BAY AREA WATER SUPPLY AND CONSERVATION AGENCY BOARD OF DIRECTORS MEETING

October 9, 2020

Correspondence and media coverage of interest between September 2020 and October 8, 2020

Correspondence

Date:	October 5, 2020
To:	The Hon. Anson Moran, Acting President and Members of the Commission
From:	Nicole Sandkulla, BAWSCA CEO/General Manager
Re:	BAWSCA's Review of the SFPUC's Fiscal Year (FY) 2019-20 Annual Report, Water System Improvement Program
Date:	October 5, 2020
To:	Assembly Member Rudy Salas, JLAC Chair
	Senator Richard Roth, JLAC Vice Chair
	The Hon. Kit Miyamoto, Alfred E. Alquist Seismic Safety Commission Chair
	The Hon. Cindy Silva, Alfred E. Alquist Seismic Safety Commission Vice Chair
	Stefan Cajina, Div. of Drinking Water State Water Resources Control Board
From:	Nicole Sandkulla, BAWSCA CEO/General Manager
Re:	BAWSCA's Review of the SFPUC's Fiscal Year (FY) 2019-20 Annual Report, Water System Improvement Program

Media Coverage

Water Supply Conditions:

Date:	October 8, 2020
Source:	Phys.org
Article:	Key indicators discovered of climate change impact on California water supply
Date:	October 7, 2020
Source:	Ag Alert
Article:	Water year starts with concerns about La Nina
Date:	October 3, 2020
Source:	SF Gate
Article:	New Drought Monitor map shows extreme dry conditions growing in Calif.
Date:	October 1, 2020
Source:	DWR
Article:	Water Year 2020 Demonstrates California's Weather Variability
Date:	October 1, 2020
Source:	KGET.com
Article:	NOAA projects persistent drought conditions stretching from Texas to California this fall

Water Management:

Date:September 30, 2020Source:DWRArticle:Clean, Reliable Water: How to Get a Seat at the Table of Groundwater Planning

Water Infrastructure:

Date:October 2, 2020Source:SFPUCArticle:Press Release: SFPUC Announces Latest Details of Green Bond Offerings

Date:	October 2, 2020
Source:	Gilroy Dispatch
Article:	Newsom vetoes Anderson Dam bill

Water Policy:

Date:	October 5, 2020
Source:	San Francisco Chronicle
Article:	Redwood City sale ponds subject to environmental protections, judge rules

Water Quality:

Date:	September 2020
Source:	Estuary News
Article:	The Delta's Blooming Problem



October 5, 2020

Via email

The Hon. Anson Moran, Acting President and Members of the Commission San Francisco Public Utilities Commission 525 Golden Gate Avenue, 13th Floor San Francisco, CA 94102

RE: BAWSCA's Review of the SFPUC's Fiscal Year (FY) 2019-20 Annual Report, Water System Improvement Program

Dear Commissioner Moran and Members of the Commission,

BAWSCA has reviewed the WSIP FY 2019-20 Annual Report and has the following findings and recommendations:

1. Section 2.4 – WSIP Revisions in FY 2019-20 (page 9). Findings:

Recent changes were made in the overall adopted program schedule extending the program delivery date from December 2021 to May 2023 based on a 17-month delay of the Alameda Creek Recovery Project (ACRP). Indications from the ACRP narrative in the WSIP Q4 FY19-20 report (Appendix C) suggests that a delay in bid advertisement and other issues present an increased chance that the ACRP schedule forecast may change within the next 2 quarters which may also result in an overall possible extension of the WSIP program by several months. Once the design phase issues are resolved and the construction contract has been awarded, the SFPUC should provide an updated forecast for project completion.

Recommendations:

It is recommended that the WSIP be rebaselined when a reliable date for the ACRP project completion is forecasted to maintain WSIP reporting integrity.

2. Section 8.1 – 2020 Review of the Program Forecast (page 45).

Findings:

The RGSRP is noted as likely to need additional time and budget to complete. The narrative generally indicates that "the SFPUC anticipates that it may propose revisions for the Regional Groundwater Storage and Recovery Project (RGSRP) for adoption by the Commission in approximately six months." It is unclear if this timeframe is referencing 6 months from the April public hearing or six months from the date of the FY 2019-20 Annual Report. This report should be clear about when this revision is expected to occur.

Recommendations:

It is recommended that in future WSIP quarterly reports, the project status page for the RGSRP give a best estimate date for any anticipated budget and/or schedule revisions. The Hon. Anson Moran, Acting President October 5, 2020 Page 2

3. Covid-19 Project Delay and Cost Impacts (Pg. ES3). The FY 2019-20 Annual Report recognizes that some project delays and added costs will be incurred as a result of COVID-19 impacts but indicates the impacts were unknown at the time of writing the report. Since COVID-19 will be a continuing challenge moving forward it is important to identify the specific program impacts in future reports.

Recommendations:

It is recommended that COVID-19 related cost and schedule impact details be presented for each project in all future WSIP quarterly and annual reports.

Thank you for the opportunity to review and comment on this report. If you have questions or wish to discuss these issues further, please contact me at 650-743-6699, or email me at <u>nsandkulla@bawsca.org</u>.

