Addendum A— Summary of Comments Received After Close of CEQA Scoping Period April 18–December 14, 2020 This page left intentionally blank.

Contents

Ch	apter 1 In	troduction	1-1
Ch	apter 2 Sc	oping Comments Summary	2-1
	2.1 Ov	erview of Commenters	2-1
	2.2 Su	mmary of Comments Received	2-2
	2.2.1	Project Purpose and Objectives	2-2
	2.2.2	2 Description of Proposed Project Facilities	2-2
	2.2.3	8 Alternatives	2-2
	2.2.4	Approach to Analysis	2-2
	2.2.5	Relationship to Other Processes, Plans, Programs, or Policies	2-3
	2.2.6	Water Supply and Surface Water Resources	2-3
	2.2.7	Groundwater	2-3
	2.2.8	8 Water Quality	2-3
	2.2.9	9 Geology and Seismicity	2-3
	2.2.1	.0 Soils	2-3
	2.2.1	1 Fish and Aquatic Resources	2-3
	2.2.1	2 Biological and Terrestrial Resources	2-4
	2.2.1	3 Land Use	2-4
	2.2.1	4 Agricultural Resources	2-4
	2.2.1	5 Recreation	2-4
	2.2.1	.6 Socioeconomics	2-4
	2.2.1	7 Aesthetics and Visual Resources	2-4
	2.2.1	8 Cultural Resources	2-4
	2.2.1	9 Transportation	2-4
	2.2.2	20 Public Services and Utilities	2-4
	2.2.2	1 Energy	2-5
	2.2.2	2 Air Quality and Greenhouse Gas Emissions	2-5
	2.2.2	23 Noise	2-5
	2.2.2	24 Hazards	2-5
	2.2.2	25 Public Health	2-5
	2.2.2	26 Mineral Resources	2-5
	2.2.2	27 Paleontological Resources	2-5
	2.2.2	28 Environmental Justice	2-5
	2.2.2	9 Climate Change	2-5
	2.2.3	0 Growth Inducement	

2.2.31 Tribal Cultural Resources	2-5
2.2.32 Public Involvement, Consultation, and Coordination	2-5
2.3 Consideration of Comments in the Draft EIR	2-6
Chapter 3 Index of Scoping Commenters	3-1
Chapter 4 Comment Summary Tables	4-1

Tables

Table A-1.	Commenters Submitting Comments April 18–December 14, 2020	3-1
Table A-2.	Commenters Submitting Form Letters April 18–December 14, 2020	3-1

Comment Summary Tables

Table A-3.	Comments Regarding the Scoping Process and the CEQA/National Environmental Policy Act (NEPA) Process
Table A-4.	Comments Regarding Participation in the EIR/EIS Process
Table A-5.	Comments Regarding the Project Objectives, Purpose, and Need4-4
Table A-6.	General Comments and Comments in Support or Opposition to the Proposed Project4-5
Table A-7.	Comments Regarding the Project Description4-6
Table A-8.	Comments Concerning Implementation Considerations4-10
Table A-9.	Comments Regarding Consistency with or Relationship to Other Processes, Plans, Program, or Policies
Table A-10.	Comments Regarding Permitting4-16
Table A-11.	Comments Regarding Project Area and Study Area4-17
Table A-12.	Comments Regarding Baseline4-18
Table A-13.	Comments Regarding Economic Impacts4-19
Table A-14.	Comments Regarding Community Benefits4-20
Table A-15.	Comments Regarding Alternatives4-21
Table A-16.	Comments Regarding the Approach to the Analysis4-30
Table A-17.	Comments Regarding Mitigation Measures4-34
Table A-18.	Comments Regarding Water Supply4-35
Table A-19.	Comments Regarding Surface Water Resources4-36
Table A-20.	Comments Regarding Groundwater4-37
Table A-21.	Comments Regarding Water Quality4-38
Table A-22.	Comments Regarding Geology and Seismicity4-39
Table A-23.	Comments Regarding Soils
Table A-24.	Comments Regarding Fish and Aquatic Resources

Table A-25. Comments Regarding Biological and Terrestrial Resources
Table A-26. Comments Regarding Land Use4-45
Table A-27. Comments Regarding Agricultural Resources 4-46
Table A-28. Comments Regarding Recreation4-47
Table A-29. Comments Regarding Socioeconomic Resources
Table A-30. Comments Regarding Aesthetic and Visual Resources
Table A-31. Comments Regarding Cultural Resources 4-50
Table A-32. Comments Regarding Transportation4-52
Table A-33. Comments Regarding Public Services 4-52
Table A-34. Comments Regarding Energy 4-53
Table A-35. Comments Regarding Air Quality and Greenhouse Gases
Table A-36. Comments Regarding Noise 4-55
Table A-37. Comments Regarding Hazards4-56
Table A-38. Comments Regarding Public Health4-57
Table A-39. Comments Regarding Mineral Resources 4-58
Table A-40. Comments Regarding Paleontological Resources 4-59
Table A-41. Comments Regarding Environmental Justice4-60
Table A-42. Comments Regarding Climate Change 4-62
Table A-43. Comments Regarding Growth Inducement4-62
Table A-44. Comments Regarding Tribal Cultural Resources 4-63

Acronyms and Abbreviations

0504	
CEQA	California Environmental Quality Act
cfs	cubic feet per second
CVP	Central Valley Project
DCA	Delta Conveyance Design and Construction Authority
DCP	Delta Conveyance Project
DEIR	Draft Environmental Impact Report
Delta	Sacramento-San Joaquin River Delta
DWR	California Department of Water Resources
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
ESA	Environmental Species Act
FAR	Lower Klamath Fall Augmentation Releases
FFTT	Fish Facilities Technical Team
NorCal	Delta of Northern California
Delta	
project	Delta Conveyance Project

RODRecord of DecisionSWPState Water Project

This document is an addendum to the *Scoping Summary Report* for the Delta Conveyance Project (project) that was published in July 2020. This document summarizes comments about the project received after the close of the official California Environmental Quality Act (CEQA) scoping period, which was April 17, 2020, at 5:00 p.m. Comment letters included in this addendum were received between April 18¹ and December 14, 2020. Information regarding the project and the scoping process is not repeated in this addendum. Please refer to the July 2020 *Scoping Summary Report* for additional information.

¹ Letters received after 5:00 p.m. on April 17, 2020 are considered to be received on April 18, 2020 for the purposes of this scoping report addendum.

This page left intentionally blank.

2.1 **Overview of Commenters**

After the close of the scoping period, the California Department of Water Resources (DWR) continued to receive comments pertaining to the alternatives considered and the scope of analysis in the Environmental Impact Report (EIR) for the project. Comments were submitted in the form of letters or emails. Following is a list of commenters whose comments were reviewed and are included in this addendum.

Tribes

Yurok Tribe

Local Governments

County of Sacramento Office of Planning and Environmental Review

Special Districts and Water Companies

Kern County Water Agency

Mojave Water Agency

State Water Contractors

Non-Governmental Organizations

AquAlliance

California Sportfishing Protection Alliance

California Water Impact Network

California Water Research

Local Agencies of the North Delta

Individuals

A total of 37 individuals submitted written comments in the form of emails. Many of the letters were duplicative and considered "form letters". Letter 831 was selected as the representative letter for all form letters and is provided in Chapter 4, *Comment Summary Tables*.

2.2 Summary of Comments Received

The following sections summarize comments received; comments are presented by EIR resource section and topic.

DWR reviewed all comments received between April 18, 2020 and December 14, 2020 in detail to inform itself and the project team about issues of concern related to the project, both in general and about specific items regarding the environmental review's scope. Comments relevant to the EIR will be considered during development of the document.

Chapter 4 contains more detailed comment summaries arranged by commenter and by category of resource section analyzed in the EIR. Comments may not be presented verbatim; they may be summarized or rephrased as appropriate. Comments are categorized by resource topic to help DWR and the project team review comments relevant to specific topics or resource areas. Copies of the comment letters received between April 18, 2020 and December 14, 2020 are provided at the end of this addendum.

2.2.1 Project Purpose and Objectives

Commenters stated agreement with the purpose and need statement in the Notice of Intent.

2.2.2 Description of Proposed Project Facilities

Commenters requested a more detailed description of proposed project facilities. Commenters requested including specific information in the EIR regarding the proposed facilities, operation, and ownership of the project.

2.2.3 Alternatives

Commenters requested that DWR evaluate a "no project" alternative or an alternative that would maximize local water sources as well as an alternative that included increased Sacramento–San Joaquin River Delta (Delta) outflows and watershed management practices emphasizing healthy forests. Commenters also requested evaluation of alternative intake location sites to reduce impacts on terrestrial species, smaller intake facilities to reduce impacts on aquatic species, and an operational scenario that would restore a more natural hydrograph to the Delta. Commenters expressed opposition to the central corridor alignment. Commenters raised objections to the proposed intake locations and suggested that alternatives need to be considered. Commenters specifically requested that the EIR consider alternatives recommended by the Fish Facilities Technical Team.

2.2.4 Approach to Analysis

Commenters stated that all potential impacts should be addressed in the EIR, including potential impacts on resources and communities north of Shasta Dam as well as community impacts, traffic, fish, terrestrial, soils, noise, land use, and other potential impacts on the Delta communities. Other commenters stated that the EIR must accurately evaluate the potential short- and long-term impacts, including cumulative impacts. Commenters stated that the EIR should not rely on any

similar previous studies such as the Final California WaterFix EIR/Environmental Impact Statement (EIS).

2.2.5 Relationship to Other Processes, Plans, Programs, or Policies

Commenters stated the project should be consistent with the requirements of the 2009 Delta Reform Act. Commenters also stated concern about the relationship of the project to other water projects in the Lodi area. Commenters stated that to meet State Water Board requirements, the EIR should consider all aquatic species, not just listed aquatic species.

2.2.6 Water Supply and Surface Water Resources

Commenters requested that the EIR evaluate potential impacts on surface water supplies on the upper Sacramento River Watershed, including Shasta Reservoir and its tributaries, and the Trinity River Watershed and include climate change scenarios. Commenters stated that potential flooding should be evaluated during construction at an early-long-term period. Commenters stated that the EIR should include the annual average yield of the project in a variety of operational scenarios.

2.2.7 Groundwater

Commenters requested a full evaluation of potential groundwater impacts as a result of the proposed facilities' operations on the Delta and adjacent groundwater basins and potential impacts on groundwater in the upper Sacramento River Watershed, including Shasta Reservoir and its tributaries.

2.2.8 Water Quality

Commenters stated concern regarding potential effects of the project on salinity, water temperature, and algal blooms in the Delta and upstream in the Sacramento River.

2.2.9 Geology and Seismicity

Commenters requested use of the best available science to evaluate potential seismic hazards to existing levees and the project's proposed facilities.

2.2.10 Soils

No comments were identified regarding soils resources.

2.2.11 Fish and Aquatic Resources

Commenters stated concerns regarding potential impacts on fish and aquatic resources both in and downstream from State Water Project (SWP) and Central Valley Project (CVP) reservoirs. Commenters stated concerns about potential impacts on Chinook salmon (*Oncorhynchus tshawytscha*) and other fish species in the Klamath and Trinity River watersheds as well as those in Suisun, San Pablo, and San Francisco Bays. Commenters stated general concerns regarding the health of the Delta ecosystem. Commenters stated that all fish should be considered in the analysis.

Commenters also stated that the proposed intake locations would be highly detrimental to migrating fish species.

2.2.12 Biological and Terrestrial Resources

Commenters stated concern that the project would have significant impacts on biological resources in the project area. Commenters requested basing analysis of impacts on wildlife and their habitat on biological surveys conducted in the project area. Commenters also stated that alternatives should include options to fully mitigate impacts on biological resources. Commenters stated specific concerns about impacts on birds in the Delta and on migratory birds that use the Delta and the greater San Francisco Bay area as food sources.

2.2.13 Land Use

No comments were identified regarding land use.

2.2.14 Agricultural Resources

No comments were identified regarding agricultural resources.

2.2.15 Recreation

No comments were identified regarding recreational resources.

2.2.16 Socioeconomics

Commenters expressed concern about displacing agricultural jobs with temporary construction jobs. Commenters raised general concerns regarding the decline of livelihoods and Delta communities.

2.2.17 Aesthetics and Visual Resources

No comments were identified regarding aesthetics and visual resources.

2.2.18 Cultural Resources

Commenters stated that bridges with architectural or historical importance may be impacted by construction and would need to be preserved.

2.2.19 Transportation

Commenters said the EIR should analyze access into and out of the Delta as well as overall construction activity on all roadway segments, including potential impacts on roadways from heavy construction equipment and roadway maintenance and impacts on recreational and barge traffic.

2.2.20 Public Services and Utilities

No comments were identified regarding public services and utilities.

2.2.21 Energy

No comments were identified regarding energy.

2.2.22 Air Quality and Greenhouse Gas Emissions

No comments were identified regarding air quality and greenhouse gas emissions.

2.2.23 Noise

No comments were identified regarding noise.

2.2.24 Hazards

Commenters stated that the EIR should address the project's haulage for possible generation of nuisance dusts, asbestos from brake linings, and petroleum drips and spills.

2.2.25 Public Health

No comments were identified regarding public health.

2.2.26 Mineral Resources

No comments were identified regarding mineral resources.

2.2.27 Paleontological Resources

No comments were identified regarding paleontological resources.

2.2.28 Environmental Justice

No comments were identified regarding environmental justice.

2.2.29 Climate Change

No comments were identified regarding climate change.

2.2.30 Growth Inducement

No comments were identified regarding growth inducement.

2.2.31 Tribal Cultural Resources

No comments were identified regarding tribal cultural resources.

2.2.32 Public Involvement, Consultation, and Coordination

Commenters stated that the public process requires a significant investment of time. Commenters stated that there should be additional time for scoping due to the pandemic.

2.3 Consideration of Comments in the Draft EIR

All comments received about the scope of the EIR are reviewed by DWR. Comments are sorted and distributed to the appropriate subject-matter experts, who are writing the environmental analysis for consideration during development of the Draft EIR.

Subject-matter experts review comments for issues related to the scope of analysis and resources to be evaluated, consider recommendations for methods and data to be used in the analysis, and consider suggested mitigation measures.

Comments are also reviewed by DWR for suggested alternatives and suggestions for modifying the project to avoid or minimize impacts. Alternatives suggested will be considered in the process of developing a reasonable range of alternatives to study in the EIR.

Table A-1 lists the name and agency, organization, or affiliation of those who submitted comments between April 18 and December 14, 2020. The letter number in this table corresponds to the letter number assigned to the comment letter and included in the comment summary tables on the following pages. Table A-2 lists the names of those who submitted form letters between April 18 and December 14, 2020.

Letter Number	First Name	Last Name	Agency, Organization, or Affiliation
831 (FORM LETTER A)	Michael	Wauschek	Sierra Club of California
850	Jerry	Creech	
852	Rachel	Huang	
980	Kathy	Cortner	Mojave Water Agency
985	Thomas	McCarthy	Kern County Water Agency
986	Jennifer	Pierre	State Water Contractors
987	Jacklyn	Shaw	
988	Jacklyn	Shaw	
1006	Jason	Folkman	
1007	Joseph	James	Yurok Tribe
1008	Chris	Shutes	California Sportfishing Protection Alliance
1008	Michael	Jackson	California Sportfishing Protection Alliance
1008	Bill	Jennings	California Sportfishing Protection Alliance
1008	Deirdre	Des Jardins	California Water Research
1008	Barbara	Vlamis	AquAlliance
1008	Carolee	Krieger	California Water Impact Network
1009	Tim	Hawkins	County of Sacramento, Office of Planning and Environmental Review
1010	Dylan	Powell	
1011	Isaac	Kinney	
1012	Osha	Meserve	Local Agencies of the North Delta

Table A-1. Commenters Submitting Comments April 18–December 14, 2020

Table A-2. Commenters Submitting Form Letters April 18–December 14, 2020

First Name	Last Name	Form Letter	
Pat	Alder	А	
David	Alvarez	А	
Stephen	Bohac	А	
George	Brewer	А	

First Name	Last Name	Form Letter
Lindsay	Deboer	А
David	Downing	А
Meredith	Elliott	А
John	Erb	А
Richard	Gallo	А
Sandra	Gamble	А
Pamela	Gibberman	А
Daniel	Gonzalez	А
Jan	Jones	А
Suzanne	Jones	А
J	Kim	А
Eugenia	Larson	А
John	Lombardi	А
Caephren	McKenna	А
Brian	Miller	А
Darrel	Neft	А
Stephanie	Nunez	А
Yvonne	Olivares	А
Melody	Ross	А
William	Schoene	А
Alec	Shea	А
James	True	А
Casey	Welch	А
Susan	Wilke	А
Tessa	Williamson	А

Tables A-3 through A-44 summarize comments about the project received after the close of the official CEQA scoping period (i.e., received between April 18 and December 14, 2020). Please refer to the July 2020 *Scoping Summary Report* for additional information regarding the scoping process and other comments received during the scoping period.

