Local Agencies of the North Delta
Friends of Stone Lakes National Wildlife Refuge

County of San Joaquin
San Joaquin County Flood Control and Water Conservation District
Mokelumne River Water and Power Authority

City of Antioch

Pacific Coast Federation of Fishermen's Associations
Institute for Fisheries Resources

California Sportfishing Protection Alliance
AquAlliance
California Water Impact Network

December 17, 2018

SENT VIA EMAIL

Tam Doduc, WaterFix Project Co-Hearing Officer
Felicia Marcus, WaterFix Project Co-Hearing Officer
State Water Resources Control Board
1001 I Street
Sacramento, CA 95814

RE: Changes to Petitioned California WaterFix/Delta Tunnels Project from Addendum to COA and Other New Agreements

Dear Hearing Officers:

Over the past several days, significant changes to existing agreements and new agreements have been announced[1] that affect the Department of Water Resources' ("DWR") and the Bureau of Reclamation's ("Reclamation") 2015 petition for changes in water rights for the Delta Tunnels project. These developments may significantly change key Hearing assumptions regarding the petitioned project. These changes include: [2]

[1] Full documentation of these agreements/changes, has not yet been made available to the public.

[2] On December 13, 2018, the SWRCB also adopted amendments to its 2006 Water Quality Control Plan, and a group of water districts and other interests presented the outline of a Voluntary Settlement Agreement within the San Francisco Bay Delta to the SWRCB. This letter does not address the possible effects of those actions on the Delta Tunnels petition.

(1) 1986 Coordinated Operations Agreement Addendum, December 13, 2018[3]

The Addendum makes changes to four elements of the 1986 Coordinated Operations Agreement, including the State Water Project ("SWP") having more responsibility to meet in basin demands in dry and critical years. (See Exhibit A;[4] see also Exhibit B.) Under the new agreement, the SWP may give up from 100,000 to 200,000 acre feet of water to the Central Valley Project ("CVP"), according to news sources. (See Exhibit C.)[5] These changes in operations would affect key Hearing issues, including modeling assumptions in CWF H3+ and other scenarios for reservoir storage, critical year operations, water temperatures, water quality, and fish and wildlife impacts. For example, it is unclear to what extent the SWP's vastly more limited access to stored water above the Delta in dry and critically dry years would lead to different (likely more severe) water quality and temperature effects than have been presented in the Hearing. Without modeling using the terms of the revised COA, it is also unclear whether Petitioners can meet Bay-Delta Water Quality Control Plan requirements, as they have asserted in this hearing.[6]

Regarding the modeling assumptions, requirements of the existing COA are hard-wired into much of the modeling presented in the Hearing over the past 2½ years. Although we have not yet been provided enough detail to understand precisely how the new changes affect the modeling underlying the Petition, it appears likely that those changes will require adjustments and supplemental analysis. These latest changes again

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[3] The 1986 Coordinated Operations Agreement ("COA") is Exhibit GCID-1, available at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/petitioners_exhibit/glenn/gcid_1.pdf. The environmental review for the COA is Exhibit FOTR-103, available at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/FOTR/for_103.pdf.

[4] Available at: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/State-Water-Project/Files/Addendum-to-Coordinated-Agreement.pdf.

[5] *California cedes water to feds in Delta deal with Trump*, Sacramento Bee, December 16, 2018, available at: https://www.sacbee.com/latest-news/article223114775.html.

[6] A complete and technically accurate project description is also required for the project's Water Quality Certification. (Cal. Code Regs., tit. 23, § 3856 (b).)

show that the project description, to which Protestants have been required to respond and which Petitioners have asked this Board to consider, is not yet stable or complete.

(2) No Harm and Cost Agreement Regarding Delta Tunnels on December 15, 2018

According to newspaper reports, the current administration also "gave federal officials a 'no-harm agreement' that says the Central Valley Project's customers won't lose any water if the tunnels are built. If they do, they'll get compensated in cash or some other water supply."[7] Though this agreement has not been made public, these changes would likely also affect assumed operations in project modeling and other evidence in the Hearing, as well as affect the ability of the SWRCB to condition the project and to resolve protests. Moreover, DWR and Reclamation also entered a cost agreement regarding implementation of the SWP/CVP Biological Opinions. (See Exhibit D.)[8] The implications of this agreement on the Hearing are not known at this time, but may also affect underlying Hearing assumptions and evidence.

* * *

Only when the actual project proposed[9] for operation under the petition has been properly described and addressed in the Hearing according to applicable water rights change procedures, should the Hearing proceed. After the Petitioners provide information regarding the effect of these agreements on the petitioned diversions, the Hearing Officers may wish to request input from all parties on the scope of a Part 3 of the Hearing.[10] Thank you for considering these concerns regarding the effect of the Addendum to COA and other New Agreements on the Delta Tunnels petition.