Sincerely, natulla) Nicole Sandkulla

Nicole Sandkulla CEO/General Manager

NS/tf/le

Assembly Member Rudy Salas, Chair, Joint Legislative Audit Committee CC: Senator Richard Roth, Vice Chair, Joint Legislative Audit Committee The Hon. Kit Miyamoto, Chair, Alfred E. Alquist Seismic Safety Commission The Hon. Cindy Silva, 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. Alguist Seismic Safety Commission Vlad Rakhamimov, Assoc. Engineer, No. Coastal Sect., SWRCB, Div. of Drinking Water Marco Pacheco, San Francisco District Engineer, 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 BAWSCA Board of Directors Harlan Kelly, SFPUC, General Manager Steven Ritchie, SFPUC, Assistant General Manager, Water Enterprise Kathy Howe, SFPUC, Chief Engineer / Assistance General Manager of Infrastructure Katie Miller, SFPUC, Acting Director, Water Capital Projects and Programs BAWSCA Water Management Representatives Allison Schutte, Hanson Bridgett, LLP, Legal Counsel



October 5, 2020 *Via email*

Assembly Member Rudy Salas, Chair Senator Richard Roth – Vice Chair Joint Legislative Audit Committee 1020 N. Street, Room 107 Sacramento, CA 95814

The Hon. Kit Miyamoto, Chairman The Hon. Cindy Silva, Vice-Chair Alfred E. Alquist Seismic Safety Commission 2945 Ramco Street, Suite 195 West Sacramento, CA 95691

Stefan Cajina, Chief North Coastal Section, Division of Drinking Water State Water Resources Control Board 850 Marina Bay Parkway, Bldg P, Second Floor Richmond, CA 94804

RE: BAWSCA's Review of the SFPUC's Fiscal Year (FY) 2019-20 Annual Report, Water System Improvement Program

Dear Assembly Member Salas, Senator Roth, Commissioners Miyamoto and Silva, and Mr. Cajina:

The San Francisco Public Utilities Commission (SFPUC) recently provided the Bay Area Water Supply and Conservation Agency (BAWSCA) a copy the Water System Improvement Program (WSIP) Annual Report for Fiscal Year 2019-20, dated August 30, 2020 (Annual Report). Attached is BAWSCA's comment letter, dated October 5, 2020, which includes a request that the Commission direct staff to implement the recommendations provided with our comments.

There were key challenges faced by the SFPUC in FY 2019-20 that are referenced in the Annual Report. Chiefly, COVID-19 related work delays impacted the WSIP. Although at the time of the Annual Report the impacts of COVID-19 on WSIP project schedules and budgets were not able to be estimated, BAWSCA will be interested in seeing that information in next year's Annual Report.

BAWSCA agrees with SFPUC's statement in the Annual Report that there continues to be great progress on the overall WSIP effort. It is also clear that the remaining work is difficult and time consuming, as made evident by a Notice of Change (NOC) submitted by the SFPUC to the State in June of this year. BAWSCA's concern about what lies ahead for the WSIP are detailed below.

Key points regarding the Status and Progress of WSIP

• **Possible need for a future NOC** - The SFPUC's Commission approved an NOC to the WSIP at a hearing held on April 14, 2020. State agencies were notified of the NOC via

correspondence from the SFPUC dated June 30, 2020. The NOC extended the proposed WSIP completion date to May 5, 2023. The NOC also alerted the State that there was uncertainty that remained regarding one particular WSIP project, the Regional Groundwater Storage and Recovery Project (RGSRP). It is BAWSCA's view that the schedule for completing the project will result in the need for a subsequent NOC. The SFPUC anticipates that they will have more certainty as to the need for an NOC sometime in 2021. Similarly, and as detailed in the Annual Report, construction of the Alameda Creek Recapture Project (ACRP) is likely to extend beyond May 5, 2023.

- **Possible need for a future WSIP budget extension** There were no WSIP budget revisions proposed in the NOC nor significant budget concerns detailed in the Annual Report. BAWSCA believes that the RGSRP will need additional monies to complete construction. Budget considerations may be incorporated into a future NOC.
- Possible need for additional WSIP project(s) to address Level of Service (LOS) -Both the RGSRP and the ACRP serve to address LOS goals associated with water supply reliability. BAWSCA understands that due to potential changes to both the RGSRP and the ACRP, the water supply yields of those projects may be lower than originally planned. WSIP's purpose was to upgrade aging or insufficient infrastructure to address seismic concerns and to implement specific delivery and drought reliability elements that, when implemented, would enable the SFPUC to meet its adopted LOS goals. If the respective water supply yield of those two WSIP projects is reduced, the SFPUC will need to implement alternative projects to make up the difference. BAWSCA asks that the State support BAWSCA's position on the importance of meeting the LOS goals as part of the WSIP when and if such a reduction of yield is documented by the SFPUC.

Please call me if BAWSCA can provide further assistance in the State's review of the SFPUC's FY 2019-20 Annual Report, or if you would like to discuss BAWSCA's comment letter to the SFPUC. I can be reached by phone at (650) 743-6688 or via email at <u>nsandkulla@bawsca.org</u>. BAWSCA sincerely appreciates the time and attention given by the State in helping to make sure the WSIP progress continues.

