BAY AREA WATER SUPPLY AND CONSERVATION AGENCY
BOARD OF DIRECTORS MEETING

March 13, 2020

Correspondence and media coverage of interest between February 2, 2020 and March 8, 2020

Correspondence

To: The Hon. David Bernhardt, Secretary, Department of the Interior
From: The Hon. Gavin Newsom, Governor, State of California
Date: February 17, 2020
Subject: Sacramento-San Joaquin Bay Delta

To: SFPUC Wholesale Customers
From: Steven R. Ritchie, Assistant General Manager, Water, SFPUC
Date: February 28, 2020
Subject: Update to Water Supply Availability Estimate

Media Coverage

Water Supply Conditions:

Date: March 3, 2020
Source: New York Times
Article: California Had Its Driest February on Record. Here's How Bad It Was.

Date: March 1, 2020
Source: California Water Blog
Article: California's Driest February and Coming Drought?

Date: March 1, 2020
Source: CapRadio
Article: Drought in California Seems Inevitable. But Experts Say Don't Panic.

Date: February 27, 2020
Source: Los Angeles Times
Article: California snowpack depleted amid what could be a record-dry February

Water Policy:

Date: March 5, 2020
Source: Modesto Bee
Article: Many would be left behind in Governor Newsom's voluntary water agreements

Date: February 27, 2020
Source: The Guardian
Article: Everything you need to know about California's historic water law

Date: February 24, 2020
Source: The Sun
Article: Bernhardt fires back at Newsom over Calif. water lawsuit

Date: February 23, 2020
Source: Modesto Bee
Article: Don't be fooled, Modesto farmers – Trump's California water plan doesn't help you

Water Policy, cont'd.:

Date: February 21, 2020
Source: KQED
Article: It's Finally On: California Files Lawsuit to Block Trump Administration Water Rules

Date: February 2, 2020
Source: MyMotherLoad.com
Article: Tri-Dam Partners Send Lawmakers Complaint Letter over Newsom Proposal

Water Infrastructure:

Date: February 29, 2020
Source: California Water News Daily
Article: Reclamation and Contra Costa Water District advance plan to increase water reliability

Date: February 27, 2020
Source: San Francisco Chronicle
Article: Editorial: A warning for Bay Area dams

Date: February 26, 2020
Source: Mercury News
Article: Feds order Santa Clara County's biggest reservoir to be drained due to earthquake collapse risk

Date: February 25, 2020
Source: San Francisco Chronicle
Article: Dozens of high-risk Bay Area dams lack required emergency plans

Date: February 19, 2020
Source: SF Gate
Article: Here's who bought 787-acre Bay Area ranch in same family for more than 100 years

Date: February 17, 2020
Source: Times of San Diego
Article: City of Oceanside to Break Ground on Pure Water Oceanside

Date: February 12, 2020
Source: Sacramento Blog News and Review
Article: One tunnel, same distrust

Water Supply Management:

Date: March 8, 2020
Source: Bakersfield.com
Article: LOIS HENRY: Collaboration is the new game in California water

Date: March 6, 2020
Source: Mercury News
Article: Why California should support Delta tunnel proposal

OFFICE OF THE GOVERNOR

February 17, 2020

The Honorable David Bernhardt
Secretary of Department of Interior
1849 C Street, NW
Washington, DC 20240

Dear Mr. Secretary,

As you travel to California this week to engage in water policy discussions, I want to underscore my commitment to protecting our environment while maintaining our state's economic vitality. Over the last year, we have set a pathway to improve the health of our waterways and recover our fish populations while building water supply reliability. In this effort, we have benefited from the engagement of federal agencies.

Our endangered salmon and other native fish populations are imperiled and in urgent need of our help. In response, we need to take extraordinary action. At the same time, our farmers face major water constraints as they bring groundwater use into balance and our growing communities need reliable water. Our actions must balance these needs.

For more than a year, we have worked together to find a comprehensive solution for the Sacramento-San Joaquin Bay Delta, which are voluntary agreements to immediately improve environmental conditions, create more certainty for the 35 million Californians who depend on these water sources, and maintain the economic vitality of the Central Valley. Federal agencies' engagement in this effort has been critical to establishing a framework for these agreements and remains crucial as we flesh-out this framework into detailed agreements.

Since November, our state and federal agencies have been working to bridge significant differences regarding the proposed federal Biological Opinions—the rules that govern water infrastructure in the Bay Delta to protect endangered fish. Our dialogue has generated progress toward an aligned approach that provides appropriate flexibility to move water in certain wet conditions while doing all that is needed to adequately protect imperiled fish. We have not yet fully resolved our differences as federal agencies prepare to take action to activate these new rules. However, we remain committed to working to resolve these remaining differences in coming weeks and months.

Finding common solutions to these complex water challenges is essential. Our intertwined state and federal infrastructure demand harmonized management. Our water users rely on us to work together to reliably provide water. Recovering our fish populations requires

our state and federal environmental agencies to work together and use all tools at their disposal.

As our respective agencies roll-out actions this week, I want to convey our commitment to staying engaged and working to find a shared path forward that protects our environment in a way that enables continued economic prosperity.

Sincerely,

Gavin Newsom
Governor of California

CC:
Brenda Burman, Commissioner, United States Bureau of Reclamation
Ernest Conant, Regional Director, United State Bureau of Reclamation
Paul Souza, Regional Director, United States Fish and Wildlife Service
Barry Thom, Regional Director, National Marine Fisheries Service
Jared Blumenfeld, Secretary, California Environmental Protection Agency
Wade Crowfoot, Secretary, California Natural Resources Agency

San Francisco
Water Power Sewer
Operator of the Hetch Hetchy Regional Water System

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TO: SFPUC Wholesale Customers

FROM: Steven R. Ritchie, Assistant General Manager, Water

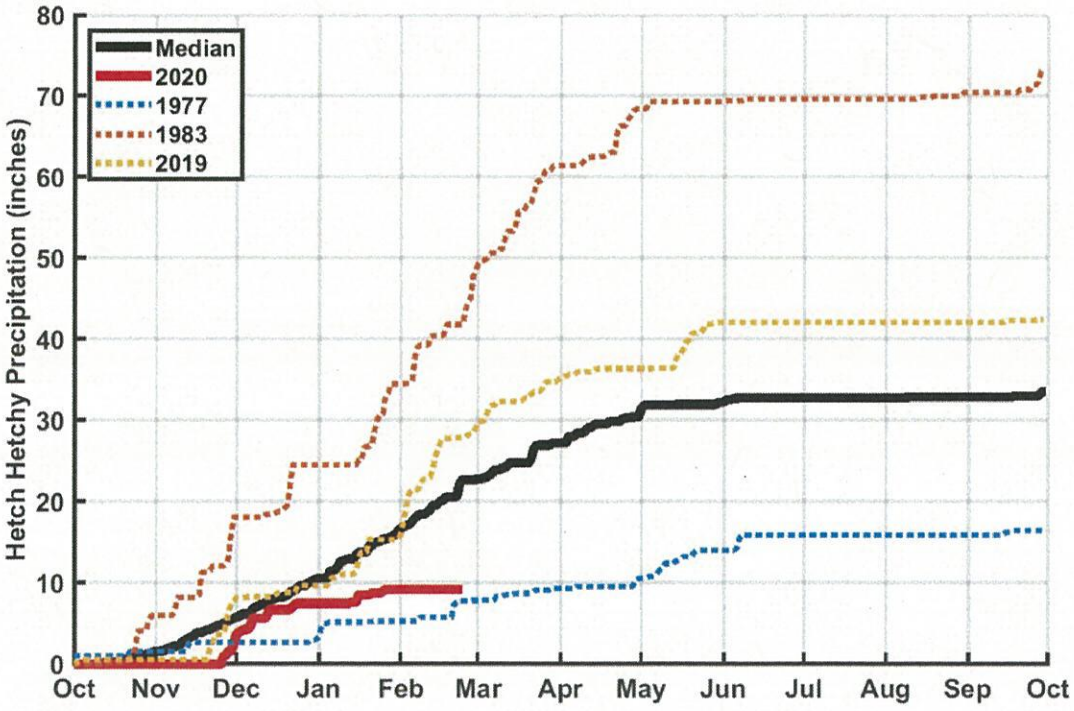
DATE: February 28, 2020

RE: Update to Water Supply Availability Estimate

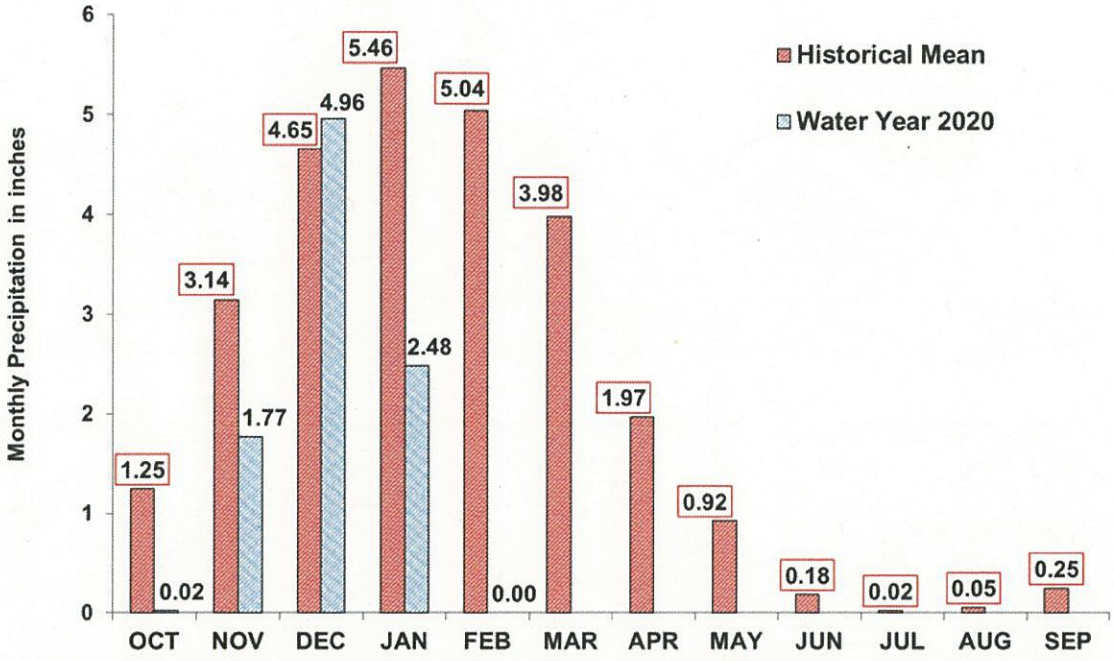
This memo provides an update to the initial water supply availability estimate provided on January 31, 2020 and the current hydrologic conditions.

The January memo described a water year with a mix of wet and dry conditions. This memo is being written as the Hetch Hetchy watershed will record the driest February on record. Hetch Hetchy precipitation is 40% of average to date. The charts below show the precipitation through February at Hetch Hetchy and in the local watershed which has been just as dry this month.

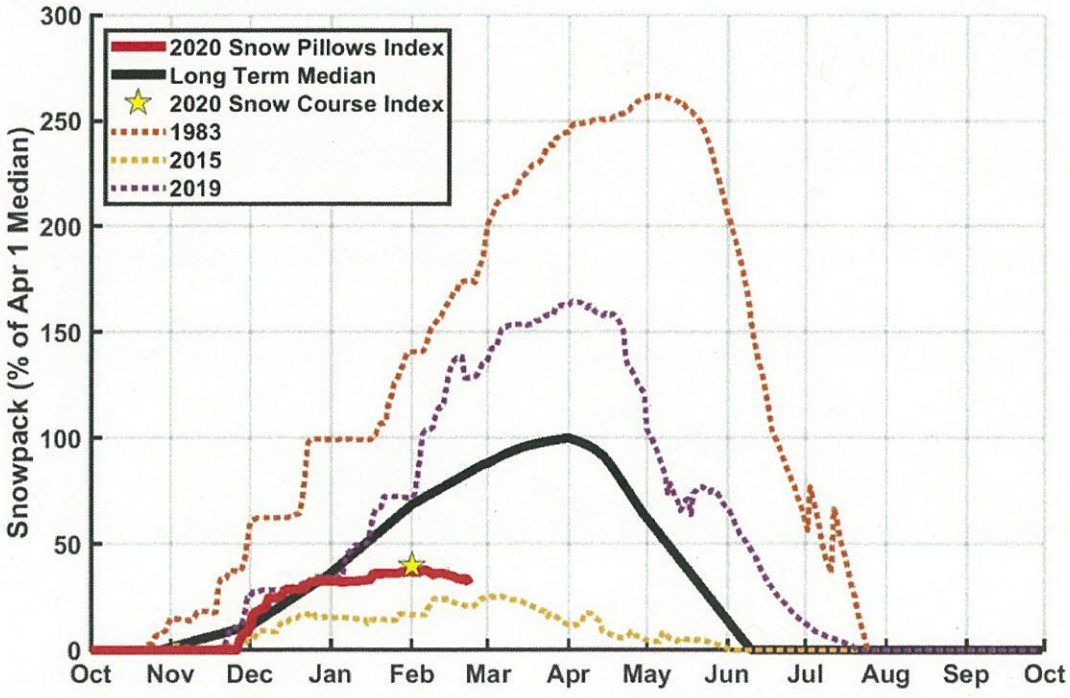
Hetch Hetchy Precipitation (as of midnight 2/24/20)



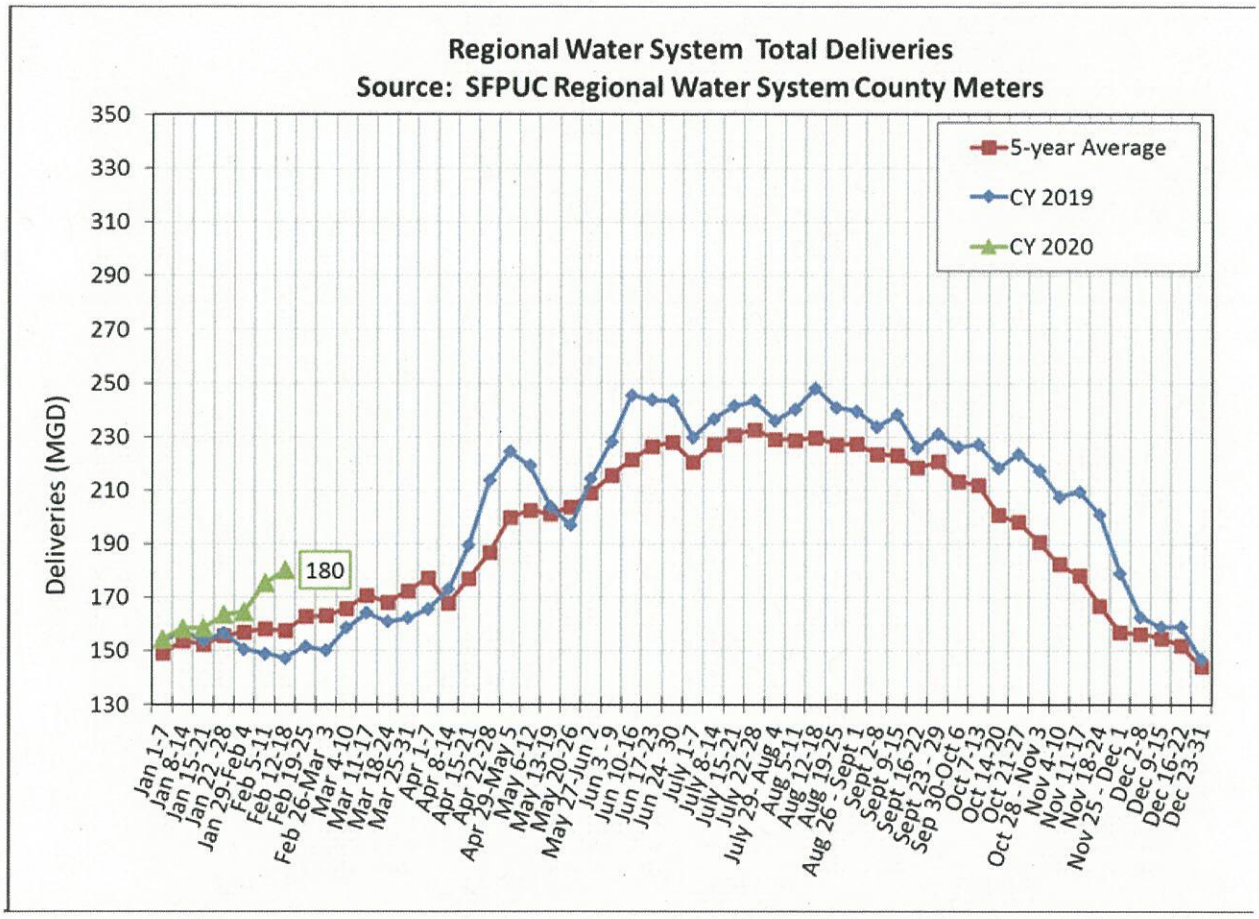
Bay Area 7-station Precipitation Index as of February 23, 2020



While the February snow course data has not been compiled yet, the snow pillow information indicates the snowpack is about 40% of the average April 1st peak snowpack as indicated in the chart below. Despite the meager snow pack, there is still a high probability that Hetch Hetchy reservoir will fill this year.



