Planning for a Dry Year in the North State

Water suppliers throughout the North State have planned for dry years in California like 2015.

2015 Reduction in Sacramento Valley Water Supplies (in %)

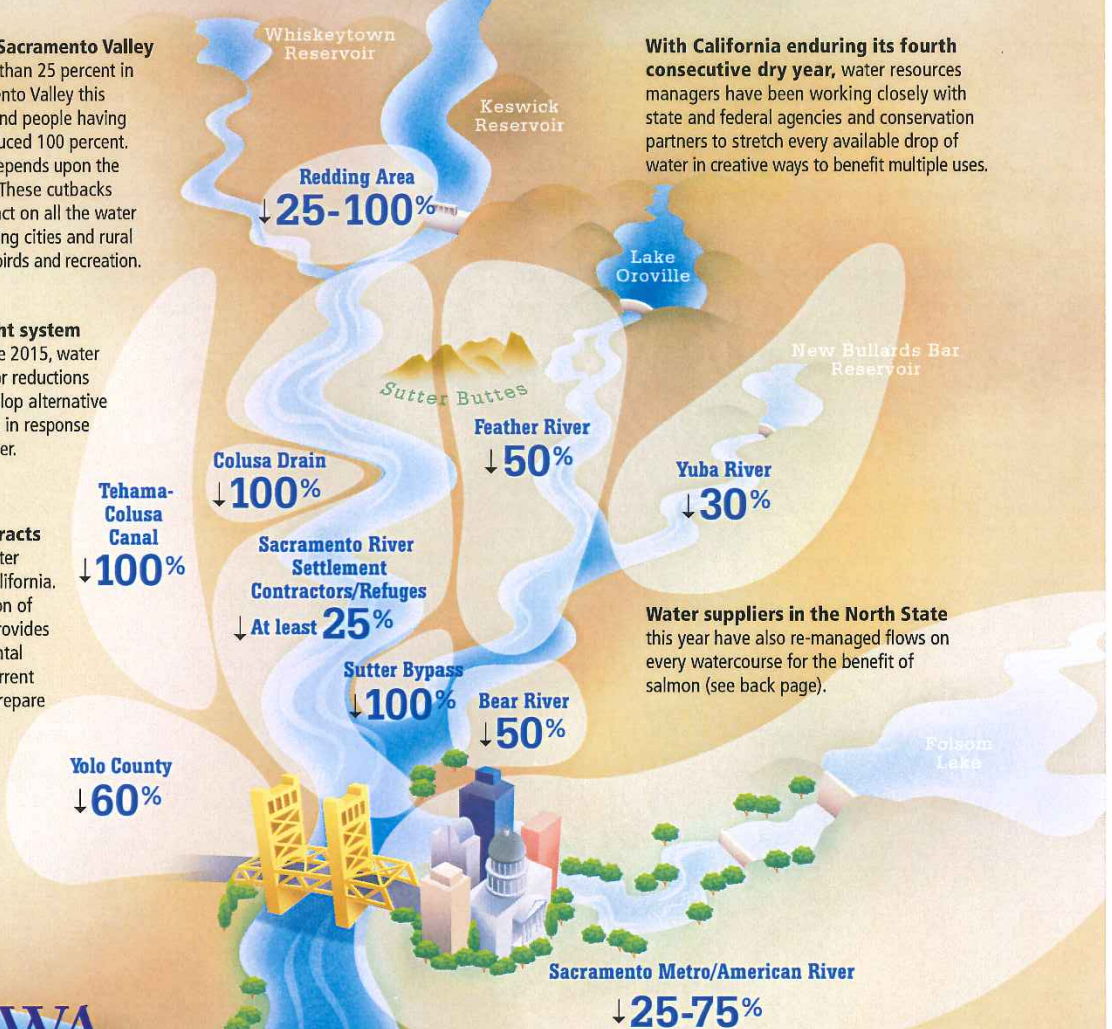
Water supplies in the Sacramento Valley have been reduced more than 25 percent in every part of the Sacramento Valley this year—with many areas and people having their surface supplies reduced 100 percent. The severity of the cuts depends upon the water rights or contract. These cutbacks will have a negative impact on all the water uses in the region, including cities and rural communities, farms, fish, birds and recreation.

California's water right system works—in a dry year like 2015, water suppliers have planned for reductions and they are able to develop alternative water management plans in response to the lack of surface water.

Water rights and contracts are the foundation for water operations throughout California. The orderly implementation of the water rights system provides economic and environmental stability to address the current dry year challenges and prepare for future droughts.

With California enduring its fourth consecutive dry year, water resources managers have been working closely with state and federal agencies and conservation partners to stretch every available drop of water in creative ways to benefit multiple uses.

Water suppliers in the North State this year have also re-managed flows on every watercourse for the benefit of salmon (see back page).



NCWA
Northern California Water Association

For more details visit http://www.norcalwater.org

Re-managing the Flow

The major rivers and streams of the Sacramento Valley provide essential pathways for spawning salmon and steelhead. Flow agreements to benefit these fish are on every major watercourse in the Sacramento Valley.

Trinity and **Shasta Lakes** are important sources of cold water storage. Timing the release of this cold water into the rivers is vital if spawning fish are to thrive.

Trinity Lake

Shasta Lake

Whiskeytown Reservoir

Keswick Reservoir

Clear Creek

In May and June, water is pulsed into Clear Creek to attract Spring-run salmon from the Sacramento River. From June through October, water released from Whiskeytown Reservoir keeps water temperatures cool.

Sacramento River below Keswick Dam

In 1960, flow objectives were established for the protection of fish and wildlife. In 1990 and 1991 this policy was modified requiring more cold water when warmer temperatures would be harmful to fish.

