

# Sustainable Water in the West: We're All In It Together

## 32<sup>nd</sup> Annual Executive Briefing Water Education Foundation 2015

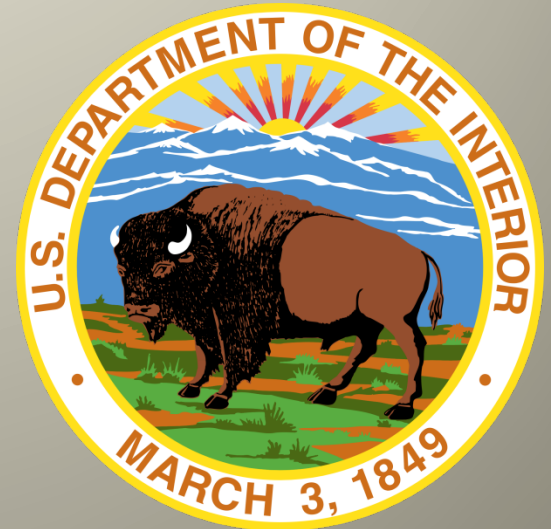
*March 25, 2015*

*Sacramento, California*

**Jennifer Gimbel**

*Principal Deputy Assistant Secretary for  
Water & Science*

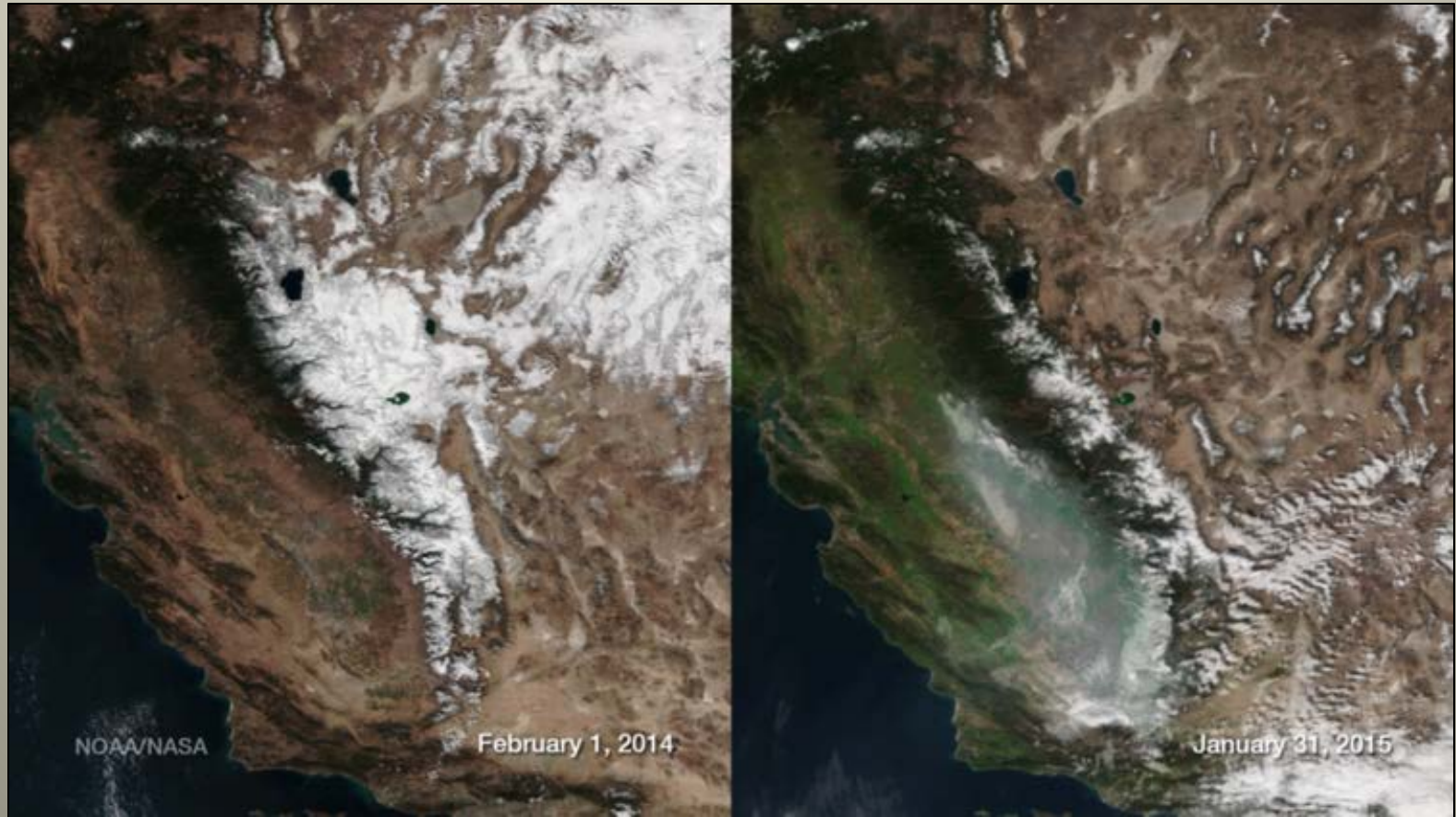
*Department of the Interior*



# Climate Action Plan



# Sierra Snowpack Comparison



Two images taken one year apart:  
February 1, 2014 and January 31, 2015

# California Drought

## U.S. Drought Monitor California

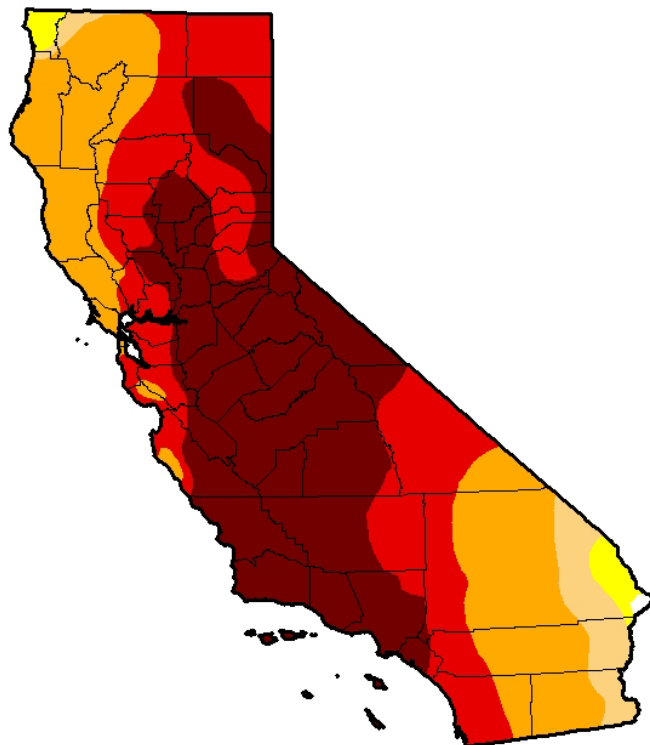
**March 17, 2015**

(Released Thursday, Mar. 19, 2015)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	0.16	99.84	98.11	93.44	67.46	39.92
<b>Last Week</b> <i>3/10/2015</i>	0.16	99.84	98.11	93.44	67.46	39.92
<b>3 Months Ago</b> <i>12/18/2014</i>	0.00	100.00	98.41	94.42	77.94	32.21
<b>Start of Calendar Year</b> <i>12/02/2014</i>	0.00	100.00	98.12	94.34	77.94	32.21
<b>Start of Water Year</b> <i>8/02/2014</i>	0.00	100.00	100.00	95.04	81.92	58.41
<b>One Year Ago</b> <i>3/18/2014</i>	0.01	99.99	99.80	93.08	71.78	22.37