Sincerely,

ra Kulla

Nicole Sandkulla Chief Executive Officer/General Manager

NS/tf/le

Enclosure

cc: SFPUC Commissioners Harlan L. Kelly, Jr., General Manager, SFPUC Kathy How, Chief Engineer / Assistant General Manager of Infrastructure, SFPUC Steven Ritchie, Assistant General Manager of the Water Enterprise, SFPUC Katie Miller, Acting Director, Water Capital Projects and Programs, SFPUC October 5, 2020 Page 3 of 3

> Wesley Opp, Chief Consultant, Joint Legislative Audit Committee Richard McCarthy, Executive Director, Alfred E. Alquist Seismic Safety Commission Vlad Rakhamimov, Associate Engineer, No. Coastal Sect., SWRCB Div. of Drinking Water Marco Pacheco, San Francisco District Engineer, 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 BAWSCA Board of Directors BAWSCA Water Management Representatives Allison Schutte, Legal Counsel, Hanson Bridgett, LLP

(This page was intentionally left blank)

Key indicators discovered of climate change impact on California water supply

Phys.org | October 8, 2020 | Anton Caputo, University of Texas at Austin

Lake Oroville is the second largest man-made lake in California. A new study could help water managers deal with climate change. Credit: University of Texas at Austin Determining how climate change is affecting water supplies is difficult in a state like California that swings between floods and droughts, but a new study has found that climate models agree on key metrics that could help water managers in the Golden State.

In the new study, scientists at The University of Texas at Austin in collaboration with the Union of Concerned Scientists found that leading climate projections used by the state strongly agree that climate change will shift the timing and intensity of rainfall and the health of the state's snowpack in ways that will make water management more difficult during the coming decades.

The findings are significant both because of their implications for California's future water supply and the fact that scientists found that the 10 climate models most widely used in state decisionmaking agree on the key metrics. In many cases, regional and state water managers have been hesitant to use climate models for future management decisions because the models often disagree on the regional effects of large-scale climate change, particularly average precipitation changes. But scientists in this study found that the models agreed at least 80% of the time on hydrological metrics that are more important for water management, said lead author Geeta Persad, an assistant professor at UT Austin's Jackson School of Geosciences.

"The point we make in our paper is if you think about the type of shifts that matter to water managers, it's typically these much more complicated aspects of the hydroclimate like how long the wet season is or how extreme the most extreme event is or how frequent high-risk events are," Persad said. "And these are the types of hydroclimate metrics where we see much higher agreement across climate projections."

The study was published in the journal Climatic Change. It focuses on 10 global climate models that have been identified to have the best performance at representing climate conditions in California.

"Collectively, these findings suggest that decision-makers and water managers may find greater consistency in climate projections by looking beyond average conditions and focusing specifically upon the extreme drought and flood events that are most likely to stress water systems and infrastructure in the first place," said co-author Daniel Swain, a climate scientist at the University of California, Los Angeles. "These findings also suggest that California is likely to experience a large increase in both year-to-year and even season-to-season water variability in a warming climate—which has significant implications for everything from wildfire risk to groundwater sustainability to flood insurance policies."

In the paper, the scientists illustrated the effects on water supply during the next several decades in two case studies—Scott Valley in Northern California and Lake Oroville, which is about 80 miles north of Sacramento. They looked at Scott Valley because it is one of the few basins in California with a publicly accessible groundwater model. They chose Lake Oroville

because it is the second largest reservoir in the state, and its stability has come under scrutiny since the Oroville Dam spillway was damaged during intense flooding in 2017.

By looking solely at changes in extreme precipitation shown by the climate models, and holding constant all other meteorological conditions and the availability and cost of surface and groundwater, the team, led by co-author Claire Kouba at the University of California, Davis, found a significant increase in the need for irrigation water throughout the Scott Valley even without a change in total rainfall. The study points out that this trend could be more pronounced in other areas of the state.

In the case of Lake Oroville, the projected hydroclimate shifts led to an average decline in water stored in the reservoir of about 17% over the year, with losses greatest in September and October when the reservoir is at its lowest levels.

Although the study examined only California's water supply, the researchers said that similar analysis looking beyond changes in average precipitation is worth pursuing in other regions with emerging water management challenges.

This study has been released in conjunction with a report from the Union of Concerned Scientists, where Persad previously held an appointment as a senior climate scientist. The UCS report further explores options for changing water management practices in response to a changing climate.

Water year starts with concerns about La Niña

Ag Alert | October 7, 2020 | Christine Souza

The 2021 water year begins with farmers concerned about dry months ahead.

Despite little precipitation and a small snowpack in the 2020 water year, which ended Sept. 30, California weathered the year on water stored in reservoirs during previous years' storms. Going into 2021, farmers note that weather officials predict a La Niña climate pattern in the Pacific Ocean, which has brought drought conditions in the past.

"We are concerned going into next year, since this is looking like maybe we're going into a 2014-type (drought) year unless we get some good rains," said Glenn County farmer Jim Jones, a director on the Orland-Artois Water District and the Tehama-Colusa Canal Water Authority. "It behooves us to build more water storage here in California. It would've been nice if we'd already had it; we could have caught those rains last year and it would definitely alleviate all the fears going into this coming year."

