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Federal effort to raise Shasta Dam by 18.5 feet is getting some serious pushback

By John Hickey| March 4, 2019 UC Berkeley News



Shasta Dam would be raised by 18.5 feet under a plan coming from Washington. State and local entities are fighting back (Photo: U.S. Bureau of Reclamation)

Californians are doing battle with the federal government on any number of fronts these days — immigration, the environment, voting rights, sanctuary cities and the sale of federal lands.

Over the next few months, another simmering battle — water — is likely to jump into the headlines. It's not about the steady rains the state has seen of late or the size of the Sierra Nevada snowpack. Those are fleeting things, and there is no telling what the next year will bring.

Instead, the war will be about the storage of water. The Trump administration wants to court favor with well-connected Central Valley agriculture interests by raising the height of Shasta Dam by 18.5 feet.

On one side is the federal government. On the other are environmental groups, a local Native American tribe, fishermen afraid that some of the state's best trout fishing will be wiped out and California's 1972 Wild and Scenic Rivers Act, which prohibits the state from supporting projects that alter certain natural waterways.

The project has a \$1.3 billion price tag, and, proponents say, adding those 18.5 feet on top of a dam that is already taller than the Washington Monument would increase the holding capacity of Shasta Lake by 14 percent. Most of that water would be headed to the Fresno area, specifically to the Westlands Water District, the nation's largest agricultural irrigation district. Westlands is funding an environmental impact report and reportedly is ready to put in hundreds of millions of dollars to get this project going in order to lay claim to that water.

Last fall, tests were taken to make sure the earthen banks of the dam, built while World War II was raging, has a foundation strong enough to support the additional bulk, and that puts the raising of the dam one step closer to being realized.

Or does it?

"I'm a little surprised to see that they are moving ahead as much as they are without more review," Matt Kondolf, director of UC Berkeley's <u>River-Lab</u>, says. "And, it's against state law."

The extra water from Shasta Lake would raise the lake by an estimated 20 feet, inundating the McCloud River, which is protected by the Wild and Scenic Rivers Act. That piece of legislation was designed to protect the trout that heavily populate those waters.



McCloud River. The trout that call the McCloud River home could be threatened by a raising of the nearby Shasta Dam. (Photo: InkKnife_2000 via Flickr)

And it's not just state law that speaks out. One of the provisions of the 1992 Central Valley Project Improvement Act is to protect fisheries up and down the state's major rivers.

Signed by President George H.W. Bush, the act's passage was seen as a victory for environmentalists and a defeat for the Central Valley agricultural industry.

Raising Shasta Dam now would only be possible by overturning those two laws, and yet the U.S. Bureau of Reclamation, which runs Shasta Dam, is pressing forward. Opposing the Bureau in the fight are environmentalists, the state and the Winnemem Wintu tribe, which lost some of the tribe's sacred sites due to flooding when the dam was first built, between 1938 and 1945, and which would lose all its remaining sacred sites should the addition be completed.

"Building up the dam would backflood the McCloud," Ted Grantham, Berkeley professor of environmental science, policy and management, says. "That area is protected under state law, and the state is opposing it just for that reason. But it's not just that. The Winnemem Wintu's cultural influence would be impacted. And there would be repercussions for salmon, trout and salamanders. There are a lot of wrinkles that make this plan problematic."

It's even problematic for the federal government. The U.S. Fish & Wildlife Service recommended against the project in 2014, saying, in summary, that the plans to raise the dam would fail to protect endangered salmon in the Sacramento River and its tributaries. On the other hand, the government later said it rescinded the study for further review, and it hasn't been seen publicly since.

Kondolf points out that the benefits from the proposed dam-raising would accrue primarily to one irrigation district. "The new storage would not benefit cities or the state generally, but a special interest group," he says.

But the Westlands Water District has a close relationship with a number politicians in Washington and Sacramento, and it's hoping it can count on Trump fulfilling a vow to free up more water for California's Central Valley. It doesn't hurt that Acting Secretary of the Interior, David Bernhardt, is a former Westlands lobbyist.

Westlands has a checkered history in California's water culture. The district was not originally part of the Central Valley Project, but was added to the water clearinghouse in 1960. Drainage off Westlands' soils was believed to be the culprit when, in 1983, thousands of birds and fish were found to have deformities related to selenium-poisoned farm runoff. More than three decades later, the Bureau of Reclamation hasn't entirely fixed the problem.

Bureau of Reclamation officials hope to award the first construction contract on raising the dam by the end of this year, with the work itself to begin in 2020. The project would be massive and would require moving roads, bridges, campgrounds, businesses and other facilities to higher ground. Some local homeowners say that their dwellings wouldn't be moved, but instead would find their properties condemned and sold at market value.

However, that timetable could be overly optimistic. The Center for Biological Diversity and the Environmental Protection Information Center sued the U.S. Fish and Wildlife Service on Nov. 29 in San Francisco for failing to act on a 2012 petition to protect Shasta salamanders under the Endangered Species Act.

There are three distinct species, each of which, the plaintiffs say, is rare and imperiled. If they are listed under the Endangered Species Act, plans to raise Shasta Dam would be threatened because the raising of the dam would flood their habitat.

Kondolf suggests that a better use of the \$1.3 billion would be to pursue reservoir reoperation and groundwater banking and to allow floodwaters in wet years, like the one the state is living through now, to spread over the floodplain through secondary channels, so the floodwaters can recharge groundwater. Aquifers under the San Joaquin Valley have the capacity to store 10 to 100 times more water than Shasta Reservoir, even with a raised dam.

Kondolf also notes, "Raising Shasta Dam would reduce the high flows that still occur in the river, with impacts on the river's geomorphic and ecological functioning that must be carefully analyzed. Virtually every major river flowing into the Central Valley has been dammed, with devastating effects on the river ecosystem: cutting salmon off from their natal streams, reducing flows in critical periods for salmon and other species and starving downstream reaches of their natural sediment loads. And by trapping these sediments, the reservoirs are inexorably silting in and losing capacity.

"Instead of building more and bigger dams, we should be investing in restoring rivers and floodplains to recharge aquifers and restore fisheries."

<u>https://news.berkeley.edu/2019/03/04/federal-effort-to-raise-shasta-dam-by-18-5-feet-is-getting-som</u> <u>e-serious-pushback/</u>