As a result of the dry weather, winter demands in the service area have been relatively higher than last year, as seen in the chart below, principally due to outdoor irrigation. The two-week forecast does show a change in the weather pattern which we hope will bring precipitation to the Bay Area and Hetch Hetchy and will result in a reduction in outdoor irrigation.



At present, the SFPUC does not intend to formally request demand reductions but March and April will be critical months for precipitation. The SFPUC encourages our customers to continue to promote water conservation strategies to get through the dry winter. We will provide a final water supply availability update by mid-April, following the final snow course report.

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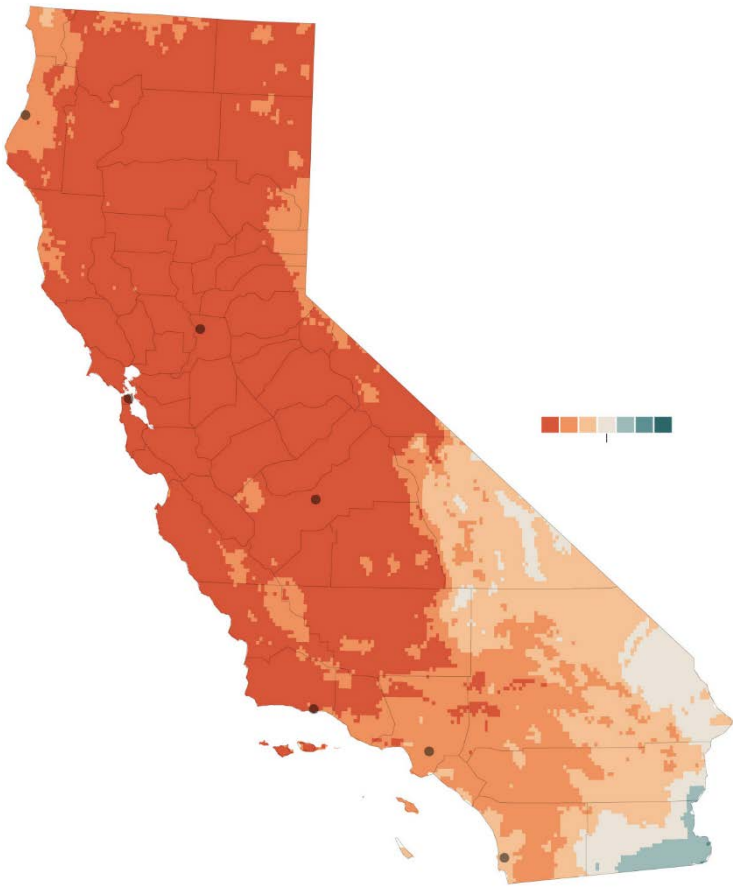
California Had Its Driest February on Record. Here's How Bad It Was.
New York Times | March 3, 2020 | Kendra Pierre-Louis and Nadja Popovich

Not a drop of rain fell in downtown San Francisco this February. Or in Big Sur State Park. Or in Paso Robles. February in California was so dry that it is raising concerns that the state, which, according to the National Drought Mitigation Center, only fully emerged from drought last March, may be headed for another one.



Precipitation totals from Feb. 1 to March 1, 2020, are shown relative to average precipitation totals for the same period between 1979 and 2015.·Source: Climate Mapper

"It was the driest February on record," said Daniel Swain, a climate scientist with the Institute of the Environment and Sustainability at the University of California, Los Angeles.

Ordinarily, 90 percent of California's rain falls during the seven-month period between Oct. 1 and April 30, with half of the state's total precipitation falling during December, January and February. The rains that come in February are part of a seasonal pattern that nourishes plants, replenishes reservoirs and, in the Sierra Nevada mountains, restores the snowpack that provides up to 30 percent of the state's drinking water.

But this February "was not just merely a below average month," Dr. Swain said. "It was, in a lot of places, a completely dry month, which is truly extraordinary."

The lack of snow and rain in February comes after a January that was also drier than average, and a record dry autumn for much of Northern California. A series of storms dumped a considerable amount of snow in late December, raising hopes that this winter might proceed normally. But that now seems less likely.

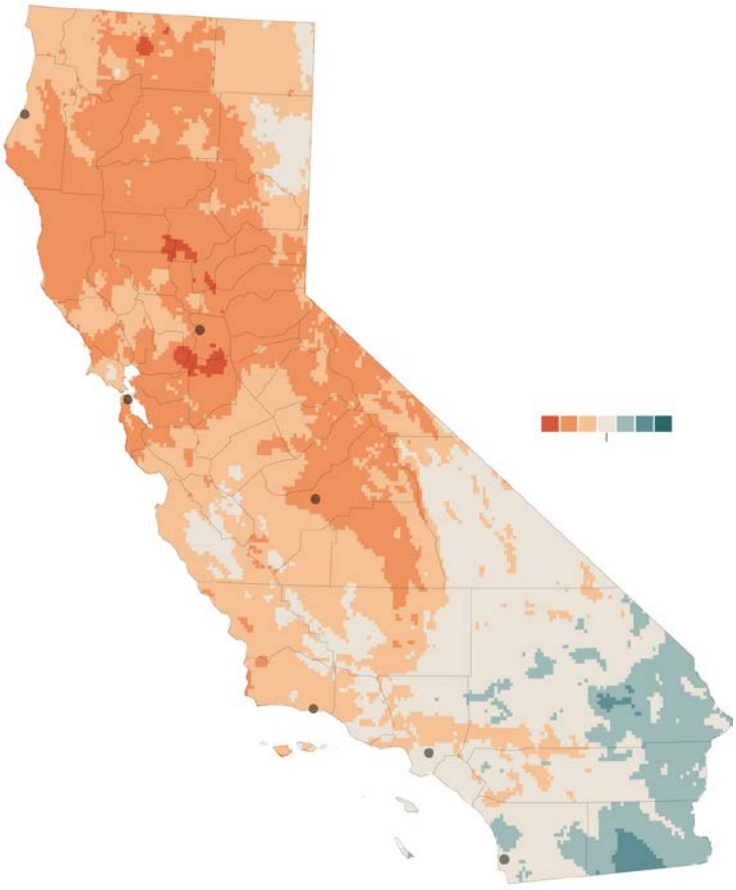
"There's sort of this myth of the miracle March in California, which refers to a couple of specific years in which the winter was extremely dry and then March came along and there was just this unceasing deluge for a few weeks in a row," Dr. Swain said.

In those years, the rainfall erased a large part of the water deficit. But this year has been so dry that the state would need record breaking rain and snow in the next few months to make up for the shortfall.

The United States Drought Monitor, a joint project by federal agencies, including the National Oceanic and Atmospheric Administration and the Department of Agriculture, releases drought maps weekly. They currently show much of the state as either abnormally dry or in moderate drought.

As of March 1, according to the California Department of Water Resources, the state's snowpack was 44 percent of normal. In the Southern Sierras, the percentage was only 40 percent.

The state had a very dry winter and a dry autumn, too.



Precipitation totals from Oct. 1, 2019 to Mar. 1, 2020, are shown relative to average precipitation totals for the same period between 1979 and 2015.·Source: Climate Mapper

The lack of moisture is coming at a time when the state needs more water, not less. January and February weren't just unusually dry, they were also unusually warm. On Feb. 27, for example, the temperature at the Los Angeles International Airport hit 85 degrees Fahrenheit, or about 29 Celsius, breaking a record of 83 degrees Fahrenheit that was set in 1992.

"In recent weeks there have actually been a number of days with spring or even summer-like temperatures in the 70s and 80s throughout a lot of California, which were daily record high temperatures for a portion of February," Dr. Swain said.

The hotter temperatures, which are associated with climate change, dry out soil, making moisture less available to plants and increasing wildfire risk. The state has already

seen an uptick in reported fires, according to The California Department of Forestry and Fire Protection, or CalFire, which responds to reports of wildfires.

Between Jan. 1 and March 1, the agency has “responded to 381 of those calls already,” Scott McLean, Cal Fire’s deputy chief of communications, said. Last year over the same time period, it responded to 105 reports. Over the past five years, the average number of wildfire reports during the first two months of the year was 279 calls, putting this year at roughly 35 percent above average.

It is too soon to tell what this will mean once summer hits, “but this is a group effort by everybody in the state of California to be prepared,” Mr. McLean said. The department is educating residents on fire risk, including maintaining space around their properties that firefighters can use to defend against fire, and sending out firefighters to reduce dead brush or overgrown plants that could easily ignite, as well as preparing firefighting equipment.

But increasingly, those preparations may need to take the long view. There’s growing evidence that, in a warming world, the state’s overall levels of precipitation won’t decline but the distribution of precipitation will change. That is: the drier years will be drier, and the wetter years will be wetter and the state will need to find ways to cope.

“Portions of California have experienced both their driest years on record and their wettest years on record in the past 10 years,” Dr. Swain said.

And California is not the only state in the region facing these sorts of issues. The United States Drought Monitor is also showing that much of Oregon, Washington State and Nevada are also currently experiencing abnormally dry conditions.

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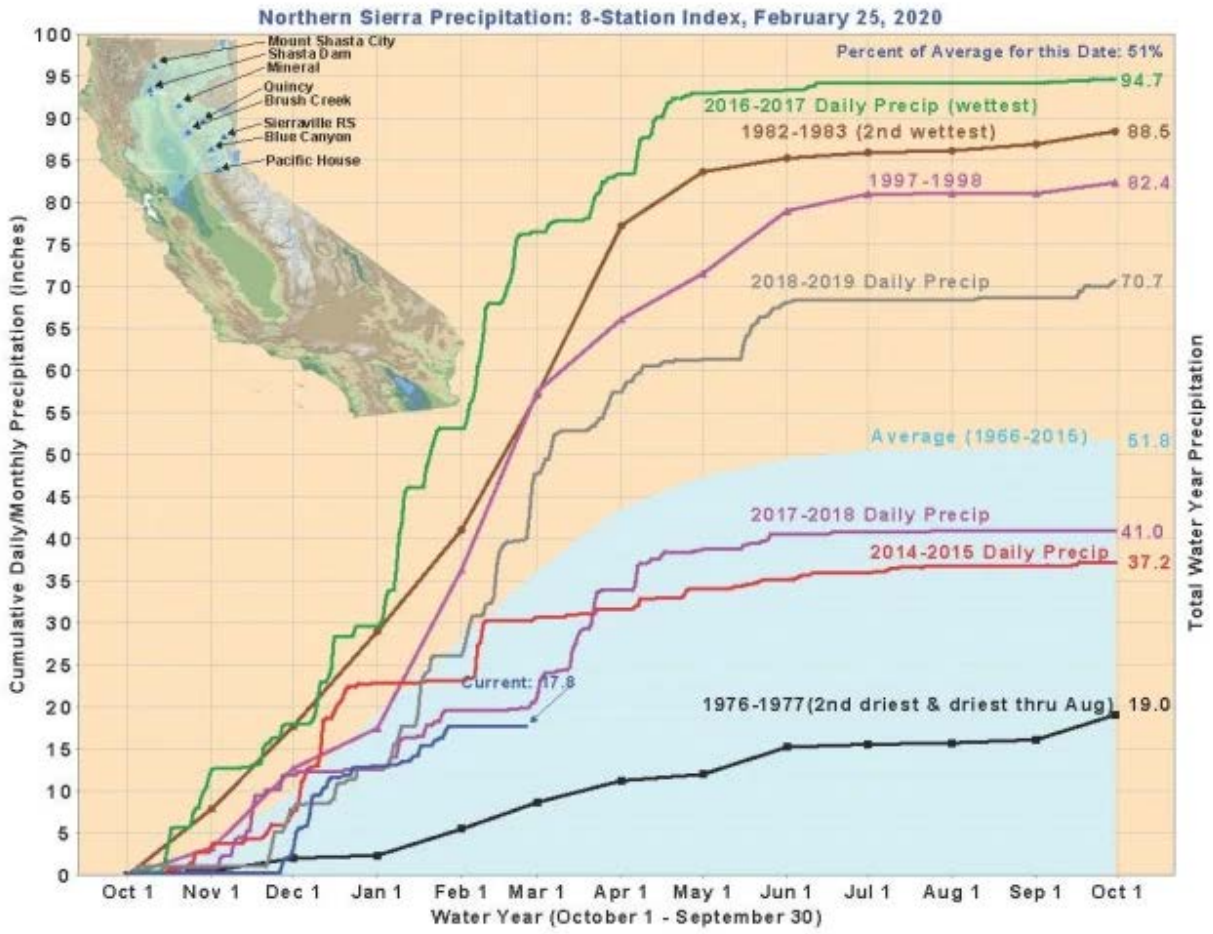
California's Driest February and Coming Drought?
California Water Blog | March 1, 2020 | Jay Lund



February has been amazingly dry in California, if anyone hasn't noticed. No precipitation at all in February, a dry forecast, about 51% of seasonal Sacramento Valley precipitation (a bit less for the San Joaquin and Tulare basins), and only about half (45-57%) of normal snowpack for this time of year. Unless March is wet, this dry year seems likely to advance the onset of the fire season and threaten forest health this year.

Reservoir levels are still not bad for this time of year. Many are fuller than average, perhaps reflecting some snowpack loss. Some other reservoirs are a bit low. This is inherent in the first year of a drought, low precipitation and snowpack, but mostly ok reservoirs.

