

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

January 10, 2020

Correspondence and media coverage of interest between December 11, 2019 and January 9, 2020

Correspondence

To: The Hon. Russell T. Vought, Director, Office of Management and Budget
From: Jackie Speier, Member of Congress
Date: December 20, 2019
Subject: Los Vaqueros Expansion Project

To: The Hon. Ann Moller Caen, SFPUC President and Members of the Commission
From: Daniel L. Wade, SFPUC, Director, Water Capital Programs – Infrastructure
Date: December 10, 2019
Subject: Response to BAWSCA Recommendations on the WSIP FY 2018-2019 Annual Report

Media Coverage

Water Supply Conditions:

Date: January 6, 2020
Source: Maven's Notebook
Article: Monthly Reservoir Report for January 1

Date: January 2, 2020
Source: San Francisco Chronicle
Article: Up in the Sierra, nearly normal snowpack shows drought predictions wrong

Date: January 2, 2020
Source: Sacramento Bee
Article: Enough rain? Sufficient snow? Here's how wet California, and Sacramento, got in 2019

Water Policy:

Date: January 8, 2020
Source: Mercury News
Article: Opinion: Westlands backs governor's Delta water strategy

Date: January 7, 2020
Source: Maven's Notebook
Article: Reactions to the Governor's draft water resilience portfolio

Date: January 3, 2020
Source: Maven's Notebook
Article: State Agencies Release Draft Water Resilience Portfolio

Date: December 31, 2019
Source: The Daily Journal
Article: California's water policy

Water Supply Management:

Date: December 28, 2019
Source: Daily KOS
Article: Good Numbers of Salmon and Steelhead Return again to Mokelumne River

Water Infrastructure:

Date: December 26, 2019
Source: Mountain View Voice
Article: With recycled water deal signed, attention shifts to contentious Baylands site

Date: December 18, 2019
Source: San Francisco Chronicle
Article: House sinks Hetch Hetchy boating proposal

Miscellaneous:

Date: January 9, 2020
Source: SFPUC
News
Release: New Reusable Water Coolers Installed in City Hall Featuring Water from SFPUC Water System

JACKIE SPEIER
14TH DISTRICT, CALIFORNIA

2465 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-0514
(202) 225-3531
FAX: (202) 226-4183
155 BOVET ROAD, SUITE 780
SAN MATEO, CA 94402
(650) 342-0300
FAX: (650) 375-8270
WWW.SPEIER.HOUSE.GOV
WWW.FACEBOOK.COM/JACKIESPEIER
WWW.TWITTER.COM/REPSPEIER

Congress of the United States
House of Representatives
Washington, DC 20515-0514

December 20, 2019

The Honorable Russell T. Vought
Director, Office of Management and Budget
Eisenhower Executive Office Building
1650 Pennsylvania Avenue, NW Room 252
Washington, D.C. 20503

Dear Director Vought:

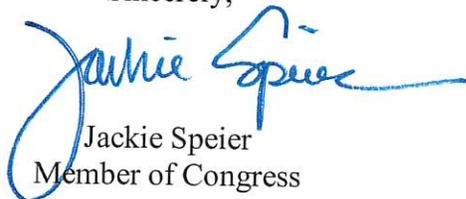
On October 8, 2019, the Final Federal Feasibility Report for the Los Vaqueros Reservoir Expansion Project (Project) was delivered to the Office of Management and Budget (OMB) for review. I respectfully request that OMB expeditiously consider the review of the Federal Feasibility Report for the Project Federal so that the Project can remain on track to meet the WIIN Act and the California Water Commission deadlines.

The Project would add over 115,000 acre-feet of additional storage to an existing off stream reservoir and would improve water supply reliability for over 5 million urban residents and over 2 million acres of irrigated farmland in California. As demonstrated in the Final Federal Feasibility Report, the Project is the most cost-effective alternative for increasing water supply for federal wildlife refuges and operational flexibility for the Central Valley Project. The Project is seeking federal participation in the current fiscal year of \$29 million and a total federal investment of \$223 million for a project which is currently estimated to cost \$895 million.

Timely consideration of the review is critical for federal participation. In 2018, the California Water Commission determined that the Project is feasible, cost-effective and would provide substantial public benefits. The California Water Commission conditionally awarded \$459 million to the Project. However, funding from the California Water Commission and federal funding under the Water Infrastructure Improvements for the Nation (WIIN) Act are dependent on meeting multiple criteria by January 2022. Meeting these criteria by 2022 requires a prompt decision regarding federal participation in the Project.

Thank you for your attention to this important matter.

Sincerely,


Jackie Speier
Member of Congress

COMMITTEE ON ARMED SERVICES
SUBCOMMITTEES:
CHAIRWOMAN, MILITARY PERSONNEL
STRATEGIC FORCES
PERMANENT SELECT COMMITTEE
ON INTELLIGENCE
SUBCOMMITTEES:
COUNTERTERRORISM, COUNTERINTELLIGENCE,
AND COUNTERPROLIFERATION
INTELLIGENCE MODERNIZATION AND READINESS
COMMITTEE ON OVERSIGHT
AND REFORM
SUBCOMMITTEES:
GOVERNMENT OPERATIONS
ENVIRONMENT
Co-Chair, Democratic Women's Caucus
Senior Whip

CC:

The Honorable Dr. Tim Petty
Assistant Secretary for Water and Science
Department of the Interior
1849 C Street, NW, Mail Stop 6640
Washington, D.C. 20240



DATE: December 10, 2019

TO: The Honorable Ann Moller Caen, President
The Honorable Francesca Viotor, Vice President
The Honorable Anson Moran
The Honorable Sophie Maxwell
The Honorable Tim Paulson

THROUGH: Harlan L. Kelly, Jr., General Manager *HK*
Kathryn How, Assistant General Manager – Infrastructure *KHow*
Steve Ritchie, Assistant General Manager - Water *SR*

FROM: Daniel L. Wade, Director *D. Wade*
Water Capital Programs - Infrastructure

SUBJECT: Response to BAWSCA Recommendations on the
WSIP FY2018-2019 Annual Report

This memorandum provides the San Francisco Public Utilities Commission's (SFPUC's) response to the three recommendations presented by the Bay Area Water Supply and Conservation Agency (BAWSCA) in their letter to the Commission dated October 18, 2019 concerning their review of SFPUC's Annual Report on the Water System Improvement Program (WSIP) for Fiscal Year (FY) 2018-2019.

The three recommendations are accordingly restated below together with responsive feedback:

BAWSCA Recommendation #1: Regional Closeout Projects.

It is recommended that future regional WSIP quarterly reports and annual reports identify known issues and challenges to scope, schedule, and budget for all four regional closeout projects (San Joaquin, Sunol, Bay, and Peninsula).

SFPUC Response:

We have been reporting in the WSIP quarterly reports on known issues and challenges to scope, schedule and budget for the four WSIP regional closeout

London N. Breed
Mayor

Ann Moller Caen
President

Francesca Viotor
Vice President

Anson Moran
Commissioner

Sophie Maxwell
Commissioner

Tim Paulson
Commissioner

Harlan L. Kelly, Jr.
General Manager



projects since these projects were initiated in 2016. We will also add summaries to future WSIP annual reports for these four projects.

BAWSCA Recommendation #2: WSIP System Performance Objectives Analysis.

It is recommended that the regional system operations model be used to confirm achievement of all LOS goals and system performance objectives, and that the results of this analysis be included in the FY 2019-20 Annual Report.

SFPUC Response

The LOS goals and objectives established under WSIP for, Seismic Reliability and Delivery Reliability were modelled to establish a portfolio of projects that would need to be implemented to meet the respective goals and objectives under WSIP. All projects established under WSIP to meet these goals and objectives, as well as those for Water Quality, have been completed and placed into operation. Therefore, by definition, the LOS goals and objectives established under WSIP for Water Quality, Seismic Reliability, and Delivery Reliability have been met.

The Water Supply LOS goal and objectives have not been fully met to date due to the technical challenges and delays associated with the Regional Groundwater Storage and Recovery Project and the Alameda Creek Recapture Project. In addition, although the primary LOS goal of the Lower Crystal Springs Reservoir, i.e. Delivery Reliability, has been met, current constraints on re-filling Lower Crystal Springs Reservoir have delayed achievement of the secondary LOS goal of Water Supply for this project. Re-filling of the Lower Crystal Springs Reservoir requires that sensitive flora be first re-established around the rim of the reservoir before the full level of reservoir storage can be restored.

Potential impacts on the Water Supply LOS goal and objectives will be assessed and reported in future WSIP annual reports based on both construction progress and the degree to which the original operational criteria established for these projects can be met.

BAWSCA Recommendation #3: Progress Towards Meeting Water Supply LOS Goals.

It is recommended that the following key information be included in all future annual reports:

(a) Long-term impacts on Water Supply Goal – Alameda Creek Recapture Project. Provide updated yield estimates for the project, including proposed and adopted permit requirements and/or EIR mitigations that affect the ability to recapture the target flow.

