

**BAY AREA WATER SUPPLY AND CONSERVATION AGENCY
BOARD OF DIRECTORS MEETING**

May 11, 2018

Correspondence and media coverage of interest between April 19, 2018 and May 8, 2018

Media Coverage

Water Supply:

Date: May 8, 2018
Source: Palo Alto Weekly
Article: Palo Alto grants water to East Palo Alto

Date: May 8, 2018
Source: Mercury News
Article: Palo Alto gives neighboring city half a million gallons of water a day, at no charge

Water Infrastructure:

Delta Tunnels

Date: May 8, 2018
Source: Sacramento Bee
Article: Brown's Delta tunnels get \$650 million boost from Bay Area water agency

Date: May 2, 2018
Source: Mercury News
Article: Santa Clara Valley Water District delays \$650 million vote on Brown's Delta tunnels project

Date: April 27, 2018
Source: Mercury News
Article: In reversal, Santa Clara Valley Water District may provide \$650 million to Brown's Delta tunnels plan

Date: May 5, 2018
Source: LA Times
Article: Separating water and politics isn't easy in California

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Article: Commission Moves Step Closer to Funding Prop 1 Water Storage Projects

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Article: Work begins on \$10 million Alameda Creek fish ladders

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Source: Water Deeply
Article: How California Water Suppliers Are Getting Earthquake-Ready

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Palo Alto grants water to East Palo Alto

Transfer of a small portion of its water shares will help East Palo Alto development

Palo Alto Weekly | May 8, 2018 | Sue Dremann

East Palo Alto received a much-needed infusion of water on Monday night after the Palo Alto City Council voted to transfer -- at no cost -- some of its water shares to its parched neighbor.

The council voted 7-1, with Councilman Greg Tanaka dissenting and Councilman Greg Scharff absent, to give a half-million gallons per day of water to enable East Palo Alto to resume its development. East Palo Alto had to put a moratorium on new hookups last year after it ran out of additional water supplies. At least four major projects have been on hold, including low-income housing, two commercial developments and a school. East Palo Alto has the smallest share of water allocations from the San Francisco Public Utilities Commission, which supplies water to local cities from the Hetch Hetchy Reservoir, because the city was not incorporated when San Mateo County made the deal with the SFPUC to divide the shares.

The inequity wasn't lost on council members and city staff. They noted that while East Palo Alto receives just 2 million gallons of water per day, Palo Alto receives 17 million. But Palo Alto only uses 10 million gallons per day, City Manager James Keene noted.

The council was to vote on the item as part of its consent calendar, which doesn't require discussion, but staff recommended the council vote to discuss it as an agenda item before making a decision and the item was added to the regular agenda. When it came up, it caused an almost immediate heated discussion with Councilman Greg Tanaka, who questioned the free transfer.

"Do the water rights have value?" Tanaka wanted to know.

Councilwoman Karen Holman, a co-author of the Dec. 5, 2016, colleagues' memo to look into transferring the shares, also questioned the process staff failed to engage in that would have afforded scrutiny and education for the council and the public prior to the vote.

Keene said the value is negligible, since Palo Alto doesn't have to pay for the water shares that it doesn't use. The city is unlikely to ever need all of its water shares, he added.

But Tanaka noted the city of Mountain View has an agreement to transfer 1 million gallons per day of its water shares to East Palo Alto for \$5 million. He questioned why Palo Alto should not also be paid \$2.5 million for its half-million gallons per day shares.

Keene said that Mountain View has a different allocation structure. It gets its water from the Santa Clara Valley Water District and SFPUC. Because it has a guaranteed minimal purchase from SFPUC, it must pay for allocations it isn't using. The costs for unused water could reach \$8.5 million in the next four to five years, he noted. The one-time, \$5 million payment by East Palo Alto is designed to help offset the costs Mountain View must pay.

Tanaka insisted that the city should consider getting revenue from East Palo Alto.

"How can we be giving away our water while utilities bills are raised by hundreds of dollars a year?" he said. But Keene noted the actual rate increase is 3 to 4 percent.

Former Palo Alto Councilman Pat Burt, who was one of the authors of the colleagues' memo when he was on the council, took Tanaka to task for wanting to charge East Palo Alto for water

that costs the city nothing. Tanaka, he said, is "asking less affluent East Palo Alto to subsidize our rates. East Palo Alto is our most intimate neighbor that houses our service workers and some of our city employees."

Carol Lamont, a Palo Alto resident who worked as East Palo Alto's rent control stabilization program administrator, noted that Palo Alto took East Palo Alto land when the area was still San Mateo County property. Palo Alto reconfigured San Francisquito Creek, which moved the border, and that land is now Palo Alto's municipal golf course and airport.

"What you are doing tonight is maybe giving a little bit back to this community," she said.

Councilwoman Lydia Kou said East Palo Alto and Palo Alto share many concerns, such as traffic, housing and airplane noise. The cities want to work cooperatively to synchronize traffic signals on University Avenue to decrease congestion, reduce aircraft noise and provide affordable and low-income housing. Helping East Palo Alto with its water is the first in what could be a constructive collaboration on the other mutual issues of concern.

East Palo Alto Mayor Ruben Abrica noted the city has no water reserves, no emergency supply and no tanks. The city "inherited many structural inequalities and insufficiencies" when it was incorporated and lacked the "power to negotiate" its water allocations because San Mateo County made the deal with the SFPUC, he said.

Without the water shares from Palo Alto, it is likely East Palo Alto will have to do much groundwater pumping, something that Palo Alto does not want, council members noted.