Good reservoir storage from a wet 2019 tempered the impact of dry weather in 2020. The California Department of Water Resources reported statewide reservoir storage at the end of September stood at 93% of average, or 21.5 million-acre feet. But reservoirs received just a third of the water runoff from precipitation and snowmelt that they did during the same period a year earlier.

"We had an above-average year in 2019 that led to the fifth-best snowpack in California history, but then January and February came in and it was the driest February on record," DWR public information officer Chris Orrock said.

Fresno County farmer Joe Allen, who grows cantaloupes, wheat and cotton near Firebaugh and farms in the Westlands Water District, said "pretty decent carryover" from the prior year gave farmers "a little bit of water to work with."

Westlands, a federal contractor through the Central Valley Project, received a 20% water allocation this year from the U.S. Bureau of Reclamation.

Allen called the 20% allocation "somewhat disappointing."

"That really changed our thinking of what we were going to grow, and we did fallow a couple of blocks," he said. "When the allocation is 20% or less, that's when we have to take a hard look and try to figure out what we're going to do as far as making our operation profitable."

California Farm Bureau Federation Senior Counsel Chris Scheuring said the state's water delivery system is designed to ride out dry years, but has become increasingly less able to do so because of changing hydrology and regulatory constraints that often lead to legal action.

In 2020, a legal struggle erupted over management of water in the Sacramento-San Joaquin river system. Environmental groups and the state of California challenged biological opinions issued in 2019 by federal fisheries agencies for long-term operations of the CVP and State Water Project, seeking a return to previous biological opinions and possible reductions in water deliveries, pending final resolution of the dispute.

In July, farmers who rely on CVP deliveries earned an initial victory when a federal judge denied environmental groups' request for an injunction that would have required the bureau to reduce water allocations to manage water temperatures in the Sacramento River below Shasta Dam. The groups sought more cold water for spring- and winter-run chinook salmon.

In the coming year, Scheuring predicted "more arguments in court about whether the pumps need to be restricted further."

"When you have the (federal and state) pumps operating at odds with each other, it is not a good situation, especially since the state and federal governments are supposed to operate in a coordinated fashion," he said.

The bureau, Scheuring said, has struggled to deliver project water due to constraints imposed by the Endangered Species Act and other requirements.

That's also been the case in the Klamath Basin along the California-Oregon border, where the executive director of the Klamath Water Users Association, Paul Simmons, described 2020 as a year "we would like to forget—even though we can't."

"The paltry water supply and continued uncertainty translate to the loss of many family farms and damage to all farm operations and rural communities," he said, "not to mention harm to wildlife and prized wildlife refuges."

Klamath Project farmers planned for the 2020 season based on an early allocation of 140,000 acre-feet and said they were "blindsided" in May after the bureau cut the already-short allocation to between 55,000 and 75,000 acre-feet. In September, the agency said it would deliver more water.

Last week, the U.S. House of Representatives passed an amendment to the 2000 Klamath Basin Water Supply Enhancement Act, which will better distribute \$10 million in annual funding for drought relief in the Klamath Basin, sending the bill to President Trump.

Regarding the Sustainable Groundwater Management Act, which requires local agencies to achieve groundwater sustainability by 2040 or 2042, Scheuring said, "There are differences of opinion about how to achieve sustainability, but there are a lot of positive ways to mitigate SGMA besides just everybody tightening their belt and sharing the pain."

Kole Upton, a farmer from Chowchilla who serves on the boards of the Chowchilla Water District and Friant Water Authority, said, "Without additional surface water supplies or bringing in some of the water that is going out of the delta, the only solution down here is fallowing land; there's just not enough groundwater.

"Water is a public benefit for everybody," he said. "The leadership now is not forward thinking on getting projects ready for the future."

###

(Christine Souza is an assistant editor of Ag Alert. She may be contacted at csouza@cfbf.com.)

New Drought Monitor map shows extreme dry conditions growing in Calif.

SF Gate | October 3, 2020 | Amy Graff



Week	Date	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
Current	2020-09-29	15.35	84.65	67.65	35.62	12.74	0.00	201
Last Week	2020-09-22	15.62	84.38	67.09	35.27	3.39	0.00	190

The U.S. Drought Monitor map released on Thursday, Oct. 1, 2020, shows dramatic change. United States Drought Monitor

The new federal Drought Monitor map shows that localized drought conditions are increasing in Northern California.

The Sept. 22 map had 3% of the state in extreme drought while the Sept. 29 map released Thursday shows 13%.

In the Bay Area, the map reveals that drought conditions range from moderate to severe.

The Drought Monitor, a mechanism to measure drought that's mainly used in agriculture, is a joint effort of the National Oceanic and Atmospheric Administration, the U.S. Department of Agriculture and the National Drought Mitigation Center at the University of Nebraska-Lincoln. A map is released each week with drought conditions across the country, indexing everything from groundwater storage to river levels. The factors California state water managers watch most closely are precipitation totals and reservoir and snowpack levels.

The presence of drought on the map is no surprise — especially in Northern California. While Southern California saw above-average rainfall in many locations, the north, which is typically responsible for about 80% of the state's water supply, was abnormally dry.

The Russian River watershed saw the third-driest year on record, while San Diego was soaked in one of its wettest Aprils, according to a report from the California Department of Water Resources.

This translated into below-average precipitation for the state over the past water year, running Oct. 1, 2019-Sept. 30, 2020.