(b) Long-term impacts on Water Supply Goal – Regional Groundwater Storage and Recovery Project. Provide updated yield estimates for the project. We also recommend that the SFPUC prepare a “Preliminary Regional Groundwater Storage and Recovery Project Yield Report” based on best available information at this current point in time and submit it to the Commission by March 31, 2020. This report should provide an estimate of the expected yield of the Phase 1 wells and characterize the viability of any Phase 2 test wells potentially suitable for development into production wells. The report should also note any expected contributions to meeting LOS goals from the Daly City Recycled Water Expansion project

SFPUC Response:

We will provide updated yield estimates in future annual reports for both the Alameda Creek Recapture Project (ACRP) and the Regional Groundwater Storage and Recovery Project (RGSRP).

We previously provided a report to the Commission dated August 30, 2019 that provided an update on the status of the Regional Groundwater Storage and Recovery Project, including best available data to date regarding yield estimates for the project. We do not anticipate that we will have better data on which to base further yield updates until the wells have operated for a sufficient period, likely on the order of many months to years. Therefore, we do not believe there would be value in updating the yield estimates in March 2020 as requested by BAWSCA. We will, however, provide updated yield estimates annually, using the best available data, in future annual reports, as requested.

We recognize that both the ACRP and the RGSRP are important water supply projects that have both encountered numerous challenges. Despite these

challenges, the SFPUC remains committed to delivering both projects as currently scoped in the March 2018 Revised WSIP. Furthermore, the SFPUC will continue to evaluate water supply needs, and will consider future actions, as necessary to meet overall water supply LOS goals and objectives established under WSIP.

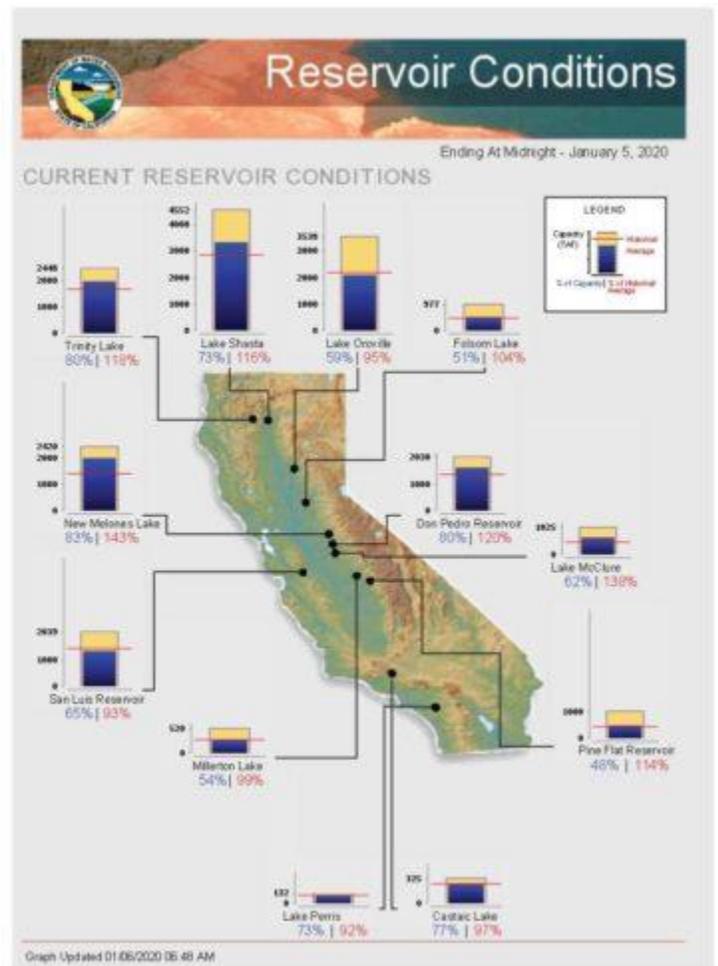
cc: Assembly Member Rudy Salas, Chair, Joint Legislative Audit
Committee
Senator Richard Roth, Vice Chair, Joint Legislative Audit Committee
The Hon. Michael Gardner, Chair, Alfred E. Alquist Seismic Safety
Commission
The Hon. Mia Marvelli, Acting Vice Chair, Alfred E. Alquist Seismic
Safety Commission
Stefan Cajina, Chief Engineer, No. Coastal Sect., SWRCB, Div. of
Drinking Water
Wesley Opp, Chief Consultant, JLAC
Richard McCarthy, Executive Director, Alfred E. Alquist Seismic Safety
Commission,
Fred Turner, Structural Engineer, Alfred E. Alquist Seismic Safety
Commission
Vlad Rakhamimov, Assoc. Engineer, No. Coastal Sect., SWRCB, Div.
of Drinking Water
Darrin Polhemus, Deputy Director, SWRCB, Div. of Drinking Water
Daniel Newton, Assistant Deputy Director, SWRCB, No. Ca. Drinking
Water Field Ops
Nicole Sandkulla - Chief Executive Officer and General Manager,
BAWSCA
Thomas (Tom) Francis - Water Resources Manager, BAWSCA

MONTHLY RESERVOIR REPORT for January 1

Maven's Notebook | January 6, 2020 | Robert Shibatani

The latter part of 2019 provided some much-needed precipitation across the State. As of January 1, 2020, total north CVP water storage was about 8.17 million acre-feet or, approximately 71.9% of total north CVP storage capacity. This is about 1.71 MAF more storage than we had on this same date last year. Of the north State "big-4", Trinity, Shasta, Folsom, New Melones reservoirs, together with Oroville reservoir all have storage well above the 15-year average for those reservoirs. When was the last time we had Trinity, Shasta, New Melones, and Oroville all over 120% of their 15-year averages in early January?

Despite what seems like a lot of rain since about the Thanksgiving week, accumulated totals really have not amounted to much. North State and central Sierra Nevada precipitation values to date are still below their long-term averages but have arisen considerably over the Holiday season. The same goes for the upper American River catchment at Blue Canyon, where precipitation totals to date have increased to about 50% of average.



Average snow water equivalents (SWE) across the Northern, Central and Southern Sierra regions were 8.5" 10.1" and 8.9" or, 81%, 94% and 109% of normal for this date. Statewide, based on over 98 stations reporting, average SWE is 9.3" or 94% of normal for this date.

Major river flow contributors to Delta inflow, the Sacramento, Feather, and American are all making releases about 50% higher than their 15-year median for this time of year. The lower American River, for example, is releasing over 2,300 cfs from Nimbus Dam to the lower river, Keswick is releasing almost 5,600 cfs, Oroville is releasing about 2,000 cfs and even Goodwin is releasing over 800 cfs.

Overall, we can say that while the early start to the 2019-2020 WY was conspicuously dry, late autumn and Holiday season storms have helped raise existing carryover, upper basin SWE, and catchment soil moisture cross the Sierra Nevada. The season is still early and storage space has been available in most reservoirs up to their encroachment levels. None of either Trinity, Shasta, New Melones, Folsom have made mandated "spills" to date.

At this point, there is no reason to worry about the State's water supply storage condition.

#

*Robert Shibatani, a physical hydrologist with over 35-years combined academic, legal, consulting and water advisory expertise, is an international expert witness on reservoir-operations, climate change hydrology, commercial flood damage litigation, and water supply development. He is Managing Partner for The SHIBATANI GROUP International, a division of The SHIBATANI GROUP Inc. and resides in Sacramento, California.
robert@theshibatani.com*

Up in the Sierra, nearly normal snowpack shows drought predictions wrong

San Francisco Chronicle | January 2, 2020 | Peter Fimrite



Sean DeGuzman of the state Department of Water Resources uses a metal tube to calculate the depth and water content of the Sierra snowpack at Phillips Station near Lake Tahoe.

Photo: Rich Pedroncelli / Associated Press

The storms that swept across California over the past month have laid down enough snow to bring the Sierra to just shy of its long-term average, providing temporary relief for the nervous Nellies who monitor the state's frozen water supply.

The state's annual snow surveys, used by the California Department of Water Resources to gauge the drinking water supply for the year, began Thursday and found that the snow water content in the Sierra snowpack is 9.3 inches, or 90% of normal for the new year.

That, by all accounts, is pretty good considering earlier predictions of drought.

Last month's storms provided the biggest boost in the southern Sierra, which is 104% of normal. The northern part of the mountain range is only 77% of the long-term average, while the central portion, including the Lake Tahoe area, is 90% of normal for this time of year.

It's good to be that close to average, said Jay Lund, a professor of civil and environmental engineering and the director of the Center for Watershed Sciences at UC Davis, but California is not yet safe from drought.

“It’s still too early to make an accurate prediction,” Lund said. “We still have a lot of variability between years, and we have a lot of variability between wet periods, too. We won’t really know what the water year is going to be until March, maybe even late March.”

The surveys are a vital gauge of how much drinking and irrigation water is available in California. The snow in the Sierra and lower Cascades provides as much as a third of the state’s water, sending runoff into California’s sprawling network of reservoirs and aqueducts, which supply water districts throughout the state.