Vice Mayor Eric Filseth supported the water transfer at no cost. "A business model to broker a deal to make money ... I find it offensive. This is a no-brainer," he said.

But Tanaka remained firm. "Options are worth something. Water rights are worth something. ... For us to consciously give way \$2.5 million in water rights is improper," he said.

Holman had co-authored the colleagues' memo with Burt, Filseth and Councilman Tom DuBois. While she supported the share transfers, she was disturbed that staff had not followed the council's directives, which would have led to a more public process and greater scrutiny by the council. The memo had requested that the council direct staff to schedule a council study session to discuss the sale or transfer of the water rights to help East Palo Alto. The council voted 8-0 to refer the matter to the Finance Committee for discussion.

But Holman said that staff never brought the water transfer to the Finance Committee, council never held a study session and they never discussed or considered what details were in the East Palo Alto water conservation documents.

"None of it ever happened," she said.

Not having such procedures and processes followed "interferes with my ability to do my job, I think, in a reasonable and responsible manner. I hope that these kinds of situations going forward don't proliferate," she said. Pulling the water issue from the consent calendar and having it as an agenda item where the council and the public did have a chance for discussion was the proper thing to do, she said.

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Palo Alto gives neighboring city half a million gallons of water a day, at no charge
City permanently shifts 500,000 gallons per day in water rights to East Palo Alto to offset its shortage

Mercury News | May 8, 2018 | Kevin Kelly

In a move meant to right a wrong dating back 35 years, the Palo Alto City Council agreed Monday to give 500,000 gallons a day of the city's water to East Palo Alto — for free.

"This is being a good neighbor," Councilman Tom DuBois said, adding that the city was correcting a "historical inequity."

On a 7-1 vote, with Councilman Greg Scharff absent, the council authorized the San Francisco Public Utilities Commission to permanently transfer half a million gallons a day of Palo Alto's water to its eastern neighbor. As a result, Palo Alto's allotted supply will be reduced from 17.1 million gallons a day to 16.6 million.

That shouldn't leave Palo Alto dry, however. Staff noted the last time the city consumed more than 16.6 gallons a day was in the 1970s, before it initiated various water conservation measures. The city isn't expected to exceed 11 million gallons per day until at least 2040.

Councilman Greg Tanaka dissented, saying water shouldn't permanently be given away for free, especially when the city is planning to raise residents' water and other utility rates.

"We need to keep our residents' interests first, beyond that of our neighbors," Tanaka said.

City Manager James Keene said reducing the city's water allocation won't affect the rates residents pay for water.

"We happen to have the great good fortune to be able to buy more water than our next-door neighbor," Keene said. "All we are proposing is whether we could share with our neighbor our ability to buy water we're never going to use. ... They will be paying for this water."

City resident Cybele Lovuolo-Bhushan said authorizing the water transfer would show Palo Alto cares about its neighbor, particularly one that is struggling economically.

"It really makes sense on every level," Lovuolo-Bhushan said. "We need to do it. We need to do the right thing."

East Palo Alto, whose population is roughly 40 percent of Palo Alto's, was allocated only 2 million gallons of water a day because the Public Utilities Commission divvied out amounts among the region's areas before the city incorporated in 1983.

"We didn't have the power to negotiate as a city government" back then, East Palo Alto Mayor Ruben Abrica said at the meeting.

East Palo Alto needs to get at least 3.5 million gallons a day to launch a number of planned projects, including a new school and low-income housing, without tapping into its groundwater. It currently has no water reserves or even an emergency supply.

Mountain View is selling East Palo Alto rights to 1 million gallons a day from its allocation, for \$5 million. Mountain View's agreement with the Public Utilities Commission requires the city to pay for those water rights whether it uses them or not.

Abrica said East Palo Alto inherited "a lot of structural inequalities" when it formed, such as toxic waste and the county dump.

"We feel that it is a sign of generosity of your community to be considering sharing your water," Abrica told the council.

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Brown's Delta tunnels get \$650 million boost from Bay Area water agency

Sacramento Bee | May 8, 2018 | Dale Kasler

A Bay Area water agency agreed Tuesday to pump \$650 million into Gov. Jerry Brown's Delta tunnels project, providing a meaningful boost for the controversial \$16.7 billion plan.

The 4-3 vote by the Santa Clara Valley Water District brings the tunnels project, which would overhaul the troubled heart of California's aging water delivery network, a step closer to being fully funded.

Just a few months ago the project, officially known as California WaterFix, was sputtering for a lack of funds. Brown's administration was forced to consider a phased-in approach that called for building one tunnel first and constructing a second tunnel only if enough money became available. WaterFix is to be paid for by south-of-Delta local water agencies that get supplies from the Sacramento-San Joaquin Delta.

The original twin-tunnels concept was revived a month ago, when the giant Metropolitan Water District of Southern California agreed to spend \$10.8 billion on the project. Metropolitan in effect is stepping in for San Joaquin Valley agricultural districts that have refused to support WaterFix because of its price tag. To recoup the costs, the big Los Angeles agency expects to sell some of the tunnels' capacity to the farm groups in years to come.

Even with the support from Metropolitan and Santa Clara, the project still is looking for dollars. State officials have said they believe enough south-of-Delta agencies will pitch in to move the project forward. Karla Nemeth, director of the state Department of Water Resources, said in a prepared statement: "In the coming days, the state and the public water agencies funding WaterFix will enter into an agreement to implement final design and construction."

While environmentalists railed against the Santa Clara vote, Brown hailed it as a "courageous decision."

For Santa Clara, the vote represents an about-face of sorts. Last October, its board indicated it would spend only about \$200 million on WaterFix, and only if the project followed the phased-in approach.