### Intensity:



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

### Author:

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NCDC/NESDIS/NOAA



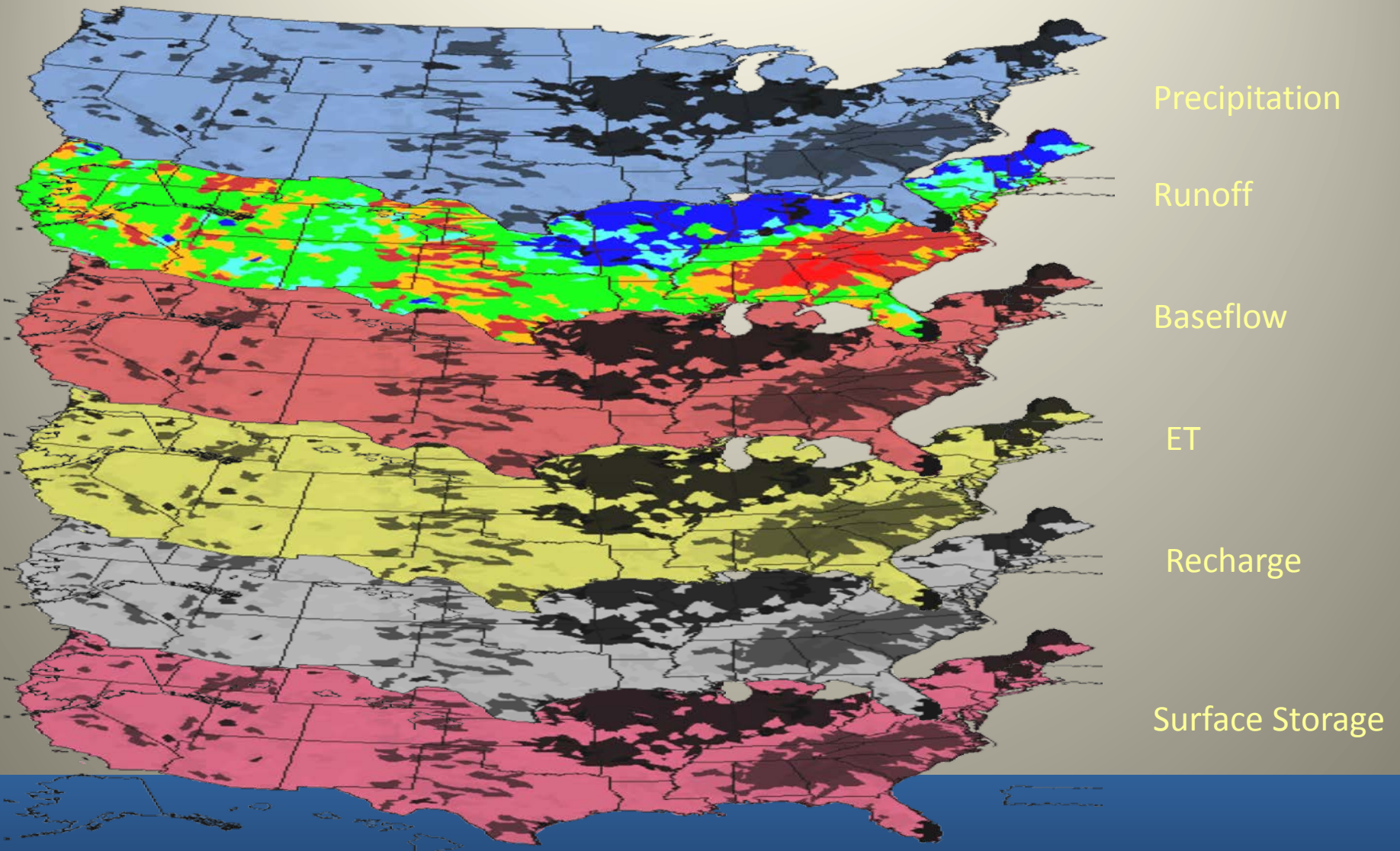
<http://droughtmonitor.unl.edu/>



# Drought Impacts to Folsom Lake



# USGS Water Census



A Nationwide System to deliver water accounting information<sup>6</sup>



# SALTON SEA



# Stakeholder Concerns

- Declining inflows
- Salinity increasing
- Fugitive dust
- Human health risk
- Avian disease
- Hydrogen sulfide releases
- Selenium, arsenic
- Geothermal activity
- Earthquakes/faults
- Fisheries habitat (loss)
- Migratory bird habitat (loss)