The state surveyors use metal tubes to calculate the depth and water content of the Sierra snow during a 10-day window around the first of every month, from January to May. The measurements are taken at 260 “snow courses” across the Sierra and are combined with 130 electronic sensor measurements to calculate how much water will be in the reservoirs once all the snow melts.

Among the snow courses is a field at the historic Phillips Station, just north of the Sierra-at-Tahoe Resort south of Lake Tahoe in El Dorado County. Phillips was the location of a cattle ranching operation starting in 1859 and has been a stage-coach stop, hotel, post office, and stopover for cattle drives and silver miners over the years.

The station itself burned down in 1873, but Phillips, at 6,800 feet, is a symbolic location in that it is roughly mid-range in elevation and is an accessible place for surveyors to announce the results to the media every month.

The snow was 33.5 inches deep at Phillips. The water content was 11 inches, or 97% of the long-term average for January at that location going back to 1941, according to Sean DeGuzman, the water department’s chief of snow surveys and water-supply forecasting.

“Climate change is altering the balance of rain and snow in California,” DeGuzman said. “That is why it is important to maintain our measurements of the snowpack to document the change, in addition to having critical information to forecast spring runoff.”

Despite being just short of the long-term average, most experts are pretty happy, considering how worried they were only a couple of months ago when a ridge of high pressure was blocking storms over the Pacific from hitting California.

Before the rains began, the U.S. government’s Drought Monitor classified 81% of California as “abnormally dry.” Forecasting models suggested more of the same was on the way, prompting the experts to soberly predict a long dry spell this winter, possibly veering into drought.

But those experts, with their sophisticated computer models and learned talk, were wrong. The high-pressure patch off the coast broke up in late November and the state has gotten a pretty good pounding of rain and snow ever since.

“Every wet season we’re worried about droughts and we’re worried about floods, and every year we should be worried about both because both can happen,” Lund explained. “I think given the variability we have in California with water, we always have to pay attention and prepare for both droughts and floods and make sure that we are managing water well.”

The situation was similar in 2018-19, when there were a few wet days in November and December before January brought in a riotous array of Pacific storms. More than 30

atmospheric rivers — the large plumes of moisture that flow off the Pacific — rolled over California last year, including six in February alone.

The storms last spring piled the mountain range with three times the amount of snow as the year before. The 2018-19 rainy season turned into one of the wettest of the decade.

The towering drifts eventually melted and filled the reservoirs. And because last winter was so wet, California's big reservoirs were already in good shape this season.

Lake Shasta, the largest-capacity reservoir in the state, is 73% of capacity, which is 117% of the long-term average for this time of year.

Lake Oroville, on the Feather River about 75 miles north of Sacramento, was at 59% of capacity. That's 96% of average for this time of year at the nation's tallest dam.

Shasta and Oroville together carry 80% of the state's reservoir supply, which is used to irrigate 8 million acres of farmland and provide water for close to 30 million people.

Most reservoirs are now below capacity in a balancing act between storage and flooding. The trick at this time of year is to avoid what happened in February 2017, when Oroville Dam managers released a torrent of water that caused the structure's main spillway to partially collapse. Officials then turned to the dam's emergency spillway for the first time ever, and the hillside began to erode, forcing 188,000 people in downstream communities to evacuate.

Management of water levels and outflow at the 154 reservoirs tracked by the state is critical during the winter because of the danger that the Oroville disaster exposed.

#

Peter Fimrite is a San Francisco Chronicle staff writer. Email: pfimrite@sfchronicle.com Twitter: [@pfimrite](https://twitter.com/pfimrite)

(This page was intentionally left blank)

Enough rain? Sufficient snow? Here's how wet California, and Sacramento, got in 2019
Sacramento Bee | January 2, 2020 | Michael McGough



The CA Department of Water Resources conducted the first manual snow survey of 2020 on Jan. 2, 2019. They recorded 33.5 inches of snow depth and a snow water equivalent of 11 inches, which is 97 percent of average for this location. BY CALIFORNIA DEPARTMENT OF WATER RESOURCES

It's a new year, and a time to take stock in California's most precious commodity: water.

While October marks the start of the new water year, state hydrology leaders opened the new year with the first measure of snowpack in the Sierra Nevada, east of Sacramento. Coupled with the rainfall totals for the calendar year, thanks to a series of storms in late November, Thursday's measurement brought a hopeful start for the state's biggest source of water.

Numbers from the National Weather Service and California Department of Water Resources tell the story of 2019 for the Sacramento region, Northern California and the Sierra Nevada mountains: a very wet start, followed by a long dry spell from late spring into mid-November, and finally a few winter storms to end the year strong.

Those storms brought an end to California's 2019 wildfire season, which had roared to life in the autumn months with Sonoma County's Kincade Fire and other significant blazes in Northern and Southern California after a relatively quiet summer.

Heavy rain and snow bookending 2019 also mean reservoirs are in good shape to start 2020.

As of Wednesday, eight of DWR's 12 reservoirs were at or above historical average levels, and none were below 91 percent of normal.

The Folsom Lake Reservoir was at 107 percent of its normal level this time of year, and at 52 percent of its full capacity. Lake Oroville in Butte County is at 96 percent of normal and 59

percent of its capacity; New Melones Lake is at 143 percent of normal, 83 percent full; and the Deon Pedro Reservoir is at 121 percent of average, 80 percent full.

Reservoir across California were at healthy levels as of Jan. 1, 2020. California Department of Water Resources

HOW MUCH DID IT RAIN IN SACRAMENTO?

Sacramento's yearly average rainfall is about 17.8 inches, according to the NWS. Through Monday, the station at Sacramento Executive Airport had received 24.9 inches for the year.

That makes 2019 Sacramento's second-wettest calendar year in two decades, edged by only by the 26 inches of precipitation that fell in 2017, the year that then-Gov. Jerry Brown declared an official end to California's drought.

Prior to that, the wettest year came in 1998, when just under 28 inches of rain fell at the city's main weather station. Last year's mark of 24.9 inches also represented Sacramento's sixth-wettest calendar year on record, dating back to 1948.

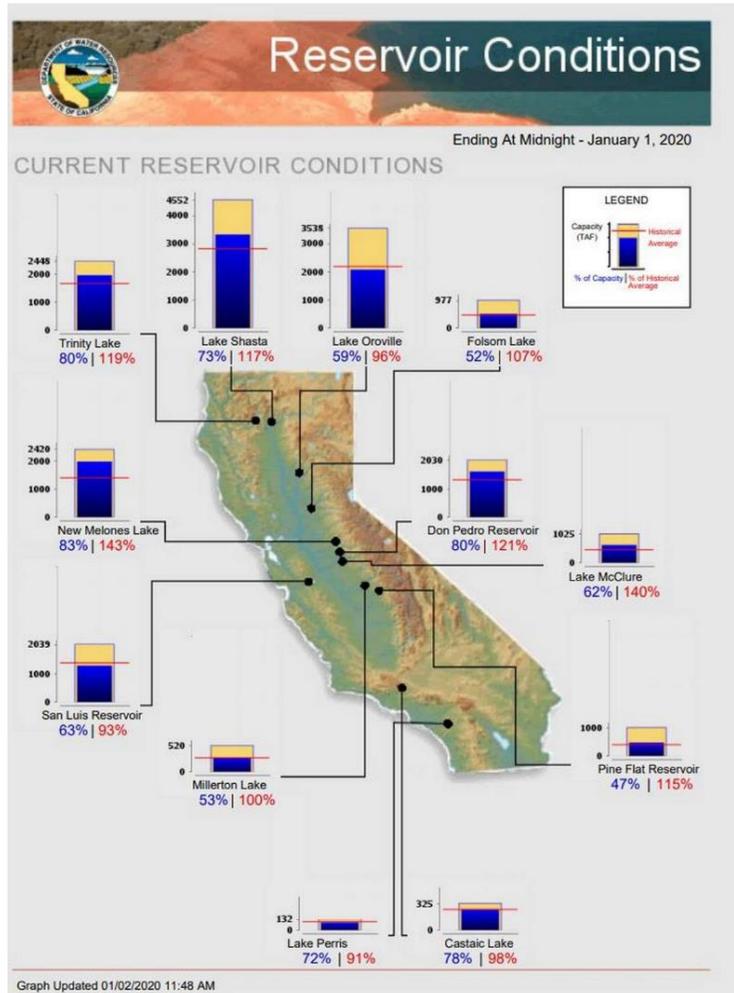
Nearly 20 inches fell from January to May 2019, boosted by 7.84 inches that fell in February thanks to strong atmospheric river systems that pounded Northern California with powerful storms.

The wet trend was a welcome sign, and it led the U.S. Drought Monitor to show the entire state becoming drought-free for the first time in about eight years.

But in Sacramento and across most of the rest of Northern California, the rain halted. From late May through late November, just over one-tenth of an inch of measurable precipitation was recorded in the capital city.