Letter Number	Commenter Name, Affiliation	Comment Text	
1007	Joseph James, Yurok Tribe	Our recent consultation increased our understanding of the DCP, however I should note that we ran out of time prior to sharing all of our technical concerns with the proposed project. The Yurok Tribe provides this letter to address and summarize our technical concerns. The Yurok Tribe also requests that our letter be considered as scoping comments and government-to-government consultation comments to ensure our concerns are considered during preparation of the Draft Environmental Impact Report (DEIR). There is nothing confidential in regard to these comments, therefore I request they be addressed within the publicly available DEIR.	
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	Finally, we request that the DEIR fully describe and disclose the Delta Conveyance Design and Construction Authority's engineering design efforts, ongoing since May of 2019, and must describe how the DCA's efforts relate to DWR's CEQA process. The DEIR must provide a clear timeline for DWR's approval of the design of the project. The DEIR must describe the sequence of permit applications for the project and of approvals under CEQA by responsible agencies that will be issuing permits for the project.	
1011	Isaac Kinney	This project needs more time for public comment and input due to pandemic	

Table A-3. Comments Regarding the Scoping Process and the CEQA/National Environmental Policy Act (NEPA) Process

Letter	Commenter Name, Affiliation	Comment Text
987	Jacklyn Shaw	(4) Drought makes more drought cycles, and ignoring local taxpayers and witnesses — does not mean there are no objections! Why are we expected to donate our time with endless meetings and written comments, when taxpayer funds, local and state, go to pay staff stuck with an agenda to favor water bonds and more taxes? (Who are profiteers in water bonds?)
1011	Isaac Kinney	Please include me on future scoping opportunities and project development timelines.

Table A-4. Comments Regarding Participation in the EIR/EIS Process

Letter	Commenter Name, Affiliation	Comment Text
980	Kathy Cortner, Mojave Water Agency	DWR's proposed single-tunnel project will provide opportunities to retain existing water supplies into the future. The single tunnel will help the SWP adapt to climate change conditions including increasing Delta salinity caused by sea level rise and increasingly "flashy" hydrology. Additionally, seismic risks to Delta levees can be mitigated through the construction of a tunnel that provides dual conveyance in coordination with the existing south Delta facilities, and an ability to continue water deliveries through the tunnel. The proposed new points of diversion would allow for some diversions to continue while measures are taken to flush saltier water from the Delta and restore the ability to divert from the south Delta. As such, we agree with the project purpose and objectives as stated in the NOP.
985	Thomas McCarthy, Kern County Water Agency	The Agency appreciates the focus in the NOP on restoring SWP water supply reliability as a stated purpose of the project and understands that purpose to include restoration of SWP capacity up to the full amount of water available to the Agency under its contract with DWR. Restoring both the amount of water supply available to the Agency and the reliability of that water supply are necessary to assist public water agencies in Kern County as they work to address the economic impacts expected from full implementation of the State's Sustainable Groundwater Management Act. The water supply created by the DCP also mitigates the loss of water supply due to reduced snowpack caused by climate change and the possibility of temporary but significant interruptions in water deliveries from earthquakes affecting the Sacramento-San Joaquin Delta.
985	Thomas McCarthy, Kern County Water Agency	The NOP does not describe the cost of the project, nor make cost effectiveness a project objective. Design and construction of the DCP will be the largest re-investment in the SWP since it was constructed. DWR has shown sensitivity to cost considerations in its work to this point and the Agency requests that DWR continue to prioritize cost effectiveness as a project objective.
986	Jennifer Pierre, State Water Contractors	DWR's proposed single-tunnel project will provide opportunities to retain existing water supplies into the future. The single tunnel will help the SWP adapt to climate change conditions including increasing Delta salinity caused by sea level rise and increasingly 'flashy' hydrology. Additionally, seismic risks to Delta levees can be mitigated through the construction of a tunnel that provides dual conveyance in coordination with the existing south Delta facilities, and an ability to continue water deliveries through the tunnel. The proposed new points of diversion would allow for some diversions to continue while measures are taken to flush saltier water from the Delta and restore the ability to divert from the south Delta. As such, we agree with the project purpose and objectives as stated in the NOP.

 Table A-5.
 Comments Regarding the Project Objectives, Purpose, and Need

Letter	Commenter Name, Affiliation	Comment Text
987	Jacklyn Shaw	(7) Are virtual waterboard meetings selective, one dimensional, or more of not acknowledged or concerned in agenda focus? The letter by R. Jones, CVflood.ca.gov suggests such. We heard at the Clarksburg workshop, July, 2015, that Delta Levee Maintenance was at 85 percent noncompliance! (That is inexcusable.) And does all this include permits for mineral sludge to rivers for an oligarchy?
988	Jacklyn Shaw	Thank you for the very helpful links towards maps, within almost 80 pages in documents. For over five years, I have gone to meetings, from Sacramento to Los Angeles, Stockton to Clarksburg. In particular, this is with the Delta Coalition of Supervisors of Five Counties letter stating that any "tunnel" (or conveyance) for water exports would be devastating to the Delta region and fresh food crops to USA. It is very heartbreaking, to see the ignorant, outrageous Delta Plan!
1006	Jason Folkman	I have researched this, and have come to the conclusion that the environmental damage to the landscape, water ways, and flora and fauna exceed any benefit that might come from this proposal.
1006	Jason Folkman	We need to do much more to conserve water, rather than spending billions of taxpayer dollars to construct tunnels to redirect water, with potentially devastating effects on wildlife. I therefore oppose the proposed Delta conveyance facilities.
1011	Isaac Kinney	California salmon can show the bio-region and the World about diverse pathways to ecological regeneration on multiple scales; but we must keep this large obsolete infrastructure like the Delta Tunnel Conveyance Project out of California for good.

 Table A-6.
 General Comments and Comments in Support or Opposition to the Proposed Project

Letter	Commenter Name, Affiliation	Comment Text
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must describe all sources of water that the project will divert. It must describe generally what amounts of water the project will divert from each source and under what conditions it will divert water from each source. The DEIR must also clearly describe the amounts of water historically diverted from each source.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must describe the destinations of the water that the proposed project will divert, including but not limited to south of Delta conveyance and surface storage, groundwater banks, and groundwater replenishment. The DEIR must describe how DWR will make operational decisions about where to direct the water so diverted.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must describe who will operate the project. It must describe how operators will make decisions about operations, and to whom operators will be accountable.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must describe the role that the Bureau of Reclamation and/or the San Luis and Delta Mendota Water Authority will have in directly making operational decisions about the proposed new facilities and will have indirectly on the operation of the proposed new facilities by participating with DWR in decisions about the overall joint operation of the State Water Project (SWP) and CVP.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must state how the project will operate during droughts and must specify the proposed constraints on operations during droughts. Reliance on Temporary Urgency Change Petitions is not an acceptable description for drought operation. The DEIR must evaluate an operational alternative would meet all current Bay-Delta Water Quality Control Plan requirements, as well as any proposed "appropriate Delta flow criteria," in an extended drought.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must describe operational alternatives for the project under a variety of critically dry, dry, average and wet water year conditions and sequences, including how much water the project will divert through new facilities and through new and existing Delta export facilities in combination.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must describe whether the new project facilities will divert water under the Joint Points of Diversion provisions of Water Rights Decision 1641 (D-1641), and if so under what claimed basis in right and under what circumstances, and whether the Bureau of Reclamation will obey state law and recognize the authority of the State Water Resources Control Board and other California jurisdictional entities regarding the delivery and use of water so conveyed.

Table A-7. Comments Regarding the Project Description

Delta Conveyance Project

Letter	Commenter Name, Affiliation	Comment Text
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must analyze the difference in annual project diversions under assumptions that the Export Limits in Table 3 of D-1641 (export to Delta inflow ratio) apply or do not apply to diversions using the new north Delta diversion facilities.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must clearly describe and analyze operations of the proposed new South Delta Forebay in conjunction with the existing Clifton Court Forebay.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must present a complete operations plan for the proposed new conveyance facilities as an adaptation to climate change. It must describe how DWR will determine preferred use of the proposed facilities as opposed to diverting water from the south Delta at the south Delta diversion facilities of the SWP and (if applicable) the CVP. The DEIR must evaluate operations under sea level rise of one half meter (18 inches) by 2060.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must describe how climate change and associated shifts in hydrology will affect project operations and existing project facilities, including Clifton Court Forebay. It must describe how project operations under changed climate conditions will alter project impacts.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must clearly describe the existing operations of SWP and CVP storage facilities, including Trinity, Shasta, Oroville, Folsom, and San Luis reservoirs. This description must set forth existing operations as a set of rules or contingencies. Proffering a model run that professes to incorporate or embed existing SWP and CVP reservoir operations is not an acceptable description of baseline conditions of SWP and CVP reservoir operation. <i>See County of Amador et al. v. El Dorado County Water Agency et al.</i> (1999) 76 Cal.App.4th 931, 955, 956.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must describe how operators will integrate the operation of proposed conveyance facility with the operation of the SWP and the CVP.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must describe whether the project will redivert water from the Trinity River, and must describe impacts of the project to the Trinity and Sacramento rivers that result from changes in the operation of the Shasta-Trinity Division of the CVP.

Letter	Commenter Name, Affiliation	Comment Text
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must describe the cumulative impacts of the project in incentivizing the construction of new storage projects upstream of the Delta, particularly the proposed Sites Reservoir, the proposed raise of Shasta Dam, and other Proposition 1 Water Storage Investment Program water storage facilities.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must consider an alternative that is designed to "halt species population declines and increase populations of ecologically important native aquatic species, as well as species of commercial and recreational importance, by providing sufficient water flow and water quality at appropriate times to promote species life stages that use the Delta," as stated in the Biological Goals in the 2010 Department of Fish and Wildlife's <i>Quantifiable Biological Objectives and Flow Criteria for Aquatic and Terrestrial Species of Concern Dependent on the Delta</i> .
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must clearly specify proposed bypass flow criteria at the project's new intake facilities as an enforceable condition. The DEIR must clearly describe why the proposed intake and screen design and bypass operation will protect fish and other aquatic resources. The bypass criteria must clearly specify whether they are average daily or instantaneous bypass flow requirements. The DEIR must evaluate the design and capacity of the proposed North Delta intakes simultaneously with bypass flow criteria, and must analyze the operation of the intakes for the full range of tidal flows at their proposed location.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must explicitly specify proposed daily and instantaneous diversion operations. Any dependence of diversion amounts on bypass flow requirements must clearly describe how diversions will be modified with the tidal cycle. The DEIR must consider an alternative that establishes minimum sweeping velocities at the diversion intakes as an instantaneous value adequate to protect all aquatic species. The DEIR should analyze a sweeping velocity greater than 0.67 feet per second.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must establish minimum sweeping velocities at the diversion intakes as an instantaneous value. It must explicitly specify whether the sweeping velocities refer to both upstream and downstream movement of water or only to downstream movement of water.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must describe the water rights that will apply to the project, and who will own them. The DEIR must provide the priority date of the water rights and all sources of water. The DEIR must describe whether use of those rights implies or requires extension of time to put water to beneficial use.

Letter	Commenter Name, Affiliation	Comment Text
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must consider reasonably foreseeable changes to existing SWP and CVP facilities that DWR and the Bureau of Reclamation might seek to make if the State Water Resources Control Board were to grant pending petitions by the Department of Water Resources and the Bureau of Reclamation for extension of time to put water to beneficial use under the SWP and CVP water right permits. Such reasonably foreseeable changes include potential increases in the capacity of the California Aqueduct and the Delta- Mendota Canal. The DEIR must analyze operation of the proposed project in conjunction with such reasonably foreseeable changes in infrastructure.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must specify whether the project facilities will divert water under water rights for the CVP, and if so when and on what basis.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must describe how operation of the new project facilities will affect use at existing south Delta SWP and CVP diversion facilities of the Joint Points of Diversion provisions of D-1641.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must fully describe and disclose the Delta Conveyance Design and Construction Authority's (DCA's) engineering design efforts, ongoing since May of 2019, and must describe how the DCA's efforts relate to DWR's CEQA process. The DEIR must provide a clear timeline for DWR's approval of the design of the project. The DEIR must describe the sequence of permit applications for the project and of approvals under CEQA by responsible agencies that will be issuing permits for the project.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must describe the end users of water that the project diverts.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must describe how the project will incentivize or facilitate water transfers from Sacramento Valley water rights holders or CVP and/or SWP contract holders to other entities. The DEIR must identify the likely recipients of such transfers by geographic region and by the types of water rights and/or contracts the recipients hold. The DEIR must disclose impacts of any such transfers, including impacts to Sacramento Valley groundwater.

Letter	Commenter Name, Affiliation	Comment Text
987	Jacklyn Shaw	(8) Funds need to go to growth, like restoring forests, unprotected from needless fires.
987	Jacklyn Shaw	(10) Bureau of Reclamation and Department of Interior need to give funding to California coast, as soon as possible. They gave funding to 16 other states. That is ridiculous, to put it nicely.
988	Jacklyn Shaw	 (1) Where is a map showing the purchase of SoCal in properties of the Delta region? (a) Surely, their concerns do not reflect stewards of the Delta of Northern California (NorCal Delta). (b) Where is it verifiable that SoCal owes water to Northern Mexico? (DWR info officer, Mark G. or other)?
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The Draft Environmental Impact Report (DEIR) must describe who will own the project. It must describe who will pay for the construction and operation of the project and how they will pay for that construction and operation.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must identify the actual project investors and beneficiaries. It must describe how much the beneficiaries will contribute to project cost and how much water they will be assured on what schedule in return for their investment.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must describe whether and if so to what degree and under what conditions the Bureau of Reclamation and its contractors will receive water conveyed through the proposed new conveyance facilities. If the role of the Bureau of Reclamation in the proposed project is unknown or unresolved at the time the DEIR is issued, the DEIR must analyze the effects of various reasonably foreseeable levels of the Bureau of Reclamation's participation as part of the alternatives and cumulative effects analyses. The DEIR cannot segment analysis by deferring the effects of the Bureau of Reclamation's participation in the proposed project or project alternatives to a separate NEPA analysis.

 Table A-8.
 Comments Concerning Implementation Considerations

Letter	Commenter Name, Affiliation	Comment Text
831	Michael Wauschek (FORM LETTER A)	California needs a water management system that is in accordance with the Delta Reform Act's policy of reducing reliance on the Delta and provides benefits and protections for California's native fish, wildlife species, and communities. Thank you.
988	Jacklyn Shaw	(3) Woodbridge, WID, vs East Bay/MUD (Jan. 31, 2018), includes grower/farmers concerns on not keeping agreements (like Mono Lake, Anderson Dam, etc.)
		(a) Mokelumne (River) Aqueduct towards Port of Oakland adds to Lodi's history in worst recorded drought in February (2/2020, lodinews.com).
		(b) With water exports towards Port of Oakland since Pardee Dam, 1929, Lodi, city and rural, has been impacted, like fog for months to a few weeks if any.
		(c) The federal air quality gave a health alert, recently for allergies, lungs, etc., so where is documented consideration for communities (2020, lodinews.com)
		(d) Photos of living dead salmon are not for a Hollywood movie, but maybe it is, as Delta breeze blows more dust for needless construction of water exports.
		(e) The "Dust Bowl" documentary on Kansas area, showed that nobody believed the dust bowl, until it blew into the streets of New York! (For what are we waiting?)
1010	Dylan Powell	California needs a water management system that is in accordance with the Delta Reform Act's policy of reducing reliance on the Delta and provides benefits and protections for California's native fish, wildlife species, and communities.