Sacramento River at Wilkins Slough

The Rivers and Harbors Act of 1935 mandated a specific flow rate at Wilkins Slough be maintained. The primary goals at that time were navigation and flood control. In 1992, Congress made protection of fish and wildlife a secondary goal and this requirement was updated in 2009.

Sacramento River Tributaries

Various flow agreements benefit spring run salmon.

Feather River

A water quality certification adopted in 2010 provides for specific flow and temperature requirements to accommodate spawning salmon and steelhead.

Lake Oroville

Sutter Buttes

New Bullards Bar Reservoir

Yuba River

In 2008, the Yuba River Accord increased the streamflow requirements over previous levels, which benefits fish while insuring sufficient water supplies for irrigation and municipal uses.

Folsom Lake

American River below Nimbus Dam

In 2000, the Flow Management Standard was developed, which established minimum flow standards to improve the conditions for fall-run Chinook salmon and steelhead. Additionally, releases are adjusted to maintain sufficiently low water temperatures for steelhead rearing in summer and Chinook spawning in the fall.

NCWA
Northern California Water Association

For more details visit www.norcalwater.org/efficient-water-management/instream-flows/

Building the Sites Reservoir

WATER FOR OUR CITIES, FARMS AND WILDLIFE

The ongoing drought has cost our state billions of dollars of farm production, diminished wildlife habitat and reduced urban water supplies. For our future prosperity, we need to capture water in rainy years through offstream storage to help the state survive future dry years. Every Californian will benefit from the increased water storage and flexible water management that will come from Sites Reservoir.

Benefits:

- **More reliable water supplies** for millions of households, farms, birds and migrating salmon
- **Greater flexibility** to save water during surplus conditions for use during dry periods
- Stores water during the winter to generate **clean and renewable power** for peak summer demands
- Helps recharge **groundwater** supplies
- **Recreational opportunities** including boating, camping, fishing and hiking

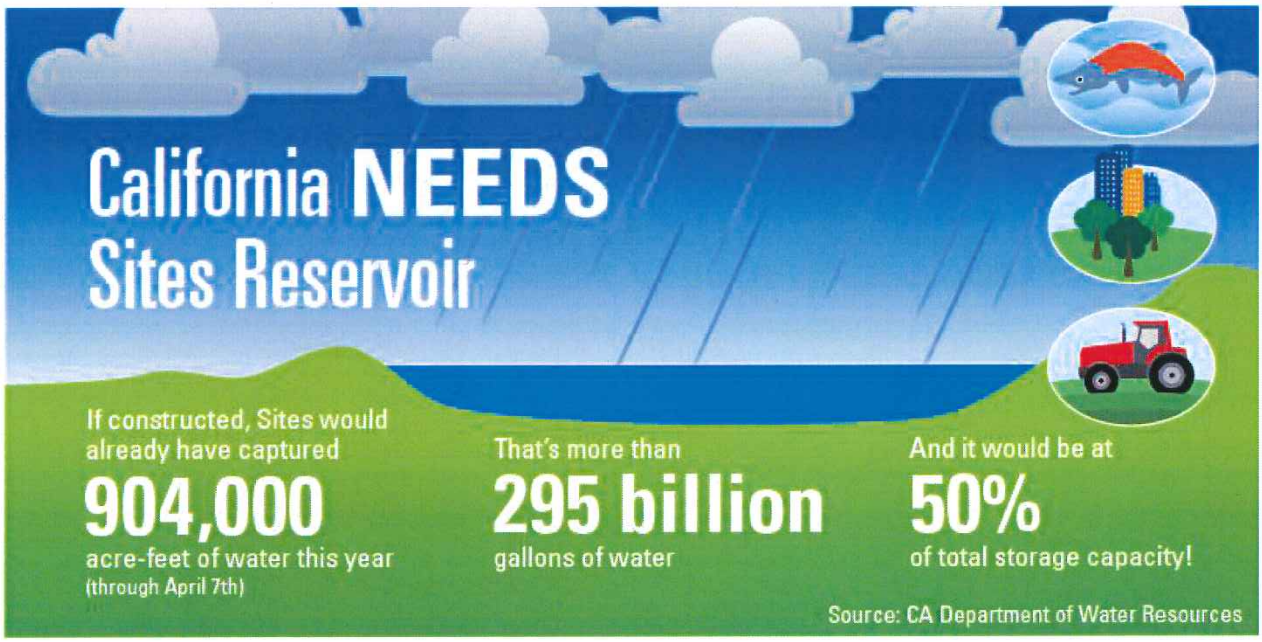
California Rice
CalRice.org

NCWA
Northern California Water Association
norcalwater.org

California Needs Sites Reservoir.....

As we approach the spring with varying hydrology throughout California, now is a good time to think about longer-term solutions that will help California during dry years. If Sites Reservoir were already online, the California Department of Water Resources has estimated that it would have already stored an additional 904,000 acre-feet of water this year, or nearly 295 billion gallons. Last year, during one of the driest years ever, Sites would have captured 410,000 acre-feet of precious water from two storm events. For context, this amount of water would nearly fill Folsom Reservoir near Sacramento.

Why does California need Sites Reservoir? California currently has 39 million people and a spectacular landscape supporting various other species–all of which depend upon a managed water system to help provide drinking water and other domestic uses, the most diverse and high quality food grown anywhere in the world, the cold water and habitat for fish, and habitat for birds along the Pacific Flyway. The last four dry years and a changing climate have reinforced that for all of these beneficial uses to thrive in California, we need robust surface water storage throughout California. One of the best opportunities to add value to our current water system is the proposed Sites Reservoir, an off-stream regulating reservoir on the west side of the Sacramento Valley.



As of April 7, 2016

NCWA
Northern California Water Association

California Rice

Family Water Alliance, Inc.