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

### **September 14, 2018**

Correspondence and media coverage of interest between July 27, 2018 and September 12, 2018

### Correspondence

Date: September 10, 2018

To: Spreck Rosekrans, Restore Hetch Hetchy Executive Director

From: Harlan Kelly, SFPUC General Manager

Subject: Response to S. Rosekrans August 3, 2018 letter (attached)

Date: August 29, 2018

To: Al Mendall, BAWSCA Chair of the Board and Ike Kwon, SFPUC President

From: Spreck Rosekrans, Restore Hetch Hetchy Executive Director Subject: Implementation of flow requirements on the lower Tuolumne River

Date: August 22, 2018

To: Felicia Marcus, Chair, State Water Resources Control Board

From: The Hon. Scott Weiner, State Senator

The Hon. Phil Ting, State Assembly Member The Hon. David Chiu, State Assembly Member

Subject: Consideration of a Proposed Resolution to Adopt Amendments to the Water Quality Control

Plan for the San Francisco Bay/Sacramento San Joaquin Delta Estuary and Adopt the Final

Substitute Environmental Document

Date: August 20, 2018

To: Felicia Marcus, Chair, State Water Resources Control Board

From: The Hon. Jerry Hill, State Senator Subject: Bay Delta Water Quality Control Plan

Date: August 20, 2018

To: Felicia Marcus, Chair, State Water Resources Control Board

From: The Hon. Bill Quirk, State Assembly Member

Subject: Bay Delta Water Quality Control Plan

Date: August 16, 2018

To: Felicia Marcus, Chair, State Water Resources Control Board

From: Congress of the United States

Subject: Final Draft Bay-Delta Plan Update for the Lower San Joaquin River and Southern Delta

Date: August 15, 2018

To: The Hon. John Laird, Secretary for Natural Resources
From: Felicia Marcus, Chair, State Water Resources Control Board

Subject: Response to August 15<sup>th</sup> letter from John Laird

Date: August 15, 2018

To: Felicia Marcus, Chair, State Water Resources Control Board From: The Hon. John Laird, Secretary for Natural Resources

Subject: August 21, 2018 Meeting, Agenda Item 4: Consideration of a Proposed Resolution to Adopt

Amendments to the Water Quality Control Plan for the San Francisco Bay/Sacramento San

Joaquin Delta Estuary and Adopt the Final Substitute Environmental Document

### Correspondence, Cont'd.

Date: July 27, 2018

To: Felicia Marcus, Chair, State Water Resources Control Board

From: Department of Water Resources and Department of Fish and Wildlife

Subject: Proposed Final Amendments and Final Substitute Environmental Document for Lower

San Joaquin River Flow Objectives and Southern Delta Salinity Objectives

Date: July 27, 2018

To: Felicia Marcus, Chair, State Water Resources Control Board From: The Hon. Brenda Burman, United States Department of the Interior

Subject: Final Draft Bay-Delta Plan Update for the Lower San Joaquin River and Southern Delta

Date: August 9, 2018

To: The Hon. Ryan Zinke, Secretary, Department of the Interior From: Dianne Feinstein and Kamala D. Harris, United States Senator Subject: Removing O'Shaughnessy Dam and restoring Hetch Hetchy Valley

### **Media Coverage**

### **Bay Delta Water Quality Control Plan:**

Date: September 11, 2018

Source: Modesto Bee

Article: Why some are concerned over water board chairwoman's ties to Bay Area Institute

Date: September 11, 2018
Source: San Mateo Daily Journal
Article: The amazing Tuolumne

Date: September 9, 2018

Source: Fresno Bee

Article: Strange Bedfellows? Westlands and San Francisco share common ground

Date: August 30, 2018 Source: Water Deeply

Article: Groundwater Banking: A Likely Solution to Achieve Greater River Flows

Date: August 25, 2018

Source: San Francisco Chronicle

Article: State Water Board plan would require water rationing in the Bay Area

Date: August 22, 2018

Source: San Francisco Examiner

Article: Supporting a Bay-Delta Plan that balances water reliability and environmental sustainability

Date: August 21, 2018

Source: San Francisco Chronicle

Article: California's water wars heat up at Sacramento hearing over river flows

Date: August 21, 2018 Source: Palo Alto Weekly

Article: Defying water suppliers, Palo Alto backs Bay-Delta Plan

### Bay Delta Water Quality Control Plan, cont'd:

Date: August 15, 2018

Source: San Francisco Examiner

Article: Prioritizing San Francisco's water supply

Date: August 14, 2018

Source: ACWA

Article: State Water Board Must Reconsider Unimpaird Flows Approach

### **Restore Hetch Hetchy:**

Date: August 22, 2018 Source: Water Deeply

Article: A Century On, the Battle Over Yosemite's Hetch hetchy Valley Continues

Date: August/September 2018

Source: Bay Area Monitor

Article: The Great Hetch Hetchy Debate

### Infrastructure:

Date: September 12, 2018 Source: East Bay Times

Editorial: Delta hearing opens door to twin-tunnels water grab

Date: September 10, 2018 Source: Capitol Weekly

Article: State Water Project: Our most important infrastructure

Date: September 6, 2018

Source: Public Policy Institute of California

Article: Make California's Water Grid Climate-Ready

Date: September 6, 2018 Source: San Diego Tribune

Article: Commentary: How Prop 3 helps ensure California's water future

Date: September 5, 2018 Source: The Union Democrat

Article: Hetch Hetchy's Moccasin Dam is in poor condition, state Dams Safety Division says

Date: August 31, 2018 Source: AgNet West

Article: Latest Climate Change Assessment Illustrates Farming Challenges of the Future

Date: August 29, 2018 Source: Tracy Press

Article: Brown tries to jam Delta water hearing through legislature





### OFFICE OF THE GENERAL MANAGER

San Francisco Public Utilities Commission 525 Golden Gate Avenue, 13<sup>th</sup> Floor San Francisco, CA 94102-3220 T 415-554-0740 F 415-554-3161 HKelly@sfwater.org

September 10, 2018

Mr. Spreck Rosekrans
Executive Director
Restore Hetch Hetchy
3286 Adeline Street, Suite 7
Berkeley, CA 94703

Dear Mr. Rosekrans,

In response to your letter dated August 3, 2018, I stand by the statements made in my Letter to the Editor published in the San Francisco Chronicle on July 31, 2018. Any effort to restore Hetch Hetchy Valley would have major financial, environmental and water supply consequences detrimental to San Francisco and our long-term wholesale customers.

Regarding your proposal for a public dialogue, I am unable to participate in such a discussion given Restore Hetch Hetchy's continuing litigation against the City and County of San Francisco.

Sincerely,

cc:

Harlan L. Kelly, Jr.

General Manager

London Breed Mayor

> Ike Kwon President

Vince Courtney Vice President

Ann Moller Caen Commissioner

Francesca Vietor

Francesca Vietor Commissioner

> Anson Moran Commissioner

Harlan L. Kelly, Jr. General Manager

The Honorable Ryan Zinke, U.S. Secretary of the Interior

The Honorable John Laird, California Secretary of Natural Resources

Nicole Sandkulla, Chief Executive Officer and General Manager, BAWSCA

San Francisco Chronicle

**OUR MISSION:** 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.





#### **BOARD OF DIRECTORS**

Roger Williams, Chair
Virginia Johannessen, Vice- Chair
Peter Van Kuran, Treasurer
Mark Palley, Secretary
Sean Bothwell
Kathy Bowler
Mark Cederborg
Ann Hayden
Rex Hime
Lance Olson
Kathy Schrenk
Ron Sundergill
Melanie Webber

### **ADVISORY BOARD**

Dr. Ronald Alessio Allison Dr. Peter Andersen **Bob Binnewies** Brent Blackwelder Carl Boronkay Yvon Chouinard David Curry Lane Darnton Larry Fahn Drew Goetting B.J. Griffin **Bob Hackamack** Martin Hellman Peter Hilf Liz Huntington Huey Johnson Kate Looby Jim Lovelace Christine White Loberg Laura Lockwood Mike McCloskey Geoff McQuilkin George Miller Dr. Barbara Mossberg Dr. Roderick Frazier Nash Tom Parker Aaron Peskin Marsh Pitman Kay Pitts The Honorable Mark Ross Tony Rowell Lee Stetson Richard Wiebe Harold Wood Felicia Woytak

### STAFF

Spreck Rosekrans Executive Director

Julene Freitas Office Manager August 3, 2018

Mr. Harlan Kelly, General Manager Mana

Re: Your letter published in the SF Chronicle, July 29, 2018

Dear Mr. Kelly: come out sound north show the bluew it incilled the too be semiled

It is easy to understand why the San Francisco Public Utilities Commission opposes the restoration of Hetch Hetchy Valley in Yosemite National Park. San Francisco pays only \$30,000 per year to use Hetch Hetchy as a storage tank – certainly a good deal from the PUC perspective.

Restore Hetch Hetchy, however, disputes numerous claims in your letter. These claims significantly overstate the cost of restoring the valley while keeping San Francisco's Regional Water System whole with respect to both water supply and clean electricity production.

I propose a public dialogue in which we can discuss the value of restoration, and what the various elements necessary to make it possible would cost. Such a dialogue should include a variety of interested parties, including representatives of the State and Federal governments.

Please let me know if you are interested. Restore Hetch Hetchy would appreciate a cooperative discussion on the merits.

Sincerely,

Spreck Rosekrans Executive Director

Cc: The Honorable Ryan Zinke, Secretary of the Interior

The Honorable John Laird, California Secretary of Natural Resources

Nicole Sandkulla, CEO/GM of BAWSCA

San Francisco Chronicle



## San Francisco Chronicle

### LETTERS TO THE EDITOR

July 30, 2018

Bad idea to drain reservoir

Regarding "Hetch Hetchy plan stirs little worry" (Bay Area, July 26): Hetch Hetchy Reservoir is the main source of drinking water for 2.7 million people in four Bay Area counties. That's why our ratepayers just invested \$4.8 billion dollars on our Water System Improvement Program over the past 10 years to make sure it remains reliable well into the future.

Dismantling this system would have major financial, environmental and water supply consequences. First, at an estimated cost of \$10 billion, it would cost more than twice the amount of money spent to improve the system to take it down. Second, this system generates 100 percent greenhouse-gas-free electricity. We would lose 410 megawatts of clean hydropower generation, equal to powering more than 400,000 homes. Finally, the loss of the dam would mean a loss of more than 117 billion gallons of high-quality water storage. In times of global climate change and increasing droughts, this would be particularly foolish.

No matter how many times they've been told no, this group will go to any lengths to destroy our precious drinking water system. In fact, just this month, the Fifth District Court of Appeals upheld a decision to dismiss a lawsuit pushing to drain Hetch Hetchy. Because it's a bad idea. We will continue to work with our local, state and federal partners to protect the Bay Area's vital water resources.

Harlan Kelly Jr., general manager, San Francisco Public Utilities Commission

Spreck Rosekrans
Executive Director





### BOARD OF DIRECTORS

Roger Williams, Chair
Virginia Johannessen, Vice- Chair
Peter Van Kuran, Treasurer
Mark Palley, Secretary
Sean Bothwell
Kathy Bowler
Mark Cederborg
Ann Hayden
Rex Hime
Lance Olson
Kathy Schrenk
Ron Sundergill
Melanie Webber

#### **ADVISORY BOARD**

Dr. Ronald Alessio Allison Dr. Peter Andersen **Bob Binnewies** Brent Blackwelder Carl Boronkay Yvon Chouinard **David Curry** Lane Darnton Larry Fahn **Drew Goetting** B.J. Griffin **Bob Hackamack** Martin Hellman Peter Hilf Liz Huntington **Huey Johnson** Kate Looby Jim Lovelace Christine White Loberg Laura Lockwood Mike McCloskey Geoff McQuilkin George Miller Dr. Barbara Mossberg Dr. Roderick Frazier Nash Tom Parker Aaron Peskin Marsh Pitman Kay Pitts The Honorable Mark Ross Tony Rowell Lee Stetson Richard Wiebe Harold Wood

### STAFF

Spreck Rosekrans
Executive Director

Julene Freitas Office Manager

Felicia Woytak

August 29, 2018

Mr. Ike Kwon, President, San Francisco Public Utilities Commission

Mr. Al Mendel, Chair, BAWSCA

Mr. Harlan Kelly, General Manager, San Francisco Public Utilities Commission

Ms. Nicole Sandkulla, General Manager and CEO, BAWSCA

Subject: Implementation of flow requirements on the lower Tuolumne River

Dear President Kwon, Chair Mendel, GM Kelly, and GM/CEO Sandkulla:

This letter is a follow up to the Bay-Delta Plan discussion at yesterday's San Francisco Public Utilities Commission meeting. Many opinions, some in favor and some opposed, were expressed regarding the State Water Resources Control Board's proposal that the Tuolumne River below La Grange Dam be required to retain at least 40% of its natural flow between February and June.

Restore Hetch Hetchy takes no position on the State Board's proposal. We hope all parties are able to reach a solution that works for the river, San Francisco's Regional Water System, and the Turlock and Modesto Irrigation Districts.

It is unknown what final plan will become law. While the SFPUC and BAWSCA support a separate alternative and hope to negotiate a solution that would require far less flow on the lower river, it would only be prudent to consider that a significant increase in flow below La Grange Dam may ultimately be required.

The State Board's proposal poses particular challenges to San Francisco's RWS, which relies on the Tuolumne River for 85% of its supply. Due to the City's junior water rights, it receives very little of the Tuolumne River's flow in the driest years. Further, the "Fourth Agreement" (signed in 1966 between San Francisco and the Turlock and Modesto Irrigation Districts) obligates San Francisco's RWS to provide 51.7% of any increase in flow. So even though the Districts use about 4 times as much Tuolumne River's water, San Francisco's RWS will be responsible for meeting the majority of any flow increase.

Commission staff presentations have provided quantitative projections of how the State Board's proposal will affect its ability to deliver water to customers. Others have provided different interpretations. In any event, it is incumbent on the SFPUC to consider how it will meet customer needs in the event that a final decision requires substantial increases to flows below La Grange Dam.

President Kwon, Chair Mendel, GM Kelly, and GM/CEO Sandkulla:

August 29, 2018

Subject: Implementation of flow requirements on the lower Tuolumne River

Page 2

The State Board's proposal has little changed since it was made public in 2012. Even if modified, an increase in flows may be required as soon as 2022. Alternative supplies are possible but, as noted at the Commission meeting, they are not easy, quick or cheap to implement. Some are also environmentally controversial.

The SFPUC, BAWSCA and BAWSCA member agencies provide essential services to much of the Bay Area. It is incumbent to continue providing those services, even if made more difficult due to increased environmental requirements.

Restore Hetch Hetchy well understands the vital importance of providing a reliable water supply to all SFPUC customers. We look forward to seeing potential projects and programs for closing the gap between supply and demand, and we stand ready to play a productive role in their development and implementation if it is helpful.

Sincerely,

Spreck Rosekrans Executive Director (1997) and Author (1997) and A

3286 Adeline St. Suite 7, Berkeley, California 94703 \* 510.893.3400 \* Tax ID # 77-0551533 Contributions to Restore Hetch Hetchy are tax-deductible to the extent allowed by law.

# California Legislature

August 22, 2018

Felicia Marcus, Chair Steven Moore, Vice-Chair Tam M. Doduc, Member Dorene D'Adamo, Member E. Joaquin Esquivel, Member

State Water Resources Control Board 1001 | Street, 24th Floor Sacramento, CA 95814

Re: Consideration of a Proposed Resolution to Adopt Amendments to the Water Quality Control Plan for the San Francisco Bay/Sacramento San Joaquin Delta Estuary and Adopt the Final Substitute Environmental Document

Dear Chair Marcus, Vice-Chair Moore, and Members:

We are writing with respect to the State Water Resources Control Board's (Board) Revised Substitute Environmental Document for the Bay-Delta Plan (SED). We admire and appreciate the Board's responsibility to preserve, manage and restore the downstream habitat of the Tuolumne River and its tributaries. However, as the state representatives for San Francisco, it is our obligation to ensure that the city is properly prepared for future droughts. San Francisco residents have a long history of respect for water as an important resource and currently use about half of the state's average per capita (42 gallons per person per day). We are concerned that the Board's proposal to require 40% unimpaired flows would drastically reduce the San Francisco Public Utilities Commission's (SFPUC) ability to provide water to meet the basic needs of 2.7 million people in the Bay Area and require up to 50% rationing for our residents in drought years.

We urge the Board to delay voting until the SFPUC and other stakeholders conclude voluntary settlement negotiations, which we believe would yield better outcomes for both the environment and our residents. It is our sincere hope that working cooperatively will result in a faster and more impactful resolution of this important issue.

We also encourage the Board and other policy makers to closely evaluate SFPUC's alternative Bay-Delta Plan which is based on 30 years of research and over 200 scientific studies on the Tuolumne River. This proposal is intended to produce better outcomes for fish species with a combination of flow and non-flow measures such as predation control, controlling the timing of the flows, and habitat restoration, while allowing for more water storage than what is proposed in the SED.



Thank you for your consideration of our comments.

Sincerely,

Senator Scott Wiener

Assemblymember Phil Ting

Assemblymember David Chiu

CC:

Governor Edmund G. Brown Jr.