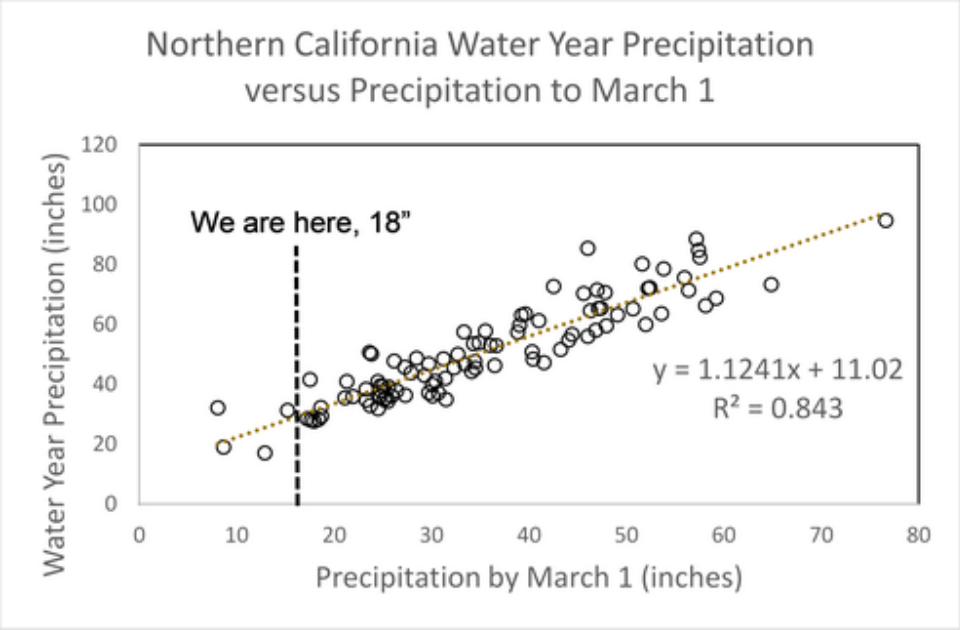
Groundwater has recovered somewhat from the previous 2012-2016 drought, better in the north, but less in the state's more overdraft-prone areas in the San Joaquin and Tulare basins.

USBR recently released a sobering contract allocation: 100% north of the Delta and 100% for San Joaquin Valley settlement contractors, but only 15% for Westlands and 20% for more reliable Class 1 Friant water contracts (zero for Class 2). These folks, and others in the San Joaquin and Tulare basins, will be looking to buy water and are likely to pump more

groundwater. In the height of the 2012-2016 drought, these areas pumped about 6 million acre feet (maf)/year or more, on top of an average annual overdraft of almost 2 maf in these regions.

Several dry years will be tougher, again, on farming, and deepen groundwater depletion, making it tougher to comply with SGMA's call for recovering 2014 groundwater levels by 2040. This will increase interest in Delta and upstream diversions, with implications for Delta and environmental flow discussions and policies.

What is the likelihood of 2020 being a drought year (below normal, dry, or critically dry)? This seems quite likely. The plot below has Annual precipitation vs. Precipitation before March 1 for 101 water years. Given how unusually dry February and the rest of the year has been, March and April are unlikely to save us from some form of dry year. (Still, in the 4th year of drought, 1991 had a "miracle March", with three times average March precipitation, but this is unlikely).



Is 2020 is the start of a multi-year drought? This is much less likely, but more likely than we'd like. The dryness of subsequent years in California have pretty low correlations, overall. By definition half of years have less than the median runoff. Of 112 years of Sacramento Valley runoff records, 56 years had less than median runoff, 30 times had adjacent 2 years with both less than median, 18 times had 3 sequential below-median years, 10 times of 4 sequential below-median years, 4 times of 5 sequential below-median years, and 2 times of 6 sequential below-median years. This understates correlation a bit because longer droughts can have rosier years interspersed, but it makes the point that multi-year droughts are far from certain after one dry year, and that drought-year correlations are not terribly high on the scale of a few years. Recent apparent changes in climate make historical statistics less firm, of course, but are likely better than a blind guess.

Is 2020 a continuation of a longer drought, from 2012 or even 2007? Given the diverse aspects of California's water system, this is undoubtedly true for some areas and in some aspects.

Lovers of drought statistics will revel in this question, some of which will be interesting and even useful. From a surface reservoir perspective, no, because essentially all reservoirs have refilled. From a groundwater perspective, one can argue we are in more than a century of drought, without refill, in some areas. (When tortured enough, drought statistics can confess almost anything.)

What to do now? Hope for the best and prepare for the worst, as should be done every year in managing water in California's highly variable hydrology.

Given the high likelihood of a drier year and the likelihood of a drought, it is not a bad time for state, federal, and local agencies to prepare and digest some lessons from the last drought, and maybe prepare some drought exercises ("dry runs", so to speak) to local, state, and federal agencies get better acquainted. Many agency water leaders retired (or fled) at the end of the 2012-2016 drought (who can blame 'em). It may already be time, after 4 wetter years, for the next generation of water managers to cut their teeth on drought management.

Whether 2020 is a drought year of not, California will be seeing another major drought. Given the difficulty and centrality of Delta operations during drought, now might be a good time for the state to develop a multi-agency Delta drought plan.

Don't panic, and don't be complacent. Prepare carefully.

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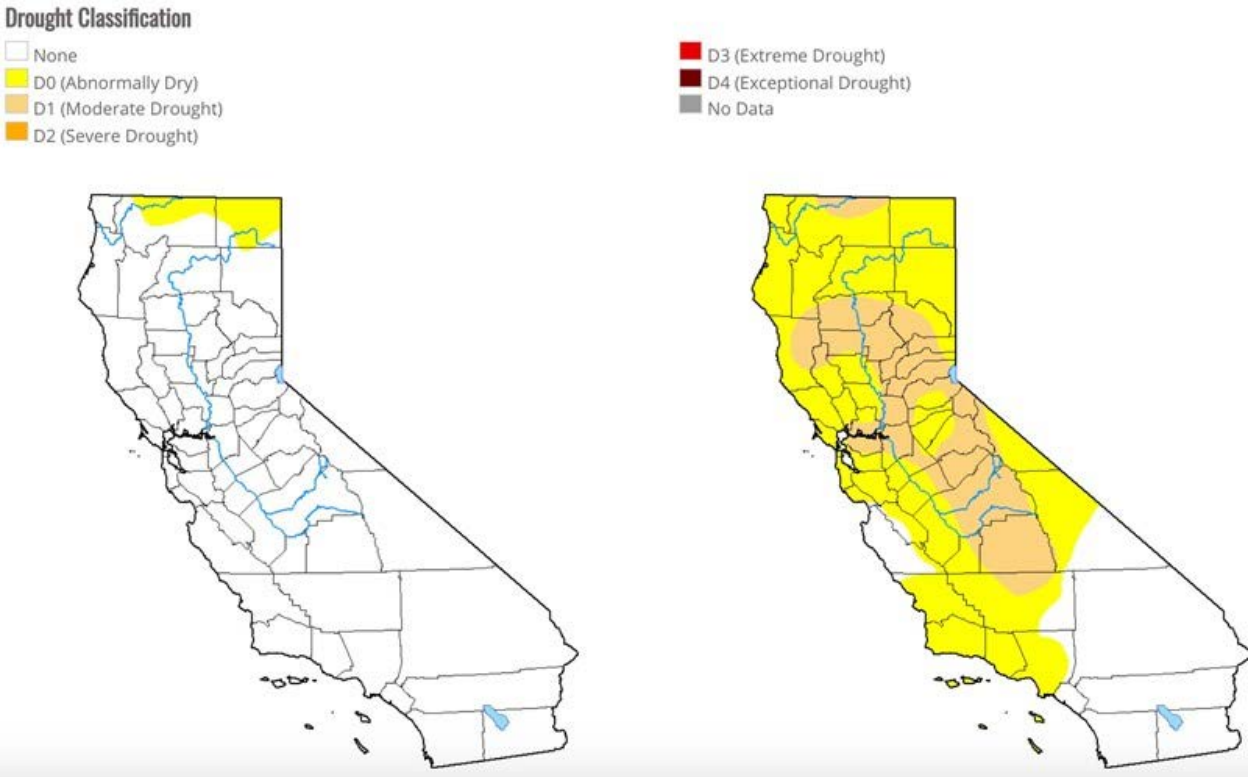
Drought In California Seems Inevitable. But Experts Say Don't Panic.
Capradio | March 1, 2020 | Ezra David Romero



A comparison of the level in drought in Calfornia from January 7 to Feb. 25, 2020. The National Drought Mitigation Center, University of Nebraska-Lincoln

Some communities in California just experienced the driest February ever, and there's around an 80 percent chance the state will enter a full-blown drought this year.

If that happens, it could be the third-driest year in over a century, according to modeling by the Center for Watershed Sciences at UC Davis.

But even though around a quarter of California is undergoing moderate drought conditions experts say it's too early to panic — they say a second year of drought is where things get dicey.

"The first year of a drought is really mostly a wake-up call," said Jay Lund, the center's director. "It will be prudent, if this turns out to be a dry year, for us to prepare for it to be a longer drought."

But Lund says to not overlook that California's climate is variable. Droughts are normal, but with climate change they're intensifying — as the state saw during the previous drought from 2011 to 2017

Possible rain in March and April is unlikely to save California from a dry year, Lund says. But he says to remember there's a weak chance that a "Miracle March" could help.

In 1991, during the fourth year of a drought, there were three times the average rain and snow during March, Lund recalled.

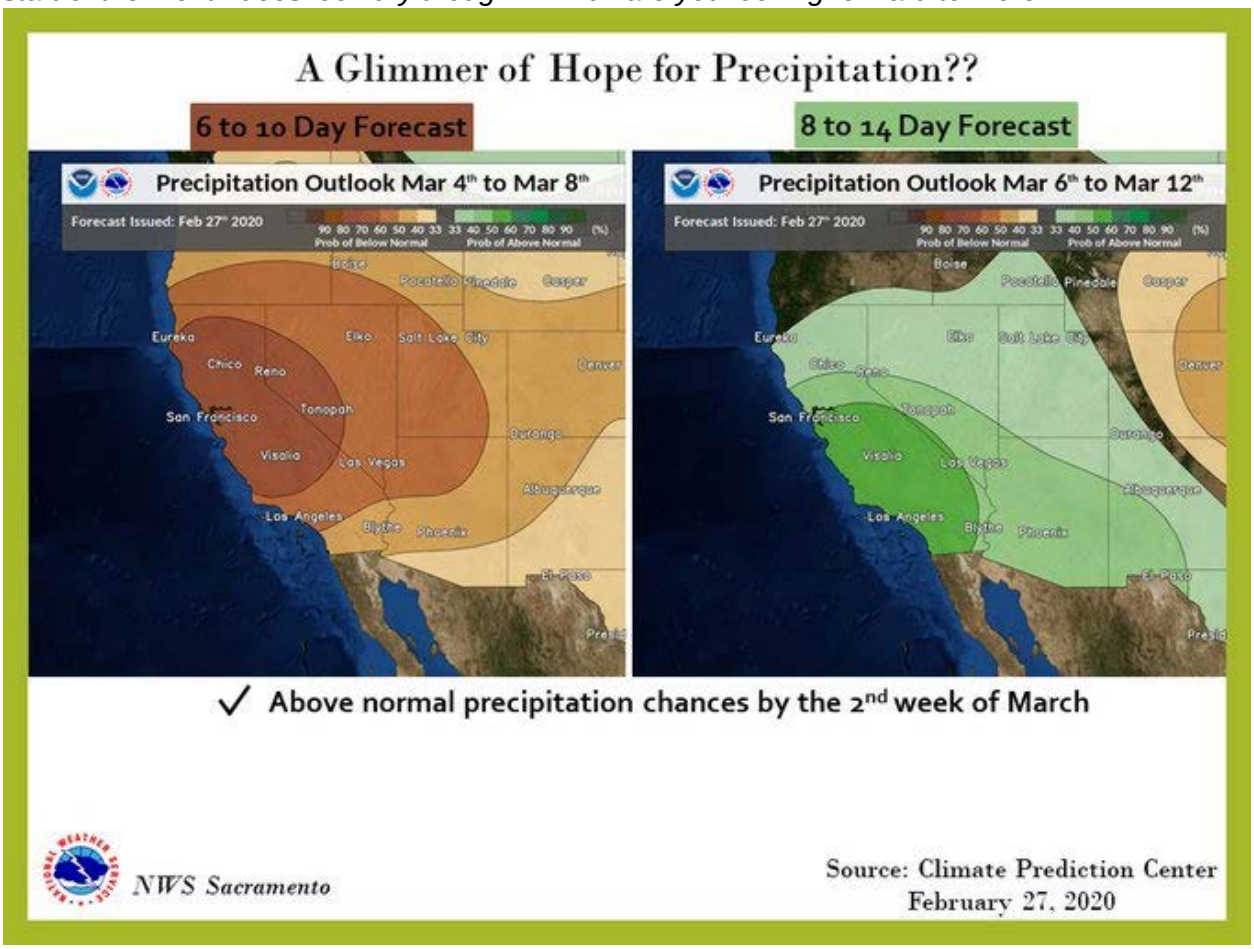
But some climatologists, like UCLA's Daniel Swain, have said that, despite the forecast of light precipitation over the next few weeks, "models are unfortunately painting a continued drier-than-average picture for spring 2020."

How Bad Is The Current Drought?
February was very dry in California. So far, there has only been about 51 percent of the average amount of seasonal rain in the Sacramento Valley — and less in the San Joaquin and Tulare basins. But there is some hope on the horizon.

There was some light rain and snow in the Sierra Nevada this weekend. But the "next measurable amount of precipitation isn't expected until later in the week," according to Bill Rasch, science and operations officer for the National Weather Service in Sacramento.

"Hopefully that will open the storm doors, but it's just a little too far to tell if it will lead to more rain," he said.

The Climate Prediction Center has posted its latest extended outlook for Mar 4-12. For the first time in a while, the 8-14 day outlook period shows above normal chances for precipitation! The start of the month does look dry though. Which are you looking forward to more?



A high-pressure system sitting over the Pacific is blocking storms before penetrating inland California and pushing them north over the Pacific Northwest, missing the state. This storm deflector is similar to what helped cause the 2011-17 drought.

“People are wondering are we ever going to see rain again and I want to point out every winter California experiences a three to six week dry spell,” said Michelle Mead, warning coordination meteorologist with the National Weather Service in Sacramento.

“It does seem ominous, but it is something that we have seen before,” she said.

When it comes to the Sierra Nevada, the snowpack dropped from 92 percent of normal in January to 46 percent for March.

“We didn’t quite get the results we had hoped for and we will most likely end this year below average,” said Sean de Guzman, chief of snow surveys and water forecasting section of the California Department of Water Resources at the Feb 27 snow survey.

But State Climatologist Mike Anderson said there’s a glimmer of hope in that reservoir levels statewide are around 104 percent of average for this time of year.

He also says what’s looking to be a drier-than-average water year is in part attributable to a late start to the rain and snow season, around Thanksgiving; a below-average January; and the record dry February.

That means California is 70 percent abnormally dry, and about a quarter of the state is undergoing drought conditions, according to David Miskus, a NOAA meteorologist who wrote the latest U.S. Drought Monitor.

He says during the past two months “less than 25% of normal precipitation had fallen on much of California and western Nevada, creating deficits [of snow] exceeding a foot in parts of the Sierra Nevada, and 4-8 inches along the coast.”

The scarcity of rain and snow in models could point to a dry spring, and Lund with UC Davis says this means fires could ignite sooner in the season.

“There will be impacts to the forest, maybe some disease outbreaks, wildfires quite likely and more problems for fish and waterfowl because of this,” Lund said.

