

State of California
State Water Resources Control Board
DIVISION OF WATER RIGHTS
P.O. Box 2000, Sacramento, CA 95812-2000
Info: (916) 341-5300, FAX: (916) 341-5400, Web: <http://www.waterboards.ca.gov/waterrights>

PROTEST- PETITION

This form may also be used for objections

PETITION FOR TIME EXTENSION, CHANGE, TEMPORARY URGENT CHANGE OR TRANSFER ON

APPLICATION _____ PERMIT * _____ LICENSE _____

OF *Permits 16478, 16479, 16481 and 16482 of DWR for the SWP; and
*Permits 11315, 11316, 11967, 11968, 11969, 11971, 11973, 12364,
12721, 12722, and 12723 of Bureau of Reclamation for the CVP

I (We) have carefully read the notice (state name): NOTICE OF PETITION, REQUESTING CHANGES IN WATER RIGHTS OF THE DEPARTMENT OF WATER RESOURCES AND U.S. BUREAU OF RECLAMATION FOR THE CALIFORNIA WATERFIX PROJECT, dated October 30, 2015

Address, email address and phone number of protestant or authorized agent:

DOWNEY BRAND LLP Kevin O'Brien
621 Capitol Mall, 18th Fl. kobrien@downeybrand.com
Sacramento, CA 95814 TEL (916) 444-1000

ON BEHALF OF: North Delta Water Agency (NDWA) & Member Districts (See Attachment 1)

Attach supplemental sheets as needed. To simplify this form, all references herein are to protests and protestants although the form may be used to file comments on temporary urgent changes and transfers.

Protest based on ENVIRONMENTAL OR PUBLIC INTEREST CONSIDERATIONS (Prior right protests should be completed in the section below):

- the proposed action will not be within the State Water Resources Control Board's jurisdiction
- not best serve the public interest
- be contrary to law
- have an adverse environmental impact

State facts which support the foregoing allegations: See Attachments 1-3

Under what conditions may this protest be disregarded and dismissed? (Conditions should be of a nature that the petitioner can address and may include mitigation measures.)

NDWA is working to develop proposed terms and conditions that would be sufficient to allow NDWA to dismiss its protest. NDWA plans to submit those proposed terms and conditions during the SWRCB's hearing on DWR's and Reclamation's Petition. In general, those terms and conditions would require DWR and Reclamation to operate the State Water Project and the Central Valley Project in a manner that would (i) eliminate the potential adverse impacts to NDWA and the

environment, as described in this Protest, and (ii) ensure compliance with all terms and conditions of the 1981 Contract.

Protest based on INJURY TO PRIOR RIGHTS:

To the best of my (our) information and belief the proposed change or transfer will result in injury as follows:

See Attachments 1 and 2

Protestant claims a right to the use of water from the source from which petitioner is diverting, or proposes to divert, which right is based on (identify type of right protestant claims, such as permit, license, pre-1914 appropriative or riparian right):

See Attachments 1 and 2

List permit or license or statement of diversion and use numbers, which cover your use of water (if adjudicated right, list decree).

See Attachments 1 and 2

Where is your diversion point located? * 1/4 of 1/4 of Section , T , R , B&M

See Attachments 1 and 2

If new point of diversion is being requested, is your point of diversion downstream from petitioner's proposed point of diversion?

See Attachments 1 and 2

The extent of present and past use of water by protestant or his predecessors in interest is as follows:

See Attachments 1 and 2

Under what conditions may this protest be disregarded and dismissed?

NDWA is working to develop proposed terms and conditions that would be sufficient to allow NDWA to dismiss its protest. NDWA plans to submit those proposed terms and conditions during the SWRCB's hearing on DWR's and Reclamation's Petition. In general, those terms and conditions would require DWR and Reclamation to operate the State Water Project and the Central Valley Project in a manner that would (i) eliminate the potential adverse impacts to NDWA, as described in this Protest, and (ii) ensure compliance with all terms and conditions of the 1981 Contract.

All protests must be signed by the protestant or authorized representative:

Signed: Ken M. O'Brien Date: 1/5/16

All protests must be served on the petitioner. Provide the date served and method of service used. See attached Proof of Service

STATE WATER RESOURCES
CONTROL BOARD

2016 JAN -5 AM 11:04

DIV OF WATER RIGHTS
SACRAMENTO

Attachment 1

Attachment 1 to Protest of North Delta Water Agency & Member Districts to California WaterFix Petition for Change

I. Introduction

North Delta Water Agency (NDWA) was formed by a special act of the Legislature in 1973. (North Delta Water Agency Act, Chapter 283, Statutes of 1973). Its boundaries encompass approximately 277,000 acres including substantially all of the Sacramento-San Joaquin Delta, as defined in Water Code Section 12220, situated within Sacramento, Yolo and Solano Counties. NDWA also includes lands in northeastern San Joaquin County comprising New Hope Tract, Canal Ranch and Staten Island. Reclamation District 999, Reclamation District 2060 and Reclamation District 2028 (collectively, the "Districts") are each members of NDWA and exercise independent water rights within the NDWA service area.

NDWA was formed to represent northern Delta interests in negotiating a contract with both the U.S. Bureau of Reclamation (Reclamation) and the California Department of Water Resources (DWR) in order to mitigate the water rights impacts of the State Water Project and the Central Valley Project. From 1974 to 1979, NDWA, Reclamation and DWR determined the outflow necessary to meet water quality standards for irrigated agriculture and reviewed the water rights of landowners within NDWA's boundaries. The agencies also evaluated the Delta channels' historical function as natural seasonal storage.

In 1981, DWR and NDWA executed a Contract for the Assurance of a Dependable Water Supply of Suitable Quality (1981 Contract), a copy of which is submitted with this Protest as Attachment 2. The crux of the 1981 Contract is a guarantee by the State of California that, on an ongoing basis, it will ensure that suitable water will be available in the northern Delta for agriculture and other beneficial uses. The 1981 Contract requires DWR to operate the State Water Project to meet specified water quality criteria while providing enough water to satisfy all reasonable and beneficial uses of water within NDWA's boundaries. (1981 Contract, Art. 2.).

The 1981 Contract also contains provisions that expressly protect NDWA and its landowners from harm caused by changes in State Water Project (SWP) water conveyance infrastructure. For example, Article 6 of the 1981 Contract provides:

The State shall not convey SWP water so as to cause a decrease or increase in the natural flow, or reversal of the natural flow direction, or to cause the water surface elevation in Delta channels to be altered, to the detriment of Delta channels or water users within the Agency. If lands, levees, embankments, or revetments adjacent to Delta channels within the Agency incur seepage or erosion damage or if diversion facilities must be modified as a result of altered water surface elevations as a result of the conveyance of water from the SWP to lands outside the Agency after the date of this contract, the State shall repair or alleviate the damage, shall improve the channels as necessary, and shall be responsible for all diversion facility modifications required. (emphasis added)

In return for the various protections of the 1981 Contract, NDWA makes an annual payment to

DWR. (*Id.* Art. 10). The 1981 Contract remains in full force and effect.¹

NDWA and the Districts protest the joint California WaterFix Petition for Change (Petition) filed by the California Department of Water Resources and Reclamation (collectively Petitioners) on the grounds that the proposed change:

- would not best conserve the public interest or public trust uses;
- would be contrary to law;
- would have an adverse environmental effect; and
- would cause injury to legal users of water within NDWA.

NDWA and the Districts will present testimony and evidence in support of this Protest during Parts I and II of the SWRCB's evidentiary hearing on the Petition.

II. Identification of Protestants

North Delta Water Agency
910 K Street, Suite 310
Sacramento, CA 95814

Reclamation District 999
37363 Road 144
Clarksburg, CA 95612

Reclamation District 2060
1143 Crane Street, Suite 200
Menlo Park, CA 94025

Reclamation District 2068
7178 Yolano Road
Dixon, CA 95620

III. Basis for Protest

A. The Petition Fails to Satisfy the Requirements of the California Water Code and SWRCB Regulations.

1. The Petition does not Identify how the Proposed New Points of Diversion and Rediversion will Alter Diversions, Release and Return

¹In connection with the hearings that preceded the State Water Resources Control Board's adoption of Water Right Decision 1641, DWR and NDWA entered into a memorandum of understanding dated May 26, 1998 (MOU), which provides that DWR is responsible for any obligation imposed on NDWA to provide water to meet Bay-Delta flow objectives, so long as the 1981 Contract remains in effect. In Decision 1641, the State Water Board made the following findings and determinations: "Based on the agreement, the SWRCB finds that the DWR will provide the backstop for any water assigned to the parties within the NDWA as specified in the MOU. This decision assigns responsibility for any obligations of the NDWA to the DWR consistent with the MOU." (Decision 1641 at 66). The latter findings and determinations were upheld by the trial and appellate courts that subsequently reviewed Decision 1641.

Flows, and does not Describe how the Streamflow Regime will be Changed.

SWRCB regulations provide that a change petition must include “[t]he existing and the proposed diversion, release and return flow schedules if stored water is involved or if the streamflow regime will be changed.” Cal. Code Regs, tit. 23, § 794(a)(6). The Petition fails to satisfy these requirements. The Petition does not describe how the Project will be operated. Consequently, it does not identify the “proposed diversion, release and return flow schedules” as required by law.

Recognizing this infirmity, the Petition refers to flows and operations presented by Alternative 4A of the Bay Delta Conservation Plan/California Water Fix Partially Recirculated Draft Environmental Impact Report /Supplemental Draft Environmental Impact Statement (RDEIR/SDEIS) (Petition Environmental Form at 1 and Supplemental Information for the Petition at 12, 13). The Petition thus purports to rely on information in the RDEIR/SDEIS to satisfy the SWRCB’s requirements for information relating to the hydraulic and hydrologic impacts of the Project. However, neither the Petition nor the RDEIR/SDEIS contains sufficient definition of Central Valley Project (CVP) and State Water Project (SWP) operations if the SWRCB were to grant the Petition, particularly with respect to the amounts of CVP and SWP releases for spring outflow and the rates, quantities and timing of water diversions that will occur at the proposed new points of diversion and rediversion. For example, the RDEIR/SDEIS and the Petition explain that additional outflow may be required in order to meet the needs of threatened and endangered fish species (RDEIR/SDEIS at 4.1-13; Supplemental Information for Petition at 13). However, neither the Petition nor the RDEIR/SDEIS describe the quantity, timing or source of water for this additional outflow.

In addition, the Petition is silent on when water will be diverted from which of the existing and proposed points of diversion and in what quantities. The Petition and RDEIR/SDEIS do not specify how Petitioners would make the decision about where and when to divert water, or whether, where, and when to make releases from storage, making it impossible for any other entity – including the SWRCB – to understand the nature of the proposed Project operations or their impacts on others or on the environment.

2. The Petition Fails to Provide Evidence that the Change will not Injure Other Legal Users of Water.

Water Code § 1701.2(d) requires that a petition for change “include sufficient information to demonstrate a reasonable likelihood that the proposed change will not injure any other legal user of water.” The Petition fails to satisfy this requirement. To determine the effects of the Project, the Project must be (1) defined sufficiently for analysis, and (2) analyzed using tools that accurately reflect the environmental effects. As discussed above, the Petition purports to rely upon analysis presented in the RDEIR/SDEIS, yet the RDEIR/SDEIS lacks a fully defined Project description.

Furthermore, the RDEIR/SDEIS improperly analyzes key components of the portions of the Project that are defined. Inconsistencies between the Project description and the analysis contained in the RDEIR/SDEIS are detailed in NDWA’s comments on the December 2013 Draft Bay Delta Conservation Plan and Accompanying Draft Environmental Impact Report / Environmental Impact Statement (Draft EIR/EIS) and NDWA’s comments on the July 2015

RDEIR/SDEIS. NDWA's comments on the RDEIR/SDEIS are attached as Attachment 3 to this Protest.

One example of a major inconsistency between the Project description and the RDEIR/SDEIS analysis is the amount of assumed habitat restoration. The Project description includes only 59 acres of tidal marsh habitat, yet the RDEIR/SDEIS analysis assumes 25,000 acres of tidal marsh habitat. While the RDEIR/SDEIS claims that the inconsistency between the modeling assumptions and the Project description tends to overestimate water quality impacts, NDWA asserts that the opposite is true – the RDEIR/SDEIS underestimates impacts.

Finally, the hydrologic modeling that was done in connection with Alternative 4A (California WaterFix) was fundamentally flawed, as described in *Technical Comments on the Bay Delta Conservation Plan/California Water Fix Partially Recirculated Draft EIR/Supplemental Draft EIS*,² dated October 28, 2015 by MBK Engineers. MBK's evaluation of the California WaterFix modeling was undertaken on behalf of a coalition of water users, including NDWA, and will be jointly presented during the Part I hearing. In sum, the California WaterFix modeling has the following flaws:

1. The incorporation of climate change into the modeling ignores reasonably foreseeable adaptation measures.
2. The model was built on a benchmark study with numerous inaccuracies.
3. The model coding and data issues significantly skew the analysis and conflict with actual real-time operational objectives and constraints.
4. The "high outflow scenario" is not sufficiently defined for analysis.
5. Delta Cross-Channel operational assumptions overestimate October outflow.
6. San Luis Reservoir operational assumptions produce results inconsistent with real-world operations.

These omissions and flaws make it difficult for the SWRCB or any party to this proceeding to (i) know how the proposed change might alter the operations of the CVP and SWP, or (ii) analyze how the environment would be impacted or how legal users of water would be injured.

Moreover, depending on how the Project is operated, use of the proposed new points of diversion and rediversion may constitute the initiation of a new water right in which event the Petitioners would be required to file a new water right application.

B. The Proposed Change Would Not Best Conserve the Public Interest.

The proposed change would impair NDWA's ability to serve water users within NDWA as it has been doing for more than 40 years. Among other things the proposed change would impair NDWA's ability to effectively and efficiently administer the 1981 Contract. The proposed change would also diminish the value of water infrastructure within NDWA. Consequently, the proposed change would harm public health and safety and would not best conserve the public interest.

² MBK's Technical Comments will be submitted as exhibits in the Part I hearing on the Petition.

C. The Proposed Change Would Be Contrary to Law.

The proposed change would be contrary to law in several respects including but not limited to the following:

First, the Petition fails to satisfy the requirements of Water Code § 1701.2(d) because it does not “include sufficient information to demonstrate a reasonable likelihood that the proposed change will not injure any other legal user of water.” The Petition also fails to satisfy the requirements of SWRCB regulations, Cal. Code Regs, tit. 23, § 794(a)(6), because it does not identify the California WaterFix Project’s “proposed diversion, release and return flow schedules.”

Second, all of the lands within NDWA are located within the area protected by the Watershed of Origin portion (Water Code sec. 11460 *et seq.*) of the Central Valley Project Act and the Delta Protection Act (Water Code sec. 12220 *et seq.*) *i.e.*, all NDWA lands are within the “statutory Delta” defined in the Delta Protection Act. The proposed California WaterFix Project would violate the Watershed of Origin portion of the Central Valley Project Act and the Delta Protection Act by enabling the Project proponents to divert additional water from the Delta to the detriment of NDWA and legal users of water within NDWA.

Third, the Delta Reform Act, in Water Code section 85301, requires the Delta Stewardship Commission to adopt the Delta Plan, which serves as a blueprint to coordinate the activities of local, state and federal agencies in the Delta. One of the most important innovations of the Delta Plan was to recognize the unique character of the Delta and seek to preserve the “Delta as Place” despite the many challenges (manmade and natural) to the Delta. Because the Project would have all of the adverse effects described above, though, the Project would have an extremely detrimental effect on the natural environment and the human communities in the Delta. In those ways, the Project is not consistent with the Delta Plan’s requirement that any conveyance facilities preserve the Delta as a place where people may live, work and recreate.

Fourth, Petitioners have failed to satisfy the requirements of the California Environmental Quality Act and the National Environmental Policy Act.

D. The Proposed Change Would Have Adverse Environmental Impacts.

NDWA submitted extensive comments on the BDCP DEIR/DEIS and the Cal WaterFix RDEIR/SDEIS. Following is a brief summary of the key impacts the Project would cause:

1. Adverse Impacts on Fisheries.

As described in the comments submitted by the North State Water Alliance on the Bay-Delta Conservation Plan Draft EIR/S in July 2014 and on the Project’s RDEIR/SDEIS in October 2015, which are hereby incorporated by reference, the Project would have a very significant adverse effect on anadromous and pelagic fish in the Delta, potentially to the point of extirpation. Additional fisheries concerns are set forth in the following comment letters:

ICF Response to Bureau of Reclamation Red Flag Comments:
http://baydeltaconservationplan.com/Libraries/Dynamic_Document_Library_-

Archived/Effects_Analysis_-
Bureau_of_Reclamation_Red_Flag_Comments_and_Responses_5-31-12.sflb.ashx

ICF Response to Fishery Agency Red Flag Comments, April 2012:
[http://baydeltaconservationplan.com/Files/Effects_Analysis_-
_Fish_Agency_Red_Flag_Comments_and_Responses_4-25-12.pdf](http://baydeltaconservationplan.com/Files/Effects_Analysis_-_Fish_Agency_Red_Flag_Comments_and_Responses_4-25-12.pdf)

“NMFS Progress Assessment and Remaining Issues Regarding the Administrative Draft BDCP Document”, 4/4/13:
[http://baydeltaconservationplan.com/Libraries/Dynamic_Document_Library/NMFS_Progress_A
ssessment_Regarding_the_BDCP_Administrative_Draft_4-11-13.sflb.ashx](http://baydeltaconservationplan.com/Libraries/Dynamic_Document_Library/NMFS_Progress_Assessment_Regarding_the_BDCP_Administrative_Draft_4-11-13.sflb.ashx)

“NMFS Evaluation of Flow Effects on Survival in Vicinity of Proposed North Delta Diversions BDCP Admin Draft Dec 2012,” 4/4/13:
[http://baydeltaconservationplan.com/Libraries/Dynamic_Document_Library/NMFS_Evaluation
of_Flow_Effects_on_Survival_-_BDCP_Admin_Draft_-_4-11-13.sflb.ashx](http://baydeltaconservationplan.com/Libraries/Dynamic_Document_Library/NMFS_Evaluation_of_Flow_Effects_on_Survival_-_BDCP_Admin_Draft_-_4-11-13.sflb.ashx)

“U.S. Fish and Wildlife Service Staff BDCP Progress Assessment,” April 3, 2013:
[http://baydeltaconservationplan.com/Libraries/Dynamic_Document_Library/U_S_Fish_and_Wil
dlife_Service_Staff_BDCP_Progress_Assessment_4-11-13.sflb.ashx](http://baydeltaconservationplan.com/Libraries/Dynamic_Document_Library/U_S_Fish_and_Wildlife_Service_Staff_BDCP_Progress_Assessment_4-11-13.sflb.ashx)

2. Adverse Impacts to Water Quality.

As described in the comments submitted by the North State Water Alliance on the Bay-Delta Conservation Plan Draft EIR/S in July 2014 and on the Project’s RDEIR/SDEIS in October 2015, which are hereby incorporated by reference, the Project would have a significant adverse effect on water quality in the Delta, potentially failing to satisfy applicable water quality standards in the Delta. In addition, those adverse impacts on water quality create conditions in the Delta that are most hospitable to invasive species, which place further stresses on native species and further degrade water quality.

3. Adverse Impacts on Flood Control Facilities.

As documented in both the Bay-Delta Conservation Plan Draft EIR/S and the RDEIR/SDEIS, construction of the Project would have a variety of adverse effects on flood control facilities located in the Delta. Depending on the location of each of the Protestants, those effects involve the following:

a. Impacts on Levees.