The snow pack was 50% of average on April 1, making it the 10th-smallest snowpack in California since 1950, DWR said in a statement.

The state's reservoirs received about one-third of the total water runoff from snow melt and rain that filled them in the same time period a year ago.

Despite the dry year, DWR spokesperson Chris Orrock said the state is far from declaring a statewide drought emergency, and last winter's dry conditions are tempered by the plentiful reservoir storage from a wet 2019 when precipitation was 131% of average.

When Gov. Jerry Brown declared a drought emergency in January 2014, the state had seen dry conditions in the two years prior. Brown introduced mandatory water-use restrictions in April 2015.

"We had a dry year, but one dry year doesn't make a drought. In California we always have some local drought conditions," Orrock said. "There's no definitive answer to when a drought starts, it's based on so many factors."

Water Year 2020 Demonstrates California's Weather Variability

DWR | October 1, 2020



(Left) Sean de Guzman, chief of California Department of Water Resources (DWR), Snow Surveys and Water Supply Forecasting Section, and Andy Reising, water resource engineer, DWR Snow Survey Section and Water Supply Forecast Section, conducts the final snow survey of the 2020 season at Phillips Station.

SACRAMENTO, Calif. -

California's Water Year 2020 has come to a close and while Northern California was mostly dry, parts of Southern California experienced above average precipitation. The water year ended below average and further demonstrated the impact of climate change on the state's water supply.

"California is experiencing the impacts of climate change with devastating wildfires, record temperatures, variability in precipitation, and a smaller snowpack," said DWR Director Karla Nemeth. "We must continue to invest in our infrastructure to

prepare the state to cope with more extreme weather for the state's needs today and in the future."

For Water Year 2020, a lack of precipitation resulted in a snowpack of just 50 percent of average on April 1, as measured by the California Cooperative Snow Survey Program, making it the 10th smallest snowpack in California since 1950. California's reservoirs received just a third of the water runoff from precipitation and snowmelt that they did during the same time period a year ago.

The impacts of dry conditions were tempered, however, because of good reservoir storage from a wet 2019. Statewide reservoir storage through the end of September 2020 is projected to be 93 percent of average or 21.5 million-acre feet.

DWR's annual water year recap, "Water Year 2020: Summary Information" highlights additional key details of the water year which runs from October 1 to September 30.

Focused on tangible actions to help build a climate-resilient water system, the state recently finalized the California Water Resilience Portfolio outlining almost 150 actions to better prepare our state for long-term water resilience. The continued water year variability is also a reminder to all Californians that we need to be prepared for dry periods. For more information visit: California's Most Significant Droughts: Comparing Historical and Recent Conditions.

(This page was intentionally left blank)

NOAA projects persistent drought conditions stretching from Texas to California this fall KGET.com | October 1, 2020 | Nexstar Media Wire

(NEXSTAR) – Some of the parched hills across the west that have been ravaged by fire in recent months will see little relief this fall.

New maps from the National Oceanic and Atmospheric Administration predict drought-like conditions impacting nearly all of the desert southwest and the most populated regions of California as well as much of west Texas and southern Oregon.

NOAA tweeted Thursday that the drought conditions will begin to settle in across the great plains in October, with California, Nevada, Utah, Colorado, New Mexico and Wyoming contending with widespread persistent drought conditions through the end of the year.



The above forecast is a seasonal projection, but NOAA's Drought Monitor project also released new maps on current drought conditions Thursday showing nearly every state outside of Appalachia and the deep south dealing with at least some level of abnormally dry conditions.



A La Niña weather pattern, characterized by warmer than typical conditions in the west, is partially behind the western drought projections.

"The ongoing La Niña results in drought persistence and expansion being forecast through the end of 2020 across much of the southern tier," tweeted the Climate Prediction Center.

Clean, Reliable Water: How to Get a Seat at the Table for Groundwater Planning DWR | September 30, 2020

Healthy communities need clean, reliable water supplies. That is why your thoughts, and ideas need to be shared with local water agencies as they create plans that map out how groundwater will be managed for the next 50 years.

These local plans – called groundwater sustainability plans or GSPs – will affect anyone who uses groundwater – whether at home, at school, on a farm, at their jobs, or at a business – and 85 percent of Californians depend on groundwater for some or all of their water. It is important that community members representing diverse interests have a seat at the table and get involved in planning how groundwater will be managed now and in the future.

You can be a part of groundwater planning by first finding your local groundwater sustainability agency – called a GSA – on the All Posted GSAs section on the Department of Water Resources' (DWR) website. Then, you can contact your GSA or visit the GSA's website and sign up to receive information. Next, make sure to attend meetings and workshops, share ideas, and comment on plans, activities, and projects as they are being developed.

Years of overpumping groundwater caused problems in many areas of California – such as drying up wells and contaminating water making it unsafe to drink.

The Sustainable Groundwater Management Act (SGMA) provides a framework for GSAs to create plans describing how they will manage groundwater for long term sustainability. The plans are reviewed by DWR once they are submitted and every five years thereafter to determine if they are likely to achieve the sustainability goals.

GSPs for the most critically overdrafted groundwater basins were turned in to DWR in January 2020. The continued overuse of groundwater in these basins would likely result in significant environmental, social or economic impacts requiring their plans to be completed two years earlier than other impacted basins. These GSPs can be viewed on DWR's SGMA Portal and community members can attend GSA meetings, follow plan progress, and provide input as plans are implemented.