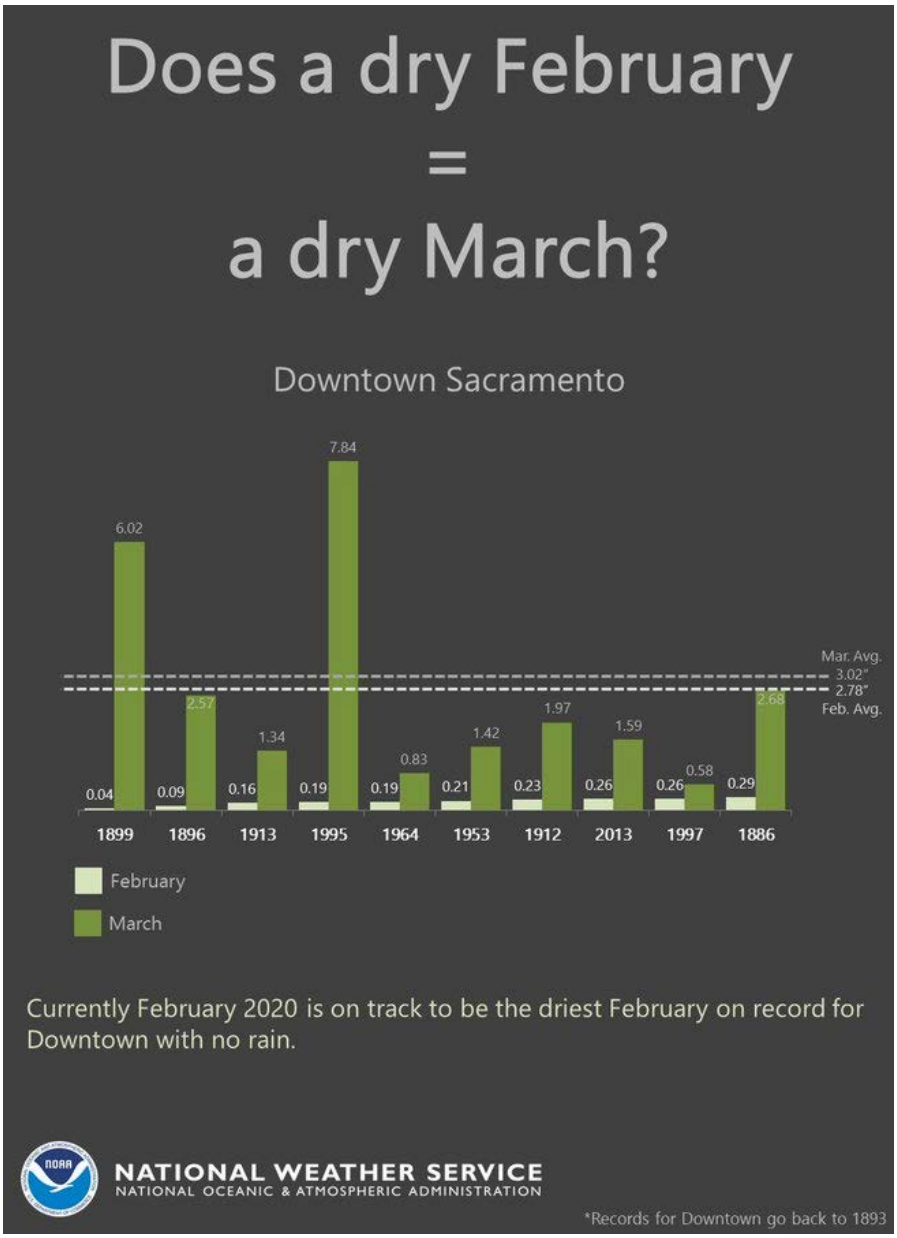
The weather pattern could result in grass fire season in the foothills starting before the typical fire season, and offshore wind events could increase the possibility of fires in Southern California, CalFire reports on its incident page.

So far this year, 157 acres have burned in 233 incidents with no loss of life or damaged structures.

Will There Be A Miracle March?
Bill Rasch, with NWS in Sacramento, looked at the last 10 driest Februaries in California and found that every March was wetter.

“They weren’t all Miracle Marches, but two of them were pretty wet,” Rasch said. “It’s a pretty good chance that we’re going to be at least wetter in March and a slight chance of a ‘Miracle March.’”

Does a dry February mean we will see a dry March? Taking a look at the top 10 driest February's a wetter March followed all of them with some of the March’s being exceptionally wet.



Historically, when looking at the month following a dry February, “about half of them go on to be dry and half continue to get a fair bit of moisture in March and April,” said Anderson, the state’s climatologist.

He says a wet March this year would mute the impacts of drought, but not likely offset the state’s water and snowpack deficits — so it would have to be pretty miraculous for California to get out of drought for 2020.

“It seems very unlikely that we could be pulled back up to average conditions,” said Paul Ullrich, an associate professor of regional climate modeling at UC Davis.

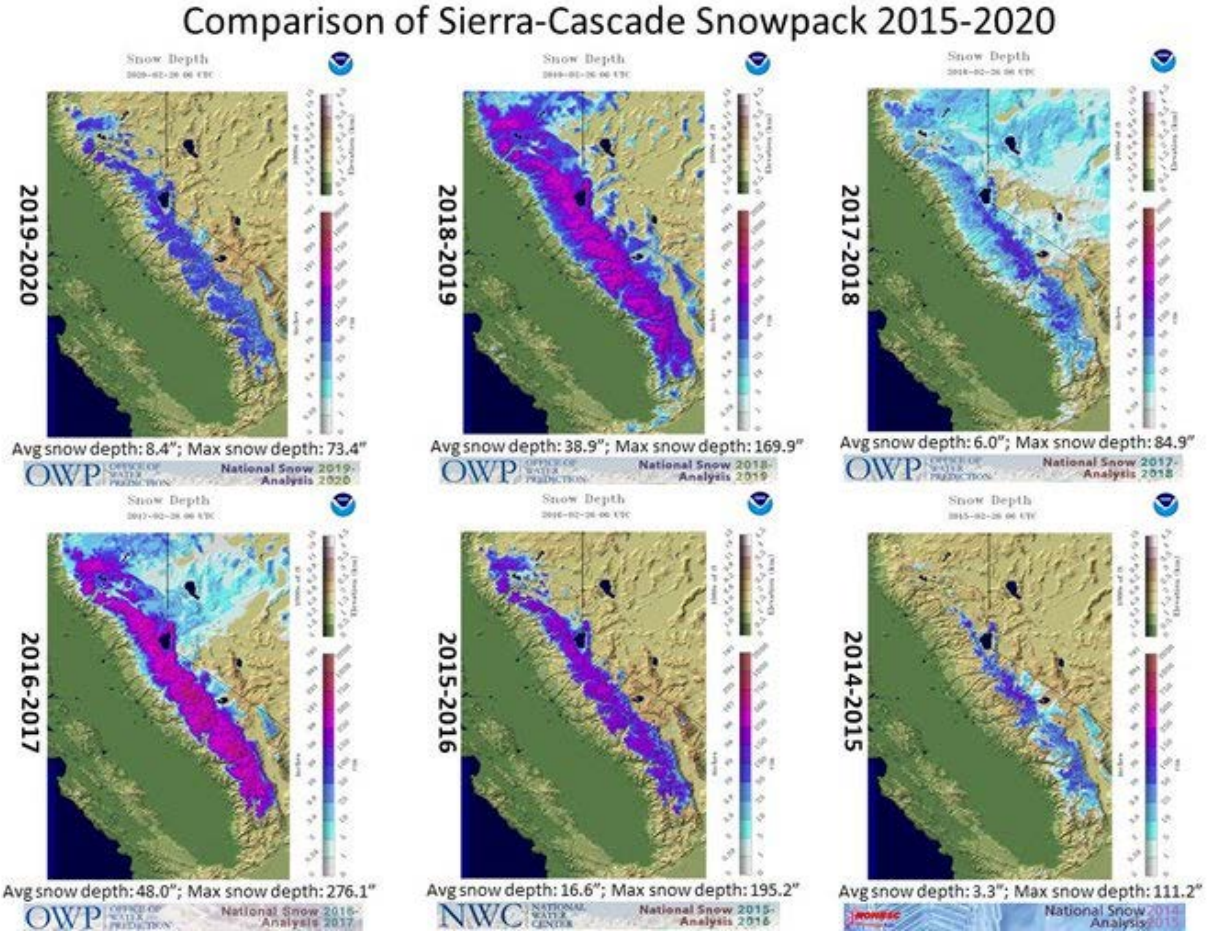
He also notes that Miracle Marches only take place about one or two times every century.

“What I worry about in particular is that these Miracle Marches or Miraculous Mays also come with warmer temperatures,” Ullrich said.

That means the state’s snowpack won’t likely grow much larger than the 46 percent. Ullrich said there’s already “enough damage done to the snowpack that we are going to see a snow drought through the remainder of the season.”

This February, there was no recorded measurable precipitation in the Northern Sierra, which “never happened before in its history since 1921,” said de Guzman with DWR.

A comparison of the snowpack across the Sierra-Cascade range over the past 6 years shows the true variability of a California wet season. While numbers are similar to the 2017-2018 winter, snow did extend into somewhat lower elevations back then.



But de Guzman notes it’s not unprecedented for California to be in this position. In 2018, after a dry start, March storms made up much of the deficit and brought California closer to normal that year.

“February rain and snow were quite disappointing, and we didn't quite get the results we had hoped for, so we'll most likely end this water year below average. We just don't know how far below,” de Guzman said.

The next snow survey will be conducted on April 1. Experts say it will be significant, because it’s when the snowpack’s water content peaks — snow melts faster after this point in the year because of the sun's higher position in the sky.

Don’t Panic
Don’t freak out but be wary — that’s the message from experts across California as dry weather continues.

“It’s really when you get out to the third, fourth or fifth year of a drought that there is really little flexibility in surface water to manage,” said Lund with UC Davis. “California does have long droughts, and they happen frequently and may be more severe with climate change.”

That’s why Ullrich, the UC Davis climate modeler, says Californians shouldn’t be too concerned. He says it’s difficult to make long-term predictions about the amount of rain and snow the state will experience.

“We can’t say anything about whether April or after will be wet months, or if we will be able to recover from drought conditions,” Ullrich said.

He and others, like Mead with NWS, emphasize that, despite California’s history, all we know at this point is that 2020 will most likely be a below-average water year.

“I have a yard, too, and right now I’m looking at it going, ‘Boy, it could really use some rain,’” Mead said. “Right now, it's too early to panic … and I wish I had a crystal ball to tell you what’s going to happen, but I don’t.

“I’m in the same boat as everybody else keeping an eye on the forecast because it’s not over until it's over.”

# # #

California snowpack depleted amid what could be a record-dry February

Los Angeles Times | February 27, 2020 | Hannah Frystaff

Sean de Guzman, chief of snow surveys for the California Department of Water Resources, checks the depth of the snowpack at the department's Phillips station in the Sierra Nevada.(Rich Pedroncelli / Associated Press)

A dry February continues to take its toll on California's dwindling snowpack, officials reported Thursday.

The pack in the Northern California resort town of Phillips measured just 47% of average, down significantly from last month's measurement.

Despite the lower number, water officials say it's not cause for too much alarm — yet.

Surveyors with the California Department of Water Resources trekked through the snow at the El Dorado County measuring station to take the third seasonal measurement, which serves as an important marker for the state's water supply.

The result — a depth of 29 inches — marks a decline of about 11.5 inches from the last measurement. If all the snow were to melt at once, it would amount to about 11.5 inches of water, said Sean de Guzman, chief of the agency's snow surveys and water supply forecasting section.

Warmer winter temperatures and lackluster rainfall in January and February are to blame for the snowpack's reduction. This month is poised to become the driest February in the northern Sierra Nevada on record, dating to 1921. There has been no measurable rainfall in the area this month, De Guzman said.

"February rain and snow were quite disappointing, and we didn't quite get the results we'd hoped for, so we'll most likely end this water year below average," he said. "We just don't know how far below."

The snow season typically begins in December and ends on the first day of April, when the snowpack is normally at its highest. However, surveyors will continue to measure the pack as long as there's snow on the ground, often through May. How much snow falls during this period is crucial to California's annual water outlook and is watched closely by state water managers. Thursday's reading at the Phillips station was 46% of the April 1 average for that location.

The snowpack provides about 30% of the annual freshwater supply for the state. Its spring and summer runoff feeds rivers and reservoirs, and part of it is distributed to water agencies for farm irrigation, landscaping and urban drinking supplies.

The good news, officials say, is that the state's reservoir storage is about 104% for this time of year, thanks in part to solid rainfall last winter and chilly spring temperatures last year that kept snow around into the summer.

That 2019 snowpack — which picked up later in the winter, boosted by a series of atmospheric rivers paired with cold fronts that pounded the state — was ultimately the fifth best in recorded history. That has given the state some cushion this year, officials said.

"A few dry months doesn't really make a drought," said Chris Orrock, spokesman for the Department of Water Resources. He added that two consecutive dry years, however, could start to affect the state's water supply.

Still, nearly 70% of the state, including much of the Central Coast and Los Angeles County, is considered to be abnormally dry. About 23% of the state, including large swaths of the San Joaquin Valley and portions of the Sierra Nevada home to about 5.9 million people, is considered to be in moderate drought conditions, according to maps released Thursday by the U.S. Drought Monitor.

Forecasters and water managers keeping a close eye on precipitation and the resulting snowpack may find a reprieve if rainfall ramps up in March, a phenomenon known by weather experts as "miracle March." But a wet March is far from a certainty.

Of the six driest Februaries on record, three were followed by a dry March and three were followed by a March that had above average rainfall, Orrock said.

"We'll just have to wait and see what next month brings," he said.

# # #

Many would be left behind in Governor Newsom's voluntary water agreements
Modesto Bee | March 5, 2020 | Barbara Barrigan-Parrilla – Special to the Modesto Bee

It's understandable that state Senator Anna Caballero wants to feel "great hope and guarded optimism" for Governor Newsom's voluntary agreements ("California governor's water negotiations leave no one behind," Page 6A, Feb. 24). Everyone working on California water wants meaningful solutions. Unfortunately, too many are left behind in these deals and we have seen no evidence of "solutions that can benefit everyone."

Environmental justice communities of Stockton and the Bay-Delta have not been considered in the voluntary agreements plan, or in the San Joaquin Valley Blueprint. During the last year, the Delta community worked with the Newsom administration on environmental protections for the region. We have tracked the Trump water plan for the Delta and spoke out when President Trump's directives (carried out by Interior Secretary Bernhardt on behalf of Westlands Water District) have weakened protections for Delta water quality, environmental justice communities, and fisheries.

We created a comprehensive analysis of the flood threat to the Delta and made recommendations to the Newsom administration about next steps for dealing with climate change impacts manifesting in the Delta. Part included documenting harmful algal blooms and connecting this water quality challenge to air quality and other public health problems. We also helped convene local partners to work on an environmental justice initiative with CalEPA for Stockton.

Disregarding contributions by Delta advocates, the Newsom administration is now offering "voluntary agreements" with inadequate Delta flows for fisheries and healthy waterways. Governor Newsom now champions a revision of state policies aimed at greater Delta water exports than what science deems as protective for the region, let alone restorative.

Thankfully, on Feb. 20, Attorney General Xavier Becerra filed a lawsuit against the junk science of the Trump Delta biological opinion. We thank Newsom for keeping his word to sue the Trump administration and protect the San Francisco Bay-Delta estuary from Trump's water grab. Bay-Delta advocates pushed Newsom hard to file the suit because we believe the estuary, and the people who live there, are worth saving.