In areas that would serve as haul routes or other construction corridors, the Project would require tens of thousands, if not hundreds of thousands, of truck trips over the period of construction. Delta levees – while adequate to prevent flooding for local areas – were never constructed to bear the tremendous loads associated with such construction. If the obligation to maintain these levees falls on local reclamation districts, those districts lack the resources to maintain levees given the burden of construction. The Project proponents have not indicated that they will

upgrade levees to meet the necessary standards at their own cost. Thus, the likely result of Project construction is to increase the likelihood of levee failures. It is noteworthy that the Project proponents use the likelihood of levee failure as a selling point for the Project (i.e., the levees in the Delta are so sub-standard that the Project is required) but then rely on those very same levees for one of the largest construction projects in history. If levees within NDWA were to fail, water quality degradation would likely occur within NDWA as a result of increased saline intrusion.

b. *Impacts on Drainage.*

One important element of the Project will be the disposal of many thousands of tons of drilling “muck,” which is a combination of soil and various contaminants needed for the operation of the drilling rigs. The Project proposes to dispose of muck in a series of muck piles tens of feet tall across the Delta. In the areas where those muck piles will be located, it is likely that the deposition of large amounts of earth will dramatically and irreversibly change historical drainage patterns within Delta islands. Depending on the location, these changes could cause internal flooding, additional subsidence of Delta soils, and the disruption of farming activity. All of those effects would be contrary to the public interest and are adverse effects on the environment. They would also violate Article 6 of the 1981 Contract.

c. *Impacts on Land Values.*

The Project’s effects on flood control levees, on drainage and water quality, among others, are likely to limit the crops that can be grown within the Delta and/or the yields of those crops. In either case, a reduction in cropping revenue means that there will be, over time, a reduction in land values and in the ability of local agencies to impose assessments to fund flood control works, drainage and other necessary infrastructure. If local agencies are unable to meet these needs, there is an increased likelihood of flooding, of further reductions in cropping revenues, etc. Thus, the Project is likely to have a very significant adverse effect on local agencies in the Delta, which is contrary to the public interest.

E. The Proposed Change Would Cause Injury to NDWA and to Legal Users of Water within NDWA.

1. Protestant’s Interests

As discussed above, NDWA and DWR are parties to the 1981 Contract, which provides for, among other things, water quality and water quantity assurances for water users within NDWA.

The recent appellate decision in the *State Water Resources Control Board Cases* (2006) 136 Cal.App.4th 674, 798-804, makes clear that NDWA, as a DWR contractor, is a legal user of water for purposes of Water Code section 1702 and is entitled to all the protections of a party with that status.

The Districts each hold riparian, appropriative and contractual water rights that are described in detail in section 3 below.

2. Injury to NDWA and the Districts

The RDEIR/SDEIS obscures and underestimates impacts of the proposed change, as detailed in NDWA's comments on the Draft EIR/S and the RDEIR/SDEIS. However, as discussed above in Section III.A of this Protest, operations of the California WaterFix Project have not been defined and the full nature and extent of injury that would be caused by the proposed change cannot be assessed and are likely to be greater than currently known. In summary, NDWA is informed and believes and thereon alleges that the proposed change would cause at least the following injuries to NDWA and legal users of water within NDWA:

- The proposed change would cause injury by causing significant degradation in the quality of the water available for diversion and use within NDWA. During 2015 DWR failed to satisfy certain of the water quality criteria set forth in the 1981 Contract, and certain of the water quality objectives contained in D-1641. Under certain hydrologic scenarios water quality degradation associated with the proposed Project would cause DWR to violate the terms and conditions of the 1981 Contract and would cause injury to water users within NDWA which divert and use water pursuant to riparian, pre-1914 appropriative rights and permits and licenses issued by the SWRCB, including the Districts;
- The proposed change would cause DWR to violate the requirement of Article 6 of the 1981 Contract that the State of California "shall not convey SWP water so as to cause a decrease or increase in the natural flow, or reversal of the natural flow direction, or to cause the water surface elevation in Delta channels to be altered, to the detriment of Delta channels or water users within the Agency;"
- The proposed change would cause DWR to violate the requirement of Article 6 of the 1981 Contract which requires that, if lands, levees, embankments, or revetments adjacent to Delta channels within NDWA incur seepage or erosion damage or if diversion facilities must be modified as a result of altered water surface elevations as a result of the conveyance of water from the SWP to lands outside NDWA, "the State shall repair or alleviate the damage, shall improve the channels as necessary, and shall be responsible for all diversion facility modifications required;" and
- The proposed change would cause injury by degrading the value of capital investments by water users within NDWA due to significant degradation in the quality of the water available for diversion at such water users' intakes and/or changes in Delta hydrodynamics;

3. Specific Information Regarding the Water Rights of Reclamation District 999, Reclamation District 2060 and Reclamation District 2068³

³ The water rights summaries included herein are not an exhaustive statement of all water rights claimed by the Districts. The Districts reserve the right to amend or supplement these water rights summaries in the future or assert additional water rights in other forums.

RECLAMATION DISTRICT 999

Riparian

Statement of Diversion and Use:	23958						
Points of Diversion (Upstream of proposed change):	POD	1/4 of	1/4 of	Section	Township	Range	B&M
	HQ Siphon	38°, 37334N, 121.55198 W			6N	4E	MD
Source:	Elk Slough						
Approx. Date of First Use:	1920						
Amount:	160 cfs						
Extent of Past Use:	Year	Amt. Directly Diverted or Collected to Storage (acre-feet)				Amt. Beneficially Used (acre-feet)	
	2014	--				--	
	2013	--				--	
	2012	2032				2032	
	2011	--				--	
	2010	--				--	
	Note:						
Extent of Present Use:	Presently, RD 999 intends to use all of the water available under its right to the extent that such water can be put to reasonable and beneficial use.						
Diversion Season:	November to April						
Purpose of Use:	Irrigation						

Appropriative

License:	001301						
Application:	001666						
Points of Diversion (Upstream of proposed change):	POD	1/4 of	1/4 of	Section	Township	Range	B&M
	Movable points on Sacramento River, Elk Slough, Sutter Slough, Miner Slough, and Sacramento River Deep Water Ship Channel adjacent to that portion of Reclamation District No. 999 lying South of the Willow Point Levee of said district and the South levee of Reclamation District No. 307, also known as the Lisbon District				5, 6, 7	3E, 4E	MD
Source:	Elk Slough, Miner Slough, Sacramento River, Sacramento River Deep Water Ship Channel, Sutter Slough						

Approx. Date of First Use:	February 11, 1920		
Amount:	160 cfs/ 58394.2 afy		
Extent of Past Use:	Year	Amt. Directly Diverted or Collected to Storage (acre-feet)	Amt. Beneficially Used (acre-feet)
	2014	1472	1472
	2013	915	915
	2012	1472	1472
	2011	1472	1472
	2010	1472	1472
	Note:		
Extent of Present Use:	Presently, RD 999 intends to use all of the water available under its right to the extent that such water can be put to reasonable and beneficial use.		
Diversion Season:	About May 1 to about October 31		
Purpose of Use:	Irrigation		

License:	001302						
Application:	004099						
Points of Diversion (Upstream of proposed change):	POD	1/4 of	1/4 of	Section	Township	Range	B&M
	Movable points on the Sacramento River Deep Water Ship Channel adjacent to the Westerly boundary of that portion of Reclamation District No. 999 bounded as follows: On the North by the South Levee of Reclamation District No. 900, on the East and South by Tule Canal (North of Lisbon Station), and on the West by the West Levee Borrow pit of said District No. 999			30, 31	T8	4E	MD
				6	7N	4E	MD
Source:	Sacramento River Deep Water Ship Channel						
Approx. Date of First Use:	July 18, 1924						
Amount:	4.82 cfs/ 1472.3 afy						
Extent of Past Use:	Year	Amt. Directly Diverted or Collected to Storage (acre-feet)		Amt. Beneficially Used (acre-feet)			
	2014	1472		1472			
	2013	915		915			
	2012	1472		1472			
	2011	1472		1472			
	2010	1472		1472			
	Note:						
Extent of Present Use:	Presently, RD 999 intends to use all of the water available under its right to the extent that such water can be put to reasonable and beneficial use.						
Diversion Season:	About May 1 to about October 1						
Purpose of Use:	Irrigation						

License:	001303						
Application:	004100						
Points of Diversion (Upstream of proposed change):	POD	1/4 of	1/4 of	Section	Township	Range	B&M
	Movable points on Sacramento River, Elk Slough, Sutter Slough, Miner Slough, and Sacramento River Deep Water Ship Channel adjacent to that portion of Reclamation District No. 999 lying South of the Willow Point Levee of said district and the South levee of Reclamation District No. 307, also known as the Lisbon District				5, 6, 7	3E, 4E	MD
Source:	Sacramento River, Elk Slough, Sutter Slough, Miner Slough, and Sacramento River Deep Water Ship Channel						
Approx. Date of First Use:	July 18, 1924						
Amount:	111.88 cfs/ 34174.8 afy						
Extent of Past Use:	Year	Amt. Directly Diverted or Collected to Storage (acre-feet)			Amt. Beneficially Used (acre-feet)		
	2014	34173			34173		
	2013	2562			2562		
	2012	34173			34173		
	2011	34173			34173		
	2010	34173			34173		
	Note:						
Extent of Present Use:	Presently, RD 999 intends to use all of the water available under its right to the extent that such water can be put to reasonable and beneficial use.						
Diversion Season:	About May 1 to about October 1						
Purpose of Use:	Irrigation						

License:	001304						
Application:	004101						
Points of Diversion (Upstream of proposed change):	POD	1/4 of	1/4 of	Section	Township	Range	B&M
		NW	NE	28	7N	4E	MD
	Movable points on Sacramento River, Elk Slough, Sutter Slough, Miner Slough, and Sacramento River Deep Water Ship Channel adjacent to that portion of Reclamation District No. 999 lying South of the Willow Point Levee of said district and the South levee of Reclamation District No. 307, also known as the Lisbon District				5, 6, 7	3E, 4E	MD
Source:	Sacramento River, Elk Slough, Sutter Slough, Miner Slough, and Sacramento River Deep Water Ship Channel						
Approx. Date of First Use:	July 18, 1924						
Amount:	12.8 cfs/ 3909.9 afy						
Extent of Past Use:	Year	Amt. Directly Diverted or Collected to Storage (acre-feet)			Amt. Beneficially Used (acre-feet)		

	2014	3910	3910
	2013	679	679
	2012	3910	3910
	2011	3910	3910
	2010	3910	3910
	Note:		
Extent of Present Use:	Presently, RD 999 intends to use all of the water available under its right to the extent that such water can be put to reasonable and beneficial use.		
Diversion Season:	About May 1 to about October 1		
Purpose of Use:	Irrigation		

Contractual

Contract with	Department of Water Resources
Other provider	North Delta Water Agency
Contract number	1981 North Delta Water Contract
Source from which contract water was diverted	Sacramento River
Point of diversion same as identified water right	Yes
Extent of Past Use:	The amount of water put to reasonable and beneficial use under the NDWA 1981 Contract is maintained and reported by the entities and landowners within NDWA's service area.
Extent of Present Use:	Presently, RD 999 intends to use all of the water available under its right to the extent that such water can be put to reasonable and beneficial use.

RECLAMATION DISTRICT 2060

Riparian

District lands are riparian to the Sacramento River or other Delta Channels. Statements of diversion and use are filed by individual landowners.

Appropriative

License:	002833						
Application:	003769						
Points of Diversion (Downstream of proposed change):	POD	1/4 of	1/4 of	Section	Township	Range	B&M
	Movable along the shoreline of Hastings Reclamation District No. 2060 in Sections 8, 9, 10, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, and 26				5N	3E	MD
Source:	Barker Slough, Cache Slough, Hastings Cut, Lindsey Slough, Unst, Wright Cut						
Approx. Date of First Use:	December 12, 1923						
Amount:	45 cfs/ 21957.4 afy						
Extent of Past Use:	Year	Amt. Directly Diverted or Collected to Storage (acre-feet)				Amt. Beneficially Used (acre-feet)	
	2014	6623				6623	
	2013	18124.9				18124.9	
	2012	15961				15961	
	2011	15147				15147	
	2010	10572				10572	
	Note:						
Extent of Present Use:	Presently, RD 2068 intends to use all of the water available under its right to the extent that such water can be put to reasonable and beneficial use.						
Diversion Season:	3/1 to 11/1						
Purpose of Use:	Irrigation; stockwatering						

Contractual

Contract with	Department of Water Resources
Other provider	North Delta Water Agency
Contract number	1981 North Delta Water Contract
Source from which contract water was diverted	Barker Slough, Cache Slough, Hastings Cut, Lindsey Slough, Unst, Wright Cut
Point of diversion same as identified water right	Yes
Extent of Past Use:	The amount of water put to reasonable and beneficial use under the NDWA 1981 Contract is maintained and reported by the entities and landowners within NDWA's service area.

Extent of Present Use:

Presently, RD 2060 intends to use all of the water available under its right to the extent that such water can be put to reasonable and beneficial use.

RECLAMATION DISTRICT 2068

Riparian/ Reuse

Statement of Diversion and Use:	000565						
Points of Diversion (Downstream of proposed change):	POD	1/4 of	1/4 of	Section	Township	Range	B&M
		SW	SW	24	6N	2E	MD
Source:	Drain W5						
Approx. Date of First Use:	1949						
Amount:							
Extent of Past Use:	Year	Amt. Directly Diverted or Collected to Storage (acre-feet)			Amt. Beneficially Used (acre-feet)		
	2014	--			--		
	2013	1532.83			1532.83		
	2012	1346.23			1346.23		
	2011	1183.3			1183.3		
	2010	1457			1457		
	Note:	*This project is an integrated water supply and regional recapture and reuse of ag tail water system.					
Extent of Present Use:	Presently, RD 2068 intends to use all of the water available under its right to the extent that such water can be put to reasonable and beneficial use.						
Diversion Season:							
Purpose of Use:	Irrigation; stockwatering						

Statement of Diversion and Use:	000566						
Points of Diversion (Downstream of proposed change):	POD	1/4 of	1/4 of	Section	Township	Range	B&M
		SW	SE	25	6N	2E	MD
Source:	Drain W8						
Approx. Date of First Use:	1950						
Amount:							
Extent of Past Use:	Year	Amt. Directly Diverted or Collected to Storage (acre-feet)			Amt. Beneficially Used (acre-feet)		
	2014	--			--		
	2013	1053.44			1053.44		
	2012	632.1			632.1		
	2011	590.89			590.89		
	2010	572.9			572.9		
	Note:	*This project is an integrated water supply and regional recapture and reuse of ag tail water system.					
Extent of Present Use:	Presently, RD 2068 intends to use all of the water available under its right to the extent that such water can be put to reasonable and beneficial use.						
Diversion Season:							
Purpose of Use:	Irrigation; stockwatering						

Statement of Diversion	000567
-------------------------------	--------

and Use:							
Points of Diversion (Downstream of proposed change):	POD	1/4 of	1/4 of	Section	Township	Range	B&M
		NE	NE	13	6N	2E	MD
Source:	Drain W						
Approx. Date of First Use:	1951						
Amount:							
Extent of Past Use:	Year	Amt. Directly Diverted or Collected to Storage (acre-feet)			Amt. Beneficially Used (acre-feet)		
	2014	--			--		
	2013	--			--		
	2012	--			--		
	2011	1166.96			1166.96		
	2010	1456.78			1456.78		
	Note:	*This project is an integrated water supply and regional recapture and reuse of ag tail water system.					
Extent of Present Use:	Presently, RD 2068 intends to use all of the water available under its right to the extent that such water can be put to reasonable and beneficial use.						
Diversion Season:							
Purpose of Use:	Irrigation; stockwatering						

Statement of Diversion and Use:	000568						
Points of Diversion (Downstream of proposed change):	POD	1/4 of	1/4 of	Section	Township	Range	B&M
		SE	NE	31	7N	3E	MD
Source:	Drain X						
Approx. Date of First Use:	1950						
Amount:							
Extent of Past Use:	Year	Amt. Directly Diverted or Collected to Storage (acre-feet)			Amt. Beneficially Used (acre-feet)		
	2014	--			--		
	2013	0*			0		
	2012	0			0		
	2011	0			0		
	2010	0			0		
	Note:	*This statement is consolidated with statement s000576. We are not abandoning this location.					
Extent of Present Use:	Presently, RD 2068 intends to use all of the water available under its right to the extent that such water can be put to reasonable and beneficial use.						
Diversion Season:							
Purpose of Use:	Irrigation; stockwatering						

Statement of Diversion and Use:	000569						
Points of Diversion (Downstream of proposed change):	POD	1/4 of	1/4 of	Section	Township	Range	B&M
		NE	NW	22	6N	2E	MD
Source:	Drain V						

Approx. Date of First Use:	1950		
Amount:			
Extent of Past Use:	Year	Amt. Directly Diverted or Collected to Storage (acre-feet)	Amt. Beneficially Used (acre-feet)
	2014	--	--
	2013	0*	0
	2012	0	0
	2011	0	0
	2010	0	0
	Note:	*Diversion consolidated with statement A002318. We are not abandoning this location	
Extent of Present Use:	Presently, RD 2068 intends to use all of the water available under its right to the extent that such water can be put to reasonable and beneficial use.		
Diversion Season:			
Purpose of Use:	Irrigation; stockwatering		

Statement of Diversion and Use:	000570							
Points of Diversion (Downstream of proposed change):	POD	1/4 of	1/4 of	Section	Township	Range	B&M	
		NW	SE	1	6N	2E	MD	
Source:	Drain V4							
Approx. Date of First Use:	1953							
Amount:								
Extent of Past Use:	Year	Amt. Directly Diverted or Collected to Storage (acre-feet)				Amt. Beneficially Used (acre-feet)		
	2014	--				--		
	2013	472.93				472.93		
	2012	148.85				148.85		
	2011	134.46				134.46		
	2010	147.77				147.77		
	Note:	A system wide collection and reuse of ag tailwater/stormwater in place, water use regulation enforced, vegetation control in distribution system, real time crop water demand and water application efficiency made available monthly, irrigation efficiency evaluations provided to growers, seasonal water use tracking monthly.						
Extent of Present Use:	Presently, RD 2068 intends to use all of the water available under its right to the extent that such water can be put to reasonable and beneficial use.							
Diversion Season:								
Purpose of Use:	Irrigation; stockwatering							

Statement of Diversion and Use:	000571							
Points of Diversion (Downstream of proposed change):	POD	1/4 of	1/4 of	Section	Township	Range	B&M	
		NW	SE	23	6N	2E	MD	
Source:	Drain W5							
Approx. Date of First Use:	1953							

Amount:			
Extent of Past Use:	Year	Amt. Directly Diverted or Collected to Storage (acre-feet)	Amt. Beneficially Used (acre-feet)
	2014	--	--
	2013	1795.93	1795.93
	2012	1790.85	1790.85
	2011	1504.88	1504.88
	2010	1852.12	1852.12
	Note:		
Extent of Present Use:	Presently, RD 2068 intends to use all of the water available under its right to the extent that such water can be put to reasonable and beneficial use.		
Diversion Season:			
Purpose of Use:	Irrigation; stockwatering		

Statement of Diversion and Use:	000572						
Points of Diversion (Downstream of proposed change):	POD	1/4 of	1/4 of	Section	Township	Range	B&M
		SE	SE	31	7N	3E	MD
Source:	Drain X						
Approx. Date of First Use:	1954						
Amount:							
Extent of Past Use:	Year	Amt. Directly Diverted or Collected to Storage (acre-feet)	Amt. Beneficially Used (acre-feet)				
	2014	--	--				
	2013	1009.25	1009.25				
	2012	802.53	802.53				
	2011	670.7	670.7				
	2010	873.23	873.23				
	Note:	This project is an integrated water supply and regional recapture and reuse of ag tailwater system.					
Extent of Present Use:	Presently, RD 2068 intends to use all of the water available under its right to the extent that such water can be put to reasonable and beneficial use.						
Diversion Season:							
Purpose of Use:	Irrigation; stockwatering						