# Red Hill Bay Project

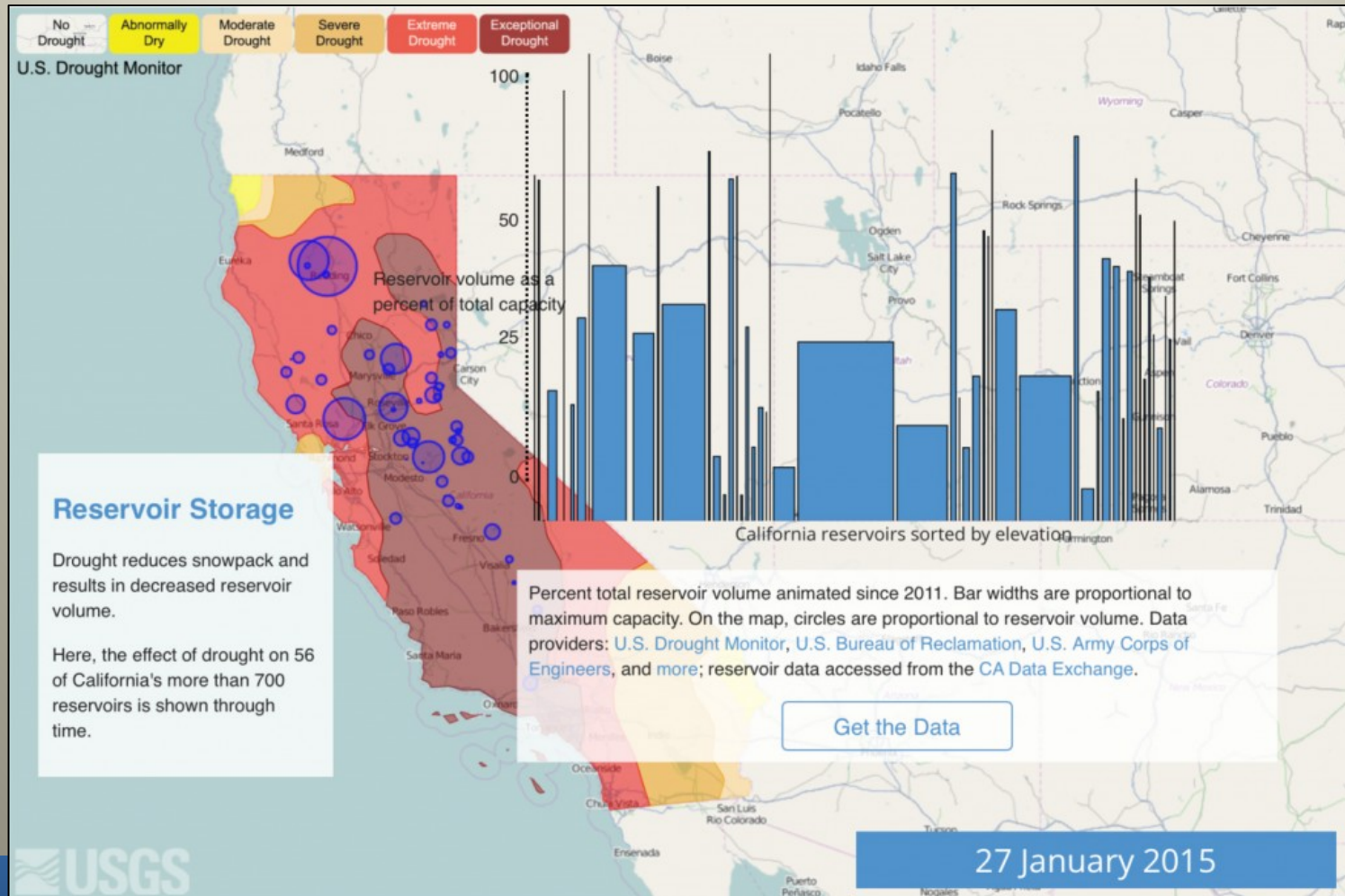


# Bay Delta Conservation Plan





# Open Water Data Initiative



# Overview of the Colorado River





# Colorado River 2000-2015 Historic Drought

- Worst 15-year drought in 109 years of recorded history
- One of worst 15-year droughts in over 1200 years
- Lower Basin shortages possible beginning in 2016 (approx. 20% chance)
- Chance of Lower Basin shortages in 2017 approximately 50%