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[7] *California cedes water to feds in Delta deal with Trump*, Sacramento Bee, December 16, 2018, available at: https://www.sacbee.com/latest-news/article223114775.html.

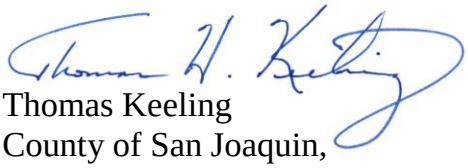
[8] Available at: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/State-Water-Project/Files/MOU-Signed-Cost-Share.pdf [note Exhibits A-C missing].

[9] DWR still has not certified the 2018 Supplemental EIR under CEQA, which included further changes to the petitioned project; Reclamation has not yet taken any action at all pursuant to NEPA on the petitioned project.

[10] Petitioners also maintain that the 2015 petition is inadequate and must be dismissed. See Early Petition Comments; see, e.g., August 31, 2015 - Letter from Local Agencies of the North Delta and Central Delta Water Agency Re: Petition for Change

Sincerely,

Osha Meserve
Local Agencies of the North Delta
Friends of Stone Lakes National Wildlife Refuge



Thomas Keeling
County of San Joaquin,
San Joaquin County Flood Control and Water Conservation District,
and
Mokelumne River Water and Power Authority

Matthew Emrick
City of Antioch

Stephan C. Volker
Pacific Coast Federation of Fishermen's Associations
Institute for Fisheries Resources

Michael Jackson
California Sportfishing Protection Alliance, AquAlliance,
California Water Impact Network

CC: Electronic service list for CA WaterFix Petition Hearing

Attachments:

Exhibit A	December 12, 2018 Addendum to the Agreement for Coordinated Operation of the Central Valley Project and the State Water Project
Exhibit B	Westlands Water District Board of Directors Meeting of December 18, 2018, Item 5
Exhibit C	December 15, 2018 Sacramento Bee Article: California Cedes Water to Feds in Delta Deal with Trump
Exhibit D	December 12, 2018 Memorandum of Agreement re: 2008 and 2009 Biological Opinions

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submitted by DWR and BOR, available at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/early_petition_comments/docs/land_cdwa_083115.pdf.

EXHIBIT A

ADDENDUM TO
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

This addendum to the 1986 Agreement Between the United States of America and the State of California for Coordinated Operation of the Central Valley Project and State Water Project ("Agreement") is entered into by the United States and the State of California, this 12 day of December, 2018, in light of the following:

EXPLANATORY RECITALS

After the execution of the Agreement in 1986, the United States added facilities to the Central Valley Project, including the Red Bluff Pumping Plant and Fish Screen and the Delta Mendota Canal California Aqueduct Intertie.

After the execution of the Agreement in 1986, the State added facilities to the State Water Project, including the Barker Slough Pumping Plant and the Harvey O. Banks Pumping Plant 4-pump expansion.

In 1995 and 2006 the California State Water Resources Control Board established New Delta Standards.

Implementation of New Delta Standards imposed restrictions on the operations of the Central Valley Project and the State Water Project, including new restrictions on Delta exports by the United States and the State and new Delta outflow for the protection of aquatic species in the Delta.

After execution of the Agreement in 1986, biological opinions for the coordinated operations of the Central Valley Project and State Water Project were issued pursuant to the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.) that further restricted operations of the Projects and affected the ability of the United States and the State to achieve their respective water supply objectives.

The United States and the State have heretofore shared responsibility for meeting New Delta Standards and export capacity when exports were constrained by biological opinions for the coordinated operations of the Central Valley Project and the State Water Project through agreements reached between operators of the Central Valley Project and operators of the State Water Project.

The United States and the State have determined that periodic review pursuant to Article 14 of the Agreement would promote achieving their respective water supply objectives considering the New Delta Standards and the restrictions imposed under the Endangered Species Act.

NOW, THEREFORE, it is agreed:

1. Article 6(c) of the Agreement is amended to provide:

(c) Sharing of Responsibility for Meeting Sacramento Valley Inbasin use With Storage Withdrawals During Balanced Water Conditions: Each party's responsibility for making available storage withdrawals to meet Sacramento Valley inbasin use of storage withdrawals shall be determined by multiplying the total Sacramento Valley inbasin use of storage withdrawals by the following percentages:

	United States	State
Wet Years	80%	20%
Above Normal Years	80%	20%
Below Normal Years	75%	25%
Dry Years	65%	35%
Critical Years	60%	40%

The water year classifications described in this Article 6(c) shall be based on the Sacramento Valley 40-30-30 Index as most recently published through the Department of Water Resources' Bulletin 120.