Statement of Diversion and Use:	000573						
Points of Diversion (Downstream of proposed change):	POD	1/4 of	1/4 of	Section	Township	Range	B&M
		SW	NW	25	6N	2E	MD
Source:	Drain W8						
Approx. Date of First Use:	1956						
Amount:							
Extent of Past Use:	Year	Amt. Directly Diverted or Collected to Storage (acre-feet)	Amt. Beneficially Used (acre-feet)				
	2014	--	--				
	2013	58.25	58.25				

	2012	42.8	42.8
	2011	50.2	50.2
	2010	45.62	45.62
	Note:	This project is an integrated water supply and regional recapture and reuse of ag tailwater system.	
Extent of Present Use:	Presently, RD 2068 intends to use all of the water available under its right to the extent that such water can be put to reasonable and beneficial use.		
Diversion Season:			
Purpose of Use:	Irrigation; stockwatering		

Statement of Diversion and Use:	000574						
Points of Diversion (Downstream of proposed change):	POD	1/4 of	1/4 of	Section	Township	Range	B&M
		NW	SW	26	6N	2E	MD
Source:	Drain W8						
Approx. Date of First Use:	1957						
Amount:							
Extent of Past Use:	Year	Amt. Directly Diverted or Collected to Storage (acre-feet)			Amt. Beneficially Used (acre-feet)		
	2014	--			--		
	2013	872.56			872.56		
	2012	674.05			674.05		
	2011	626.39			626.39		
	2010	682.26			682.26		
	Note:	This project is an integrated water supply and regional recapture and reuse of ag tailwater system.					
Extent of Present Use:	Presently, RD 2068 intends to use all of the water available under its right to the extent that such water can be put to reasonable and beneficial use.						
Diversion Season:							
Purpose of Use:	Irrigation; stockwatering						

Statement of Diversion and Use:	000575						
Points of Diversion (Downstream of proposed change):	POD	1/4 of	1/4 of	Section	Township	Range	B&M
		NE	NW	30	7N	3E	MD
Source:	Drain Y4						
Approx. Date of First Use:	1958						
Amount:							
Extent of Past Use:	Year	Amt. Directly Diverted or Collected to Storage (acre-feet)			Amt. Beneficially Used (acre-feet)		
	2014	--			--		
	2013	0			0		
	2012	0			0		
	2011	0			0		
	2010	0			0		
	Note:	*Diversion consolidated with statement S000582.					
Extent of Present Use:	Presently, RD 2068 intends to use all of the water available under its right						

	to the extent that such water can be put to reasonable and beneficial use.
Diversion Season:	
Purpose of Use:	Irrigation; stockwatering; habitat

Statement of Diversion and Use:	000576						
Points of Diversion (Downstream of proposed change):	POD	1/4 of	1/4 of	Section	Township	Range	B&M
		NE	NE	31	7N	3E	MD
Source:	Drain X						
Approx. Date of First Use:	1946						
Amount:							
Extent of Past Use:	Year	Amt. Directly Diverted or Collected to Storage (acre-feet)				Amt. Beneficially Used (acre-feet)	
	2014	--				--	
	2013	2202.4				2202.4	
	2012	1741.59				1741.59	
	2011	1471.71				1471.71	
	2010	1540.31				1540.31	
	Note:						
Extent of Present Use:	Presently, RD 2068 intends to use all of the water available under its right to the extent that such water can be put to reasonable and beneficial use.						
Diversion Season:							
Purpose of Use:	Irrigation; stockwatering						

Statement of Diversion and Use:	000577						
Points of Diversion (Downstream of proposed change):	POD	1/4 of	1/4 of	Section	Township	Range	B&M
		NE	NW	15	6N	2E	MD
Source:	Drain V						
Approx. Date of First Use:	1946						
Amount:							
Extent of Past Use:	Year	Amt. Directly Diverted or Collected to Storage (acre-feet)				Amt. Beneficially Used (acre-feet)	
	2014	--				--	
	2013	1051.77				1051.77	
	2012	851.49				851.49	
	2011	769.88				769.88	
	2010	863.64				863.64	
	Note:						
Extent of Present Use:	Presently, RD 2068 intends to use all of the water available under its right to the extent that such water can be put to reasonable and beneficial use.						
Diversion Season:							
Purpose of Use:	Irrigation; stockwatering						

Statement of Diversion and Use:	000578
--	--------

Points of Diversion (Downstream of proposed change):	POD	1/4 of	1/4 of	Section	Township	Range	B&M
		SE	NE	12	6N	2E	MD
Source:	Drain W						
Approx. Date of First Use:	1947						
Amount:							
Extent of Past Use:	Year	Amt. Directly Diverted or Collected to Storage (acre-feet)			Amt. Beneficially Used (acre-feet)		
	2014	--			--		
	2013	1791.68			1791.68		
	2012	1596.56			1596.56		
	2011	1299.71			1299.71		
	2010	736			736		
	Note:						
Extent of Present Use:	Presently, RD 2068 intends to use all of the water available under its right to the extent that such water can be put to reasonable and beneficial use.						
Diversion Season:							
Purpose of Use:	Irrigation; stockwatering						

Statement of Diversion and Use:	000579						
Points of Diversion (Downstream of proposed change):	POD	1/4 of	1/4 of	Section	Township	Range	B&M
		NW	NE	24	6N	2E	MD
Source:	Drain W5						
Approx. Date of First Use:	1949						
Amount:							
Extent of Past Use:	Year	Amt. Directly Diverted or Collected to Storage (acre-feet)			Amt. Beneficially Used (acre-feet)		
	2014	--			--		
	2013	--			--		
	2012	--			--		
	2011	1059.3			1059.3		
	2010	1341.64			1341.64		
	Note:						
Extent of Present Use:	Presently, RD 2068 intends to use all of the water available under its right to the extent that such water can be put to reasonable and beneficial use.						
Diversion Season:							
Purpose of Use:	Irrigation; stockwatering						

Statement of Diversion and Use:	000580						
Points of Diversion (Downstream of proposed change):	POD	1/4 of	1/4 of	Section	Township	Range	B&M
		NE	NE	12	6N	2E	MD
Source:	Drain W						
Approx. Date of First Use:	1948						
Amount:							

Extent of Past Use:	Year	Amt. Directly Diverted or Collected to Storage (acre-feet)	Amt. Beneficially Used (acre-feet)
	2014	--	--
	2013	384.55	384.55
	2012	335.47	335.47
	2011	301.24	301.24
	2010	290.5	290.5
	Note:		
Extent of Present Use:	Presently, RD 2068 intends to use all of the water available under its right to the extent that such water can be put to reasonable and beneficial use.		
Diversion Season:			
Purpose of Use:	Irrigation; stockwatering		

Statement of Diversion and Use:	000581						
Points of Diversion (Downstream of proposed change):	POD	1/4 of	1/4 of	Section	Township	Range	B&M
		SW	NW	30	7N	3E	MD
Source:	Drain W						
Approx. Date of First Use:	1948						
Amount:							
Extent of Past Use:	Year	Amt. Directly Diverted or Collected to Storage (acre-feet)	Amt. Beneficially Used (acre-feet)				
	2014	--	--				
	2013	805.52	805.52				
	2012	624.09	624.09				
	2011	556.37	556.37				
	2010	454.09	454.09				
	Note:						
Extent of Present Use:	Presently, RD 2068 intends to use all of the water available under its right to the extent that such water can be put to reasonable and beneficial use.						
Diversion Season:							
Purpose of Use:	Irrigation; stockwatering						

Statement of Diversion and Use:	000582						
Points of Diversion (Downstream of proposed change):	POD	1/4 of	1/4 of	Section	Township	Range	B&M
		NW	NW	30	7N	3E	MD
Source:	Drain Y4						
Approx. Date of First Use:	1949						
Amount:							
Extent of Past Use:	Year	Amt. Directly Diverted or Collected to Storage (acre-feet)	Amt. Beneficially Used (acre-feet)				
	2014	--	--				
	2013	229.08	229.08				
	2012	472.26	472.26				
	2011	433.49	433.49				
	2010	403.27	403.27				

	Note:	Diversion includes statement S000575
Extent of Present Use:	Presently, RD 2068 intends to use all of the water available under its right to the extent that such water can be put to reasonable and beneficial use.	
Diversion Season:		
Purpose of Use:	Irrigation; stockwatering	

Statement of Diversion and Use:	000583						
Points of Diversion (Downstream of proposed change):	POD	1/4 of	1/4 of	Section	Township	Range	B&M
		NW	SE	18	7N	3E	MD
Source:	Drain Z						
Approx. Date of First Use:	1949						
Amount:							
Extent of Past Use:	Year	Amt. Directly Diverted or Collected to Storage (acre-feet)			Amt. Beneficially Used (acre-feet)		
	2014	--			--		
	2013	750.56			750.56		
	2012	503.78			503.78		
	2011	345.63			345.63		
	2010	211.29			211.29		
	Note:						
Extent of Present Use:	Presently, RD 2068 intends to use all of the water available under its right to the extent that such water can be put to reasonable and beneficial use.						
Diversion Season:							
Purpose of Use:	Irrigation; stockwatering						

Statement of Diversion and Use:	000584						
Points of Diversion (Downstream of proposed change):	POD	1/4 of	1/4 of	Section	Township	Range	B&M
		NW	NE	25	6N	2E	MD
Source:	Drain W7						
Approx. Date of First Use:	1951						
Amount:							
Extent of Past Use:	Year	Amt. Directly Diverted or Collected to Storage (acre-feet)			Amt. Beneficially Used (acre-feet)		
	2014	--			--		
	2013	767.14			767.14		
	2012	509.61			509.61		
	2011	509.71			509.71		
	2010	445.68			445.68		
	Note:						
Extent of Present Use:	Presently, RD 2068 intends to use all of the water available under its right to the extent that such water can be put to reasonable and beneficial use.						
Diversion Season:							
Purpose of Use:	Irrigation; stockwatering						

Statement of Diversion	0004995
-------------------------------	---------

and Use:							
Points of Diversion (Downstream of proposed change):	POD	1/4 of	1/4 of	Section	Township	Range	B&M
		SE	NE	18	7N	3E	MD
Source:	Drain Z						
Approx. Date of First Use:	1969						
Amount:							
Extent of Past Use:	Year	Amt. Directly Diverted or Collected to Storage (acre-feet)			Amt. Beneficially Used (acre-feet)		
	2014	--			--		
	2013	--			--		
	2012	--			--		
	2011	345.22			345.22		
	2010	266.8			266.8		
	Note:						
Extent of Present Use:	Presently, RD 2068 intends to use all of the water available under its right to the extent that such water can be put to reasonable and beneficial use.						
Diversion Season:							
Purpose of Use:	Irrigation; stockwatering						

Appropriative

License:	006103						
Application:	002318						
Points of Diversion (Downstream of proposed change):	POD	1/4 of	1/4 of	Section	Township	Range	B&M
		SE	SW	34	6N	2E	MD
Source:	Haas Slough						
Approx. Date of First Use:	April 22, 1921						
Amount:	200 cfs/ 97191.5 afa						
Extent of Past Use:	Year	Amt. Directly Diverted or Collected to Storage (acre-feet)			Amt. Beneficially Used (acre-feet)		
	2014	0*			9885		
	2013	56355			56355		
	2012	48898			48898		
	2011	55628			55628		
	2010	48543			48543		
	Note:	*The above is not zero.					
Extent of Present Use:	Presently, RD 2068 intends to use all of the water available under its right to the extent that such water can be put to reasonable and beneficial use.						
Diversion Season:	3/1 to 10/31						
Purpose of Use:	Irrigation; fish culture						

License:	009939						
Application:	019229						
Points of Diversion (Downstream of proposed change):	POD	1/4 of	1/4 of	Section	Township	Range	B&M
		SE	SW	34	6N	2E	MD
Source:	Haas Slough						

Approx. Date of First Use:	February 11, 1960		
Amount:	42 cfs/ 5153 afa		
Extent of Past Use:	Year	Amt. Directly Diverted or Collected to Storage (acre-feet)	Amt. Beneficially Used (acre-feet)
	2014	0*	3582
	2013	2057	2057
	2012	265	265
	2011	269	269
	2010	1030	1030
	Note:	*The above is not zero.	
Extent of Present Use:	Presently, RD 2068 intends to use all of the water available under its right to the extent that such water can be put to reasonable and beneficial use.		
Diversion Season:	11/1 to 3/1		
Purpose of Use:	Irrigation; recreational		

Permit:	019205						
Application:	024961						
Points of Diversion (Downstream of proposed change):	POD	1/4 of	1/4 of	Section	Township	Range	B&M
		NW	NW	35	7N	2E	MD
		NE	NW	22	6N	2E	MD
Source:	Dixon Drain						
Approx. Date of First Use:	April, 1984						
Amount:	42 cfs/ 5153 afa						
Extent of Past Use:	Year	Amt. Directly Diverted or Collected to Storage (acre-feet)			Amt. Beneficially Used (acre-feet)		
	2014	0*			3582		
	2013	2057			2057		
	2012	265			265		
	2011	269			269		
	2010	1030			1030		
	Note:	*The above is not zero.					
Extent of Present Use:	Presently, RD 2068 intends to use all of the water available under its right to the extent that such water can be put to reasonable and beneficial use.						
Diversion Season:	11/1 to 3/1						
Purpose of Use:	Irrigation; recreational						

Contractual

Contract with	Department of Water Resources
Other provider	North Delta Water Agency
Contract number	1981 North Delta Water Contract
Source from which contract water was diverted	Haas Slough
Point of diversion	Yes

same as identified water right	
Extent of Past Use:	The amount of water put to reasonable and beneficial use under the NDWA 1981 Contract is maintained and reported by the entities and landowners within NDWA's service area.
Extent of Present Use:	Presently, RD 2068 intends to use all of the water available under its right to the extent that such water can be put to reasonable and beneficial use.

IV. Protest Dismissal Terms

NDWA and the Districts are working to develop proposed terms and conditions that would be sufficient to allow NDWA and the Districts to dismiss their protest. NDWA and the Districts plan to submit those proposed terms and conditions during the SWRCB's hearing on DWR's and Reclamation's Petition. In general, those terms and conditions would require DWR and Reclamation to operate the State Water Project and the Central Valley Project in a manner that would (i) eliminate the potential impacts to NDWA and the Districts, as described in this Protest, and (ii) ensure compliance with all terms and conditions of the 1981 Contract.

V. Manner of Service of Protest

See attached Proof of Service.

Attachment 2

CONTRACT
BETWEEN
STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
AND
NORTH DELTA WATER AGENCY

FOR THE ASSURANCE
OF A DEPENDABLE WATER SUPPLY OF SUITABLE QUALITY

TABLE OF CONTENTS

Topic	Page
RECITALS	1
AGREEMENTS	1
1. Definitions	1
2. Water Quality	2
3. Monitoring	2
4. Emergency Provisions	2
5. Overland Water Supply Facilities	2
6. Flow Impact	2
7. Place of Use of Water	3
8. Scope of Contract	3
9. Term of Contract	3
10. Amount and Method of Payment for Water	3
11. Participation of the United States	3
12. Remedies	3
13. Comparable Treatment	4
GENERAL PROVISIONS	
14. Amendments	4
15. Reservation with Respect to State Laws	4
16. Opinions and Determinations	4
17. Successors and Assigns Obligated	4
18. Assignment and Subcontract	4
19. Books, Records, Reports and Inspections Thereof	4
20. Waiver of Rights	4
21. Assurance Relating to Validity of Contract	4
22. Notices	4
ATTACHMENTS	
Attachment A. Water Quality Contract Criteria	5
Part 1 of 4. Sacramento at Emmaton	
Part 2 of 4. North Fork Mokelumne at Walnut Grove, Sacramento at Walnut Grove, Steamboat Slough at Sutter Slough	
Part 3 of 4. San Joaquin at San Andreas Landing, Sacramento at Rio Vista	
Part 4 of 4. Mokelumne at Terminous	
Attachment B. Location of Water Quality Stations	6

**CONTRACT BETWEEN THE STATE OF CALIFORNIA DEPARTMENT OF WATER RESOURCES
AND THE NORTH DELTA WATER AGENCY
FOR THE ASSURANCE OF A DEPENDABLE WATER SUPPLY OF SUITABLE QUALITY**

THIS CONTRACT, made this 28 day of Jan., 1981, between the STATE OF CALIFORNIA, acting by and through its DEPARTMENT OF WATER RESOURCES (State), and the NORTH DELTA WATER AGENCY (Agency), a political subdivision of the State of California, duly organized and existing pursuant to the laws thereof, with its principal place of business in Sacramento, California.

RECITALS

(a) The purpose of this contract is to assure that the State will maintain within the Agency a dependable water supply of adequate quantity and quality for agricultural uses and, consistent with the water quality standards of Attachment A, for municipal and industrial uses, that the State will recognize the right to the use of water for agricultural, municipal, and industrial uses within the Agency, and that the Agency will pay compensation for any reimbursable benefits allocated to water users within the Agency resulting from the Federal Central Valley Project and the State Water Project, and offset by any detriments caused thereby.

(b) The United States, acting through its Department of the Interior, has under construction and is operating the Federal Central Valley Project (FCVP).

(c) The State has under construction and is operating the State Water Project (SWP).

(d) The construction and operation of the FCVP and SWP at times have changed and will further change the regimen of rivers tributary to the Sacramento-San Joaquin Delta (Delta) and the regimen of the Delta channels from unregulated flow to regulated flow. This regulation at times improves the quality of water in the Delta and at times diminishes the quality from that which would exist in the absence of the FCVP and SWP. The regulation at times also alters the elevation of water in some Delta channels.

(e) Water problems within the Delta are unique within the State of California. As a result of the geographical location of the lands of the Delta and tidal influences, there is no physical shortage of water. Intrusion of saline ocean water and municipal, industrial and agricultural discharges and return flows, tend, however, to deteriorate the quality.

(f) The general welfare, as well as the rights and requirements of the water users in the Delta, require that there be maintained in the Delta an adequate supply of good quality water for agricultural, municipal and industrial uses.

(g) The law of the State of California requires protection of the areas within which water originates and the watersheds in which water is developed. The Delta is such an area and within such a watershed. Part 4.5 of Division 6 of the California Water Code affords a first priority to provision of salinity control and maintenance of an adequate water supply in the Delta for reasonable and beneficial uses of water and relegates to lesser priority all exports of water from the Delta to other areas for any purpose.

(h) The Agency asserts that water users within the Agency have the right to divert, are diverting, and will continue to divert, for reasonable beneficial use, water from the Delta that would have been available therein if the FCVP and SWP were not in existence, together with the right to enjoy or acquire such benefits to which the water users may be entitled as a result of the FCVP and SWP.

(i) Section 4.4 of the North Delta Water Agency Act, Chapter 283, Statutes of 1973, as amended, provides that the Agency has no authority or power to affect, bind, prejudice, impair, restrict, or limit vested water rights within the Agency.

(j) The State asserts that it has the right to divert, is diverting, and will continue to divert water from the Delta in connection with the operation of the SWP.

(k) Operation of SWP to provide the water quality and quantity described in this contract constitutes a reasonable and beneficial use of water.

(l) The Delta has an existing gradient or relationship in quality between the westerly portion most seriously affected by ocean salinity intrusion and the interior portions of the Delta where the effect of ocean salinity intrusion is diminished. The water quality criteria set forth in this contract establishes minimum water qualities at various monitoring locations. Although the water quality criteria at upstream locations is shown as equal in some periods of some years to the water quality at the downstream locations, a better quality will in fact exist at the upstream locations at almost all times. Similarly, a better water quality than that shown for any given monitoring location will also exist at interior points upstream from that location at almost all times.

(m) It is not the intention of the State to acquire by purchase or by proceeding in eminent domain or by any other manner the water rights of water users within the Agency, including rights acquired under this contract.

(n) The parties desire that the United States become an additional party to this contract.