OPINION
The Newsom administration claims great pride in working with Delta communities but often slides into the old ways of the Brown and Schwarzenegger administrations. They are not taking action on Delta recommendations made by community water leaders — like completing a solid water inventory before moving forward with planning a tunnel, creating a loading order for regional water projects and then determining if a tunnel is needed and at what size. They do not have a plan for increasing flows through the Bay-Delta to restore water quality and protect species as the best available science recommends.

Newsom recently claimed that water deliveries protect jobs in the San Joaquin Valley, even though industrial agriculture has never lifted a San Joaquin Valley community from poverty, and available jobs continue to decrease with agricultural mechanization.

A recent economic analysis by hired gun David Sunding for the San Joaquin Valley Blueprint discusses water needs of the Valley. The report forgets to discuss the water needs of Stockton, which is part of the Valley and contains California's largest environmental justice community percentage-wise. Economic impacts to Stockton of extreme pollution from water management policies are never acknowledged.

Newsom is pushing forward in support of the Valley Blueprint with a voluntary agreement that will bring State Water Project operations in alignment with a bad federal standard. His administration is wrapping the effort in a feel-good green bow and rhetoric of concern for environmental justice communities — just not those in the Delta. He will have participating parties in the room for negotiations without having impacted parties from the Delta.

To end the old binaries, the Delta must be protected while improving regional water supplies. That means protection of water quality for Delta people. Equity means representation and care for all impacted parties.

# # #

Barbara Barrigan-Parrilla is executive director of Stockton-based Restore the Delta.

Everything you need to know about California's historic water law

The Guardian | February 27, 2020 | Watered down

A canal running in between agricultural fields in Del Rey, California, last week. Photograph: Talia Herman/The Guardian

Regulation will have significant impacts on the state's $50bn agriculture industry, rural communities and endangered wetlands

California began regulating surface water in rivers and streams in 1914, but it took the state another 100 years to look underground.

In 2014, for the first time in its history, California passed a law regulating the use of groundwater – the resource on which 85% of its population and much of its $50bn agriculture industry rely.

This year marks the first big deadline for the Sustainable Groundwater Management Act (Sgma), as dozens of agencies complete initial plans to protect overdrafted water resources.

Here's what you need to know:

What were groundwater rights like before Sgma?

California's underground basins are a key component of the state's complex and fragile water system. For all of the state's history, the rights to groundwater had come with land ownership: if one had an access point to an aquifer, one had the right to drill into it and pump out its contents. No regulatory entity would track, let alone limit how much water any pump sent up.

This anarchy persisted for decades. Aquifers were drained lower and lower and the land above them sank – a phenomenon called “subsidence” that wreaks havoc on infrastructure and compresses the soil, making it even more difficult for some aquifers to recharge with water.

Bottled water on a front porch in Tombstone Territory, an unincorporated working class neighborhood south-east of Fresno, California, this month. Photograph: Talia Herman/The Guardian

What prompted lawmakers to take action?

Pumping reached a fever pitch during the drought that began in 2011, when growers across California received less and less water from the rivers and canals meted out by regulatory agencies and irrigation districts. To make up the difference, farmers who could afford it drilled new wells and lowered existing ones.

Aquifers became increasingly overdrawn as more and more water was pumped out without being replaced by rainfall. As the drought continued for the next six years, smaller farmers and domestic water users with more shallow personal wells found the groundwater had retreated past their pumps, many of which now sent up only sand.

The Sustainable Groundwater Management Act or Sgma (pronounced “sigma”) aimed to address this seemingly sudden crisis, which in reality was over a century in the making. The package of three bills was passed over vocal criticism from some local governments in the Central Valley – California’s agricultural heartland – agribusiness and the California Farm Bureau Federation, which warned of “huge long-term economic impacts”.

What does Sgma do?

Sgma essentially upholds the right to groundwater access and use, but considers water to be a shared asset and imposes rules on its use. Those restrictions also apply to California's powerful agriculture industry, which uses roughly 80% of all the state's water.

Sgma relies on local oversight. The law established local groundwater sustainability agencies to oversee the development and implementation of plans to manage groundwater resources in California's 450 underground basins. The first round included more than 260 agencies for more than 140 of the state's most high-priority basins, 21 of which are "critically overdrafted". Of those, 11 are in the San Joaquin Valley.

Those agencies are tasked with developing and overseeing groundwater sustainability plans, with the power to gather data on how much water is being pumped and where and set limits on it. Analysts have estimated that between those limits on groundwater pumping and less available water due to climate change, anywhere between 500,000 and 1m acres of California farmland will have to be fallowed.

Many of the groundwater sustainability agencies in the Central Valley share their borders and board members with the local irrigation districts, reflecting agriculture's interests. But these agencies and plans must "consider the interests of" beneficial users, including groundwater rights holders and disadvantaged communities served by private wells and small community water systems. Those communities won't face pumping limits like their farming neighbors under Sgma, but they will face impacts nonetheless. Some of the sustainability plans call for allowing aquifers to drain to the worst levels seen during the drought before pumping limits would be imposed – levels that left many residents without any water at all.

A water canal used for irrigation running along a newly planted vineyard is nearly dry, near Bakersfield, California, April 2015. Photograph: Michael Nelson/EPA

When does it go into effect?

Although Sgma was passed in 2014, agencies in particularly high-priority, overdrafted basins had until 31 January 2020 to file their plans to make groundwater resources sustainable by 2040. Those plans are subject to review and approval by the state's department of water resources, and will be reassessed every five years.

That doesn't mean the sustainability process will begin right away. Instead of imposing immediate limits on new wells and water pumping, the plans will "glide" toward sustainability in 2040.

Why does Sgma matter?

A framework for healthy groundwater resources and storage is key to California's ability to weather the more extreme drought and flood cycles the state will experience due to climate change. With less water stored in the form of snowpack in the Sierra Nevada mountains, there will be less surface water to meet agricultural demand – putting yet more pressure on overdrafted aquifers.

Sgma was widely hailed as a necessary and long-overdue regulatory step toward making California's water usage remotely sustainable. But it will also have significant impacts on the state's agriculture industry, rural communities and endangered wetlands.

What else is California doing to solve its water problems?

Over the last near-decade of drought and recovery, California has tried to plan for a drier future. Just weeks after the state passed Sgma in 2014, voters approved a $7.5bn water bond to pay for water infrastructure upgrades for storage, ecosystem protection and drinking water. It was not enough.

More than 1 million state residents live with water too toxic to drink. In 2019, the state passed the Safe and Affordable Drinking Water Fund, which allocates $1.4bn over 11 years to projects and programs to bring clean water to disadvantaged communities statewide.

This January, Gavin Newsom, the California governor, released his Water Resilience Portfolio, "a comprehensive strategy to build a climate-resilient water system".

"California's water challenges are daunting, from severely depleted groundwater basins to vulnerable infrastructure to unsafe drinking water in far too many communities. Climate change magnifies the risks," Newsom said in announcing the plan.

# # #

Bernhardt fires back at Newsom over Calif. water lawsuit
The Sun | February 24, 2020 | Alex Tavlian

The future of the complicated network of waterways and canals that supplies millions of Californians with water daily could be murky at best, U.S. Interior Secretary David Bernhardt warned Calif. Gov. Gavin Newsom in a letter Monday.

The letter comes on the heels of a busy week in California's water landscape. Bernhardt spent much of the week in the San Joaquin Valley visiting with water users ahead of a forum hosted by Rep. Devin Nunes (R–Tulare) on Tuesday

The forum featured a detailed breakdown of the recently-issued, now adopted biological opinions, or environmental guidelines, governing the flow of water supplied to farms and communities in the Valley via the Central Valley Project.

A hallmark of the new opinions is the transition away from a rigid, calendar-based method to determine pumping toward real-time monitoring of the Sacramento-San Joaquin Delta for impacted fish populations.

For Valley communities and Southern California, the new flexibility in pumping will likely translate to greater pumping of water supplies south from the Delta.

After the opinions were released in November, Newsom and other California leaders expressed their opposition to changes and initially threatened litigation over the issuance of the new environmental rules.

During the forum last week and in his letter Monday, Bernhardt emphasized the level of cooperation and collaboration between agencies in his department, the Department of Commerce, and their counterparts with the State of California.

"Given the extensive collaboration in the development of the biological opinions, and the science they are grounded in, I believe your litigation is ill-founded," Bernhardt said in the letter.

One day after Bernhardt appeared alongside Nunes in Tulare, President Donald Trump flew into Bakersfield's Meadows Field to celebrate the adoption of those environmental guidelines and sign a new Presidential memorandum to advance new California water priorities.

Minutes before Trump took the stage at a hangar in Bakersfield, Calif. Attorney General Xavier Becerra – on behalf of Newsom's administration – made good on the threats, filing a Federal suit against the new operations plan for the Central Valley Project.

In it, Becerra alleges the biological opinions violate the Endangered Species Act and National Environmental Protection Act over its handling of fish species in the Delta.

The latest California v. Trump lawsuit raises a major quandary for the Delta: what happens if the state and Federal government cannot coalesce around a single environmental standard for the Delta?

That answer is still to be seen, and while Bernhardt didn't get into specifics, he didn't shy away from it either.

"I anticipate the State of California and Department of the Interior will face significant administrative and operational challenges regarding the intertwined operation of [the State Water Project and Central Valley Project]," Bernhardt wrote.

As for the consequences of new water litigation, Bernhardt looped in comments from a letter he received from Newsom.

"Given that tens of millions of people and 3 million acres of farmland depend on the intertwined operation of these projects for their crucial water resources, your expressed commitment to 'staying engaged and woking to find a shared path forward' after precipitating this litigation will not be forgotten," he wrote.

The Sun contacted the Governor's Office for comment. This story will be updated.

Read Bernhardt's Letter to Newsom *(next page)*

THE SECRETARY OF THE INTERIOR
WASHINGTON

FEB 24 2020

The Honorable Gavin Newsom
Governor of California
Sacramento, CA 95814

Dear Governor Newsom:

Thank you for your correspondence dated Monday, February 17 (Presidents Day), which I received at 8:41 p.m. EST that same day.

In this correspondence you emphasize your commitment to "protecting our environment while maintaining our state's economic vitality." You further explain that our "intertwined state and federal infrastructure demand harmonized management"; that our water users "rely on us to work together to reliably provide water"; and that "[r]ecovering our fish populations requires our state and federal environmental agencies to work together and use all tools at their disposal."

While I could not agree more with your comments, it is equally notable that less than 48 hours after delivering your correspondence, you announced your intention to file litigation regarding the long-term operations of the State Water Project and the Central Valley Project and associated biological opinions, minutes before the President arrived in Bakersfield on Wednesday.

Given the extensive collaboration in the development of the biological opinions by your State agencies, and the science they are grounded in, I believe your litigation is ill-founded. However, I am respectful of your decision to litigate. Over time, I suspect this litigation, like many other California water cases before, will end up with many parties and many twists and turns.

As the litigation you initiated proceeds, I anticipate the State of California and the Department of the Interior will face significant administrative and operational challenges regarding the intertwined operation of these two water projects, some of which have not been seriously contemplated for decades. The result of this and any litigation will be further uncertainty of water supplies to 35 million people, including numerous disadvantaged communities, farms, and ecosystems dependent on these water sources.

Given that tens of millions of people and over 3 million acres of farmland depend on the intertwined operation of these projects for their crucial water resources, your expressed commitment to "staying engaged and working to find a shared path forward" after precipitating this litigation will not be forgotten.

Sincerely,

Secretary of the Interior

# # #

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Don’t be fooled, Modesto farmers — Trump’s California water plan doesn’t help you
Modesto Bee | February 23, 2020 | Modesto Bee Editorial Board

President Donald Trump promised in a Central Valley visit on Wednesday that his new water edict would benefit farmers, drawing applause and adulation from a Kern County crowd. But the brash move is more likely to hurt than to help growers, whether in Bakersfield or Modesto.

That’s because his plan may blow up delicate negotiations among all interests receiving water from rivers flowing to the Sacramento-San Joaquin Delta, especially those here in the Northern San Joaquin Valley — the Stanislaus, Tuolumne and Merced rivers.

These on-life-support negotiations, called voluntary agreements, present our best chance at finding peace after decades of water wars. Such a truce would provide respite and certainty not only to our farmers, but also to the fish industry and environmentalists aligned with it. And, to the city of Modesto, whose water customers rely in part on treated water from the Tuolumne.

Former Governor Jerry Brown and his successor, Governor Gavin Newsom, see the value in voluntary agreements; we applauded when Newsom in September quickly vetoed misguided state legislation, Senate Bill 1, because it threatened to derail these all-important negotiations. Newsom risked severe political blowback but stuck to his guns because he knows that compromise, in the long run, is preferable to protracted court battles.

The water agencies in our area with the most at stake — the Modesto and Turlock irrigation districts — have championed the voluntary agreements. They long ago accepted that giving up some of their Tuolumne River water would be far better than the state Water Resources Control Board’s much-maligned “water grab” proposal, which is anything but voluntary.

OPINION
One might expect the irrigation districts and our local farmers to applaud Trump’s move on Wednesday — rolling back environmental restrictions to make it easier for Delta pumps to send a lot more water to farmers in the south Valley, and potentially to Southern California cities. With typical hyperbole, Trump told the cheering crowd that they are “going to be able to do things you never thought possible.”

Let’s be honest: Some of the president’s rationale rings absolutely true. For example, his administration’s biological opinion (enabling more water to move south) is based on recent science that is head-and-shoulders above outdated data that the state Water Board relied on to propose the hated water grab. The legislation vetoed by Newsom would ignore this sound science as well.

But the country’s negotiator-in-chief has zero interest in negotiating California’s water wars. His only goal is a complete and crushing victory for his political base. That’s why he signed the rollbacks in Kern County, which favored him by 13 percentage points over Hillary Clinton in 2016. And that explains why he was accompanied by fawning, loyalist office-holders such as U.S. Representatives Kevin McCarthy, Devin Nunes and Tom McClintock.

Also in attendance was David Bernhardt, who previously lobbied Washington legislators on behalf of the powerful Fresno-based Westlands Water District before joining Trump's cabinet as Interior secretary. Westlands stands to gain as much or more than anyone under Trump's water management plan, shepherded by Bernhardt.

The president's Wednesday visit, coming just before the March 3 Primary, was calculated to help his cronies, not our farmers.

The next day, Thursday, California Attorney General Xavier Becerra filed a lawsuit challenging the president's plan. Westlands previously indicated that such a lawsuit could prompt it to pull out of the voluntary agreements, threatening complete collapse just as we were nearing a healthy and sustainable compromise that might have been good for all.

Had Trump not inserted himself into the issue, Becerra would not have sued and negotiations would have stayed on track.

A resolution to this mess may await the outcome of the fall presidential election.

Meanwhile, if the voluntary agreements do blow up, California's water future will be decided in courts over the next decade or so. In that case the only winners, as they say, will be the lawyers.

Delta smelt are among the fish species struggling for survival in the Sacramento-San Joaquin Delta. President Donald Trump's plan to increase pumping from the Delta could hurt the fish population, environmentalists say. RANDY PENCH SACRAMENTO BEE FILE

It's Finally On: California Files Lawsuit to Block Trump Administration Water Rules
KQED | February 21, 2020 | Adam Beam, Assoc. Press

A fisherman casts his line into the Sacramento River in the Sacramento-San Joaquin River Delta on September 29, 2005 south of Sacramento, California. (Photo by David McNew/Getty Images)

California sued the Trump administration on Thursday to block new rules that would let farmers take more water from the state's largest river systems, arguing it would push endangered populations of delta smelt, chinook salmon and steelhead trout to extinction.