In a Dry or Critical Year following two Dry or Critical Years, the United States and State will meet to discuss additional changes to the percentage sharing of responsibility to meet inbasin use.

2. A new Article 10(i) is added to the Agreement to provide:

(i) Sharing of Applicable Export Capacity When Exports are Constrained: During periods when exports are constrained by non-discretionary requirements imposed on the Central Valley Project and the State Water Project South Delta exports by any federal or state agency, applicable export capacity shall be shared by the following percentages:

	United States	State
Balanced Water Conditions	65%	35%
Excess Water Conditions	60%	40%

3. Article 10(b) of the Agreement is amended to provide:

(b) The State will transport up to 195,000 acre-feet of Central Valley Project water through the California Aqueduct Reaches 1, 2A, and 2B no later than November 30 of each year by direct diversion or by rediversion of stored Central Valley Project water at times those diversions do not adversely affect the State Water Project purposes or do not conflict with State Water Project contract provisions. The State will provide available capacity at the Harvey O. Banks Pumping Plant ("Banks") to the Central Valley Project to divert or redivert 195,000 acre-feet when the diversion capacity at the south Delta intake to Clifton Court Forebay is in excess of 7,180 cubic feet per second during the July 1 through September 30, except when the Delta is in Excess Water Conditions during July 1 through September 30, the diversion capacity at the south Delta intake to Clifton Court Forebay in excess of 7,180 cubic feet per second shall be shared equally by the State and the United States. This Article does not alter the Cross-Valley Canal contractors' priority to pumping at the Harvey O. Banks Pumping Plant, as now stated in Revised Water Rights Decision 1641 (March 15, 2000).

4. Pursuant to Article 11, Exhibit A will be updated to conform with Delta standards established by the State Water Resources Control Board in the 1995 Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary.

5. Exhibit B shall be updated based on a joint operations study of the amendments as agreed to in this addendum.

6. Article 14(a) of the Agreement is amended to provide:

(a) Prior to December 31 of the fifth full year following execution of this agreement, and before December 31 of each fifth year thereafter, or within 365 days of the implementation of new or revised requirements imposed jointly on Central Valley Project and State Water Project operations by any federal or state agency, or prior to initiation of operation of a new or significantly modified facility of the United States or the State or more frequently if so requested by either party, the United States and the State jointly shall review the operations of both projects. The parties shall (1) compare the relative success which each party has had in meeting its objectives, (2) review operation studies supporting this agreement, including, but not limited to, the assumptions contained therein, and (3) assess the influence of the factors and procedures of Article 6 in meeting each party's future objectives. The parties shall agree upon revisions, if any, of the factors and procedures in Article 6, Exhibits B and D, and the Operation Study used to develop Exhibit B.

7. A new Article 14(c) is added to the Agreement to provide:

(c) For any triggering event requiring review under Article 14 that occurs after December 15, 2018, either party may move directly to the Advisory Board process. The

Advisory Board, consisting of one member designated by each party and a third member chosen by both parties, shall report its unanimous recommendations to both parties at a date not to exceed 180 days from which the matter was referred to the Advisory Board and the parties shall amend this agreement and immediately begin to operate in accordance with the recommendation. If the Advisory Board fails to make unanimous recommendations with the 180 day period, either party may unilaterally terminate this agreement.

THE UNITED STATES OF AMERICA

By _____
Commissioner, Bureau of Reclamation

THE DEPARTMENT OF WATER RESOURCES
OF THE STATE OF CALIFORNIA

By Karla A Nemeth
Director, Department of Water Resources

EXHIBIT B

WESTLANDS WATER DISTRICT BOARD OF DIRECTORS

MEETING OF DECEMBER 18, 2018

ITEM 5

SUBJECT:

Addendum to 1986 Coordinated Operations Agreement

DISCUSSION:

On December 12, 2018, the Bureau of Reclamation and the Department of Water Resources executed an addendum to the Agreement Between the United States of America and the State of California for Coordinated Operation of the Central Valley Project and State Water Project ("1986 Agreement"). The Addendum amends four elements of the 1986 Agreement to reflect the evolved manner in which the Central Valley Project ("CVP") and the State Water Project ("SWP") have been operated since the 1986 Agreement was signed.