Table A-9. Comments Regarding Consistency with or Relationship to Other Processes, Plans, Program, or Policies

Letter	Commenter Name, Affiliation	Comment Text
988	Jacklyn Shaw	(4) How soon can the public view in news press — the letter of objection, last year, from the Delta Coalition of Supervisors of Five Counties?
		(a) Why are locals being disenfranchised by not listening to ELECTED REPRESENTATIVES of five Delta Counties?
		(b) That is any tunnel (or conveyance for WATER EXPORTS would be DEVASTATING?
		(c) Could you please make more easily accessible to widespread public — the Delta map plan ravaging Terminous [sic] resort and communities at large? of Rio Vista, the heart of the Delta River? (A snapshot photo renders a map picture, DWR, Jan. 15, p.4.) (
		5) Where are increasing concerns with Health Data Reports? (Check with HMO's from Elk Grove to Stockton as well as federal, state reports.)
		(6) Why is not Department of Interior with Bureau of Reclamation giving grants to California with Pacific Ocean Coast? (Desalination was invented with J. Leibovitz, Ph.D., UC Berkeley, 1977. It has since been used in over 100 nations and grants went to 16 other states in USA.)
		(7) Again, how soon will the Delta Map Plan show a "conveyance" if any water exports, to be West of Rio Vista, heart of the Delta River?
		(8) In 2015, we started California Water Solutions. Please see the recent statement on the "Delta Bill of Rights".
		(9) Avoid flooding by restoring funds to USACE. When is that for DEEP, PURE DREDGING from Rio Vista towards Antioch Bay? (Are construction pre-plans part of delays or profiteers from Delta distress?) Levees were 80 percent non-compliance in levee maintenance, CVFCB, Clarksburg Workshop, July, 2015. (In staged show for water bonds, former US Senator sent funds to Washington State, Sacramento Bee, 2014-15.
		(10) Your replies would be greatly appreciated and are requested, as this affects property rights and health concerns with the Delta Breeze, 10-40-90 miles per hour. Driving from Lodi to UC Berkeley along Highway 12, it is beautiful seeing the panoramic Delta, one of the top two in the world, like Mount Kilimanjaro. Delta River from Rio Vista to Antioch Bay and then East Bay, or Rio Vista southward to Sacramento has Highway 160, which is considered historic highway. (Check the Delta uglification plans on buildings, like Darth Vader hats on the Delta River and levees.) Where is the new email links to submit these questions? We participated in the "DWR, Deltascoping? Renee Rodriguez" <deltaconveyancescoping@water.ca.gov> They say it is changed to a new link on timely concerns, from time to time</deltaconveyancescoping@water.ca.gov>

Letter	Commenter Name, Affiliation	Comment Text
1007	Joseph James, Yurok Tribe	Future Diversions from the Trinity Basin It is the Tribe's position that any increase in diversion capacity from the Sacramento River Basin has the potential for future foreseeable actions to negatively impact water quantity and quality in the Klamath-Trinity Basin. The Trinity River Project contains the only trans-basin diversion into the Sacramento River. Given that Central Valley water supplies are stretched beyond the ability to sustain a healthy ecosystem, meet the ESA requirements, and municipal and agricultural demands, we are concerned the increased diversion capacity proposed by the project will result in future efforts to divert additional Trinity Basin water to meet the unquenchable thirst of the Central Valley and Southern California. This comes amid concern of the continued ability to meet existing legal requirements associated with the 2000 and 2017 Record of Decisions (RODs) and the 1955 act authorizing an annual 50,000 AF federal water contract with Humboldt County and downstream users, and uphold trust responsibilities to restore and maintain the anadromous fisheries of the Trinity River.
1007	Joseph James, Yurok Tribe	Cold Water Pool Allowing Trinity Reservoir levels to become too low compromises the cold-water pool volume in the bottom of the reservoir. Such low cold-water pool levels can result from multi-year drought and/ or from diverting too much water from Trinity Reservoir. Without adequate cold-water, the water released to the Trinity River in the late summer/early fall can be too warm to sustain our fishery. Loss of cold-water releases to the Trinity River can lead to mortality of adult Spring Chinook salmon holding in the Trinity River below Lewiston Dam and poor egg viability of Spring Chinook, Fall Chinook, and Coho salmon holding in the River, prior to spawning. All of these species are of critical importance to sustain the Yurok way of life, for cultural and substance purposes, as well as economic opportunity when populations are in abundance. The ability of the Yurok Tribe to exercise its fishing rights are reliant on healthy and flourishing population numbers of the Spring Chinook, Fall Chinook, and Coho salmon and the State has the obligation to ensure its actions do not diminish the Yurok Tribe's fishing and water rights.
1007	Joseph James, Yurok Tribe	Additional Temperature Concerns An additional concern is the recently released "Central Valley Project (CVP) Power Initiative," which implies that power plant bypass operations at CVP dams will no longer be implemented to protect fisheries resources. This is in direct contradiction to condition 7.b of the 2000 Trinity NMFS BiOp and would make Trinity River fisheries resources even more susceptible to temperature impacts from reduced pool elevations in Trinity Reservoir. To further complicate temperature issues, a certain magnitude of diversion is required by current infrastructure to prevent warming as water passes through Lewiston Reservoir in late summer and early fall. Changes to diversion timing or magnitude, without significant upgrades to existing infrastructure, pose a threat to adult fish holding prior to spawning and embryos deposited in the stream bed below Lewiston Dam.

Letter	Commenter Name, Affiliation	Comment Text
1007	Joseph James, Yurok Tribe	Questions with the Proposed DCP Due to other time commitments, the government-to-government meeting on May 29th 2020 was ended before the Yurok Tribe could ask several technical questions and requests. Please allow the below questions and requests to be submitted to the scoping process and provide written responses to the following questions:
		1. What assurances will be offered to ensure increased capacity to convey water south will not result in future efforts to increase diversions from the Trinity River?
		2. What type of jurisdiction does the State have over storage and release from the Trinity River Division CVP? How will the project and the actions of the State be consistent with current federal regulatory and contractual water commitments?
		3. What will the effects to Trinity Reservoir end of September carry-over storage be from the proposed project? What does the modeling show relative to historic levels?
		4. Will DWR require protection for the Trinity River in the form of elevated minimum pool requirements for Trinity Reservoir in accordance with the findings from previous studies (Bender 2012; Deas 1998a; Finnerty and Hecht 1992)?
		5. Are Proviso 2 water volumes (50,000 acre ft of federal water contracted to Humboldt County and downstream users) being accounted for in modeling of water quantity and quality? Will the ability of the CVP to provide this contract water be jeopardized given the DCP's increased conveyance capacity around the delta?
		6. Are water volumes necessary to support the Lower Klamath Fall Augmentation Releases (FAR), authorized under the 2017 EIS, considered in modeling for this project? If so, during what water year types? Are measures present in the proposed action to ensure cold-water to perform the fall flow augmentation when deemed necessary (most likely during extended drought)?
		7. Will DWR require Reclamation to address the temperature issues in Lewiston Reservoir identified in the U.S. DOI BOR 2012 Technical Memorandum through a feasibility study and NEPA document?
1007	Joseph James, Yurok Tribe	The DEIR and FEIR require: Minimum pool requirements, above the current recommended 600K AF, be adopted in the Trinity Reservoir to protect cold water pool during times of drought. Ensure the Trinity River Record of Decision water volumes are maintained and released annually to the Trinity River to sustain healthy anadromous fish production, adequate water volumes are available to meet Proviso 2 requirements annually, and Proviso 1 requirements as needed. Continue to manage
		diversions from Lewiston Reservoir in a manner that provides adequate cold water releases to the Trinity River. Proviso 2 and FAR volumes be accounted for in modeling for water quantity and quality. Reclamation to address the temperature issues in Lewiston Reservoir identified in the U.S. DOI BOR 2012 Technical Memorandum through a feasibility study and NEPA document.

Letter	Commenter Name, Affiliation	Comment Text
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DCA and DWR must situate the proposed project in the context of the existing over appropriation and overallocation of water in the Bay-Delta watershed and the Central Valley. The DCA and DWR should consider the cumulative effect of project construction and operation together with future demands under existing water rights, particularly those in the areas of origin.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	If the Bureau of Reclamation and its contractors will receive water conveyed through the proposed new conveyance facilities, the DEIR must explicitly describe whether the Bureau of Reclamation will obey state law and recognize the authority of the State Water Resources Control Board and other California jurisdictional entities regarding the delivery and use of water so conveyed and regarding any other requirements the Board or other state entity may place on interrelated operation of the Central Valley Project (CVP). In such case, the DEIR must explicitly state the enforcement mechanisms DWR proposes to assure compliance by the Bureau of Reclamation with state law and authorities.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must describe how the proposed project will conform to the Delta Reform Act of 2009 requirement that the State Water Resources Control Board include "appropriate Delta flow criteria" in the order approving the Change in Point of Diversion.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must situate the proposed project in the context of the existing over-appropriation and overallocation of water in the Bay-Delta watershed and the Central Valley. The DEIR must consider the cumulative effect of project construction and operation together with future demands under existing water rights, particularly those in the areas of origin.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must demonstrate that the proposed project will conform to the requirements in the Delta Reform Act of 2009 to reduce reliance on the Delta, and must describe how it will do so.
1012	Osha Meserve, Local Agencies of the North Delta	Part 2 of the State Water Resource Control Board's water rights hearing process for the California WaterFix considered: "Will the changes proposed in the Petition unreasonably affect fish and wildlife or recreational uses of water, or other public trust resources?"5 The SWRCB is a responsible agency with respect to DWR's environmental review process. In order for the SWRCB to later rely on it, the Draft EIR must disclose and provide mitigation for project effects on fish and wildlife or recreational uses of water, and other public trust resources. This includes impacts to unlisted fish.

Table A-10.	Comments Regarding Permitting
-------------	--------------------------------------

Letter	Commenter Name, Affiliation	Comment Text
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must describe the complete regulatory setting, including contingencies should a preferred regulatory approach or outcome prove infeasible. The DEIR must describe all permits and approvals necessary to complete the project and bring it online, and must describe how proponents will sequence proceedings to obtain such permits and approvals.

Letter	Commenter Name, Affiliation	Comment Text
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The geographic scope of the DEIR should extend to Suisun, San Pablo and San Francisco Bays, and should extend into the Pacific Ocean as far west as the Farallon Islands. Changes in Delta outflow and water quality that are reasonably foreseeable to occur as a result of the proposed project may affect both water resources and aquatic resources.
1011	Isaac Kinney	Although this project is in the central part of the State it will require more diverted water from the Trinity and Sacramento watersheds. Furthermore this project will adversely effect [sic]the people living in these watersheds and their economies. And because so much in the region relies so much on local clean water, this project directly diverts the natural flowing tributaries and their ecosystems.
1011	Isaac Kinney	More projects like the Delta tunnel conveyance project has many issues that need to be addressed before moving forward: Delta Conveyance Team must include all Federally, State, and locally recognized (i.e. "Tsunungwe" people living in the Trinity watershed) Tribes in their official consultation. This includes connected Tribes such as the Hoopa Valley and Yurok Tribes.

 Table A-11.
 Comments Regarding Project Area and Study Area

Table A-12.	Comments Regarding Baseline	
-------------	-----------------------------	--

Letter	Commenter Name, Affiliation	Comment Text
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must describe the imminent necessary reduction in agricultural water supply as an underlying baseline condition created by the cumulative effect of agricultural business decisions and the diversion of water; it must not describe such reduction as the product of regulatory response to the impacts of the underlying baseline condition.

Delta Conveyance Project

Table A-13. Comments Regarding Economic Impacts

No comments identified.

Table A-14. Comments Regarding Community Benefits

No comments identified.

Letter	Commenter Name, Affiliation	Comment Text
831	Michael Wauschek (FORM LETTER A)	I am writing to urge the Department of Water Resources to fully include and consider a "no tunnel" alternative in the environmental impact report (EIR) of the Delta Conveyance Project.
831	Michael Wauschek (FORM LETTER A)	The EIR should analyze alternatives that increase Delta outflow and reduce exports as compared to current conditions in the Delta. Specifically, the EIR should examine a "no tunnel" alternative that analyzes the use and investment in water conservation, efficiency, and additional demand reduction measures that are less environmentally harmful than the tunnel and achieve the same water supply reliability goals and targets.
850	Jerry Creech	We do not need to divert water from north to south to enrich almond growers and other at the expense of causing stagnant waters throughout 1300 miles of delta. The Delta supply's water to agricultural interest and has been for many years. It is one of the most fruitful valleys in the world. In addition it will have a detrimental affect [sic]on boating marinas, fishing and may even cause damage to San Francisco Bay. If the delta becomes polluted where will the money come from to resurrect the failing delta. We already have problems with the water flow to Discovery Bay and Stockton harbor. Calif needs a new source of water through desalinization which is a FIX not a Band-Aid.
980	Kathy Cortner, Mojave Water Agency	A single-tunnel Delta Conveyance project is one of the critical and necessary solutions for ensuring that Californians have a reliable water supply for their homes and businesses amidst the growing threat and impacts of climate change. However, we request that in developing and selecting a proposed project, DWR also consider the cost-effectiveness of the project. For the SVP investment, we believe a 6,000 cfs facility has the greatest possibility of fulfilling this need, because the costs as compared to benefits goes up sharply as the capacity is reduced below 6,000 cfs. MWA looks forward to the development of the EIR for this important and critical project. Thank you for considering these comments.
985	Thomas McCarthy, Kern County Water Agency	The NOP describes a proposed project of 6,000 cubic feet per second (cfs) and alternatives that will be analyzed in the EIR ranging from 3,000 cfs to 7,500 cfs. The Agency supports the 6,000 cfs proposed project and analysis of alternatives at the 3,000 cfs and 7,500 cfs sizes. USBR is not participating in the development of the DCP at this time. However, should USBR decide to participate in the project prior to the start of construction, then a capacity at the higher end of the range of alternatives must be available.

Letter	Commenter Name, Affiliation	Comment Text
987	Jacklyn Shaw	(3) To avoid staged show of "flooding", restore DEEP, PURE DREDGING, by USACE, Sacramento and Pacific offices. That is from Rio Vista towards Antioch Bay. In 2014-15, Sacramento Bee reported that the former US Senator sent funds to Washington State. (Who profits from water bonds?) If any "conveyance" or "funnel" to divert water from Nor Cal towards SoCal, it is better and less intrusive on WEST SIDE OF DELTA RIVER.
987	Jacklyn Shaw	(9) Melones Dam for Tulare and Hetch Hetchy Dam for Fresno need to be reclaimed by local areas. Both San Francisco and Port of Oakland need to use their Desalination Plants. Desalination was invented at UCB, with J. Leibovitz, PhD, 1977, and since used in 100 nations.
988	Jacklyn Shaw	I will send a snapshot, p.4, DWR, (Jan. 15, 2020) on the "Devastating" Delta Plan with any "Conveyance" of Water export. Most timely and vitally vs any East of Delta River "funnel" towards 500 miles, up to 67 foot wide. (That is the size of an underground highway.). If any, a plan needs to show a "funnel" to be West of Rio Vista or West of Delta River. Terminous [sic] Resort is only seven to 12 miles from my late folks homestead vineyard. Temporary construction jobs would displace hardworking agricultural business families and agri-tourism. That is with over 100 kinds of fresh food crops to USA from one of the most fertile soils in the world. The cost is prohibitive for an empty tunnel and amidst increasing drought recycles. Also, Southern California Metro in Los Angeles (SoCal, Metro, LA) knows that construction (with phases for 10 years) costs more than desalination.
988	Jacklyn Shaw	 (2) How soon will a Delta plan show a "conveyance" to be west of Rio Vista, heart of the Delta River? (a) If any tunnel, it is better to be WEST of the DELTA RIVER. (b) It is ridiculous to not recognize Terminous Resort, part of Lodi Unified School District for decades, as part of the bipartisan Greater Delta Heritage Act. (c) Terminous Resort is amidst fresh food crops, communities, etc. and is only 7-12 miles from Lodi City Hall. (d) Lodi in 2015 rated #1 in the world for Wines, heart healthy, and any water exports would increase drought cycles. (e) That is amidst Sheriffs', SJC.gov concerns of narco crops plus FBI finds of ignorant terrorists in Lodi care.
992	Dylan Powell	in Lodi area. I am writing to urge the Department of Water Resources to fully include and consider a "no tunnel" alternative in the environmental impact report (EIR) of the Delta Conveyance Project.