The Delta is the hub of the State Water Project and the federal Central Valley Project. The two systems deliver billions of gallons of water to 25 million Southern Californians, Bay Area residents and San Joaquin Valley farmers. Decades of pumping have devastated the estuary's eco-system and left several fish species nearing extinction, forcing pump operators to reduce operations occasionally to reduce the environmental damage.

Brown says the tunnels, by rerouting how some of the Sacramento River's water reaches the pumps, would allow the pumps to operate more reliability and with less harm. Environmentalists, Delta landowners and Northern California officials say the project would actually worsen the estuary's woes.

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Santa Clara Valley Water District delays \$650 million vote on Brown's Delta tunnels project

Mercury News | May 2, 2018 | Paul Rogers

After a five-hour packed public hearing, the board of Silicon Valley's largest water provider postponed a decision on whether to provide up to \$650 million toward a \$17 billion plan to build two giant tunnels under the Sacramento-San Joaquin River Delta to move water south.

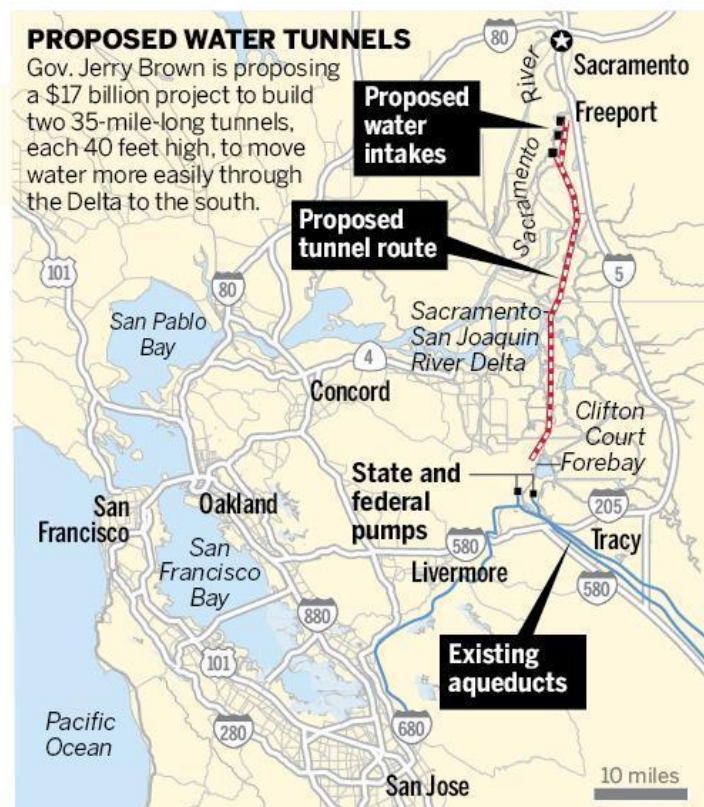
Although it appeared there might be four votes on the seven-member Santa Clara Valley Water District board in favor of Gov. Jerry Brown's so-called WaterFix project, board members late Wednesday night were divided and continued the issue until Tuesday at 9:30 a.m. In October the board unanimously voted against the plan over environmental concerns and potential higher costs for customers who would see little benefit from the project.

At least three said that given the risk that ratepayers will bear the brunt of likely cost overruns on a project of such a large size, they needed more time to read and understand hundreds of pages of staff reports and draft contracts, some of which were presented to them only 24 hours earlier by district staff members urging them to approve the plans.

"What's the rush?" said Dick Santos, chairman of the water district board. "In my opinion, we need to sit down as a group and really discuss these things. This is too fast."

Brown's plan calls for building two massive tunnels, each four stories high and 35 miles long, under the Delta. Supporters, who include business groups and Los Angeles-area water agencies, say the project would give cities and farms a more reliable water supply by reducing reliance on giant pumps near Tracy. In recent years those pumps have been ordered shut down by court rulings at times to protect endangered salmon, smelt and other fish.

Critics, including most of the state's environmental groups and Northern California congressional representatives, have compared the project's risk of cost overruns to Brown's high-speed rail project and worry that it would make it easier for Southern California interests and Central Valley farmers to take more water from the north, despite promises to take only the current amount from the Delta.



Source: California Natural Resources Agency

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In a letter, Rep. Anna Eshoo, D-Palo Alto, urged the board to delay reconsideration or to reject the tunnels plan. She cited concerns about the price tag, which water district staff said would increase rates by up to \$10.26 per month by the time the tunnels are operational in 2033.

“In my view, WaterFix remains plagued by high costs and mismanagement that justified the board’s prior rejection of this project, and it’s unclear what has changed in the last six months to ensure that it now meets the criteria the board put forth last October,” Eshoo said.

Several board members who voted against the two-tunnel plan in October said Wednesday that they changed their minds after the powerful Metropolitan Water District of Southern California, which has 20 million customers, voted to contribute \$11 billion to the project last month. They said that they wanted Santa Clara Valley Water District to participate in a joint powers agreement with the Los Angeles-based agency to help build the project so it would have a seat at the table.

“It’s important that we stay engaged. I do not trust Southern California and agribusiness to be looking out for the interests of Northern California,” said board member Barbara Keegan.

But board member Linda LeZotte said she had concerns about the project’s environmental impacts on fish, wildlife and water quality in the Delta and San Francisco Bay. Other board members said they are worried about construction problems that could mean property tax increases or higher water rates in the event of cost overruns.