Article 6(c) of the 1986 Agreement was amended to provide that each project's responsibility for making available storage withdrawals during balanced conditions to meet Sacramento Valley inbasin uses would vary depending on water year type, rather than the CVP 75% - SWP 25% sharing provided in the 1986 Agreement. The amended formula under Article 6(c) are:

Water Year Type	United States	State of California
Wet	80%	20%
Above Normal	80%	20%
Below Normal	75%	25%
Dry	65%	35%
Critical	60%	40%

Article 10(b) of the Agreement was amended to provide that the SWP will transport up to 195,000 acre-feet of CVP water through the California Aqueduct Reaches no later than November 30 of each year by direct diversion or by rediversion of stored CVP water at times those diversions do not adversely affect the State Water Project purposes or do not conflict with State Water Project contract provisions. If the diversion capacity at the south Delta intake to Clifton Court Forebay is permitted to operate in excess of 7,180 cubic feet per second during the July 1 through September 30, the SWP will provide available capacity at the Banks Pumping Plant to the CVP to divert or redivert 195,000 acre-feet, except when the Delta is in excess water conditions, in which case the diversion capacity at the south Delta intake to Clifton Court Forebay in excess of 7,180 cubic feet per second will be shared equally by the CVP and SWP.

A new Article 10(i) was added by the Addendum to the 1986 Agreement to provide for sharing of available export capacity when exports are constrained. During periods when exports are constrained by non-discretionary requirements imposed on the CVP and SWP south Delta exports by any federal or state agency, allowable available export capacity shall be shared by the following percentages:

	United States	State of California
Balanced Water Conditions	65%	35%
Excess Water Conditions	60%	40%

Sharing of available export capacity during balanced water conditions will be considered a first right of refusal for the CVP to use up to 65% of allowable export capacity.

Finally, Article 14 of the 1986 Agreement was amended to provide expedited review of the sharing formulas after the implementation of new or revised requirements imposed jointly on CVP and SWP operations by any federal or state agency, or prior to initiation of operation of a new or significantly modified facility of the CVP or SWP.

CVP water supply impacts resulting from these amendments will vary depending on water year type. Analysis of the amendments indicates that average allocations for south-of-Delta CVP agricultural water service contractors will increase from 40% under the sharing formulas established by the 1986 Agreement to 50% under the sharing formulas as amended by the Addendum. This average allocation does not include potential water supply benefits resulting from the implementation of the amended Article 10(b). Reclamation has estimated that Article 10(b) will increase the average allocation by approximately 5%.

RECOMMENDATION:

This item is presented for information purposes only.

EXHIBIT C

California cedes water to feds in Delta deal with Trump

BY DALE KASLER AND

RYAN SABALOW

DECEMBER 15, 2018 09:07 AM

Southern Californians could lose billions of gallons of water a year to Central Valley farmers under a deal Gov. Jerry Brown's administration has struck with water officials working for President Donald Trump.

There's no guarantee the agreement with Trump will accomplish what Brown's team is seeking: a lasting compromise on environmental regulations that could stave off significant water shortfalls for farms and cities across California. A powerful state agency, the State Water Resources Control Board, hasn't yet signed off on Brown's compromise environmental proposal. Environmental groups have called the governor's idea woefully insufficient to save ailing fish populations.

Brown's administration also made a separate concession to the Trump administration on the governor's controversial Delta tunnels project, to the dismay of environmental groups that oppose the tunnels.

The various deals began to come to light Wednesday, as the state water board, made up of Brown appointees, was about to vote on a plan that would take substantial amounts of water from cities and farms and leave it in the state's rivers to assist struggling fish species such as salmon and steelhead.

Hoping the board would back down, Brown's administration rolled out a bold but tentative water-sharing agreement supported by irrigation districts and urban water suppliers. Under the proposed settlements, farms and cities that rely on the State Water Project and the federal government's Central Valley Project agreed to surrender a smaller volume of water. They also pledged to kick in hundreds of millions of dollars in cash for habitat improvement projects, to boost the ailing fish.

Brown's compromise also got support from water agencies that don't take water from either the state or federal project, but stood to lose supplies to the state board's plan. They include the city of San Francisco, which relies heavily on water from the Tuolumne River.

For state officials, forging this grand compromise appears to have come at a price to the State Water Project and its biggest customer, the Metropolitan Water District of Southern California.

Under a separate deal made Wednesday with the Trump administration on rules governing Delta pumping, the State Water Project will relinquish an average of 100,000 acre-feet of water a year to customers of the federal Central Valley Project, which mainly serves farmers in the San Joaquin Valley, said John Leahigh, the state project's executive manager for water operations.

In dry years, the State Water Project could cough up as much as 200,000 acre-feet, Leahigh said. That's about one-fifth the capacity of Folsom Lake.