Letter	Commenter Name, Affiliation	Comment Text
992	Dylan Powell	The EIR should analyze alternatives that increase Delta outflow and reduce exports as compared to current conditions in the Delta. Specifically, the EIR should examine a "no tunnel" alternative that analyzes the use and investment in water conservation, efficiency, and additional demand reduction measures that are less environmentally harmful than the tunnel and achieve the same water supply reliability goals and targets.
992	Dylan Powell	!!!—Please consider looking into the placement of swales on contour throughout watersheds in order to raise water tables, reduce runoff, encourage healthy and hydrated forests, and granted - overtime - increase available water resources to the southern portion of California. This is the only truly sustainable means of handling our water situation that I can see supporting a healthy future for everyone here. This also seems perfect for our current, COVID affected situation, as done correctly this can be achieved with very minimal intermingling of "swale installers."
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DCA and DWR evaluate a range of locations for project intakes that would make the project reliable under a range of reasonably foreseeable potential sea level rise over the expected service life of the project, according to the best available science. We request such analysis.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DCA and DWR should dismiss as an unreasonable alternative the 3,000 cfs intake design and locations previously proposed for the "California WaterFix" project, because this these locations cannot reasonably protect fish and other aquatic species.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DCA and DWR must evaluate a smaller intake design that will allow juvenile salmon and sturgeon to be exposed to the intakes for no more than 15 minutes at the proposed minimum bypass flows. Tentatively, we suggest that the DCA and DWR analyze intakes with a capacity of 1,000 cfs.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DCA and DWR must analyze near-screen sweeping velocities at the proposed intake locations. The DCA and DWR must evaluate alternative locations with smaller intakes on the outside bends of the river channel to provide adequate near-screen sweeping velocities.

Letter	Commenter Name, Affiliation	Comment Text
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DCA and DWR must ground its consideration of project alternatives to reduce impacts to terrestrial species in biological surveys conducted on terrestrial species and their habitat within the footprint of the project facilities and their construction area. The DCA and DWR must analyze alternatives that fully mitigate those impacts, including relocation of facilities away from the sites selected for the previous "California WaterFix" project. The DEIR must analyze project impacts on golden eagle, bald eagle, Swainson's hawk, greater sandhill crane, California black rail, California clapper rail, giant garter snake, riparian brush rabbit, burrowing owl, tricolored blackbird, bank swallow, least bell's vireo, California yellow warbler, western yellow-billed cuckoo, loggerhead shrike, pallid bat, valley elderberry longhorn beetle, vernal pool invertebrates, and rare or sensitive native plants.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DCA and DWR should consider an alternative that maximizes local water supplies, including conservation, water recycling, stormwater capture, brackish groundwater desalination and other groundwater remediation.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must clearly analyze present and future discretionary operations of the SWP and CVP as part of the alternatives analysis and not as part of baseline conditions. Existing SWP and CVP facilities are part of the baseline condition. Operation of existing SWP and CVP facilities to meet regulatory requirements are part of the baseline condition. Discretionary operations of the SWP and CVP are ongoing operational choices, not part of the baseline condition; the DEIR must analyze discretionary operations as part of the various project alternatives.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must evaluate a range of locations for project intakes that would make the project reliable under a range of reasonably foreseeable potential sea level rise over the expected service life of the project, according to the best available science. Tentatively, we recommend such analysis under sea level rise of up to two meters by 2100.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must describe the operation and performance of the project under a reasonable range of alternative flow requirements for the Sacramento River, Delta inflow and Delta outflow.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR should dismiss as an unreasonable alternative the 3,000 cfs intake design and locations previously proposed for the "California WaterFix" project, because this design at these locations cannot reasonably protect fish and other aquatic species.

Letter	Commenter Name, Affiliation	Comment Text
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must evaluate a smaller intake design that will allow juvenile salmon and sturgeon to be exposed to the intakes for no more than 15 minutes at the proposed minimum bypass flows. Tentatively, we suggest that the DEIR analyze intakes with a capacity of 1,000 cfs.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must analyze near-screen sweeping velocities at the proposed intake locations. The DEIR must evaluate alternative locations with smaller intakes on the outside bends of the river channel to provide adequate near-screen sweeping velocities.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must evaluate an operational alternative that would restore a more natural hydrograph to the Bay-Delta ecosystem.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must analyze an alternative that will contribute to the recovery of the at-risk terrestrial species in the Bay-Delta estuary and its watersheds, meeting the Biological Goals and Objectives identified in the Department of Fish and Wildlife's 2010 <i>Quantifiable Biological Objectives and Flow Criteria for Aquatic and Terrestrial Species of Concern Dependent on the Delta</i> .
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must analyze an alternative that relocates intakes away from Delta legacy communities.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must reject locating the project along the Central Delta Corridor as an unreasonable alternative because of impacts to terrestrial species, Delta levees, local communities, and Delta recreational uses.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must consider an alternative that maximizes local water supplies, including conservation, water recycling, stormwater capture, brackish groundwater desalination and other groundwater remediation. The DEIR must analyze and compare embedded greenhouse gas emissions of the local water supply alternative and the proposed project.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must analyze a reasonable range of project alternatives that are sufficiently distinct from one another. We recommend that the DEIR evaluate an alternative that includes a smaller conveyance facility than that of the proposed project, with smaller intakes as described in the section of these comments on Delta Flows and Impacts on Aquatic Species, above.

Letter	Commenter Name, Affiliation	Comment Text
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must analyze an alternative that includes reducing agricultural water demand in the SWP service area and adjacent areas through crop shifting, agricultural water conservation, and soil management, as well as retirement of marginally productive lands and land without reliable dry year supply. The DEIR must also discuss and evaluate greater reliance on local supplies for agricultural and urban entities south of Delta, in lieu of a new Delta conveyance facility, consistent with the Delta Reform Act.
1011	Isaac Kinney	Additionally, Tribes in California are clear decision-making agencies in this project and must include all tribes along the Trinity and Sacramento Rivers as well as the Bay Delta. Because of the natural interconnectedness of these tributaries, project scope must include impacts on all watersheds in the upcoming Environmental Impact Report. Tribal consultation in relation to that EIR needs to have adequate time for project review and needs to include a status quo or "no build" alternative.
1011	Isaac Kinney	Include scalable and long term water conservation strategies for the no build alternative for the EIR.
1012	Osha Meserve, Local Agencies of the North Delta	LAND is disappointed that the Department of Water Resources ("DWR") is proposing the same intake locations as the failed California WaterFix project. This letter explains that: (1) the proposed intake locations identified in the NOP along the Sacramento River were not approved in any way by the Fish Facilities Technical Team ("FFTT"); (2) the proposed intake locations would be a disaster for fish; (3) the DCP must include protections for all fish in the river, not just listed fish; and (4) the proposed intake locations were not selected with any regard for the nearby Delta communities. The Draft EIR for the project must evaluate alternative intake locations that could lessen the significant impacts to fish and Delta communities.
1012	Osha Meserve, Local Agencies of the North Delta	NOP Intake Locations Were Not Approved by Fish Facilities Technical Team The currently proposed intakes are the same as those proposed in the abandoned California WaterFix project, and were not the result of any agency decision that those locations were the only options available. Moreover, DWR and the Delta Conveyance Design and Construction Authority's ("DCA") decision to retain the cancelled WaterFix project intake locations is absolutely contrary to Governor Newsom's directive to limit impacts of the Project on Delta legacy communities and fish. Furthermore, the intake locations were never approved by the FFTT.

Letter	Commenter Name, Affiliation	Comment Text
1012	Osha Meserve, Local Agencies of the North Delta	While it has been suggested by DWR staff and staff for the DCA that the FFTT recommended the three intake locations proposed in the NOP, that is not true. For instance, a member of the DCA's Stakeholder Engagement Committee asked: I would like to know who in the California Department of Fish and Wildlife approved intake locations 2, 3, and 5, and when? And how did they consider effects of the intakes on North Delta communities and North Delta businesses in making that approval? Particularly on the towns of Hood and Clarksburg? And will they give a presentation to the Stakeholder Engagement Committee on their "constraints and siting criteria? 1 The DCA engineer Phil Ryan responded: As you know, a detailed assessment of a variety of resource issues were completed as part of the BDCP/California WaterFix environmental review process. Where appropriate, the information from that process was reviewed and updated for application to the Delta Conveyance Project. For BDCP/California WaterFix, a Fish Facilities Technical Team (FFTT) comprised of expert resource agencies (including USFWS, NMFS, CDFW, USBR, and DWR) and consultant members was formed to evaluate intake sites. The FFTT conducted a series of evaluations using a wide variety of criteria (focusing [primarily] on engineering feasibility and avoidance of impacts to sensitive fish species but also considering land use effects) to select the number and location of suitable intake sites for the project. The agency members of the FFTT ultimately provided final recommendations regarding intake siting. That process and abcore Project, the original analyses from the WaterFix Project were reviewed by DCA and DCO, with input from USFWS, NMFS, and CDFW, and supplemented with more current information regarding the study area, including new bahymetric data and characteristics of the area. Suitable sites were identified as part of that process and they turned out to be substantially the same as those recommended for the BDCP/California WaterFix Project, primarily due to river

Letter	Commenter Name, Affiliation	Comment Text
1012	Osha Meserve, Local Agencies of the North Delta	In 2008, the FFTT was initially directed by the BDCP consulting team to consider specific locations for intakes (2008 FFTT, p. 2), and were given a very narrow geographic scope: "on the Sacramento River between Sacramento and Walnut Grove." (2008 FFTT, p. 12.)2 Following the 2008 FFTT report, it was the BDCP consulting team that actually specified the locations for the intakes by applying the 2008 FFTT location guidance in addition to its own political and economic analysis: "The DHCCP engineering teams placed the conceptual diversions at the locations agreed upon based on information of the FFTT in 2008 and a Value Planning Study, as well as the integrated considerations of the EIR/EIS team." (2011 FFTT Recommendations ["2011 FFTT"], p. 13.) In this way, the BDCP advanced DWR's and the consultants' proposed locations and did not evaluate other alternatives.
1012	Osha Meserve, Local Agencies of the North Delta	In 2011, a new geographic scope without a specified range was formalized for the FFTT locations by the 5-Agency Group, consisting of representatives from DWR, California Department of Fish and Game (now called Department of Fish and Wildlife), U.S. Bureau of Reclamation, U.S. Fish and Wildlife Service (, and the National Marine Fisheries Service. This time, the BDCP consulting team had been given direction by the BDCP Steering Committee in July 2010 to look at more than 5 locations because of the potential for significant reduction in Salmonid mortality if one or more intakes were located upstream of the American River.
1012	Osha Meserve, Local Agencies of the North Delta	This second effort resulted in the 2011 FFTT Recommendations that provided siting parameters that "could allow intakes along much of the river." (2011 FFTT Recommendations 1-2, p. 6.) In other words, the FFTT did not choose or give any specific recommendations for particular intake locations, but only gave general recommendations that could be applied to review potential diversion locations. Potential diversion locations were "identified by the EIR/EIS team and DWR." (2011 FFTT, p. 42.) Moreover, the FFTT actually advised review of additional locations for analysis of suitability, assessment of actual risk to fish species and evaluation of final suitability for diversion. (2011 FFTT Recommendations 1-21, pp. 6-8.)
1012	Osha Meserve, Local Agencies of the North Delta	Noting the high level of uncertainty stemming from the type and magnitude of impacts from the proposed intake facilities, FFTT stressed that the entire population of several anadromous species (Sacramento basin salmonids and green sturgeon) must pass through the river reach to complete their life cycles. (2011 FFTT, p. 33.) As a result, FFTT specified a number of studies to be completed prior to final design. A selection is provided in its 2011 report. (2011 FFTT Recommendations, pp. 37-38: Table 1. List of Near-Term Aquatic Studies Needed Prior to Diversion Structure Construction to Reduce Key Uncertainties.) Further, currently proposed NOP intake locations (i.e., BDCP selected diversion locations) and FFTT alternatives can be compared to scoring and initial ranking of suitability by the 2011 FFTT on pages 57-60.

Letter	Commenter Name, Affiliation	Comment Text
1012	Osha Meserve, Local Agencies of the North Delta	In summary, the FFTT made a series of recommendations for general criteria applicable to siting new diversion intakes along the Sacramento River in 2008 and again in 2011, but never approved specific intake locations. The FFTT report was then modified by BDCP to select locations for further engineering without the evaluations of alternatives. The intake sites were never approved by the FFTT or the fish agencies, and would nevertheless result in take of listed fish, as acknowledged in the Biological Opinions issued for the California WaterFix project in 2017.3
1012	Osha Meserve, Local Agencies of the North Delta	Conclusion As explained above, the Delta Conveyance Project is no better than the failed California WaterFix project in terms of impacts on fish species, the Delta environment and Delta communities. DWR's premature rejection of all alternatives that do not include these same intakes in the North Delta should be reversed, and a full analysis of potential project impacts, project alternatives and mitigation measures prepared. DWR's identified project objectives could still be met by following a proper CEQA alternatives process. Such an approach could provide a pathway for consideration of less impactful alternatives with wider support.

Letter	Commenter Name, Affiliation	Comment Text
831	Michael Wauschek (FORM LETTER A)	For years, the Bay-Delta ecosystem has been severely depleted of freshwater flows that has led to the loss of natural habitat for species and reduced the livelihood of residents in Delta communities.
831	Michael Wauschek (FORM LETTER A)	This project will hasten the decline of the Delta.
852	Rachel Huang	I am writing this email in strong opposition to the Delta Conveyance project. This damaging project should be terminated immediately as its construction and operation will drive the Chinook Salmon to extinction, with over a hundred species following, devastating the Winnemem Wintu Tribe, local fisheries, and the beautiful ecosystem we currently have and need. This tunnel project will have a tremendous impact on the livelihood and culture of the Winnemem Wintu Tribe, a matrilineal Wintu-speaking community who are indigenous to the Winnemem, or McCloud River. The Chinook Salmon are an essential part of the cultural traditions of the Winnemem Wintu Tribe, who takes care of the Salmon's land and is deeply and spiritually connected to the Chinook Salmon (Julie Bongers).
852	Rachel Huang	Negative impacts on environment for people to money.
986	Jennifer Pierre, State Water Contractors	A single-tunnel Delta Conveyance project is one of the critical and necessary solutions for ensuring that Californians have a reliable water supply for their homes and businesses amidst the growing threat and impacts of climate change. However, we request that in developing and selecting a proposed project, DWR also consider the cost-effectiveness of the project. For the SWP investment, we believe a 6,000 cfs facility has the greatest possibility of fulfilling this need, because the costs as compared to benefits goes up sharply as the capacity is reduced below 6,000 cfs.
987	Jacklyn Shaw	(1) Again, Where is MAP access or readability here and to public newspapers? To build a "funnel", 67 foot wide and 500 miles to N. Mexico defies common sense. Note Delta locals and bipartisan "Greater" Delta Heritage Act. Certainly, west of Lodi, about 12 miles away to any Terminous Marina tunnel is "devastating to the Delta", raising health concerns with federal data in air quality (LodiNews.com, May, 2020).
987	Jacklyn Shaw	(2) Authorities alert us to a potential "Dust Bowl". Apparently, concerns of Fishermen organizations are not acknowledged either.

 Table A-16.
 Comments Regarding the Approach to the Analysis

Letter	Commenter Name, Affiliation	Comment Text
987	Jacklyn Shaw	(6) SoCal knows that concrete costs more than desalination plants. Is this towards "fracking farmlands" for oil oligarchy? People best move to where the water is, not necessarily on the Delta counties most fertile soil in the world for food crops, nor by destroying rivers.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must deploy an appropriate temporal scope for its cumulative effects analysis. It must describe the cumulative impacts of the past and present operation of the SWP and CVP taken together with the proposed future operation of the SWP and CVP under the proposed project; the DEIR must not limit analysis to the incremental impacts of the proposed project compared to the existing operations of the SWP and CVP. These cumulative impacts must include, non-exclusively, impacts to fisheries and aquatic ecosystems.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must describe both the short-term and long-term impacts of each project alternative and its construction to Delta communities and Delta recreational uses, particularly those in the vicinity of the proposed intakes. This includes, non-exclusively, noise impacts, traffic impacts, impacts to boat traffic, and impacts to recreational fishing and associated businesses.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must evaluate reasonably foreseeable changes in water supply demand in the SWP service areas. Among these changes are impacts to both agricultural and urban demand caused by the COVID-19 pandemic and the resulting economic contraction. Also among these changes are recent reductions in population projections by the California Department of Finance due to changes in migration into and out of California.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must describe the cumulative impacts of the project in incentivizing the continuation and expansion of irrigation on lands in the southern San Joaquin Valley that would otherwise likely cease or never begin production; among these impacts, the DEIR must identify increasing groundwater overdraft based on the occasional availability of surface water for irrigation.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must consider the ongoing process of the salinization of soil and groundwater in the San Joaquin Valley, and the resulting loss of productivity. The DEIR should analyze an alternative that does not include any further state investments in impaired lands, except for funding for habitat acquisition and restoration.

