



It's time to secure California's water supply by raising Shasta Dam

By Brenda Burman

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Republicans in Congress authorized spending \$20 million to study raising Shasta Dam by 18.5 feet. If ever fully approved, the \$1.3 billion project would flood a stretch of the McCloud River, a wild and scenic river that's sacred for a Native American tribe. Randy Pench Sacramento Bee file

California is in critical need of additional water storage. It seems that every other year we see fields fallowed, rivers running low, and water rationing in cities and towns across the state. Reliable water is critical to every aspect of the economy as more than 40 percent of the nation's fruits, nuts and vegetables are grown in the Central Valley, much of that using water from the Central Valley Project (CVP) and its largest reservoir — Shasta Lake.

Last October, President Trump issued a “Memorandum on Promoting the Reliable Supply and Delivery of Water in the West.” The memo spells out how during the 20th century the federal government invested enormous resources in water infrastructure throughout the western United States, including California, to reduce flood risks to communities; to provide reliable water supplies for farms, families, businesses, and fish and wildlife; and to generate dependable hydropower. Our administration stands ready to partner with Western states in advancing new and improved water storage projects that would deliver water and power in an efficient, cost-effective, and environmentally sound manner. Improving California's infrastructure is key to increasing both water supply reliability and environmental benefits.

At the request of the state of California, Congress authorized the CVP to support California's vast economy, while also creating benefits to the diverse communities of the Central Valley. In the highly variable drought and flood cycles that dominate Northern California, the key to meeting water demands is having enough storage capacity to capture runoff when it is wet for carryover and delivery when it is dry.

Carry-over storage provided by state and federal reservoirs in California is meant to allow for delivery of water to grow food even when the rain does not come. It is meant to allow cities to provide safe drinking water during prolonged drought. Carry-over water supplies also help the Bureau of Reclamation deliver much needed cold water to support spawning salmon even when snowfall in the Sierra Nevada falls short.

However, California simply does not have enough carry-over storage. Growing demands for California's shared water resources over the last century, combined with insufficient water storage capacity, limit our ability to meet all those demands. This is why, working with partners, we are looking for new storage opportunities in Northern California. Projects like raising Shasta Dam would allow California to add capacity to an existing reservoir — like adding an addition to your house, rather than clearing land for a new home.

Raising Shasta Dam by 18.5 feet would increase storage capacity by 630,000 acre-feet or more than 200 billion gallons of additional water. This would afford water managers more flexibility to balance municipal and agricultural needs with environmental protection, even in dry years. It would offer local benefits, such as providing important flood control to Northern California communities. It also has broader economic impacts for Western states. Without a stable Sacramento–San Joaquin River delta, California must turn to other shared water supplies, such as the Colorado River.

Misinformation and rhetoric surrounding these critical infrastructure projects have facilitated a false narrative that only a handful of agricultural interests will benefit at the expense of our environment. This couldn't be more untrue. Unfortunately, coverage has not focused on the substantial scientific and operational benefits additional storage would provide to ecosystems and fisheries.

Funding provided by Reclamation and water and hydropower contractors has allowed for investment in billions of dollars of scientific research and infrastructure modifications. These investments improved our understanding of the needs of fish and wildlife and supported major improvements to the water system.

For example, an objective for raising Shasta Dam is to increase the survival of anadromous fish populations in the Sacramento River. Water temperatures in the upper Sacramento River, especially in dry years, are a critical factor affecting the abundance of Chinook salmon and steelhead in the river. Enlarging the reservoir would further expand Reclamation's supply of cold water and improve its ability to deliver water to benefit fish.

Reclamation and other federal agencies have spent decades carefully evaluating data to ensure an environmentally sound approach to raising Shasta Dam. This includes ensuring that the McCloud River and the important wild trout fishery it supports are

protected. In a year like 2019, Shasta Lake already extends up the McCloud River when the lake is at full capacity. If we had already raised Shasta Lake, our peer-reviewed analysis shows the lake would have extended into the McCloud another 3,500 feet — approximately two-thirds of a mile — for a few months in the spring. Generally, we see these types of wet years occurring about once every four years. This is not a radical change.

Congress first directed Reclamation to look at the feasibility of raising Shasta Dam in the 1980s. More recently, recognizing the need for increased surface water storage and the need to find funding mechanisms that work in today's vastly overstretched federal budget, Congress passed the Water Infrastructure Investment for the Nation (WIIN) Act in 2016 with broad bipartisan support. Congress has appropriated \$335 million for surface storage, providing \$20 million for preconstruction activities to raise Shasta Dam, including additional environmental analysis and engineering designs. It also directed Reclamation to work with local beneficiaries to identify non-federal funding. The WIIN Act authorized the federal government to fund up to 50 percent of the cost of the project, and a non-federal cost share partner, which could be a water agency, a group of water users, a state agency or a private entity, is required to initiate construction and to fund the remainder.

If we are to successfully manage our precious water supplies in a changing future, strategic projects such as raising Shasta Dam are needed to capture precipitation that may come less often and in higher intensity storm events. Without such projects, it will become increasingly difficult to meet the needs of all who depend on the CVP.

Every year in California we have unmet water needs. We hear it from our constituents, we read it in the news — we know it. In California, we know that more storage would help us meet those needs. Shasta Dam already stands over 600 feet tall — adding another 18 ½ feet would enhance the infrastructure we have already built, providing new water supplies for farms, for fish, and for cities.

Investments made in the last century paved the way for a modern American West. We stand ready to work with our partners to secure water resources for California's future.



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