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California funds new dams to protect against future drought

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The Contra Costa Water Districth was allocated \$459 million for the proposed expansion of Los Vaqueros Reservoir.

Photo: Michael Macor / The Chronicle

For the first time since California's dam-building boom ended nearly a half century ago, state officials on Tuesday approved a windfall of cash for new water storage projects, setting the stage for at least a mini-resurgence of reservoir construction.

The historic \$2.7 billion of voter-approved bond money will go to elevating two Bay Area dams, at Los Vaqueros Reservoir near Livermore and Pacheco Reservoir east of Gilroy, as well as to the development of two much larger dams in the Central Valley. Funds also will go to four less traditional endeavors that store water underground.

Collectively, the projects would add about 4.3 million acre feet of water storage across the state, the equivalent of about a dozen of San Francisco's Hetch Hetchy reservoirs. The new supply is intended to help California weather drought as longer, deeper dry spells are expected to take hold with climate change.

Although the larger dams, at the proposed 13-mile-long Sites Reservoir along the Sacramento River and 18-mile-long Temperance Flat Reservoir on the San Joaquin River, are still well short of the money they need to get off the ground, the Bay Area projects are now close to moving forward.



"Getting the money is a greater step toward water reliability for the Bay Area region," said Oliver Symonds, a spokesman for the Contra Costa Water District, which was allocated \$459 million for the proposed \$980 million expansion of Los Vaqueros Reservoir.

The state money comes four years after voters approved Proposition 1 in the throes of the recent drought. The \$7.5 billion bond measure committed funding for upgrading water infrastructure, restoring watersheds and developing new water storage, with more than a third of the money earmarked for reservoirs and underground water banks.

Tuesday's decision on storage projects was made by the California Water Commission, an independent advisory board appointed by the governor, following a years-long technical review in which about a dozen proposals were considered.

To make sure the projects wouldn't serve special interests, each was scored by how much public benefit it would provide — for example, whether it offered boat recreation, improvements to fish habitat or wastewater treatment.

Among the winners were two efforts to recycle wastewater by treating it and storing it underground. The projects were submitted by the Sacramento Regional County Sanitation District and the Inland Empire Utilities Agency.

Two other funding recipients, in Kern County and Southern California's Antelope Valley, plan to recharge stressed groundwater basins with surplus surface water.

But the bulk of the money, close to \$2 billion, is headed to reservoirs.

With its allocation, the Contra Costa Water District hopes to break ground in two years on raising the dam at Los Vaqueros Reservoir in the East Bay hills by 55 feet. The reservoir, which holds water piped in from the Sacramento-San Joaquin River Delta, would grow by 70 percent, increasing its capacity to 275,000 acre-feet of water, enough to supply more than a half million households for a year.

The district intends to share its additional supplies with other Bay Area providers, including the San Francisco Public Utilities Commission and the East Bay Municipal Utility District. Those agencies are expected to help foot the balance of the project's cost.

With \$485 million of Prop. 1 money, the Santa Clara Valley Water District plans to construct a new \$969 million dam on Pacheco Creek in eastern Santa Clara County, in the footprint of a smaller dam. The project will increase water storage from the creek, which gets much of its water through releases from nearby San Luis Reservoir, from 5,500 to 140,000 acre feet of water.

An acre foot is 326,000 gallons and can meet the needs of about two households for a year.

The outstanding balance for the expanded Pacheco Reservoir is expected to come from other water agencies that will benefit, including the San Benito County Water District and Pacheco Pass Water District, as well as customers served by the project.

Richard Santos, chairman of the Santa Clara Valley Water District Board of Directors, said he hopes construction will start in the next few years.

"It's a reliable source of water that will provide for all of Santa Clara County's residents," he said.

The biggest recipient of the Prop. 1 funding was the proposed Sites Reservoir, a \$5.2 billion venture slated for the west side of the Sacramento Valley in rural Colusa County. The project would store 500,000 acre feet of water piped in from the nearby Sacramento River.

However, the \$816 million allocated for the reservoir is much less than the project's backers wanted, leaving the future of the effort uncertain. The reservoir's anticipated public benefit did not score as high as what supporters had hoped.

"My concern is that this (money) is more of a down payment on what we need and not an end solution," said Jim Watson, general manager of the Sites Project Authority. "But it's a step in the right direction."

Watson said he is pursuing funding from other sources, including the many water agencies that would benefit from Sites, largely districts that provide water for farms.

Proponents of the proposed Temperance Flat Reservoir, near Fresno, said they, too, are having to look elsewhere for cash.

The \$3 billion project, which would add 1.3 million acre feet of water storage from the San Joaquin River, was awarded \$171 million. The public benefit of the project was also deemed low.

Mario Santoyo, the project's executive director, said he's hoping President Trump, who has committed to increasing agricultural water supplies, will pick up with where the state left off.

"There's no guarantees, but we have a new administration that wants to build," Santoyo said.

The Prop. 1 funding for water storage is the most the state has allocated since construction of the State Water Project, which consists of 21 dams and hundreds of miles of canals, built largely in the 1960s.

California's last major reservoir, New Melones Lake near Sonora (Tuolumne County), was constructed by the U.S. Bureau of Reclamation in the 1970s.

Jay Lund, director of the Center for Watershed Studies at UC Davis, said Prop. 1 was largely an aberration since the state and federal governments have retreated from the dam-building business.

The reasons are numerous, he and other water experts say. For one, the best spots for reservoirs are taken. Also, the harm that dams do to fish and rivers has become increasingly clear. And finally, there's just not much money for the pricey endeavors.

"This is pretty unprecedented that the state is providing general fund revenues for water storage. It's rarely done on this large of scale," Lund said. "But I'm not sure there's anymore economically promising surface storage to be built no matter how much money you have. This may well be the last hurrah for water storage."

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