

# Amid calls for more water storage in arid West, large dam projects stall

As extreme drought continues across a large swath of the western U.S., water district managers and Republican members of Congress are calling for more and expanded water storage facilities they say will help hydroelectric plants and food growers prepare for the next inevitable dry spell.

Their demands have reinvigorated a partisan debate about whether and where to invest potentially billions in large dam projects at a time where decreasing snowmelt and rain is unlikely to fill up such storage. Critics of such plans have also noted that there are few places left in which to build dams.

At a May 19 hearing hosted by Republican members of the House Natural Resources Committee, lawmakers and several witnesses criticized a decision by Democratic California Gov. Gavin Newsom to halt a \$1.3 billion plan by the Trump administration to raise Shasta Dam.

The federally owned reservoir in northern California is the state's largest, with concrete wall towering 602 feet over Sacramento River. Besides serving as critical water storage for downstream farms and a recreation area, the dam powers a 663-MW hydroelectric plant connected to the western power grid.

In May 2019, California sued Fresno-based Westlands Water District for helping the U.S. Bureau of Reclamation finish plans for the dam enlargement. The state argued that by flooding a stretch of protected river in Shasta County, the project violated California environmental laws because it would

result in "significant and unavoidable impacts to fish, wildlife and natural communities."

A state judge sided with California later that year, barring the water district from completing an environmental review required to break ground on the dam expansion.

But the Golden State's stringent environmental regulations, along with opposition from Democrats in Congress, jeopardize an important solution to the Western water problem, warned Kevin McCarthy, the House Republican minority leader whose district includes much of the agricultural Central Valley region.

"Remember, the greatest return on the investment if you already have a dam, if you just raise it, it has a great deal more storage," McCarthy said told the hearing. "You're storing more for the future, and the cost is less."