AGREEMENTS

1. **Definitions.** When used herein, the term:

(a) "Agency" shall mean the North Delta Water Agency and shall include all of the lands within the boundaries at the time the contract is executed as described in Section 9.1 of the North Delta Water Agency Act, Chapter 283, Statutes of 1973, as amended.

(b) "Calendar year" shall mean the period January 1 through December 31.

(c) "Delta" shall mean the Sacramento-San Joaquin Delta as defined in Section 12220 of the California Water Code as of the date of the execution of the contract.

(d) "Electrical Conductivity" (EC) shall mean the electrical conductivity of a water sample measured in millimhos per centimeter per square centimeter corrected to a standard temperature of 25° Celsius determined in accordance with procedures set forth in the publication entitled "Standard Methods of Examination of Water and Waste Water", published jointly by the American Public Health Association, the American Water Works Association, and the Water Pollution Control Federation, 13th Edition, 1971, including such revisions thereof as may be made subsequent to the date of this contract which are approved in writing by the State and the Agency.

(e) "Federal Central Valley Project" (FCVP) shall mean the Central Valley Project of the United States.

(f) "Four-River Basin Index" shall mean the most current forecast of Sacramento Valley unimpaired runoff as presently published in the California Department of Water Resources Bulletin 120 for the sum of the flows of the following: Sacramento River above Bend Bridge near Red Bluff; Feather River, total inflow to Oroville Reservoir; Yuba River at Smartville; American River, total inflow to Folsom Reservoir. The May 1 forecast shall continue in effect until the February 1 forecast of the next succeeding year.

(g) "State Water Project" (SWP) shall mean the State Water Resources Development System as defined in Section 12931 of the Water Code of the State of California.

(h) "SWRCB" shall mean the State Water Resources Control Board.

(i) "Water year" shall mean the period October 1 of any year

through September 30 of the following year.

2. Water Quality.

(a) (i) The State will operate the SWP to provide water qualities at least equal to the better of: (1) the standards adopted by the SWRCB as they may be established from time to time; or (2) the criteria established in this contract as identified on the graphs included as Attachment A.

(ii) The 14-day running average of the mean daily EC at the identified location shall not exceed the values determined from the Attachment A graphs using the Four-River Basin Index except for the period February through March of each year at the location in the Sacramento River at Emmaton for which the lower value of the 80 percent probability range shall be used.

(iii) The quality criteria described herein shall be met at all times except for a transition period beginning one week before and extending one week after the date of change in periods as shown on the graphs of Attachment A. During this transition period, the SWP will be operated to provide as uniform a transition as possible over the two-week period from one set of criteria to the next so as to arrive at the new criteria one week after the date of change in period as shown on the graphs of Attachment A.

(b) While not committed affirmatively to achieving a better water quality at interior points upstream from Emmaton than those set forth on Attachment A, the State agrees not to alter the Delta hydraulics in such manner as to cause a measurable adverse change in the ocean salinity gradient or relationship among the various monitoring locations shown on Attachment B and interior points upstream from those locations, with any particular flow past Emmaton.

(c) Whenever the recorded 14-day running average of mean daily EC of water in the Sacramento River at Sacramento exceeds 0.25 mmhos, the quality criteria indicated on the graphs of Attachment A may be adjusted by adding to the value taken therefrom the product of 1.5 times the amount that the recorded EC of the Sacramento River at Sacramento exceeds 0.25 mmhos.

3. **Monitoring.** The quality of water shall be measured by the State as needed to monitor performance pursuant to Article 2 hereof with equipment installed, operated, and maintained by the State, at locations indicated on "Attachment B". Records of such measurements shall at regular intervals be furnished to the Agency. All monitoring costs at North Fork Mokelumne River near Walnut Grove, Sacramento River at Walnut Grove, and Steamboat Slough at Sutter Slough incurred by the State solely for this contract shall be shared equally by the Agency and the State. All monitoring costs to be borne by the Agency for monitoring at the above locations are included in the payment under Article 10.

4. Emergency Provisions.

(a) If a structural emergency occurs such as a levee failure or a failure of an SWP facility, which results in the State's failure to meet the water quality criteria, the State shall not be in breach of this contract if it makes all reasonable efforts to operate SWP facilities so that the water quality criteria will be met again as soon as possible. For any period in which SWP failure results in failure of the State to meet the water quality criteria, the State shall waive payment under Article 10, prorated for that period, and the amount shall be deducted from the next payment due.

(b) (i) A drought emergency shall exist when all of the following occur:

(1) The Four-River Basin Index is less than an average of 9,000,000 acre feet in two consecutive years (which occurred in 1933-4 and 1976-7); and

(2) An SWRCB emergency regulation is in effect providing for the operation of the SWP to maintain water quality different from that provided in this contract; and

(3) The water supplied to meet annual entitlements of

SWP agricultural contractors in the San Joaquin Valley is being reduced by at least 50 percent of these agricultural entitlements (i.e. being the objective of the SWP to avoid agricultural deficiencies in excess of 25 percent) or the total of water supplied to meet annual entitlements of all SWP contractors is being reduced by at least 15 percent of all entitlements, whichever results in the greater reduction in acre feet delivered.

(ii) A drought emergency shall terminate if any of the conditions in (b) (i) of this Article ceases to exist or if the flow past Sacramento after October 1 exceeds 20,000 cubic feet per second each day for a period of 30 days.

(iii) Notwithstanding the provisions of Article 2 (a), when a drought emergency exists, the emergency water quality criteria of the SWRCB shall supersede the water quality requirements of this contract to the extent of any inconsistency; provided, however, that the State shall use all reasonable efforts to preserve Delta water quality, taking into consideration both the limited water supply available for that purpose and recognizing the priority established for Delta protection referred to in Recital (g).

(iv) When a drought emergency exists, and an overland supply is not available to an individual water user comparable in quality and quantity to the water which would have been available to the user under Attachment A, the State shall compensate the user for loss of net income for each acre either (A) planted to a more salt-tolerant crop in the current year, (B) not planted to any crop in the current year provided such determination not to plant was reasonable based on the drought emergency, or (C) which had a reduced yield due to the drought emergency, calculated on the basis of the user's average net income for any three of the prior five years for each such acre. A special contract claims procedure shall be established by the State to expedite and facilitate the payment of such compensation.

5. Overland Water Supply Facilities.

(a) Within the general objectives of protecting the western Delta areas against the destruction of agricultural productivity as a result of the increased salinity of waters in the Delta channels resulting in part from SWP operation, the State may provide diversion and overland facilities to supply and distribute water to Sherman Island as described in the report entitled "Overland Agricultural Water Facilities Sherman Island" dated January 1980. Final design and operating specifications shall be subject to approval of the Agency and Reclamation District No. 341. The Agency or its transferee will assume full ownership, operation, and maintenance responsibility for such facilities after successful operation as specified. After the facilities are constructed and operating, the water quality criteria for the Sacramento River at Emmaton shall apply at the intake of the facilities in Three Mile Slough.

(b) The State and the Agency may agree to the construction and operation of additional overland water supply facilities within the Agency, so long as each landowner served by the overland facilities receives a quality of water not less than that specified in Attachment A for the upstream location nearest to his original point of diversion. The design and operation of such facilities and the cost sharing thereof are subject to approval of any reclamation district which includes within its boundaries the area to be served. The ownership, operation, and maintenance of diversion works and overland facilities shall be the subject of a separate agreement between the Agency or its transferees and the State.

6. **Flow Impact.** The State shall not convey SWP water so as to cause a decrease or increase in the natural flow, or reversal of the natural flow direction, or to cause the water surface elevation in Delta channels to be altered, to the detriment of Delta channels or water users within the Agency. If lands, levees, embankments, or revetments adjacent to Delta channels within the Agency incur seepage or erosion damage or if diversion facilities must be modi-

ted as a result of altered water surface elevations as a result of the conveyance of water from the SWP to lands outside the Agency after the date of this contract, the State shall repair or alleviate the damage, shall improve the channels as necessary, and shall be responsible for all diversion facility modifications required.

7. Place of Use of Water.

(a) Any subcontract entered into pursuant to Article 18 shall provide that water diverted under this contract for use within the Agency shall not be used or otherwise disposed of outside the boundaries of the Agency by the subcontractor.

(b) Any subcontract shall provide that all return flow water from water diverted within the Agency under this contract shall be returned to the Delta channels. Subject to the provisions of this contract concerning the quality and quantity of water to be made available to water users within the Agency, and to any reuse or recapture by water users within the Agency, the subcontractor relinquishes any right to such return flow, and as to any portion thereof which may be attributable to the SWP, the subcontractor recognizes that the State has not abandoned such water.

(c) If water is attempted to be used or otherwise disposed of outside the boundaries of the Agency so that the State's rights to return flow are interfered with, the State may seek appropriate administrative or judicial action against such use or disposal.

(d) This article shall not relieve any water user of the responsibility to meet discharge regulations legally imposed.

8. Scope of Contract.

(a) During the term of this contract:

(i) This contract shall constitute the full and sole agreement between the State and the Agency as to (1) the quality of water which shall be in the Delta channels, and (2) the payment for the assurance given that water of such quality shall be in the Delta channels for reasonable and beneficial uses on lands within the Agency, and said diversions and uses shall not be disturbed or challenged by the State so long as this contract is in full force and effect.

(ii) The State recognizes the right of the water users of the Agency to divert from the Delta channels for reasonable and beneficial uses for agricultural, municipal and industrial purposes on lands within the Agency, and said diversions and uses shall not be disturbed or challenged by the State so long as this contract is in full force and effect, and the State shall furnish such water as may be required within the Agency to the extent not otherwise available under the water rights of water users.

(iii) The Agency shall not claim any right against the State in conflict with the provisions hereof so long as this contract remains in full force and effect.

(b) Nothing herein contained is intended to or does limit rights of the Agency against others than the State, or the State against any person other than the Agency and water users within the Agency.

(c) This contract shall not affect, bind, prejudice, impair, restrict, or limit vested water rights within the Agency.

(d) The Agency agrees to defend affirmatively as reasonable and beneficial the water qualities established in this contract. The State agrees to defend affirmatively as reasonable and beneficial the use of water required to provide and sustain the qualities established in this contract. The State agrees that such use should be examined only after determination by a court of competent jurisdiction that all uses of water exported from the Delta by the State and by the United States, for agricultural, municipal, and industrial purposes are reasonable and beneficial, and that irrigation practices, conservation efforts, and groundwater management within areas served by such exported water should be examined in particular.

(e) The Agency consents to the State's export of water from

the Delta so long as this contract remains in full force and effect and the State is in compliance herewith.

9. Term of Contract.

(a) This contract shall continue in full force and effect until such time as it may be terminated by the written consent and agreement of the parties hereto, provided that 40 years after execution of this contract and every 40 years thereafter, there shall be a six-month period of adjustment during which any party to this contract can negotiate with the other parties to revise the contract as to the provisions set out in Article 10. If, during this period, agreement as to a requested revision cannot be achieved, the parties shall petition a court of competent jurisdiction to resolve the issue as to the appropriate payment to be made under Article 10. In revising Article 10, the court shall review water quality and supply conditions within the Agency under operation of the FCVP and SWP, and identify any reimbursable benefits allocated to water users within the Agency resulting from operation of the FCVP and SWP, offset by any detriments caused thereby. Until such time as any revision is final, including appeal from any ruling of the court, the contract shall remain in effect as without such revision.

(b) In the event this contract terminates, the parties' water rights to quality and quantity shall exist as if this contract had not been entered into.

10. Amount and Method of Payment for Water.

(a) The Agency shall pay each year as consideration for the assurance that an adequate water supply and the specific water quality set forth in this contract will be maintained and monitored, the sum of one hundred seventy thousand dollars (\$170,000.00). The annual payments shall be made to the State one-half on or before January 1 and one-half on or before July 1 of each year commencing with January 1, 1982.

(b) The payment established in (a) above shall be subject to adjustment as of January 1, 1987, and every fifth year thereafter. The adjusted payment shall bear the same relation to the payment specified in (a) above that the mean of the State's latest projected Delta Water Rate for the five years beginning with the year of adjustment bears to \$10.00 per acre foot; provided that, no adjusted payment shall exceed the previous payment by more than 25 percent.

(c) The payments provided for in this article shall be deposited by the State in trust in the California Water Resources Development System Revenue Account in the California Water Resources Development Bond Fund. The trust shall continue for five years (or such longer period as the State may determine) but shall be terminated when the United States executes a contract as provided in Article 11 with the State and the Agency at which time the proportion of the trust fund that reflects the degree to which the operation of the FCVP has contributed to meeting the water quality standard under this contract as determined solely by the State shall be paid to the United States (with a pro rata share of interest). In the event that the United States has not entered into such a contract before the termination of the trust, the trust fund shall become the sole property of the State.

11. **Participation of the United States.** The Agency will exercise its best efforts to secure United States joinder and concurrence with the terms of this contract and the State will diligently attempt to obtain the joinder and concurrence of the United States with the terms of this contract and its participation as a party hereto. Such concurrence and participation by the United States in this contract shall include a recognition ratified by the Congress that the excess land provisions of Federal reclamation law shall not apply to this contract.

12. Remedies.

(a) The Agency shall be entitled to obtain specific perfor-

mance of the provisions of this contract by a decree of the Superior Court in Sacramento County requiring the State to meet the standards set forth in this contract. If the water quality in Delta channels falls below that provided in this contract, then, at the request of the Agency, the State shall cease all diversions to storage in SWP reservoirs or release stored water from SWP reservoirs or cease all export by the SWP from Delta channels, or any combination of these, to the extent that such action will further State compliance with the water quality standards set forth in this contract, except that the State may continue to export from Delta channels to the extent required to meet water quality requirements in contracts with the Delta agencies specified in Section 11456 of the California Water code.

(b) To the extent permitted by law, the State agrees to forego the use of eminent domain proceedings to acquire water rights of water users within the Agency or any rights acquired under this contract for water or water quality maintenance for the purpose of exporting such water from the Delta. This provision shall not be construed to prohibit the utilization of eminent domain proceedings for the purpose of acquiring land or any other rights necessary for the construction of water facilities.

(c) Except as provided in the water quality assurances in Article 2 and the provisions of Article 6 and Article 8, neither the State nor its officers, agents, or employees shall be liable for or on account of:

(i) The control, carriage, handling, use, disposal, or distribution of any water outside the facilities constructed, operated and maintained by the State.

(ii) Claims of damage of any nature whatsoever, including but not limited to property loss or damage, personal injury or death arising out of or connected with the control, carriage, handling, use, disposal or distribution of any water outside of the facilities constructed, operated and maintained by the State.

(d) The use by the Agency or the State of any remedy specified herein for the enforcement of this contract is not exclusive and shall not deprive either from using any other remedy provided by law.

13. **Comparable Treatment.** In the event that the State gives on the whole substantially more favorable treatment to any other Delta entity under similar circumstances than that accorded under this contract to the Agency, the State agrees to renegotiate this contract to provide comparable treatment to the Agency under this contract.

GENERAL PROVISIONS

14. **Amendments.** This contract may be amended or terminated at any time by mutual agreement of the State and the Agency.

15. **Reservation With Respect to State Laws.** Nothing herein contained shall be construed as estopping or otherwise preventing the Agency, or any person, firm, association, corporation, or public body claiming by, through, or under the Agency, from contesting by litigation or other lawful means, the validity, constitutionality, construction or application of any law of the State of California.

16. **Opinions and Determinations.** Where the terms of this contract provide for action to be based upon the opinion, judgment, approval, review, or determination of either party hereto, such terms are not intended to be and shall never be construed as permitting such opinion, judgment, approval, review, or determination to be arbitrary, capricious, or unreasonable.

17. **Successors and Assigns Obligated.** This contract and all of its provisions shall apply to and bind the successors and assigns of the parties hereto.

18. **Assignment and Subcontract.** The Agency may enter into subcontracts with water users within the Agency boundaries in which the assurances and obligations provided in this contract as

to such water user or users are assigned to the area covered by the subcontract. The Agency shall remain primarily liable and shall make all payments required under this contract. No assignment or transfer of this contract, or any part hereof, rights hereunder, or interest herein by the Agency, other than a subcontract containing the same terms and conditions, shall be valid unless and until it is approved by the State and made subject to such reasonable terms and conditions as the State may impose. No assignment or transfer of this contract or any part hereof, rights hereunder, or interest herein by the State shall be valid except as such assignment or transfer is made pursuant to and in conformity with applicable law.

19. **Books, Records, Reports, and Inspections Thereof.** Subject to applicable State laws and regulations, the Agency shall have full and free access at all reasonable times to the SWP account books and official records of the State insofar as the same pertain to the matters and things provided for in this contract, with the right at any time during office hours to make copies thereof, and the proper representatives of the State shall have similar rights with respect to the account books and records of the Agency.

20. **Waiver of Rights.** Any waiver at any time by either party hereto of its rights with respect to a default, or any other matter arising in connection with this contract, shall not be deemed to be a waiver with respect to any other default or matter.

21. **Assurance Relating to Validity of Contract.** This contract shall be effective after its execution by the Agency and the State. Promptly after the execution and delivery of this contract, the Agency shall file and prosecute to a final decree, including any appeal therefrom to the highest court of the State of California, in a court of competent jurisdiction a special proceeding for the judicial examination, approval, and confirmation of the proceedings of the Agency's Board of Directors and of the Agency leading up to and including the making of this contract and the validity of the provisions thereof as a binding and enforceable obligation upon the State and the Agency. If, in this proceeding or other proceeding before a court of competent jurisdiction, any portion of this contract should be determined to be constitutionally invalid, then the remaining portions of this contract shall remain in full force and effect unless modified by mutual consent of the parties.

22. **Notices.** All notices that are required either expressly or by implication to be given by one party to the other shall be deemed to have been given if delivered personally or if enclosed in a properly addressed, postage prepaid, envelope and deposited in a United States Post Office. Unless or until formally notified otherwise, the Agency shall address all notices to the State as follows:

Director, Department of Water Resources
P.O. Box 388
Sacramento, California 95802

and the State shall address all notices to the Agency as follows:

North Delta Water Agency
921 1/2 11th St., Rm. 703
Sacramento, California 95814

IN WITNESS WHEREOF, the parties hereto have executed this contract on the date first above written.