Diana Dooley, Executive Secretary to Governor Brown Keely Bosler, Cabinet Secretary to Governor Brown Kim Craig, Deputy Cabinet Secretary to Governor Brown California State Senate

CAPITOL OFFICE STATE CAPITOL SACRAMENTO, CA 95814 TEL (916) 651-4013 FAX (916) 651-4913

DISTRICT OFFICE 1528 S. EL CAMINO REAL SUITE 303 SAN MATEO, CA 94402 TEL (650) 212-3313 FAX (650) 212-3320

WWW.SENATE.CA.GOV/HILL SENATOR.HILL@SENATE.CA.GOV

August 20, 2018

### SENATOR

JERRY HILL
THIRTEENTH SENATE DISTRICT



COMMITTEES
BUSINESS, PROFESSIONS &
ECONOMIC DEVELOPMENT
CHAIR

APPROPRIATIONS

ENERGY, UTILITIES & COMMUNICATIONS

ENVIRONMENTAL QUALITY

GOVERNMENTAL ORGANIZATION

Ms. Felicia Marcus, Chair State Water Resources Control Board P. O. Box 100 Sacramento, CA 95812

Re: Bay Delta Water Quality Control Plan

Dear Chair Marcus:

I have followed with great interest the State Water Resources Control Board's Bay Delta Water Quality Control Plan (Plan) discussions. The overwhelming majority of constituents and businesses within my district are served by water from the Tuolumne River. All are concerned with issues of supply and flow of the Tuolumne.

I have been approached by interested parties who have expressed concerns with the implementation of the Plan.

I note that Governor Brown has stated his hope for a negotiated voluntary agreement. Your July 6, 2018 comments, as made concurrent with the SWRCB's release of the Draft Final Plan, encouraging people to come together with a voluntary settlement as a way to successfully resolve this critical issue, is sincerely appreciated.

I respectfully urge you to delay any action on the Plan until January 1, 2019 with the expressed purpose of providing a specific time-window for reaching a successful settlement through voluntary, negotiated agreements.

As a state legislator, I am ready to assist the interested parties reach a successful voluntary negotiated settlement agreement on this very important Tuolumne River water supply issue for people and fish. Please let me know how I can be of assistance to you and the State Board on this critical matter.

Very truly yours,

Senator, 13<sup>th</sup> District



### Congress of the United States Mashington, DC 20515

August 16, 2018

Ms. Felicia Marcus, Chair State Water Resources Control Board P.O. Box 100 1001 I Street Sacramento, California 95814

Subject: Final Draft Bay-Delta Plan Update for the Lower San Joaquin River and Southern Delta

Dear Chairwoman Marcus:

We write today to express our fervent opposition to the State Water Resources Control Board's proposed final San Joaquin River flows and Southern Delta water quality amendments to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary.

As members of Congress responsible for ensuring and protecting the federal interest of the U.S. Bureau of Reclamation projects, we strongly support the position expressed in Reclamation Commissioner Brenda Burman's letter to you of July 27, 2018. We affirm our intention to intervene if your Board attempts to take action that would usurp management of federal facilities, interfere with the lawful operation of Bureau of Reclamation facilities, or impose any of the water quality standards identified in the final San Joaquin River flows and Southern Delta water quality amendments to the Water Quality Control Plan on the water rights permits for the State Water Project.

The Board's proposal clearly subordinates the beneficial human use of the water in favor of fish and wildlife measures of dubious validity, contrary to congressional authorization of the Central Valley Project and the New Melones Dam. Notably, implementation of the 40 percent unimpaired flow standard will reduce average storage of water at New Melones by 315,000 acrefeet per year, while decimating deliveries to Central Valley Project contractors. The 40 percent unimpaired flow standard will also result in diminished power generation and public recreation at New Melones.

As members of Congress, we stand behind Commissioner Brenda Burman's letter. If the SWRCB moves forward as planned and adopts the Draft Water Quality Control Plan for Phase I or seeks to impose new water quality obligations on the State Water Project, then we will seek legislative, administrative and judicial countermeasures.

Sincerely,

Kevin M

Ken Calvert	Devin Nunes
Doug LaMalfa	Jeff Denham
David G. Valadao	Paul Cook
Mimi Walters	Duncan Hunter
Dana Rohrabacher	Ed Royce Ed Royce
Darrell Issa	Steve Knight
Jim Costa	

STATE CAPITOL P.O. BOX 942849 SACRAMENTO, CA 94249-0020 (916) 319-2020

DISTRICT OFFICE
22320 FOOTHILL BOULEVARD, SUITE 540
HAYWARD, CA 94541
(510) 583-8818





COMMITTEES
CHAIR: ENVIRONMENTAL SAFETY
AND TOXIC MATERIALS
APPROPRIATIONS
PUBLIC SAFETY
REVENUE AND TAXATION
UTILITIES AND ENERGY

August 20, 2018

The Honorable Felicia Marcus Chair, California State Water Resources Control Board P.O. Box 100 Sacramento, California 95812-0100

Dear Chair Marcus:

I represent communities in Alameda county, that are served by water from the Tuolumne River that is delivered under long-term contracts with the San Francisco Public Utilities Commission (SFPCU) to 26 wholesale water agencies which are members of the Bay Area Water Supply and Conservation Agency (BAWSCA), a state-authorized public agency.

I want to extend my thanks to you and the rest Water Board for postponing the decision on the proposed amendments to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary.

I have serious concerns about the State Water Resources Control Board's Bay Delta Water Quality Control Plan (Plan) and its potential damage to the 1.8 million residents, 40,000 businesses, and thousands of community organization in these three counties served by BAWSCA member agencies who depend on this water.

BAWSCA has provided me with reliable information about the Plan, and I have reviewed the detailed letters submitted to your Board by BAWSCA by each of their 26-member agencies. Those letters describe their issues with the Plan.

I am aware that BAWSCA supports the objectives of your Plan, but that it has major concerns with its implementation, specifically the major water shortages it could cause during future droughts. BAWSCA believes that these shortages would result in unprecedented and unsustainable levels of rationing in our communities.

As you know, there is an alternative Plan developed and proposed by the SFPUC, and supported by BAWSCA, that is based on 30 years of research and over 200 site-specific studies and that will meet the environmental objectives without compromising water supply for the current users of the water. As you know, an alternative plan has been



developed and proposed by the SFPUC. This alternative plan can serve as a basis for a voluntary settlement that can meet your Board's objectives as well as protect our water users.

I am pleased that both Governor Brown and Secretary Laird have stated their hope for a negotiated voluntary agreement. Your July 6, 2018 comments, as made concurrent with the SWRCB's release of the Draft Final Plan, encouraging people to come together with a voluntary settlement as a way to successfully resolve this critical issue is sincerely appreciated. Others, including agricultural irrigation districts and non-governmental organizations, also agree. Most recently, in their July 27, 2018 comment letter to the State Water Board, the State Departments of Water Resources and Fish and Wildlife expressed their continued support for voluntary, negotiated agreements to resolve this issue and support for such negotiations.

I again extend my thanks for the recent postponement, and hope that this additional time will allow for negotiations to continue. This will allow substantive alternatives to be considered, such as that offered by the SFPUC. I have confidence that a voluntary negotiated settlement can strike a balance between the needs of the invested parties, and provide for a sustainable future in the Bay and Delta – in both our cities and our wildlands.

As a state legislator, I am ready to help the interested parties reach a successful voluntary negotiated settlement agreement on the Tuolumne River water supply. I look forward to continuing to work with you and other in this process

Respectfully

BILL QUIRK

Assemblymember, 20th District

Bill Zunk







### State Water Resources Control Board

August 15, 2018

Honorable John Laird Secretary for Natural Resources California Natural Resources Agency 1416 Ninth Street, Suite 1311 Sacramento, CA 95814

VIA U.S. MAIL AND EMAIL

Dear Secretary Laird:

I have received the request you submitted on behalf of the California Natural Resources Agency, Department of Fish and Wildlife, and Department of Water Resources for an opportunity to present at next week's board meeting on adaptive implementation and voluntary settlement agreements. Your letter also requests that the board defer final action on the item. As discussed below and after conferring with the Executive Director, both requests are granted.

Throughout the last two years, board members and staff have repeatedly emphasized that voluntary settlement agreements can provide a faster, more durable solution to reasonably protect beneficial uses in the Lower San Joaquin River and its tributaries. The pending board action recognizes the important of both flow and non-flow actions to enhance the fisheries and provides significant flexibility for adaptive implementation. Voluntary settlement agreements present the opportunity to make the non-flow elements more concrete and reduce the potential water supply impact. I look forward to hearing from the parties involved in the voluntary settlement agreement process about their progress in this regard.

Board staff will issue a revised agenda that makes clear final action will occur at a subsequent board meeting. The agenda item next week will provide the final opportunity for comment on the staff-proposed action, but final board action on the water quality control plan update will be continued to a future board meeting.

Sincerely.

Felicia Marcus

Chair





August 15, 2018

Felicia Marcus, Chair Steven Moore, Vice-Chair Tam M. Doduc, Member Dorene D'Adamo, Member E. Joaquin Esquivel, Member State Water Resources Control Board 1001 I Street, 24th Floor Sacramento, CA 95814

Re: August 21, 2018 Meeting, Agenda Item 4: Consideration of a Proposed Resolution to Adopt Amendments to the Water Quality Control Plan for the San Francisco

Bay/Sacramento San Joaquin Delta Estuary and Adopt the Final Substitute

Environmental Document

Dear Chair Marcus, Vice-Chair Moore, and Members:

I write on behalf of my agency and the Departments of Water Resources and Fish and Wildlife (Departments) pursuant to the procedures stated in your "Notice of Public Meeting" (July 6, 2018), p. 3. Specifically, I request that you give the Departments the opportunity to discuss information they could present on scientific methods available to evaluate the relative benefits of flow and non-flow actions to protect native salmonid fish species in the San Joaquin Basin. We request 30 minutes for the presentation. This information bears on adaptive implementation, as well as the voluntary settlement agreements which the Departments expect to complete and submit. SED Appendix K, pp. 30, 36. Further, we request that the State Water Board exercise your authority to continue the meeting beyond August 22, 2018 (Notice, p. 1) so that final board action will take place at a future board meeting.

Thank you for consideration of this request.

Sincerely,

Jehn Laird

Secretary for Natural Resources

1416 Ninth Street, Suite 1311, Sacramento, CA 95814 Ph. 916.653.5656 Fax 916.653.8102 http://resources.ca.gov



# State of California \* Natural Resources Agency Edmund G. Brown Jr., Governor



DEPARTMENT OF WATER RESOURCES Karla A. Nemeth, Director 1416 Ninth Street, Room 1115-1 Sacramento CA 95814



DEPARTMENT OF FISH AND WILDLIFE Charlton H. Bonham, Director 1416 Ninth Street, Room 1205 Sacramento, CA 95814

July 27, 2018

Felicia Marcus, Chairman
Steven Moore, Vice-Chairman
Tam M. Doduc, Member
Dorene D'Adamo, Member
E. Joaquin Esquivel, Member
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814

Dear Chairman Marcus, Vice-Chairman Moore, and Members:

Re: Proposed Final Amendments and Final Substitute Environmental Document for Lower San Joaquin River Flow Objectives and Southern Delta Salinity Objectives

The California Department of Fish and Wildlife (CDFW) and California Department of Water Resources (CDWR) submit these comments on the "Proposed Final Amendments and Substitute Environmental Document for the Lower San Joaquin River and Southern Delta" (July 6, 2018)" (SED), which updates the *Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary* (WQCP). We write in response to the Fact Sheet, which states: "While the revised amendments enhance flexibility, the Board remains interested in receiving potential plan amendment language which would authorize, with the affirmative concurrence from the California Department of Fish and Wildlife, a coordinated control of flows and other, non-flow factors that would achieve benefits comparable to the unimpaired flow requirements." We submit such alternative language in the enclosure to this letter.

State Water Resources Control Board July 27, 2018 Page 2

The Departments support the State Water Board's purpose, in updating the WQCP, to improve protection for anadromous and pelagic fishes in the Delta watershed, where these species are in crisis. Fact Sheet, p. 1. With gratitude, the Departments recognize the extraordinary efforts of the State Water Board to develop this update, including continuing engagement of stakeholders in the update process.

The Departments have commented and participated actively in this process. Since 2016 we have also undertaken negotiations with water agencies and districts, conservation groups, and other stakeholders to develop voluntary settlement agreements, which would be proposed as the Program of Implementation in the San Joaquin Basin, as well as the Sacramento Basin and legal Delta. As you note, "the State Water Board cannot order these collaborative efforts in a regulation, but can accept them as offered." Fact Sheet, p. 4. The enclosure to this letter includes alternative language that would support our continued progress towards reaching such agreements in 2018.

### Voluntary Settlement Agreements

The Proposed Final Amendments recognize that voluntary settlement agreements may inform and expedite implementation of water quality objectives in a durable manner. SED, Appendix K ("Revised Water Quality Control Plan"), p. 36. The Departments agree. This letter describes our continuing approach to development of such agreements.

Restoring the viability of anadromous fishes in the Lower San Joaquin River Basin will require improvements in a wide range of baseline conditions that affect habitat availability and quality. These conditions include: elevated water temperatures, passage barriers, lack of floodplain inundation, blockage of substrate transport, and predation by non-native species. In voluntary agreements, CDFW proposes to coordinate functional flows with non-flow actions to substantially improve habitat availability and biological outcomes for the anadromous fishes. Such improvements would begin immediately if the State Water Board accepts the agreements and would continue for the defined term of the agreements, which could be 15 years subject to renewal.

The Proposed Final Amendments provide for future development of biological goals to inform adaptive implementation. Fact Sheet, p. 5; SED Appendix K, pp. 32-33. The Departments support use of goals to improve effectiveness of implementation. CDFW proposes to include outcomes in the voluntary agreements, and specifically, to increase habitat availability sufficient to support doubling of the average adult escapement of anadromous fishes that occurred between 2001-2015 in each of the San Joaquin tributaries. These outcomes would compare favorably with the State Water Board's findings about the benefits of the proposed narrative objective. See SED, Table 19-32, pp. 74-89.

Consistent with the Proposed Final Amendments (SED Appendix K, pp. 34-36), CDFW proposes that the voluntary agreements would include a robust science process to

State Water Resources Control Board July 27, 2018 Page 3

evaluate effectiveness of implementation. This process would involve continuous monitoring in open-source format, measurable indicators, and testable hypotheses, including competing hypotheses where existing science is particularly uncertain. CDFW would have lead responsibility for implementation of the science process, but will emphasize improved coordination with other regulatory agencies, universities, and other entities.

### **Non-Flow Actions**

The Proposed Final Amendments permit non-flow actions in voluntary settlement agreements. SED, Appendix K, p. 36. The Departments conclude that such actions will materially enhance habitat and biological outcomes. This point deserves emphasis. CDFW proposes that voluntary agreements would include a robust set of non-flow actions, such as replenishment of spawning gravels, riparian tree plantings, enhancement of habitat complexity, restoration of floodplain habitat, water hyacinth removal, potentially a fish segregation weir on the Tuolumne, hatchery improvements on the Merced, and actions to reduce predation rate by non-native predators.

### **Functional Flows**

The Proposed Final Amendments require maintenance of 40% unimpaired flow, subject to an adaptive range of 30 to 50%, from February in each of the tributary rivers. SED, Appendix K, pp. 28-31. The "unimpaired flow requirement is designed to mimic the natural cues that species have evolved to respond to, but is not intended to be a rigid and fixed percentage of unimpaired flow." Indeed, the proposed requirement allows shaping and shifting between months and years to achieve ecological functions. Fact Sheet, p. 3; SED Appendix K, pp. 30-31. CDFW agrees that functional flows, including mimicry of ecological processes and associated cues, are critical to restore the viability of anadromous fishes, while understanding that unimpaired flows are one of several reasonable metrics for management of functional flows.

The State Water Board has made it clear that it will permit flexibility in the unimpaired flow requirement if voluntary settlement agreements would provide better outcomes in protection of anadromous fishes and the proposed alternative language in the enclosure would enhance that flexibility. In the continued development of voluntary agreements, CDFW is pursuing a coordinated approach which would implement non-flow actions, integrate them with an enhanced year-round base flow, and use pulse flows to activate habitat for juvenile rearing and growth. In cooperation with other stakeholders, CDFW will undertake further modeling analysis, understanding the evidentiary burden of demonstrating comparable outcomes. Assuming that voluntary agreements are reached, CDFW will be prepared to sponsor a workshop panel of experts with respect to outcomes of coordinated control of flow and non-flow actions in the context of the San Joaquin Basin, as well as the Sacramento Basin and legal Delta.

State Water Resources Control Board July 27, 2018 Page 4

### Conclusion

Since 2016 the Departments have undertaken negotiations with public water agencies, conservation groups, and other stakeholders to reach voluntary agreements as the basis for implementation of the updated WQCP with respect to anadromous and pelagic fishes. Those negotiations, while difficult and slow, show great promise.

The Departments will continue our best efforts to conclude negotiations and submit complete agreements for your consideration later this year. We appreciate your consideration of our proposed language.

Thank you for consideration of these comments.

Sincerely,

Karla A. Nemeth

Director

Department of Water Resources

indy Messer for

Encl: Proposal of Alternative Language

Charlton H. Bonham

Director

Department of Fish and Wildlife

### **Proposal of Alternative Language**

We recommend the addition of alternative language in the new narrative objective for the San Joaquin Basin, as highlighted below:

Maintain inflow conditions from the San Joaquin River watershed to the Delta at Vernalis sufficient to support and maintain the natural production of viable native San Joaquin River watershed fish populations migrating through the Delta. Inflow conditions that reasonably contribute toward maintaining viable native migratory San Joaquin River fish populations include, but may not be limited to, flows that more closely mimic the natural hydrographic conditions to which native fish species are adapted, including the relative magnitude, duration, timing, and spatial extent of flows as they would naturally occur. Indicators of viability include population abundance, spatial extent, distribution, structure, genetic and life history diversity, and productivity.

Maintain 40% of unimpaired flow, with an allowed adaptive range between 30% - 50%, inclusive, from each of the Stanislaus, Tuolumne, and Merced Rivers from February through June; or in the alternative, undertake flow and non-flow actions in a coordinated manner, to achieve comparable outcomes for fish and wildlife beneficial uses.