“The cost I don’t believe for a minute,” said LeZotte. “I have concerns about the environment, and I don’t see the need for two tunnels. On the other hand, Met has put us in a position where we need to be at the table. I’m highly conflicted.”

The project already has been hit with multiple lawsuits and still needs approval from the State Water Resources Control Board. Brown has only eight months left in his term to try and pull it across the finish line; none of his potential successors have indicated strong support for the two-tunnel plan.

Throughout the evening Wednesday, more than 40 members of the public spoke, most in opposition. Union members in orange T-shirts said the project would bring construction jobs. Environmental groups said it was a boondoggle.”

One of the state’s top water officials, Karla Nemeth, a former Metropolitan Water District employee whom Brown appointed several months ago to run the state Department of Water Resources and oversee the project, drove to San Jose for the meeting.

“As I’m sure you all know, the vote before you today is part of a transformational moment in California water policy,” Nemeth said. “The choices and outcomes are as meaningful and as consequential tonight as those made by water managers who built the State Water Project decades ago.”

The Santa Clara Valley Water District, which provides water to 2 million people, is considered a key player in the tunnels debate because its support would allow Brown and other supporters to frame the issue as a statewide one, rather than a north-south battle. The proposed Peripheral Canal plan in 1982, when Brown was also governor, was defeated by voters in a statewide ballot measure after the issue broke down as a battle between north and south over water.

In recent months, the CEO of the Santa Clara Valley Water District, Norma Camacho, and other top staff have met with Brown administration officials to discuss the tunnels project. At the same time, the district applied for \$485 million in state bond funds to help it construct a new \$1 billion dam near Pacheco Pass. In February, the California Water Commission, whose nine members are appointed by the governor, recommended no funding for the Pacheco Dam. But two weeks ago, the agency's staff recommended the project receive full funding as part of an appeals process, and days afterward, the district staff placed a re-vote on the tunnels before the board.

Lisa Lien-Mager, a spokeswoman for the state Natural Resources Agency, said there was no quid pro quo deal.

"Those processes are completely separate, and suggesting otherwise is really misleading," she said. "The Water Commission staff has been completely transparent about its review of the Pacheco project."

District chairman Santos suggested that his agency wait to take a final vote until after July, when the state water commission board has made its final decision on using bond funds for the dam project. He said that waiting would help give the agency a better overall budget picture as it decides whether to spend \$650 million on the tunnels.

But board members who said they now support the tunnels, including Tony Estremera and Gary Kremen, said they oppose that kind of delay.

Referring to Metropolitan Water District, Estremera said: "They are going to do what they want to do. They are going to do the project. Do we want to participate or not?"

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In reversal, Santa Clara Valley Water District may provide \$650 million to Brown's Delta tunnels plan

Mercury News | April 27, 2018 | Paul Rogers

In a dramatic reversal of its stance just six months ago, Silicon Valley's largest water district has scheduled a vote Wednesday on a plan to commit up to \$650 million to Gov. Jerry Brown's controversial proposal to build two massive tunnels under the Sacramento-San Joaquin River Delta.

The shift comes amid questions over whether the Santa Clara Valley Water District struck a deal with the Brown administration to support the tunnels plan in exchange for the state funding a new dam that the San Jose-based agency wants to build near Pacheco Pass.

Brown's tunnels project — one of his two legacy projects along with high-speed rail — aims to make it easier to move water south.

In February, the staff of the California Water Commission, whose nine members are appointed by the governor, recommended against funding the Pacheco dam project. Last week, however, after officials from the water district held discussions with the Brown administration on the tunnels, the water commission's staff recommended the full \$485 million in funding for the Pacheco project that the water district had been seeking.

Dick Santos, chairman of the Santa Clara Valley Water District, said Friday that he isn't sure whether he will support the district funding the tunnels.

"I haven't changed my mind, but I'm willing to discuss the principles if people aren't on the hook for increased costs," he said. "I've got to listen. Do the benefits outweigh the costs?"

Santos said he hasn't heard whether the agency's staff discussed the Pacheco Reservoir funding as part of its talks on the tunnels with the Brown administration officials, who have lobbied the district heavily, as has the governor, to help fund the tunnels.

"That's easy to assume," Santos said. "But I haven't heard that there was that kind of a threat or offer to us."

Critics of the tunnels project, however, called the timing suspicious.

"It is interesting to note that Santa Clara's renewed interest is at the same time that the governor's water commission has just determined that Santa Clara is eligible to receive \$485 million to build a new dam," said Jonas Minton, senior water policy adviser at the Planning and Conservation League, a Sacramento environmental group. "Because all of these discussions have been behind closed doors, there's no way to confirm the suspicion that this was a back-room deal."

Minton, a former deputy director of the state Department of Water Resources, noted that if the Santa Clara Valley Water District agrees to help pay for the tunnels, homeowners in Santa Clara County could be hit with higher property taxes without a vote if the project has cost overruns, similar to the high speed rail and the Bay Bridge rebuilding projects. That's because under a legal loophole, the tunnels project is part of the State Water Project, which voters endorsed in 1960, and which pre-dates Proposition 13, the 1978 measure that requires a two-thirds vote for most property tax increases.

“Governor Brown, who is in the middle of all of this, is trying to rush through a half-baked project before his term ends in eight months,” Minton said. “Next week’s decision by the Santa Clara Valley Water District Board would obligate ratepayers and property taxpayers for decades to come.”

In a staff report, Garth Hall, deputy director of the water district, said the project would raise the water rates of customers in the urban areas of northern Santa Clara County by up to \$10.26 a month by 2033, when the tunnels would begin operations, and \$4.47 a month in the southern part of the county.

