as a replacement for existing turfgrass.

\*AB 2104 (2814)

\*Lead an initiative to remove 50 million sq. ft. of turf

\* Residential and CII

- \*Prohibit potable water on medians
- \*Reduce water on campuses, golf courses

- \*No spray on new landscapes
- \*Water rate changes
- \*Update the MWELO
- \*Expedite graywater systems and stormwater capture
- \*CalFire- urban forest fire prevention

# \*Executive Order to state agencies

\*50 Million Square feet (1100 acres)
\*Underserved and disadvantaged communities
\*Complement existing programs

# Executive Order B-29-15 \* **Pirective # 3**Turf Replacement

## •update the State Model Water Efficient Landscape Ordinance

- more efficient irrigation systems,
- greywater usage,
- onsite storm water capture,
- and by limiting the portion of landscapes that can be covered in turf...

# \*Directive # 11 State Model Water Efficient Landscape Ordinance

# \* Directive # 11, cont. State Model Water Efficient Landscape Ordinance

 reporting on the implementation and enforcement of local ordinances

- local compliance to the Water Board, which shall consider adopting regulations or taking appropriate enforcement actions to promote compliance.
- provide technical assistance and give priority in grant funding to public agencies for actions necessary to comply with local ordinances.

# \*Stakeholder webinar/listening sessions

- IA/ASIC
- CLCA
- ASLA
- APLD
- BIA
- CUWCC Landscape Committee
- City, County, Water Suppliers

# \*What we have heard so far on Efficient Irrigation Systems:

- \*Run times (drip) and multiple runtimes, Sensors
- \*Master valves
- \*Pressure regulation
- \*Flow Sensors
- \*Hydrometers
- \*Lower ETAF
- \*More emphasis on soils

# \*What we have heard so far on Graywater Systems:

\*Don't require use of graywater

- \*Research with Art Ludwig and Brad Lancaster sources
- \*Appropriate products (soaps and detergents)
- \*Concern over salts and pH
- \*Encourage double plumbing of new buildings
- \*Reinforce plumbing code requirements on local agencies

# \*What we have heard so far on stormwater:

- \*Dry stream beds
- \*Drywells
- \*Living soils, compost and mulch
- \*Sometimes esthetically unappealing
- \*Costs
- \*Favor bio-retention
- \*Bioswales
- \*Don't require raingardens

# \*Have we have heard so far on turfgrass:

- \*Warm season only
- \*Backyards, sports fields only
- \*Avoid invasive plants in shrubs beds
- \*Some supply issues for short term, contract growing for long term
- \*Turf growers are hard hit by drought

- \*Drought conditions + watering restrictions = tree decline and loss statewide
- \*Governor's office asking for consistent messaging



## Save Our Water and Save Our Trees

## \*Turf rebates!!!

# \*http://www.water.ca.gov/turf



### CALIFORNIA DEPARTMENT OF

HOME NEW

NEWSROOM & EVENTS ISSUES

ABOUT US

### CA.gov | Help | Accessibility

Search

💿 DWR 🔘 California

Q

## California 2015 Turf Replacement Initiative

### **Replacing California's Lawns**

Outdoor landscaping is the single largest use of water in the typical California home. In most of our yards, grass consumes the most water, so reducing or eliminating how much grass we have in our landscapes can make a significant impact on the state's water use.

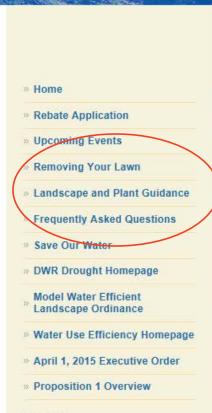
The ongoing drought reinforces the importance of using water more wisely, especially our drinking water. Governor Brown issued an Executive Order on April 1, 2015 that directed the implementation of specific actions to reduce potable water use in the urban sector. Directive number three declared that 50 million square feet of turf be replaced with drought-tolerant landscapes. This is to be accomplished by local water agency programs and a complementing statewide residential turf rebate program implemented by DWR.

### **Residential Turf Rebate Update**

The on-line applications for residential turf removal (and toilet replacement) rebates are available. To submit the application click on the Rebate Application tool bar located on the right side menu. Rebates will be accepted on a first-come, first-served basis. It is recommended that interested applicants submit their application as soon as possible.

The application will require a measurement of the turf area to be removed, 5 current pictures, and a copy of your most recent water bill or electrical bill, if you have private water well.

### July Public Workshop Materials



#### Contact

For questions regarding the Residential Turf Rebate Program





http://www.saveourh2o.org/

Contact Information:

Julie.Saare-Edmonds@water.ca.gov (916) 651 9676