Letter	Commenter Name, Affiliation	Comment Text
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	Finally, the DEIR must be a stand-alone document that does not rely on references to previous iterations of CEQA documents for the Bay-Delta Conservation Plan and/or the "California WaterFix." The DEIR will be an extensive and complex document. Previous EIR's and supplements for the Bay-Delta Conservation Plan and California WaterFix are 90,000 pages in volume and were already daunting due to the difficulty in understanding which sections which were superseded by subsequent documents. Retention of previous CEQA documents would force even a well-informed reader to conduct a treasure hunt through earlier documents to extract pertinent information. The problem is not so much whether there is useful information in previous documents, but in determining which specific information would be relevant and germane to the instant new proposed project. Reliance on cross-referencing with earlier documents would thus defeat the informational purpose of CEQA.
1011	Isaac Kinney	Delta Conveyance Team must analyze the cumulative impacts of the Delta Conveyance in relation to Gov. Newsom's Water Portfolio and Trump Administration's Biological Opinion/Water Plan
1011	Isaac Kinney	Delta Conveyance Team must analyze the cumulative impacts of the Delta Conveyance in relation to the Site Reservoir, Shasta Dam Raise and Klamath Dam Removal Projects
1012	Osha Meserve, Local Agencies of the North Delta	NOP Intake Locations Were Not Selected with Regard for Nearby Delta Communities The North Delta intakes currently proposed in the NOP would impact the Delta legacy towns of Clarksburg, Hood, and Courtland. Traffic, noise and other impacts during construction of the intakes would also impact the towns of Locke and Walnut Grove. Since the current proposed intake locations are the same as those proposed in the WaterFix Final EIR/EIS, those documents continue to be relevant.
1012	Osha Meserve, Local Agencies of the North Delta	Specifically, Appendix 3F of the WaterFix Final EIR/EIS documents the process by which DWR selected the intake locations and shows that the engineering and EIR teams made early decisions about the intake locations with minimal consideration of land use impacts in the Delta. For example, Appendix 3F cites a 2010 Technical Memorandum 20-2: Proposed North Delta Intake Facilities for the Draft EIR/S that construction traffic impacts were eliminated from consideration because it represented a short-term impact that is less important than the long-term changes in communities that could result from the intake option. DWR's failure to provide analysis for any traffic impacts during construction, as well as lack to consider potential noise impacts, was improper and did not consider land uses, as claimed in the DCA response quoted above.

Letter	Commenter Name, Affiliation	Comment Text
1012	Osha Meserve, Local Agencies of the North Delta	Appendix 3F shows that proposed intake sites were chosen with minimal consideration of landowner and community impacts. Furthermore, the intakes were constrained to the stretch or river between Courtland and Clarksburg, and no locations were considered that would not have significant and unavoidable impacts on these Legacy communities. Appendix 3F of the WaterFix Final EIR/EIS further serves to show that impacts on Delta communities were not considered, in a general sense, because none of the information referenced indicated that other alternative sites upstream, downstream or elsewhere were infeasible for any particular reason.

Table A-17. Comments Regarding Mitigation Measures

Letter	Commenter Name, Affiliation	Comment Text
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must consider the potential impacts of flooding due to sea level rise and/or increased frequency of river flooding on the project during the proposed construction period and early long-term operations. The DEIR must analyze an alternative that improves Delta levees over the near term to protect infrastructure, people, and property in the Delta.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must analyze impacts of the project on the operation of SWP and CVP storage facilities, including Trinity, Shasta, Oroville, Folsom, and San Luis reservoirs, and describe how the project will affect storage in these facilities. This analysis must consider a reasonable range of alternatives for reservoir operation, such as a high delivery scenario and a high carryover storage scenario.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must base its analysis on transparent modeling to assess impacts on flow, water temperature, and water quality. The DEIR must clearly state all modeling assumptions. The DEIR must make publicly available all models and all model input and output generated in support of the DEIR.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must analyze the effects of the project construction and operation on Delta levees, including potential increased risks of flooding.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must quantify the amount of water that the project will reliably produce on an annual basis under a quantified variety of bypass flow and other physical and regulatory scenarios.

Table A-18. Comments Regarding Water Supply

Letter	Commenter Name, Affiliation	Comment Text
1007	Joseph James, Yurok Tribe	I would like to thank you for the May 29, 2020 opportunity to meet government-to-government with California Department of Water Resources (DWR) regarding the State's environmental review process under the California Environmental Quality Act (CEQA) for the tunnel conveyance project through the Sacramento-San Juaquin Delta. The Yurok Tribal Council would also like to accept your offer to have regular quarterly government-to-government consultation meetings regarding the proposed Delta Conveyance Project (DCP or proposed project) as well as other issues of mutual interest. As the Tribal Council noted during the meeting, our primary concern with the proposed DCP is related to potential water quantity and quality cumulative impacts to the Trinity River and Lower Klamath River, impacts to Klamath and Trinity River fishery resources, and impacts to the Yurok Tribe's fishing rights. Furthermore, the Trinity River is designated as critical habitat for the Endangered Species Act (ESA) listed Coho salmon. If there are impacts to the Trinity River National Marine Fisheries Service Biological Opinion (2000 Trinity BiOp), direct take of Coho would result in violation of the ESA.
1007	Joseph James, Yurok Tribe	As you may be aware, approximately 52 percent of the water impounded above Lewiston Dam is diverted to the Central Valley on an annual basis; this follows decades of nearly 90 percent of the water being diverted following construction of the Trinity Dam. These diversions resulted in substantial impacts to the health of the Trinity River, the viability of our fishery resource, and the ability of the Yurok People to fully exercise our federally reserved fishing rights. It is our understanding that CEQA does not excuse an EIR from evaluating past, present, and future foreseeable actions and cumulative impacts and the Yurok Tribe requests the DWR review all impacts the DCP will have on the Trinity River, the endangered Coho salmon, and the Yurok Tribe's water and fishing rights.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DCA and DWR consider the potential impacts of flooding due to sea level rise and/or increased frequency of river flooding on the project during the proposed construction period and early long-term operations. The DCA and DWR analyze an alternative that improves Delta levees over the near term to protect infrastructure, people, and property in the Delta.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DCA and DWR must analyze the effects of the project construction and operation on Delta levees, including potential increased risks of flooding. The DCA and DWR must analyze an alternative that relocates intakes away from Delta legacy communities. The DCA and DWR should reject locating the project along the Central Delta Corridor as an unreasonable alternative because of impacts to terrestrial species, Delta levees, local communities, and Delta recreational uses.

 Table A-19. Comments Regarding Surface Water Resources

Table A-20.	Comments Regarding Groundwater
-------------	--------------------------------

Letter	Commenter Name, Affiliation	Comment Text
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must disclose impacts of the construction and use of new project facilities on groundwater resources in the Delta and adjacent groundwater basins.

Letter	Commenter Name, Affiliation	Comment Text
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must disclose the water quality impacts of the project, including impacts in the Sacramento River and the Delta resulting from diversions at the new project facilities and impacts of releases from storage. The water quality analysis must pay particular attention to salinity, water temperature, and algal blooms.

Table A-21. Comments Regarding Water Quality

Letter	Commenter Name, Affiliation	Comment Text
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must use the current best available scientific information on seismic sources and ground movements in the Delta to determine the maximum considered earthquake in the Delta. The DEIR must use the same assumptions about seismic hazards and geotechnical conditions to analyze both the existing Delta levees and the proposed new project facilities.

 Table A-22.
 Comments Regarding Geology and Seismicity

Table A-23. Comments Regarding Soils

Letter	Commenter Name, Affiliation	Comment Text
1010	Dylan Powell	For years, the Bay-Delta ecosystem has been severely depleted of freshwater flows that has led to the loss of natural habitat for species and reduced the livelihood of residents in Delta communities.
		This project will hasten the decline of the Delta.
1006	Jason Folkman	I have researched this, and have come to the conclusion that the environmental damage to the landscape, water ways, and flora and fauna exceed any benefit that might come from this proposal.
		We need to do much more to conserve water, rather than spending billions of taxpayer dollars to construct tunnels to redirect water, with potentially devastating effects on wildlife. I therefore oppose the the proposed Delta conveyance facilities.
1007	Joseph James, Yurok Tribe	Requests: The Draft Environmental Impact Report analysis include the cumulative impacts the project will have on the Klamath-Trinity Chinook salmon, SONCC Coho Salmon, and Yurok fishing and water rights.
1007	Joseph James, Yurok Tribe	Summary Again, I'd like to thank you for our recent government-to-government consultation and I look forward to future meetings with the DWR. As noted above, we have significant concerns with the proposed DCP and the potential impacts it will have to our fishery resource. We know all too well the unquenchable thirst that interests to the south have for our water; water that has already been diverted to levels beyond what can sustain a healthy ecosystem. We are continuously trying to regain lost water for the survival of our fishery resource, it is concerning to see this proposed project that could cause additional flow reductions in the future. Please don't hesitate to contact myself, or Dave Hillemeier (Fisheries Department Director), at the address in the letterhead if you have any questions.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must analyze impacts of the project on fishery resources in rivers downstream of SWP and CVP storage facilities, including Trinity, Shasta, Oroville, and Folsom reservoirs, and describe how operation of the proposed new facilities will affect these resources under a reasonable range of reservoir operations. It must describe how the project would affect the ability of the DWR and Bureau of Reclamation to meet fish protection requirements downstream of these reservoirs as applicable, including Order WR 90-05 and the existing and proposed American River flow standard.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must disclose the impacts of the project to the food web in the Delta, including impacts resulting from diversions at the new project facilities and impacts of releases from storage.

 Table A-24.
 Comments Regarding Fish and Aquatic Resources

Letter	Commenter Name, Affiliation	Comment Text
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must analyze and disclose the impacts of the project on circulation, water quality and marine habitat in Suisun, San Pablo, and San Francisco bays.
1011	Isaac Kinney	Currently, the salmon populations in the Klamath and Trinity Rivers and Sacramento River/Bay Delta are at the brink of extinction due to the obsolete infrastructure. The California State and Federal water projects have assisted in the decline of all living things relying on the Trinity River for survival.
1012	Osha Meserve, Local Agencies of the North Delta	Using the Proposed Locations Would be a Disaster for Fish The intakes reviewed by the FFTT, proposed for the failed California WaterFix project, and now proposed for the DCP, have been roundly criticized by fish experts.4 Even with two rather than three diversions, the primary criticisms lodged by fish screening expert Dave Vogel remain relevant. As he explains, There is a high probability the structures will be catastrophic for salmon and severely undermine progress for salmon restoration in upstream areas. Except when the Yolo Bypass is flooding, all four runs of Chinook salmon in the entire watershed would be forced to migrate past these enormous diversions. • Analyses conducted for the project revealed that young salmon could be exposed to each of the three individual WaterFix screens for an astounding one-hour period (not a typo) not exactly the original 60 seconds criterion mentioned above. • In the worst-possible scenario for salmon, all three water intakes are to be located on the same side of the river and in relative close proximity. Water (and therefore fish) will be driven toward the east riverbank, particularly when all intakes are operating in unison. • [I]ncreasingly fatigued and exposed downstream-migrating juvenile salmon will become more and more consolidated along the east bank of the river as the fish traverse the long length of each individual screen structure and arrive (if the fish have not already perished) at the downstream end • Predatory fish will unquestionably become accustomed to these ideal "feeding stations" at the lower end of each fish screen. These criticisms would also apply with the T-Screen concept to the extent that is now being considered, which is known to provide additional habitat for predators.
1012	Osha Meserve, Local Agencies of the North Delta	The DCP Must Include Protections for All Fish in the River, Not Just Listed Fish The location and design of the intakes cannot be based only on listed fish, such as the Delta smelt and Spring run salmon. The Sacramento River hosts a rich fishery, and has numerous fish species in it throughout the year that would be potentially affected by new large diversions. The constant presence of fish species in the vicinity of the proposed intake sites was discussed in the environmental review documents for the California WaterFix. (See Exhibit B, Fish Presence Table.)

Letter	Commenter Name, Affiliation	Comment Text
1012	Osha Meserve, Local Agencies of the North Delta	[Attachment 1] Exhibit A, The Twin-Tunnels Project: A Disaster for Salmon Parts 1-4 of a Series, Posted on July 30, 2017, August 2, 2017, August 9, 2017, and August 19, 2017
1012	Osha Meserve, Local Agencies of the North Delta	[Attachment 2] Exhibit B, Fish Presence Table

Letter	Commenter Name, Affiliation	Comment Text
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must ground its analyses of project impacts to terrestrial species in biological surveys conducted on terrestrial species and their habitat within the footprint of the project facilities and their construction area. The DEIR must analyze alternatives that fully mitigate those impacts, including relocation of facilities away from the sites selected for the previous "California WaterFix" project. The DEIR must analyze project impacts on golden eagle, bald eagle, Swainson's hawk, greater sandhill crane, California black rail, California clapper rail, giant garter snake, riparian brush rabbit, burrowing owl, tricolored blackbird, bank swallow, least bell's vireo, California yellow warbler, western yellow-billed cuckoo, loggerhead shrike, pallid bat, valley elderberry longhorn beetle, vernal pool invertebrates, and rare or sensitive native plants.
1008	AquAlliance, California Sportfishing Protection Alliance, California Water Impact Network, and California Water Research	The DEIR must analyze and disclose the impacts of project operations on water birds, including impacts on north and south of Delta wildlife refuges and other habitat, as well as food sources in San Francisco Bay and the Farallon Islands. The DEIR must explicitly analyze impacts to migratory waterfowl, greater sandhill cranes, cormorants, pelicans, and the common murre.

Table A-25. Comments Regarding Biological and Terrestrial Resources

Table A-26. Comments Regarding Land Use

Table A-27. Comments Regarding Agricultural Resources

Table A-28. Comments Regarding Recreation

Letter	Commenter Name, Affiliation	Comment Text
987	Jacklyn Shaw	(5) Why displace the generational agri-business economy for fresh food crops to USA, by temporary jobs to others in construction?
1010	Dylan Powell	For years, the Bay-Delta ecosystem has been severely depleted of freshwater flows that has led to the loss of natural habitat for species and reduced the livelihood of residents in Delta communities. This project will hasten the decline of the Delta.

 Table A-29.
 Comments Regarding Socioeconomic Resources

Table A-30. Comments Regarding Aesthetic and Visual Resources

Letter	Commenter Name, Affiliation	Comment Text
1009	Tim Hawkins, County of Sacramento Office of Planning and Environmental Review	Construction activities may impact bridges that have architectural or historical importance and will need to be preserved per the County General Plan.
1011	Isaac Kinney	Delta Conveyance Team must include cultural impacts from this project

 Table A-31. Comments Regarding Cultural Resources

Letter	Commenter Name, Affiliation	Comment Text
1009	Tim Hawkins, County of Sacramento Office of Planning and Environmental Review	 The DEIR must describe and analyze the effects the project will have on access into and out of the Delta. For example: (1) how will levee failures and mean sea level rise affect circulation, (2) will all roads remain passable for vehicles (e.g.; for farm to market roads, evacuation roads, etc.), (3) will there be any roads that have to be realigned, and if so what is the required right-of-way, and (4) what will be the source of funding for future roadway realignments and/or right-of-way acquisition.
1009	Tim Hawkins, County of Sacramento Office of Planning and Environmental Review	Many of the roadways in the Delta do not meet the County's current standards for rural roadways, which include two twelve-foot (12') travel lanes and two six-foot (6') shoulders. The DEIR should evaluate how construction activities and the presence of heavy equipment will impact safety on these substandard roadways for all users (e.g.; farm equipment, recreational vehicles, boat trailers, cyclists). Additionally, Sacramento County's old draw bridges are operating at their threshold. Any additional activities that occur as a result of this project could put them above their safe operating levels of service. Presently, no oversized and/or overweight trucks are allowed on Sacramento County's draw bridges in the study area. The applicant should coordinate with Sacramento County DOT for structural limits on each bridge.
1009	Tim Hawkins, County of Sacramento Office of Planning and Environmental Review	Early roads in the Delta were built over old trails that ran along the tops of levees, on peat, or in tidal areas. Roads were built with the structural standards of that time and no longer meet present structural standards. At a minimum, this analysis must include the impacts to roadways by any heavy equipment used to do work on the levees. For instance, how will heavy equipment affect and accelerate the degradation of the existing roadways in the Delta? Construction impacts may require reconstructing roadways to current structural standards. Delta-area experience has demonstrated that, due to limited oversight, sub-contract haulers do not adhere to prescribed haul routes. The analysis should therefore consider all roadway segments potentially impacted by construction activities. The DEIR must address all roadway maintenance issues related to the Delta Conveyance project (e.g.; potholes, raveling). Lastly, the DEIR must address the impacts of construction activities on recreational and barge traffic.

