

# California needs to invest in Sites reservoir

## HIGHLIGHTS

The Sacramento Valley reservoir would fit into a modern water system

Sites reservoir would help commerce, farming and the environment

Funding Sites remains an issue, to be sorted out by the California Water Commission



California must develop a modern water system and strategy that includes greater flexibility to deal with climate change and a growing demand for an unpredictable supply of water.

The proposed Sites reservoir on the west side of the Sacramento Valley fits into that system. It would be an important part of a broad portfolio that includes more wastewater recycling, stormwater capture, desalination, conservation and environmental protection.

After four years of drought and the thinnest snowpack in 500 years, El Niño storms predicted for this rainy season won't end the water crisis, and Californians should not become complacent.

Sites reservoir would be partially funded by the \$7.5 billion water bond approved by voters last year. It would deliver benefits statewide by increasing water supply and, with proper management, providing versatility in water delivery for farms, cities and much-needed groundwater recharge. One of the more promising aspects of Sites is that a bloc of water would be allocated to the environment.

Created by two primary dams and nine saddle dams, Sites would store 1.8 million acre-feet of water off-stream from the Sacramento River. Operators would fill the reservoir by using two existing canals and a pipeline that would be built to divert Sacramento River water during high flows from large winter storms.

Located west of the town of Maxwell in the Coast Range mountains, the reservoir would inundate the Antelope Valley, home to about 15 family farms and cattle ranches.

Mostly hay and winter wheat is grown in the 14-mile-long valley in Colusa and Glenn counties. During the scorching summer months, when the temperature can hit 110 degrees, ranchers move cattle north or to the Sierra.

Some families in the valley favor the reservoir, and say they are looking to the future of agriculture and see the need for additional surface water storage. Others are wary of giving up land that has been in their families for generations, where their ancestors were born, where they farmed and where they died. Those concerns are understandable and not to be taken lightly. The landowners must be properly compensated. But there is a question of the greater good.

The decision to fund Sites reservoir rests with the California Water Commission, which will divvy up \$2.7 billion of the water bond for projects to increase storage capacity, improve the operation of the statewide water system and provide benefits to the Delta ecosystem. The commission also must determine that the projects are “cost-effective.”

Sites would accomplish the first three objectives. Whether it’s cost-effective would depend on the proposal to build the reservoir and who would pay the remaining costs.

Projects to be evaluated by the Water Commission fall into two categories: surface storage and groundwater recharge. Both have merit, both are debatable and both are politically charged. Projects that achieve surface storage and groundwater recharge, like Sites reservoir, should have an advantage when the commission begins allocating bond money in 2017.

Constructing Sites would cost \$3 billion to \$4 billion, only a portion of which would be covered by the water bond. Other financing would come from people who benefit: farmers in the Sacramento Valley, farmers and cities south of the Sacramento-San Joaquin Delta.

Congress should help pay, as should environmental organizations. Proper operation of the reservoir would have downstream benefits for the Delta, waterfowl habitat and for fisheries.

In considering Sites, cost effectiveness will weigh heavily as the commission seeks to get the biggest bang for 2.7 billion bucks earmarked for increased water storage. Sites would compete with other storage plans, including a Temperance Flat reservoir north of Fresno on the Upper San Joaquin River.

Sites would provide a relatively modest amount of water to the state’s system. During summer months, about 500,000 acre-feet of water from Sites would be available for Northern California farmers, for transfers south and for projects to recharge depleted aquifers. By comparison, Shasta Lake holds 5.5 million acre-feet; Folsom Lake holds nearly 1 million acre-feet, less than Sites.

But helping to tip the scale in favor of Sites, the reservoir would not require a dam on a river, and thus would not impede fish migration. Dams on rivers separate salmon from spawning grounds and have led to plummeting populations of the iconic fish.

Sites also would provide an environmental water account that could contribute to wildlife refuges along the Pacific flyway. Mainly, it would create flexibility in the water system when used in concert with water from Shasta, Oroville and Folsom lakes for the benefit of the Delta.

When salt water intrudes into the Delta, water from Sites could be released to flush the salinity back toward San Francisco Bay. By using water from Sites, cold water behind Shasta and Folsom dams would be saved for release when necessary for salmon survival.

Climate change coupled with the threat of fish species going extinct and an ever-growing population has upended the way California has managed water. Now, winter rain and snowpack slowly fill the state's reservoirs, then water is pumped south from the Delta to farms and cities.

This system for managing water no longer functions for our times.

California must create a water system that realistically deals with a changing climate, an environment in peril, a \$54 billion agriculture industry and nearly 40 million people.

The \$7.5 billion water bond should be used to help create a water system for the future. The investment should include incentives for conservation, greater use of recycled wastewater, capturing stormwater and desalination.

Strategic surface water storage and groundwater recharge will balance the portfolio of water assets. In that mix, Sites reservoir would add flexibility and would be worth the investment.

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## **JOIN THE CONVERSATION**

Do you think money from the water bond should be used to build Sites reservoir? Why or why not?