Approved as to legal form
and sufficiency:

STATE OF CALIFORNIA

By /s/ P. A. TOWNER
Chief Counsel
Dept. of Water Resources

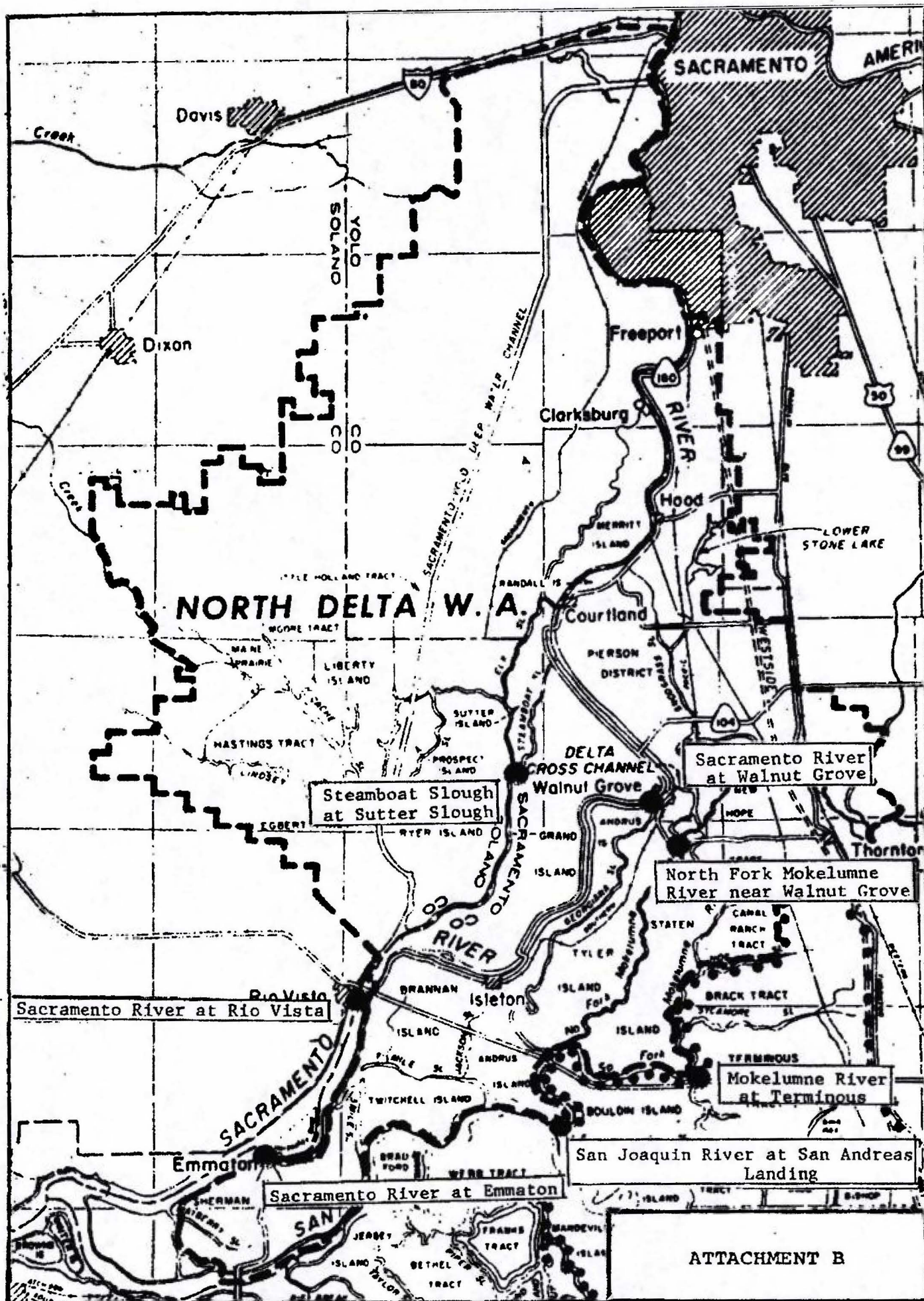
By /s/ RONALD B. ROBI
Dept. of Water Resources

Approved as to legal form
and sufficiency:

NORTH DELTA WATER
AGENCY

By /s/ GEORGE BASYE
General Counsel
North Delta Water Agency

By /s/ W. R. DARSIE
Chairman
Board of Directors



NORTH DELTA W. A.

Steamboat Slough at Sutter Slough

Sacramento River at Walnut Grove

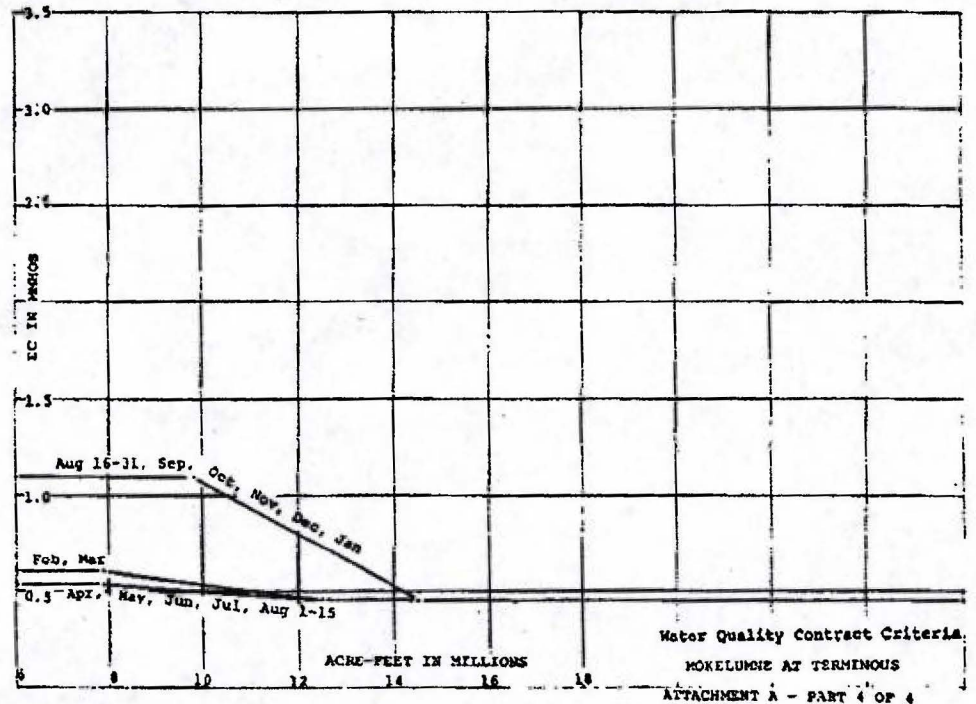
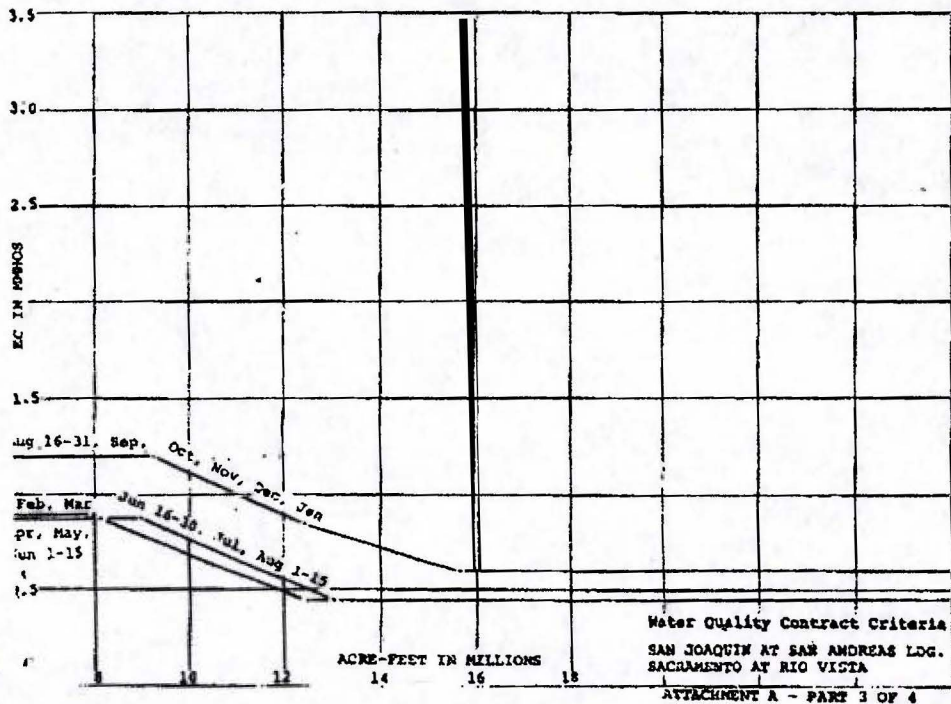
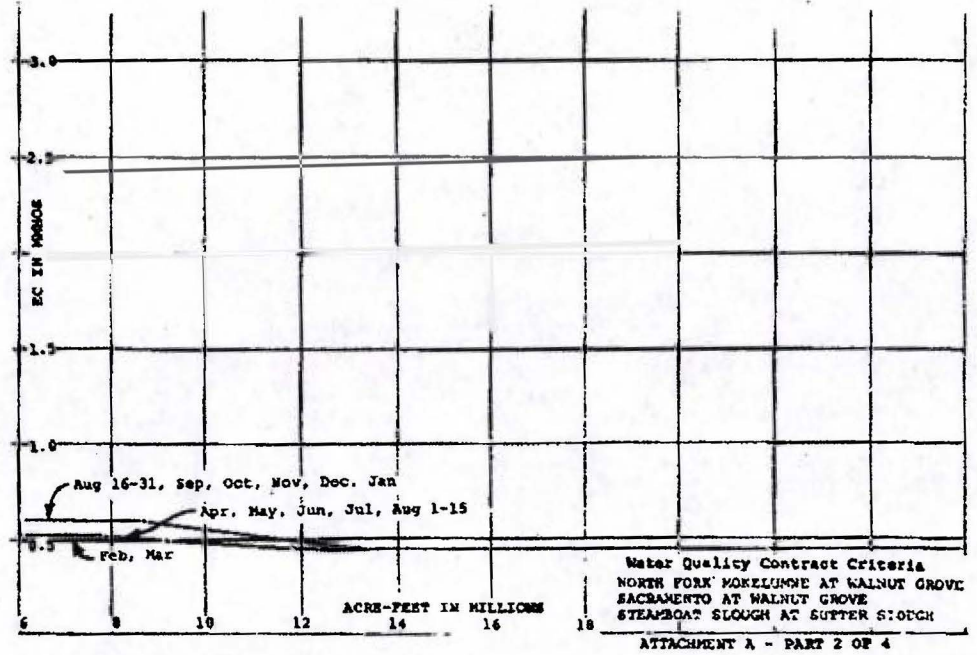
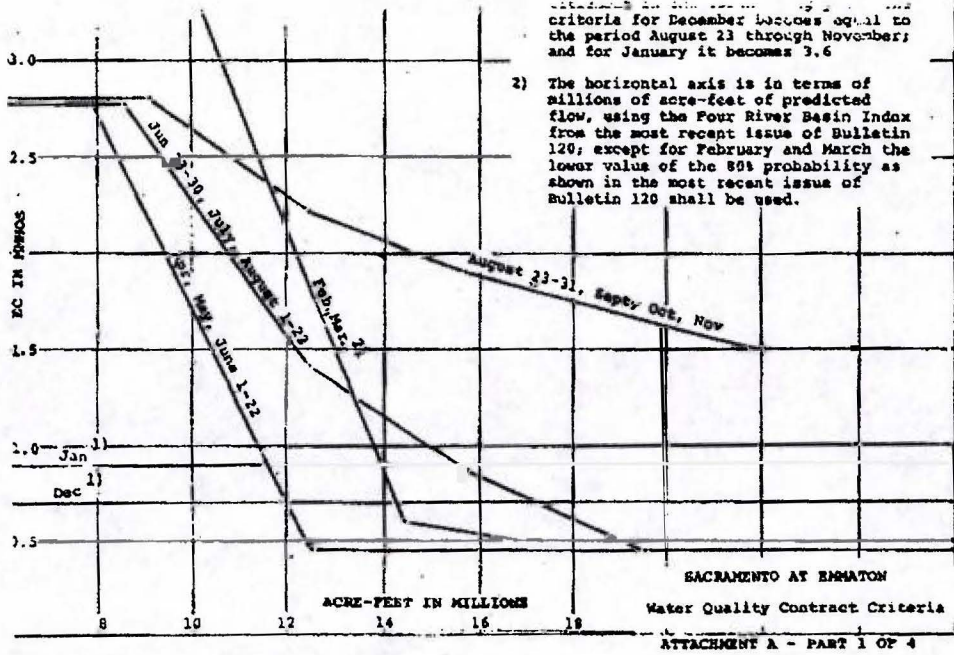
North Fork Mokelumne River near Walnut Grove

Rio Vista Sacramento River at Rio Vista

Mokelumne River at Terminous

San Joaquin River at San Andreas Landing

Sacramento River at Emmaton



Attachment 3

NORTH DELTA WATER AGENCY

910 K Street, Suite 310, Sacramento, CA 95814
(916) 446-0197 Fax (916) 446-2404 www.northdeltawater.net
Melinda Terry, Manager

Board of Directors

Henry N. Kuechler, Chairman * Kenneth A. Ruzich, Secretary/Treasurer
Steve Mello, Director * Carel van Löben Sels, Director * Tom Hester, Director

October 30, 2015

Delivered Via E-mail: BDCPComments@icfi.com

BDCP/CA WaterFix Comments

P.O. 1919

Sacramento, CA 95812

Subject: Comments of North Delta Water Agency on the Partially Recirculated Bay-Delta Conservation Plan EIR/EIS with New CA WaterFix Sub-Alternatives

Dear ICFI Consultants:

To secure the current contractual and individual water rights of Agency landowners to adequate water supply and quality, the North Delta Water Agency ("NDWA" or "Agency") submits these comments on the new CA WaterFix alternatives (4A, 2D, and 5A) added to the Bay Delta Conservation Plan ("BDCP") project and the Draft Recirculated Environmental Impact Report/Supplemental Environmental Impact Statement ("DREIR/DSEIS"). In 1981, the NDWA and the Department of Water Resources ("DWR" or "Department") executed the *Contract for the Assurance of a Dependable Water Supply of Suitable Quality* (1981 Contract)

The Agency values DWR's commitment to maintain the assurances provided to North Delta water users for the last thirty-four years, but is concerned how the large diversion facilities proposed in most of the BDCP/CA WaterFix alternatives will alter hydrodynamics, potentially preventing DWR from complying with 1981 Contract obligations if constructed and operated as proposed. NDWA's successful negotiation of a water supply and quality contract with the State in 1981, and its more recent efforts to actively participate and provide expertise as a Cooperating Agency under NEPA in the development of the BDCP Plan has proven the Agency's willingness to act in good faith as a water contractor with DWR.

The comments provided herein on the CA WaterFix project alternatives, as well as the NDWA comments on the 2012 and 2013 Administrative Drafts and the 2014 BDCP Draft EIR/EIS seek to incorporate compliance with the 1981 Contract into the design, location, and operation of the BDCP/CA WaterFix proposed facilities, and to ensure that the impacts associated with the proposed project are properly described, analyzed, and mitigated in accordance with applicable law.

The findings and recommendations set forth in the following attachments are submitted with this letter and incorporated herein by reference:

Exhibit A:

DWR-NDWA, *Contract for the Assurance of a Dependable Water Supply of Suitable Quality* (1981)

Exhibit B:

Steiner/MBK Engineers, *Report on Review of Bay Delta Conservation Program Modeling* (June 20, 2014);

Exhibit C:

MBK Engineers, *Technical Comments on Bay-Delta Conservation Plan Modeling* (July 29, 2014)

Exhibit D: MBK Engineers, *Technical Comments on Bay Delta Conservation Plan/California Water Fix Partially Recirculated Draft EIR/Supplemental Draft EIS*(October 28, 2015)

These comments are also being submitted on behalf of the following districts that exist and operate, in whole or in part, within NDWA:

- Reclamation District 501
- Reclamation District 551
- Reclamation District 563
- Reclamation District 900
- Reclamation District 999
- Reclamation District 2060
- Reclamation District 2068
- Maine Prairie Water District

I. INCORPORATION OF PREVIOUS COMMENTS BY REFERENCE

All of the extensive legal and technical comments on the 2014 Draft Bay Delta Conservation Plan (BDCP) and Environmental Impact Report/Environmental Impact Statement (EIR/EIS) contained in letters submitted by the following are incorporated by reference herein.

1. Contra Costa Water District, July 25, 2014
2. North State Water Alliance, July 28, 2014
3. CA Central Valley Flood Control Association, July 29, 2014
4. Local Agencies of the North Delta, July 29, 2014

NDWA anticipates that Contra Costa Water District, North State Water Alliance, CA Central Valley Flood Control Association, and the Local Agencies of the North Delta will submit additional comments on the CA WaterFix RDEIR/SDEIS. In addition, the Delta Independent Science Board presented their review of environmental documents for CA WaterFix to the Delta Stewardship Council on September 30, 2015. All of these comments are likewise incorporated herein by reference.

As a responsible agency under CEQA, and a cooperating agency under NEPA, NDWA expects to receive a response to our comments at least ten days prior to the Department taking any final action on the CA WaterFix Project EIR/EIS.

II. SUMMARY OF COMMENTS AND CONCERNS

The NDWA recognizes the importance of achieving the State's coequal goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem¹ and has a clear statutory mandate to assure that the lands within the North Delta have a dependable supply of water of suitable quality sufficient to meet present and future needs in accordance with the 1981 Contract.²

For this reason, NDWA has repeatedly asserted during the various Delta planning processes that any projects, programs, and actions pursued in the name of coequal goals, including the BDCP/CA WaterFix, must be: 1) based on the best available science; 2) consistent with the contractual obligations of the State under the 1981 Contract; and 3) undertaken in compliance with all applicable state and federal law.

Key issues of concern NDWA has with BDCP/CA WaterFix project alternatives and associated EIR/EIS are:

- 1) **Unequal** – May improve water supply reliability for water contractors in Export Service Areas, water supply reliability and quality for in-Delta and upstream users is diminished.
- 2) **Indecipherable** - Document organization and relationships between BDCP analysis and CA WaterFix alternatives is confusing at best, and sometimes incomprehensible.
- 3) **Conceptual** – The project design/description is preliminary and subject to change, so the impact analysis conclusions are mostly conjecture based on limited facts or actual assessment.
- 4) **Incomplete** – Project operations rely on levee corridor through the Delta for conveyance to south Delta pumps, but comprehensive levee and flood protection analysis is deferred, and cost-sharing of levee maintenance is absent.
- 5) **Pre-Determined** – Submission of 404 permit to USACE and change of diversion petition to SWRCB appear to have already determined the outcome of the ongoing CEQA/NEPA environmental review process.

An overarching and inherent issue with the BDCP/WaterFix alternatives and associated EIR/EIS is the fact that the CA WaterFix project is still in a state of flux according to recent engineering report by DWR³:

- alignment and features are “preliminary and subject to change”
- all information presented in the report is considered “conceptual or preliminary”
- “need to be verified as part of additional investigations and detailed design” according to

¹ Public Resources Code Section 29702(a)

² North Delta Water Agency Act, Chapter 283, Special Statutes of 1973.

³ Delta Habitat Conservation & Conveyance Program (DHCCP), *Conceptual Engineering Report Dual Conveyance Facility Modified Pipeline/Tunnel Option – Clifton Court Forebay Pumping Plant*, July 1, 2015.

Reliance on a “conceptual” project design results in an inadequate “preliminary” project description being used as the basis for conducting environmental assessment and determining CEQA/NEPA impact conclusions.

In addition, the Agency agrees with many of the observations and general conclusion in the 2015 Delta ISB review that the CA WaterFix alternatives and RDEIR/SDEIS lack key information, analyses, summaries, and comparisons necessary to adequately inform decision-makers, resources managers, scientists, or the broader public. The Delta ISB also points out that the BDCP which was already one of the most complex projects to evaluate has been made even more complicated and confusing with the addition of three new alternatives that propose to only construct CMI and eliminate many of the actions in CMs 2-22.

In NDWA’s view, the new project description and environmental analysis is a jumbled mess, resulting in a complex labyrinth that is hard to navigate, and even harder to decipher. The degree of difficulty is heightened by the fact that the new CA WaterFix alternatives rely on modeling done for BDCP and continually refer back to BDCP alternatives for project description and environmental impact analysis.

For example, throughout the recirculated CA WaterFix chapters, the impact analysis and conclusions for Alt. 4A refer to BDCP Alt. 4, which then often refers readers to BDCP Alt. 1A for a description of how CEQA/NEPA conclusions and mitigation measures were determined.

Simply put, NDWA finds the description of CA Waterfix construction and operation is often internally inconsistent, preventing a full and meaningful disclosure of the scope, purpose, intensity, duration, and true effects in the RDEIR/SDEIS. This is not unexpected since the design is still at a very preliminary conceptual level according to the July 1, 2015 Conceptual Engineering Report by the Delta Habitat Conservation & Conveyance Program (DHCCP).

Finally, there is acknowledgment throughout the new CA WaterFix documents that the water conveyance facilities construction under Alt. 4A would be identical to that of Alt. 4, with similar operations. (e.g., Water Supply chapter, page 4.3.1-1, lines 3-6, 2015 DREIR/DSEIS). Because the construction, operation, and impacts of the new CA WaterFix preferred alternative (Alt. 4A) is substantially similar to the prior preferred alternative (Alt. 4), most of the significant adverse impacts identified in the 2014 BDCP Alt. 4 and 2014 BDCP comments still apply to CA WaterFix Alt. 4A.