But then December ended the water year on a high note, with more than an inch-and-a-half falling the first two days of the month to jump-start Sacramento to total of 4.35 inches by the end of the month, 1.3 inches more than average.

A precipitation map by the NWS confirms it was a wetter-than-normal December throughout most of the state.



HOW ABOUT SIERRA SNOWPACK?

The statewide average snow-water equivalent, across the Sierra Nevada range, stood at 9 inches as of the last day of 2019, according to the DWR. That represents 94 percent of normal for California, and is the best year-end figure since 2015, when it reached 106 percent.

DWR officials conducted the first manual snow survey of 2020 Thursday at Phillips Station near Echo Summit, recording a snow depth of 33.5 inches for a snow-water equivalent of 11 inches.

Sean DeGuzman, chief of snow surveys and water supply forecasting at the DWR, said those numbers are about 97 percent of average for the start of January, and 44 percent of the average snowpack for April, which is when snowpack typically peaks.

“It’s still too early to predict what the remainder of the year will bring in terms of snowpack,” he said.

DeGuzman stood atop heavy powder and wearing a beanie and thick blue jacket as he announced the results, streamed live via Facebook.

“While the series of cold weather storms in November and December has provided a good start to the 2020 snowpack, precipitation in Northern California is still below average for this time of year,” DWR Director Karla Nemeth said in a prepared statement. “We must remember how variable California’s climate is and what a profound impact climate change has on our snowpack.”

Surveys at Phillips Station over the first few months of 2019 brought good news for the state’s water health. A reading of 51 inches of snow-water equivalent at the start of April made it the fourth-best start to that month ever recorded thanks to Northern California’s torrential storms early last year.

WHAT DOES THIS MEAN FOR STATE’S DROUGHT STATUS?

Though a “drought” technically refers to a statewide emergency being declared, as Gov. Brown did in January 2014, California is in excellent shape, according to the U.S. Drought Monitor.



According to a map released Thursday with data through the last day of 2019, more than 96 percent of the state's land area has no measurable level of drought or "abnormal dryness." The only dry patch is seen in the state's northeast corner.

On Jan. 1, 2019, more than 92 percent of California had some level of drought or dryness, according to the monitor.

U.S. Drought Monitor California

December 31, 2019
(Released Thursday, Jan. 2, 2020)
Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	96.43	3.57	0.00	0.00	0.00	0.00
Last Week <i>12-24-2019</i>	96.43	3.57	0.00	0.00	0.00	0.00
3 Months Ago <i>10-01-2019</i>	95.29	4.71	2.06	0.00	0.00	0.00
Start of Calendar Year <i>01-01-2019</i>	7.77	92.23	75.17	14.12	2.10	0.00
Start of Water Year <i>10-01-2019</i>	95.29	4.71	2.06	0.00	0.00	0.00
One Year Ago <i>01-01-2019</i>	7.77	92.23	75.17	14.12	2.10	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

Brad Pugh
CPC/NOAA



droughtmonitor.unl.edu

A map and statistics concerning drought conditions across California as of Dec. 31, 2019, from the U.S. Drought Monitor. Brad Pugh CLIMATE PREDICTION CENTER / NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

###

Opinion: Westlands backs governor's Delta water strategy

The voluntary agreements sought by Newsom will produce greater benefits for native fish

Mercury News | January 8, 2020 | Dan Errotabere



Farmers in the Central Valley require a more reliable water supply in California. (Bay Area News Group File Photo)

The Mercury News and East Bay Times editorial “Newsom is being played by Big Ag on Delta water” asserted: “Gavin Newsom is being played by Big Ag interests as he tries fruitlessly to negotiate a truce in California’s water wars.” Gov. Newsom has proven that he will not be played by anyone or any interest group – be it an agricultural, urban, or environmental interests.

The editorial asserts Newsom capitulated to Westlands Water District when he vetoed SB1. But Westlands was only one of numerous water agencies that opposed SB1; others included large urban agencies, including Valley Water and Metropolitan Water District of Southern California. The governor vetoed SB1 because, in his words, SB1 was a “solution in search of a problem.” When he vetoed SB1, Newsom correctly observed: “Senate Bill 1 does not ... provide the state with any new authority to push back against the Trump administration’s environmental policies and it limits the state’s ability to rely upon the best available science to protect our environment.”

Newsom recognizes that issues related to protection and restoration of native fish in the Delta are complex and cannot be resolved by simplistic, narrowly focused actions. He has continuously sought solutions that do not require the state to protect the more than 25 million people and 2 million acres of fertile land that depend on water conveyed through the Delta at the expense of the health of the Delta.

Consistent with the science developed over the last three decades, the Newsom administration is pursuing comprehensive, watershed-wide solutions that address the numerous factors that limit the abundance of native fish in the Delta. These types of solutions are the ones that are most likely to achieve the state's co-equal goals of the 2009 Delta Reform Act, of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. It is for that reason, Westlands and numerous other water agencies strongly support the governor's efforts to develop voluntary agreements that include both flow and non-flow actions. Indeed, modeling conducted by the California State Water Resources Control Board indicates that the voluntary agreements, if implemented, will produce greater benefits for native fish than the single-focused, unimpaired flow approach that threatens agricultural, urban, and wildlife communities.

On Nov. 21, 2019, the state announced, without explanation, that it had concluded new biological opinions issued by federal agencies to protect native fish under the Endangered Species Act are not scientifically adequate and would sue the federal agencies. This announcement was both surprising and disappointing because the state Department of Water Resources, as a co-applicant, was involved in preparing the new biological opinions, and prior drafts of the biological opinions were modified to address concerns expressed by the California Department of Fish and Wildlife. At the time of the state's announcement, its representatives recognized the need to work quickly with the federal agencies to address the state's concerns with the biological opinions, and they acknowledged the relationship between the biological opinions and the voluntary agreements.

It is true that on Dec. 10, 2019, Westlands' general manager sent to representatives of the state an email that stated the threat of litigation would make it "impossible to reach a voluntary agreement," but that same email encouraged the state to work with the federal agencies to resolve quickly, outside of a litigation context, the state's concerns with the biological opinions. Westlands expressed that view, not as a threat, but in recognition of the circumstances. How can voluntary agreements intended to result in actions that support native fish be reached when there is litigation between necessary parties to the voluntary agreements, the state and federal agencies, over biological opinions that pertain to the same native fish? Simply put, the earlier the issues over the biological opinions are resolved, the sooner important discussions on voluntary agreements can resume.

#

Dan Errotabere is a third generation family farmer in Fresno County and president of Westlands Water District.

REACTIONS to the Governor's draft water resilience portfolio

Maven's Notebook | January 7, 2020

Last Friday, the Newsom administration released the long-awaited Water Resilience Portfolio with over 100 specific actions across four broad categories. Here's what organizations had to say, listed in alphabetical order:

From the Coalition for a Sustainable Delta:

The Newsom Administration's highly anticipated Water Resilience Portfolio presents an impressive suite of actions that will certainly advance California water management. The Natural Resources Agency, CalEPA, and California Department of Food & Agriculture's plan offers new opportunities to improve the Sacramento-San Joaquin Delta ecosystem through enhanced monitoring and incorporation of adaptive management based on the best available science, enhance conveyance and storage, and address the impacts of climate change.

"The Coalition for a Sustainable Delta remains concerned, however, that the portfolio fails to address the growing impacts of water scarcity on rural farming communities throughout the Central Valley of California. While the portfolio recognizes land fallowing resulting from implementation of the Sustainable Groundwater Management Act and increasingly limited surface water supplies, it stops short of providing real solutions to address the impacts to residents, farms and small businesses that depend on reliable water supplies," said Bill Phillimore, Coalition for a Sustainable Delta President. "The state needs to provide more concrete solutions to a problem that will have far reaching impacts on millions who live and work in these regions."

From Maurice Hall at the Environmental Defense Fund:

"EDF is encouraged to see the Newsom administration lean in to build climate resilience into California's overtaxed water supply system. The draft water resilience portfolio released today has an appropriate emphasis on ensuring all Californians have access to clean drinking water and puts forth an ambitious agenda that balances the many uses of California's water, including enhancing and protecting the fish and wildlife that depend on our streams, rivers and wetlands. We look forward to working with the administration to strengthen the environmental measures outlined in the portfolio and then quickly moving forward to implement the highest priorities."

From the Sacramento Regional Groundwater Authority, Sacramento Groundwater Authority, the Water Forum, and the Sacramento Area Flood Control Agency:

Regional organizations that provide water supply, flood protection, groundwater management and ecosystem restoration in the American River watershed today applauded the findings and recommended actions presented in Governor Gavin Newsom's draft Water Resilience Portfolio, the state's first-ever comprehensive and long-term plan on how to manage the state's water resources in the face of climate change. The report recommends developing inclusive solutions that protect the natural and human environment and provide water for our communities. The greater Sacramento region has been at the forefront of this approach for decades.