Two years ago, a majority of the district’s board said they wanted to put the tunnels question before Santa Clara County voters for a vote. No vote is scheduled, however.

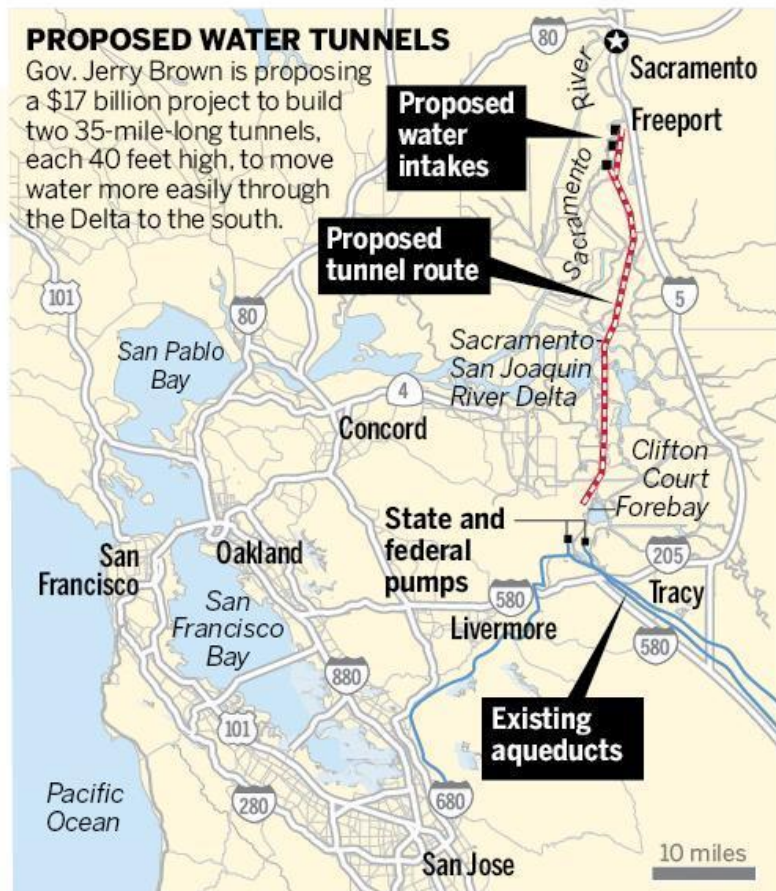
The project, which Brown’s administration has called WaterFix, would build two tunnels, each 35 miles long and 40 feet high, at a cost estimated at \$17 billion, to be paid by water agencies that participate. The idea is that they would take water from the Sacramento

River, 17 miles south of Sacramento, and move it to the huge pumps at Tracy that are part of the State Water Project, reducing reliance on those pumps.

At certain times of the year, when salmon, Delta smelt and other endangered fish swim near those pumps, courts have ruled that the pumps be turned down, or off temporarily, so they don’t kill the fish.

But critics say that the tunnels are a boondoggle that would allow large agribusiness interests in the San Joaquin Valley, as well as urban users in Los Angeles, to take more water out of the Delta, a fragile system of islands and sloughs. They maintain that would not only be a water grab from Northern California but would potentially degrade the Delta and San Francisco Bay, its wildlife and water quality.

The project had been struggling for cash after Westlands Water District, a large farm water agency in Fresno, backed out of contributing \$3 billion, citing high costs and debt risk.



Source: California Natural Resources Agency

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But earlier this month, the Metropolitan Water District of Southern California, which serves 20 million people in Los Angeles and other counties, increased its commitment to \$11 billion, giving it new momentum.

In his staff report, Hall said, that change makes the project more viable and worth another look by Santa Clara Valley Water District. The meeting is scheduled for 5 p.m. Wednesday at the district's headquarters at 5750 Almaden Expressway in San Jose.

Hall is also overseeing the district's Pacheco Reservoir project. On Friday, he referred questions to the agency's public affairs office.

The district's communications director, Linh Hoang, did not make Hall or district CEO Norma Camacho available for questions. Instead, she sent out an emailed statement from a board member, Tony Estremera.

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"There have been some significant developments recently on the California WaterFix project, so we are looking forward to staff providing us with an update as well as with information on the agreements and different approaches to participation," Estremera said in the statement.

"Our board will determine how the agreements and participation tie into our guiding principles, and what this means for our valley, as the full project is before us for consideration. We are still aiming to achieve the best outcome for Santa Clara County, and that includes investing in infrastructure to ensure our water supply for the future, while also doing our part to protect the Delta environment."

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Separating water and politics isn't easy in California

LA Times | May 5, 2018 | Bettina Boxall

The 2014 water bond included a novel funding approach designed to take at least some of the politicking out of deciding which projects get public money.

This week's tortured deliberations by the California Water Commission showed just how tough it is to do that.

By applying a complex procedure for grading proposals, the bond restricted state taxpayer spending to the pieces of a project that would provide measurable benefits to the public.

Commissioners struggled mightily with that formula as it became obvious that certain proposals were headed for little or no funding.

"This is extremely uncomfortable," commission chairman Armando Quintero of San Rafael conceded.

"To be here today and be in a position, where as much as we want to move this project forward, we can't — that is extremely hard," said commissioner Maria Herrera of Visalia.

"It would be tragic if the project died in this room tonight," commissioner Joe Del Bosque lamented as the panel prepared to vote on the Temperance Flat proposal to build a new dam and reservoir on the upper San Joaquin River.