Jeff Kightlinger, general manager of Metropolitan, said federal officials signaled they wouldn't participate in Brown's compromise plan unless the state gave up some water through the new rules governing the Delta pumping.

Kightlinger defended the horse-trading, saying the governor's compromise on environmental regulations is crucial to avoiding severe water cutbacks — and the compromise would go nowhere without participation from the federal Central Valley Project water agencies.

"The Central Valley contractors, that was pretty critical, to get them on it," said Kightlinger. "They're just too big."

Karla Nemeth, Brown's director of the state Department of Water Resources, said the deals were separate.

“I don’t view them as a quid pro quo,” she said.

She added that the state gained other concessions from the Trump administration. Among other things, Nemeth said the federal Bureau of Reclamation, which runs the Central Valley Project, signed a separate pact agreeing to a cost-sharing plan worth “several hundred million dollars” on a series of habitat-restoration projects the state has undertaken in the Delta in the past two years.

All told, “I don’t think we gave away the store,” said Nemeth, whose agency runs the State Water Project.

Leahigh said the state didn’t give up that much water: “Certainly anytime you’re going to make an adjustment there’s going to be winners and losers, but we’re talking about 100,000 to 200,000 acre-feet. That’s in the context of the delivery of millions of acre-feet between the two projects. It’s not a huge number.” An acre-foot is 326,000 gallons, enough to supply an average California household for at least a year. The city of Sacramento’s water utility provided its customers around 86,000 acre-feet in 2015.

Asked about the various agreements, Erin Curtis, spokeswoman for the U.S. Bureau of Reclamation, said, “We want to emphasize Reclamation’s longstanding partnership with the state of California. Recent discussions have provided an opportunity to work collaboratively on issues now and into the future.”

As for the Delta tunnels, Erin Mellon, a spokeswoman for the Department of Water Resources, said Brown’s administration gave federal officials a “no-harm agreement” that says the Central Valley Project’s customers won’t lose any water if the tunnels are built. If they do, they’ll get compensated in cash or some other water supply.

South state water agencies that pull water from the Delta are supposed to pay for the tunnels, which would reroute how water reaches the giant federal and state pumping stations at the south end of the estuary. The farmers who rely on the Central Valley Project have so far refused to pay their share, causing concern among some that they might lose water if the tunnels get built.

In return for the "no-harm agreement," Mellon said the federal Bureau of Reclamation, which runs the CVP, pledged to continue helping the state seek crucial permits needed before construction can begin.

Environmentalists said Brown's administration is capitulating to Trump's desire to ship more water to Valley farmers, to the further detriment of the Delta and the estuary's fragile ecosystem.

"It appears that California's salmon, thousands of fishing jobs, and the health of the Bay Delta estuary are the sacrificial lambs in these series of agreements between the Trump and the Brown administrations," Doug Obegi, a lawyer for the Natural Resources Defense Council, said in an email. "It's outrageous that they are trying to sacrifice California's environment to appease Trump."

The series of deals capped months of negotiations — and not-so-veiled threats from Trump — over how to allocate the river water that flows into and through the Sacramento-San Joaquin Delta, the hub of California's man-made north-to-south delivery system.

The State Water Project and the feds' Central Valley Project both take water from the rivers and deliver them to their respective customers through giant pumps located a few miles apart in the south Delta.

In July, the State Water Resources Control Board announced it was ready to move ahead with a long-awaited plan to force farms and cities to leave far more water in those rivers for Chinook salmon and other fish species. Their numbers have dwindled in recent decades, in part because of the damaging effects of the pumps.

The Trump administration publicly threatened to sue the water board. U.S. Interior Secretary Ryan Zinke issued a memo declaring "the time for action is now" on a plan to move more water to Valley farmers. He then told the state he wanted to renegotiate the "coordinated operation agreement," a 1986 document that governs how the two projects work in tandem to deliver water through the Delta.

A tentative truce began to emerge Wednesday. The state and federal governments signed an update to the 1986 agreement. It gives the federal project more leeway to make deliveries when there's plenty of water in the Delta but pumping operations are limited by rules designed to protect endangered fish from the powerful effects of the pumps themselves. It also relieves the federal project of some of its obligations to release water from its Shasta and Folsom reservoirs in dry years to put cool water into the system to help Chinook salmon, Leahigh said. Bottom line, the new deal takes water from the State Water Project and gives it to the feds' Central Valley Project.

At about the same time that agreement was signed, Nemeth and Chuck Bonham, director of the state Department of Fish and Wildlife, presented the state water board with Brown's big environmental compromise — his alternative to the board's proposed wholesale reallocation of river water to fish.