"Amendments and Substitute Environmental Document for Lower San Joaquin River and Southern Delta" (July 6, 2018), Appendix K, Table 3 ("Water Quality Objectives for Fish and Wildlife Beneficial Uses"), p. 18.

We suggest conforming changes to the Program of Implementation, and specifically, the section entitled "Voluntary Agreements," as highlighted below:

The State Water Board recognizes that voluntary agreements can help inform and expedite implementation of the water quality objectives and can provide durable solutions in the Delta watershed.

Subject to acceptance by the State Water Board, a voluntary agreement may serve as an implementation mechanism for the LSJR flow objectives for the LSJR Tributaries as a whole, an individual tributary, or some combination thereof. Voluntary agreements may include commitments to meet the flow requirements and to undertake non-flow actions undertake flow and non-flow actions in a coordinated manner. The State Water Board may accept an agreement as the Program of Implementation for the affected waters, even though the flow requirement is outside of the range of unimpaired flows otherwise prescribed by the flow objective, provided: (1) the agreement will reasonably be expected to achieve comparable outcomes by comparison to unimpaired flows within the range; and (2) DFW supports the agreement. If the voluntary agreements include non-flow actions recommended in this Plan

or by DFW, the non-flow measures may support a change in the required percent of unimpaired flow, within the range prescribed by the flow objectives, or other adaptive adjustments otherwise allowed in this program of implementation. Any such changes must be supported by DFW and satisfy the criteria for adaptive adjustments contained within this program of implementation. At a minimum, to be considered by the State Water Board, voluntary agreements must include provisions for transparency and accountability, monitoring and reporting, and for planning, adaptive adjustments, and periodic evaluation, that are comparable to similar elements contained in the program of implementation for the LSJR flow objectives.

The State Water Board encourages parties to present any executed voluntary agreement to the State Water Board for its review as soon as feasible to improve conditions in the watershed.

n kepan (a. 11. janús – 16. m. m. 16. m. m. m. a. 11. kepá, sez ako a zamoj szájak a m. m. 18. janús – 16. m. janús – 16. m. m. m. 18. m. 18. m. m. janús – 16. m. janús – 16. m. kem a m. 18. m. m. m. p. 18. m. janús – 18. m. janús –

e di la parti e di serie i la serie titti i di este de di più di se di più di serie di più di serie di più di s De la più di la compania di serie di s

and the comment of th

Barrandeska, in deskripa i kommune kommune for de kommune i har har har har de filipija i kalendi. De lagge de Barrandeska i kommune kommune for har har har filipija i kommune kommune i kommune filipija i har

Appendix K, p. 36.



### United States Department of the Interior

### BUREAU OF RECLAMATION Washington, DC 20240

July 27, 2018

Ms. Felicia Marcus, Chair State Water Resources Control Board P.O. Box 100 1001 I Street Sacramento, California 95814

Subject: Final Draft Bay-Delta Plan Update for the Lower San Joaquin River and Southern Delta

#### Dear Chair Marcus:

The Bureau of Reclamation provides this comment to the State Water Resources Control Board ("Board" or "SWRCB") in response to the Board's proposed final San Joaquin River flows and Southern Delta water quality amendments (collectively, "Board Amendments") to the *Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary*. The Board has requested comments by July 27, 2018.1 Attached are Reclamation's more technical comments on the Board Amendments.

As set forth in greater detail below, the Board Amendments contemplate management by others of a Reclamation project and appear to directly interfere with the New Melones Project's ability to store water. The Board amendments essentially elevate the Project's fish and wildlife purposes over the Project's irrigation and domestic purposes contrary to the prioritization scheme carefully established by Congress. Notably, implementation of the 40% unimpaired flow standard will reduce storage of water at New Melones by 315,000 acre-feet per year, on average—even after taking into account likely reductions to Central Valley Project contract deliveries. The 40% unimpaired flow standard will likely result in diminished power generation and recreational opportunities at New Melones, as well.

Reclamation, therefore, recommends the Board reconsider the Board Amendments and postpone the public meeting currently scheduled for August 21-22, 2018, for additional due diligence and dialogue.

Consistent with his statutory responsibilities set forth in Pub. L. 99-546, Title 1, section 101 and elsewhere, the Secretary of the Interior will more fully review the Board Amendments. Following appropriate due diligence, if the Secretary of the Interior determines that the Board

1 The Board has also released its Framework for the Sacramento/Delta Update to the Bay-Delta Plan. Reclamation intends to comment on that document, as well. As confirmed to Reclamation by Board staff, there is no current deadline for comments to the Framework document.

Amendments are inconsistent with these responsibilities, the Secretary will request the Attorney General of the United States bring an action against the Board.

### I. The Central Valley Project and New Melones Project: Congressional Directives

Reclamation operates the Central Valley Project ("CVP") in accordance with federal Reclamation law, including the Rivers and Harbors Act ("RHA") of August 26, 1937, Public Law 75-392, 50 Stat. 844, 850, as amended by Section 3406 of the Central Valley Project Improvement Act ("CVPIA"), Public Law 102-575, 106 Stat. 4706 (1992). Under the RHA, as amended by Section 3406(a)(2) of the CVPIA, the CVP "shall be used first, for river regulation, improvement of navigation, and flood control; second, for irrigation and domestic uses and fish and wildlife mitigation, protection, and restoration purposes; and third, for power and fish and wildlife enhancement."

As the statute makes clear, only the specific fish and wildlife mitigation, protection, and restoration purposes may be considered on par with the CVP's irrigation and domestic use purposes. The CVP may be operated for the enhancement of fish and wildlife, but Congress placed enhancement purposes below the CVP's irrigation and domestic use purposes.

The CVP includes the New Melones Project, a dam and reservoir and related facilities originally constructed by the Army Corps of Engineers for flood control purposes. In accordance with Section 203 of the Flood Control Act of 1962, Pub. L. 87-874, 76 Stat. 1173, upon completion of construction by the Army Corps, the New Melones Project became an integral part of the CVP to be operated and maintained by the Secretary of the Interior pursuant to Federal reclamation laws. As an integral part of the CVP, the New Melones Project is authorized for irrigation, municipal & industrial, power, recreation, and water quality purposes, as well as preservation and propagation of fish. Today, the New Melones Project plays a critical role in providing Californians reliable water supply, flood control, fish and wildlife, and other benefits.

The legislative history of the New Melones Project details the deliberations made by Congress when it determined the economically justifiable capacity, federal funding levels, and benefits from the New Melones Project. The 2.4 million acre-feet New Melones Project was recommended to Congress by the Chief of Engineers for the Army Corps because it would provide for full development and maximum use of Stanislaus River supplies. H.R. Rep. No. 13273, 2d Sess., p. 349 (1962).

These authorities demonstrate Congress intended the New Melones Project to support reliable irrigation, flood control, power and recreation. The authorities also include fish and wildlife and other important environmental purposes that have been incorporated into Reclamation's mission. Indeed, Reclamation operates the CVP and New Melones Project in an environmentally sensible manner, consistent with the project specific congressional directives discussed above, as well as the Endangered Species Act, the National Environmental Policy Act, the San Joaquin River Restoration Settlement Act (Pub. L. 111-11, Title X), and other laws. Environmental activities include restoring and replenishing spawning gravel in Central Valley streams, screening

diversions, modifying operations where necessary, advancing science, and updating monitoring to assist in the survival and recovery of fish species.

Reclamation also provides restoration flows for salmon and other species in the San Joaquin River and engages with the U.S. Fish and Wildlife Service, the National Marine Fisheries Service and the California Department of Fish and Wildlife in implementing the various biological measures identified in the current biological opinions related to the operations of the CVP and State Water Project.

## II. The Secretary of the Interior May Determine That SWRCB Water Quality Standards Are Not Consistent with the Congressional Directives for the CVP and New Melones Project

Section 8 of the Reclamation Act of 1902 requires Reclamation to "proceed in conformity" with state laws "relating to the control, appropriation, [and] distribution of water used in irrigation." 43 U.S.C § 383. State law plays an important role in project operations. Reclamation values and appreciates its collaborative relationships with SWRCB and other state water resource agencies.

At the same time, SWRCB does not have unfettered discretion to impose regulatory constraints that interfere with the congressionally authorized purposes of a Reclamation project. Otherwise, there would be no limit to the ability of a state agency to co-opt control of Reclamation project water and usurp the purposes for which Congress made the federal investment. Reclamation is charged with implementing congressional directives, and Reclamation has an obligation to ensure that federal project objectives are respected and adhered to but not impinged upon.

Congress confirmed the preeminence of federal objectives vis-à-vis SWRCB in 1986, following years of litigation between the United States and California over the validity of state water quality regulations. In Public Law 99-546, Congress authorized the Secretary to operate the CVP in compliance with SWRCB water quality standards, but left the Secretary with discretion to evaluate and determine whether the standards are consistent with congressional directives. Upon determination of inconsistency, Congress mandated the Secretary to request the Attorney General to take appropriate action:

Unless the Secretary of the Interior determines that operation of the Central Valley project in conformity with State water quality standards for the San Francisco Bay/Sacramento—San Joaquin Delta and Estuary is not consistent with the congressional directives applicable to the project, the Secretary is authorized and directed to operate the Project, in conjunction with the State of California water project, in conformity with such standards. Should the Secretary of the Interior so determine, then the Secretary shall promptly request the Attorney General to bring an action in the court of proper jurisdiction for the purposes of determining the applicability of such standards to the project.<sup>2</sup>

<sup>2</sup> P.L. 99-546. 100 Stat. 3050. 27 Oct. 1986. Congress established this review process to "provide[] a mechanism by which the Secretary will evaluate future water quality standards and determine whether operating in compliance with those standards is consistent with Congressional directives applicable to the project," recognizing further that "the Secretary's authority to make such an evaluation is discretionary."

Thus, although SWRCB may promulgate water quality standards which purport to apply to the CVP, the Secretary has authority to review the standards for consistency with congressional directives.<sup>3</sup>

### III. The Board Amendments Are Likely Not Consistent with the CVP's and New Melones Project's Congressional Directives

The New Melones Project includes a large reservoir, but is dependent on the extremely variable hydrology of the Stanislaus River. The annual inflows are further subject to use by State-granted senior (pre-Project) water right holders (a maximum entitlement of 600,000 acre-feet per year). Over the life of New Melones, inflow to the reservoir has varied between 200,000 acre-feet per year to over 3 million acre-feet per year, with an average annual inflow of approximately 1.1 million acre-feet per year. Initial investigations into the viability of the 2.4 million acre foot New Melones reservoir estimated the reliable project yield for CVP contract supplies to be less than 200,000 acre-feet, leading to CVP water service contracts for irrigation and municipal uses that total up to 155,000 acre-feet. The current average annual demand for all uses and regulations (SWRCB D-1641 and Biological Opinions) at New Melones is approximately 1.2 million acre-feet per year.

Past Reclamation studies have shown that even under the current conditions, actual gains in carryover storage at New Melones occur only 39% of the time. With current demands of the senior water right holders, current state and federal environmental requirements, and Central Valley Project contracts, New Melones loses storage from one water year to another 61% of the time.

H. Rep. 99-257, *Providing for the Coordinated Operation of the Central Valley Project and the State Water Project in California* (Comm. on Interior and Insular Affairs) (Sept. 9 1985). *See also*, 132 Cong. Rec. 31304 (1986) (Statement of Sen. McClure) ("This language provides protection for the investment of the taxpayer and the Nation in the facilities of the Central Valley Project. Foremost under the Reclamation law is the obligation of the Secretary of the Interior to secure repayment of the reimbursable costs of reclamation projects. In operating the Central Valley Project to meet appropriate state water quality standards, the Secretary must be consistent with the congressional directives applicable to the project. In response to those directives, the Secretary must not place in jeopardy the repayment capability of the project.").

3 The CVPIA provides the Secretary of the Interior "shall operate the Central Valley Project to meet all obligations under state and federal law . . . and all decisions of the [SWRCB] establishing conditions on applicable licenses and permits for the project," but also makes clear that the Secretary retains discretion to review SWRCB standards for consistency with congressional directives. *See* CVPIA 3406(b), 3411(b) (requiring the Secretary in implementing the CVPIA to "fully comply with the United States' obligations as set forth in the 'Agreement Between the United States of America and the Department of Water Resources of the State of California for Coordinated Operation of the Central Valley Project and the State Water Project' dated May 20, 1985 [(1985 COA)], and the provisions of Pub. L. 99-546." *See also* 1985 COA, Article 11(a) ("Should the [SWRCB] establish new Delta standards, and the United States determines that operation of the [CVP] in conformity with the new Delta standards is not inconsistent with congressional directives the parties shall amend Exhibit A to conform with the new Delta standards.").

The Board's initial analysis suggests there are minimal impacts to CVP storage, yet the Board's modeling to support this conclusion is based on a minimum carryover storage target and other reservoir controls at New Melones. Reclamation's own preliminary analysis, on the other hand, has modeled the implementation of the 40% unimpaired flow standard and has concluded that even with reductions to Central Valley Project contract deliveries, New Melones reservoir will, on average, store 315,000 fewer acre feet of water, per year.

The Board's analysis failed to show this impact due to an erroneous assumption that Reclamation would be able to prioritize Board modeled carryover storage targets over meeting senior water right demands. The preliminary average annual storage shortfall of 315,000 acre-feet of water could make it likely that New Melones would only rarely, if ever, see gains in storage year over year. This is not a sustainable operation for New Melones Reservoir and does not provide a reliable water supply for Reclamation's CVP water service contractors. As a result, full use of the dam as Congress contemplated would be prevented, significantly undermining Congress's design for the long-term operation of the project to satisfy multiple policy objectives.

The Board's plan appears to not only directly interfere with the New Melones Project's ability to store water, but the Board also contemplates management of the federal Reclamation project by others. The Board has provided that the Board's Executive Director may allow variances to the 40% unimpaired flow standard, including allowing for the standard to be managed as a volume throughout the year, if any the member of the Stanislaus Tuolumne Merced Workgroup, set up by the State, requests.

The Board has not provided sufficient detail for Reclamation to understand fully how managing the 40% unimpaired flow standard as a projected total annual volume of water would work, or its potential implementation on the Stanislaus River. Further information is needed regarding how the Board contemplates management of this volume of water throughout the year and what happens to, or who the Board believes would manage, any carryover supplies from this volume, if any.

The loss of flow and hydraulic head caused by additional outflow requirements in the spring will negatively impact power generation during the peak summer and early fall months, cutting energy production in half and doubling fixed operating costs per MWh. In Fiscal Year (FY) 17, gross power generation at New Melones was 646,522 MWh, whereas in FY14 and FY15, the gross power generation at New Melones was 286,563 MWh, and 141,706 MWh, respectively. The FY14 and FY15 power generation numbers resulted from severe consecutive years of drought. If the Board Amendments are implemented, Reclamation anticipates power generation similar to the levels generated in FY14 and FY15.

Similarly, potential impacts to recreation in the local area could be devastating. In FY17 New Melones visitation reported approximately 450,000 visitors with revenue of approximately \$500,000.00. In FY15 in the fourth year of the drought, New Melones reported approximately 286,842 visitors with revenue of approximately \$213,575.00. If the Board Amendments are implemented, consistently lower lake levels are anticipated. The potential impacts to the local

economy could be significant, and this could be exacerbated by reduced visitation caused by consistently lower lake levels. When Congress authorized New Melones for recreation, it did not expect future State action to undercut the recreation benefits it anticipated by requiring the reservoir to operate at less than full capacity.

In light of these severe consequences to Reclamation's ability to effectively manage the Central Valley Project and New Melones Project, the Secretary of the Interior intends to review the final draft of the Board amendments to determine their consistency with congressional directives.4 If they are inconsistent with applicable congressional directives, the Secretary will be required to request the Attorney General to take appropriate action.

### IV. The Board Amendments Fail to Sufficiently Consider Other Factors Affecting Fish Species and Alternative Approaches to Species Recovery

The Board Amendments focus primarily on requiring increased flows for fish on the Stanislaus River. This approach does not fully capture the impacts of other stressors limiting fish populations on the Stanislaus River. Scientific evidence indicates that other stressors are impacting the populations, including: predation (Buchanan et. al 2018, Zeug et al. 2014, SST 2017, Zeug et al. 2016); temperature (Fish Bio 2015); interactions with hatchery fish (SEP 2016); and lack of spawning and rearing habitat (SEP 2016, Sturrock et al. 2015). Research has also demonstrated that flow timing and flow quantity are equally important. (SEP 2016, Zeug et al. 2014). Furthermore, the water quantity used in existing flow pulses is greater than necessary to elicit adult fish response (Peterson et al. 2016).5

The Anadromous Fish Restoration Program, authorized by the CVPIA, represents an alternative approach—with proven benefits for fish species and the environment in the Stanislaus River system—that the Board did not consider. Implementation of habitat restoration projects supported by significant investment of federal funding, in collaboration with local partners, include side channel/floodplain projects at Honolulu Bar, annual spawning gravel placements in Goodwin Canyon, side channel and gravel projects at Lover's Leap, Buttonbush Side Channel, and gravel and boulder placements at Knights Ferry. The current combination of flows from New Melones and the habitat restoration activities provides a significant contribution to meeting beneficial uses of water in the Stanislaus River.

Reclamation encourages the Board to participate in collaborative processes using peer reviewed conceptual models that include the full range of factors that influence fish. Reclamation is currently engaged in a Reinitiation of Consultation on Long-term Operations and anticipates updates to how the Sacramento and San Joaquin systems, including New Melones, meet the requirements of listed species as well as other project purposes. This process could help to inform the Board on a Stanislaus River operations plan that could support water supply as well as

<sup>4</sup> The Secretary's review will include appropriate input from the U.S. Fish and Wildlife Service. 5 As the Board is aware, the relationship between temperature and flow within the Stanislaus system, including the two major reservoirs below New Melones, is complex. I would like to offer my staff to sit down and discuss this issue with the Board and its staff.

meet the needs for fish and wildlife species.