The federal rules govern how much water can be pumped out of the watersheds of the Sacramento and San Joaquin rivers, which flow from the Sierra Nevada mountains to the San Francisco Bay and provide the state with much of its water for a bustling agriculture industry that supplies two-thirds of the country's fruits and nuts and more than a third of its vegetables.

But the rivers are also home to a variety of state and federally protected fish species, whose numbers have been dwindling since humans began building dams and reservoirs to control flooding and send water throughout the state.

Two massive networks of dams and canals determine how much water gets taken out, with one system run by the state and the other run by the federal government.

Historically, the federal government has set the rules for both systems. But recently, state officials have complained the Trump administration's proposed rules don't do enough to protect endangered species. Gov. Gavin Newsom's administration threatened to sue the federal government in November, but delayed action in the hopes he could work out a compromise.

But the federal government finalized the new rules this week.

On the issue of the environment, California is trouncing the Trump administration in the courts, at least so far.

Yet, when President Trump visited Bakersfield this week to promote his California water plan in front of a friendly crowd of Central Valley conservatives and farmers, Newsom took heat for not standing up to the president on the issue sooner.

Newsom's critics say the governor's office has been complicit in weakening protections for waterways and wildlife.

"They're not doing enough, and, in fact, they're hand in glove with the Trump administration," Jon Rosenfield, the environmental advocacy group San Francisco Baykeeper, told the San Francisco Chronicle this week.

Trump traveled to Bakersfield on Wednesday to celebrate his plan before a jubilant crowd.

"We're going to get you your water and put a lot of pressure on your governor," Trump told the crowd. "And, frankly, if he doesn't do it, you're going to get a new governor."

Newsom responded on Thursday with a lawsuit, filed in partnership with state Attorney General Xavier Becerra.

"California won't silently spectate as the Trump Administration adopts scientifically-challenged biological opinions that push species to extinction and harm our natural resources and waterways," Becerra said.

The lawsuit, filed in federal court in San Francisco, challenges the actions of the U.S. Bureau of Reclamation.

U.S. Interior Secretary David Bernhardt, who oversees the bureau, warned Thursday night of unpredictable consequences that could result from the lawsuit.

"The governor and attorney general just launched a ship into a sea of unpredictable administrative and legal challenges regarding the most complex water operations in the country, something they have not chartered before," Bernhardt said in a statement. "Litigation can lead to unpredictable twists and turns that can create significant challenges for the people of California who depend on the sound operation of these two important water projects."

Wednesday, the U.S. Department of the Interior touted the new rules for pledging $1.5 billion of federal and state funds over the next 10 years to restore habitat for endangered species, scientific monitoring of the rivers and improvements to fish hatcheries.

But state officials say the rules would mean less water in the rivers, which would kill more fish. In particular, the low flows would hurt chinook salmon and steelhead trout, which once a year return to the freshwater rivers from the Pacific Ocean to spawn.

The state's lawsuit says the federal government did not properly analyze the rules to see if they would "tip a species toward extinction."

Last year, a KQED investigation found that the Trump administration ordered federal biologists to speed up critical decisions about whether to send more water from Northern California to farmers in the Central Valley.

Environmentalists and research scientists said the rushed science threatened the integrity of the process and cut the public out.

Lawsuits over water in California are common, but it's something the Newsom administration has been trying to avoid. For the past year, state regulators have been negotiating with water agencies on a set of voluntary agreements to set water quality standards in the delta. Newsom hopes these agreements, if they are ever reached, would avoid decades of lawsuits that have plagued prior water regulations.

The lawsuit announced Thursday could put those agreements in jeopardy. A representative for the State Water Contractors declined to comment on the lawsuit, but pointed to the group's previous comments where General Manager Jennifer Pierre said they were "disappointed" the two sides could not compromise.

"We are concerned about the impact any litigation may have on the Voluntary Agreements process," Pierre said at the time.

Thursday, Newsom said his goal remains to "realize enforceable voluntary agreements."

"This is the best path forward to sustain our communities, our environment and our economy," the governor said.

# # #

Kevin Stark of KQED contributed to this post.

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Tri-Dam Partners Send Lawmakers Complaint Letter Over Newsom Proposal
MyMotherLode.com | February 12, 2020 | Tori James

Oakdale, CA – While they say they appreciate Governor Gavin Newsom's help to settle what has been billed by many as a "massive water grab," two water districts are crying foul over his solution.

Tri-Dam Partners the Oakdale (OID) and South San Joaquin (SSJID) irrigation districts, which developed New Melones and maintain senior water rights, recently sent a letter outlining their concerns to Mother Lode Congressman Tom McClintock and U.S. Representatives Jerry McNerney and Josh Harder. Among those cc'd were California Senators Dianne Feinstein and Kamala Harris, seven other U.S. Representatives, and the heads of CalEPA and NRA.

The letter was intended as both an update and a "squeaky wheel" complaint to the lawmakers that the proposal constitutes unfair treatment to their constituents.

The communication argues that Governor Gavin Newsom's latest proposed framework for voluntary settlement agreements among the stakeholders is still not cutting it because the proposal fails to include a sustainable operations plan for the Stanislaus River and it ignores the Bureau of Reclamation's new biological opinion and other local science.

The Water Board back in December of 2018 approved setting in place a contentious plan to require 40 percent unimpaired water flows on the Stanislaus River as a primary approach to improve fish habitat. It resulted in a flurry of multiagency lawsuits still ongoing, including one filed in Tuolumne County by the Tri-Dam Partners.

The two general managers state that the Governor's proposal actually appears to be even more onerous since it would require nearly the same flow commitments from the Stan along with sizeable financial contributions of $7.5 million from the districts to support habitat development outside the districts' communities and the purchase of water outside of the river basin for additional Delta outflow.

Knell dryly acknowledges, "It's just another lap around the track with Sacramento regarding voluntary agreements on the Stanislaus River."

# # #

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Reclamation and Contra Costa Water District advance plan to increase water reliability
California Water News Daily | February 29, 2020

The Bureau of Reclamation and Contra Costa Water District published final environmental documents Friday that evaluate the second phase of the Los Vaqueros Reservoir Expansion Project, which seeks to increase water storage capacity from 160,000 acre-feet to 275,000 acre-feet while adding new conveyance facilities.

This expansion would provide increased water supply reliability and operational flexibility to the Central Valley Project. In addition, the expansion would deliver water supplies to various Bay Area municipal and industrial water providers, as well as federally recognized wildlife refuge areas and irrigation districts in the San Joaquin Valley, and improve water deliveries to customers.

“As part of a continuing effort to increase storage capability throughout California, Reclamation and the Contra Costa Water District have been working together on evaluating the feasibility of Phase 2 of the Los Vaqueros Reservoir Expansion Project,” said California-Great Basin Regional Director Ernest Conant. “If constructed, the project would help ensure water is available to meet the needs of residents and businesses, along with Central Valley agriculture, habitats and species.” The Final Supplement to the Final Environmental Impact Statement/Environmental Impact Report for Phase 2 of the expansion project evaluates impacts of adding conveyance facilities and 115,000 acre-feet of storage capacity to the existing Los Vaqueros Reservoir. Completion of the environmental process is a necessary step in determining the feasibility of the project and its eligibility for federal investment.

“We greatly appreciate Commissioner Brenda Burman’s leadership and long-standing commitment to expanding Los Vaqueros and want to express appreciation for the partnership between our agencies,” said CCWD Board President Lisa Borba.

Reclamation circulated the Draft Supplement to the Final EIS/EIR for a 60-day public review and addressed submitted comments in the Final SEIS/EIR.

# # #

The final environmental documents may be viewed at https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=903 and https://www.ccwater.com/993/Project-Documents.

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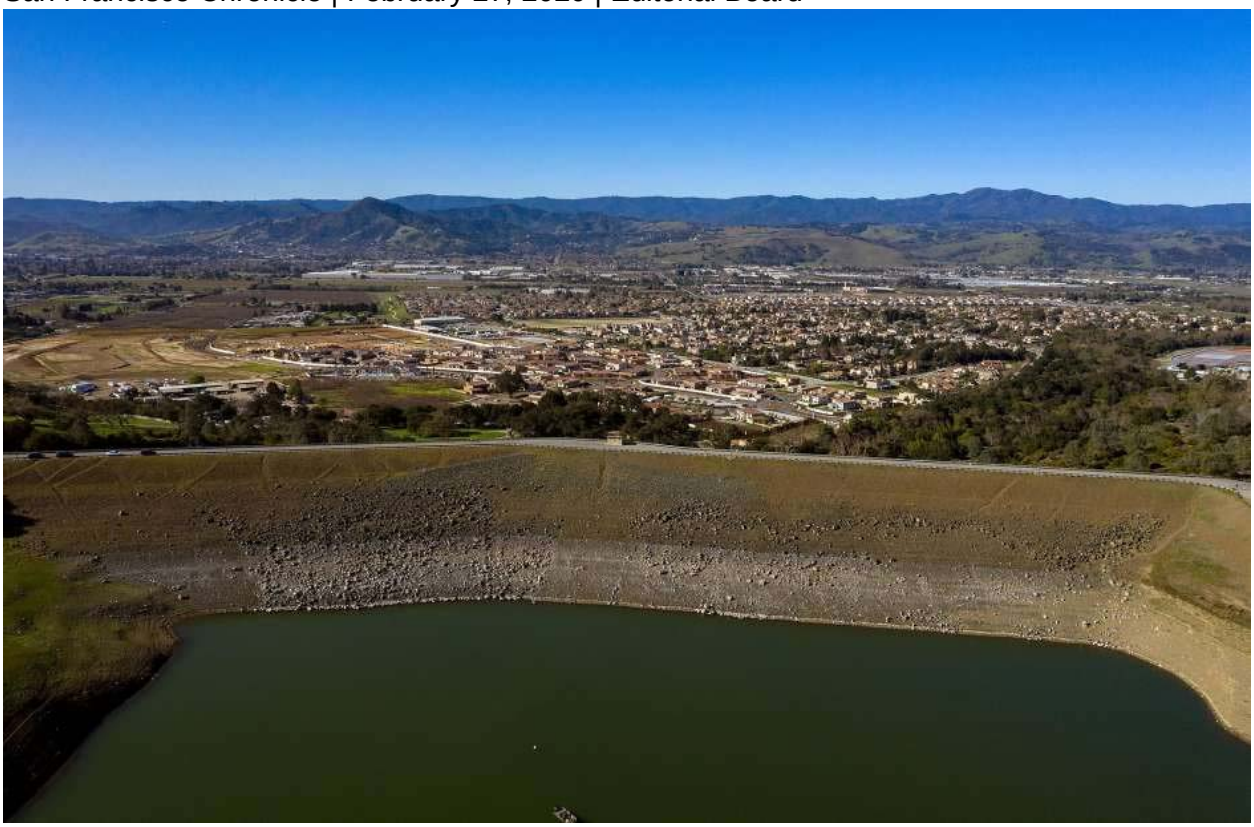
Editorial: A warning for Bay Area dams

San Francisco Chronicle | February 27, 2020 | Editorial Board



An aerial view of the dam and at homes below it at Anderson Lake Reservoir on Tuesday, Feb. 25, 2020 in Morgan Hill, Calif. Photo: LiPo Ching / Special to The Chronicle

Life in California depends on the dams and reservoirs that provide water for homes, farms, recreation, energy and, not least, safety. That last function should be getting serious consideration toward providing overdue answers about emergency preparedness.

The more than 1,200 earth and cement structures that stand astride rivers and canyons across the state look solid enough, but many were built before engineers fully understood the threat of nearby seismic faults. Compounding the danger, a large number of decades-old dams are operating without updated policies on emergency notification of communities and businesses that have developed downriver since they were built.

This general worry has become specific in the case of one Bay Area dam. Federal regulators want the Anderson Reservoir in Santa Clara County drained dry beginning this fall out of concern that the Calaveras Fault could unleash a disastrous jolt to the dam above Morgan Hill. Valley Water, the dam's operator, disagrees, arguing that the lake is low enough now and that more releases could harm part of the facility.

At stake is a needed water supply for the booming Silicon Valley and the economic health of the region. This standoff needs to be resolved.

There are years-away plans to rebuild the dam, but federal regulators are in no mood to wait. Their order affects the county's largest reservoir, though there appears to be enough supply to ward off major repercussions for water users.

The dam's condition highlights another concern: If there is an emergency, dams should have quick-response plans to alert homes and businesses downriver. Three years ago, the Oroville Dam, the nation's tallest, experienced a near disaster when an aging spillway crumbled, threatening the structure and forcing the evacuation of some 180,000 people downstream. The same winter's heavy rains caused a spillover of the Anderson Reservoir that flooded neighborhoods in San Jose with little advance warning.

The Bay Area needs better preparation for such dangers. A Chronicle report Wednesday showed at least 47 of 145 dams in the region don't have updated plans to notify authorities and downriver communities in an emergency. The state requires such plans and should make a concerted effort to ensure that they are in place. This region is riddled with active fault lines that could precipitate a disaster.

As the vagaries of climate change unfold, dams will be tested as never before. Droughts will alternate with heavy storm seasons, making water storage and flood control vital. In Santa Clara County's case, a dry reservoir could mean taking more water from the federal and state water systems already facing competing demands from farmers and environmentalists.

Dam safety is a crucial part of California water policy. It shouldn't be neglected, especially when it comes to alerting the public if trouble looms.

# # #

This commentary is from The Chronicle's editorial board. We invite you to express your views in a letter to the editor. Please submit your letter via our online form: SFChronicle.com/letters.

Feds order Santa Clara County's biggest reservoir to be drained due to earthquake collapse risk

Failure if reservoir is full could send 35-foot wall of water into Morgan Hill

Mercury News | February 26, 2020 | Paul Rogers

In a dramatic decision that could significantly impact Silicon Valley's water supply, federal dam regulators have ordered Anderson Reservoir, the largest reservoir in Santa Clara County, to be completely drained starting Oct. 1.

The 240-foot earthen dam, built in 1950 and located east of Highway 101 between Morgan Hill and San Jose, poses too great of a risk of collapse during a major earthquake, the Federal Energy Regulatory Commission, which regulates dams, has concluded.

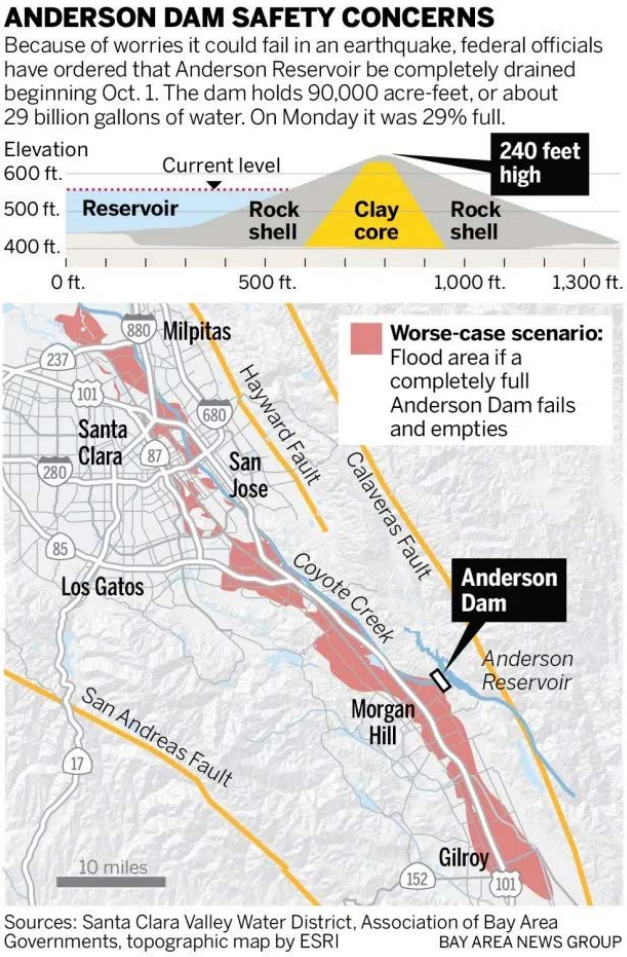
"It is unacceptable to maintain the reservoir at an elevation higher than necessary when it can be reduced, thereby decreasing the risk to public safety and the large population downstream of Anderson Dam," wrote David Capka, director of FERC's Division of Dam Safety and Inspections, in a letter to the Santa Clara Valley Water District on Thursday.