Under Brown's plan, farm and urban water districts from throughout the Central Valley would cough up some of their water, although not as much as the board has been contemplating. In addition, those districts would also tax themselves to the tune of $800 million to help pay for a series of habitat restoration projects — more spawning grounds and the like — to help the fish. The state would kick in $900 million of its own.

The water districts said the Brown administration's plan makes more sense for the fish — and is far preferable to giving up water in the volumes the state water board has been considering.

If the state board goes ahead with its plan, water deliveries out of the Delta will fall "by an excess of 1 million acre-feet, which would have a dramatic effect on our water supply," said Tom Birmingham of Westlands Water District, a Central Valley Project customer that serves farmers on Fresno and Kings counties.

The fate of the governor's compromise is decidedly uncertain.

After hours of debate and public testimony, the state water board voted 4-1 to approve its proposal to reallocate billions of gallons of water to the fish from the San Joaquin

River and its tributaries. The board still hasn't voted on a similar proposal covering the Sacramento River watershed, including the American and Feather rivers.

The board didn't close the door on the governor's compromise plan, though. It said it would study the Brown compromise more closely, and it encouraged water agencies on the Stanislaus and Merced rivers, which haven't yet agreed to the governor's plan, to explore compromise deals too.

Environmentalists, however, say the plan is sorely lacking in specifics and doesn't include nearly enough water to stave off extinction for the fish. They also said many of the habitat restoration projects to be funded by the governor's compromise are already in the pipeline.

Barry Nelson, a water policy advocate for a number of fishing and environmental groups, was incredulous that the state would agree to part with so much water to gain support for a plan that he thinks the state water board will ultimately reject.

"They traded 100 to 200,000 acre feet for that document?" Nelson said.

https://www.sacbee.com/latest-news/article223114775.html

EXHIBIT D

MEMORANDUM OF AGREEMENT

for the

IMPLEMENTATION OF THE 2008 and 2009 BIOLOGICAL OPINIONS FOR THE COORDINATED LONG-TERM OPERATION OF THE CENTRAL VALLEY PROJECT AND STATE WATER PROJECT

by and between

THE CALIFORNIA DEPARTMENT OF WATER RESOURCES OF THE STATE OF CALIFORNIA
AND
THE UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF RECLAMATION

This Memorandum of Agreement ("Agreement") is entered into this 12TH day of DECEMBER, 2018, pursuant to the provisions of the California Water Resources Development Bond Act and other applicable laws of the State of California, and the Reclamation Act of June 17, 1902 (32 Stat. 388), as amended and supplemented, including but not limited to the Act of August 26, 1937 (50 stat. 844), as amended and supplemented, between the Department of Water Resources of the State of California ("DWR") and the United States Department of the Interior Bureau of Reclamation ("Reclamation"). DWR and Reclamation are referred to individually as "Party" and collectively as "Parties" in this Agreement.

1.0 RECITALS OF THE MEMORANDUM

1.1 The United States, through Reclamation, has constructed and is operating the Central Valley Project, California ("CVP"), for diversion, storage, carriage, distribution and beneficial use, for flood control, irrigation, municipal, domestic, industrial, fish and wildlife mitigation, protection and restoration, generation and distribution of electric energy, salinity control, navigation and other beneficial uses, of waters of the Sacramento River, the American River, the Trinity River, and the San Joaquin River and their tributaries.

1.2 DWR is a State agency within the California Natural Resources Agency responsible for constructing, operating, and maintaining the State Water Project ("SWP") storage and conveyance facilities located throughout California, including pumping facilities located in the Delta. The SWP is composed of 21 reservoirs and lakes and 11 other storage facilities with a combined storage capacity of more than 4 million acre-feet; five hydroelectric power plants and four pumping-generated plants; and more than 700 miles of major canals and aqueducts.

1.3 Pursuant to Sections 7.(a)(1) and (a)(2) of the Endangered Species Act of 1973, as amended and supplemented ("ESA"), Reclamation is to utilize its authorities in furtherance of the purposes of the ESA, and insure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species.

1.4 On December 15, 2008, the United States Fish and Wildlife Service ("USFWS") issued a Biological Opinion on the Coordinated Long-Term Operation of the CVP and SWP ("USFWS BiOp"). The USFWS BiOp includes, among other things, monitoring and reporting requirements, Reasonable and Prudent Alternative ("RPA") Actions and Components, Reasonable and Prudent Measures ("RPM"), Terms and Conditions, and Conservation Recommendations.