The above mentioned processes will also consider the interaction between flow and temperature in developing an operations plan that meets multiple objectives. The relationship between temperature and flow within the Stanislaus system, including operation of the two major reservoirs below New Melones, is complex due to the bathymetry of the system, physical limitations of the outlet structures, and the varying residence times.

### V. South Delta Salinity Issues

The Board has engaged in a welcome effort to understand the difficulties with the Southern Delta Salinity standards. The Board Amendments appear to set the Vernalis and interior South Delta salinity standards at 1.0 dS/m EC year round. This is consistent with the Board's findings on reasonable protection levels for agricultural uses in the South Delta.

The Board's implementation plan with respect to stored water at New Melones remains, however, unclear. The Board appears to suggest that despite setting the objective at Vernalis as 1.0 dS/m EC, year round, only Reclamation would be regulated to an outdated objective of 0.7 dS/m EC at Vernalis in order to implement the interior South Delta standards. The technical and legal bases for such a determination are not apparent and conflict with the analysis Reclamation submitted in 2011, which determined that a much lower assimilative capacity is adequate at times when San Joaquin River salinity is controlling.

It is also unclear whether the Board's program of implementation for the interior South Delta could include additional dilution flows from New Melones, especially after June. Currently, the Board does not implement the interior South Delta standards through dilution flows from New Melones. A clear statement from the Board is needed as to whether the implementation of the interior South Delta salinity objectives could include dilution flows from New Melones and whether the Board's modeling fully captures the impact of that potential additional draw on New Melones storage, in addition to implementation of the 40% unimpaired flow standard.

The Board continues to claim, mistakenly, that Reclamation and the California Department of Water Resources ("DWR") are responsible for degraded salinity levels in the South Delta, despite some of those causes being beyond the control of either Reclamation or DWR. Additional information regarding the basis of the Board's position is necessary to enable Reclamation to make a fully informed response.

### Conclusion

Reclamation appreciates the opportunity to comment and looks forward to continued dialogue with the Board. However, in light of the concerns discussed above, Reclamation respectfully requests the Board to reconsider the Board Amendments and postpone the meeting currently scheduled for August 21-22, 2018.

Sincerely,

Brenda Burman Commissioner

Attachment



August 9, 2018

The Honorable Ryan Zinke Secretary Department of the Interior 1849 C Street, NW Washington, D.C. 20240

Dear Mr. Secretary:

We know you are deeply concerned and knowledgeable about the problems of drought and water supply in the West. It therefore surprised us to read reports that you may support removing O'Shaughnessy Dam and restoring Hetch Hetchy Valley.

Hetch Hetchy provides water and power not just to the City and County of San Francisco, but also to 2.7 million residents and businesses throughout the San Francisco Bay Area. One of our country's major economic engines, Silicon Valley, depends on Hetch Hetchy for a majority of its water supply (*see attached map* "Bay Area Reliance on Hetch Hetchy Regional Water System"). Without water, all the dynamism of Silicon Valley and the region's economy are at risk. Advocates for draining Hetch Hetchy have failed to demonstrate how they would ensure a reliable, cost effective water supply at a time when water resources across the state are stretched thin.

California's available sources of clean drinking water are already at risk due to the multiple impacts of climate change.<sup>1</sup> The Hetch Hetchy system provides 250,000 acrefeet of unfiltered drinking water per year and will be increasingly relied upon as climate change reduces snowpack, exacerbates droughts, and causes salt water to creep further inland.

The State of California estimated in 2006 that it would cost a staggering \$4.3 billion to \$14 billion in 2018 dollars to remove O'Shaughnessy Dam and replace its water and power. No taxpayers – city, state, or federal – are willing to foot such costs. Moreover, there are reasons to believe that the cost for replacing Hetch Hetchy's water

<sup>&</sup>lt;sup>1</sup> http://www.climatechange.ca.gov/adaptation/water.html

<sup>&</sup>lt;sup>2</sup> The State projected costs of \$3 to \$10 billion in July 2006, which translate to \$4.3 to \$14 billion in 2018 dollars using the California Department of General Services' California Construction Cost Index. State of California Resources Agency, *Hetch Hetchy Restoration Study*, page 4 (2006).

<sup>&</sup>lt;sup>3</sup> In fact, San Francisco voters resoundingly rejected by a 77-23% margin a 2012 ballot measure requiring the City to develop a plan to remove the dam and replace its water and power supply. Prominent in the voters' minds was a San Francisco City Controller estimate that replacing Hetch Hetchy would increase water bills by \$2,770 per year for San Francisco ratepayers.

and power and restoring the Valley would be closer to the upper end of the State's estimates (\$14 billion in 2018 dollars) than to the lower end (\$4.3 billion in 2018 dollars). The draining of Hetch Hetchy would force the San Francisco Bay Area to either build a large new surface impoundment or find an alternative water supply.

In its study, the State evaluated the cost of new surface impoundments based on estimates of the unit construction cost for major proposed reservoirs such as an enlarged Shasta Dam, Sites Reservoir, or Upper San Joaquin River storage. New analysis indicates that projected costs for these reservoirs will be 400-800% higher than the initial estimates.<sup>4</sup> As a result, building a major surface reservoir to replace Hetch Hetchy is likely to cost far more than the State's analysis suggested. Building additional dams would also in many cases generate further environmental concerns.

In the absence of a large, new surface impoundment, San Francisco and the Bay Area would almost certainly be forced to look to the Sacramento-San Joaquin Delta for their water supply. Yet even now Delta water resources are already stretched to their limit. To force Hetch Hetchy customers to take their water supply from the Delta, quite simply, unrealistic. Even if a reliable water supply can be found, it would require the construction of an expensive new water treatment facility. The City and County of San Francisco estimates the cost of such a facility to be well in excess of \$1 billion.

For more than 100 years, the most basic needs of as many as 2.7 million people and the entire water and power infrastructure of Northern California have assumed the presence and continued operation of the Hetch Hetchy system. That reality must govern any discussion of removing the dam and restoring the valley.

We urge you to take to heart these very practical considerations and welcome the opportunity to discuss this further with you at any time.

Sincerely,

Dianne Feinstein

**United States Senator** 

Kamala D. Harris

**United States Senator** 

### Attachment:

Bay Area Reliance on Hetch Hetchy Regional Water System

<sup>&</sup>lt;sup>4</sup> Hetch Hetchy Restoration Study at G-8. The Bureau of Reclamation's recent cost estimates project a \$1,265 billion cost for the Shasta raise versus the \$160 to \$290 million estimated by the State; a \$5 billion cost for Sites Reservoir versus the \$650 million to \$1.15 billion estimated by the State; and \$2.7 billion for Upper San Joaquin River storage versus the \$300 to \$400 million estimated by the State. The State also looked at the cost of an expanded Los Vaqueros Reservoir, which has appreciated less but already had a 3-6 times greater unit cost than the other reservoirs back in 2006. Finally, the State also considered In-Delta Storage, which is no longer an active project.

# Bay Area Reliance on Hetch Hetchy Regional Water System

the San Francisco Bay Area. Of the 26 wholesale customers, 22 rely on the Regional System for more than 60% of their drinking water supply The Hetch Hetchy Regional Water System supplies high-quality drinking water to over 2.5 million residents and businesses throughout

100% 100%

%96

32.41

25%

10.46

Alameda County Water District - 332,000

Agency & Service Population

0.25 3.94 100% 100%

4.90

0.31

**Guadalupe Valley Municipal Improvement District** Estero Municipal Improvement District - 36,100

17.44

3.01 3.19 2.85 2.24

Mid-Peninsula Water District - 26,130

City of Millbrae - 21,387

Town of Hillsborough - 11,982

City of Hayward - 153,104

City of Menlo Park - 14,139

41%

3.16 1.73

Coastside County Water District - 20,216

City of Daly City - 107,773

East Palo Alto - 29,690

Cal Water Service Co. / Mid-Peninsula

Cal Water Service Co. / Bear Gulch

City of Burlingame - 30,493

City of Brisbane - 3,993

100%

3.02

North Coast County Water District - 40,401

City of Mountain View - 75,787

Purissima Hills Water District - 6,060

City of Palo Alto - 65,408

100%

1.75

41%

1.51

94%

10.99

100%

0.81

Westborough Water District - 12,690

City of Sunnyvale - 138,826

serves a portion of identified agency

51%

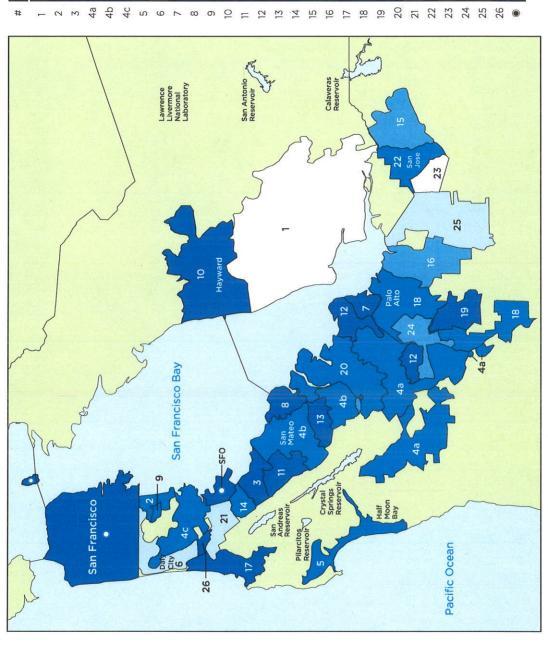
9.78

11%

2.27

City of Santa Clara - 118,830\*

City of San Bruno - 43,798



Source: Bay Area Water Supply and Conservation Agency (BAWSCA)
 Annual Survey and Water Conservation Report FY 2009-10



centage of Hetch Hetchy Regional Water System to total water supply

100% %66-06 %68-09 30-59%



# Why some are concerned over water board chairwoman's ties to Bay Area institute Modesto Bee | September 11, 2018 | Ken Carlson

Felicia Marcus, chairwoman of the State Water Resources Control Board, has considerable influence over decision-making that could leave more water in rivers for salmon at the expense of irrigation districts in the Northern San Joaquin Valley.

With a crucial vote set for Nov. 7 on the Bay-Delta Water Quality Control Plan — known as the "water grab" in Stanislaus, Merced and south San Joaquin counties — some are puzzled by what they feel is a conflict of interest given her relationship with the executive director of a Bay Area think tank that's had millions of dollars in contracts with the state agency she oversees.

The nonprofit San Francisco Estuary Institute had contracts worth \$3.3 million with the State Water Board from 2014 to 2017 and routinely does work for the agency's regional water boards.

The executive of the San Francisco Estuary Institute is Marcus' husband, Warner Chabot.

No one has formally claimed the spousal relationship and SFEI's contracting with the state disqualifies Marcus from participating in the Nov. 7 board vote.

It looks, however, like a cozy relationship to local officials who are upset with the state's proposal to allocate more water to fish and wildlife in the Sacramento-San Joaquin Delta and leave less storage in reservoirs for agriculture and city customers.

"They should never have put themselves in that kind of position to begin with," said Jim DeMartini, chairman of the Stanislaus County Board of Supervisors. "If that center is doing work for the board she chairs, one of them ought to step down."

Chabot insists the center is not involved in advocacy and stays away from studies on river flows. None of the agency's work is cited in support documents for the Bay-Delta water quality update. Chabot added that the center does not contribute scientific findings to decision-makers for Gov. Jerry Brown's delta tunnels project.

"We don't do flows," Chabot said. "We don't do tunnels."

Under political reform laws, public officials are expected to abstain from decisions in which they have a financial interest. Officials who perform their duties in an impartial manner and free from bias serve to build public trust in government.

Attorneys have advised Marcus to recuse herself when SFEI contracts for services come before the water board. The powerful board deals with water quality and water rights in California.

In a statement Wednesday, the water board said Marcus was proactive about the issue before Chabot accepted the position with SFEI in fall 2014 and has followed the appropriate legal requirements. Marcus did not comment for this story but released a portion of the legal advice she received in October 2014 from Chief Counsel Michael Lauffer.

Marcus, who's sometimes called the state's water czar, would participate in the Nov. 7 board vote unless it's foreseeable the decision would have a material effect on the couple's finances.

Marcus' financial disclosures report spousal income between \$10,000 and \$100,000 from SFEI — or half his salary — which is within state reporting guidelines. Chabot said his salary has

remained at \$150,000 a year since taking the job, showing no material gain from contracting with the state.

Before he accepted the job with SFEI, Chabot said, legal advice was sought from three sources — the attorney general, water board counsel and SFEI's attorney — to make sure the center could still contract with the water board. "I would not take the job unless we created a clear firewall and legal process." he said.

In a letter that October, Lauffer advised that Marcus could continue her service on the board if her spouse took the job. If SFEI was a private business and hired Chabot, Marcus' service on the board would nullify contracts, even if she abstained on those items.

Because the institute has nonprofit status, her community property interest in her husband's salary was deemed a "remote" interest under Government Code section 1090, the state law against self-dealing. Marcus could remain on the board and recuse herself each time an SFEI contract was considered.

Any other issues could be dealt with case by case, Lauffer wrote. The married couple and staff would "remain vigilant and assess potential conflicts as they arise," the letter said.

Chabot accepted the position and established rules barring employees of the Richmond center from talking with Marcus about contracts or their work for the state. Marcus was advised not to confer with water board staff on SFEI contract activities.

Chabot said the SFEI developed a reputation for nonpartisan and excellent research long before his tenure.

The SFEI and its Aquatic Science Center is a respected think tank created years ago by the water board and Bay Area water agencies. Rather than continuing with years of combat science by sanitation districts, oil companies and interest groups over pollution in San Francisco Bay, the agencies created the science center as a joint powers authority and pitched in funds for objective studies and monitoring.

Along with ecological projects around the Bay Area and the state, the SFEI currently runs the Delta Regional Monitoring Program looking at pesticide toxins in delta water, with almost \$1.2 million budgeted for the program this year, and it does monitoring for the water board's program called SWAMP. Work for state agencies represents 75 percent of Its \$10.2 million budget this year.

The center has landed contracts with the Delta Stewardship Council, an independent state agency, created in 2010, that's focused on a more reliable water supply for California and protection and enhancement of the delta ecosystem.

Last year, the Delta Council approved a contract with SFEI, not to exceed \$960,000, to "enhance collaboration and coordination of science initiatives and inform management decisions affecting the Bay-Delta." Part of the contract is producing science that strengthens the ecological connection between the delta and San Francisco Bay.

There was no competitive bidding for the contract. When asked for the lines of separation between this contract and the water board's plan for delta water quality, Chabot said the center will identify high-priority options for habitat restoration on the delta landscape. The water board's Bay-Delta plan talks about restoring native fish habitat in channels.

Matt Gatto, a Delta Council member and former assemblyman from Southern California, did not support the SFEI contract, approved in April 2017, over concerns it would duplicate the work of the agency's science staff. He wasn't pleased to learn last week Marcus is married to the executive director of SFEI

"This probably does not make the state of California look good," Gatto said. "We have a large part of the state that is skeptical of just about everything we do. If you have a whiff of a conflict, it casts doubt on the science we make available to the public."

Council member Susan Tatayon, who supported the SFEI contract, said she didn't know about the spousal relationship and it did not matter to her. "I don't see a conflict," she said. "The scientists at the Aquatic Science Center are very well respected for their work."

Randy Fiorini of Turlock, who's chairman of the Stewardship Council, said the SFEI was hired for the job because of its scientific reputation and previous work providing an ecological history of the delta. The Bay Area center performed studies for the Delta Council well before Chabot's time as executive director, he said.

Fiorini said he's aware the center's executive director is married to Marcus, having previously worked with Marcus on the council. Marcus was a Delta Council member from mid-2010 to 2012. Rainer Hoenicke, the Delta Council's deputy executive officer for science, was executive director for SFEI before the council hired him in 2013.

Fiorini said the institute's peer-reviewed work is guided by a lead scientist and is not vulnerable to political influence. "To suggest that is insulting to the scientists who work on these projects," he said. "We are seeking those services from them because they are good at it."

Approving the contract without seeking proposals from other potential contractors was legal because the SFEI's Aquatic Science Center is a local government JPA, Hoenicke said.

Jim Kelly, board chairman for SFEI, said the center's work on the delta has expanded under Chabot's leadership. Chabot handles administrative duties while the work of the center's 50 scientists largely is overseen by clients including regional water boards. "The clients are deeply involved in the whole process from the scope of work to commenting (on the findings) before it goes out," Kelly said.

Chabot took over reins after the SFEI center was without an executive director for nearly two years. A competitive recruitment and interview process determined he was the best candidate for the position, Kelly said.

Kelly assured that Marcus was not involved in the hiring process. "We are talking about two people who are very savvy legally and never would put themselves in that position," Kelly said.



# The amazing Tuolumne

San Mateo Daily Journal | September 10, 2018 | Sue Lempert

The Tuolumne River flows for 149 miles throughout Central California, from the Sierra Nevada to join the San Joaquin River in the Central Valley. It originates in Yosemite National Park 8,000 feet above sea level. The upper Tuolumne is a fast-flowing mountain stream. The Hetch Hetchy Watershed, located here, provides 85 percent of our water supply.

The lower river crosses a broad, fertile and very cultivated alluvial plain. The river is dammed multiple times for irrigation and the generation of hydroelectricity. The fresh water from the Tuolumne is sought by farmers, cities, developers, salmon and us. It is the subject of a current battle: the State Water Resources Control Board versus the San Francisco Public Utilities Commission and the Bay Area Water Supply and Conservation Agency (BAWSCA).