Anderson Reservoir is owned by the Santa Clara Valley Water District, a government agency based in San Jose. When full, it holds 89,278 acre feet of water — more than all other nine dams operated by the Santa Clara Valley Water District combined.

In a statement Monday, Norma Camacho, the water district's CEO, said the impacts of draining the largest reservoir in Santa Clara County will be significant.

"With these new requirements, we expect to see an impact to groundwater basins that are replenished with water released from Anderson Reservoir, including South County and southern San Jose," Camacho said. "Staff is already exploring other sources of water that will have to come from outside of the county. While residents have done an excellent job of conserving water since 2013, another drought during this time frame could require everyone to significantly decrease their water use."

Camacho also said that draining the reservoir starting in seven months is likely to kill wildlife downstream in Coyote Creek, including endangered steelhead trout,



amphibians and reptiles. Coyote Creek flows from the dam through downtown San Jose to San Francisco Bay.

Complicating the issue, California may be heading into a new drought. On Monday, amid a dry winter, Anderson Reservoir was just 29% full. Nevertheless, the 26,133 acre feet of water stored there is an important part of the South Bay's water supply — holding enough water for the annual needs of at least 130,000 people, and what the district considers an emergency supply.

The water district, a government agency based in San Jose, became aware of the dam's problems a decade ago.

In December 2008, an engineering consultant found that a 6.6 magnitude quake centered on the Calaveras Fault directly at Anderson Reservoir, or a 7.2 quake centered one mile away, could cause the reservoir's huge dam to fail.

Although unlikely, if that occurred when the reservoir was full, such as during a wet winter, it could send a wall of water 35 feet high into downtown Morgan Hill within 14 minutes, and eight feet deep into San Jose within three hours, potentially killing thousands of people, studies from that time showed.

The largest earthquake recorded on the Calaveras Fault was a 6.5 in 1911. But the U.S. Geological Survey has estimated the Calaveras Fault can produce a quake of up to 7.2.

During test borings in 2008, consultants found that the dam's foundation was not built on solid bedrock in the 1950s. Rather, there is some sand and gravel under it, which could liquefy in a big quake, causing the dam potentially to slump and fail.

The district has worked on a project to rebuild the dam, but it has faced numerous delays and cost overruns. The project's cost estimate is now $563 million. Construction was scheduled to begin in 2022, but the district has said it has had difficulty obtaining permits from other government agencies.

In October, after federal officials raised concerns about delays, the district said that the most balanced course of action was for it to fill Anderson Reservoir to no more than about 45% full. That, the agency wrote, would balance water supply and environmental needs and also reduce the risk of damage to the dam's intake structure.

But FERC rejected that approach, essentially saying the agency hadn't done enough fast enough.

"Your actions to date do not demonstrate an appropriate sense of urgency regarding the interim conditions at the project," Capka wrote in Thursday's letter.

Three years ago, FERC and the State Department of Water Resources came under criticism after the spillway at Oroville Dam in Butte County, the nation's tallest dam, crumbled during

heavy winter storms, causing the emergency evacuation of nearly 200,000 people. As a result, both agencies have taken a sharper view of safety.

“I think people are waking up to the reality of seismic instability and the consequences for Silicon Valley,” said Jeffrey Hare, a San Jose attorney who is suing the water district on behalf of roughly 200 people whose homes and businesses were flooded in 2017 when Coyote Creek went over its banks.

“The risk is well beyond what happened with Oroville,” he said, “in terms of economic and human losses, if Anderson Dam failed.”

The water district, which provides drinking water to 2 million people in Santa Clara County, produces nearly half of its supply from groundwater wells. After two wet winters, groundwater supplies are in good shape, district officials have said.

The agency also holds contracts with the federal Bureau of Reclamation and State Department of Water Resources to buy water from the Central Valley Project and the State Water Project — two massive systems of dams and canals that deliver it from across the state. And the agency produces roughly 5 percent of its supply from recycled wastewater.

Also, although California’s 2012-17 drought ended three years ago, the district’s customers are using 21 percent less water now than they were before it began, due to conservation measures such as low-flush toilets and water-efficient landscaping that were put in place during the drought.
It’s likely the district will work to bring water it has stored underground at Semitropic Water Storage District in Kern County to make up the difference from Anderson’s drained reservoir.

The district also is sponsoring a bill in the state Legislature, introduced Friday, AB 3005, that would expedite permits for the dam rebuilding project. On Monday, many questions remained unanswered. Nevertheless, the news that the biggest reservoir in the county will go dry sometime after Oct. 1 is a major development in Silicon Valley’s water picture.

“Lowering the reservoir water level below the current restricted normal pool would impair the water delivery mission of Valley Water dramatically,” Christopher Hakes, deputy operating officer for the water district’s dam safety division, wrote Dec. 31 in a letter to FERC.

# # #

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Dozens of high-risk Bay Area dams lack required emergency plans
SF Chronicle | February 25, 2020 | Joaquin Palomino

An aerial view of the dam and at homes below it at Anderson Lake Reservoir on Tuesday, Feb. 25, 2020 in Morgan Hill, Calif.Photo: LiPo Ching / Special to The Chronicle

The Bay Area is dotted with at least 145 dams where failure or misoperation could result in death or property destruction, yet many lack required emergency plans, according to an analysis of state data.

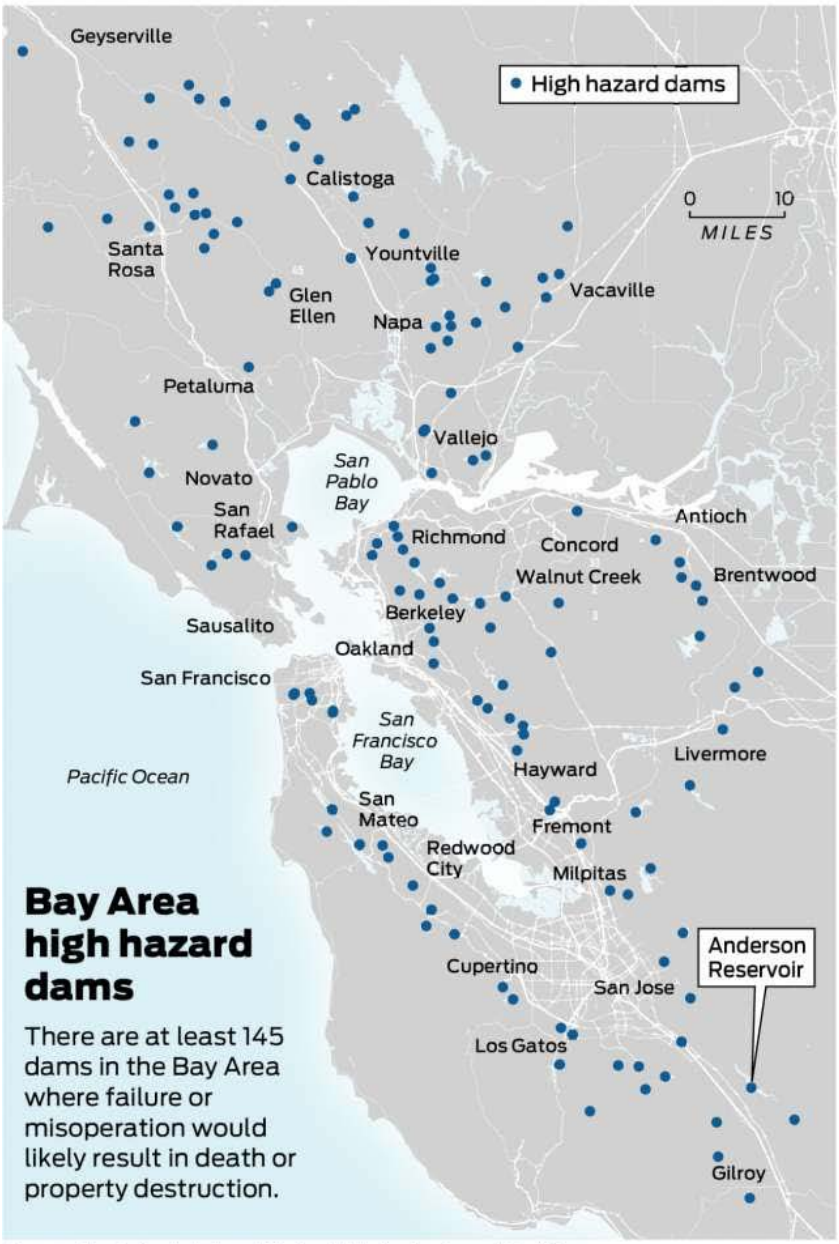
Most of these “high-hazard” dams were built before 1960. While not at a higher risk of failure, they could endanger countless homes and businesses that rest below the aging facilities, making emergency planning and maintenance increasingly important, experts said.

Yet at least 47 of the risky dams in the Bay Area — nearly a third — reported no formal procedures for warning downstream residents of a breach or set up other plans for reducing loss of life and property damage in an emergency, according to data analyzed by the Associated Press and reviewed by The Chronicle. The figures came from state inspections between 2015 and 2018.

California has required owners of high-hazard dams overseen by the state to submit such plans to the state's Office of Emergency Services since 2017, after the near failure of a spillway at the Oroville Dam forced the evacuation of 180,000 residents. But they must also be approved by the state.

In January, however, California's independent auditor, Elaine Howle, looked at compliance at 650 high-hazard dams regulated by the state and found that just 22 had approved emergency action plans, as of November. Although many more dam owners submitted plans, state officials sent them back for revisions and are still pending, according to the state's Office of Emergency Services.

On Monday, federal dam safety regulators ordered Valley Water in Santa Clara County to begin draining the Anderson Reservoir — the largest of 10 reservoirs storing water for the region — by Oct. 1 due to concerns that it could collapse in a major earthquake.



Source: Analysis of state and federal data by the Associated Press

John Blanchard / The Chronicle

"For too long we've taken these dams and the safety of these dams for granted," said Peter Gleick, cofounder of the Pacific Institute, an environmental think tank in Oakland. "A lot of people and a lot of property live below these dams, and we're either unsure of their safety or unprepared if they fail."

By some measures, California has a robust program to oversee its roughly 1,200 dams inspected by the state. A 2016 study by the Association of State Dam Safety Officials found that California had the nation's leading dam safety program, and that its high-risk dams were monitored by a "very well-documented and rigorous" state inspection program.

All but about 100 were ranked as “satisfactory” — the highest mark, said Chris Orrock, a spokesman for the California Department of Water Resources.
Dam Problems

“The vast majority of dams in California have the highest condition assessment possible,” he said.
In the Bay Area, nearly 90% of the high-hazard dams were recently labeled “satisfactory,” according to the Associated Press analysis.
Yet there are signs that dozens of dams in the Bay Area and throughout California are unprepared for an emergency — meaning the people living and working near them may be at-risk.

Having an emergency plan is a “very important tool for identifying and mitigating a potential failure” and its downstream consequences, said Mark Ogden, a technical specialist with the Association of State Dam Safety Officials.

State officials agreed, yet the vast majority of California’s dams still do not have approved emergency plans.
“This is important work and Cal OES is committed to holding individual dam owners accountable for updating and maintaining emergency action plans that meet the highest standards to protect public safety,” the department said in a statement.
The aging facilities will probably be tested in the coming years by global warming and anticipated periods of intense rain, experts said.

“The proper response isn’t panic,” said Gleick of the Pacific Institute. “The proper response is much more aggressive inspections and preparation for protecting populations at risk.”

# # #

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Here's who bought 787-acre Bay Area ranch in the same family for more than 100 years
SF Gate | February 19, 2020 | Amy Graff

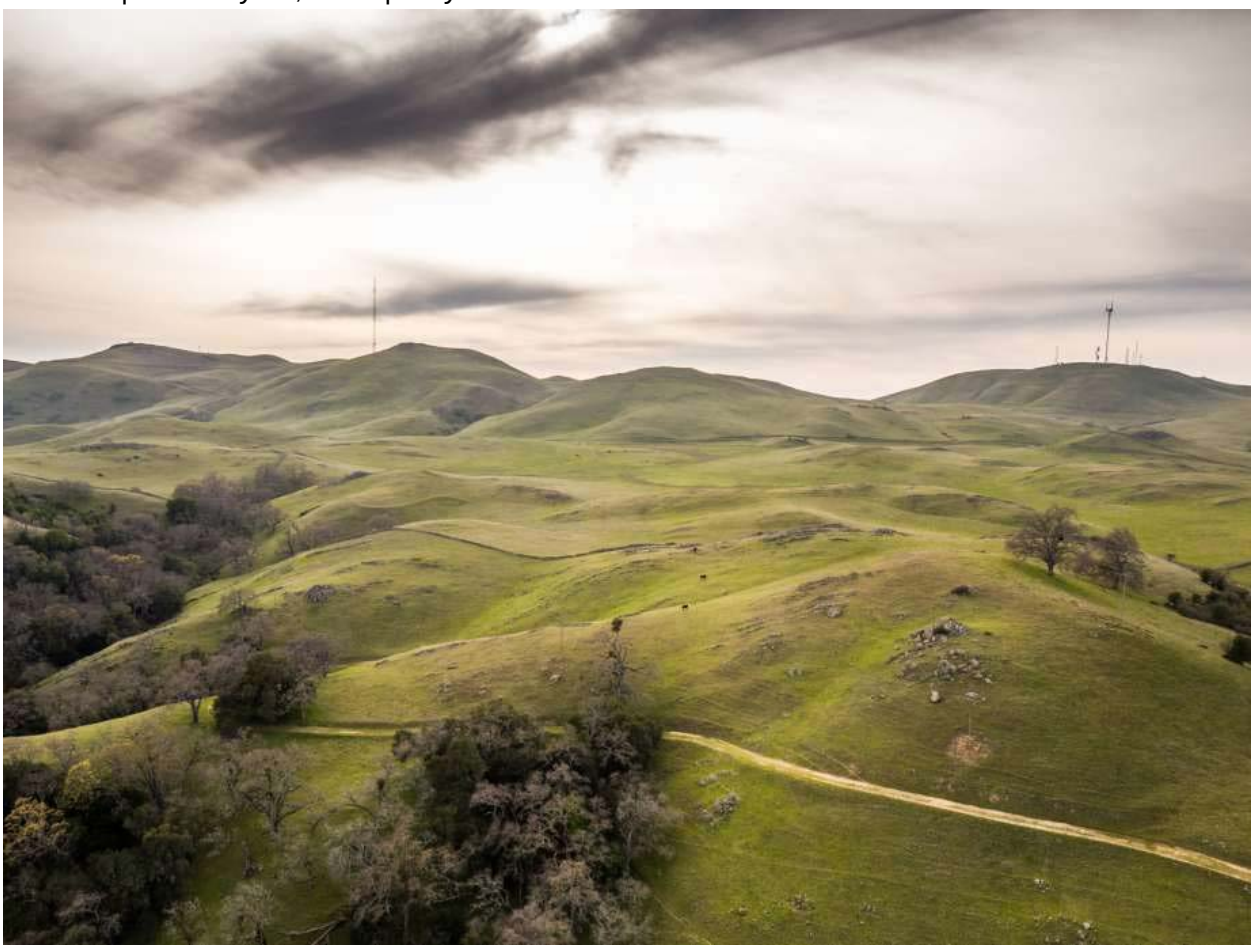

Photo: California Outdoor Properties
An undeveloped piece of 767-acre land spanning Sunol and Milpitas, Calif., has been in the same family since the 1900s and had been listed for $13.9 million. The San Francisco Public Utilities Commission bought the land for $9.7 million.