The Regional Water Authority, Sacramento Groundwater Authority, Sacramento Area Flood Control Agency, and Water Forum are committed to continuing to collaborate with each other and its state and federal government partners to advance long-term, regional planning and projects to maintain and diversify supplies, protect and enhance natural systems, and build more connected, adaptive water management infrastructure to be prepared for more extreme weather and less predictable precipitation patterns.

“Our region has long been preparing to address the impacts from climate change on our water resources at a watershed scale. We believe the water resilience portfolio findings are fully aligned with the solutions we have been developing,” said Jim Peifer, executive director for the Regional Water Authority and Sacramento Groundwater Authority. “The region’s climate adaptation portfolio re-imagines how water should be managed in the face of a less reliable water supply and a greater flood threat that is expected from reduced snowpack and flashier rainstorms in a narrower wet season. While these challenges are real and daunting, we know our holistic approach will solve them.”

“Through the Water Forum, our region has a 20-year track record of applying science and innovative management practices to balance water supply reliability with ecosystem health on the lower American River,” said Tom Gohring, executive director of the Water Forum. “The governor’s report underscores that our region can take this same, collaborative approach to building climate resiliency through new projects and practices that make our water management more adaptive and nimble in the face of changing weather conditions.”

“Climate change is posing a serious challenge to the sustainability of the water management system that we currently rely on to control flooding, meet our water demands and protect the American River,” said Rick Johnson, executive director for the Sacramento Area Flood Control Agency. “SAFCA brings a unique perspective and years of experience in addressing this challenge and looks forward to working with the Newsom Administration and our federal and regional partners in taking the bold steps that are needed to make our system more climate-resilient.”

Over the past two decades, more than \$4 billion has been invested in our region in partnership with state, federal, private and other local partners to restore habitat, increase our water use efficiency, expand conjunctive use, reduce our flood risk, and expand the flexibility of the system to adapt to periods of increased drought and serious flood threat.

The regional agencies pointed to the following initiatives that will further build climate resiliency in the American River watershed by enhancing flood protection, diversifying water supplies, allowing for adaptive management practices and promoting species health on the lower American River. All of them will require significant investment from state, federal and regional agencies.

Sacramento Regional Water Bank: The Water Bank is an innovative groundwater storage program that will improve water supply reliability and environmental conditions for the Sacramento region. It utilizes a groundwater reservoir that would have about two times the amount of storage space as Folsom Lake. The bank could enable the region to cut groundwater use in half during wet years through capture of excess surface water and provide an additional groundwater supply during dry years, benefiting the environment and downstream communities beyond the region.

Sacramento River Arc: This project will transform regional water supply by shifting of portion of the municipal supplies away from the American River and toward the Sacramento River. It will better connect the region's conveyance, treatment and groundwater storage to an existing diversion point on the Sacramento River. Doing so will continue a long-standing regional commitment to protect the aquatic habitat of the lower American River, while at the same time providing needed water supply reliability. It will increase opportunities for groundwater banking and allow for changed Folsom Reservoir operations to accommodate a changing climate. More flexibility in Folsom Reservoir operations will give state and federal water managers another tool for managing Delta water quality.

Ecosystem Restoration: The investments and collaborative work undertaken by the Water Forum have provided new models and approaches to balancing co-equal goals for water management, including optimal reservoir operations, monitoring biological conditions and constructing improved habitat. This work can be enhanced with additional state investments in planning and development of habitat and cold-water infrastructure.

Sacramento Area Flood Risk Reduction and Managed Aquifer Recharge: SAFCA is working to increase flood storage capacity in non-federal reservoirs upstream from Folsom Reservoir by using advances in weather and runoff forecasting and modifying the outlet works of these upstream facilities. The increase of atmospheric river events and reduction in snowmelt runoff throughout the winter and spring provides opportunities to leverage system capacity, thereby reducing pressure on Folsom Reservoir and downstream levees, enhancing habitat flows on the American and Cosumnes rivers and redirecting flood flows for groundwater recharge in the south American and Cosumnes basins.

Yolo Bypass Integrated Multi-Benefit Program: This SAFCA-sponsored project is designed to improve ecosystem and flood management system resiliency in the lower Sacramento River by enlarging the Yolo Bypass through levee setbacks and using the floodplain to improve fish passage, expanding fish rearing habitat by inundating the floodplain, and improving terrestrial habitat in the floodplain.

Upper Watershed and Forestry Management: Climate change adaptation must include ensuring healthy headwaters. California faces the overwhelming challenge of overstocked and unhealthy forests, where the consequences are unnecessary evapotranspiration, ecosystems being out of balance, and catastrophic fire, resulting in long-term harm to our environment and water supply. Through projects implemented under multi-stakeholder collaboration, selective thinning of small and medium sized trees, burn treatments and targeted reforestation of climate resilient trees will ensure a healthy future in California headwaters. The targeted outcome is forests that are naturally resilient and better for water supply and natural habitat.

The Regional Water Authority (RWA) is a joint powers authority representing 21 water providers serving 2 million people in the greater Sacramento region. Formed in 2001, its primary mission is to help its members protect and enhance the reliability, availability, affordability and quality of water resources. Learn more at rwah2o.org.

The Sacramento Groundwater Authority (SGA) is a joint powers authority formed in 1998 to manage the Sacramento County's north area groundwater basin. Recognized as essential to implementing the groundwater management element of the historic Water Forum Agreement, SGA coordinates the regional program to manage and conjunctively use groundwater and

surface water to meet water needs through 2030 while reducing diversions from the lower American River to benefit the environment. Learn more at sgah2o.org.

The Sacramento Water Forum is a diverse group of business and agricultural leaders, citizen groups, environmentalists, water managers and local governments working together to balance two co-equal objectives: to provide a reliable and safe water supply for the Sacramento region's long-term growth and economic health; and to preserve the fishery, wildlife, recreational, and aesthetic values of the lower American River. Learn more at waterforum.org.

The Sacramento Area Flood Control Agency (SAFCA) is a joint powers authority that was formed in 1989 to provide the Sacramento region with increased flood protection along the American and Sacramento rivers. Its members include the City of Sacramento, Sacramento County, Sutter County, Reclamation District No. 1000 and the American River Flood Control District. Learn more at safca.or

From the State Water Contractors:

Today, the California Natural Resources Agency (CNRA), California Environmental Protection Agency (CalEPA) and California Department of Food and Agriculture (CDFA) released a draft water resilience portfolio detailing their recommendations to bolster California's long-term water resiliency and ecosystem health. The draft was developed in response to Governor Newsom's April 29 executive order calling for a portfolio of actions that may be taken to help meet the future water needs of California's fish and wildlife as well as the millions of people that depend on a reliable water source every day to run their homes, farms and businesses. There is a wealth of information in the portfolio and its appendices and we will continue our review.

However, we are pleased to see that many of the suggestions provided in the State Water Contractors comment letter on September 5, 2019 have been included in the portfolio, including upgrading infrastructure to improve conveyance and investing in existing infrastructure management and maintenance to address the impacts of climate change and population growth among other challenges — while protecting the Delta ecosystems.

"The draft portfolio released today recognizes the importance of building a water supply that is more sustainable and more resilient to the increasing impacts of climate change. We stand behind the state's commitment to address the important issues facing the Bay-Delta and our state, including the need to complete a voluntary agreement and modernize conveyance, as a part of a broad package of local and regional water actions to benefit all Californians," said Jennifer Pierre, General Manager of the State Water Contractors. "If we are to meet the challenges ahead, we must work quickly and collaboratively, basing management actions and decisions on the best available science."

#

State Agencies Release Draft Water Resilience Portfolio

Maven's Notebook | January 3, 2020 | California Natural Resources Agency:

State agencies today released a draft water resilience portfolio with a suite of recommended actions to help California cope with more extreme droughts and floods, rising temperatures, declining fish populations, aging infrastructure and other challenges.

The California Natural Resources Agency, California Environmental Protection Agency and Department of Food and Agriculture developed the draft to fulfill Governor Gavin Newsom's April 29 executive order calling for a portfolio of actions to ensure the state's long-term water resilience and ecosystem health.

Shaped by months of public input, the draft portfolio outlines more than 100 integrated actionable recommendations in four broad areas to help regions build water resilience as resources become available, while at the same time providing state leadership to improve infrastructure and protect natural ecosystems. Those areas include:

Maintain and diversify water supplies: State government will continue to help regions reduce reliance on any one water source and diversify supplies to enable flexibility amidst changing conditions. Diversification will look different in each region based on available water resources, but the combined effect will strengthen resilience and reduce pressure on river systems.

Protect and enhance natural ecosystems: State leadership is essential to restore the environmental health of key river systems to sustain fish and wildlife. This requires effective standard-setting, continued investments, and more adaptive, holistic environmental management.

Build connections: State actions and investment will improve physical infrastructure to store, move, and share water more flexibly and integrate water management through shared use of science, data, and technology.

Be prepared: Each region must prepare for new threats, including more extreme droughts and floods and hotter temperatures. State investments and guidance will enable preparation, protective actions, and adaptive management to weather these stresses.