The Tuolumne is the Bay Area region's single largest source of freshwater used by 2.7 million people in 33 cities across Alameda, San Francisco, Santa Clara and San Mateo counties. The problem is that so much water has been depleted from the Tuolumne, Merced and Stanislaus — the main tributaries of the San Joaquin, that the Sacramento-San Joaquin River delta, a vital water resource for much of the state, is in danger of running dry (the San Joaquin is already dry in summer) and has already suffered a dramatic loss of wildlife including salmon.

The State Water Resource Board's plan to restore the San Joaquin is being fought by agriculture interests, the San Francisco Public Utilities District and BAWSCA, Why? Because it would mean limiting their share of water from the Tuolumne. Confusing? Yes. Important? Very.

\*\*\*

Adoption of the updated water plan has been delayed for several months to see if the opposing sides can reach some kind of compromise. In 2010, the State Water Resources Control Board originally prescribed a 60 percent unimpaired flow to protect the San Joaquin during the months February-June when runoff from mountain snow is at its highest. Currently only 21 percent reaches the San Joaquin. The new proposal requires a 30 percent to 50 percent unimpaired flow starting at 40 percent. Supporters of the plan say there is enough flexibility to provide enough water to its users even in times of extreme drought — especially if conservation measures were increased. Opponents, farmers, the SFPUC and our local representative BAWSCA insist the limitations could lead to significantly less water for agriculture, new development, business and residents. Nicole Sandkulla, executive director of BAWSCA, for one, is optimistic that some kind of compromise can be reached by November. She points out that since before the drought, BAWSCA cities have used 32 percent less water despite a 29 percent increase in population.

\*\*

Supporters maintain we could do a better job of saving water. Los Angeles today, because of successful conservation efforts, uses the same amount of water as it did in the 1990s even though it has added more than 1 million people. We lose too much valuable water during periods of heavy rain.

While some farms and large estates and golf clubs depend on well water, this is a finite supply.

Do you have a voice in this? You can write a letter to the State Water Resources Control Board or to BAWSCA, the agency representing San Mateo and other counties, but the public comment period has passed. Palo Alto held hearings last month — two hours plus of public input following presentations by BAWSCA and supporters of the state plan. In the end, the council voted unanimously for the state's plan. No similar hearings are planned in San Mateo County.

\*\*\*

BAWSCA is governed by a 26-member Board of Directors representing the 24 cities and water districts that are member agencies, and two private utilities that also have appointees to the board, Stanford University and California Water Service Company. It purchases water on behalf of its members from the San Francisco Regional Water System.

It says it is not feasible for member agencies to further reduce demand for water because of current low water use and conservation. Less water would mean substantial loss in park vegetation, landscaping and increase the risk of urban wildfires. Hillsborough feels its significant canopy of mature trees would be threatened. The agencies also note the threat to development and the implementation of Plan Bay Area, a plan to increase housing near transit and jobs.

\*\*\*

If you have been to Yosemite and the high country you know how awesome the Tuolumne is. When you drink that wonderful water direct from Hetch Hetchy you know how fortunate we are. We need to work with the state to protect both.

###

Sue Lempert is the former mayor of San Mateo. Her column runs every Monday. She can be reached at sue@smdailyjournal.com.

# Strange bedfellows? Westlands and San Francisco share common ground

Fresno Bee | September 9, 2018 | Lewis Griswold

It's rare that Westlands Water District and San Francisco face identical problems, but plans to keep more water flowing in the San Joaquin and Sacramento rivers – leaving less for irrigators and cities – is bringing the two together.

Westlands, the largest agricultural water district in the United States, said if proposed plans are adopted by state water regulators, its farmers would have to fallow more land due to lack of reliable water supplies, putting people out of work, harming the economy and hurting the quality of life of communities and residents whose lives are tied to westside agriculture.

Meanwhile, San Francisco residents, who get their water from the Tuolumne River, would face drastic cutbacks in drought years, the San Francisco Public Utilities Commission said.

It remains to be seen if Westlands and San Francisco's water entity would ever work together on the issue.

The utilities commission said it's urging the state to work with it and "other stakeholders on voluntary negotiated settlements" on river water priorities, while Westlands said it's not ready to say what it will do next.

But both are complaining about the State Water Resources Control Board's proposed water allocation plans.

The drama started in July when the State Water Resources Control Board issued a new water plan for the lower San Joaquin River recommending that 30 to 50 percent of the water -- 40 percent is the target -- would stay in the river as "unimpaired flows."

The goal is to rescue salmon populations and save the delta smelt.

For both rural irrigators and urban entities, the plan, if adopted, would mean 7 to 23 percent less water being diverted for their use, according to state figures.

Upset farmers rallied in Sacramento, saying it would hurt agricultural production and would not be effective in restoring salmon populations.

The State Water Resources Control Board was to vote on adopting the plan last month, but after criticism by legislators, put off action until December.

But it was a similar proposal for the Sacramento River sent a shock wave through Westlands.

The water board also announced a "framework" for the Sacramento River and its tributaries. The plan calls for 35 to 75 percent unimpaired flows, with 55 percent as the target, Westlands said.

Westlands gets water from the Sacramento River, via the San Joaquin Delta and the California Aqueduct. If the framework is adopted, Westlands would face up to a 26 percent loss of water supply, the district said.

It's now taking its case to the media and the public.

Westlands serves 700 farms growing permanent and annual crops on about 600,000 acres.

Dan Errotabere's family has farmed near Riverdale since the 1920s. He and his two brothers farm 5,500 acres of almonds, pistachios, tomatoes, garlic, pima cotton, wheat, safflower, onions, seed lettuce, garbanzo beans and wine grapes.

He sits on the Westlands board of directors. If the water board's proposal for the Sacramento River goes into effect, "we're not going to be able to irrigate," he said.

Westlands' water supply from the Central Valley Project has been cut in half since 1990, according to district figures. It blames "ineffective regulatory policies" aimed at fisheries restoration.

If there's another big cut, westside agriculture would become so uncertain that "it will be all but unsustainable," he said.

It's probably a good thing that San Francisco would also be affected so residents can see "now it's in my back yard," he said.

Harris Farms, another big west side operation, grows carrots, garlic, watermelon, spinach, lettuce, almonds, pistachios and other crops.

It's frustrating to be forced to take another water supply reduction because "we grow safe, nutritious food that feeds the nation," said William Bourdeau, executive vice president of Harris Farms and member of the Westlands board of directors.

The more water that is kept in the river, the more that flows out to the ocean, he said: "I don't think it helps the environment."

Bourdeau said one piece of welcome news is the recent announcement by Department of Interior Secretary Ryan Zinke that the Bureau of Reclamation will seek to increase "south of Delta" water deliveries.

Surely Rep. Devin Nunes, R-Tulare, is the source of the Zinke announcement, said Johnny Amaral, Westlands deputy general manager for external affairs and formerly Nunes' chief of staff.

"This has Devin's handprints all over it," Amaral said.

Nunes was a key adviser to the Trump campaign on California farm water issues, and Trump wowed supporters at a campaign stop in Fresno by vowing to get more water to farmers.

The solution to the salmon and delta smelt issue is not more water in rivers but rather infrastructure projects that help fish survive, increasing water flow by raising Shasta Dam, building Sites Reservoir in the Sacramento River watershed, and managing "functional flows" based on science and data, Amaral said.

"Why are we not being smarter about this?" Amaral said. "There's plenty of water in this state if it's managed properly."

Amaral said the State Water Resources Control Board is wrong in arguing that more water in rivers will restore fish numbers.

"This is a flow only approach," Amaral said. "If fish aren't rebounding, 'send more water, send more water'...There are lots of issues that affect the abundance of species in the Delta. A flow

only approach doesn't mean you are restoring habitat. If we truly want to see the fish rebound, we have to look at everything."

Politically, it could help Westlands if San Francisco and urban areas are feeling the same pain, he said.

"There's a group of three of four San Francisco legislators...(who) have weighed into the state board saying you can't do this," Amaral said. "So the politics of this become very, very different. When it stops becoming a bunch of farmers on the west side complaining about not having water to soccer moms in Marin County and Santa Clara ... It becomes a whole different ball game."



### Groundwater Banking: A Likely Solution to Achieve Greater River Flows

Rather than fighting over flow allocation in the San Joaquin River, water users should collaborate on a groundwater banking system. That could let river restoration proceed while ensuring enough water for all concerned, says Patrick Koepele of the Tuolumne River Trust.

Water Deeply | August 30, 2018 | Patrick Koepele

A proposal by the California Water Resources Control Board to require additional water to be left in the Tuolumne River and other San Joaquin River tributaries has prompted strong negative opinions, including from some newspapers serving the region, such as the Modesto Bee.

Regrettably, what has received little attention in this debate are the opportunities for improving water management to meet the agricultural and environmental demands placed on these rivers.

A coalition of conservation groups has proposed that Modesto and Turlock irrigation districts, working with the San Francisco Public Utilities Commission, establish a 90,000 acre-foot groundwater bank. Such a partnership has a precedent in the Tuolumne watershed, where San Francisco paid for just over 50 percent of the construction cost of Don Pedro Dam in exchange for the ability to bank up to 570,000 acre-feet in the reservoir.

A groundwater bank could be similarly financed and would be a much more efficient means of protecting groundwater supplies than the current aquifer recharge system, which relies heavily on inefficient flood irrigation. Recharge by flood irrigation requires overapplication of water to agricultural fields. Flood irrigation requires heavy application of water even in dry years and it is unknown how much of the excess water applied actually is recoverable for later use. It also moves nitrates and other pollutants into groundwater, which creates many other problems.

By comparison, an engineered aquifer recharge system would increase efficiency. Such a system would focus on capturing floodwaters during the wettest years, when water is abundant and there are fewer concerns for fish and other species. This system would increase the amount of water that would be usable in future dry years, when there is a greater need for water.

It is a system we believe people on all sides could support.

Another promising tool for water efficiency has been tested in our own backyard. In 2012, the South San Joaquin Irrigation District [SSJID] implemented a cutting-edge project on 3,800 acres of irrigated district lands. In the SSJID, like in its sister districts to the south, water has been delivered through miles of gravity-fed canals, which are inefficient and difficult to manage. In this pilot project, the SSJID converted the canals to 19 miles of pressurized pipeline.

The project reduces water use by 30 percent, reduces energy use by 30 percent and increases crop yield by up to 30 percent. The benefits are clear and should have growers throughout the region demanding that all distribution systems be converted. Assuming similar efficiencies could be achieved by the Modesto Irrigation District and the Tuolumne Irrigation District, this approach could produce about 300,000 acre-feet of conserved water on the Tuolumne alone.

This water would go a long way to meeting the needs of the river and the animals that depend on it and provide benefits to farmers.

Finally, Stanislaus County and the water districts have a responsibility to ensure the region doesn't pump and divert water beyond its means. The unfettered drilling of new wells, particularly in the eastern foothills, has led to a proliferation of orchards on ground that historically had been grazing land. The annexation of new areas by Oakdale Irrigation District to plant more and more orchards and other permanent crops compounds the problem.

These newcomers to irrigated agriculture are adding stress to an overtapped system and threatening those within the irrigation district boundaries who have been farming for generations. Our water supplies can take no additional demands, and this expansion of cropland must be checked.

While no single strategy will meet water demand, a combination of approaches will help us ensure a healthy agricultural economy, restored rivers and a healthier environment.

Instead of dismissing the water needs of the environment as unachievable, the water districts have an opportunity to lead us successfully into a new era of water management. This is a future that will support a more robust economy, a restored river system and a vibrant quality of life.

###

This article originally appeared in the Modesto Bee.

The views expressed in this article belong to the author and do not necessarily reflect the editorial policy of Water Deeply.

# State Water Board plan would require water rationing in the Bay Area

San Francisco Chronicle | August 25, 2018 | Jim Wunderman

Apart from a famous Mark Twain quote involving whiskey and fighting, no cliché about California water is more abused than the phrase "water wars." However, in the instance of the State Water Resources Control Board's plan to restore the San Joaquin River, the label fits. War has been declared on the Bay Area's largest source of freshwater, with grave implications for residents and businesses that go way beyond letting your lawn go brown.

At issue is a proposal to increase freshwater flows on the San Joaquin River. The plan targets the San Joaquin's three major tributaries — the Stanislaus, Merced and Tuolumne rivers — and would require the farms and cities that divert water from those rivers to scale back their diversions to leave more water for the environment.

The Bay Area has a big dog in this fight. The Tuolumne River is the region's single largest source of freshwater, used by 2.7 million people in 33 cities across Alameda, San Francisco, Santa Clara, and San Mateo counties.

The San Francisco Public Utilities Commission, which manages the Bay Area's Tuolumne River supplies, estimates the Bay Area could be required to provide as much as 52 percent of any new flows mandated by the state water board's plan, even though the region only diverts about 14 percent of the river's water. Central Valley farmers, meanwhile, divert more than three times that volume.

Under this scenario, huge portions of the Bay Area would immediately face water rationing on the order of 20 to 30 percent beyond the conservation rates achieved during the recent drought. Since the Bay Area's Tuolumne River water users are already among the most frugal in California (residents use just 54 gallons per capita, per day, compared to the statewide average of 82 gallons), some communities would be forced to achieve water-use rates unseen anywhere in the developed world. Daly City, Hayward, Millbrae, Palo Alto, Redwood City and even San Francisco could all be forced to impose emergency moratoria on building everything from schools and parks to hospitals and housing.

The state water board has dismissed these concerns with the extraordinary argument that these very hardships would force the Bay Area to invest in creating alternative water supplies. Assuming developing alternative supplies at this scale is even possible or affordable, the water board plan is slated to go into effect in 2022. The Bay Area could be forced to operate under severe water rationing for possibly decades.

There's a huge irony in the state using environmentalism to push policies that will inhibit growth in some of California's most sustainable locales while promoting sprawl elsewhere. Perhaps most troubling, the plan provides no guarantees that water left in the Tuolumne River wouldn't merely be diverted at downstream pumps operated by Central Valley farmers and Southern California users.

Since the Gold Rush, California has awarded legal rights to about five times more water than nature delivers. It's no surprise that water policy decisions are rife with legal conflict, and rivers that once sustained hundreds of thousands of salmon have been reduced to tepid puddles.

Without some sort of grand bargain that connects conservation and new environmental water with major new investments in storage, habitat, recycling and conveyance, piecemeal efforts like

the state water board's plan are likely doomed to wallow for decades in fruitless litigation. Bay Area residents and businesses should contact John Laird, secretary of the California Natural Resources Agency, and urge him to reject the current Bay-Delta Water Quality Control Plan.

###

https://www.pressreader.com/usa/san-francisco-chronicle-late-edition/20180828/281681140742854

# Supporting a Bay-Delta Plan that balances water reliability and environmental sustainability

San Francisco Examiner | August 22, 2018 | Harlan Kelly

The Tuolumne River fish population is struggling. We know this because we are one of the public utilities that relies on this system for drinking water, so we care about the health of this ecosystem. And we've put in the work to find out what's happening and how we can fix it.

In fact, together with the Modesto and Turlock Irrigation Districts, we invested \$25 million on more than 200 Tuolumne-specific studies to get better results for fish and residents. Those studies revealed that we can increase the fish population and ensure that Bay Area residents have a reliable water supply.

The SFPUC presented these results to the State Water Resources Control Board last year and urged the regulatory body to allow us and other stakeholders to reach voluntary negotiated settlements that can help the fish on the Tuolumne River without risking the stability of our City. It's clear that the State didn't just reject our plan. It didn't even consider it.

Instead, the State put together its own plan for the San Francisco Bay/Sacramento-San Joaquin Delta that ignores our combined scientific research and focuses on releasing more water into the Tuolumne. This will have limited benefit to fish and terrible impacts on residents. If implemented, the State's plan would significantly reduce San Francisco's reservoirs, leaving the 2.7 million Bay Area residents who count on our system for clean, safe and reliable drinking water, vulnerable and unprepared for the next major water shortage. During times of drought, the State's plan could require water rationing levels of up to 50 percent in the City.

Climate change is happening. This is undeniable, and in that unfortunate new reality, we must come to expect increasingly volatile weather patterns and unpredictable climate swings in our state. As a result, San Francisco must be more vigilant than ever when planning for the future.

In recent years, we have endured raging wildfires and lengthy droughts—tragic consequences of climate change that will sadly become the norm in California. Supporting a plan that hampers our efforts to deal with those developments would be irresponsible.

This is not a question of trading environmental values in exchange for increased security. We're offering a win-win situation where we can both honor San Francisco's commitments to environmentally sustainable practices and ensure that our City has the infrastructure in place for drought planning. Contrary to some misguided reports, we are not warehousing water simply to plan for the next big development project. This is about saving water for tomorrow for the benefit of all of us.

Communities throughout the Central Valley are having similar discussions on ways to improve fish populations while maintaining water supplies through voluntary settlement agreements with the State. We believe these voluntary settlement discussions, based on a common understanding of the best available science, are the most sensible paths forward to restoring healthy fish populations, while balancing the water supply needs of all Californians. Our own State agencies agree. The California Department of Water Resources and the California Department of Fish and Wildlife both sent letters expressing this sentiment to the State.

We are urging the State to delay voting on the plan until the SFPUC and other stakeholders can reach voluntary negotiated settlements that will help the fish on the Tuolomne River without

risking the stability of our City. To secure our future amid the looming impacts of climate change, we must come together on a solution that works for everyone.

###

Harlan Kelly is general manager of the San Francisco Public Utilities Commission.