The San Francisco Public Utilities Commission is the new owner of a rare chunk of undeveloped Bay Area land stretching across 787 acres of oak-studded grassy hills in Milpitas and Sunol.

The so-called Wool Ranch went on the market last spring for $13.9 million, and the deal closed in December for $9.7 million. The property is trading hands for the first time since Ernest Wool purchased the property to raise sheep in the 1900s. The sheep business failed when coyotes killed the flock, so Wool transitioned to cattle. Wool's grandchildren now lease the land to a cattle rancher, and they are ready to pass their stewardship to a new owner.

The SFPUC is a department of the city and county of San Francisco, and provides drinking water to 2.9 million customers in Alameda, Santa Clara, San Mateo and San Francisco counties. Water is pulled from reservoirs in the East Bay, the Peninsula and the Sierra Nevada, including Hetch Hetchy.

This newly purchased land neighbors SFPUC property in the East Bay, and drains directly into Calaveras Reservoir and Alameda Creek downstream from Calaveras Dam.

Tim Ramirez, who manages the SFPUC's natural resources and lands division, said Wool Ranch was purchased to stop development in the watershed.

"The best way to ensure clean water is to protect the watershed that drains into the reservoir," Ramirez said. "The watershed acts to a certain extent as a natural filter."

The SFPUC was particularly interested in acquiring property in the Alameda watershed where only 40% of the land draining into the reservoirs is protected under ownership by public agencies and conservation agencies (SFPUC owns 25%). By comparison, the SFPUC owns 95% of the land in the Peninsula watershed.

Ramirez said the SFPUC will also protect the many creatures that live on the land, including tiger salamanders and red-legged frogs.

"The open space and the watershed in general are home to countless plants and animals that are native to the watershed," he said. "This offers a lot of opportunities to protect native species."

The property is a relic of California's old Spanish land grants. This particular property was part of a 4,394-acre concession known as Rancho Los Tularcitos and given in 1821 to José Loreto Higuera by the last Spanish governor of Alta California, Pablo Vicente de Solá.

The land feels incredibly private as it's surrounded by undeveloped land owned by the SFPUC, East Bay Municipal Utility District and East Bay Regional Parks.

"People can't hunt on the water district land so there's a lot of wildlife," said listing agent Tim Renfrew of California Outdoor Properties. "There are lots of wild deer, pig, turkey, quail, doves."

The SFPUC's "grazing program" will oversee the cattle operations on the land. At this time, there aren't any plans to offer the public access to Wool Ranch.

# # #

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City of Oceanside to Break Ground on Pure Water Oceanside
Times of San Diego | February 17, 2020 | Debbie L. Sklar

Pure Water Oceanside will produce enough water to provide more than 32% of the city's water supply, or 3-5 million gallons per day. Photo courtesy The city of Oceanside
Marking a historic moment for the city of Oceanside and the region, city officials and water industry leaders will break ground on Pure Water Oceanside on Wednesday, Feb. 19 at 10 a.m. at the San Luis Rey Water Reclamation Facility. Scheduled to be completed before the end of 2021, Pure Water Oceanside will be on the map as the first operating recycled water project in San Diego County.

Pure Water Oceanside will purify recycled water using state-of-the-art purification technology that replicates and accelerate nature's natural recycling process to create a new local source of high-quality drinking water that is clean, safe, drought-proof and environmentally sound. Pure Water Oceanside will lead the way in the region in providing a sustainable water supply for its residents, businesses and visitors. Once finished, the project will provide more than 32% of the city of Oceanside's water supply, or 3-5 million gallons per day.

At the groundbreaking, Congressman Mike Levin, City of Oceanside Water Utilities Director Cari Dale, San Diego County Water Authority General Manager Sandra Kerl, Bureau of Reclamation Area Manager Jack Simes and Metropolitan Water District Special Projects Manager Meena Westford will discuss the many benefits of the project – including reducing dependence on increasingly expensive imported water, safeguarding against drought and ensuring an exceptionally pure drinking water supply is available for future generations.

The public can learn more about Pure Water Oceanside by visiting the city's website and scheduling a behind-the-scenes tour at San Luis Rey Wastewater Treatment plant. For more information, visit www.PureWaterOceanside.org.

# # #

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One tunnel, same distrust

Environmental, tribal and Delta groups who initially lauded Gov. Gavin Newsom's decision to downsize California WaterFix are worried again

Sacramento Blog News and Review | February 12, 2020 | Scott Thomas

State water officials offered an early look at the downsized California WaterFix project earlier this month, and conservationists and far-traveling indigenous tribes say they still believe it has the potential to permanently alter life in and around the Delta.

The old version of California WaterFix, better known as the "twin tunnels," was opposed by virtually every major environmental organization in the state, as well as fishing alliances, Delta businesses and groups concerned with the cultural and historic resources from Freeport to Walnut Grove. In addition to fears that the project would threaten the survival of the Chinook salmon and smelt, the previous environmental impact report laid the groundwork for eminent domain and construction impacts that could turn the Delta's rural environment into an industrial zone.

In response to Gov Gavin Newsom's executive order last April to limit the project to one tunnel, the California Department of Water Resources held one of its first public "scoping meetings" Feb. 3 to start a new environmental review process. But the scope of what DWR's engineers have in mind still includes two steel and concrete intakes along the Sacramento River between Hood and Courtland, as well as two large forebays and various pumping plants.

The project also involves digging a roughly 40-to-50 mile-long tunnel through prime Delta farming land, to be set between 150 to190 feet underground. DWR is still considering two different routes for that tunnel.

"We don't currently have a preference between the two of them," DWR program manager Carrie Buckman told the downtown Sacramento crowd. "We're getting feedback. … This is a starting point, not a decision document."

But Molly Culton, conservation organizer for Sierra Club California, argued that the concept was flawed for an obvious reason.

"We strongly suggest DWR assess a no-tunnel project," Colton told state officials. "Diversions from an already fragile ecosystem will increase, and this tunnel will facilitate those diversions."

Sacramento-area resident Susan Wallace also wanted DWR to stop thinking of the Delta as a conveyance system.

"The emphasis seems to be more about moving water than taking care of the whole state," Wallace said. "I'm hoping as you start looking into this, you'll start encouraging more benign ways to do agriculture in the south without ruining the ecosystem of the Delta."

A number of those attending the meeting were members of different indigenous tribes that live along the Trinity and Klamath rivers. The health of those rivers is directly tied to the Delta. Tribal members had to drive more than five hours to make their voices heard because DWR didn't schedule any public meetings north of Sacramento.

Chief Caleen Sisk, head of the Winnemem Wintu Tribe, told officials she was worried about the new concept. "How are you going to do this without harming the Delta and its levees?" Sisk asked. "I would like to see the framework of your science that you're going to use to dig that far down."

The chief added, "My people have never benefited from this state's empire building."

# # #

LOIS HENRY: Collaboration is the new game in California water
Bakersfield.com | March 8, 2020 | Lois Henry SJV Water

Lois Henry is the CEO and editor of SJV Water, a nonprofit, independent online news publication dedicated to covering water issues in the San Joaquin Valley. She can be reached at lois.henry@sjvwater.org. The website is sjvwater.org.

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If agriculture in the valley is going to survive, water leaders need to get cozy with new ideas and new allies.

And, yes, that means environmentalists.

“Historically, water supplies have been developed in a vacuum,” said Eric Averett, general manager of Rosedale-Rio Bravo Water Storage District, at the Water Association of Kern County’s annual daylong Water Summit Wednesday.

That doesn’t work anymore.

“All interested parties need to be stakeholders, including environmentalists,” he said to the hundreds of farmers, water mangers and others gathered in the Mechanic’s Bank Arena.

Averett was part of the kickoff panel, along with consultant Scott Hamilton, that looked at the bleak reality that there is “No. New. Water,” as Averett said repeatedly, to help valley farmers replenish groundwater under the state’s new Sustainable Groundwater Management Act.

The Kern subbasin alone is overdrafted by 350,000 acre feet a year, he said. “There is no local solution large enough” to fill that hole.

That means locals must reach out to others in the region, including environmental groups, to find innovative solutions that benefit more than just a single water interest.

For example, Rosedale partnered with Irvine Ranch Water District to develop a groundwater recharge/bank near the Kern River. It was able to get $86 million in Senate Bill 1 state funding for the $171 million project by promising to give 25 percent of the water to environmental needs.

“So, environmental groups are a stakeholder in making sure our project succeeds,” Averett said.

There were multiple examples given throughout the day of similar joint projects, from using rice fields to grow bugs for baby salmon, to flooding other farm fields for temporary habitat for migrating birds.

Farmers got water, fish and fowl got a boost and no one went broke doing it.

Speakers encouraged summit attendees to work with larger, more diverse groups to find similar opportunities.

“There is no silver bullet,” said keynote speaker Armando Quintero, chair of the California Water commission. “What we need is silver buckshot. We need a bunch of solutions that work together.”

One of the possible solutions that got a lot of attention at the summit was the Water Blueprint for the San Joaquin Valley.

Hamilton explained that the blueprint is more of a process than an actual paper or report.

It’s goal is to bring 2.5 million acre feet of water into the valley from the Sacramento-San Joaquin Delta during high flow years in ways that don’t harm native fish and help recharge valley groundwater.

The blueprint idea, which began with the Friant Water Authority, has been circulating among valley water interests for about two years.

But many people, including Quintero and former State Water Resources Control Board Chair Felicia Marcus, who was also on a panel at the summit, said they hadn’t yet seen the plan with the kind of details presented by Hamilton.

Both said they were impressed with Hamilton’s blueprint presentation and wanted to learn more.

The basic idea is to capture water that’s excess to environmental needs during winter and spring storms.

The blueprint conceptualizes building perforated pipes beneath a layer of gravel through the delta and attaching them to pumps that could be used during high flow events. The pipes would be operated at a low velocity so they wouldn’t suck up any fish, as happens now with the massive pumps near Tracy.

Another dead end, literally, for many native fish, is that reverse flows caused by pumping can pull them into box canyons where they can’t get out and die. Under the blueprint, water diversion areas would be open-ended, allowing fish to travel through the delta naturally.

In order to move that delta water into the valley and aid in groundwater recharge, the blueprint envisions a series of new earthen canals depending on “landowners’ willingness to pay” and 100,000 acres of new recharge ponds.

“Traditional projects are very expensive,” Hamilton said, explaining that the blueprint would “piggyback” off existing unused facilities. “The California Aqueduct and Delta-Mendota Canal don’t run at full capacity in winter and spring.”

Importantly, he said, the blueprint doesn’t advocate any new storage, such as a reservoir.

Though ideas are starting to gel, Hamilton said costs haven’t been worked out yet but would be coming soon, perhaps later this week. In an interview later, he ballparked full build-out costs at possibly $5 billion.

Many of the blueprint concepts were submitted to Gov. Gavin Newsom’s office last fall for inclusion in his Water Resilience Portfolio, which came out in draft form in January. A final version of that report is expected out later this month.

When asked what the chances were for the blueprint’s success, Hamilton gave it “50-50.”

“Two months ago, I would have said 25 percent,” he said.

Since then, he said, several reports have shown the dire future the valley faces without some kind of improved water delivery program.

The most recent, by U.C. Berkeley economics Pprofessors David Sunding and David Roland-Holst, showed the state’s new groundwater law could result in one million acres being fallowed. That would result in job losses of 85,000, among other consequences, according to the report.

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Why California should support Delta tunnel proposal

If our state wants to remain competitive, it must re-engineer its water-delivery system

Mercury News | March 6, 2020 | Mike Mielke

The Sacramento-San Joaquin River Delta near Bouldin Island. (Bay Area News Group File Photo).

If our state wants to remain economically competitive, it must re-engineer the troubled estuary that serves as the hub of California's elaborate water-delivery system — the Sacramento-San Joaquin River Delta. The best and most viable way to do this is via the single Delta tunnel project proposed by Gov. Gavin Newsom, which the Silicon Valley Leadership Group and our 350 members support.

The water that flows through the Delta serves nearly 27 million people in our state and ensures 3 million acres of farmland stays productive. Yet, the current Delta water delivery system – comprised often of simple earthen levees – is fragile and extremely vulnerable to catastrophic disruption from earthquakes, floods, and rising seas. If this outdated system were to fail, salt water from the nearby San Francisco Bay would knock out the freshwater supply for most of the state, causing untold economic and environmental damage. This cannot be allowed to happen.

The governor's proposal envisions a single, 30-mile underground tunnel capable of transporting up to 6,000 cubic feet of water per second that would draw water from the north end of the Delta. The goal of modernizing Delta water delivery this way is to guarantee a baseline supply of water by more reliably capturing water during and after storm events, to protect existing supplies from the threats posed by climate change, sea level rise and earthquakes and to better

protect the delicate Delta ecosystem. At the same time, the state and public water agencies throughout California are seeking to diversify our overall water supply portfolio by pursuing water recycling, desalination, and conservation through an all-of-the-above approach that will help reduce over-reliance on the Delta.

We believe that it is critically important that the state move forward with the Delta tunnel process. It is the only viable alternative to protect our freshwater supply and guarantee that a minimum amount of quality water that citizens, the environment, and business rely on is delivered all across our state. That is why we were encouraged when the Newsom administration announced it had initiated the environmental review process on a single pipeline Delta tunnel project by issuing its Notice of Preparation (NOP). A NOP provides state agencies information about the potential environmental effects, including a description of the project and its location. This is a crucial next step in terms of moving this project forward and we're eager to review and provide comments to help ensure that the project guarantees a baseline supply of water for the state's residents, while providing enough capacity to ensure the project is financially viable.

It is important to note that the governor's Delta plan will increase the use of adaptive, real-time water management to optimize freshwater flow in the Delta – to the benefit of endangered species in the Delta. Furthermore, the new path forward will not necessarily result in a net increase of water exports to the south – contrary to what many are saying. That is because operation of the Delta tunnel will be governed by existing state and federal law, which require adequate water supply for the environment.

As California Natural Resources Secretary Wade Crowfoot recently said, decisions about the future of our state's water supply system "frequently get distilled into unhelpful narratives of fish versus farms, north versus south, or urban versus rural. We must rise above these historic conflicts by finding ways to protect our environment and build water security for communities and agriculture." The members of the Silicon Valley Leadership Group could not agree more, which is why we support the governor's Delta tunnel proposal and process.

# # #

Mike Mielke is is the Silicon Valley Leadership Group's senior vice president for environment and energy.