There are still more than 60 groundwater basins in California where water managers are creating plans that are due in 2022 and community participation in this planning is important. Groundwater basins are located beneath the Earth's surface and are made up of aquifer layers where groundwater is naturally stored.

DWR supports local groundwater management and provides planning, technical, and financial assistance to local groups. DWR encourages GSA outreach to community members and provides funding, guidance, written translation services, and meeting facilitation support to help with community engagement.

Getting involved in groundwater planning today will help ensure that everyone has a voice in the planning process and that your water needs are considered.

(This page was intentionally left blank)





NEWS RELEASE SFPUC Contact: Will Reisman 415-551-4346 wreisman@sfwater.org

FOR IMMEDIATE RELEASE October 2, 2020

SFPUC Announces Latest Details of Green Bond Offerings

Nearly \$350 million in funding will benefit water infrastructure improvements and other initiatives that address climate change to be listed on London Stock Exchange

San Francisco, CA – The San Francisco Public Utilities Commission (SFPUC) has posted details of its newest bond offerings, which includes a \$342 million (preliminary, subject to change) taxable green bond to refund bonds related to the agency's Water System Improvement Program (WSIP) which will also be listed on the London Stock Exchange.

"The SFPUC's Green Bond Program is a great example of how we embrace the notion of being both environmentally and fiscally responsible," said SFPUC General Manager Harlan L. Kelly, Jr. "These financing tools help us both fund critical infrastructure projects while also allowing us to adapt to the new realities brought on by climate change. By investing smartly now, we are preparing for the future."

To reach European investors, this taxable financing will be listed on the London Stock Exchange, a first for a US muni green bond. The offering represents the latest series of the SFPUC's Green Bonds, an innovative program the proceeds of which are dedicated to fund environmentally beneficial projects like clean water, renewable energy, and other initiatives that mitigate and adapt to the risks of climate change.

Along with the SFPUC, the bond offering is being managed by Goldman Sachs, Bank of America Securities, Morgan Stanley, Siebert Williams Shank and Company, and SMBC Nikko Securities America.

The SFPUC was the first issuer to certify a green bond under the Climate Bonds Water Criteria in 2016, a funding mechanism established by the Climate Bond Initiative (CBI.) In 2017, the SFPUC was subsequently recognized for its achievements by CBI in its Green Bond Pioneer Awards.

"Offshore listing is another step in the development of the US green municipal market and SFPUC are again leading the way," said Justine Leigh-Bell, Deputy CEO Climate Bonds

Initiative. "Climate impacts and clean water supply are interlinked. We can expect to see more municipal green issuers focused on addressing these twin challenges."

With its latest offering, the SFPUC will now have offered more than \$2.5 billion in green bonds, making it among the global leaders in the field of climate change financing initiatives.

All of the SFPUC's green bond sale details are available on the agency's investor portal, which is free and open to the public. Interested investors or residents can access the website to get more information on next week's bond sale. More information is also available on the agency's Green Bond report page, which identifies projects, environmental and social impacts, and alignment of projects with the United Nations Sustainable Development Goals.

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, residential customers, 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.

Newsom vetoes Anderson Dam bill

Legislation would have expedited seismic retrofit project Gilroy Dispatch | October 2, 2020 | Michael Moore



Valley Water this week began draining Anderson Reservoir in preparation for a seismic retrofit of the body's dam in east Morgan Hill, but Gov. Gavin Newsom also vetoed a state assembly bill that would have expedited the project that the water district has been planning for more than 10 years.

Assembly Bill 3005—sponsored by 30th District Assemblymember Robert Rivas—would have hastened the rebuild and strengthening of Anderson Dam by expediting environmental review and other regulatory processes that are necessary for such a vast public works project. Newsom vetoed AB3005 on Sept. 29.

"Notwithstanding the importance of completing projects at the Anderson Dam, the bill sets unrealistic timelines for state entities to expedite deliverables," Newsom wrote in a veto message. "This (would) require staff to be diverted away from other critical projects throughout the state that are going through the CEQA process." CEQA is the California Environmental Quality Act, a law that requires environmental review for large construction projects.

Rivas, whose district includes South Santa Clara County, and Valley Water officials were upset about the governor's decision to veto the bill, known as the Expedited Dam Safety for Silicon Valley Act.

"My constituents and the greater Silicon Valley region are at risk of a catastrophic flood from a large earthquake due to the current conditions of the Anderson Dam," Rivas said in a statement. "AB 3005 would have expedited the dam's seismic retrofit project and was vital to ensuring the water supply and environmental benefits for the region expeditiously. The safety of my constituents is my highest priority."

Valley Water, which owns Anderson Reservoir and its earthen dam, began draining the water body Oct. 1. All recreation and most public access to the dam and recreation areas—including boating and

fishing—closed this week. Valley Water officials expect this access will remain closed throughout the dam retrofit project. Construction is scheduled to last until about 2031.

In an Oct. 2 statement, Valley Water said they were surprised by Newsom's veto of AB3005. The Anderson Dam Seismic Retrofit project is needed not only to ensure the safety of the dam and downstream communities throughout the valley; it is also needed to secure the water supply for Silicon Valley, the statement said.