"This draft portfolio has been shaped to provide tools to local and regional entities to continue building resilience and to encourage collaboration within and across regions," Natural Resources Secretary Wade Crowfoot said. "At the same time, state government needs to invest in projects of statewide scale and importance and tackle challenges beyond the scope of any region. Taken together, the proposed actions aim to improve our capacity to prepare for disruptions, withstand and recover from shocks, and adapt from these experiences."

To develop the portfolio, state agencies conducted an inventory and assessment of key aspects of California water, soliciting broad input from tribes, agencies, individuals, groups, and leaders across the state. An interagency working group considered the assessment and input from more than 20 public listening sessions across the state and more than 100 substantive comment letters.

“From Northern California to the Central Valley and the South, Californians from cities, farms, and other sectors are working together to develop innovative solutions to the climate-related water challenges that the state is already experiencing and that are expected to worsen,” said California Environmental Protection Agency Secretary Jared Blumenfeld. “This draft portfolio is an important step toward building resilience to ensure the long-term health of our water supplies and ecosystems.”

Since taking office, Governor Newsom has partnered with the Legislature to tackle California’s drinking water crisis, supported development of voluntary agreements to improve environmental conditions in the Sacramento and San Joaquin river systems, and advanced a single-tunnel conveyance project under the Delta to protect a key statewide water source from levee collapse caused by flood or earthquake risk and saltwater intrusion as sea level rises.

Members of the public will be able to submit written feedback on the draft portfolio through February 7. A final water resilience portfolio will be released soon after that.

“State agencies are only one set of water decision-makers in California,” California Secretary for Food and Agriculture Karen Ross said. “Continuing to improve our water systems relies on collaboration across all groups of water users and all stakeholders. Accordingly, feedback on this draft will be important to refining and finalizing our portfolio.”

#

[Click here](#) for the draft water resilience portfolio.

California's water policy

The Daily Journal | December 31, 2019 | Matt Grocott

Over the holiday break, I had the luxury of doing more reading than usual. One issue I read up on is water policy. With a majority of California being arid, water storage and management is always a concern here and even more so when development or growth is being considered. Agriculture, manufacturing, towns and cities ... all require water. Even in the days of the Catholic missions, the need to store and manage water was recognized. In fact, the missions were the first to build dams in California, albeit small and provincial.

The state's largest undertaking to manage water was in 1960. The California State Water Project was designed to deliver water from the Feather River watershed in the north to communities as far south as the Mexican border.

One article I read this past week which piqued my interest was written by an environmental organization. It wholly pointed to water conservation as the solution to California's water needs. I was not surprised. Their proposal was the same as most environmental groups with regards to our natural resources: learn to make do with less. It begs the question if California can solve its water needs through conservation and rationing alone?

For the state of California, the water year begins Oct. 1. This past water year, California families conserved 25% compared to the year previous. This was in response to the state either encouraging or mandating savings. They passed out "Save our Water" signs for people's front yards and tightened flow standards for everything from kitchen faucets to bathroom toilets.

While residents conserved, officials appointed by the governor administered the release of water from the state's reservoirs. Here's a fact to hang your hat on: Californians did not waste their way into past water shortages and they will not conserve their way out of any in the future. To explain, let's look at the math.

Of California's water pie, municipal and industrial use is 10%. That means 10% of California's water use is by families and businesses. If families and businesses conserve 25%, it is 25% of 10%. It is a sliver of the pie. It's only 2.5% of the whole.

Of California's total population, 25 million rely on two state water projects: the Central Valley Project and the State Water Project. The remaining 15 million receive water from various other sources like the Los Angeles Aqueduct or the Colorado River. According to the latest study by the Legislative Analyst's Office, statewide water use averages 85 gallons per person per day. Looking at the largest sector, if we multiply 25 million by 85 gallons by 365 days, we come up with 776 billion gallons of water per year. Saving 25% of that amount means saving 194 billion gallons.

When water is stored in a reservoir, the typical unit of measurement is acre feet. An acre foot equals 325,851 gallons. If we divide 194 billion by 325,851, the result is 595,076 acre feet. That is what was saved in 2019.

No doubt it's a lot of water but how does it compare to what the state flushed out to sea? About 27,497,800 acre feet of water was sent through the Golden Gate and into the Pacific in 2019. That is 46 times the amount of water saved by 25 million Californians. Importantly, it is also water that will not be in our reservoirs when the next drought hits. And we know from history, another drought will hit.

So why does the state flush out to the Pacific a resource its people clearly need? In part, it is to prevent a potential disaster. There exists a margin of safety that must be factored in for additional flow from potential snow melt and rainfall, even for a dam in perfect condition.

One such example is the Shasta Dam in Northern California. At this time, it is red-lined. That means it cannot safely store any more water in the space above its red line and the dam's top edge. That surface area of the dam needs to remain exposed for flood protection. In fact, Shasta was recently reported to have 27,000 acre feet more water than it should and is in the process of letting that water go.

Of course, a relatively easy fix for Shasta would be to raise the height of the dam, a solution that has been proposed. The Trump administration has offered to pay 50% of the cost to add 18.5 feet to the dam's height. All California needs to do is authorize construction. Instead, Gov. Newsom has protracted a battle to fight any proposal to raise the dam height. Why? Water is one of the most abundant natural resources on the planet. It is not a question of availability but of management and management includes adequate storage.

#

A former member of the San Carlos City Council and mayor, Matt Grocott has been involved in political policy on the Peninsula for 17 years. He can be reached by email at mattgrocott@comcast.net.

Good Numbers of Salmon and Steelhead Return Again to Mokelumne River

Daily KOS | December 28, 2019 | Dan Bacher

Large numbers of fall-run Chinook salmon have returned to the Mokelumne River in Clements, California, this fall despite challenging salmon fishing on the Mokelumne and adjacent sloughs this season.

A total of over 12,658 salmon have gone over Woodbridge Dam in Lodi on the Mokelumne as of December 10, according to Will Smith, manager of the CDFW's Mokelumne River Fish Hatchery.

"We're seeing a good, above normal season, although anglers have reported slow fishing in the river," Smith said. "We will probably see just over 13,000 fish this fall."

The hatchery trapped 2,168 adult males and 3,324 adult females, along with 2,063 jacks and 560 jills.

The hatchery took 1.4 million eggs on the best day this year alone. The hatchery has taken 7.9 million eggs to date. "We may take another 100,000 eggs next week, but we're pretty much done," said Smith.

A record number of fall-run Chinook salmon, 19,954, went over Woodbridge Dam in the fall of 2017, the highest number since 1940. The 2018 fall salmon returns were also impressive, with a total return of 17,474 fish.

These record runs have contributed greatly to the ocean recreational and commercial fishery over the past couple of years. The Mokelumne, a relatively small river, provided 33 percent of the Central Valley fall Chinooks caught in the recreational fishery and 43 percent of the commercial fishery in 2018, according to the Pacific Fishery Management Council (PFMC) in February 2018.

Hatchery staff plan to raise and release 6.8 million smolts into the San Joaquin River and other sites in the spring of 2020. They will put 3.8 million of these in the San Joaquin and 3 million in the ocean for enhancement purposes.

These fish will be divided up between 160,000 salmon for Monterey and 160,000 for Santa Cruz in the Monterey Bay Salmon and Trout Project pens, 750,000 for the Coastside Fishing Club pen project in Pillar Point Harbor and 1.9 million at Fort Baker for direct release by the CDFW at night.

This fall of 2018 yielded excellent salmon fishing for anglers in the lower Mokelumne River and adjacent sloughs. However, fishing was much slower this year, with few people reporting catching fish in spite of the good numbers of fish in the river.

“Anglers would come up to the hatchery this year and be surprised why we had so many fish when the fishing was so poor,” said Smith.

When I went to the hatchery on December 10, the river and hatchery were plugged with salmon ready to spawn. Smith and hatchery officials were processing the fish, separating the males from the females. They removed the sperm and the eggs from the fish, mixing the sperm and eggs and putting the eggs in buckets where they are disinfected and then placed in incubation sites.

The steelhead runs have increased dramatically in recent decades also. The ponds at the hatchery were plugged with hundreds of steelhead, including some big ones, on the day of my visit.

A record number of adult steelhead, 719, returned to the hatchery in the winter of 2017. The facility has trapped 367 adults so far this season, according to Smith.

The hatchery trapped 530 adults and 638 juveniles, in 2018, a total of 1,168 fish. That compares to 719 adults and 402 juveniles the previous season, a total of 1,121 fish,

This is quite a turnaround for the river, since no steelhead came back to the hatchery, located on the river right below Camanche Dam, for 10 years from 1976 through 1986. Again in 1998-1999, no adult steelhead returned to the facility.

In those years, the river hosted a popular resident trout fishery for fly, bait and lure anglers, but relatively few of the 100,000 steelhead yearlings released every year went to saltwater and returned.