1.5 On June 4, 2009, the National Marine Fisheries Service ("NMFS") issued a Biological Opinion and Conference Opinion on the Coordinated Long-Term Operation of the CVP and SWP ("NMFS BiOp"). The NMFS BiOp includes, among other things, monitoring and reporting requirements, RPA Actions and Components, RPM, Terms and Conditions, and Conservation Recommendations.

1.6 On August 2, 2016, DWR and Reclamation jointly requested the Reinitiation of Consultation on the Coordinated Long-Term Operation of the CVP and SWP, and by Presidential Memorandum, dated October 19, 2018, Reclamation shall issue a biological assessment by January 31, 2019, and USFWS and NMFS shall ensure issuance of their final biological opinions within 135 days thereafter.

1.7 The purpose of this Agreement is to: specifically identify funding for the joint and individual requirements for DWR and Reclamation that are set forth by the USFWS BiOp and the NMFS BiOp, and the subsequent and/or superseding biological opinions issued as described in Paragraph 1.6 (collectively referred to as "BiOps"); establish procedures for cooperation and collaboration; establish procedures for tracking and reporting expenditures; establish procedures to prioritize activities to satisfy the requirements of the BiOps; and, establish procedures for funding to implement the BiOps and this Agreement.

2.0 TERMS AND CONDITIONS

2.1 Effective Date

This Agreement shall become effective upon the date first hereinabove written and shall remain in effect for the duration of the BiOps; or terminated by written mutual agreement of the Parties hereto; or, by any Party as provided in Paragraph 4.5 herein.

2.2 Designation of Responsibilities

The Parties acknowledge and agree that the requirements in the BiOps are the joint responsibility of DWR and Reclamation. The costs of these joint responsibilities are to be shared equally (50-percent to each Party), except as provided in Exhibits B and C herein. DWR and Reclamation shall be jointly responsible for satisfying the requirements set forth in Exhibit A. DWR shall be individually responsible for satisfying the requirements set forth in Exhibit B. Reclamation shall be individually responsible for satisfying the requirements set forth in Exhibit C. Exhibits A, B, and C to this Agreement may be revised at any time upon mutual written agreement of the Parties and without amendment of this Agreement; *Provided,* That Exhibits A, B, and C shall be revised by the Parties, without amendment of this Agreement, within ninety calendar days, unless otherwise modified by mutual agreement of the Parties, of the acceptance by Reclamation of the final biological opinions described in Paragraph 1.6 herein.

Within one month of the date hereinabove written, the Parties, recognizing this joint and shared responsibility, shall assign costs to DWR and Reclamation for each of the requirements in Exhibit A. In determining this proportional assignment, the Parties shall consider the existing expertise and knowledge of each Party, availability of existing and future funding, property and facility availability and requirements, costs of staff directly working on these requirements, and shall not include any indirect or overhead costs of any State or Federal agency. Nothing in this Agreement shall prohibit a Party from providing resources to the other Party's individual requirements, and such contributions shall be considered, upon mutual agreement of the Parties, as a contribution towards that Parties' joint responsibilities identified in Exhibit A.

2.3 Priority Projects and Actions

The Parties, acknowledge that each has limited resources to contribute to satisfy the joint and individual requirements identified in Exhibits A, B, and C hereto, and agree that the greatest benefit will result when the Parties cooperate and coordinate in the allocation of resources, including but not limited to financial resources, to mutually agreed upon "Priority Projects and Actions". Within one month of the date first hereinabove written, the Parties shall: (i) identify and prioritize all of the Priority Projects and Actions; (ii) identify the estimated resources need and assign costs to DWR and Reclamation for each of the Priority Projects and Actions; and, (iii) select one or more Priority Projects or Actions to which the Parties agree to first contribute staff time, expertise, knowledge, money or property. This listing of Priority Projects and Actions shall be incorporated as Exhibit D to this Agreement, and shall be updated annually with the Annual Financial Review, and more frequently if necessary, upon written mutual agreement of the Parties and without amendment to this Agreement. For each

Priority Projects and Action identified in Exhibit D, the Parties shall produce and adopt a work plan setting forth, at a minimum, the:

(i) Leads and key staff; and

(ii) Schedule and milestones; and

(iii) Estimated budget and resource needs.

3.0 COOPERATION AND COORDINATION

3.1 Cooperation and Coordination

In order to further their mutual goals and objectives, the Parties shall communicate, coordinate, and cooperate with each other in order to ensure the efficient and effective administration of this Agreement and satisfaction of the requirements identified in Exhibits A, B, C and D hereto. In general, the Parties agree to:

(i) Contribute equitable staff time, expertise, knowledge, money, and/or property as described in Paragraph 2.2 herein.

(ii) Demonstrate flexibility in expenditures on activities to maximize the accomplishment of requirements.