Table A-32. Comments Regarding Transportation

Table A-33. Comments Regarding Public Services

Table A-34. Comments Regarding Energy

Table A-35. Comments Regarding Air Quality and Greenhouse Gases

Table A-36. Comments Regarding Noise

 Table A-37.
 Comments Regarding Hazards

Letter	Commenter Name, Affiliation	Comment Text
1009	Tim Hawkins, County of Sacramento Office of Planning and Environmental Review	The DEIR should address the project's haulage, which will generate thousands of tons of nuisance dusts, asbestos from brake linings, and petroleum drips and spills. Trucks frequently cut corners, causing gravel and motor vehicle fluids to enter the water. This could be mitigated by widening and improving the levee roads prior to hauling activities, requiring all aggregate and spoil loads to be tarped beyond minimum requirements, and environmental monitoring of construction materials movement-related activities.

Table A-38. Comments Regarding Public Health

Table A-39. Comments Regarding Mineral Resources

Table A-40. Comments Regarding Paleontological Resources

Table A-41. Comments Regarding Environmental Justice

No comments identified.

Delta Conveyance Project

Table A-42. Comments Regarding Climate Change

Table A-43. Comments Regarding Growth Inducement

Table A-44. Comments Regarding Tribal Cultural Resources

Copies of Comment Letters

This page left intentionally blank.

From:	Michael Wauschek (michaelwauschek@yahoo.com) Sent You a Personal Message
To:	DWR Delta Conveyance Scoping
Subject:	Delta Conveyance Scoping Comment
Date:	Sunday, April 19, 2020 1:05:02 PM

Dear The CA Dept of Water Resources,

Hello Ms. Rodriguez:

I am writing to urge the Department of Water Resources to fully include and consider a ?no tunnel? alternative in the environmental impact report (EIR) of the Delta Conveyance Project.

For years, the Bay-Delta ecosystem has been severely depleted of freshwater flows that has led to the loss of natural habitat for species and reduced the livelihood of residents in Delta communities.

This project will hasten the decline of the Delta.

The EIR should analyze alternatives that increase Delta outflow and reduce exports as compared to current conditions in the Delta. Specifically, the EIR should examine a ?no tunnel? alternative that analyzes the use and investment in water conservation, efficiency, and additional demand reduction measures that are less environmentally harmful than the tunnel and achieve the same water supply reliability goals and targets.

California needs a water management system that is in accordance with the Delta Reform Act?s policy of reducing reliance on the Delta and provides benefits and protections for California?s native fish, wildlife species, and communities. Thank you.

Sincerely,

Michael Wauschek 17413 Laurelbrook Ct Cerritos, CA 90703 michaelwauschek@yahoo.com (562) 502-0818

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

From:	Jerry Creech
To:	DWR Delta Conveyance Scoping
Subject:	Delta tunnels
Date:	Friday, April 17, 2020 5:09:08 PM

We do not need to divert water from north to SOuth to enrich almond growers and other at the expense of causing stagnant waters throughout 1300 miles of delta. The Delta supply's water to agricultural interest and has been for many years. It is one of the most fruitful valleys in the world. In addition it will have a detrimental affect on boating marinas, fishing and may even cause damage to San Francisco Bay. If the delta becomes polluted where will the money come from to resurrect the failing delta. We already have problems with the water flow to Discovery Bay and Stockton harbor. Calif needs a new source of water through desalinization which is a FiX not a bandaid.

Sent from my iPhone

From:	Rachel Huang
To:	DWR Delta Conveyance Scoping
Subject:	Request to Seriously Reconsider the Delta Conveyance Tunnel Project
Date:	Saturday, April 18, 2020 1:05:48 PM
Attachments:	image.png
	image.png

Dear the California Department of Water Resources,

-greetings-

I run a small blog that has called for the opposition of this project. There are people who commented on this blog instead of commenting directly through email to you.

I am attaching screenshots of the comments and the website where you can directly view it as well.

image.png		
	?	



Here is the site: https://eja.as.ucsb.edu/2020/04/15/oppose-the-delta-conveyance-tunnel-project/

I understand the deadline has passed the time of public comment. Please still consider it as these are the people's voices.

Thank you.

Respectfully, Rachel

DCS980

May 6, 2020

Ms. Renee Rodriguez California Department of Water Resources P.O. Box 942836 Sacramento, CA 94236

RE: Comments on the Notice of Preparation for the Environmental Impact Report on the Delta Conveyance Project

Dear Ms. Rodriguez:

The Mojave Water Agency (MWA) is pleased to provide input to the California Environmental Quality Act (CEQA) scoping process for the Delta Conveyance Project in the Sacramento-San Joaquin Delta, California. MWA is a State Water Contractor and contracts with the Department of Water Resources (DWR) to receive water from the State Water Project (SWP). MWA has invested hundreds of millions of dollars in the construction and operation of the SWP to provide a safe and reliable drinking water supply to residents of the High Desert in San Bernardino County.

The release of the Notice of Preparation (NOP) by DWR for a single-tunnel Delta Conveyance Project reflects the ongoing commitment by Governor Newsom's Administration and DWR to building a resilient water supply for California's communities, farms, and economy. MWA has identified a modernized Delta conveyance as a critical project for the SWP and is willing to make continued investments in modernizing the SWP to ensure it continues to provide reliable water supplies into the future.

DWR's proposed single-tunnel project will provide opportunities to retain existing water supplies into the future. The single tunnel will help the SWP adapt to climate change conditions including increasing Delta salinity caused by sea level rise and increasingly "flashy" hydrology. Additionally, seismic risks to Delta levees can be mitigated through the construction of a tunnel that provides dual conveyance in coordination with the existing south Delta facilities, and an ability to continue water deliveries through the tunnel. The proposed new points of diversion would allow for some diversions to continue while measures are taken to flush saltier water from the Delta and restore the ability to divert from the south Delta. As such, we agree with the project purpose and objectives as stated in the NOP. Ms. Renee Rodriguez May 7, 2020 Page 2

A single-tunnel Delta Conveyance project is one of the critical and necessary solutions for ensuring that Californians have a reliable water supply for their homes and businesses amidst the growing threat and impacts of climate change. However, we request that in developing and selecting a proposed project, DWR also consider the cost-effectiveness of the project. For the SWP investment, we believe a 6,000 cfs facility has the greatest possibility of fulfilling this need, because the costs as compared to benefits goes up sharply as the capacity is reduced below 6,000 cfs.

MWA looks forward to the development of the EIR for this important and critical project. Thank you for considering these comments.

Sincerely,

Kathy A. Come

Kathy Cortner, Interim General Manager Mojave Water Agency

From:	Prince, Stephanie
To:	DWR Delta Conveyance Scoping
Cc:	McCarthy, Thomas; Walthall, Brent; Prince, Stephanie
Subject:	KCWA Comments on the Notice of Preparation
Date:	Friday, May 8, 2020 10:22:03 AM
Attachments:	200508 KCWA Comments on the NOP for the DCP.pdf

To Whom It May Concern:

Find attached the Kern County Water Agency's comments on the Notice of Preparation for the Delta Conveyance Project Environmental Impact.

If you have any questions or require additional information, please contact Brent Walthall at (916) 952-9821.

Thank you,

Stephanie

Stephanie N. Prince | Executive Assistant **KERN COUNTY WATER AGENCY** 3200 Rio Mirada Drive | Bakersfield, CA 93308 Office: 661-634-1463 | <u>sprince@kcwa.com</u>



Directors:

Ted R. Page Division 1

Bruce Hafenfeld Division 2

Martin Milobar Division 3

Philip Cerro Division 4

Charles (Bill) W. Wulff, Jr. Division 5

> Royce Fast President Division 6

Gene A. Lundquist Vice President Division 7

Thomas D. McCarthy General Manager

Amelia T. Minaberrigarai General Counsel May 8, 2020

Ms. Renee Rodriguez California Department of Water Resources P.O. Box 94236 Sacramento, California 94236

Re: Comments on the Notice of Preparation for the Delta Conveyance Project Environmental Impact

Dear Ms. Rodriguez:

The Kern County Water Agency (Agency) appreciates the opportunity to submit these comments on the Notice of Preparation (NOP) for an Environmental Impact Report (EIR) for the Delta Conveyance Project (DCP) prepared by the California Department of Water Resources (DWR). The Agency contracts with DWR for water deliveries from the State Water Project (SWP) and would be affected by the DCP.

Most importantly, the Agency recognizes that the DCP is a new project separate from the California Water Fix or the Bay Delta Conservation Plan. The DCP includes water intakes for one tunnel and the associated facilities necessary to move water to Clifton Court Forebay in the south Delta. As described in the NOP, the DCP provides for participation in the project by the U.S. Bureau of Reclamation (USBR) as an option.

The DCP would allow SWP operations to adapt to a loss of water supply reliability due to the effects of climate change, potential earthquake risks, and increasing regulatory uncertainty. Climate change models forecast greater rainfall and lower snowpack in the coming decades which creates the need to capture greater amounts of water during rainfall events. The DCP would function as an alternative water conveyance in the event of an earthquake that damages the current through-Delta conveyance system and it allows for increased water exports in a manner that minimizes the impact of the Delta's native wildlife.

The Agency appreciates the focus in the NOP on restoring SWP water supply reliability as a stated purpose of the project and understands that purpose to include restoration of SWP capacity up to the full amount of water available to the Agency under its contract with DWR. Restoring both the amount of water supply available to the Agency and the reliability of that water supply are necessary to assist public water agencies in Kern County as they work to address the economic impacts expected from full implementation of the State's Sustainable Groundwater Management Act. Ms. Renee Rodriguez May 8, 2020 Re: Comments on the Notice of Preparation for the Delta Conveyance Project Environmental Impact Page 2 of 2

The water supply created by the DCP also mitigates the loss of water supply due to reduced snowpack caused by climate change and the possibility of temporary but significant interruptions in water deliveries from earthquakes affecting the Sacramento-San Joaquin Delta.

The NOP describes a proposed project of 6,000 cubic feet per second (cfs) and alternatives that will be analyzed in the EIR ranging from 3,000 cfs to 7,500 cfs. The Agency supports the 6,000 cfs proposed project and analysis of alternatives at the 3,000 cfs and 7,500 cfs sizes. USBR is not participating in the development of the DCP at this time. However, should USBR decide to participate in the project prior to the start of construction, then a capacity at the higher end of the range of alternatives must be available.

The NOP does not describe the cost of the project, nor make cost effectiveness a project objective. Design and construction of the DCP will be the largest re-investment in the SWP since it was constructed. DWR has shown sensitivity to cost considerations in its work to this point and the Agency requests that DWR continue to prioritize cost effectiveness as a project objective.

The Agency appreciates the opportunity to submit these comments and looks forward to working with DWR and its consultants to develop the EIR for the DCP.

Sincerely,

Thomas D. McCarthy

General Manager

From:	Linda Standlee <lstandlee@swc.org></lstandlee@swc.org>
Sent:	Wednesday, May 6, 2020 1:13 PM
То:	DWR Delta Conveyance Scoping
Cc:	Jennifer Pierre; Stephanie Parsons; Yee, Marcus@DWR; Buckman, Carolyn@DWR
Subject:	SWC Comments on the Notice of Preparation for the Environmental Impact Report on the Delta
	Conveyance Project
Attachments:	SWCcomments on NOP for EIR on Delta Conveyance.pdf

Good afternoon,

On behalf of the State Water Contractors, attached are comments on the Notice of Preparation for the Environmental Impact Report on the Delta Conveyance Project.

Kind regards,

Linda

Linda Standlee | Executive Assistant State Water Contractors 1121 L Street, Suite 1050 | Sacramento, CA 95814 P: 916.447.7357 x212 | C: 916.812-6400 D: 916.562-2588 Istandlee@swc.org



This communication, together with any attachments or embedded links, is for the sole use of the intended recipient(s) and may contain information that is confidential or legally protected. If you are not the intended recipient, you are hereby notified that any review, disclosure, copying, dissemination, distribution or use of this communication is strictly prohibited. If you have received this communication in error, please notify the sender immediately by return e-mail message and delete the original and all copies of the communication, along with any attachments or embedded links, from your system.

May 6, 2020



Ms. Renee Rodriguez California Department of Water Resources P.O. Box 942836 Sacramento, CA 94236

RE: Comments on the Notice of Preparation for the Environmental Impact Report on the Delta Conveyance Project

Dear Ms. Rodriguez:

The State Water Contractors (SWC) is pleased to provide input to the California Environmental Quality Act (CEQA) scoping process for the Delta Conveyance Project in the Sacramento-San Joaquin Delta, California. SWC is an association of 27 public water agencies who have invested billions of dollars in the construction of the State Water Project (SWP) and contract with the Department of Water Resources (DWR) to receive water from the State Water Project (SWP), and together provide clean, reliable drinking water to more than 27 million residents and 750,000 acres of farmland throughout the state.

The release of the Notice of Preparation (NOP) by DWR for a single-tunnel Delta Conveyance Project reflects the ongoing commitment by Governor Newsom's Administration and DWR to building a resilient water supply for California's communities, farms, and economy. Many of our members have long identified modernized Delta conveyance as a critical project and are, again, willing to make continued investments in modernizing the SWP to ensure the SWP continues to provide reliable water supplies into the future.

DWR's proposed single-tunnel project will provide opportunities to retain existing water supplies into the future. The single tunnel will help the SWP adapt to climate change conditions including increasing Delta salinity caused by sea level rise and increasingly 'flashy' hydrology. Additionally, seismic risks to Delta levees can be mitigated through the construction of a tunnel that provides dual conveyance in coordination with the existing south Delta facilities, and an ability to continue water deliveries through the tunnel. The proposed new points of diversion would allow for some diversions to continue while measures are taken to flush saltier water from the Delta and restore the ability to divert from the south Delta. As such, we agree with the project purpose and objectives as stated in the NOP.



DIRECTORS

Matthew Stone President Santa Clarita Valley Water Agency

Valerie Pryor Vice President Secretary-Treasurer Alameda County Flood Control and Water Conservation District, Zone 7

Kathy Cortner Mojave Water Agency

Stephen Arakawa Metropolitan Water District of Southern California

Robert Cheng Coachella Valley Water District

Mark Gilkey Tulare Lake Basin Water Storage District

Roland Sanford Solano County Water Agency

Ray Stokes Central Coast Water Authority

Craig Wallace Kern County Water Agency

> General Manager Jennifer Pierre

Ms. Renee Rodriguez May 6, 2020 Page 2

A single-tunnel Delta Conveyance project is one of the critical and necessary solutions for ensuring that Californians have a reliable water supply for their homes and businesses amidst the growing threat and impacts of climate change. However, we request that in developing and selecting a proposed project, DWR also consider the cost-effectiveness of the project. For the SWP investment, we believe a 6,000 cfs facility has the greatest possibility of fulfilling this need, because the costs as compared to benefits goes up sharply as the capacity is reduced below 6,000 cfs.

SWC and its members look forward to the development of the EIR for this important and critical project. Thank you for considering these comments.

Sincerely,

Jennifer Pierre General Manager

From:	Jacklyn Shaw
То:	Jones, Ryan@CVFPB; Reese, Kristina@DWR; DWR Delta Conveyance Scoping
Cc:	<u>belliot@sjgov.org; cwinn@sjgov.org; info@marlalivengood.com; Cathy.Kaehler Lodi, LUA?; markgoble536</u>
Subject:	Objections Stated by elected Supervisors, Delta Coalition of Five Counties. Where is map access or readability here and to public newspapers?
Date:	Thursday, May 14, 2020 9:49:41 AM

on 5.14.2020 public comment from jacklyn.el.shaw@icloud.com Lodi grower, east of Delta river

Dear Ryan Jones, <u>CVflood.ca.gov</u> and Kristina Reese, Water, <u>CA.gov</u>

RE: Objections Stated by elected Supervisors, Delta Coalition of Five Counties. Where is map access or readability here and to public newspapers?

This is false or Taxation without Representation Recognized., law since Roman times.

See Delta Bill of Rights, facebook.com/CaliforniaWaterSolutions

(1) Again, Where is MAP access or readability here and to public newspapers? To build a "funnel", 67 foot wide and 500 miles to N. Mexico defies common sense. Note Delta locals and bipartisan "Greater" Delta Heritage Act. Certainly, west of Lodi, about 12 miles away to any Terminous Marina tunnel is "devastating to the Delta", raising health concerns with federal data in air quality (LodiNews.com, May, 2020).
(2) Authorities alert us to a potential "Dust Bowl".

Apparently, concerns of Fishermen organizations are not acknowledged either.

(3) To avoid staged show of "flooding", restore DEEP, PURE

DREDGING, by USACE, Sacramento and Pacific offices. That is f**rom Rio Vista towards Antioch Bay**. In 2014-15, Sacramento Bee reported that the former US Senator sent funds to Washington State. (Who profits from water bonds?) If any "conveyance" or "funnel" to divert water from Nor Cal towards SoCal, it is better and less intrusive on WEST SIDE OF DELTA RIVER.