Before the listing of the Central Valley steelhead under the Endangered Species Act (ESA), the Mokelumne was managed as a catchable trout fishery, rather than as a wild steelhead or trout river. The CDFW regularly stocked the river with catchable size steelhead in the 10 to 15-inch range,

There are many factors behind the record salmon and steelhead runs in recent years on the Mokelumne. “Strong returns confirm the health of the Mokelumne River, making this a welcoming home where salmon can survive and thrive,” said Jose Setka, EBMUD Manager of Fisheries and Wildlife. “The strategies at work are proving successful and are leading to a robust population of salmon in this river.”

Setka said the record salmon returns are a result of efforts that have focused on fine-tuning water operations, including managing cold water in Camanche and Pardee reservoirs to maintain good spawning conditions, releasing pulse flows of 1,500 cfs from Camanche Dam to attract fish, restoring gravel habitat and using tagging data to evaluate hatchery release strategies. Additional measures include transporting juvenile salmon by barge and feeding them a specialized diet to assist the fish in transferring from freshwater to seawater.

Smith cited their studies on the best times to release fish as key factors in their success on salmon, including releasing salmon at the best times to take advantage of tides and limiting the number of consecutive releases to avoid predation.

Another major factor in their salmon management success is the partnership they have developed with the federal agencies, including the Bureau of Reclamation and the U.S. Fish and Wildlife Service to close the Delta Cross Channel Gates to prevent Mokelumne fish from straying into other Central Valley rivers.

Before 1998 when the Mokelumne River Settlement Agreement went into effect, the average run was 4,000 fish. Since then, the run has averaged 9,541 fish per year.

Setka said the ability to implement management actions that lead to positive outcomes in the Mokelumne River is due to engagement from a diverse group of stakeholders.

“The Mokelumne is one of the success stories in bringing back fisheries,” said Bill Jennings, Executive Director/Chairman of the California Sportfishing Protection Alliance (CSPA). “The current salmon and steelhead runs are the result of a long struggle in the state and federal courts and state regulatory agencies. EBMUD became a proactive partner in restoring the Mokelumne.”

“Salmon and steelhead on the Mokelumne are still dependent on the Delta, so that is problematic. If we compare the Mokelumne to fisheries on the San Joaquin and mainstem Sacramento, it can be categorized as a glowing success story. But we still have to get fish into the habitat above rim dams and we have to fix the Delta,” stated Jennings.

A study released in 2019 by Cramer Fish Sciences shows that 13.7 miles of Mokelumne River above Pardee show the potential to support both spawning and rearing of chinook salmon: <https://fishsniffer.com/index.php/2019/03/18/study-shows-potential-for-restoring-mokelumne-salmon-to-their-historic-spawning-habitat/>

Anglers are currently gearing up for the steelhead opener on the upper section of the Mokelumne below the hatchery. The season is from Jan.1 through Mar. 31 and again from the Fourth Saturday in May through July 15. The limit is one hatchery trout or one hatchery steelhead.

Then from July 16 through October 15, the limit in this section of river is two Chinook salmon and one hatchery trout or hatchery steelhead.

#

For more information, call the Mokelumne River Hatchery, (209) 759-3383.

(This page was intentionally left blank)

With recycled water deal signed, attention shifts to contentious Baylands site

Eight years after Palo Alto voters 'undecided' 10 acres, cities view lot as a possible location for new water plant

Mountain View Voice | December 26, 2019 | Gennady Sheyner / Palo Alto Weekly

Santa Clara Valley Water District board member Gary Kremen lauds the new deal between the district and the cities of Palo Alto and Mountain View after the board's Dec. 10 vote to approve the agreement. Photo courtesy Valley Water.

Hailing it as a "historic" agreement, Santa Clara County's primary water supplier, Valley Water, enthusiastically approved on Dec. 10 a 76-year deal with Palo and Mountain View to construct a water purification plant in the Baylands with the intent of greatly expanding use of recycled water.

Under the approved terms, Valley Water would pay \$16 million for a water purification plant that would be built near the Regional Water Quality Control Plant in the Palo Alto Baylands. The facility, which has an estimated price tag of \$20 million, will reduce salinity in treated wastewater and allow more commercial customers to hook up to the city's "purple pipes."

The cities and Valley Water are also looking at potentially building a larger and more advanced purification facility in the future, possibly in Palo Alto. That regional plant would effectively convert wastewater to potable water.

But while the water district and the two cities lauded the deal as a perfect example of agencies working together for a common good, the agreement leaves open one critical question: Where exactly would the regional plant be located? The answer to that question may rest with Palo Alto voters.

City officials have proposed using a 10-acre site at Byxbee Park that was initially designated as parkland but that voters "undecided" in 2011 when they approved Measure E. That measure made the site available for a waste-to-energy facility such as an anaerobic digestion plant. Since the vote, however, the city has agreed to ship out its sewage sludge for treatment in Merced County and Fairfield facilities rather than build a local plant.

The measure requires a public vote for any use of the site beyond what was approved in 2011. It also specifies, however, that the "undecision" is only valid for 10 years. After that time, the council will have the option of dedicating it as parkland.

The contract between the three agencies specifies that if Valley Water determines that the Measure E site is the best location for a regional plant, and no "extenuating circumstances" have been identified by the city, Palo Alto staff will recommend that the City Council place a measure on the ballot to allow for this use. It would then be up to local voters to either advance or push back against the regional plan. If Valley Water opts not to move ahead with a water plant Palo Alto, the contract allows it to convey effluent to another location in the county for treatment.

Walter Hays, a local environmentalist who was one of the leading proponents of Measure E, said he supports changing the rules for the 10-acre site to allow the construction of a water treatment plant. At the Dec. 10 meeting of Valley Water board of directors, Hays said he and other supporters of the measure would be happy to work on a voter initiative to authorize the purification plant.

Hays said that in the years since Measure E, he and others learned that it was "more practical" to ship out sewage sludge and have it treated through anaerobic digestion elsewhere.

"So that site is available now for other environmental purposes and those of us who worked on anaerobic digestion would love to see the advanced treatment plant there," Hays told the Valley Water board.

A report from Palo Alto's Utilities Department suggests that not everyone shares this view. The city hosted a meeting in April to discuss the partnership with the Valley Water. While many community members supported the goals of reducing the city's reliance on imported water and enhancing water conservation, they also "expressed concern with the use of the Measure E site for a Valley Water regional purification facility," the report states.

Despite this unresolved issue, Valley Water's board unanimously supported the deal, which Palo Alto and Mountain View had approved on Nov. 18. The contract also allows the water district to transfer half of Palo Alto's treated wastewater to an "advanced water purification center," which could be built either in the city or elsewhere in the county. The plant would convert wastewater to potable water.

Board member Tony Estremera, who made the motion to approve the agreement, lauded staff from the two cities and the water district for confronting and overcoming the various obstacles that stood in the way of the agreement.

"This is the Silicon Valley way: not just to look at problems and whine, but to look at problems and step in, confront them and come up with solutions," Estremera said. "That's why we have a 76-year agreement. Where on the globe do you find a 76-year agreement? That doesn't even exist in the United Nations!"

His colleagues agreed. Board member Gary Kremen, who represents north county, said it's been an "honor" to work on the deal, while board member Barbara Keegan said she hopes to see other cities forge similar agreements with Valley Water in the years to come.

"I look forward someday to be able to say nice things about the city of San Jose and city of Santa Clara, when we enter into similar partnerships with them," Keegan said. "But they will not have that special place that the communities of Palo Alto and Mountain View have of being the first to the table, so to speak."

The deal also gives Palo Alto the option of buying water from the water district. Today, the city is one of about two dozen that buy their water from the San Francisco Public Utilities Commission, which relies on the Hetch Hetchy system.

Elected leaders from Palo Alto and Mountain View similarly lauded the effort. Palo Alto Mayor Eric Filseth said in a statement that the partnership will "increase the resiliency of our vital water supply." Mountain View Mayor Lisa Matichak said the deal will improve the quality of recycled water in Mountain View and Palo Alto.

"As a long-time recycled water user, Mountain View looks forward to significantly increasing consumption while concurrently supporting the city's sustainability efforts and saving potable water for our important non-irrigation needs," Matichak said in a statement.