"The Board of Directors is fully committed to ensuring that we consider every possible policy decision to move this project along as fast as possible," Valley Water Board Chair Nai Hsueh said. "We are thankful for the support we received from Assemblymember Robert Rivas, Congresswoman Zoe Lofgren, every state and federal representative of Santa Clara County, as well as the County, cities, labor, business, and environmental advocates. We will continue to consider paths to ask the State of California to assist us in expeditiously completing this critical project."

In 2009, state authorities determined that Anderson Dam, which was built in the 1950s, would not withstand a major earthquake, and the crest of the dam could slump in such an event—leaving Morgan Hill underwater within minutes.

Upon further study, the local water district determined that the interior of the earthen dam could liquefy in the event of a significant earthquake on the Calaveras fault, which is about 1.2 miles from Anderson Dam. Since 2009, as a precaution the reservoir level has been maintained below 60 percent of the reservoir's capacity—except during occasional storms that produced heavy rainfall.

Earlier this year, the Federal Energy Regulatory Commission ordered Valley Water to begin draining Anderson to dead-pool level starting Oct. 1. In February, the state legislature approved AB3005, which Newsom vetoed this week.

The retrofit project will in fact begin—after the reservoir is almost fully drained in the coming months with a new outlet tunnel that will improve the district's ability to quickly discharge large volumes of water from the bottom of the lake into Coyote Creek. Construction of the tunnel will last about three years.

After the tunnel is complete, construction will begin on the Anderson Dam Seismic Retrofit project, which will take about 10 years to complete. Then, Valley Water will be able to allow Anderson Reservoir to return to its full capacity for the first time since the existing dam was deemed seismically unsound in 2009.

As of Oct. 2, Anderson Reservoir is holding about 18 percent of its 89,000 acre-feet capacity, according to Valley Water's website.

The total projected cost of the tunnel and retrofit project is about \$576 million.

"We are greatly disappointed by the veto of AB 3005, but Valley Water staff will continue to seek the fast-tracking of permits for the Anderson project," Valley Water CEO Rick Callender said in this week's statement. "We will not quit pushing as hard as we can to get this project done quickly and safely, because the protection of life and property is our highest priority."

Redwood City salt ponds subject to environmental protections, judge rules San Francisco Chronicle | October 5, 2020 | Michael Williams



The Cargill salt ponds on Wednesday, March 13, 2019, in Redwood City, Calif. A federal judge on Monday ruled that a collection of salt ponds on the San Francisco Bay is subject to protections under the Clean Water Act — going against a previous decision by the Environmental Protection Agency that could have potentially paved the way for Photo: Santiago Mejia / The Chronicle

A federal judge on Monday ruled that a sprawling collage of salt ponds in Redwood City is subject to protections under the Clean Water Act — going against a previous decision by the Environmental Protection Agency that would have eased development along the bay.

The ruling by United States District Judge William Alsup represents a victory for local environmental groups that have long sought to prevent development of the 1,365 acres of Redwood City salt ponds.

The site, at the western foot of the Dumbarton Bridge, has been used to harvest salt for generations. The current owner, Cargill Inc., has been considering development of the site since about 2009.

One proposal envisioned 12,000 homes, but that proposal was later pulled because of concerns about traffic and building on flood-prone property.

At issue in the lawsuit was whether the area should be considered wetlands, and therefore protected under the Clean Water Act, a 1972 law designed to prevent their destruction.

During the administration of President Obama, the Environmental Protection Agency made it a policy to safeguard all bodies of water that feed larger rivers and lakes. The local office then determined that the site was subject to the act. Under President Trump, however, the agency reversed that decision last year.

In his ruling, Alsup said the EPA "ignored its own agency regulations even though they were still in effect at the time of determination."

"The ponds themselves ... remain subject to (Clean Water Act) jurisdiction because they are wet (plus they are not uplands)," Alsup wrote in his decision to vacate the EPA's determination from 2019. "And, they have important interconnections to the Bay."

The lawsuit was brought by several environmental groups, including Save the Bay, San Francisco Baykeeper, the Committee for Green Foothills and the Citizens' Committee to Complete the Refuge.

"With today's ruling, it's more clear than ever that Cargill does not need these ponds to make salt any more," said David Lewis, executive director of Save the Bay. He called on Cargill instead to "give them back to the public and add them to the wildlife refuge so they can be protected forever."

Not only do the marshes provide flooding protection, Lewis said, they serve as nursing areas for salmon and other fish. Marshes also provide habitats for threatened and endangered species like Ridgeway's rail and the salt marsh harvest mouse.

Lewis said there were more than 200,000 acres of tidal marsh in the bay at its peak. Development and conversion of marshes to other uses reduced this number to about 40,000 acres by the 1960s, Lewis said.

Since then there have been extensive restoration efforts around the bay, including former salt ponds farther south. The goal of local environmentalists is to get back to 100,000 acres of wetlands in the next decade or so.

"We've turned the tide and it's a real renaissance for making the bay bigger and healthier," Lewis said.