(4) Drought makes more drought cycles, and ignoring local taxpayers and witnesses — does not mean there are no abjectional. Why are we expected to denote our time with

objections! Why are we expected to donate our time with endless meetings and written comments, when taxpayer funds, local and state, go to pay staff stuck with an agenda to favor water bonds and more taxes? (Who are profiteers in water bonds?)

(5) Why displace the generational agri-business economy for fresh food crops to USA, by temporary jobs to others in construction?

(6) **SoCal knows that concrete costs more than desalination plants.** Is this towards "fracking farmlands" for oil oligarchy? People best move to where the water is, not necessarily on the Delta counties most fertile soil in the world for food crops, nor by destroying rivers.

(7) Are virtual waterboard meetings selective, one dimensional, or more of not acknowledged or concerned in agenda focus? The letter by R. Jones, <u>CVflood.ca.gov</u> suggests such. We heard at the Clarksburg workshop, July, 2015, that Delta Levee Maintenance was at 85% non-compliance! (That is inexcusable.) And does all this include permits for mineral sludge to rivers for an oligarchy?)
(8) Funds need to go to growth, like **restoring forests**, unprotected from needless fires.

(9) Melones Dam for Tulare and Hetch Hetchy Dam for Fresno -- need to be reclaimed by local areas. Both San Francisco and Port of Oakland need to use their Desalination Plants. Desalination was invented at UCB, with J. Leibovitz, PhD, 1977, and since used in 100 nations.
(10) Bureau of Reclamation and Department of Interior need to give funding to California coast, as soon as possible. They gave funding to 16 other states. That is ridiculous, to put it nicely.

Betrayed by Bureaucratic Water boarding or Republic with representation of limited rules? Who ignores the Delta Coalition of supervisors of five counties who have written that any tunnel (or "funnel") for water exports towards SoCal, would be "devastating to the Delta".

Sincerely, N.I.M.B.Y. Jacki

jacklyn.el.shaw@icloud.com

Grower, Prof-author, Ed.Admin.

Lodi, CA 95242

*Not-In-My-Back Yard" * Residing east of Delta River (west of Lodi), just about seven miles from Marina. Terminous area has been part of Lodi Unified School District for years. Building a humongous "conveyance" for water exports is ludicrous. Terminous is only about 12 miles from Lodi, CA, 95242. If any "funnel" of water exports, it needs to BE WEST OF DELTA RIVER (not east side in "greater Delta Heritage Act").

* <u>facebook.com/CaliforniaWaterSolutions</u>

DCS987

From:	Jacklyn Shaw
То:	Jones, Ryan@CVFPB; Reese, Kristina@DWR; DWR Delta Conveyance Scoping
Cc:	<u>belliot@sjgov.org; cwinn@sjgov.org; info@marlalivengood.com; Cathy.Kaehler Lodi, LUA?; markgoble536</u>
Subject:	Objections Stated by elected Supervisors, Delta Coalition of Five Counties. Where is map access or readability here and to public newspapers?
Date:	Thursday, May 14, 2020 9:49:41 AM

on 5.14.2020 public comment from jacklyn.el.shaw@icloud.com Lodi grower, east of Delta river

Dear Ryan Jones, <u>CVflood.ca.gov</u> and Kristina Reese, Water, <u>CA.gov</u>

RE: Objections Stated by elected Supervisors, Delta Coalition of Five Counties. Where is map access or readability here and to public newspapers?

This is false or Taxation without Representation Recognized., law since Roman times.

See Delta Bill of Rights, facebook.com/CaliforniaWaterSolutions

(1) Again, Where is MAP access or readability here and to public newspapers? To build a "funnel", 67 foot wide and 500 miles to N. Mexico defies common sense. Note Delta locals and bipartisan "Greater" Delta Heritage Act. Certainly, west of Lodi, about 12 miles away to any Terminous Marina tunnel is "devastating to the Delta", raising health concerns with federal data in air quality (LodiNews.com, May, 2020).

(2) Authorities alert us to a potential "Dust Bowl". Apparently, concerns of Fishermen organizations are not acknowledged either.

(3) To avoid staged show of "flooding", restore DEEP, PURE

DREDGING, by USACE, Sacramento and Pacific offices. That is f**rom Rio Vista towards Antioch Bay**. In 2014-15, Sacramento Bee reported that the former US Senator sent funds to Washington State. (Who profits from water bonds?) If any "conveyance" or "funnel" to divert water from Nor Cal towards SoCal, it is better and less intrusive on WEST SIDE OF DELTA RIVER.

(4) Drought makes more drought cycles, and ignoring local taxpayers and witnesses — does not mean there are no abjectional. Why are we expected to denote our time with

objections! Why are we expected to donate our time with endless meetings and written comments, when taxpayer funds, local and state, go to pay staff stuck with an agenda to favor water bonds and more taxes? (Who are profiteers in water bonds?)

(5) Why displace the generational agri-business economy for fresh food crops to USA, by temporary jobs to others in construction?

(6) **SoCal knows that concrete costs more than desalination plants.** Is this towards "fracking farmlands" for oil oligarchy? People best move to where the water is, not necessarily on the Delta counties most fertile soil in the world for food crops, nor by destroying rivers.

(7) Are virtual waterboard meetings selective, one dimensional, or more of not acknowledged or concerned in agenda focus? The letter by R. Jones, <u>CVflood.ca.gov</u> suggests such. We heard at the Clarksburg workshop, July, 2015, that Delta Levee Maintenance was at 85% non-compliance! (That is inexcusable.) And does all this include permits for mineral sludge to rivers for an oligarchy?)
(8) Funds need to go to growth, like **restoring forests**, unprotected from needless fires.

(9) Melones Dam for Tulare and Hetch Hetchy Dam for Fresno -- need to be reclaimed by local areas. Both San Francisco and Port of Oakland need to use their Desalination Plants. Desalination was invented at UCB, with J. Leibovitz, PhD, 1977, and since used in 100 nations.
(10) Bureau of Reclamation and Department of Interior need to give funding to California coast, as soon as possible. They gave funding to 16 other states. That is ridiculous, to put it nicely.

Betrayed by Bureaucratic Water boarding or Republic with representation of limited rules? Who ignores the Delta Coalition of supervisors of five counties who have written that any tunnel (or "funnel") for water exports towards SoCal, would be "devastating to the Delta".

Sincerely, N.I.M.B.Y. Jacki

jacklyn.el.shaw@icloud.com

Grower, Prof-author, Ed.Admin.

Lodi, CA 95242

*Not-In-My-Back Yard" * Residing east of Delta River (west of Lodi), just about seven miles from Marina. Terminous area has been part of Lodi Unified School District for years. Building a humongous "conveyance" for water exports is ludicrous. Terminous is only about 12 miles from Lodi, CA, 95242. If any "funnel" of water exports, it needs to BE WEST OF DELTA RIVER (not east side in "greater Delta Heritage Act").

* <u>facebook.com/CaliforniaWaterSolutions</u>

DCS987

From:	Jacklyn Shaw
То:	<u>belliot@sjgov.org; cwinn@sjgov.org; tpatti@sjgov.org; Amber McDowell; Bruce Blodgett; Wid Anders</u>
	<u>Christenson,mngr</u>
Cc:	markgoble536; Cathy.Kaehler Lodi, LUA?; Robin Marchi
Subject:	Fwd: Request regarding Delta Conveyance Maps
Date:	Monday, May 18, 2020 3:50:53 PM

on 5.18.2020 from jacklyn.el.shaw@icloud.com

Dear Laurence C., Officer, DWR, Andy C., Woodbridge/WID, Supervisors Chuck W, Bob E.,

Delta Coalition of Supervisors of San Joaquin County, and concerned others:

Thank you for the very helpful links towards maps, within almost 80 pages in documents. For over five years, I have gone to meetings, from Sacramento to Los Angeles, Stockton to Clarksburg. In particular, this is with the Delta Coalition of Supervisors of Five Counties letter stating that any "tunnel" (or conveyance) for water exports would be devastating to the Delta region and fresh food crops to USA. It is very heartbreaking, to see the ignorant, outrageous ... Delta Plan!

I will send a snapshot, p.4, DWR, (Jan. 15, 2020) on the "Devastating" Delta Plan with any "Conveyance" of Water export. Most timely and vitally vs any East of Delta River "funnel" towards 500 miles, up to 67 foot wide. (That is the size of an underground highway.). If any, a plan needs to show a "funnel" to be West of Rio Vista or West of Delta River. Terminous Resort is only seven to 12 miles from my late folks homestead vineyard. Temporary construction jobs would displace hard-working agricultural business families and agri-tourism. That is with over 100 kinds of fresh food crops to USA from one of the most fertile soils in the world. The cost is prohibitive for an empty tunnel and amidst increasing drought recycles. Also, Southern California Metro in Los Angeles (SoCal, Metro, LA) knows that construction (with phases for 10 years) costs more than desalination.

QUESTIONS:

(1) Where is a map showing the purchase of SoCal in properties of the Delta region?

(a) Surely, their concerns do not reflect stewards of the Delta of Northern California (NorCal Delta).

(b) Where is it verifiable that SoCal owes water to Northern Mexico? (DWR info officer, Mark G. or other)?

(2) How soon will a Delta plan show a "conveyance" to be west of Rio Vista, heart of the Delta River?

(a) If any tunnel, it is better to be WEST of the DELTA RIVER.

(b) It is ridiculous to not recognize Terminous Resort, part of Lodi Unified School District for decades, as part of the bipartisan Greater Delta Heritage Act.

(c) Terminous Resort is amidst fresh food crops, communities, etc. and is only 7-12 miles from Lodi City Hall.

(d) Lodi in 2015 rated #1 in the world for Wines, heart healthy, and any water exports would increase drought recycles.

(e) That is amidst Sheriffs', <u>SJC.gov</u> concerns of narco crops plus FBI finds of ignorant terrorists in Lodi area.

(3) Woodbridge, WID, vs East Bay/MUD (Jan. 31, 2018), includes grower/ farmers concerns on not keeping agreements (like Mono Lake, Anderson Dam, etc.)

(a) Mokelumne (River) Aqueduct towards Port of Oakland adds to Lodi's history in worst recorded drought in February (2/2020, lodi <u>news.com</u>).

(b) With water exports towards Port of Oakland since Pardee Dam, 1929, Lodi,

city and rural, has been impacted, like fog for months to a few weeks if any. (c) The federal air quality gave a health alert, recently for allergies, lungs, etc., so where is documented consideration for communities (2020, <u>lodinews.com</u>)

(d) Photos of living dead salmon are not for a Hollywood movie, but maybe it is, as Delta breeze blows more dust for needless construction of water exports.

(e) The "Dust Bowl" documentary on Kansas area, showed that nobody believed the dust bowl, until it blew into the streets of New York! (For what are we waiting?)

(4) <u>How soon can the public view in news press</u> — the letter of objection, last year, from the Delta Coalition of Supervisors of Five Counties?

(a) Why are locals being disenfranchised by not listening to ELECTED REPRESENTATIVES of five Delta Counties?

(b) That is any tunnel (or conveyance for WATER EXPORTS would be DEVASTATING?

(c) Could you please make more easily accessible to widespread public — the Delta map plan ravaging Terminous resort and communities at large? of Rio Vista, the heart of the Delta River? (A snapshot photo renders a map picture, DWR, Jan. 15, p.4.)

(5) Where are increasing concerns with Health Data Reports? (Check with HMO's from Elk Grove to Stockton as well as federal, state reports.)

(6) Why is not Department of Interior with Bureau of Reclamation giving grants to California with Pacific Ocean Coast? (Desalination was invented with J. Leibovitz, Ph.D., UC Berkeley, 1977. It has since been used in over 100 nations and grants went to 16 other states in USA.)

(7) Again, how soon will the Delta Map Plan show a "conveyance" if any water exports, to be West of Rio Vista, heart of the Delta River?

(8) In 2015, we started California Water Solutions. Please see the recent statement

on the "Delta Bill of Rights".

(9) Avoid flooding by restoring funds to USACE. When is that for DEEP, PURE DREDGING from Rio Vista towards Antioch Bay? (Are construction pre-plans part of delays or profiteers from Delta distress?) Levees were 80% non-compliance in levee maintenance, CVFCB, Clarksburg Workshop, July, 2015. (In staged show for water bonds, former US Senator sent funds to Washington State, Sacramento Bee, 2014-15.

(10) Your replies would be greatly appreciated and are requested, as this affects property rights and health concerns with the Delta Breeze, 10-40-90 miles per hour.

Driving from Lodi to UC Berkeley along Highway 12, it is beautiful seeing the panoramic Delta, one of the top two in the world, like Mount Kilimanjaro. Delta River from Rio Vista to Antioch Bay and then East Bay, or Rio Vista southward to Sacramento has Highway 160, which is considered historic highway. (Check the Delta uglification plans on buildings, like Darth Vader hats on the Delta River and levees.)

Where is the new email links to submit these questions? We participated in the "DWR, Delta...scoping? Renee Rodriguez"

<<u>DeltaConveyanceScoping@water.ca.gov</u>> They say it is changed to a new link on timely concerns, from time to time...

Sincerely,

Prof. Jacklyn Shaw Grower, Prof-Author <u>facebook.com/CaliforniaWaterSolutions</u> Lodi, CA 95242 (562) 233-7300 *Note: born and raised in Lodi and rode school bus with Lodi area students from Terminous Resort area. P.S. In proofreading, this letter gets longer, adding details... cc: concerned others

Begin forwarded message:

From: "Campling, Laurence@DWR" <<u>Laurence.Campling@water.ca.gov</u>> Subject: Request regarding Delta Conveyance Maps Date: May 18, 2020 at 9:48:34 AM PDT To: "jjjjshaw@verizon.net" <jjjjshaw@verizon.net> Dear Mr. Shaw,

Thank you for your inquiry regarding the availability of maps showing the proposed alternative alignments for the Delta Conveyance Project. A map showing the proposed alignments can be found in the Notice of Preparation. Available on the DWR website here:

https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Delta-Conveyance/Delta_Conveyance_Project_NOP_20200115_508.pdf? la=en&hash=74B80DAAE5B9C4BC2EB0619B6A252011F72D1087

Other informative maps can be found in the presentation made to the Delta Conveyance Design and Construction Authority Stakeholder Engagement Committee on April 22nd of this year. Materials for the meeting are available online here: <u>https://www.dcdca.org/pdf/2020-04-22-StakeholderEngagementMeetingMaterials.pdf</u>

In addition, a video recording of the April 22nd online meeting can be seen here: <u>https://www.youtube.com/watch?v=cPwVX4KC5Cs</u>

Again, thank you for your interest in the project and please let me know if I can be of further assistance.

Best regards,

Laurence Campling Information Officer California Department of Water Resources Delta Conveyance Office Office: (916) 653-9794 Mobile: (916) 834-8290

From:	Jason Folkman
To:	DWR Delta Conveyance Scoping
Subject:	New Delta Conveyance Facilities Public Comment
Date:	Sunday, September 20, 2020 4:02:11 PM

Dear Department of Water Resources,

I recently received a letter notifying me of the environmental review of the proposed new Delta Conveyance Facilities which would transport water through an underground tunnel running below the natural waterways.

I have researched this, and have come to the conclusion that the environmental damage to the landscape, water ways, and flora and fauna exceed any benefit that might come from this proposal.

We need to do much more to conserve water, rather than spending billions of taxpayer dollars to construct tunnels to redirect water, with potentially devastating effects on wildlife.

I therefore <u>oppose</u> the the proposed Delta conveyance facilities.

Respectfully,

Jason Folkman 3005 Boundary Street San Diego CA 92104

--

"We can create a culture--imagine this--where our kids ask for healthy options instead of resisting them." M. Obama



YUROK TRIBE

190 Klamath Boulevard • Post Office Box 1027 • Klamath, CA 95548

June 16, 2020

Carrie Buckman, Environmental Program Manager, Delta Conveyance, and Anecita Agustinez, Tribal Policy Advisor Department of Water Resources 1416 Ninth St. Sacramento, CA 94236 – 0001

Re: Consultation regarding Delta Conveyance Project

Aiy ye kwee' Ms. Buckman and Ms. Augustinez:

I would like to thank you for the May 29, 2020 opportunity to meet government-to-government with California Department of Water Resources (DWR) regarding the State's environmental review process under the California Environmental Quality Act (CEQA) for the tunnel conveyance project through the Sacramento-San Juaquin Delta. The Yurok Tribal Council would also like to accept your offer to have regular quarterly government-to-government consultation meetings regarding the proposed Delta Conveyance Project (DCP or proposed project) as well as other issues of mutual interest. As the Tribal Council noted during the meeting, our primary concern with the proposed DCP is related to potential water quantity and quality cumulative impacts to the Trinity River and Lower Klamath River, impacts to Klamath and Trinity River fishery resources, and impacts to the Yurok Tribe's fishing rights. Furthermore, the Trinity River is designated as critical habitat for the Endangered Species Act (ESA) listed Coho salmon. If there are impacts to the Trinity that result in failure to meet temperature objectives as required in the 2000 Trinity River National Marine Fisheries Service Biological Opinion (2000 Trinity BiOp), direct take of Coho would result in violation of the ESA.