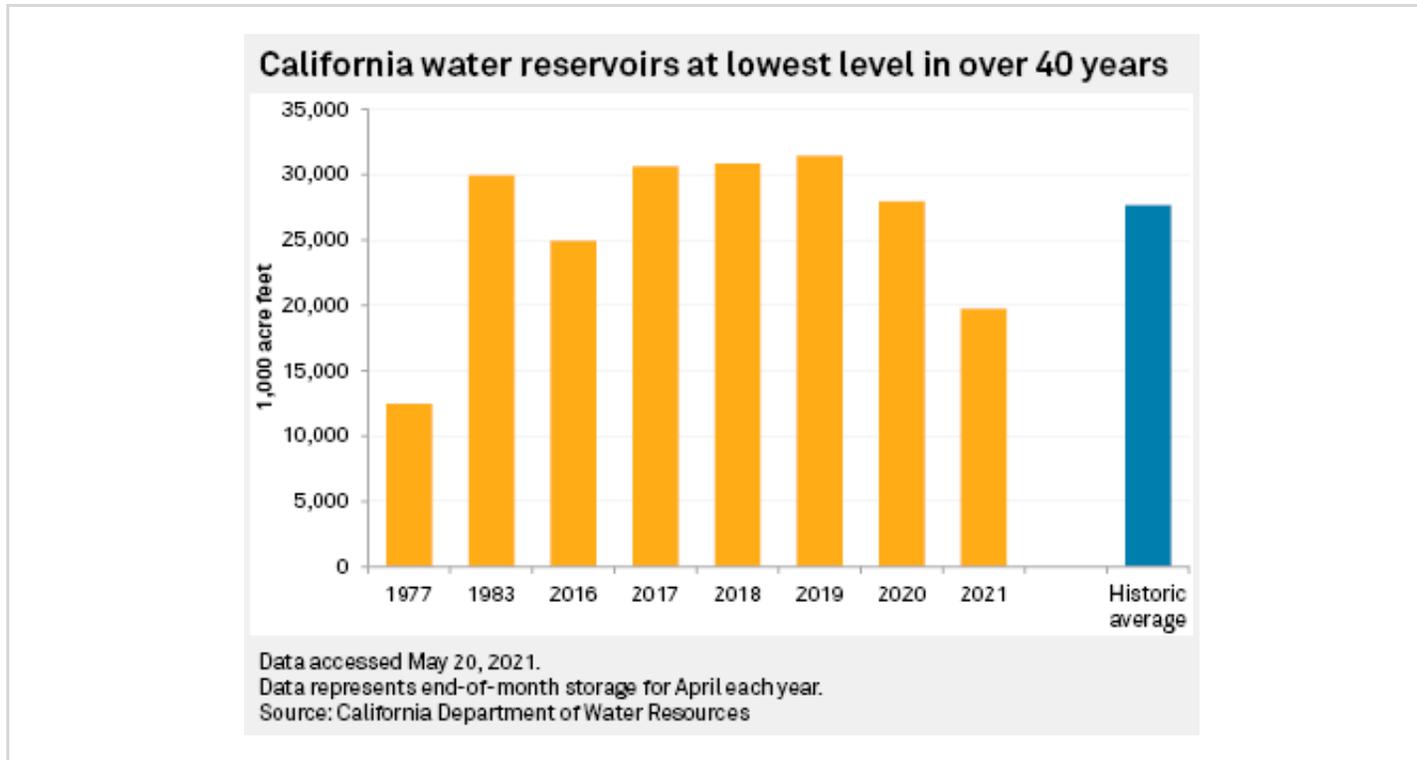
### **Dams could be money losers**

Others say large infrastructure projects, such as expanding dams or building new ones where feasible, will not only be a bad investment, they also will not resolve the problem of a lack of water.

"Everybody thinks that if you just build more storage, you will create more water," said Jeffrey Mount, a senior fellow at the Public Policy Institute of California and founder of the Center for Watershed Sciences at the University of California, Davis. "A problem with that is that storage does you no good if you can't fill it."

"We only get these big flows every seven to 10 years," Mount said. "So the fact of the matter is, who's

going to pay for that sunk asset once you've used the water and it does nothing for you?"



California is getting increasingly hotter and drier, its Mediterranean climate starting to resemble that of the Southwest. Placer County north of Sacramento expects to generate only 325,000 MWh of energy from its hydroelectric facilities this year. That is down from 1 million MWh during a wetter year, Tony Firenzi, the county's director of strategic affairs, told members of Congress.

"We're suffering historically low reservoir inflow this year," Firenzi said. "We only received a third of what we normally do and this will have a direct impact on our ability to put clean energy on the grid."

California is not alone. Water supplies in Lake Mead, the nation's largest reservoir on the Arizona-Nevada state line, are projected to reach record-low levels in the coming months. This would prompt an unprecedented federal shortage declaration that would force water restrictions in those two states, hitting farmers hard.

Lincoln County, Nev., north of Las Vegas, recently said it plans to raise electricity rates to pay for more expensive power from the wholesale market, replacing the cheaper but dwindling hydropower from Hoover Dam above Lake Mead.

In a March report prepared for Congress, the Bureau of Reclamation assessed the impact of drought on its massive water operation. It said that even with efficiency gains, Hoover Dam is projected to lose between 0.5% and 2.5% in annual power generation over the next five years.

Colorado River has suffered a 20-year drought that is not expected to ease any time soon. The loss of power sales hits the federal revenues, too. The Hoover Dam power sales had been sending \$50 million annually to U.S. coffers.

### **Banking groundwater costs millions**

Increasingly worried hydropower plant managers and farmers are now taking extraordinary steps to adapt to what is becoming a chronic problem in a changing climate.

"U.S. hydropower operators are actively incorporating climate resilience strategies to mitigate vulnerabilities to generation production," LeRoy Coleman, a spokesman for the National Hydropower

Association, said in an email.

In the Columbia Basin in the Pacific Northwest, for example, public utility districts are now trying to accommodate higher fall and winter flows as more winter precipitation falls as rain instead of snow and summer water flows decline, Coleman said.

And in farming communities in California and beyond, water districts are investing hundreds of millions in new projects to conserve and make better use of dwindling resources.

Kern County north of Los Angeles has spent nearly \$300 million on groundwater banking projects. Water is purchased and spread out to infiltrate and replenish the groundwater table — a costly undertaking as is the need to drill new wells.

Royce Fast, board president of the Kern County Water Agency, told the hearing that federal regulations such as the Endangered Species Act have been a showstopper to some projects that could have helped growers in the area. But he also said large infrastructure projects are not a top priority to his county at this time.

"To address the drought this year we need projects that can be built quickly," Fast said in an interview. "We have canal lining and groundwater projects that could move forward very quickly with immediate investment by the state. Coupled with a waiver of regulatory restrictions that typically slow down project construction, several of these projects could help mitigate the drought within a year or so."

The latest issue of the U.S. Drought Monitor issued May 20 reported worsening conditions in the

California Bay Area and Idaho, while holding out New Mexico as the only state that had seen some improvement.

"There are increasing reports of reduced pasture forage, livestock requiring supplemental feed and/or being sold off, and some reports of livestock mortality," the publication reported. "Additionally, stock ponds are running dry and farmers have been forced to haul water in some locations."