### California's water wars heat up at Sacramento hearing over river flows

San Francisco Chronicle | August 21, 2018 | Kurtis Alexander

Speaking on Monday, Noah Oppenheim, of the Pacific Coast Federation of Fishermen's Associations, backs water officials' proposal to increase flows for the lower San Joaquin River.

Photo: Rich Pedroncelli / Associated Press

Central Valley farmers and their elected leaders converged on Sacramento on Tuesday to accuse the state of engineering a water grab that puts the fate of fish above their fields and jeopardizes a thriving agricultural economy.

The allegations came at a meeting of the powerful State Water Resources Control Board, which recently unveiled a far-reaching plan to shore up the health of the Sacramento-San Joaquin River Delta, the West Coast's largest estuary and a source of water for much of California.

The plan calls for irrigation districts as well as some urban water suppliers, including San Francisco, to reduce their draws on rivers that feed the delta in an effort to boost inflows into the depleted estuary and help wildlife.

Tuesday's fractious hearing followed a protest a day earlier by more than 1,000 growers at the state Capitol, and it comes as the Trump administration escalates its attacks on California water policy.

"From where we sit, this has been all take and no give," said Assemblyman Adam Gray, D-Merced, who was among the mostly rural, yet bipartisan group of speakers criticizing the water board as being too aggressive. "If the conversation is going to evolve, the proposal has to evolve."

Gray warned that he would pursue legislation weakening the authority of the board if it didn't relent to the demands of the agricultural community. The threat has been made before in the face of high-stakes regulation.

The board's plan is to increase flows in three tributaries of the San Joaquin River. As it stands, diversions by cities and farms have left the Stanislaus, Tuolumne and Merced rivers with less than one-third of the water, on average, that naturally runs there. And this has diminished the quantity and quality of water in the delta.

Diminished flows have left the population of California's fabled salmon at a fraction of its historic numbers. In recent years, only several thousand Chinook have migrated through the delta up the San Joaquin River basin, compared to tens of thousands a few decades ago. The impact on fish has worked its way up the food chain to birds of prey in the Sierra and whales at sea.

Just as agricultural supporters confronted the board with criticism, dozens also came to the eight hour-plus hearing to speak on behalf of watersheds and wildlife. Conservationists and fishing groups called on the state water board to boost flows in the rivers to more than the 40 percent that is proposed.

Giving away 60 percent of the water, they contended, hardly restores the robust natural run of a river.

"We're on our last legs," said Don Marshall, a 36-year-old fisherman, whose livelihood has suffered as salmon numbers have dropped. "We're left with a fishery that's in shambles."

Tuesday was the first day of a scheduled two-day hearing on the Bay-Delta Plan. More than 100 people had signed up to speak on the proposal, which has drawn more than 10,000 written comments.

The state water board does not intend to make a decision this week, but whatever verdict is eventually rendered will likely be tied up by lawsuits from one side or the other — or both sides.

San Francisco water officials, who fear less water for Bay Area residents and are threatening litigation, did not speak Tuesday. But Michael Carlin, assistant general manager for the San Francisco Public Utilities Commission, is expected to address the board Wednesday.

The SFPUC gets most of the water it delivers to 2.7 million Bay Area residents from the Tuolumne River.

Tom Francis, water resources manager for the Bay Area Water Supply and Conservation Agency, which represents communities that buy water from the SFPUC, told the board Tuesday that two some two dozen cities in the region would likely have to make sacrifices that go well beyond cuts to outdoor landscaping.

"That type of reduction could have significant impact on business activities," he said.

The state estimates that between 7 and 23 percent less river water would be available for human consumption under the plan. Dry years could mean even less.

The impact on agriculture, according to state estimates, will be a 2.5 percent reduction to the basin's annual \$2.6 billion crop output. Farm groups say it will be more.

The attempt to boost flows in San Joaquin River tributaries is expected to be followed up with a strategy to similarly increase water in the larger Sacramento River and its tributaries.

Such plans have widened the divide between the Trump administration and California over how water should be distributed.

Interior Secretary Ryan Zinke recently ordered the U.S. Bureau of Reclamation, which may have to cut water deliveries from federally owned reservoirs in California, to find ways to counter state restrictions.

In a memo sent Friday, Zinke suggested that federal water officials limit coordination with the state and challenge constraints imposed by the Endangered Species Act and other environmental laws.

The memo directs Interior Deputy Secretary David Bernhardt to lead the effort. Bernhardt is a former lobbyist for the Central Valley's Westlands Water District and has long fought to loosen state water rules.

Even President Trump has joined the fray, tweeting last month that bad environmental laws "aren't allowing massive amounts of readily available water to be properly utilized."

The president was criticized, though, for falsely asserting that water was being withheld not only for farms but firefighters battling California's deadly blazes. State fire officials have said they have plenty of water.

Still, Commerce Secretary Wilbur Ross this month directed the National Marine Fisheries Service to put firefighter needs before the needs of fish and wildlife protected by the Endangered Species Act.

###

Kurtis Alexander is a San Francisco Chronicle staff writer. Email: kalexander@sfchronicle.com Twitter: @kurtisalexander



# Defying water suppliers, Palo Alto backs Bay-Delta Plan

City Council moves to support state proposal for requiring more unimpaired flow at Tuolumne River

Palo Alto Weekly | August 21, 2018 | Gennady Sheyner

Palo Alto plunged into the fierce debate over California's water policies on Monday night, when the City Council voiced unanimous support for the amended Bay-Delta Plan despite objections from the city's water suppliers and its own Utilities Department.

The council sided squarely with Palo Alto's environmentalists, led by former Mayor Peter Drekmeier, who are pitted against Gov. Jerry Brown, state Sen. Jerry Hill, the city's own Utilities Department and the San Francisco Public Utilities Commission (SFPUC).

The latter group -- along with the Bay Area Water Supply and Conservation Agency (BAWSCA), the alliance of 26 cities on the Peninsula and in Alameda County that draw their water from the San Francisco agency -- prefers to allow water agencies to negotiate settlements with the state over water-conservation measures.

Both SFPUC and BAWSCA came out against the amended Bay-Delta plan, which the State Water Resources Control Board (State Water Board) released in early July and which was the subject of two public hearings this week.

The new plan focuses on the lower San Joaquin River and its three tributaries, the Stanislaus, Merced and Tuolumne rivers. The Tuolumne River, which flows from the high Sierra Nevada to Central Valley, also provides water for the Hetch Hetchy system that supplies 85 percent of the SFPUC's potable water. (The State Water Board is working on a separate plan for the Sacramento River and its tributaries.)

Specifically, the amended Bay-Delta Plan would require the "unimpaired flow" of the San Joaquin and its three tributaries to be 40 percent during the period extending from February to June. This means that 40 percent of the rivers' water production would have to be "unaltered by upstream diversions, storage or by export or import of water to or from other watersheds."

Under the Bay-Delta Plan, water agencies would also be required to provide annual reports demonstrating their compliance with the goal. They would also have to produce a "comprehensive report" every three to five years, which would be peer-reviewed by a scientific panel and then subject to public hearings.

The new objectives "recognize the need for flows of an adequate volume and more variable pattern on the three major tributaries to provide habitat and migratory signals and protections for native fish," the State Water Board's overview of the plan states.

The State Water Board concluded that while 60 percent of "unimpaired flow" would improve conditions for a healthy fishery, the requirement would cause more economic damage to water users, including the SFPUC. Thus, it decided to go with the 40 percent level as a starting point, while allowing an "adaptive range" for unimpaired flow of 30 percent to 50 percent.

Is 40 percent too high?

But critics of the plan allege that adopting even the 40 percent level could hinder economic growth and potentially lead to major cutbacks in water use. Nicole Sandkulla, chief executive

officer of BAWSCA, argued in a letter that, if implemented during a drought, the agency's water users could be required to cut back water use from the recent pre-drought level of 79 gallons per person per day to 41 gallons per day or — for some cities — as low as 25 gallons per day.

"Community development might be delayed and new housing might not be built," the letter states. "A community without enough water for job growth and fully operational businesses, hospitals and public institutions is unsustainable."

Steve Ritchie, assistant general manager at the SFPUC, said his agency believes the lower San Joaquin River plan would "have significant impacts on our water supply with actually uncertain benefits for the Tuolumne River." The plan, he told the council, is based on the Water Board's studies of other "unmodified" river basins. Its conclusions, he claimed, don't fit as well with the Tuolumne, which is heavily modified and requires a "different kind of thinking."

Ritchie said Monday that the SFPUC, along with the Modesto and Turlock Irrigation Districts, believe greater benefits can be achieved with strategically planned "functional flows." The most effective ways to make the needed improvements, he said, is to couple these requirements with habitat improvements "developed specifically for the Tuolumne River by those who have done research on the Tuolumne River for decades."

"They are obsessed with flow and not really thinking about what will make the river work better, what will produce better fishery benefits," Ritchie said, referring to the Water Board.

River Trust: 'Disingenuous' criticisms

But one organization that has long studied the Tuolumne River strongly contested the water agencies' positions. The Tuolumne River Trust called the SFPUC proposal to rely on negotiated settlements "myopic," its criticisms "disingenuous" and its proposed approach "doomed to fail," according to a letter that the group's Executive Director Patrick Koepele sent to the water board. Allowing water agencies to reach settlement agreements that only include "non-flow measures" (actions that do not address flow capacity) is inadequate, he argued, pointing to the 1995 settlement agreement that the SFPUC and the Modesto and Turlock districts signed with various nonprofit organization and federal regulators. The approach relied heavily on "non-flow" measures, Koepele wrote, and it largely failed to protect the salmon population.

"Put simply, the full ecosystem needs to be restored, not just a limited set of specific elements that are part of the ecosystem," Koepele's letter states. "Salmon and steelhead recover cannot be achieved without providing sufficient habitat throughout the full spawning, rearing and migratory route.

"The SFPUC Alternative's proposed actions to modify spawning and in-channel rearing habitat are very limited geographically, and they ignore the need for habitat improvements in the Tuolumne River corridor and downstream as far as the Delta."

Drekmeier, who serves as policy director at the Tuolumne River Trust, criticized the two water agencies for both their position on the Bay-Delta Plan and on how they arrived at their preferred alternative. Ritchie told the council on Monday that the water agencies had several public meetings on the Bay-Delta plan since early 2017. But Drekmeier argued that the two agencies "have done everything possible to control the conversation and the message of this issue."

The Tuolumne River Trust, he said, had to wage a campaign just to get the Bay-Delta Plan on the SFPUC agenda. And when it came to the BAWSCA board, discussion was limited to residents speaking up during the public-comment section of the meeting. The agencies held numerous closed-door meetings with "important decision-makers," Drekmeier said, and his organization had to file Public Records Act requests to learn what information was exchanged.

Drekmeier also criticized the agencies' projections of potential cutbacks in water use, should the Bay-Delta plan be implemented. The SFPUC combined the two worst droughts of the past 50 years, he said, and based its rationing projections on that extreme scenario. A more realistic estimate, he said, suggests that the region can survive the worst drought on record with 10 percent rationing, well below the 20 to 40 percent cited by the water agencies.

The proposal to use negotiated settlements, he said, would effectively allow the agencies to go through a checklist of agreed-upon measures and claim compliance even if the measures prove ineffective. And while Ritchie suggested that the new Bay-Delta plan could lead to lengthy litigation, Drekmeier argued the SFPUC and BAWSCA aim to basically "wear down the State Water Board and get (their) way."

Residents to council: Reject staff recommendation

The debate appeared to have caught Palo Alto council members and staff by surprise. Last week, the item was scheduled to go on the council's "consent" calendar, where the city's approval of the SFPUC and BAWSCA's position would have been effectively rubber-stamped by the council. In recent days, however, the council has received dozens of emails, with many urging council members to support the Bay-Delta Plan or, at the very least, to hold a full discussion on the topic (the packet of letters and emails added up to 77 pages).

The council also heard from about 20 residents, with nearly everyone urging members to break from the Utilities Department recommendation and support the Bay-Delta Plan. Resident Annette Isaacson asked the council to "take a stand to protect the ecosystem."

"Without this protection, these rivers could become warmer, murkier and shrivel to a crawl, endangering the whole ecosystem," Isaacson told the council.

After hearing from both sides, Councilman Greg Scharff made the motion to reject the staff recommendation and to take Drekmeier's side. At least three of his colleagues immediately seconded his motion. The history of the environmental movement, Scharff said, is that there is "always a dire prediction for everything." Despite these predictions, Californians adopted measures to make the air cleaner, protect open space and restore marshes.

"Today, everyone agrees these are the right things to do and if we hadn't done them we would've been worse off," Scharff said. "Doing the right thing is protecting the Bay-Delta ecosystem. The Bay-Delta ecosystem shouldn't be destroyed because we're running out of water. We need to figure out how to protect it and how to provide the right amount of water."

Vice Mayor Eric Filseth concurred and said the city should "stay true to our values and support the Bay-Delta Plan."

"I find it unconscionable that we in our state, the bluest of blue states in the nation, would damage our environment to prop up Silicon Valley industry at a time when we actually have the

water but don't want to move it," Filseth said. "If we do that, we're no better than the federal government that is damaging the environment to prop up the fossil-fuel industry."

Councilwoman Karen Holman observed that it's rare for the council to so significantly oppose the recommendation of its Utility Department. In this case, however, she said the economic risk cited by opponents of the Bay-Delta plan appears to not be supported by the data. She also noted that while a major goal of the plan is to support the salmon population, the issues involved in the water debate are far broader.

"It's never just about one thing. It's never just about one species. It's about the broader ecosystem and what we can do to support it," Holman said.

###

# **Prioritizing San Francisco's water supply**

San Francisco Examiner | August 15, 2018 | Peter Drekmeier

Results from a recent public opinion poll commissioned by the Tuolumne River Trust were clear — San Franciscans conserve water largely to benefit the environment, and dramatically less so to enable more commercial development.

Of the 400-plus voters surveyed, 93 percent said they conserved water during the recent drought. Of those, 94 percent said improving the environment was a motivating factor, with 71 percent citing environmental concerns as playing a major role.

When asked if they would be more likely to conserve water if they knew it benefitted the environment, 72 percent responded yes. Conversely, only 21 percent said they would be more likely to conserve if it only enabled more development.

Unfortunately, the water we conserved during the recent drought did not benefit the environment. Instead, the San Francisco Public Utilities Commission, which manages the Hetch Hetchy Water System, hoarded it behind dams, only to have to "dump" it during last year's storms when all of its reservoirs were full.

The Tuolumne River, which fills the Hetch Hetchy Reservoir, experienced one excessive year of high flows at the expense of five terrible years.

The survey also revealed a clear distinction between support for housing versus commercial development. 88 percent were supportive of creating more affordable housing, and 69 percent supported the creation of more market-rate housing. Only 40 percent were supportive of creating more office space.

Water is a limited resource, and San Francisco officials need to be more strategic in how it is allocated. Unfortunately, the trend of adding jobs much faster than housing is placing a huge burden on our community. As reported in the Examiner, according to the Planning Department's Housing Balance report published in May, about 154,000 jobs were created in San Francisco between 2009 and 2016, but only 25,600 homes were added in a similar time period between 2007 and 2016. Not only did this exacerbate the housing crisis and traffic gridlock, it also hardened demand on water from the Tuolumne River.

The SFPUC now opposes the Bay Delta Water Quality Control Plan, which is overseen by the State Water Resources Control Board. The Plan is being updated to help restore the Bay-Delta estuary and rivers that feed it by improving instream flows. The SFPUC's opposition is based largely on its perceived need to accommodate a rapid increase in commercial development in the coming years — a vision that is not embraced by a vast majority of San Francisco voters.

When asked about Plan Bay Area — a government-initiated roadmap that forecasts the addition of 1.3 million new jobs and 2 million more people to the Bay Area between 2010 and 2040 — 85 percent of those who had an opinion believed Plan Bay Area would make their quality of life worse.

A good example of misplaced development priorities is the Flower Mart Project, which is part of the Central SoMa Plan. This single project would create 8,000 new jobs without producing a single unit of housing.

The SFPUC's Water Supply Assessment for the Flower Mart Project makes it clear that the water we conserve will be needed to enable this and other major development projects. The document states, "The ability to meet the demand of the retail customers is in large part due to development of 10 mgd [million gallons per day] of local [water] supplies, including conservation, groundwater, and recycled water."

In other words, we are being asked to conserve water, drink groundwater and support recycled water to facilitate more commercial development.

The way the SFPUC manages our water supply is clearly out of sync with the environmental values of its constituents. 97 percent favored protection of San Francisco Bay, and 92 percent supported restoration of the Tuolumne River.

One would think we could just elect SFPUC Commissioners who are more responsive to their constituents. However, unlike every other major water agency in the Bay Area, the SFPUC Commissioners are appointed by the Mayor, so there's little public input.

When asked if they would favor changing the way the SFPUC Commissioners are appointed, more than twice as many people favored making them elected positions.

###

Peter Drekmeier is policy director for the Tuolumne River Trust.

# State Water Board Must Reconsider Unimpaired Flows Approach

ACWA | August 14, 2018 | Timothy Quinn

Years of hard work behind the Brown Administration's California Water Action Plan could be at considerable risk if the State Water Resources Control Board persists on its path to implement a Bay-Delta flow regime based on "unimpaired flows." Next week, the State Water Board should convert its proposed hearing on this topic to a workshop and commit to the collaborative path being pursued by the Brown Administration and stakeholders.

When the State Water Board released its proposed amendments to the Bay-Delta Plan update last month, the revised plan was essentially the same as the initial plan calling for 40% unimpaired flows in the San Joaquin River watershed, largely ignoring the comments of local public agency water suppliers and others. This persistence to establish a 40% unimpaired flow standard for the Lower San Joaquin River and its tributaries (to be followed by a 55% requirement in the Sacramento Valley) could set the stage for one of California's longest and most fierce conflicts over water policy ever. The California Water Action Plan could be the first casualty of this conflict. It calls for a comprehensive statewide approach to achieve the coequal goals of providing a more reliable water supply for California while protecting, restoring and enhancing the Delta ecosystem. In contrast, the State Water Board's current approach will almost certainly undermine the groundwater sustainability, safe drinking water, storage, Delta conveyance, and other key elements within the California Water Action Plan.