III. FACTUAL BACKGROUND

A. North Delta Water Agency

Beginning approximately 160 years ago, farmers within the area now comprising NDWA began reclaiming lands from flooding, appropriating water to beneficial use and establishing vibrant agricultural communities pursuant to the federal Swamp Land Act of 1850.⁴ In the 1930s, the U.S. Bureau of Reclamation (Bureau/USBR) began constructing the Central Valley Project (CVP), damming the major tributaries on the Sacramento River and holding back substantial quantities of the Delta water supply. Before government reservoirs began withholding much of

⁴ Arkansas Swamp Lands Act, Act of September 28, 1850, codified at California Public Resources Code Section 7552, 7552.5.

the Sacramento River system's high winter flows, the Delta channels stored sufficient fresh water to sustain water quality in the northern Delta throughout and often beyond the irrigation season. In addition, because the tides raised surface water elevations twice a day, a supply of water always remained physically available in the Delta.

This natural phenomenon of the Sacramento-San Joaquin Delta in its natural state acting as a freshwater reservoir instead of a stream, as evidenced by water quality monitoring conducted in the western Delta since 1914 by the East Contra Costa Irrigation District,⁵ is commonly referred to as the Delta Storage Concept.

On the eve of the parties signing the 1981 Contract, DWR told the North Delta landowners that the benefits of becoming a SWP water contractor would be receiving "more water, or water of better quality, than they did before the construction of the Central Valley Project and State Water Project."⁶ Since the SWP and CVP water supply operations commenced, however, the reduction of naturally occurring high flushing flows from upstream storage combined with the pull of the State and federal export pumps have contributed to the intrusion of salinity into the Delta.⁷

Now, the SWP and CVP water conveyance project operations have effectively transformed the natural Delta freshwater "reservoir" into more of a flowing stream, resulting in relatively minor decreases in outflow that can have a serious impact on Delta water quality. These changed conditions are the basis for DWR executing a water supply availability and quality contract with the NDWA.

In 1973, the NDWA was formed by a special act of the Legislature to represent northern Delta interests in negotiating a contract with both the Bureau and DWR in order to mitigate the water rights impacts of the CVP/SWP Projects.⁸ Representing nearly one-half of the legal Delta, the Agency's boundaries encompass approximately 300,000 acres. This includes all of that portion of the Sacramento-San Joaquin Delta, as defined in Water Code Section 12220, situated within Sacramento, Yolo and Solano Counties, including New Hope Tract, Canal Ranch and Staten Island in northeastern San Joaquin County.

After undertaking extensive analysis, study, and review between 1974 and 1979, the Bureau, DWR, and the NDWA collectively determined the outflow necessary to meet water quality standards for irrigated agriculture, reviewed the paramount water rights of landowners within North Delta's boundaries, and evaluated the Delta channels' historical function as natural seasonal storage for purposes of executing a water supply and quality contract.

⁵ Water Resources Department, Contra Costa Water District "Historical Fresh Water and Salinity Conditions in the Western Sacramento-San Joaquin Delta and Suisun Bay: A summary of historical reviews, reports, analyses and measurements (Technical Memorandum WR10-001) (February 2010)

⁶ DWR Director Ronald Robie quoted in the Sacramento Bee, "Water Payment Progress Helped By Fear Of Canal." (March 21, 1980).

⁷ Hanak et.al, *Managing California's Water: From Conflict to Reconciliation* (Public Policy Institute of California 2011). ("Delta farmers complained of increasing salinity in their water supplies as upstream diversions and combined CVP/SWP operations depleted more of the natural flow.")

⁸ North Delta Water Agency Act, Chapter 283, Special Statutes of 1973.

B. The 1981 Contract

The crux of the 1981 Contract, which remains in full force and effect, is a guarantee by the State of California that, on an ongoing basis, DWR will ensure through the operation of the SWP that suitable water will be available to satisfy all agricultural and other reasonable and beneficial uses in all channels within NDWA's boundaries.⁹ Specifically, the State is obligated to furnish "such water as may be required within the Agency to the extent not otherwise available under the water rights of water users."¹⁰

The 1981 Contract contains numerous provisions that protect water users and channels in the North Delta from detrimental impacts associated with changes in conveyance of SWP water; specifies year-round water quality criteria; and includes specific remedies, which include limitations on the operations of the SWP. In return for the benefits received, NDWA makes an annual payment to DWR. NDWA further expressly consents to the export of water from the Delta "so long as this contract remains in full force and effect and the State is in compliance herewith."

IV. SPECIFIC IMPACTS TO NDWA AND CONTRACTUAL ASSURANCES

DWR's compliance with the binding terms of the 1981 Contract is not discretionary. Moreover, the legal standards that govern DWR's discharge of its obligations under the 1981 Contract are quite different from those that govern DWR's compliance with CEQA and other applicable law. For example, while CEQA requires DWR to implement feasible mitigation measures to reduce significant impacts of the project to less-than-significant levels, DWR may not, as a matter of contract law, choose not to comply with the specific requirements of the 1981 Contract based on a determination of infeasibility, or otherwise.

In light of the statewide significance and consequences associated with implementation of CA WaterFix, NDWA concurs with the Delta ISB statement, "This EIR/EIS must be uncommonly complete in assessing important environmental impacts, even if that means going beyond what is legally required."

NDWA appreciates the RDEIR/SDEIS stating the intention of CA WaterFix to meet contractual obligations under Alt. 4A operations (Section 4.1.2.2). How this will be accomplished is not apparent however, particularly under drought conditions.

⁹ Contract for the Assurance of a Dependable Water Supply of Suitable Quality (1981 Contract). A copy of this contract is attached to this letter. Note that by reference to this contract, NDWA intends to reference all relevant Memoranda of Understanding, including the memorandum of understanding dated May 26, 1998 (MOU). This MOU provides that DWR is responsible for any obligation imposed on NDWA to provide water to meet Bay-Delta flow objectives, so long as the 1981 Contract remains in effect. This agreement was formed in connection with the hearings that preceded the State Water Resources Control Board's adoption of Water Right Decision 1641. In Decision 1641, the State Water Board made the following findings and determinations: "Based on the agreement, the SWRCB finds that the DWR will provide the backstop for any water assigned to the parties within the NDWA as specified in the MOU. This decision assigns responsibility for any obligations of the NDWA to the DWR consistent with the MOU." (Decision 1641 at 66). The latter findings and determinations were upheld by the trial and appellate courts that subsequently reviewed Decision 1641.

¹⁰ Id.; 1981 Contract Art. 8(b)

An example of language in CA WaterFix that casts doubt on DWR's ability to maintain the 1981 Contract water quality criteria is on page 4.2-4, lines 25-37:

- "There would be a decrease in carryover storage at the end of September for Lake Oroville, Trinity Lake, Shasta Lake, and Folsom Lake in all years"
- "These changes in storage would reduce the ability of the CVP and SWP to meet system water demands and environmental water needs."

The increased frequency under CA WaterFix Alt. 4A operations in which lack of carryover storage occurs could result in decreased Delta outflows and water quality.

The CA WaterFix project description and RDEIR/SDEIS indicate that implementation of the preferred alternative (Alt. 4A) would impact North Delta water quality and availability, and potentially violate several provisions of the 1981 Contract:

- Alteration of existing water elevations to the detriment of North Delta channels and water users;
- Alteration of natural flow patterns (reverse flows created at Georgiana Slough and Delta Cross Channel) to the detriment of North Delta channels and water users;
- Decrease Delta outflow in winter and summer months;
- Meeting spring outflow requirements relies on annually purchasing sufficient water supply from willing sellers, which is a speculative proposition at best; and
- Seepage and erosion damage to the lands, levees, embankments, or revetments adjacent to Delta channels from water conveyance changing the estuary's hydrodynamics.

The following CA WaterFix operational assumptions are also disclosed in the DHCCP Conceptual Engineering Report (July 1, 2015), but not analyzed in the RDEIR/SDEIS:

- Must be able to deliver up to 9,000 cfs from north Delta intakes at the low water level in the Sacramento River;
- Must be able to deliver 9,000 cfs flow rate 99% of the time;
- Operating volume of the new North Clifton Court Forebay (NCCF) is significantly less than the existing Clifton Court Forebay.

In addition, the following are a few examples of numerous major omissions that the NDWA identified in previous comments that still appear to have not been analyzed, disclosed, or mitigated in RDEIR/SDEIS:

- Complying with contractual assurances within the NDWA boundaries are not adequately quantified or addressed in the new alternative or DREIR/DSEIS.
- Cumulative adverse impacts disclosed in the Groundwater, Water Quality, Health, and Agriculture Chapters result in a significant adverse water supply impacts on Delta water users.
- The effects of lowered surface water elevations from reduced flows on the overall local water supply and water quality in the Delta region.
- The economic, health, and agriculture impacts due to lowered groundwater elevations from extensive dewatering activities during 10-14 year construction.
- Water quality impacts resulting from levee reconfiguration or failures.

- Emergency response and evacuation or recovery plans.

V. CEQA/NEPA AND OTHER LEGAL DEFICIENCIES

Beyond the requirements of the 1981 Contract, the CA WaterFix and associated RDEIR/DSEIS also fail to satisfy the requirements of CEQA/NEPA, the federal Endangered Species Act (ESA), and various Delta protection laws.

Very few of the prior comments and suggestions have been addressed in the new CA WaterFix alternatives or the DREIR/DSEIS. As a result, the BDCP/CA WaterFix project alternatives and EIR/EIS still fail to:

- Accurately and comprehensively assess the current ecological conditions or compare the full extent, duration, intensity, and severity of potential adverse impacts;
- Utilize the best available science;
- Protect listed or covered species consistent with ESA/CESA laws;
- Comply with state and federal law governing economic analysis of public water infrastructure;
- Develop an appropriate range of feasible alternatives or least environmentally damaging preferred alternative;
- Include any direct benefits for, residents, communities and local governments in the Plan Area;
- Properly identify or mitigate cumulative impacts; or
- Include oversight of project construction, operation, or effectiveness of mitigation measures.

VI. RECENT SCIENCE REVIEW CITES MAJOR DEFICIENCIES

A. Inadequate, Inconsistent, and Confusing Project Description

A proper environmental analysis of a project of this size and scope requires an accurate, stable, and finite description of all major project components and the existing baseline conditions. Otherwise, the public cannot determine the true nature and extent of the actual impacts likely to be caused by the Project.

However, a recent DWR engineering report¹¹ discloses that CA Waterfix design is still at a very preliminary conceptual level:

- alignment and alignment features are “preliminary and subject to change”
- alignment and alignment features will ultimately “need to be verified as part of additional investigations and detailed design.”
- the facility locations, dimensions, and elevations (both topographic and facility) are “approximate” and “subject to change”
- geotechnical information for the proposed tunnel alignment is currently limited, so preliminary designs will be refined “once adequate geotechnical investigations have been performed.”

¹¹ Delta Habitat Conservation & Conveyance Program (DHCCP), *Conceptual Engineering Report: Modified Pipeline/Tunnel Option – Clifton Court Forebay Pumping Plant*, Volume 1 (July 1, 2015)

NEPA requires that the proposal in an EIS is properly defined (§ 1502.4(a)). Under CEQA, the fundamental purpose of an EIR “is to demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action.”¹²

Unfortunately, trying to decipher the description of the project’s new alternatives is particularly daunting. For instance, the conclusions for Alt. 4A often refer to BDCP 4 impact analysis, which then refers readers to BDCP sections n BDCP Alt. 1A. Frankly, the project is a jumbled mess, resulting in a complex labyrinth that has created an even higher level of navigation difficulty and fails to substantiate environmental conclusions, as pointed out in several reviews by scientific panels.¹³

As a result, NDWA cannot properly evaluate the full extent of the environmental consequences of the CA WaterFix alternatives, or provide meaningful input in terms of recommendations for avoiding or reducing the adverse impacts of the proposed project.

B. Environmental Impact Conclusions Are Unsubstantiated and Overly Optimistic

Under CEQA the lead agency’s factual conclusions must be supported by substantial evidence – facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts (CEQA Guidelines §15384(b)). Speculation does not constitute substantial evidence, and unsubstantiated narrative or expert opinion asserting nothing more than “it is reasonable to assume” that something “potentially may occur” is not analysis supported by factual evidence (e.g.; 2,600 dewatering radius).

There are too many chapters and individual impact statements that rely on conjecture instead of providing evidence to support the CEQA/NEPA conclusions to list them all. The following are general examples of the extensive amount of environmental analysis that is lacking from the Delta ISB’s review of CA Waterfix:

- “the Current Draft fails to consider how levee failures would affect the short-term and long-term water operations spelled out in Table 4.1-2.” (Pg 7)
- “The Current Draft does not evaluate how the proposed project may affect estimates of the assets that the levees protect.” (Pg 8)
- “Neither the Previous Draft nor the Current Draft, however, provides a resource chapter about Delta levees.” (Pg 8)

¹² (CEQA Guidelines §15003(d), citing *People ex rel. Department of Public Works v. Bosio* 1975

¹³ See, e.g.,: 1) September 30, 2015, *Review of the Partially Recirculated Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement (California WaterFix)* conducted by Delta Independent Science Board; 2) National Academy of Science Panel to Review California’s Draft Bay Delta Conservation Plan, 2011, *A Review of the Use of Science and Adaptive Management in California’s Draft Bay Delta Conservation Plan* (“The lack of an appropriate structure creates the impression that the entire effort is little more than a post-hoc rationalization of a previously selected group of facilities, including an isolated conveyance facility, and other measures for achieving goals and objectives that are not clearly specified.”) http://www.nap.edu/openbook.php?record_id=13148; 3) Delta Independent Science Board, *Review of the Draft EIR/EIS for the Bay Delta Conservation Plan* (May 15, 2014), . (“The DEIR/DEIS provides an exhausting wealth of information about the Delta and the likely impacts of the proposed alternatives. However, this wealth of information and data is not organized in a way that can usefully inform difficult public and policy discussions.”) http://deltacouncil.ca.gov/sites/default/files/documents/files/Item_9_Attachment_3.pdf.

- “Although sensitivity modeling was used to address the effects of changes in the footprint and other minor changes of the revised project, full model runs were not carried out to assess the overall effects of the specific changes.” (Pg 11)
- “Current draft generally neglects recent literature, suggesting a loose interpretation of ‘best available science.’” (Pg 11)
- “Confounding interactions that may enhance or undermine the effectiveness of proposed actions were overlooked.” (Pg 12)

CA WaterFix’s CEQA/NEPA conclusions lack credibility because they are typically general and vague in making overly optimistic assumptions without site-specific identification of where, for how long impacts will occur, or who will be impacted.

As detailed in the report of fisheries biologist Dave Vogel filed herewith, the new North Delta intakes and accompanying fish screens will lead to “ideal conditions” for predation of juvenile salmon by creating flow conditions that disorient juvenile salmon and pull them to one side of the Sacramento River directly into a target-rich environment for predators waiting to feed. Furthermore, when the North Delta intakes are operating the pumping facilities will cause reduced Sacramento River stream flow which will adversely affect migration of juvenile winter-run Chinook salmon who will be pulled into the Central Delta by increased reverse flows created at the Delta Cross Channel and Georgiana Slough. These impacts will occur under both BDCP and CA WaterFix alternatives, including Preferred Alternatives 4 and 4A.

Currently, CM1 as proposed will require the three new North Delta intakes to undergo some operational fish screen testing prior to full pumping – but only *after* all three North Delta diversions have been built. If these never-before-used screens do not function as planned, then this gamble will end up a losing proposition for the Delta fisheries, Delta-as-Place, or CVP/SWP Delta water contractors (who will be stuck with long-term payments on a very expensive stranded asset).

It is important to point out a fact that is rarely discussed in BDCP/WaterFix alternatives – SIZE matters. The average size of the Delta’s agricultural water diversion intakes is about 12 inches with a 10-15 cfs capacity (mostly siphon, not pumps) while the urban intakes are less than 300 cfs. The precedent for the size selected for CM1 is the Glenn-Colusa Irrigation District’s (GCID) 3,000 cfs intake. However, GCID’s facilities are not located in a tidal estuary, do not have to screen for smelt, and were not without their own problems.¹⁴

To reduce the level of adverse impacts, the preferred alternative (4/4A) should be modified to either delay CEQA/NEPA analysis until the project is at a 60% design level, or require phasing of construction for the intakes and two main tunnels. To address uncertainties, the original the Peripheral Canal conveyance project approved by the State Legislature in 1980 (SB 200 and ACA 90), required the intakes to be installed one at a time and environmental impacts analyzed for two years before proceeding with further construction. The extreme amount of risk warrants a similar phased construction approach so that the altered Delta hydraulic and surface water elevation changes to flood protection, and local water supply and quality can be analyzed and mitigated before building the other intakes/tunnel. Governor Jerry Brown’s Administration

¹⁴ These problems ultimately resulted in a very expensive redesign of fish screens and forebay. See chronology in *U.S.A. v. Glenn-Colusa Irrigation District* CVS-91-1074-DFL-JFM (1991)

obviously agreed to this precautionary approach the first time around and should do no less with CA WaterFix.

Examples of the Delta ISB finding CA WaterFix to be overly optimistic in regards to impacts and uncertainties, include:

- “In the Current Draft, uncertainties and their consequences remain inadequately addressed, improvements notwithstanding.” (Pg 11)
- “The level of certainty seems optimistic, and it is unclear whether there are any contingency plans in case things don’t work out as planned. This problem persists from the Previous Draft.” (Pg 17)
- “Here, as in many other places, measures are assumed to function as planned, with no evidence to support the assumptions.” (Pg 17)
- “A scientific basis for this statement is lacking, and an adaptive or risk-based management framework is not offered for the likely event that such optimism is unfulfilled.” (Pg 10)
- “Despite the lack of specific data on how well screens function, the conclusion that there will be no significant impact is stated as certain” (Pg 17)

C. Adaptive Management, Funding, and Mitigation Commitments are Vague

Under CEQA, an EIR must be sufficiently descriptive and specific to allow the public to clearly understand exactly how significant effects will be mitigated so they can weigh in on the adequacy of such measures. Unfortunately, neither the BDCP nor the CA WaterFix EIR/EIS documents meet CEQA or NEPA requirements in terms of assurances necessary for adaptive management, funding, or mitigation measure commitments.

Neither the BDCP nor the CA WaterFix EIR/EIS documents meet CEQA or NEPA requirements in terms of assurances necessary for adaptive management, funding, or mitigation measure commitments.

For instance, 4.1-15, line 7 states that “Specific locations for implementing many of the activities associated with these commitments have not been identified at this time.” In addition, the “restoration and protection principles” are apparently not enforceable like mitigation measures according to page 4.1-37, line 32, “these activities are considered part of the alternative and are not defined as ‘mitigation measures’ in order to avoid confusion with those measures proposed for the purposes of CEQA and NEPA compliance.”

Fundamental concerns regarding the effectiveness of adaptive management and mitigation measures due to vague descriptions and deferred commitments were noted by the Delta ISB:

- “The lack of substantive treatment of adaptive management in the Current Draft indicates that it is not considered a high priority or the proposer have been unable to develop a substantive idea of how adaptive management would work for the project.” (Pg 5)
- “We did not find examples of how adaptive management would be applied to assessing – and finding ways to reduce – the environmental impacts of project construction and operations.” (Pg 5)

- “The missing details also include commitments and funding needed for science-based adaptive management and restoration to be developed, and more importantly, to be effective.” (Pg 6)
- “The Current Draft does little more than promise that collaborations will occur and that adaptive management will be implemented.” (Pg 6)
- “The test will be whether the measures will be undertaken as planned, be as effective as hoped, and continue long enough to fully mitigate effects. This is where adaptive management and having contingency plans in place becomes critically important. It is not apparent that the mitigation plans include these components.” (Pg 13)
- “Monitoring is mentioned, but details of organization, intent, and resources seem lacking. Adequate funding to support monitoring, collaborative science, and adaptive management is a chronic problem.” (Pg 15)

Finally, environmental conclusions in the RDEIR/SDEIS simply stating that future projects/actions/designs will comply with applicable law does not constitute avoidance of all impacts and does not suffice to replace mitigation. All of the EIR/EIS Chapters we reviewed also had many examples where the adverse impacts identified in the title and description were left unmitigated in the CEQA Conclusion.