(iii) Work together in good faith to maximize efficiency, share knowledge, and coordinate.

(iv) Openly share their respective science and participate in a shared framework for biological and water supply benefits.

(v) Meet as provided in this Agreement, and as otherwise necessary.

3.2 Annual Financial Review Process and Meetings

No later than December 31 of each year this Agreement is in effect, the Parties agree to provide the Directors of DWR and Reclamation a joint "Annual Financial Review", which will set forth, at a minimum:

(i) A succinct narrative describing significant matters relating to compliance with the BiOps, including significant accomplishments of the prior calendar year.

(ii) Each Party's contributions, for the prior calendar year, towards the satisfaction of the requirements listed on Exhibits A, B, C and D hereto.

(iii) Forecasted costs for the next five years.

Within three months of the date first hereinabove written, DWR and Reclamation will adopt an agreed upon financial reporting plan further detailing the annual financial review and reporting process.

4.0 MISCELLANEOUS PROVISIONS

4.1 Contacts

Each Party will designate a point of contact and alternate who will be responsible for administration of this Agreement on behalf of each Party. The point of contacts will meet at least quarterly to discuss cost-sharing, project update, and other significant information. Within one week of the date hereinabove written, each Party shall provide in writing to the other party with its initial point of contact and alternate, and each Party may change its point of contact and/or alternate by written notice to the other Party.

4.2 No Delegation of Authority

Nothing in this Agreement shall cause, or shall be deemed to cause, any delegation of authority from any Party in this Agreement to any other Party.

4.3 Severability

In the event one or more provisions contained in this Agreement is rendered illegal or impossible, or implementation is otherwise barred in any way by, executive or legislative brand action, or by policy decisions therein, the Parties will meet and confer to determine whether such portion will be deemed severed from this Agreement and the remaining parts of the Agreement will remain in full force and effect as though such illegal, impossible, or barred portion had never been part of this Agreement.

4.4 Preservation of Rights and Authorities

All provisions of this Agreement are intended and will be interpreted to be consistent with all applicable provisions of State and Federal law. The Parties recognize that each party to this Agreement has specific statutory and regulatory authority and responsibilities, and that actions of these public agencies must be consistent with applicable procedural and substantive requirements. Nothing in this Agreement is intended to, nor will have the effect of, constraining or limiting any public entity in carrying out its statutory responsibilities. Nothing in this Agreement constitutes an admission by any party as to the proper interpretation of any provision of law, nor is anything in this Agreement is intended to, nor will it have the effect of, waiving or limiting any public entity's rights and remedies under any applicable law. The purpose of this Agreement is to determine the allocation of costs to satisfy the requirements of the BiOps as identified in Exhibits A, B, and C hereto.

4.5 Dispute Resolution

In the event of a dispute regarding interpretation or implementation of this Agreement, a party shall provide written notice of the dispute to the other Party. The Parties shall endeavor to resolve the dispute by meeting within 30 days of the written notice, or at a later date by mutual written agreement by the Parties. The representative for each party to this meeting shall be an individual authorized by that party to resolve interpretation of this Agreement or implementation issues. If the dispute is unresolved following the meeting, the Director of DWR and the Regional Director of Reclamation or their designees shall meet within 30 days (Directors' meeting), or at a later date by mutual written agreement of the Parties, after the initial meeting to resolve the dispute. If the dispute still remains unresolved, the Parties may elect to terminate this Agreement. Except as specifically provided, nothing herein is intended to waive or abridge any right or remedy that any party may have.

4.6 Federal - Availability of Appropriations

The expenditure or advance of any money or the performance of any obligation of Reclamation under this Agreement shall be contingent upon appropriation or allotment of funds. Absence of appropriation or allotment of funds to the United States shall not relieve DWR from any obligations under this Agreement. No liability shall accrue to the United States in case funds are not appropriated or allotted.

4.7 State – Availability of Funds

The commitments and obligations under this Agreement of the State, by and through DWR, are subject to the availability of funds. Absence of funds to the State shall not relieve Reclamation from any obligations under this Agreement. No liability shall accrue to the State for failure to perform any obligation under this Agreement in the event that funds are not available.

4.8 Drafting Considerations

This Agreement has been negotiated and reviewed by the Parties, each of whom is sophisticated in the matters to which this Agreement pertains and no one party shall be considered to have drafted any articles in this Agreement.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement on the day and year first written above.

CALIFORNIA DEPARTMENT OF WATER RESOURCES:

Karla Nemeth, Director

12-12-18

BUREAU OF RECLAMATION:

Michael Ryan, Regional Director