The commission, whose members are appointed by Gov. Jerry Brown, capped three exhausting days of hearings with a round of votes Thursday that determined project funding eligibility. The panel won't make final awards until July.

The \$2.6-billion Temperance Flat project was deemed eligible for only \$171 million. The \$5.1-billion Sites proposal to construct an off-stream dam and reservoir in the Sacramento Valley fared better with \$1 billion. But that still fell nearly \$400 million short of proponents' original request.

It was clear from the onset that the 11 water storage proposals competing for state money wouldn't get all they wanted. Their requests amounted to nearly double the \$2.7 billion set aside for storage in the 2014 bond, known as Proposition 1.

The projects, from around the state, spanned the storage spectrum. They included expanding existing reservoirs in the Bay Area, storing recycled water in a San Diego County reservoir and capturing Kings River floodwaters to recharge San Joaquin Valley groundwater basins.

The commission concluded the San Diego, Kings River and one other project failed to meet the bond requirements and weren't eligible for any state money.

Temperance Flat advocates, who had requested roughly \$1 billion, suffered a major setback for a reservoir long sought by San Joaquin Valley growers.

"There is no easy road," Mario Santoyo, executive director of the San Joaquin Valley Water Infrastructure Authority, said Friday. "I would fully expect our priority will be to engage with the Trump administration to secure more dollars."

The Sites project enjoys more widespread political support than Temperance Flat. But both dam proposals ran into trouble meeting the requirements of the complicated funding formula outlined in voter-approved Proposition 1.

The measure mandates that the state in most cases pay for no more than half of a project's total cost. And the state money can be used only to underwrite a project's public benefits, such as recreation, flood control and ecosystem improvements.

Additionally, half of the state share has to pay for ecosystem improvements in the watershed of the Sacramento-San Joaquin Delta, the environmentally troubled center of California's water delivery system.

State agencies reviewed the applications to determine if — and to what extent — the projects met those requirements.

The state Fish and Wildlife Department rejected claims that the Sites and Temperance Flat projects would improve conditions for imperiled salmon runs. That especially hurt Temperance Flat's funding chances.

Commissioners repeatedly grilled — and sometimes challenged — the economic consultant and state agency staffers on their funding recommendations.

"How do you get zero?" asked Del Bosque, a San Joaquin Valley grower, referring to the finding that Temperance Flat wouldn't provide any benefit to the Chinook salmon run the federal government is trying to return to the San Joaquin River.

Again and again, Kristal Davis-Fadtke, a Fish and Wildlife Department senior scientist, told the commissioners the same thing: "The applicant has not demonstrated a net benefit."

Clearly unhappy with some of the staff recommendations, commissioner Andrew Ball of Berkeley said he refused "to be a rubber stamp" for other agencies. "The public is demanding we should move forward" on funding new water storage, he said.

Joe Yun, the commission's executive officer, pointed out that it would be legally risky to depart from the regulatory framework established by the bond. "If you just ignore what the agencies have told you and what's on the record, I think that's a very short road," he said.

Commission vice chair Carol Baker of Sacramento similarly said the panel didn't have much wiggle room. "We have some areas of flexibility. But for the most part we are bound within the law and regulation."

Ultimately, the commission voted 4 to 3 to accept the staff recommendations on the Temperance Flat and Sites funding. Commissioner Daniel Curtin of Sacramento, who earlier in the hearings pushed to give more money to many of the projects, was absent for the Thursday votes.

The commission approved full funding requests from several projects. Those include expansions of the Los Vaqueros and Pacheco reservoirs in the Bay Area and a Sacramento County project that would use recycled water to irrigate crop land and recharge the regional aquifer.

A Southern California proposal to expand the Chino Basin water recycling program and reduce the basin's use of imported delta supplies was approved for roughly half its original request.

The challenge of California water "is that we expect more than there is to get," said Doug Obegi, a Natural Resources Defense Council attorney who attended the hearings.

"Prop 1 tried to depoliticize that by making it about specific public benefits. But over and over again you saw the commission struggling with the broader implications."

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Commission Moves Step Closer to Funding Prop 1 Water Storage Projects

Maven's Notebook | May 4, 2018 | California Water Commission

The California Water Commission on Thursday determined the [public benefits and eligible funding amounts](#) for 11 proposed water storage projects, taking another step toward awarding close to \$2.7 billion in funding to help expand the state's water storage capacity

The decisions capped a three-day meeting in Sacramento in which the Commission heard staff recommendations as well as comments from funding applicants and the public. Eight of the 11 projects will move forward to the next phase of project scoring, while three were deemed ineligible.

"We appreciate the dialogue with applicants and the public this week, and the Commission shares their desire to fund as many eligible projects as possible," Commission Chair Armando Quintero said. "While our decisions mean some projects will not be eligible for their full ask due to the requirements of Proposition 1, at the end of this process we will be kickstarting a variety of projects that add significant water storage for California's future."

Proposition 1, approved by voters in 2014, funds the public benefit aspects of water storage projects: specifically, ecosystem improvement, water quality improvement, flood control, recreation and emergency response. Applications for Proposition 1 funding must detail these public benefits, along with a measurable benefit for the Delta, to receive funding.

The Commission made decisions on each project's public benefit value to calculate that project's public benefit ratio, which is one of four component scores that will be used to determine eligibility for Proposition 1 funding. The ratio is the value of the public benefits divided by the applicant's funding request.

The value of the public benefits also determines the maximum eligible funding each project can receive from the program due to limits set in Proposition 1. The combined maximum eligible funding for proposed projects now totals \$2.819 billion, which is greater than the available Proposition 1 funding. The Commission voted to allow applicants to confirm or adjust their funding request by 5 p.m. Wednesday, May 9. Adjusting the funding request can change the public benefit ratio.