D. Defers Analysis of Significant Components of the Project

The new CA WaterFix alternatives and RDEIR/RDEIS continue to defer essential material to the Final EIR/EIS which prevents NDWA from understanding the true nature and scope of project impacts to water quality and supply.

In order to approve a project, the lead agencies must identify feasible mitigation measures or alternatives that would avoid or substantially lessen any significant adverse environmental effects of the project.¹⁵ The mitigation measures must also be specific and mandatory, such that they are fully enforceable.

The EIR/EIS cannot defer the determination of the scope and nature of significant impacts until future studies and reports are prepared without including specific performance standards, timeframes for completion, and a commitment to mitigate. However, many Alt. 4/4A Mitigation Measures fail to set specific performance standards or criteria for surveying, relocating, repairing, replacing, compensating, or restoring the impacted resource.

Misleading conclusions and missing impacts associated with Alt 4A that would adversely affect Delta water quality and supply are common throughout the EIR/EIS, mostly because studies about the existing baseline conditions and the Project’s impacts are deferred to a later time

The amount of environmental analysis that is deferred to a later date identified by the Delta ISB is concerning to NDWA:

- “It defers essential material to the Final EIR/EIS” (09-3-15 cover letter)
- “overall incompleteness through deferral of content to the Final EIR/EIS” (Pg 4)
- “modeling of the effects of levee failure would be presented in the Final Report.” (Pg 4)

¹⁵ Cal. Pub. Res. Code § 21002

- “The Current Draft does not demonstrate consideration of recently available climate science, and it defers to the Final Report analysis of future system operations under potential climate and sea-level conditions.” (Pg 11)

The Agency contends that it is reckless to assume that the details of mitigation will be fleshed out at an unknown future date.

NDWA shares the concerns regarding the extensive amount of environmental analysis that is deferred to a later date raised by the Delta ISB:

- “It defers essential material to the Final EIR/EIS” (09-3-15 cover letter)
- “overall incompleteness through deferral of content to the Final EIR/EIS” (Pg 4)
- “Steve Centerwall told us on August 14 that modeling of the effects of levee failure would be presented in the Final Report.” (Pg 4)
- “analysis describing potential scenarios for future SWP/CVP system operations and uncertainties [related to climate change] will be provided in the Final Report.” (Pg 4)
- “The Current Draft states that comparisons of alternatives will be summarized in the Final Report (p. 1-35).” (Pg 4)
- “some of the missing content has been deferred to the Final Report” (Pg 4)
- “The Current Draft defers details on how adaptive management will be made to work:” (Pg 6)
- “This is too late. If adaptive management and monitoring are central to California WaterFix, then details of how they will be done and resourced should be developed at the outset (now) so they can be better reviewed, improved, and integrated into related Delta activities.” (Pg 6)
- “The Current Draft does not demonstrate consideration of recently available climate science, and it defers to the Final Report analysis of future system operations under potential climate and sea-level conditions.” (Pg 11)

E. Uncertainties Confounded by Significant Analytical Omissions and Data Gaps

CEQA conclusions in CA WaterFix lack credibility because they are typically general and vague in making optimistic assumptions without site-specific identification of where, for how long impacts will occur, or who will be impacted. The RDEIR/SDEIS fails to specify the scientific background on how these assumptions were made.

The numerous examples of significant issues that are not acknowledged or analyzed undermines the credibility of the BDCP as a biologically justified project, and erodes the public’s trust in DWR and the State to uphold statutory, regulatory, and contractual obligations to protect the value of the Delta’s unique ecosystem, water supply, agricultural longevity, and socioeconomic environment.

The Delta ISB had the following to say about the “unwarranted optimism” that continues to persist in CA WaterFix:

- “The level of certainty seems optimistic, and it is unclear whether there are any contingency plans in case things don’t work out as planned. This problem persists from the Previous Draft.” (Pg 17)

- “Here, as in many other places, measures are assumed to function as planned, with no evidence to support the assumptions.” (Pg 17)
- “This conclusion is built on questionable assumptions;” (Pg 8)
- “A scientific basis for this statement is lacking, and an adaptive or risk-based management framework is not offered for the likely event that such optimism is unfulfilled.” (Pg 10)
- “The literature does not support this assumption.” (Pg 18)

F. Cumulative Impacts Analysis is Inadequate

Every action has a reaction, and there are hundreds of actions in each of the new CA WaterFix alternatives, but very little analytical attention to the cumulative impacts of these actions to each other, environmental trade-offs, or how other foreseeable projects and actions will affect this project.

Examples of the many cumulative adverse impacts in the Plan Area (Delta) the EIR/EIS should specifically describe, analyze, and quantify include:

- Cumulative impacts to in-Delta water supply (agriculture and drinking water) from 7 significant and “unavoidable” adverse impacts identified in *Water Quality Chapter 8*.
- Cumulative impacts to levee stability and Delta flood risk from CM1 pile driving, dewatering lowering groundwater 10-20 feet, sediment loading, 9 cofferdams in the Sacramento River and tributaries, and damage from erosion, seepage, and overtopping;
- Cumulative impacts to Delta agriculture from land conversion, seepage damage, water quality degradation, soil contamination (salinity absorption), blocked access to parcels, and reduce water elevations (surface and groundwater) stranding diversion intakes and wells;

The failure to adequately analyze the cumulative impacts was also pointed out by the Delta ISB:

- “The proposed project is part of the broader array of management actions in the Delta and should be considered in that broader context.” (Pg 18)
- “the Current Draft fails to consider how levee failures would affect the short-term and long-term water operations spelled out in Table 4.1-2.” (Pg 7)
- “What are the cumulative impacts of wetland losses in the Delta? What is the tipping point beyond which further wetland losses must be avoided?” (Pg 18)
- “Up to 14 years of construction activities were predicted for some areas (e.g., San Joaquin Co.); this would have cumulative impacts (e.g., dewatering would affect soil compaction, soil carbon, microbial functions, wildlife populations, and invasive species).” (Pg 19)

G. Insufficient Modeling and Analysis of Water Supply and Quality Impacts

The use of flawed models and failure to conduct full model runs for the new CA WaterFix alternatives, once again results in underestimated impacts, particularly for Delta water supply and quality, as well as overly optimistic conclusions regarding the ability to mitigate impacts.

The Delta ISB also pointed out the following issues with the modeling and water operations:

- “Although sensitivity modeling was used to address the effects of changes in the footprint and other minor changes of the revised project, full model runs were not carried out to assess the overall effects of the specific changes.” (Pg 11)
- “Consequently, modeling that would help bracket ranges of uncertainties or (more importantly) assess propagation of uncertainties is still inadequate.” (Pg 11)
- “There are also uncertainties with the data generated from model outputs, although values are often presented with no accompanying error estimates.” (pg 11)
- “The operating guidance for the new alternatives seems isolated from the many other water management and environmental activities in and upstream of the Delta likely to be important for managing environmental and water supply resources related to Delta diversions.” (Pg 14)
- “The dynamics of the Delta are largely determined by water flows. The Current Draft acknowledges that water flows and salinity will change in complex ways. There are statements about how inflows, outflows, and exports will change in Alternative 4A in relation to baseline (No-Action) conditions (p. 4.3.8-13). What is the scientific basis on which these changes will be managed? Will models be used? What confidence should we have in current projections? Have the effects of drought or deluges been considered?” (Pg 15)
- “the Current Draft is probably outdated in its information on climate change and sea-level rise. It relies on information used in modeling climate change and sea-level rise in the Previous Draft, in which the modeling was conducted several years before December 2013.” (Pg 11)
- “The absence of the climate-change chapter (Chapter 20) in the Previous Draft from Appendix A in the Current Draft indicates that no changes were made.” “Yet climatic extremes, in particular, are a topic of intense scientific study, illustrated by computer simulations of ecological futures and findings about unprecedented drought.” (Pg 11)
- “How sensitive are project water supply and environmental performance to changes in operating criteria?” (Pg 14)
- “The new Sustainable Groundwater Management Act (SGMA) seems likely to increase demands for water diversions from the Delta to the south to partially compensate for the roughly 1.5-2 maf/year that is currently supplied by groundwater overdraft.” (Pg 15)
- “The climate change analysis of changes in Delta inflows and outflows is useful, but isolating the graphs in a separate document disembodies the discussion.” (Pg 15)
- “the failure to consider how climate change and sea-level rise could affect the outcomes of the proposed project is a concern that carries over from our 2014 review and is accentuated by the current drought” (Pg 8)
- “Graphs of changes and listing of extreme highs and lows during a model run would have more biological meaning. Also, comparisons were made using current baseline conditions and did not consider climate change effects on temperatures.” (Pg 17)

VII. ECONOMIC IMPACTS AND FISCAL ASSURANCES

A. Economic Evaluation of BDCP Is Inadequate and Biased

A new economic analysis does not appear to have been conducted on the new CA WaterFix alternatives. Therefore, the NDWA’s previous comments on BDCP alternatives in 2014

regarding the inherent inequities that exist in the BDCP and EIR/EIS assumptions used in the cost-benefit analysis, also apply to the CA WaterFix alternatives.

DWR should undertake objective and comprehensive cost-benefit and socioeconomic analyses for the CA WaterFix alternatives that is consistent with applicable economic analysis standards and independently peer-reviewed for accuracy and efficacy of the methodology, assumptions, models, and results.

B. 1981 Contract Compliance Costs Are Not Included in the Finance Chapter or the Underlying Economic Analysis

CA WaterFix should acknowledge the financial obligations associated with implementing remediation measures to comply with DWR's assurances that are specified in the NDWA 1981 Contract. Costs to comply with the 1981 Contract will be incurred in the design, construction and operational phases of the BDCP/CA WaterFix alternatives (assuming, *arguendo*, that the project is constructed), so DWR's binding obligations under the 1981 Contract will most certainly have economic repercussions during the ongoing operation of these water conveyance facilities. Yet neither the Finance Chapter of the BDCP, the new CA WaterFix alternatives, nor the economic analyses mention or quantify the costs of complying with the 1981 Contract.

C. Reduction in NDWA Assessments Needs to be Addressed

Like other local agencies dependent on property assessments to fund its core functions, NDWA is concerned that the massive permanent conversion of land and long-term (up to 14 years) disruption of existing land use activities during construction would result in a significant loss of assessment revenues which could seriously impede the Agency's ability to administer and enforce the 1981 Contract. Local government agencies in the Plan Area, including NDWA, need a reliable mechanism and funding source to replace lost local government revenues (taxes, assessments).

DWR and USBR not only have a duty under CEQA and NEPA to identify these significant fiscal impacts; they also have a duty to mitigate these impacts. Moreover, the 1981 Contract imposes other, contractual obligations on DWR including, *inter alia*, the implied covenant of good faith and fair dealing, not to take actions that undermine the Agency's ability to perform under, or enforce, the 1981 Contract.¹⁶

Resolution of this matter is additionally critical to the Agency because state agencies do not have a good track record of paying local property taxes and assessments, forcing NDWA and other local government agencies to sue for recovery.¹⁷ In fact, the two largest delinquent landowners who have not paid current NDWA assessments are State agencies.¹⁸

¹⁶ Special Act, Sec. 115-4.1

¹⁷ See, e.g., *North Delta Water Agency v. CA Department of Fish & Game* (Case No. 06AS03923); *Manteca Unified School Dist. v. Reclamation District 17* (fees for school assessments); Kruger, Harold "Levee District 1 tells Caltrans to pay up" *Appeal-Democrat* (November 2, 2013). Available at http://www.appeal-democrat.com/levee-district-tells-caltrans-to-pay-up/article_510ee3bf-be28-53ca-8b52-449318e471a5.html?mode=jqm

¹⁸ Specifically, the Department of Fish and Wildlife (whose assessments are currently offset by DWR contact payment reductions pursuant to a settlement in the above case, Case No. 06AS03923) and Caltrans.

The BDCP/CA WaterFix project alternatives and associated RDEIR/SDEIS should explicitly acknowledge the obligations of the State to financially offset “any detriments” to North Delta channels and water users resulting from the operation of the CVP and SWP, as required by the 1981 Contract,¹⁹ and declare DWR’s commitment to enter into a binding agreement prior to the start of construction to mitigate lost assessment revenues associated with a 14-year construction time period and ongoing operations of BDCP/CA WaterFix project. This is consistent with BDCP’s existing obligation under the Delta Reform Act to enter into contracts for payment of local agency tax or assessments for all lands associated with implementation of CM1 conveyance facilities. A reduction of 1981 Contract payments for any lands transferred from private to public ownership (whether owned by State, federal, or local agencies) for purposes of implementing BDCP/CA WaterFix project is one option for mitigating these fiscal impacts.

D. Additional Funding Assurances for BDCP/WaterFix Implementation Are Needed

Costs incurred by DWR actions to avoid or remedy 1981 Contract violations, or pay in-lieu assessments to NDWA, are not theoretical and should be budgeted in a way that recognizes the fiscal gravity and significant impact to the Agency. NDWA is particularly concerned about the availability of funding to implement mitigation measures for the hundreds of impacts identified in the RDEIR/SDEIS and individual actions called for in *Avoidance and Minimization Measures*.

The precariousness of BDCP/WaterFix funding is exacerbated by documents stating finance plans will be developed separately by “various funding agencies” through future discussions.²⁰ The elusive nature of the ability of BDCP/WaterFix to fully fund permit activities, including adaptive management and mitigation measures is illustrated by the lack of funding agreements signed by SWP or CVP water contractors. In order to be reliable funding streams over long-term operation of these new water conveyance facilities, the funding mechanisms should be unencumbered by the vagaries of legislative appropriations.

NDWA requests the certainty of reliable funding being available for mitigation implementation, reimbursement of in-lieu assessments, payment of 1981 Contract violation remedies, and compensation to third parties for damages be described and committed to in detail in BDCP/WaterFix project description and RDEIR/SDEIS.

VIII. OVERSIGHT OF IMPLEMENTATION

A. BDCP/WaterFix Lacks Accountability for Compliance with Laws and Permits

Under NEPA, mitigation includes avoiding, minimizing, rectifying, reducing over time, or compensating for an impact.²¹ CEQA contains similar requirements. In order to ensure compliance with all permit terms and conditions, permitting agencies will need to have a robust tracking mechanism to monitor whether the thousands of discrete mitigation actions listed in the EIR/IES chapters and contained in the *Avoidance and Minimization Measures* (Plan Appendix

¹⁹ 1981 Contract Recitals, p. 1

²⁰ BDCP EIR/EIS, p. 8-2.

²¹ 40 CFR § 1508.20

3.C) are being implemented properly, and that the mitigation measures are performing as intended to reduce the hundreds of significant impacts listed in the RDEIR/SDEIS.

In accordance with NEPA/CEQA, the BDCP/WaterFix permitting agencies must be clear with each other and transparent with the public as to who is proposing each mitigation measure, and who will monitor and enforce measures that are adopted as terms and conditions of the approved permits.²² Failure to ensure the implementation and effectiveness of these mitigation measures will result in a substantial increase in “Significant and Unavoidable” adverse impacts.

NDWA could find no mitigation monitoring plan, governance oversight entity, or adaptive management process specifically described for developing replacement mitigation measures in the event that an action portrayed in the RDEIR/SDEIS is ineffective.

Neither did the Delta ISB according to the following concerns regarding the effectiveness of adaptive management and mitigation measures due to inadequate funding and oversight:

- “We did not find examples of how adaptive management would be applied to assessing – and finding ways to reduce – the environmental impacts of project construction and operations.” (Pg 5)
- “The missing details also include commitments and funding needed for science-based adaptive management and restoration to be developed, and more importantly, to be effective.” (Pg 6)
- “The Current Draft does little more than promise that collaborations will occur and that adaptive management will be implemented.” (Pg 6)
- “The test will be whether the measures will be undertaken as planned, be as effective as hoped, and continue long enough to fully mitigate effects. This is where adaptive management and having contingency plans in place becomes critically important. It is not apparent that the mitigation plans include these components.” (Pg 13)
- “Monitoring is mentioned, but details of organization, intent, and resources seem lacking. Adequate funding to support monitoring, collaborative science, and adaptive management is a chronic problem.” (Pg 15)

Of most concern to the NDWA is the potential for breach of the 1981 Contract by DWR that could result in substantial adverse impacts on water users and the physical and human environment in the North Delta, if BDCP/WaterFix fails to properly implement compliance measures and/or mitigation measures to avoid or remedy violations of the 1981 Contract.

In order to protect Delta-as-Place in accordance with the coequal goals of the Delta Reform Act, the project description and RDEIR/SDEIS for the newly added CA WaterFix alternatives should explicitly describe at a minimum the entity responsible for:

- Oversight, administration, and approval of program funding, contracting, and resources;
- Oversight and implementation of mitigation measures, particularly their effectiveness in reducing adverse impacts consistent with CEQA/NEPA requirements;

²² See, e.g., *NEPA and CEQA: Integrating State and Federal Environmental Reviews*, Draft for Public Review and Comment, March 2013, the U.S. Council on Environmental Quality (CEQ) and CA Governor’s Office of Planning and Research

- Implementation of compliance monitoring and adaptive management measures;
- Acquisition of interests in real and personal property, and sequencing of permits and other authorizations; and
- Compliance of water operations with permit conditions and contractual obligations.

B. Enforcement Oversight and Mechanisms Needed

The Agency could only find cursory references to the NDWA and the 1981 Contract in BDCP/WaterFix. As the Agency asserts in comments above, the assurances provide to NDWA by DWR are particularly relevant to proposed SWP and CVP water operations in BDCP/WaterFix because the 1981 Contract requirements could significantly constrain such operations.²³

NDWA's prior comments also establish the fiscal ramifications if the terms and conditions of the 1981 Contract are violated as a result of BDCP/WaterFix operations. Despite DWR's long-standing acceptance and commitment to uphold the provisions of the 1981 Contract, NDWA is concerned about DWR's ability to do so, based upon recent exceedances of the Contract's water quality criteria during drought conditions experienced in 2015.

Permit conditions for CA WaterFix should therefore incorporate, at a minimum, the following requirements:

- Specific year-round water quality criteria, and avoid alteration of surface water elevations and natural flows that are detrimental to water users and Delta channels as 1981 Contract metrics to be achieved, including identification of enforcement triggers and mechanisms.
- Require DWR to annually disclose any operational changes, remedies for damages caused by prior year's operations that were implemented, and any significant physical modifications made to SWP facilities (i.e., alternative water supply infrastructure) implemented as a result of complying with water quality and supply obligations under the 1981 Contract.
- Require "compliance "with any and all DWR and USBR contractual obligations still in full force and effect that are associated with the operations of the SWP and CVP, including the NDWA 1981 Contract."
- Identify the entity responsible (among construction contractors, NMFS, USFWS, DWR, USBR, BDCP Implementation Office, and the other key players)) for the timing, implementation, and effectiveness of mitigation actions²⁴ contained in Mitigation Measures and *Avoidance and Minimization Measures* including the development of studies, field surveys, avoidance protocols, reports, best management practices, etc. to be implemented during all phases of the project from design to maintenance, monitoring, and adaptive management.

²³ This would apply to Contract violations caused by loss of water quantity or water quality, altered surface water elevations detrimental to water users, damage from seepage, harm caused by overland facilities, damage to existing flows and diversions, or any other provisions identified in Articles.