The Delta's Blooming Problem

Estuary News | September 2020 | Cariad Hayes Thronson

Bright-green blotches of algae have been popping up all over the Delta since early summer, from Discovery Bay to the Stockton waterfront, befouling the air and poisoning the water with toxins that can sicken or even kill humans and animals. Veteran Delta watchers believe that this year's harmful algal blooms may be the worst ever, and worry that some features of Governor Gavin Newsom's recently released Water Resilience Portfolio for California will aggravate the problem.

"We don't have enough data to know if this is the worst year ever, because we haven't been out there every single year for years and years monitoring," says Meredith Howard, an environmental program manager with the Central Valley Regional Water Quality Control Board. "I will say we've seen higher toxin numbers this year compared to the last three or four years."

Although blooms are common in Discovery Bay and Stockton, "What was especially concerning this year is that we saw significant concentrations out in the Estuary as far as Antioch that were connected to the big Delta bloom," says scientist Brian Bergamaschi of the U.S. Geological Survey (USGS).

Delta waterways in the summer can be ideal environments for the cyanobacteria that create harmful algal blooms (HABs). "There are certain areas of the Delta that don't get a lot of flow for long periods of time, usually in the summer when it's really warm. Cyanobacteria love that," says Howard, citing the stagnant waters around Stockton as a particularly optimal spot for HABs. "Cyanobacteria grow faster in warm water." The nutrients that spill into the Delta from agricultural land and urban runoff also stimulate their growth.



Despite the alarming number of blooms identified this summer, the true extent of the problem is unclear, as there is no formal monitoring program for HABs in the Delta. "HABs are kind of like COVID in that if you don't track it, you don't know what you're really dealing with," says Barbara Barrigan-Parrilla, director of Restore the Delta, which has been raising alarms about HABs since 2014.

In 2019, the governor signed AB 834, mandating a freshwater and estuarine HAB program. "That was supposed to give us a lot of resources starting in July 2020," says Howard, but COVID-related budget constraints took that off the table.

Such a program will be challenging to design and expensive to operate, says Bergamaschi, who is studying the effect of cyanotoxins on Delta aquatic ecology. It can cost upwards of \$350 to analyze each water sample for the toxins, not including the costs of "getting people into boats to collect the samples."

Monitoring is also complicated by the fact that not every algal bloom is harmful. "Just because you can see an algae colony doesn't tell you whether or not there are cyanotoxins in the water column," says Bergamaschi's USGS colleague Tamara Kraus. "There are different kinds of algae; some of them are beneficial and some of them are harmful. Some of them have the gene to produce the toxin, and some of them don't. Some that have the gene are not necessarily making the toxin." The conditions that cause the organism to produce the toxin are still unknown.

Although there is no formal HAB monitoring program in the Delta, an informal peer-to-peer scientific network is picking up some of the slack, says Howard. "There's a huge number of groups that do monitoring [of various things] in the Delta. We've started to work with USGS and the Department of Water Resources, and we're trying to get HABs incorporated into more of our regional monitoring programs." In the meantime, the Surface Water Ambient Monitoring System, established in 2016, maintains an online portal that allows anyone to report suspected HABs.

"There are a lot of active stakeholders who use that resource now," says Howard. "It's gotten to the point where there are actually more reports than we have staff to investigate."

Howard is hopeful that a regular monitoring program will begin in 2021 (implementing AB 834 is one of the priorities identified in the Water Resilience Portfolio). In the meantime, Howard says she is talking with regional board members and stakeholders about developing a HAB mitigation and management strategy for the Delta.

To Barrigan-Parrilla, some solutions are obvious. "There has to be adequate fresh water flowing through the Delta all year round," she says. Number two, we've got to do something about [nutrient-heavy] discharge from the Port of Stockton and agriculture. And number three, we need mechanical recirculation systems [where there are stagnant areas]."

Barrigan-Parrilla and others are worried that several priorities identified in the portfolio will limit the needed freshwater flows. These include the proposed Sites Reservoir, the latest iteration of the Delta tunnel, and reliance on voluntary agreements with water contractors to increase flows and improve conditions for native fish in the Delta. "What's going to happen when we are deprived of even more flow?" asks Barrigan-Parrilla. "Rather than just saying 'no' to the tunnel, we're saying, let's solve this problem and then talk about the tunnel. But [the Department of Water Resources] just doesn't want to do that. And it's the same with voluntary agreements. Nobody wants to do the hard work about how these issues are interrelated."

New water quality standards for the Delta might go a long way toward resolving these issues, says Kate Poole of the Natural Resources Defense Council. In 2018, the State Water Resources Control Board released its Phase One update to the Bay-Delta Water Quality Control Plan, which set new standards for flows from the San Joaquin River. However, those standards have yet to be implemented. Phase Two, which would address flows from the Sacramento River, is on hold while the state tries to negotiate the voluntary agreements. Earlier this year, negotiations over the agreements dissolved when the parties—including state and federal agencies and water contractors—disagreed over Endangered Species Act requirements.

"The state boardneeds to get back to work on both the Phase One implementation and the Phase Two standards," says Poole. "If the voluntary agreements come back to life, they can be plugged into that proceeding. But there's urgency around this. We've lost decades already." Poole says her concern about the Water Resilience Portfolio is that while it includes some laudable initiatives and approaches, "It doesn't connect the pieces, which is what really needs to happen if we're going to deal effectively with these big thorny problems, like restoring the health of the Delta."