This conflict is unnecessary. It can and should be avoided with leadership from the governor, the State Water Board and stakeholders within the water community.

No one seriously disputes that the policy on unimpaired flows being pursued by the State Water Board will hurt local economies and impede implementation of the Sustainable Groundwater Management Act (SGMA). For example, by reducing surface water supplies for municipal and agricultural uses, the unimpaired flows proposal leaves local government with a stark choice: either increase groundwater pumping to offset lost surface supplies, which in the long run would likely be incompatible with the requirements of SGMA, or shrink their local economies. Under a policy of coequal goals, the objective in implementing SGMA should be to achieve sustainable groundwater conditions while sustaining healthy local economies.

Overall, the State Water Board is pursuing a strategy that is difficult, if not impossible, to reconcile with the central policy of coequal goals. So what does the water community want? First and foremost, we want the State Water Board to evolve from being the regulator of flows as a single variable to becoming a robust partner with stakeholders, state and federal agencies in developing integrated resources plans for ecosystem management. This means using "all the tools in the toolbox" in a fishery management plan. These tools include habitat restoration and harvest management along with predation and pollution control as well as other measures. Where appropriate, these tools should link to flow and temperature requirements reflecting habitat and flood plain management elements within the California Water Action Plan.

Becoming a partner also means exercising responsibility by using flows wisely, because flows are the tool that most negatively affects the water supply community and undermines the policy of coequal goals. When using such an impactful tool, the State Water Board has an obligation to use it as efficiently as possible. That is why the water supply community advocates for a functional flows approach applied through a voluntary agreement process. This requires that

each flow measure has an identifiable purpose and that the overall environmental water budget is built from the bottom up to be as efficient as possible.

Using mandatory unimpaired flows alone is a decidedly top-down approach to water management that starts with a large water budget, much of which has no identified functional purpose. The argument in support that all is well because some of the water can be directed to functional purposes misses the point. It remains a top-down approach to ecosystem management that is inherently inefficient, with an overreliance on flows as the primary management tool – the tool that harms other stakeholders the most.

In essence, the water supply community is asking state government to undergo the same transformation that we have undergone during the past three decades. Prior to the 1980s, water managers often established water supply plans that relied almost exclusively on diverting flows from the natural environment. Today, water managers put much more emphasis on developing local water resources, using a wide range of new water management tools within integrated resources plans. This new strategy significantly reduces the need for imported water below levels that would otherwise be required. In the long-term water-efficiency legislation passed this year, virtually everyone at the table agreed that water supply management budgets had to be built from the bottom up to assure that the overall budget was based on efficiency.

To avoid a paralyzing spiral of litigation, we need to modernize ecosystem management, much the same as we have modernized water supply management. Fortunately, the governor appears to be on the right track. When the State Water Board initially released its draft unimpaired flow plan, the governor set us on a course of developing voluntary agreements to fulfill its intent. The best shot at avoiding litigation and moving closer to this modern approach is through a collaborative process, as originally envisioned a year ago by Governor Brown. Now is the time for the Brown Administration and stakeholders to do whatever is necessary to produce voluntary agreements to change the direction of ecosystem management in California. It might require giving the voluntary agreement process more time this fall. And it might require that the governor personally engage to get the voluntary agreements process to the finish line. His leadership in water is greatly appreciated.

The Brown Administration has made too much progress on water to leave this issue to litigation. We all need to work together to come up with a better approach that solves these difficult issues with collaboration instead of adversarial conflict.

### A Century On, the Battle Over Yosemite's Hetch Hetchy Valley Continues

A lawsuit aimed at draining San Francisco's reservoir in Yosemite National Park recently met another obstacle. But efforts to restore the flooded valley are far from over, supporters say. Water Deeply | August 22, 2018 | Robin Meadows

Hetch Hetchy Reservoir in Yosemite National Park holds 360,000 acre-feet of water, which serves San Francisco via pipeline 160 miles away. Robin Meadows

When Spreck Rosekrans visits Hetch Hetchy – the valley in Yosemite National Park that San Francisco turned into a reservoir nearly a century ago – he looks beyond what is. Instead, he envisions what once was and could be again.

"I imagine a meadow dotted with oak, pine and fir trees, and with the Tuolumne River meandering through it," said Rosekrans, executive director of Restore Hetch Hetchy, a Berkeley-based nonprofit.

Hetch Hetchy is just 15 miles north of Yosemite Valley and the two are often called twins. Historical photographs show why: like Yosemite Valley, Hetch Hetchy has sheer granite walls that originally rose dramatically from a wide valley floor. Today, however, that valley is under 300 feet of water.

Building a dam on the Tuolumne River at Hetch Hetchy was fiercely debated when it was proposed in the early 1900s. The Sierra Club was one of the original opponents, calling the reservoir "the greatest blemish in our national parks." Its former executive director, David Brower, recommended that Rosekrans lead an effort to restore the valley. Rosekrans had previously worked at the Environmental Defense Fund, a New York-based environmental advocacy nonprofit, where he was lead author of the 2004 report "Paradise Regained: Solutions for Restoring Yosemite's Hetch Hetchy Valley."

Hetch Hetchy reservoir continues to spark controversy today. The latest twist in this long story has just unfolded.

In 2015, Restore Hetch Hetchy sued the City and County of San Francisco, seeking a ruling that Hetch Hetchy Reservoir violated California law. "The state constitution says all water use must be 'reasonable,'" Rosekrans said. "We argued that the reservoir is not reasonable because the value of the restored valley is greater than the cost of changing the water system." At the time, they put the recreational value of the restoration at up to \$8.8 billion and the cost of water system changes at \$2 billion, both measured over 50 years.

Hetchy Hetchy Valley, photographed in 1911, about eight years before San Francisco began building O'Shaughnessy Dam. (Photo Courtesy Library of Congress)

The trial court ruled in San Francisco's favor in 2016, saying California courts lack jurisdiction over Hetch Hetchy because the dam was approved by Congress. So Restore Hetch Hetchy took the case to the Court of Appeal in Fresno, which heard arguments from both sides in May of this year.

Supporters of the appeal include Barbara Griffin and Robert Binnewies, both former superintendents of Yosemite National Park. In a brief filed with the appellate court, they said: "The trial court did not determine that the continued use of the dam and reservoir was 'reasonable' – rather, it concluded that the question could not be examined at all." In other words, they say the trial court did not address the substance of Restore Hetch Hetchy's argument.

Other supporters of the appeal include the State Water Resources Control Board. But the board did not support either side in the Hetch Hetchy debate. Rather, in a brief submitted to the appellate court by California attorney general Xavier Becerra, the board said the trial court "erred" when it ruled that federal law pre-empted California water law.

The Fresno appellate court disagreed. In July, the judges affirmed the previous ruling in favor of San Francisco: "The trial court correctly concluded Restore Hetch Hetchy's claims are preempted under federal law."

Legal issues aside, is it theoretically possible to change the Hetch Hetchy water system? Jay Lund, director of the University of California, Davis Center for Watershed Sciences, thinks so. The Hetch Hetchy water system includes other reservoirs, and the one in Hetch Hetchy Valley stores only about a quarter of the water San Francisco gets from the Tuolumne River.

In a 2006 analysis in the Journal of the American Water Resources Association, Lund identified additional options for storing the water that is currently in Hetch Hetchy Reservoir. But changing the system would be jaw-droppingly expensive. "Hetch Hetchy would never get built today, but restoring it is something for the long haul," he said.

Steve Ritchie, a San Francisco Public Utilities Commission (SFPUC) water manager who oversees the Hetch Hetchy system, says storing the water elsewhere would cost billions of dollars. "The notion that we could restore Hetch Hetchy would be very attractive if it didn't have any other effects – but it does," Ritchie said, adding that the water goes to about one-third of the people in the Bay Area. "It's not just San Francisco."

Some of the costs would be operational, recurring year after year. That's because Hetch Hetchy Reservoir has built-in advantages that save huge amounts of money. For example, thanks to the reservoir's nearly 4,000-foot elevation in the Sierra Nevada, its water is amazingly pure.

"Hetch Hetchy captures snowmelt that runs off granite," Ritchie said. "It's very clean; there's very little sediment." The water is disinfected with ultraviolet light but, in contrast to almost all other reservoir water in the United States, filtration is not required. Lund estimates that being able to forego filtration saves the SFPUC \$1billion or \$2 billion every year.

Restoring Hetch Hetchy could also come at an environmental cost. "I would never put Hetch Hetchy where it is, but the fix itself would be destructive somewhere else," said Laura Tam, sustainable development policy director of SPUR, a San Francisco-based nonprofit dedicated to urban planning in the Bay Area. For example, raising a dam for another reservoir in the system could flood another stretch of the Tuolumne River that, while outside Yosemite National Park, is designated as a national Wild and Scenic River.

For Restore Hetch Hetchy, however, the overriding concern is righting what they see as a historical wrong to an iconic national park. "We are fighting a battle to try our case in the California courts," Rosekrans said. "We continue to believe that Congress's intent was clear that state law would prevail in the event of a conflict."

The group's next move? It will ask the state Supreme Court to review the case.

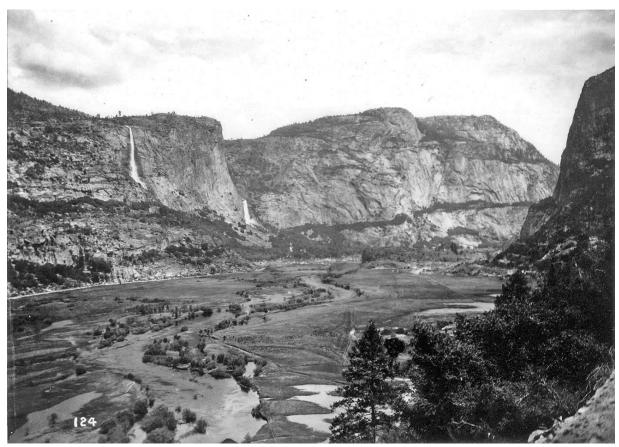
This story originally appeared in the Bay Area Monitor.

###

The views expressed in this article belong to the author and do not necessarily reflect the editorial policy of Water Deeply.

#### The Great Hetch Hetchy Debate

Bay Area Monitor | August/September 2018 | Robin Meadows



This photo from the early 1900s shows Hetch Hetchy Valley from the southwestern end, with the Tuolumne River flowing through the lower portion of the valley prior to damming. Photo by Isaiah West Taber.

When Spreck Rosekrans visits Hetch Hetchy — the valley in Yosemite National Park that San Francisco turned into a reservoir nearly a century ago — he looks beyond what is. Instead, he envisions what once was and could be again. "I imagine a meadow, dotted with oak, pine, and fir trees, and with the Tuolumne River meandering through it," said Rosekrans, executive director of Restore Hetch Hetchy, a Berkeley-based nonprofit.

Hetch Hetchy is just 15 miles north of Yosemite Valley and the two are often called twins. Historical photographs show why: like Yosemite Valley, Hetch Hetchy has sheer granite walls that originally rose dramatically from a wide valley floor. Today, however, that valley is under 300 feet of water.

Building a dam on the Tuolumne River at Hetch Hetchy was fiercely debated when it was proposed in the early 1900s, and the reservoir continues to spark controversy today. The latest twist in this long story has just unfolded, and the final chapter is yet to come.

The Sierra Club is one of the original opponents of flooding Hetch Hetchy, calling it "the greatest blemish in our national parks," and the organization's former executive director David Brower

recommended that Rosekrans lead an effort to restore the valley. Rosekrans had previously worked at the Environmental Defense Fund, a New York-based environmental advocacy nonprofit, where he was lead author of the 2004 report Paradise Regained: Solutions for Restoring Yosemite's Hetch Hetchy Valley.

In 2015, Restore Hetch Hetchy filed a lawsuit against the City and County of San Francisco, seeking a ruling that Hetch Hetchy Reservoir violated California law. "The state constitution says all water use must be 'reasonable,'" Rosekrans said. "We argued that the reservoir is not reasonable because the value of the restored valley is greater than the cost of changing the water system." At the time, they put the recreational value of the restoration at up to \$8.8 billion and the cost of water system changes at \$2 billion, both over 50 years.

The trial court ruled in San Francisco's favor in 2016, saying that California courts lack jurisdiction over Hetch Hetchy because the dam there was approved by Congress. So Restore Hetch Hetchy filed an appeal with the Court of Appeals in Fresno, which heard arguments from both sides in May of this year.

Supporters of the appeal include Barbara Griffin and Robert Binnewies, both former superintendents of Yosemite National Park. In a brief filed with the appellate court, they said, "The trial court did not determine that the continued use of the dam and reservoir was 'reasonable' — rather, it concluded that the question could not be examined at all." In other words, they say the trial court did not address the substance of Restore Hetch Hetchy's argument.

Other supporters of the appeal include the State Water Resources Control Board. That said, the board does not support either side in the Hetch Hetchy debate. Rather, in a brief submitted to the appellate court by California Attorney General Xavier Becerra, the board said that the trial court "erred" when it ruled that federal law preempted California water law.

The Fresno appellate court disagreed. In July of this year, the judges affirmed the previous ruling in favor of San Francisco: "The trial court correctly concluded Restore Hetch Hetchy's claims are preempted under federal law."

Legal issues aside, is it theoretically possible to change the Hetch Hetchy water system? Jay Lund, director of the UC Davis Center for Watershed Sciences, thinks so. The Hetch Hetchy water system includes other reservoirs, and the one in Hetch Hetchy Valley stores only about a quarter of the water San Francisco gets from the Tuolumne River.

In a 2006 analysis in the Journal of the American Water Resources Association, Lund identified additional options for storing the water that is currently in Hetch Hetchy Reservoir. But changing the system would be jaw-droppingly expensive. "Hetch Hetchy would never get built today, but restoring it is something for the long haul," Lund told the Monitor.

Steve Ritchie, a San Francisco Public Utilities Commission (SFPUC) water manager who oversees the Hetch Hetchy system, says storing the water elsewhere would cost billions of dollars. "The notion that we could restore Hetch Hetchy would be very attractive if it didn't have any other effects — but it does," Ritchie said, adding that the water goes to about one third of the people in the Bay Area. "It's not just San Francisco."

Some of the costs would be operational, recurring year after year. That's because Hetch Hetchy Reservoir has built-in advantages that save huge amounts of money. For example, thanks to

the reservoir's nearly 4,000-foot elevation in the Sierra Nevada, the water in it is amazingly pure.

"Hetch Hetchy captures snowmelt that runs off granite," Ritchie said. "It's very clean; there's very little sediment." The water is disinfected with ultraviolet light but, in contrast to almost all other reservoirs in the U.S., filtration is not required. Lund estimates that being able to forego filtration saves the SFPUC \$1 or \$2 billion every year.

Restoring Hetch Hetchy could also come at an environmental cost. "I would never put Hetch Hetchy where it is, but the fix itself would be destructive somewhere else," said Laura Tam, sustainable development policy director of SPUR, a San Francisco-based nonprofit dedicated to urban planning in the Bay Area. For example, raising a dam on another reservoir in the system could flood another stretch of the Tuolumne River that, while outside Yosemite National Park, is designated as a national Wild and Scenic River.

For Restore Hetch Hetchy, however, the overriding concern is righting what they see as a historical wrong to an iconic national park. "We are fighting a battle to try our case in the California courts," Rosekrans said. "Next we'll ask for a review from the state Supreme Court."



#### Editorial: Delta hearing opens door to twin-tunnels water grab

Opponents should look to ballot measure after Gov. Brown rams through 50-year water contract extensions

East Bay Times | September 12, 2018 | By Mercury News Editorial Board

The bad news emerging from Sacramento on Tuesday was that, after two postponements, the Joint Legislative Budget Committee held a hearing allowing the Department of Water Resources to extend State Water Project contracts for another 50 years.

No committee vote was needed. Just holding the hearing allows the state to move forward with the contract extensions, which, in turn could provide the needed funding for Gov. Jerry Brown's \$19.9 billion Delta twin-tunnels project.

The contract extensions could commit the 27 water districts that are a part of the State Water Project to pay for the tunnels — without the approval of voters or the Legislature. Three Bay Area water districts — Santa Clara Valley Water District, Alameda County Water District, and Alameda County Flood Control and Water Conservation District Zone 7 — could be affected.

Voters and taxpayers should be outraged. We are.

Brown's successor, likely Lt. Gov. Gavin Newsom, should kill the project if he can. But if the Legislature and governor can't bother to look out for the best interests of Californians, perhaps it's time for opponents to start thinking about a state ballot measure for 2020 giving voters a chance to decide the fate of the project, once and for all.



## State Water Project: Our most important infrastructure

Capitol Weekly | September 10, 2018 | Jennifer Pierre

Ask me what tops the list of California's most critical infrastructure, and I'll tell you it's the State Water Project. It's hard to argue with the fact that water is a prerequisite for all life and a healthy economy.

That's why financing the operation and maintenance of the State Water Project in a responsible, cost-effective manner should be common sense — not a political volley that puts California's lifeline at risk and threatens ratepayers with a surge in water rates that is easily avoidable.

By extending the contracts, DWR can issue bonds beyond 2035 to allow for long-term financing.

The State Water Project delivers water to more than 25 million people, 750,000 acres of farmland, and fuels business and industry statewide. We must ensure it can continue serving our needs today while providing for future generations in the most reliable and affordable way possible. The best and most responsible way to do that is by extending long-term water supply contracts that have been in place between public water agencies and the California Department of Water Resources (DWR) since the 1960s.