#

House sinks Hetch Hetchy boating proposal

San Francisco Chronicle | December 18, 2019 | Dustin Gardiner

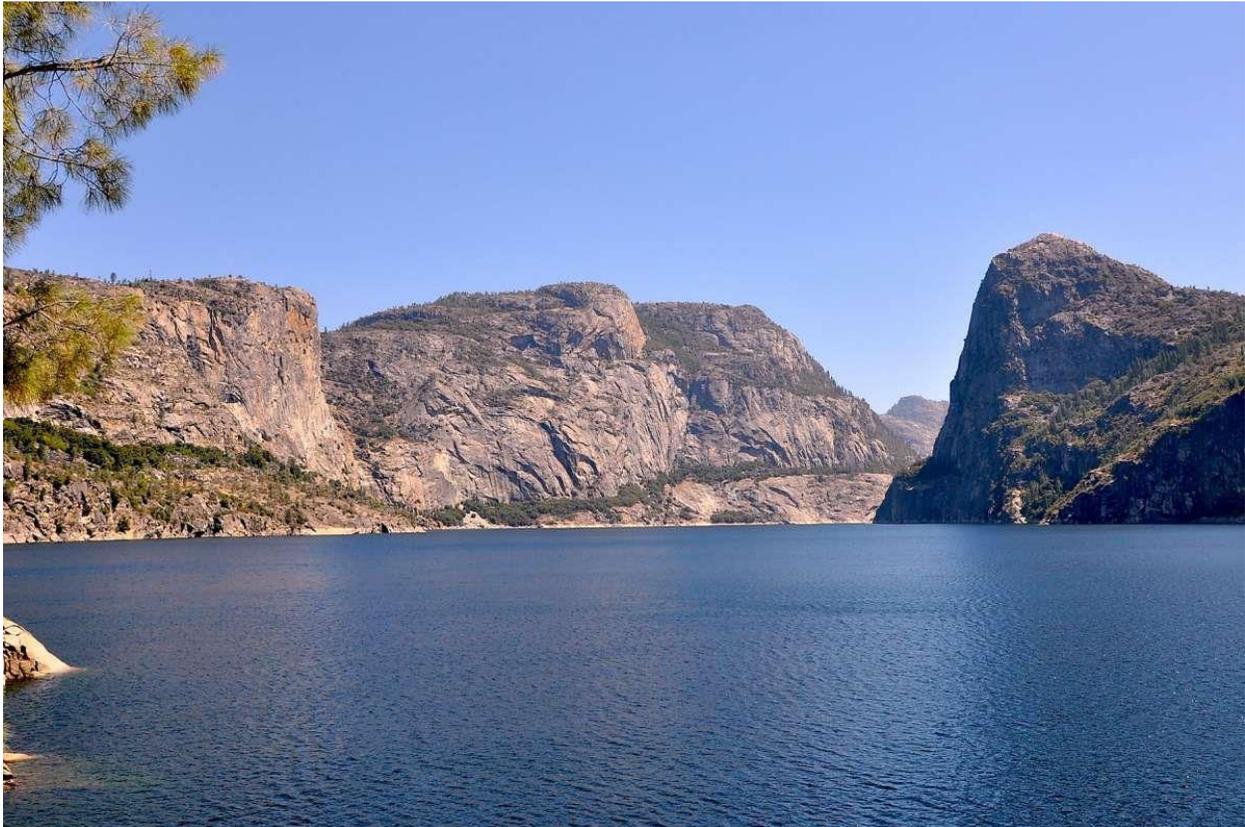


Photo of Dustin Gardiner: Hetch Hetchy Reservoir viewed from the trail that passes over the dam and beyond along the lake to Wapama Falls

WASHINGTON — The House has torpedoed a proposal to allow limited boating on Hetch Hetchy Reservoir in Yosemite National Park.

Critics feared the plan could introduce contaminants to the reservoir that supplies famously pure drinking water for 2.7 million people in the Bay Area. Boating on its waters has been banned for nearly a century.

House Speaker Nancy Pelosi, D-San Francisco, claimed the decision as a victory for her city, which runs the Hetch Hetchy water and power system. The prohibition was included in a \$1.37 trillion spending plan the House approved Tuesday to keep the federal government funded through September.

Interior Secretary David Bernhardt, who oversees the national parks system, had been considering a proposal to allow rental kayaks, canoes and electric-powered boats for the first time. His predecessor, Ryan Zinke, had said the department was “taking a fresh look at different opportunities and options to restore public access and recreation” to Hetch Hetchy Valley.

The plan for “environmentally healthy access” by boaters to Hetch Hetchy was advanced by California Trout, a conservation group that says it works “to ensure resilient wild fish thrive in healthy waters for a better California.” It was also backed by Restore Hetch Hetchy, which wants to drain the reservoir and restore Hetch Hetchy Valley to its natural state.

The plan would have excluded gas-powered motorboats from Hetch Hetchy, but that didn’t sway Pelosi.

Since Hetch Hetchy was filled in 1923, “boating has been prohibited to prevent the introduction of contaminants, and the quality of the water from Hetch Hetchy is so pristine that it does not require filtration,” her office said.

The San Francisco Public Utilities Commission, which operates the Hetch Hetchy system, applauded the House’s move.

“We commend the House’s decision to preserve the Hetch Hetchy Reservoir’s purpose to provide safe, fresh and clean water to the SFPUC’s 2.7 million customers,” said Will Reisman, a spokesman for the agency.

The spending plan still needs final authorization from the Senate, which is expected to approve it before the government runs out of funding on Friday. President Trump’s administration has signaled he plans to sign the legislation.

Restore Hetch Hetchy’s executive director, Spreck Rosekrans, said keeping the prohibition on recreational boating at Hetch Hetchy was representative of a “campaign” by San Francisco officials “to severely limit public access to Yosemite’s spectacular Hetch Hetchy canyon.” The organization will review its legal options in light of the move, he said.

Curtis Knight, executive director of California Trout, said it was “unfortunate that the public will continue to be shut out from enjoying the beauty and benefits of this natural treasure. It’s more important than ever that people get out and experience the extraordinary gifts nature provides in order to understand the need to protect it.”

Pelosi’s office touted several other victories in the spending plan approved in the House:

- Congress rejected the Trump administration’s proposal to earmark money for a project to raise Shasta Dam. California Republicans and farming interests in the Central Valley want to raise the dam by nearly 20 feet to store more water. Environmentalists say it would endanger chinook salmon habitat, and the Winnemem Wintu Tribe says the project would inundate sacred lands. California Attorney General Xavier Becerra won a lawsuit halting the project.
- The plan includes \$10 million in loans to fund restoration of historic buildings and maintenance in the Presidio. The Treasury Department would loan money to the

Presidio Trust, an autonomous federal agency, to continue projects in the park — loans it would have to repay with interest.

#

Dustin Gardiner is a San Francisco Chronicle staff writer.

Email: dustin.gardiner@sfchronicle.com Twitter: [@dustingardiner](https://twitter.com/dustingardiner)

(This page was intentionally left blank)



525 Golden Gate Avenue, 12th Floor
San Francisco, CA 94102
T 415.554.3289
communications@sfwater.org

NEWS RELEASE

Contact:

Will Reisman

415-551-4346

wreisman@sfwater.org

FOR IMMEDIATE RELEASE

January 9, 2020

New Reusable Water Coolers Installed in City Hall Featuring Water from SFPUC Water System

SFPUC water installed in department offices with limited access to drinking water

San Francisco, CA—New reusable five-gallon containers featuring tap water from San Francisco’s water system are being installed in City Hall this week as part of a pilot program to provide City departments with more access to the water services managed by the San Francisco Public Utilities Commission (SFPUC).

“We offer delicious, fresh-tasting water to more than 2.7 million customers—and now it is time we expand our services at City Hall,” said SFPUC General Manager Harlan L. Kelly, Jr. “With our product, you always know where the water is coming from and how often it has been tested for quality and safety. It makes perfect sense for City agencies to be drinking water managed and produced by the City.”

The water now available to City departments is a blend of water supplies collected from the Hetch Hetchy Reservoir in Yosemite National Park, protected watersheds in Alameda and San Mateo Counties, and groundwater from San Francisco’s aquifer. It will replace bottled water previously supplied by Nestlé Global.

Tap water provided by the SFPUC is tested more than 100,000 times a year and is highly regulated by state and federal health agencies.

The taste of San Francisco’s tap water also routinely ranks among the highest quality in the nation. In a blind taste test conducted by the San Francisco Chronicle, four of the five participants preferred the City’s tap water to bottled water alternatives.

San Francisco’s tap water will be provided in five-gallon reusable containers to nine departments with offices in City Hall. Those offices have limited immediate access to tap water facilities or drinking fountains. The pilot program is expected to also include Board of Supervisors’ offices and potential expansion to other departments outside City Hall within a few months as a replacement for bottled water purchased from private companies.

In addition to the new SFPUC five-gallon reusable containers, a drink tap station has been installed in City Hall, helping to complement the dozens of water fountains currently located in the building. The bottle refilling station is situated on the ground floor of City Hall and is one of more than 170 such stations that have been added to San Francisco since the SFPUC launched the [Drink Tap program in 2010](#).

About the San Francisco Public Utilities Commission

The San Francisco Public Utilities Commission (SFPUC) is a department of the City and County of San Francisco. It delivers drinking water to 2.7 million people in the San Francisco Bay Area, collects and treats wastewater for the City and County of San Francisco, and generates clean power for municipal buildings, residents, and businesses. Our mission is to provide our customers with high quality, efficient and reliable water, power, and sewer services in a manner that values environmental and community interests and sustains the resources entrusted to our care. Learn more at www.sfwater.org.

###

This email was sent to nsandkulla@bawsca.org
San Francisco Public Utilities Commission, 525 Golden Gate Avenue, San Francisco, CA 94102, USA
[Unsubscribe](#)