On May 25, staff will release recommendations for the remaining component scores: relative environmental value, resiliency and implementation risk. The Commission will make final decisions on those scores at its June 27-29 meeting. Preliminary award decisions will be made at the Commission's July meeting.

The diverse range of projects under consideration include expanding existing reservoirs, boosting groundwater storage and building new surface water storage facilities.

Proposition 1 dedicated \$2.7 billion for the water storage program. As noted at the beginning of the application process, 2 percent of that amount is set aside for bond financing and 2.5 percent is set aside for state administrative costs over the life of the program, so the total funding available is \$2.582 billion.

A summary of the Commission's determinations is below. Additional detail is available [here](#).

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Work begins on \$10 million Alameda Creek fish ladders

East Bay Times | April 26, 2018 | Joseph Geha

FREMONT — Denied access to their natural spawning grounds in the Alameda Creek watershed for roughly 50 years, threatened fish species will soon be able to migrate upstream when two multi-million dollar fish ladders are completed.

A groundbreaking for the first of two ladders — which have been in the conceptual and planning stages for 20 years — was held this week along the banks of Alameda Creek in Fremont with officials from the Alameda County Water District, as well as other local and state agencies present.

The grant-funded ladder is one of two scheduled to be built in the creek by late 2021, allowing steelhead trout and chinook salmon to move upstream, where they have historically been denied access by rubber dams and a concrete structure built to control flooding in 1972.

The ladder construction represents a shift in priorities for local and state agencies, which have aggressively pursued ways to restore Alameda Creek, where it may have been written off in the past, said Jeff Miller, founder of the advocacy group Alameda Creek Alliance.

“It’s kind of a start of a new pretty exciting chapter for restoring Alameda Creek. ... We’re going to have salmon and steelhead back in the watershed,” he said.

“Despite the delay, and how long it’s taken to get these ... I think we’re set up really well for the next phase of trying to restore the creek.”

The first ladder the water district is building is just west of the Mission Boulevard overcrossing in the Niles district of Fremont, allowing passage around a rubber dam. The second ladder, which should start construction in 2019, is about a mile downstream at the concrete structure, called a weir.

The two ladders are funded by nearly \$10 million in grants from several agencies, including \$5.36 million from the California Wildlife Conservation Board and \$3 million from the California Natural Resources Agency, the district said.

Steelhead trout and Chinook salmon, in their natural rhythm, are born in freshwater areas, spend their early years there, and then migrate to the Pacific Ocean to live as adults before eventually returning to their home stream to spawn.

“A fish ladder is actually a series of pools which go up about one foot in height, and that allows them to get up and around our dam,” said Shane O’Nesky, project engineer with the water district.

The fish will use the shorter “jumps” to access the upper watershed in the eastern foothills of Alameda County, where they can spawn.

Steelhead trout are a federally listed threatened species in the Central California Coast region, which includes the local population.

Sean Cochran, an environmental scientist with the California Department of Fish and Wildlife, said Monday the return of the trout to the upper reaches of the watershed habitat could have a significant impact on the ability of the fish to rebound locally and regionally.

“This is kind of one of the key watersheds that has been identified that could potentially serve as a great restoration opportunity,” he said of the creek. “This is going to essentially allow them to re-establish a population where they are able to naturally migrate back and forth.”

The benefits are not just for the fish, however.

Because the ladders will be built to allow the rubber inflatable dams to stay, the water district will be able to continue water management in the creek, including monitoring groundwater levels.

The Alameda Creek watershed supplies about 40 percent of the water to the district’s 351,000 residential and business customers in Fremont, Newark and Union City.

Other improvements have been made along the creek over the years leading up to the building of these ladders, according to Evan Buckland, a water supply supervisor for the district.

Fish screens have been installed in several locations to help shield fish from being pulled away from the stream into holding ponds, and the San Francisco Public Utilities Commission as well as East Bay Regional Park District have removed some rubber dams farther upstream.

Miller, of the alliance, said while there is still plenty of work to be done, he is optimistic about the changes, which will benefit fish, other wildlife and people.

“Alameda Creek, for an urban stream, has a pretty unique opportunity to bring these kinds of fish, these ocean ambassadors that kind of tie together everything,” he said.

“What happens in the ocean, what happens in the stream, up on the landscape, all affects the creek habitat. So it really ties together a lot of issues about sustainability and whether we can coexist with nature in an urban watershed like this,” Miller said.

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How California Water Suppliers Are Getting Earthquake-Ready

Water Deeply | April 19, 2018 | Alastair Bland

Californians know another “big one” will be coming someday. In preparation, the state’s major water suppliers have been working to seismically retrofit key infrastructure, but vulnerabilities remain.

As is often said, it’s not a matter of if, but of when, a large earthquake strikes the heart of one of California’s most densely populated regions. State officials and local agencies know the clock is ticking, and mile by mile, pipe by pipe, work crews are replacing or retrofitting water lines throughout much of the Los Angeles and San Francisco Bay areas. Upgrades have also been made in the Sacramento-San Joaquin Delta, the heart of the state’s water distribution system, where potential levee ruptures have made water officials uneasy for decades.

The San Andreas Fault, which generated the 1906 (7.9 magnitude) and the 1989 (6.9 magnitude) Bay Area earthquakes, could potentially produce a quake greater than 8.0. However, the Hayward Fault is widely considered the greater threat at this moment in geologic time. Scientists consider a 7.0 magnitude quake to be the largest likely to occur on the Hayward Fault, an offshoot of the San Andreas that runs through San Jose, Oakland, Berkeley and Richmond. The Hayward Fault hasn’t slipped significantly since 1868, and experts say it’s overdue for the proverbial “Big One.”