By extending the contracts, DWR can issue bonds beyond 2035 to allow for long-term financing for planned State Water Project capital operation and maintenance, such as the Communications System Replacement Project and the Fire Systems Modernization Project. This protects ratepayers statewide, shielding them from the steep water rate increases that result from financial compression.

Think of "financial compression" in terms of financing a home mortgage.

If a homeowner has a 15-year mortgage, their monthly payments are much higher than if they were to finance the same amount using a 30-year mortgage. The contract extension is equivalent to changing from a 15-year to 30-year mortgage for millions of ratepayers.

The State Water Project is the nation's largest state-built, user-financed water and power development and delivery system.

Without an extension, municipal and industrial public water agencies' costs are projected to escalate by more than double, from \$300 million to \$700 million over the period until 2035. Agricultural public water agencies' capital charges would spike from \$36 million to \$490 million over the same period, an increase that is 13 times greater.

Opponents of California WaterFix are making the contract extension for the entire State Water Project about the Governor's \$17 billion twin tunnels project in hopes of delaying the project. A joint legislative budget committee hearing, scheduled Tuesday (Sept. 11) is the final informational hearing required to complete the contract extensions and avoid the financial compression.

After nearly five years and an extensive public review, the contract extension process is nearly complete. An Agreement in Principle was developed in public in 2014, after which the CEQA draft environmental document was publicly released and comments were received. DWR and public water agencies have done their due diligence with great care and transparency. While WaterFix is a necessary investment in our State Water Project, it's not the reason we need to extend the long-term water supply contracts.

The State Water Project is the nation's largest state-built, user-financed water and power development and delivery system – a vast network of aqueducts, tunnels, canals, reservoirs, pumping plants, and hydroelectric power generation plants.

Bringing Sierra Nevada melted snowpack from the Bay Area to San Diego, it's one of the cleanest and most cost-effective water supply sources. It gets us through droughts more efficiently than any other source, augments local water supply sources and recharges groundwater basins. Two-thirds of California's water is delivered through the State Water Project. Some California regions depend on water from the State Water Project for as much as 80 percent of their total supply.

The scheduled hearing has been delayed twice amidst the noise from WaterFix opponents, who are looking for any reason to slow down the project's momentum. There's no question the hearing should proceed as planned next week. Any further delay just makes it more difficult to maintain high bond ratings, keep interest costs low, and provide financial stability to the State Water Project.

And if there's any doubt about just how important this is, imagine life without the State Water Project. It's in California's best interest to have a stable, reliable water supply.

###

Ed's Note: Jennifer Pierre is the general manager of the State Water Contractors, a non-profit statewide association of 27 public agencies that purchase water from the California State Water Project.

## Make California's Water Grid Climate-Ready

Public Policy Institute of California | September 6, 2018 | Jeffrey Mount and Ellen Hanak

Next week people from around the globe will gather at the Global Climate Action Summit in San Francisco to explore solutions to climate change. California has long played a leadership role in reducing climate emissions. But the state has a crucial weakness in its climate readiness: its vast water system. Modernizing California's "water grid"—the linked network of above- and below-ground storage and conveyance systems that connects most water use in the state—can help reduce the costs and impacts of a changing climate.

The PPIC Water Policy Center put together a team of experts in climate science, hydrology, ecology, engineering, economics, and law to review the weak points in California's water system and recommend actions to build the system's climate resilience. The focus of the work was on managing water scarcity, using lessons learned from California's most recent drought.

We found that five climate pressures will seriously impact the state's water system: warming temperatures, shrinking snowpack, shorter and more intense wet seasons, more volatile precipitation patterns, and rising seas.

During drought, California relies heavily on its water grid to manage supplies. This system will become even more important for managing more intense droughts of the future. Yet elements of this grid are in trouble, and climate pressures will make it harder to manage competing demands—particularly the need to store more water for drought while also capturing high flows to reduce flood risk, while also protecting freshwater ecosystems.

California's climate is changing and drought intensity is increasing. Adapting to and preparing for change will require a more robust, better-integrated water grid. This should be a top priority for the next governor.

To make the grid climate-ready, the new administration should undertake a thorough assessment of weaknesses in the state's storage and conveyance system—including important canals and aqueducts that help recharge groundwater, deliver surface water, and manage floods—and launch a major upgrade of this network.

The state's many underground basins have a much large capacity for storage than surface reservoirs and will become much more important as a drought reserve. Strategic investments are needed to help California store water more effectively and take better advantage of opportunities to trade and share it—an important way to reduce the social, economic, and environmental costs of using less.

Adapting to a more volatile climate—including more intense winter storms—will also require more operational flexibility to enable storage and conveyance facilities to work together as an integrated water supply and flood management system. Investments will be needed to update hydrological assumptions for reservoirs, and improve water accounting in all sectors, including groundwater recharge and use.

This water infrastructure revolution won't just be technically challenging: it will also require finding reliable funding to pay for necessary investments. Californians will need to look beyond general obligation bonds and develop long-term funding sources to adapt the water grid to a changing climate.

Strong leadership from state and local institutions has guided the development of the water system that California relies on today. Despite its many problems, this system has mostly served the state well, even in the face of occasional severe drought. Leadership—an essential ingredient for continued progress in water management—is a key requirement to prepare for droughts of the future.

## Commentary: How Prop 3 helps ensure California's water future

San Diego Union Tribune | September 6, 2018 | Tim Quinn

At no other time in California's history have its citizens faced such a complex array of extremes affecting the quality and resiliency of our water supply. But if you're an optimist like me, you can recognize that 2018 gives us an ideal opportunity to make a significant impact, overcome challenges and ensure the best chance possible toward securing California's water future.

Securing California's water future has become an increasingly challenging task in the past decade with years of historic drought, periods of record flooding, a strain on aging infrastructure, desperate need for more storage and continued lack of safe drinking water for some communities. Meanwhile, we need to invest in our statewide water system to respond effectively to our growing population, changing ecosystem needs, climate change and its impacts on public safety and long-term water supply reliability.

This November, California voters will have the opportunity to help support significant change by voting in support of Proposition 3, an \$8.8 billion water bond that could fund new technologies for local water supply such as water reuse and storm water capture, safe water for disadvantaged communities, watershed restoration, fish and wildlife protection, sustainable groundwater management and repair of existing dams and canals.

The measure, called the Water Supply and Water Quality Act of 2018, would dedicate muchneeded funds for essential projects in the critical areas of infrastructure repair and long-term drought relief by protecting mountain watersheds, capturing more storm water runoff for reuse, and converting more salt water into fresh drinking water.

On a local level, San Diego would benefit significantly under Proposition 3, with local organizations and projects qualifying for at least \$330 million in funding for a variety of uses benefiting water supply and quality, as well as conservation. The funding could benefit projects ranging from conservancy for the San Diego Bay and San Diego River, to wastewater recycling, stormwater management, groundwater desalination and water conservation efforts that will further reduce local dependence on imported water.

San Diego would also be eligible to compete for roughly \$5 billion in Proposition 3 funds with organizations from other parts of the state. Water challenges confront every region in California and, if approved, Proposition 3 funding can overcome those challenges no matter what part of our state you live in, and no matter what San Diego County community you call home.

Recent polling shows a vast majority of Californians (68 percent of likely voters) understand the need for Proposition 3 and support the measure, but there is too much at stake to even consider taking its passage for granted. At stake is our ability to seize an opportunity to meet tough challenges head on with the necessary resources.

On a statewide level, increasingly catastrophic wildfires have become the "new normal." But we are far from helpless bystanders. Proposition 3 also devotes significant resources toward forest restoration, which includes tree thinning efforts that help prevent the size and scale of wildfires while also improving the health of California's watersheds, on which we heavily depend on for water no matter in which corner of the state you live.

California's economy depends on a reliable water supply. This measure provides water to meet our future needs, keep our family farms and businesses productive, and put Californians to

work. Those are a few reasons why Proposition 3 enjoys broad support from water agencies (including the San Diego County Water Authority), environmental and conservation groups, agricultural organizations, businesses, elected officials and local governments. My own organization, the Association of California Water Agencies (ACWA), is on this long list of supporters.

We must seize the opportunity to lay the groundwork for a more secure water future. ACWA stands strong in its support of Proposition 3 and urges you to learn more about this measure and cast your vote in November.

###

To learn more, including benefits specific to San Diego and Southern California, visit www.waterbond.org.

Quinn is executive director of the Association of California Water Agencies, whose members are responsible for 90 percent of the water delivered to cities, farms and businesses in California. He can be reached at TimQ@acwa.com.

Hetch Hetchy's Moccasin Dam is in poor condition, state Dams Safety Division says The Union Democrat | September 5, 2018 | Guy McCarthy

Moccasin Dam at Hetch Hetchy Water & Power's company town Moccasin remains in poor condition due to damage incurred during the March 22 megastorm that tore up Groveland, Moccasin and Highways 49 and 132, according to the state Division of Dams Safety.

The dam, called Moccasin Lower in a state report, has capacity of 554 acre-feet, it was built in 1930, and it's owned by the San Francisco Public Utilities Commission. It's one of 10 dams rated poor statewide out of 1,246 dams under state jurisdiction.

"Moccasin Lower Dam is rated poor in today's report because of the incident that happened earlier this year," Chris Orrock, a public information officer with the state Department of Water Resources, Division of Dams Safety, said Tuesday in a phone interview. "The repairs are not yet complete. The Division of Safety of Dams has received and approved the repair plans, and the dam owner is in the process of completing repairs."

On March 22, heavy rains sent a surge of water and debris into Moccasin Reservoir, overwhelming its diversion system and nearly overtopping the dam, Hetch Hetchy public affairs staff said. Water seeped from the dam in places. Hetch Hetchy workers took steps to release as much water as possible from Moccasin Reservoir.

An evacuation order was issued for anyone potentially in harm's way, including people at the Moccasin Fish Hatchery and Moccasin Point Marina and Campground. Hetch Hetchy crews drained the reservoir before it overtopped. At no point was there any threat to the Bay Area's water supply.

"We anticipate the dam will be rated as 'poor' until we have the emergency repair and interim improvement projects installed at the end of this year or early next year," Will Reisman, press secretary for the San Francisco Public Utilities Commission, said Tuesday. "At that point, we expect that the dam will be upgraded to 'fair' condition. The dam will like not be upgraded to 'satisfactory' until we make the longer-term improvements. We are currently evaluating what those long-term improvements entail."

Reisman emphasized Tuesday that Moccasin Dam functioned properly under stress during the storm. The dam was rated satisfactory in last year's Division of Dams Safety report.

According to Hetch Hetchy estimates, contractors are fixing \$21 million in storm damage at Moccasin Dam and Reservoir.

March 22 damage to the state Fish and Wildlife hatchery just below Moccasin Dam totaled about \$3.2 million, state Fish and Wildlife staff said.

#### **Elsewhere in Mother Lode**

A "Dams within Jurisdiction of the State of California" update released Tuesday lists information about 29 dams in Tuolumne County and 35 dams in Calaveras County.

New Melones, the fourth-largest reservoir in California with 2.4 million acre-feet capacity, is owned and operated by the federal Bureau of Reclamation and it is not under state jurisdiction. New Melones is not listed in the Tuesday report.

Some dams in Tuolumne and Calaveras have "extremely high" downstream hazard assessments in the event of failure of a dam when it's holding back a full reservoir.

The assessments are based strictly on potential downstream impacts to life and property if a dam fails when the reservoir it holds back is full. The downstream hazard assessment is not related to condition of the dam or its related structures.

Donnells, Beardsley and Tulloch dams, all on the Stanislaus River and owned and operated by Tri-Dam, have extremely high downstream hazards in event of dam failure for different reasons, said Ron Berry, general manager for Tri-Dam.

"Tulloch shows extremely high hazard because with Tulloch there's more than a thousand people downstream," Berry said. "For Donnells and Beardsley there is not a population of a thousand people. But it could be if it happened to be a very high recreation day."

Tri-Dam has inundation maps and emergency action plans for Donnells, Beardsley and Tulloch, Berry said. Berry said he could not share them Tuesday.

"Tri-Dam Project takes dam safety very seriously," Berry said. "We have been rated satisfactory by the Division of Safety of Dams, and continue to monitor our dams with public safety in mind."

Statewide, the Division of Dams Safety is re-evaluating spillways on 93 dams similar to the one that came apart in February 2017 at Lake Oroville.

A list of those 93 dams includes O'Shaughnessy Dam on Hetch Hetchy Reservoir in Yosemite National Park, Cherry Valley Dam at Hetch Hetchy's Cherry Lake reservoir, Donnells, Beardsley and Tulloch, owned and operated by Tri-Dam on the Stanislaus River, Don Pedro, owned and operated by Turlock Irrigation District, Strawberry Dam at Pinecrest, owned and operated by PG&E and Big Creek Dam, owned by Pine Mountain Lake Association.

###

Contact Guy McCarthy at gmccarthy@uniondemocrat.com or 588-4585. Follow him on Twitter at @GuyMcCarthy.

# Latest Climate Change Assessment Illustrates Farming Challenges of the Future AgNet West | August 31, 2018 | Brian German

The California Natural Resources Agency (CNRA) recently released an updated climate change assessment detailing the expectations of future climate conditions in California. The report, California's Fourth Climate Change Assessment, revises some of the information that was presented in the last report that was written in 2012. Along with predicting a 77 percent increase in the amount of acreage that will be burned by wildfires, along with a 50 percent increase in the overall number of wildfires by 2100, the report presents information on the effects of climate change on agricultural production.

The information most relevant for farming is the predicted increase in drought periods, more frequent extreme heat events and an increased demand for energy if greenhouse gas emissions continue to rise. The report focuses on Central Valley crops, the dairy industry, as well as the beef cattle grazing industry. By demonstrating the challenges facing California agriculture, the hope is to identify ways to adapt and overcome those issues.

Some of the highlights of the report include the confirmation of some of the previous findings related to crop adaptation to various climate change scenarios. Adapting crops and production methods can help address climate change issues. Specialty crops were also shown to be more successful over feed, field and grain crops in the modeling results.

Dairies are expected to endure challenges in obtaining forage because of increased competition for water supplies between different commodities and lower returns on hay and corn silage in relation to water usage. Reducing milking herd sizes along with finding alternative feed sources may help overcome those challenges.

Water shortage scenarios are expected to have a negative impact on irrigated areas, cropping patterns and overall gross revenues. The report highlights the importance of protecting groundwater reserves in order to avoid large economic losses in the agriculture sector. A decline in irrigated pasture availability will also present challenges for expanding the beef cattle industry.

The climate change assessment is comprised of research taken from 44 technical reports, as well as 11 summary reports from CNRA.



## Brown tries to jam Delta water hearing through legislature

Tracy Press | August 29, 2018 | Michael Ellis Langley

An innocuous sounding hearing tomorrow morning for lawmakers on the Joint Legislative Budget Committee at the State Capitol may lock taxpayers into paying for the California WaterFix for the next half century.

The informational hearing, called "Department of Water Resources: Proposed Water Supply Contract Extension & Amendments," will commit 50 years of funding to the WaterFix, the state's plan to build two tunnels to siphon water from the Delta and send it south.

"It is nothing more than end-of-session shenanigans to try and jam this through at the last minute," Assemblywoman Susan Talamantes Eggman said of the hearing. "We all just found out, so we are trying to coordinate very quickly in addition to voting on hundreds of bills at the same time."

This is the last week of the legislative year in California, and Eggman and other lawmakers are voting on a year's worth of proposed laws. By scheduling the hearing in the midst of the rush of legislation, Eggman believes Gov. Jerry Brown and his allies may be trying to get around opposition.

Because the hearing is informational only, there are no votes and the 50-year commitment will be approved automatically if the hearing takes place.

Part of that approval would include language from committee member Assemblyman Richard Bloom, D-Santa Monica, that removes direct legislative oversight of the project.

"I don't think this was his idea to do this. I think this is part of a grander, package deal. And I told him that I would not be voting for this," she said.

Last year, Eggman asked the Joint Legislative Audit Committee to audit the WaterFix. The committee issued a report calling for more oversight, which Eggman said she had been trying to push. She said Bloom language reverses that.

"I don't want people to think that if the hearing is held tomorrow, it just means the WaterFix is going to happen. But having the hearing removes an impediment to the project," she said. "We needed more oversight and more involvement. I've been very active in trying to maintain that process."

Eggman said the committee chairman should cancel the hearing and bring it up again next year if appropriate. She believes Brown is trying to muscle through something he has been trying unsuccessfully to do for years before his term ends in December.

"I don't know that they are trying to disenfranchise (San Joaquin County residents), but the goal for this governor is to try to get as much in place to facilitate the WaterFix, the tunnels, as he possibly can," she said. "So I don't know that it is purposely disrespectful to us, but that is certainly a consequence of the WaterFix."

Sen. Cathleen Galgiani, D-Stockton, who represents Tracy and Mountain House, did not return multiple calls for comment, but Eggman said she had been in contact with her today about this issue.

Eggman did say that people who are concerned about the hearing should call Toni Atkins, president pro tempore of the State Senate, at 916-651-4039 or Assembly Speaker Anthony Rendon at 916-319-2063.

None of the eight state senators and eight Assembly members on the committee are from Delta districts.

###

- Get more information on the hearing and the committee at <a href="https://www.senate.ca.gov/legislativebudget">www.senate.ca.gov/legislativebudget</a>
- Get more information about the California WaterFix at <a href="https://www.californiawaterfix.com">www.californiawaterfix.com</a>
- Contact Assemblywoman Susan Eggman's Stockton office at 948-7479.

Contact Michael Ellis Langley at mlangley@tracypress.com or 830-4231.