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SOAPBOX JANUARY 3, 2016 5:07 AM

# Collaboration benefits Pacific Flyway habitat for migratory birds

## HIGHLIGHTS

95 percent of California's original wetlands have been lost

Drought has challenged the ability to divert water for Pacific Flyway

Partners help provide water for more than 200,000 acres of habitat



BY DAVID GUY AND MARK BIDDLECOMB

*Special to The Bee*

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This time of year, millions of birds arrive in the Sacramento Valley as part of their annual migration cycle along the Pacific Flyway. The drought that has already caused significant losses to farmers also represents a major threat to these birds, which include migratory waterfowl, shorebirds, raptors and other species.

Like every other water use in the region, the fourth year of the drought has challenged the ability to divert water for the Pacific Flyway. Yet, as a result of hard work, innovation and collaboration this year, the results have been incredible in the face of challenging conditions. Our partners in the Sacramento Valley, working with many state and federal agencies, have managed to provide water for more than 200,000 acres of habitat in rice fields and managed wetlands to help migrating wildlife.

With 95 percent of California's original wetlands lost, these birds and hundreds of wildlife species depend on rice fields and managed wetlands for food and a resting place. In fact, nearly 60 percent of the winter diet for the millions of ducks and geese migrating through the Central Valley comes from area rice fields.

For the past several years, water resources managers, conservation organizations, landowners and state and federal agencies have been working together to develop various habitat strategies for these lands in the face of bleak conditions. For example, water resources managers have creatively used and rescheduled water conserved during the summer irrigation season to stretch winter rice decomposition and refuge water for habitat purposes.

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Conservation organizations have also worked closely with the California Rice Commission and landowners to proactively prepare post-harvest ricelands to take advantage of natural rainfall and any other available water. Refuge managers have prepared public lands with

limited resources to squeeze the best habitat out of wildlife areas.

This is particularly positive considering that during the dry summer we were all very concerned that there would be very little water available for bird habitat this fall and winter. Wildlife experts say prolonged periods where precious little habitat is available can lead to undernourished birds incapable of returning on spring migratory routes, and it increases the potential for outbreaks of contagious diseases such as avian cholera, which can decimate bird populations in a relatively short time. Importantly, the 200,000 acres of habitat are strategically spread from Glenn and Butte counties in the north, all the way down to the Yolo Bypass, just west of Sacramento and south to the Grasslands Ecological Area.

We are not out of the woods. The habitat acreage is still less than half of what would be considered optimal conditions. November rains were less than we had hoped. Winter storms now emerging may add additional water, but we are only halfway through the migration season, and additional water will be essential to sustain this habitat.

In an era where it seems many organizations would rather churn out more studies or seek court injunctions, it is refreshing to see on-the-ground, tangible successes here in the Sacramento Valley. We have made a difference so far and will continue to make a difference. Mother Nature may or may not cooperate, but the partners are all working to improve bird habitat under all these conditions.

Now is your opportunity to experience firsthand the incredible result of these efforts. We encourage you to visit the Sacramento Valley this winter to view the millions of birds spread out throughout our special region.

*David Guy is president of the Northern California Water Association. Mark Biddlecomb is western regional director of Ducks Unlimited.*

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## Letters

### A quiet, yet forceful presence on water

Laura King Moon, a Woodland resident, was a quiet and yet forceful presence in the ongoing discourse surrounding California water. To reflect on her accomplishments, California's water community celebrated Laura's life last week in the courtyard adjoining the Stanford Mansion.

The arc of Laura King Moon's wonderful career is instructive and tells us something valuable as California wrestles with our water challenges in the midst of four dry years. She started her career as a staff scientist at the Natural Resources Defense Council, where I first met Laura. She then evolved through various roles as an environmental affairs officer with the East Bay Municipal Water District, a special assistant with the U.S. Bureau of Reclamation, the San Luis Delta Mendota Water Authority and the assis-

tant general manager with the State Water Contractors. Her final destination was as Governor Brown's appointment as chief deputy director with the California Department of Water Resources.

In these varying and diverse roles, Laura accumulated a deep knowledge about many parts of the state and she understood the complex and integrated way that water moves throughout California. Although she was not afraid of conflict, she did not seek it out and she spent her entire career quietly working to avoid the conflicts that plague water in California. She was not ideological, other than her passion and tireless commitment and faith to practical solutions that would benefit people and their various values in water. Her hallmark was an open-mindedness and an ability to always see the river from the opposite bank. Perhaps most interesting in reflection, Laura never directly represented the Sacramento

Valley in the water debates — yet she loved the Woodland community and she seemed to understand the culture in the Sacramento Valley as well as people that have lived here much longer. She truly cared deeply about this region and she was a devoted champion for the Valley's people, farms, wildlife refuges, fish and the rural communities.

Laura will be missed in many ways. In thinking about Laura and her ideals, it seems that if her philosophies were driving the ongoing debate over water and particularly the future of the Bay-Delta discussion, there would be hope in pulling together diverse interests, possibly creating a different energy flow that will be necessary to take a new path toward solutions that benefit California.

*David J. Guy, president, Northern California Water Association*