In the historical and global context, 7.0 isn’t huge, but if it strikes a heavily populated area, the damage could be significant. About 5,000 water connections that cross the Hayward Fault, as well as several critical water mains, could potentially be sheared in half by a powerful temblor, according to Richard Sykes, director of natural resources for the East Bay Municipal Utility District. That’s just within East Bay MUD’s service area. San Francisco’s water supply, sourced from Hetch Hetchy Reservoir in Yosemite National Park, also travels through large pipes that cross major East Bay fault zones. Several of its reservoirs, including Crystal Springs, San Andreas and Calaveras, sit literally on the San Andreas and Calaveras faults, with the water actually contained within the linear depressions created by these tectonic plate boundaries.

“It’s sort of a joke here that two of our reservoirs are named after faults,” said Steven Ritchie, the San Francisco Public Utilities Commission’s assistant general manager for water.



Firefighters extinguish a fire in the Marina District in San Francisco after a quake erupted on October 17, 1989, killing an estimated 63 people. (Jonathan Nourok/AFP/Getty Images)

To protect the water supply of their collective 4 million customers, both East Bay MUD and the San Francisco PUC have protected their water mains with clever engineering systems that allow the earth to shift around the pipes, which range from 6 to 9ft in diameter, without damaging them. One of the San Francisco PUC's major pipes is fitted with ball joints and slip joints that allow the steel-lined tube to shift and move without breaking.

San Francisco PUC's ongoing upgrades are part of the \$4.8 billion Regional Management Program, of which a key element is major seismic upgrades.

Among East Bay MUD's major supply pipes, critical sections in high-risk fault zones have been retrofitted so they can shift and flex within spacious concrete tunnels.

"The pipe is on rollers so that when that offset occurs, it can move with the shifting earth," said Andrea Pook, an East Bay MUD spokesperson, referring to a 2,000ft section of pipeline bored through the East Bay Hills.

"That tunnel could actually shear, but without shearing the pipe itself," Sykes added.

For the unlikely event that the main water line is ruptured, East Bay MUD keeps a six-month supply of reservoir water ready on the west side of the hills.

In Southern California, the Metropolitan Water District also has a six-month backup supply of water at hand, stored in reservoirs on the west side of the San Andreas Fault.

"That will buy us time to make any necessary repairs," said Gordon Johnson, Metropolitan's chief engineer.

He said his district began seriously seismically upgrading reservoirs, dams and various structures following the San Fernando earthquake of 1971, an early morning 6.7 magnitude quake that tore the region apart, killing 64 people and destroying freeways, sewer lines and thousands of buildings.

Now, he said, the agency – which delivers water to about 12 million people – is working on strengthening canals, aqueducts and pipelines. The district, in conjunction with the California Department of Water Resources and the City of Los Angeles, has formed a "seismic task force" that is currently identifying weak spots in the local water supply system and developing emergency response plans.

The preparations include stockpiling repair equipment and materials near likely rupture locations on numerous local faults. And two projects now in the works aim to seismically protect the Colorado River Aqueduct, as well as a 7ft-wide pipe that delivers treated water to several million people north of Long Beach.

The federal government also has its eye on California and its shifting tectonic plates. The U.S. Bureau of Reclamation has seismically retrofitted seven dams, according to Steve Melavic, the agency's mid-Pacific region chief engineer. More upgrades, he said, are in the works.

Meanwhile, the California Division of Safety of Dams has mandated extensive upgrades to dams. Over the past two decades, inspections by the state agency – a branch of the Department of Water Resources – have resulted in dam owners spending more than \$1.5 billion on repairing and upgrading dams to protect them from seismic risks, according to Erin Mellon, a spokesperson with the Department of Water Resources. Experts with her agency were unavailable for a phone interview, and questions sent via email about seismic upgrades in the Sacramento-San Joaquin Delta were not answered.

According to Sykes at East Bay MUD, the Department of Water Resources has provided his district with a \$35 million grant to upgrade Delta levees that specifically protect the Mokelumne Aqueduct, which passes through the estuary. Sykes said upgrades to levees are generally made in accordance to the standards of the U.S. Army Corps of Engineers.

At the University of California, Los Angeles, Scott Brandenburg, a professor in the Department of Civil and Environmental Engineering, has extensively studied the delta and its levees. He said the earthen barriers, which protect and contain more than 1,000 maze-like miles of critical water supply channels, are not threatened as much by the Hayward and San Andreas faults as they are by more localized ones like the Dunnigan Hills Fault, the Gordon Valley Fault and the Midland Fault.

“These faults wouldn’t be capable of producing a 7.8 earthquake, like the San Andreas, but they could still cause strong shaking and serious damage,” he said.

One or more levee ruptures in the Delta could potentially flood freshwater supplies with saltwater – which would be a disaster for the state. These levees are vulnerable for a variety of reasons. For one, Brandenburg said, many were built on peat, which is soft and can become more so during an earthquake. In places, the levees are built of sand, which can essentially liquefy during intense shaking.

“I don’t think any improvements to these levees have made them earthquake-proof,” he said.

All in all, he said, the system is very fragile. In fact, the Delta’s vulnerability to earthquake damage is among the main arguments for building the controversial Delta tunnels. This system would move water under the Delta and connect it to the pumps at the south edge.

“It’s much easier to protect and maintain a system like that,” Brandenburg said. ■

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