Lake Mead near Hoover Dam 2000



Lake Mead near Hoover Dam March 2015

# Basin Study: Next Steps

- Meet with stakeholders and the public to describe Study findings and answer questions
- Reduce uncertainties related to water conservation, reuse, water banking, augmentation, and weather modification concepts
- Further study of tribal water issues
- Advance science and modeling tools used in the Study
- Consider strategies that provide a wide-range of benefits to all water users

# Proactive Efforts - Drought Response

- Agreement for Pilot Drought Response Actions (2014-2019)
  - 2014-2017 Goal: Generate 740,000 acre-feet of water to benefit Lake Mead elevation
  - 2014-2019 Goal: Generate 1.5 to 3.0 maf of water to benefit Lake Mead elevation
- System Conservation Pilot Program (2014-2016)
  - Provides \$11 million for voluntary pilot projects that create system water – in both Upper and Lower Basins
  - Anticipate that the first implementation agreements will be signed during Spring 2015
  - U.S. would welcome Mexican participation



# Minute 319

INTERNATIONAL BOUNDARY AND WATER COMMISSION  
UNITED STATES AND MEXICO.

MINUTE NO. 319

Coronado, California  
November 20, 2012

**INTERIM INTERNATIONAL COOPERATIVE MEASURES  
IN THE COLORADO RIVER BASIN THROUGH 2017 AND  
EXTENSION OF MINUTE 318 COOPERATIVE MEASURES TO ADDRESS THE  
CONTINUED EFFECTS OF THE APRIL 2010 EARTHQUAKE IN THE  
MEXICALI VALLEY, BAJA CALIFORNIA**

The Commissioners met in the City of Coronado, California on November 20, 2012 at 1:00 p.m., in order to consider interim international joint cooperative measures to address water management in the Colorado River Basin.

**I. BACKGROUND**

The Commissioners referred to the interest of both countries in identifying cooperative opportunities that would help ensure that the Colorado River system is able to continue to meet the needs of both nations, consistent with the declarations in the August 13, 2007 Joint Statement by officials from both governments, and the Joint Declaration by the United States Secretary of the Interior and Mexico's Ambassador on January 15, 2009, which noted that, based on the principles of mutual respect and bilateral collaboration, the United States and Mexico have sought to address areas of common interest and support the efforts of the Commission to identify innovative opportunities for water conservation and environmental protection.

The Commissioners observed that in this context, in early 2008 the Commission prepared the terms of reference to be applied, established a framework for discussion, and coordinated binational work groups in order to explore opportunities for cooperation on the Colorado River, in furtherance of the provisions of the "United States-Mexico Treaty on Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande," signed February 3, 1944 (hereinafter the 1944 Water Treaty).

The Commissioners also referred to Minute 317, "Conceptual Framework for U.S.-Mexico Discussions on Colorado River Cooperative Actions," dated June 17, 2010, which stipulates that the Commission "shall in particular explore opportunities for binational cooperative projects that: minimize the impacts of potential Colorado River shortage conditions; generate additional volumes of water using new water sources by investing in infrastructure such as desalinization facilities; conserve water through investments in a variety of current and potential uses, including agriculture, among others; and envision the possibility of permitting Mexico to use United States infrastructure to store water."

The Commissioners recognize that various considerations exist in both countries with respect to the implementation of some of the long-term options and activities that have

- Completed Nov. 2012
- Innovative Agreements with US Basin States and Municipal Entities
- Complementary agreements within Mexico with NGOs



# **Colorado River Pulse Flow March 2014**

# US/Mexico Border – Morelos Dam













*Colorado River:  
1 mile North of SIB  
March 2014*



*Photos:  
Dale Turner  
The Nature Conservancy*

# Colorado River reaches the Sea... May 2014











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# California drought, visualized with open data

Scroll down to learn more.

The State of California is experiencing one of the most severe droughts on record, which has implications for citizens of California and beyond. Many State, Federal, and Tribal agencies make routine observations of the water cycle. This website graphically visualizes these data to help understand the effect of drought on rivers, streams, lakes, and reservoirs. Below, learn more about water use and changes in the water cycle due to the current drought in California.

The data presented here are drawn from free and publicly accessible sources. In addition, the analytical, graphical, and software tools used are open-source and available for public re-use.

For more information about drought and science-based decision making in California, visit the [USGS California Water Science Center webpage](#).

Firefox is recommended for the best viewing experience





**THANK YOU**