²⁴ Mitigation actions contained in the EIR/EIS's Mitigation Measures and Plan Appendix 3.C, *Avoidance and Minimization Measures*

- The entity responsible for ensuring adequate funding is available for all mitigation and *Avoidance and Minimization Measures* associated with CM1 and for annually reporting the fiscal costs of mitigation.
- What the Project and permit ramifications will be if the hundreds of mitigation and avoidance actions are not being properly implemented in a timely manner to alleviate adverse impacts.
- An annual assessment by the Delta ISB of DWR's compliance with the timing and effectiveness of mitigation measures in Final EIR/EIS and required as permit terms and conditions, with particular attention to any mitigation measures and actions that are behind in implementation or not performing as intended to reduce adverse impacts, and provide recommendations for alternative mitigation measures/actions to replace those that are not working. This will ensure that mitigation occurs and that adaptive management is properly applied to mitigation associated with construction of new water conveyance facilities.

C. Significant Environmental Uncertainty Warrants a Phased Approach

The NDWA agrees with Project proponents that uncertainty is not a good reason to do nothing. However, in the case of the BDCP/WaterFix, the high degree of uncertainty for achieving any meaningful benefits for covered species as expressed by independent science reviews and ESA permitting agencies,²⁵ results in a fundamental failure to comply with NEPA, CEQA, or state and federal endangered species laws.²⁶ According to the independent review of the Plan and Effects Analysis by fisheries biologist Dave Vogel, every aspect of the impacts of BDCP Preferred Alternative 4 on salmonids is either "uncertain" or "highly uncertain."²⁷ Because WaterFix Preferred Alt. 4A relies on Effects Analysis for BDCP Alt. 4, Dr. Vogel's comments also apply to the new preferred alternative.

Despite the criticism of these uncertainties by independent scientists and fish agencies, the CA Waterfix fails to include precautionary measures such as phased construction so that a single intake in Hood would be operated long enough to include at least one dry year to establish adequate fish screen and operational criteria before additional intakes could be constructed.

Currently, the three new North Delta intakes would undergo some operational fish screen testing prior to full pumping but only *after* all three North Delta diversions have been built. If these never before-used screens do not function as planned in terms of fish protection, then this gamble will end up a losing proposition for at least one of the following: the Delta ecosystem, Delta-as-Place, or the CVP/SWP Delta export water contractors (who will be stuck with long-term payments on a very expensive stranded asset).

To mitigate environmental and human resource impacts, BDCP/WaterFix construction should be phased so that one intake is built and fish screen effectiveness and compliance with permits is tested and the water quality, elevation, and reverse flows monitored to assure the 1981 Contract and California's "No Injury" water rights rule are not being violated. The administration of Governor Edmund G. Brown, Jr. obviously agreed to this precautionary approach the first time

²⁵ Vogel Report, NAS Comments, ISB Comments, Latour, R., Ph.D., Technical Review of the Bay-Delta Conservation Plan (BDCP) and Related Environmental Impact Review (EIR) (May 16, 2014) ("Latour Report")

²⁶ Vogel Report, Latour Report, NAS Comments, ISB Comments

²⁷ Vogel report

around in the Peripheral Canal legislation (ACA 90 and SB 200) and should do no less now with BDCP/WaterFix.

IX. EFFECTS ANALYSIS AND MODELING FLAWS

A. Flawed Modeling Underlying the Plan and EIR/EIS Prevents Evaluation of Impacts

The models used for evaluating water project operations, hydrodynamics, and water quality have been extensively modified for BDCP studies to calibrate for salinity, reflect current Biological Opinion operational constraints, and incorporate the proposed actions and water operations proposed in Alt. 4 and 4A.

These modified models have been found to be unreliable due to problems highlighted by an independent review, incorporated herein by reference in a report by MBK Engineers and Dan Steiner entitled *Report on Review of Bay-Delta Conservation Program Modeling* (“Modeling Report”).

As explained in the Modeling Report, the BDCP model is an outdated version of the CalSim II model, which contains known errors.²⁸ By definition, utilization of an outdated version of the CalSim II model does not constitute utilization of best available science.²⁹ Project proponents should conduct new model runs and Effects Analysis results using the current version of CalSim II for CA WaterFix alternatives.

The Modeling Report describes other significant problems with the BDCP modeling that should be addressed before running new modeling runs for WaterFix alternatives:

- Methodology used to incorporate climate change contains errors and does not incorporate reasonably foreseeable adaptation measures that would lessen the dramatic effects predicted by the model;
- Climate change hydrology in the Upper San Joaquin River basin was incorporated incorrectly into the BDCP Model;
- Includes predicted changes in precipitation and temperature without other changes, resulting in insufficient water needed to meet all regulatory objectives and user demands.

Each one of the above problems contained in the BDCP’s models and methodology alter the outcomes in ways that could mask a greater severity in impacts to Delta water quality, temperature, elevations, and unnatural flows posed by BDCP/WaterFix alternatives. The cumulative nature of these miscalculations essentially renders the BDCP modeling and Effects Analysis useless for making impact conclusions for new CA WaterFix alternatives. In particular, the modeling and Effects Analysis does not adequately evaluate water quality and supply data critical to enforcement of NDWA’s 1981 Contract.

Once these modeling anomalies are corrected and an operations plan is defined, the NDWA will be able to evaluate whether proposed BDCP/WaterFix reconfiguration of SWP and CVP water

²⁸ These errors are discussed at greater length in the Modeling Report.

²⁹ Note that NEPA requires application of information of “high quality” and professional integrity. 40 CFR 1500.1, 1502.24. Finally, the *Delta Plan* requires application of best available science for all covered actions.

facilities and alteration of Delta hydrology will be in compliance with DWR's assurances provided to North Delta water users in the 1981 Contract.

B. The Modeling Fails to Include the 1981 Contract Requirements

Under CEQA and NEPA, an EIR/EIS must include a description of the physical environmental conditions in the vicinity of the project from both a local and regional perspective.³⁰ An accurate description of the environmental setting of the Project is critical because it establishes the baseline physical conditions against which a lead agency can determine whether an impact is significant.³¹ Most importantly, the baseline helps the public discern its impact on the local natural resources and human environments.³²

Therefore, to comply with CEQA guidelines and case law, all hydrologic modeling undertaken in connection with BDCP/WaterFix must assume as part of the "baseline" condition that the terms and conditions of the 1981 Contract will remain in full force and effect. This includes DWR's obligations to operate the SWP to maintain water quality and supply in accordance with Articles 2, 6 and 8.

To date, the hydrologic modeling underlying BDCP/WaterFix and EIR/EIS fails to do so – even though the NDWA at its own expense has provided a modeling tool to incorporate into BDCP's Effects Analysis modeling to ensure the Contract's criteria is analyzed as a baseline condition of SWP operations. This inclusion is important because the Contract's salinity objectives differ in certain key respects from the water quality requirements in the SWRCB's current Water Quality Control Plan for the Delta (D-1641), particularly in the late summer months where the 1981 Contract requirements are more stringent from a water quality standpoint.

The California Water and Environmental Modeling Forum and ISB should perform an independent verification of the modeling tools prior to conducting new model runs, to ensure that the best science available is deployed in the best manner possible.

C. Averaging in Modeling Methodology Can Obscure Significant Fluctuation of Salinity Increases

The BDCP Effects Analysis makes extensive use of averaging, which is also used in the CA WaterFix alternatives. Unfortunately, by its nature, averaging obscures the extreme values that – for some variables and biological and hydrological systems – masks true water quality, water supply, flood risk, and species impacts. For example, the Effects Analysis analyzes X2 values averaged from December to May, even though that period encompasses a huge seasonal range in natural Delta outflow patterns.

Averaging across these periods tends to conceal larger changes in Delta outflow within and across years that may occur over operation of new CA WaterFix facilities. CA WaterFix's

³⁰ CEQA Guidelines §15125(a)

³¹ Id.

³² See, e.g., *Communities for a Better Environment v. South Coast Air Quality Management Dist.* (2010) 48 Cal.4th 310 (The ultimate goal in fixing a baseline is to "give the public and decision makers the most accurate picture practically possible of the project's likely impacts.")

reliance on the BDCP's use of a 5-month average in the modeling of compliance with X2 requirements could have problematic results, such as a decrease in the temporal variability in salinity that historical conditions and existing Delta standards provide. Improperly treating water quality as a long-term average rather than a daily issue could result in hiding the significant fluctuation of salinity increases that could occur under Alt. 4/4A water operations as proposed. Depending on water quality conditions, water users may make decisions on water diversions on a daily basis and sometimes hourly basis, sometimes diverting only during certain tidal cycles. Thus, averaging salinity impacts particularly over a long period fails to identify impacts to local water users.

D. Modeling Flaws Mask Nature, Extent, And Severity of Salinity Impacts

Changes in Delta hydrology can influence water quality across a broad range of constituents. Currently, all of the waterways of the Bay Delta are water-quality impaired for one or more contaminants;³³ therefore, any changes that worsen the existing conditions also exponentially increases the level of significance of each impact under each alternative.

The following salinity impacts are of particular concern to NDWA:

- Sea water intrusion as a result of sea level rise or decreased Delta outflow can increase the concentration of salts (i.e. bromides, chlorides, etc.).
- Long-term average annual Delta outflow is anticipated to decrease under Alt. 4/4A by between 864 (scenario H1) and 5 TAF (scenario H4) relative to the No Action Alternative, attributable only to changes in operations. The result of this will be increased sea water intrusion in the western Delta.
- Overall effects would be greatest at Barker Slough, where substantial increase in long-term average bromide concentrations under all operational scenarios are predicted, but would be greatest for Scenario H2.
- Salinity level increases in South and Western Delta are labeled as "unavoidable" adverse impacts due to uncertainties surrounding the effectiveness of the mitigation measures to reduce adverse water quality effects. (Impact WQ-11)

X. WATER SUPPLY AND QUALITY CONCERNS

A. Alteration of Natural Tides Create Elevation and Water Quality Concerns

When export levels are low,³⁴ the Sacramento River's flow is dominantly tidal with both positive (flow to the north) and negative (flow to the south) oscillations of similar magnitudes with the tides, averaging to a net flow of approximately zero. As exports increase in mid- to late-June, the oscillations shift such that the net flow becomes negative and the number of hours each day

³³ United States Environmental Protection Agency, Staff Report: Analysis of Water Quality Issues in EPA's February 2011 ANPR (2011). Available at <http://www2.epa.gov/sites/production/files/documents/actionplan-appx1.pdf>

³⁴ As one example, refer to the data for June 2007.

when the flow moves to the north is reduced. From mid-July through August, when total exports at South Delta continuously exceed 10,000 cfs, the flow becomes primarily to the south, effectively eliminating the natural ebb tidal flow that would occur otherwise. This creates an unnatural flow pattern in which water no longer oscillates between north and south, but simply flows constantly south in a reverse flow.

The subsequent impact on water quality within the Delta is likely to be substantial according to BDCP's modeling results for Alt. 4/4A.³⁵

BDCP/WaterFix should conduct new modeling using the recalibrations requested in previous comments to provide a robust analysis of the changes in tidal excursions in the Plan Area and identification of impacts in the EIR/EIS to provide more detail on water quality, surface water elevations (water supply), and covered fish species. This analysis should include specific details on the timing, locations, duration, and intensity of the alteration of natural tides in the Plan Area and appropriate mitigations to reduce any adverse impacts on beneficial uses.

B. Altered Water Elevations Not Analyzed for Impacts to Delta Water Supply or Potential for Specific Damages Under NDWA 1981 Contract

The Preferred Alternatives 4/4A construction and ongoing operations will alter both surface and groundwater elevations within NDWA, including reduced surface flows in September within NDWA in about half of all years.³⁶

The NDWA is concerned about the water supply availability impacts that alterations in water elevations pose to water users and other beneficial uses in the North Delta:

- More than 2,500 water diversions, including diversions for agricultural uses, in the Plan area.³⁷
- Groundwater is used throughout the Delta for agricultural, municipal, and industrial beneficial uses, particularly in the North Delta for irrigation of orchards. In the upland peripheral Delta areas, average annual groundwater pumping is estimated to range between 100,000 and 150,000 acre-feet, both for domestic and agricultural uses.

The NDWA is particularly concerned with potential reductions in water surface water elevations within the North Delta that could constitute a breach of DWR's obligations under Article 6 of the 1981 Contract.³⁸ Such violations of the 1981 Contract would give rise to damage claims against the State by water diverters within NDWA.³⁹

A reduction in surface water elevations would adversely affect water supply availability within NDWA in ways that were neither acknowledged nor analyzed. For example, the impact to agricultural water diverters that utilize gravity siphons and other irrigation systems designed to

³⁵ See Exhibits C and E.

³⁶ BDCP Chap 5, page 5.3-4.

³⁷ Plan Chapter 5 Effects Analysis

³⁸ NDWA 1981 Contract, Art. 6 ("The state shall not... cause the water surface elevations in Delta channels to be altered to the detriment of Delta channels or water users within the Agency...).

³⁹ *Id.* ("...the State shall repair or alleviate the damage... and shall be responsible for all diversion facility modifications required.")

optimize water diversion and conveyance based on the *current* flow and water level regime have not been analyzed. The gravity siphons and pumps that are used to divert surface water in NDWA simply will not work effectively if water surface elevations are significantly reduced, as contemplated in the Plan. If siphons are rendered inoperable it would become necessary for Delta diverters to install mechanical pumps powered either by electricity (which is often infeasible) or internal combustion engines. If the latter are used, this would cause air quality and other impacts that also are not analyzed in the RDEIR/SDEIS.

In addition, the irrigation systems designed based on the use of siphons and gravity diversions would need to be reconfigured. The increased capital and operation and maintenance costs associated with reconfiguring conveyance systems and the conversion to mechanical pumps would be substantial. NEPA requires that the “human” (including economic) impacts associated with increased costs of Delta water diversions be fully analyzed.⁴⁰ BDCP/WaterFix fails to analyze these impacts, because it does not weigh the substantial increased capital and operation and maintenance costs associated with conversion to mechanical pumps.

Due to the Delta’s high reliance on groundwater for agricultural and domestic water supplies, the lowering of groundwater elevations during construction dewatering would also create significant adverse impacts on those beneficial uses, including a loss of sub-irrigation. A reduction in sub-irrigation would, in turn, require increased surface water diversions by agricultural water users.

Using the updated CalSim model, DWR should conduct new Effects Analysis modeling with a robust emphasis on analyzing the water supply impacts on NDWA water users and channels caused by altered surface elevations (higher and lower). Further, the BDCP/WaterFix EIR/EIS should identify, disclose and mitigate contractual issues in the *Water Supply Chapter*, including the potential for increased salinity intrusion, erosion and seepage damage, reversed or otherwise unnatural flows, fish stranding, and other local diversion intake effects. Impacts analysis and disclosure in the EIR/EIS needs to provide details on specific locations, durations, timing, size, and intensity in order to comply with NEPA requirements. (40 CFR § 1508.27(a))⁴¹

C. Water Supply Chapter Silent on Impacts to Delta Water Users

Inexplicably, the EIR/EIS *Chapter 5 Water Supply* contains no discussion, disclosure, or mitigation of adverse impacts to water supplies in the Plan Area (Delta) caused under any of the BDCP/WaterFix alternatives. The chapter’s section on regional water use mentions the role of entities such as NDWA which does not even divert or supply water as is implied, but then fails to actually describe how, where, by what method, or for what purpose water is used in the Plan Area. The absence of describing the context in which local water supplies are accessed and used, results in the EIR/EIS *Water Supply Chapter 5* failing to properly disclose the level of significant impacts imposed on agricultural and municipal water users in the Plan Area.

The reduced water quality conditions created by BDCP/WaterFix operations is a “taking” of water rights due to the water supplies in the Plan Area essentially being degraded to the point of significant impairment of existing beneficial uses, requiring compensation under the law and

⁴⁰ Council On Environmental Quality, Executive Office Of The President, *A Citizen’s Guide to the NEPA* (“NEPA requires Federal agencies to consider environmental effects that include, among others, impacts on social, cultural, and economic resources, as well as natural resources.”)

⁴¹ Specifically, 40 CFR § 1508.27(a), requiring analysis of the context and intensity of the impacts.

under the 1981 Contract. The EIR/EIS must acknowledge and mitigate these adverse impacts in the Water Supply Chapter and consider whether the damage to water users is a violation of California's "No Injury Rule," statutes governing "Priority of Water Rights," or standards in CEQA and NEPA governing disclosure, weighting of impacts, and cumulative effects on environmental and human resources.

X. Conclusion

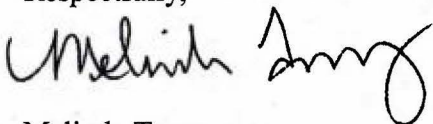
The very preliminary conceptual nature of the BDCP/CA WaterFix project alternatives, results in a failure to assess numerous significant impacts and development of CEQA/NEPA conclusions that are primarily based on conjecture. In addition, the water quality and availability impacts are nearly impossible to decipher due to the disjointed document organization and presentation; and therefore fails to satisfy the most basic requirement of CEQA – to inform the public about the environmental consequences of a proposed decision or project.

As pointed out by the Delta Independent Science Board, the CA WaterFix project alternatives and RDEIR/SDEIS lack completeness, defer essential material to the Final EIR/EIS, and retain a number of deficiencies inherent in the 2014 BDCP DEIR/DEIS.

These limiting factors prevent NDWA, its water users, and the general public from fully understanding the true scope, severity, and duration of potential environmental and economic effects associated with the construction, permitting, operation, and mitigation of BDCP/WaterFix project components.

The substantial inadequacies of the BDCP/WaterFix alternatives and RDEIR/SDEIS fail to protect people and property in the Plan Area or meet the legal requirements for state and federal endangered species, environmental assessment, or various Delta protection laws. Therefore, the Agency requests the State to revise per comments contained herein and once again recirculate the Plan and EIR/EIS for public review and comment.

Respectfully,



Melinda Terry,
Manager
North Delta Water Agency

PROOF OF SERVICE

I am a resident of the State of California, over the age of eighteen years, and not a party to the within action. My business address is Downey Brand LLP, 621 Capitol Mall, 18th Floor, Sacramento, California, 95814-4731. On January 5, 2016, I served the within document(s):

PROTEST – PETITION (North Delta Water Agency, RD 999, RD 2060, RD 2068)

NOTICE OF INTENT TO APPEAR (North Delta Water Agency, RD 999, RD 2060, RD 2068)

- BY E-MAIL:** by transmitting via e-mail or electronic transmission the document(s) listed above to the person(s) at the e-mail address(es) set forth below.
- BY MAIL:** by placing the document(s) listed above in a sealed envelope with postage thereon fully prepaid, in the United States mail at Sacramento, California addressed as set forth below.
- BY OVERNIGHT MAIL:** by causing document(s) to be picked up by an overnight delivery service company for delivery to the addressee(s) on the next business day.
- BY PERSONAL DELIVERY:** by causing personal delivery by _____ of the document(s) listed above to the person(s) at the address(es) set forth below.

California Department of Water Resources
c/o James Mizell
1416 Ninth Street, Room 1104
Sacramento, CA 95818
James.Mizell@water.ca.gov

U.S. Bureau of Reclamation
c/o Amy Aufdemberge
U.S. Department of Interior
Office of Regional Solicitor, Pacific
Southwest Region
2800 Cottage Way
Sacramento, CA 95825-1898
Amy.Aufdemberge@sol.doi.gov

I am readily familiar with the firm's practice of collection and processing correspondence for mailing. Under that practice it would be deposited with the U.S. Postal Service on that same day with postage thereon fully prepaid in the ordinary course of business. I am aware that on motion of the party served, service is presumed invalid if postal cancellation date or postage meter date is more than one day after date of deposit for mailing in affidavit.

I declare under penalty of perjury under the laws of the State of California that the above is true and correct.

Executed on January 5, 2016, at Sacramento, California.



Catharine F. Irvine

DOWNEY BRAND LLP