Our recent consultation increased our understanding of the DCP, however I should note that we ran out of time prior to sharing all of our technical concerns with the proposed project. The Yurok Tribe provides this letter to address and summarize our technical concerns. The Yurok Tribe also requests that our letter be considered as scoping comments and government-to-government consultation comments to ensure our concerns are considered during preparation of the Draft Environmental Impact Report (DEIR). There is nothing confidential in regard to these comments, therefore I request they be addressed within the publicly available DEIR.

As you may be aware, approximately 52% of the water impounded above Lewiston Dam is diverted to the Central Valley on an annual basis; this follows decades of nearly 90% of the water being diverted following construction of the Trinity Dam. These diversions resulted in substantial impacts to the health of the Trinity River, the viability of our fishery resource, and the ability of the Yurok People to fully exercise our federally reserved fishing rights. It is our understanding that CEQA does not excuse an EIR from evaluating past, present, and future foreseeable actions and cumulative impacts and the

Yurok Tribe Delta Conveyance Project Comments - June 16, 2020

Yurok Tribe requests the DWR review all impacts the DCP will have on the Trinity River, the endangered Coho salmon, and the Yurok Tribe's water and fishing rights.

Summary of Technical Concerns

Future Diversions from the Trinity Basin

It is the Tribe's position that any increase in diversion capacity from the Sacramento River Basin has the potential for future foreseeable actions to negatively impact water quantity and quality in the Klamath-Trinity Basin. The Trinity River Project contains the only tran-basin diversion into the Sacramento River. Given that Central Valley water supplies are stretched beyond the ability to sustain a healthy ecosystem, meet the ESA requirements, and municipal and agricultural demands, we are concerned the increased diversion capacity proposed by the project will result in future efforts to divert additional Trinity Basin water to meet the unquenchable thirst of the Central Valley and Southern California. This comes amid concern of the continued ability to meet existing legal requirements associated with the 2000 & 2017 Record of Decisions (RODs) and the 1955 act authorizing an annual 50,000 AF federal water contract with Humboldt County and downstream users, and uphold trust responsibilities to restore and maintain the anadromous fisheries of the Trinity River.

Cold Water Pool

Allowing Trinity Reservoir levels to become too low compromises the cold-water pool volume in the bottom of the reservoir. Such low cold-water pool levels can result from multi-year drought and/or from diverting too much water from Trinity Reservoir. Without adequate cold-water, the water released to the Trinity River in the late summer/early fall can be too warm to sustain our fishery.

Loss of cold-water releases to the Trinity River can lead to mortality of adult Spring Chinook salmon holding in the Trinity River below Lewiston Dam and poor egg viability of Spring Chinook, Fall Chinook, and Coho salmon holding in the River, prior to spawning. All of these species are of critical importance to sustain the Yurok way of life, for cultural and substance purposes, as well as economic opportunity when populations are in abundance. The ability of the Yurok Tribe to exercise its fishing rights are reliant on healthy and flourishing population numbers of the Spring Chinook, Fall Chinook, and Coho salmon and the State has the obligation to ensure its actions do not diminish the Yurok Tribe's fishing and water rights.

Additional Temperature Concerns

An additional concern is the recently released "Central Valley Project (CVP) Power Initiative," which implies that power plant bypass operations at CVP dams will no longer be implemented to protect fisheries resources. This is in direct contradiction to condition 7.b of the 2000 Trinity NMFS BiOp and would make Trinity River fisheries resources even more susceptible to temperature impacts from reduced pool elevations in Trinity Reservoir.

To further complicate temperature issues, a certain magnitude of diversion is required by current infrastructure to prevent warming as water passes through Lewiston Reservoir in late summer and early fall. Changes to diversion timing or magnitude, without significant upgrades to existing infrastructure, pose a threat to adult fish holding prior to spawning and embryos deposited in the stream bed below Lewiston Dam.

<u>Questions with the Proposed DCP</u>

Due to other time commitments, the government-to-government meeting on May 29th, 2020 was ended before the Yurok Tribe could ask several technical questions and requests. Please allow the below questions and requests to be submitted to the scoping process and provide written responses to the following questions:

- 1. What assurances will be offered to ensure increased capacity to convey water south will not result in future efforts to increase diversions from the Trinity River?
- 2. What type of jurisdiction does the State have over storage and release from the Trinity River Division CVP? How will the project and the actions of the State be consistent with current federal regulatory and contractual water commitments?
- 3. What will the effects to Trinity Reservoir end of September carry-over storage be from the proposed project? What does the modeling show relative to historic levels?
- 4. Will DWR require protection for the Trinity River in the form of elevated minimum pool requirements for Trinity Reservoir in accordance with the findings from previous studies (Bender 2012; Deas 1998a; Finnerty and Hecht 1992)?
- 5. Are Proviso 2 water volumes (50,000 acre ft of federal water contracted to Humboldt County and downstream users) being accounted for in modeling of water quantity and quality? Will the ability of the CVP to provide this contract water be jeopardized given the DCP's increased conveyance capacity around the delta?
- 6. Are water volumes necessary to support the Lower Klamath Fall Augmentation Releases (FAR), authorized under the 2017 EIS, considered in modeling for this project? If so, during what water year types? Are measures present in the proposed action to ensure cold-water to perform the fall flow augmentation when deemed necessary (most likely during extended drought)?
- 7. Will DWR require Reclamation to address the temperature issues in Lewiston Reservoir identified in the U.S. DOI BOR 2012 Technical Memorandum through a feasibility study and NEPA document?

Requests:

- The Draft Environmental Impact Report analysis include the cumulative impacts the project will have on the Klamath-Trinity Chinook salmon, SONCC Coho Salmon, and Yurok fishing and water rights.
- The DEIR and FEIR require:
 - Minimum pool requirements, above the current recommended 600K AF, be adopted in the Trinity Reservoir to protect cold water pool during times of drought.
 - Ensure the Trinity River Record of Decision water volumes are maintained and released annually to the Trinity River to sustain healthy anadromous fish production, adequate water volumes are available to meet Proviso 2 requirements annually, and

Proviso 1 requirements as needed. Continue to manage diversions from Lewiston Reservoir in a manner that provides adequate cold water releases to the Trinity River.

- Proviso 2 and FAR volumes be accounted for in modeling for water quantity and quality.
- Reclamation to address the temperature issues in Lewiston Reservoir identified in the U.S. DOI BOR 2012 Technical Memorandum through a feasibility study and NEPA document.

Summary

Again, I'd like to thank you for our recent government-to-government consultation and I look forward to future meetings with the DWR. As noted above, we have significant concerns with the proposed DCP and the potential impacts it will have to our fishery resource. We know all too well the unquenchable thirst that interests to the south have for our water; water that has already been diverted to levels beyond what can sustain a healthy ecosystem. We are continuously trying to regain lost water for the survival of our fishery resource, it is concerning to see this proposed project that could cause additional flow reductions in the future. Please don't hesitate to contact myself, or Dave Hillemeier (Fisheries Department Director), at the address in the letterhead if you have any questions.

Wohl-klew',

1. Jag

Joseph L. James Chairperson Yurok Tribal Council

Resources:

Deas 1998a - http://www.trrp.net/library/document?id=2341

Bender 2012 - http://www.trrp.net/library/document/?id=1813

Finnerty and Hecht 1992 - http://www.tcrcd.net/archive/trl-stor.htm

U.S. DOI BOR 2012 -

https://www.waterboards.ca.gov/waterrights/water issues/programs/bay_delta/california_waterfix/exhibits/docs/PCFFA&IGFR/part2/pcffa_118.pdf

Humphrey, Shay

From:	Deirdre Des Jardins <ddj@cah2oresearch.com></ddj@cah2oresearch.com>
Sent:	Thursday, July 30, 2020 1:51 PM
То:	Humphrey, Shay
Cc:	Chris Shutes; William Jennings; Michael Jackson
Subject:	CSPA, California Water Research Scoping Comments sent April 17, 2020
Attachments:	CWR request re Delta Conveyance alternatives.pdf; California Water Research Mail - RE_ CSPA et al. comments, NOP for proposed Delta Conveyance.pdf; CSPA et al comments scoping Delta Conveyance 041720.pdf

Hello,

Janet Barbieri called me today to discuss how the April 17, 2020 comments by CSPA, California Water Research, CWIN, and Aqualliance were not included in the Scoping Report. There appears to have been some confusion because (a) CSPA also signed on to two other sets of comments by Aqualliance and the Sierra Club and (b) the CSPA, California Water Research, CWIN, and Aqualliance comments were not received by ICF until after 5:00 pm on April 17, due to an email server DNS error, although they were emailed at approximately 8:00 am on April 17.

Please see attached letter to the Delta Conveyance Design and Construction Authority (DCA), which submitted our scoping comments to the DCA for consideration, sating:

There was an email server issue, and the comments by California Water Research, California Sportfishing Protection Alliance, California Water Impact Network, and AquAlliance were not received by the Department of Water Resources' <u>DeltaConveyanceScoping@water.ca.gov</u>email address before 5:00 pm on April 17, 2020, although they were emailed at 8:00 am on Friday, April 17, 2020. We notified the Department of Water Resources staff as soon as we discovered the issue, and there was no indication that the scoping comments would not be accepted. We only found out when the comments were not included in the Scoping Report.

Now the Department of Water Resources and the Delta Conveyance Design and Construction Authority have stated they will refuse to accept any requests for consideration of alternatives in the DCA Stakeholder Engagement Committee process.

California Water Research is formally submitting these comments to the Delta Conveyance Design and Construction Authority and the Stakeholder Engagement Committee members and requesting that these alternatives be considered in the DCA's engineering design process.

Ms. Barbieri explained that DWR would be preparing a Supplemental Scoping Report, and would include our suggested alternatives in that report. This was the request that California Water Research made to the DCA for consideration of alternatives suggested in our scoping comments:

The DCA and DWR consider the potential impacts of flooding due to sea level rise and/or increased frequency of river flooding on the project during the proposed construction period and early long-term operations. The DCA and DWR analyze an alternative that improves Delta levees over the near term to protect infrastructure, people, and property in the Delta.

The DCA and DWR evaluate a range of locations for project intakes that would make the project reliable under a range of reasonably foreseeable potential sea level rise over the expected service life of the project, according to the best available science. We request such analysis under sea level rise of up to two meters by 2100.

The DCA and DWR should dismiss as an unreasonable alternative the 3,000 cfs intake design and locations previously proposed for the "California WaterFix" project, because this these locations cannot reasonably protect fish and other aquatic species.

The DCA and DWR must evaluate a smaller intake design that will allow juvenile salmon and sturgeon to be exposed to the intakes for no more than 15 minutes at the proposed minimum bypass flows. Tentatively, we suggest that the DCA and DWR analyze intakes with a capacity of 1,000 cfs.

The DCA and DWR must analyze near-screen sweeping velocities at the proposed intake locations. The DCA and DWR must evaluate alternative locations with smaller intakes on the outside bends of the river channel to provide adequate near-screen sweeping velocities.

The DCA and DWR must ground its consideration of project alternatives to reduce impacts to terrestrial species in biological surveys conducted on terrestrial species and their habitat within the footprint of the project facilities and their construction area. The DCA and DWR must analyze alternatives that fully mitigate those impacts, including relocation of facilities away from the sites selected for the previous "California WaterFix" project. The DEIR must analyze project impacts on golden eagle, bald eagle, Swainson's hawk, greater sandhill crane, California black rail, California clapper rail, giant garter snake, riparian brush rabbit, burrowing owl, tricolored blackbird, bank swallow, least bell's vireo, California yellow warbler, western yellow-billed cuckoo, loggerhead shrike, pallid bat, valley elderberry longhorn beetle, vernal pool invertebrates, and rare or sensitive native plants.

The DCA and DWR must analyze the effects of the project construction and operation on Delta levees, including potential increased risks of flooding.

The DCA and DWR must analyze an alternative that relocates intakes away from Delta legacy communities.

The DCA and DWR should reject locating the project along the Central Delta Corridor as an unreasonable alternative because of impacts to terrestrial species, Delta levees, local communities, and Delta recreational uses.

The DCA and DWR must situate the proposed project in the context of the existing overappropriation and overallocation of water in the Bay-Delta watershed and the Central Valley. The DCA and DWR should consider the cumulative effect of project construction and operation together with future demands under existing water rights, particularly those in the areas of origin.

The DCA and DWR should consider an alternative that maximizes local water supplies, including conservation, water recycling, stormwater capture, brackish groundwater desalination and other groundwater remediation.

Thank you very much for your attention to this matter.

Deirdre Des Jardins California Water Research

×	The plot p_{1} , p_{2} , p_{3} and the plot decide and of the plot of the plot of the field f

831 566-6320 cah2oresearch.com twitter: @flowinguphill



Deirdre Des Jardins <ddj@cah2oresearch.com>

RE: CSPA et al. comments, NOP for proposed Delta Conveyance

Mon, Apr 20, 2020 at 10:36 AM

Lyster, Stefanie <Stefanie.Lyster@icf.com> To: Deirdre Des Jardins <ddj@cah2oresearch.com>, DWR Delta Conveyance Scoping <DeltaConveyanceScoping@water.ca.gov>

Cc: Bill Jennings <deltakeep@me.com>, Mike Jackson <mjatty@sbcglobal.net>, Barbara Vlamis

sbarbarav@aqualliance.net>, Carolee Krieger <caroleekrieger7@gmail.com>

Hello Deirdre,

Thank you for letting us know about the DNS issue. This message is to let you know we are in receipt of the comment letter submitted on April 17, 2020 at 8:01 a.m. and signed by CA Water Impact Network, AquAlliance, CA Sportfishing Protection Alliance and CA Water Research.

Regards,

Stefanie Lyster

On behalf of the Delta Conveyance Project

From: Deirdre Des Jardins <ddj@cah2oresearch.com>
Sent: Saturday, April 18, 2020 11:09 AM
To: DWR Delta Conveyance Scoping <DeltaConveyanceScoping@water.ca.gov>
Cc: Bill Jennings <deltakeep@me.com>; Deirdre Des Jardins <ddj@cah2oresearch.com>; Mike Jackson
<mjatty@sbcglobal.net>; Barbara Vlamis <barbarav@aqualliance.net>; Carolee Krieger <caroleekrieger7@gmail.com>
Subject: Fwd: CSPA et al. comments, NOP for proposed Delta Conveyance

There appears to be a DNS issue with the email address DeltaConveyanceScoping@water.ca.gov.

Deirdre Des Jardins

California Water Research



831 566-6320 cell

831 423-6857 landline

cah2oresearch.com

twitter: @flowinguphill

DCS1008

------Forwarded message -------From: Chris Shutes <BlancaPaloma@msn.com> Date: Sat, Apr 18, 2020 at 10:08 AM Subject: CSPA et al. comments, NOP for proposed Delta Conveyance To: DeltaConveyanceScoping@water.ca.gov <IMCEAMAILTO-DeltaConveyanceScoping+ 40water+2Eca+2Egov@namprd03.prod.outlook.com> Cc: Bill Jennings <deltakeep@me.com>, Deirdre Des Jardins <ddj@cah2oresearch.com>, Mike Jackson <mjatty@sbcglobal.net>, Barbara Vlamis <barbarav@aqualliance.net>, Carolee Krieger <caroleekrieger7@gmail.com>

To whom it may concern:

I sent this e-mail and comment letter yesterday, April 17, 2020, at 8:01 am. Those copied on this email can confirm the time. This morning, I received notice that the e-mail had not been delivered. As can be seen from the notice of non-delivery pasted below, effort by my server was made at 15:00 on April 17 to deliver this letter to your server. 15:00 on April 17 is still timely.

The spelling of the e-mail address is correct.

Please confirm receipt of this e-mail. Please confirm timely receipt of these comments.

Thank you.

Good morning,

Attached please find the comments of California Sportfishing Protection Alliance, California Water Impact Network, AquAlliance, and California Water Research in response to the January 15, 2020 Notice of Preparation of Environmental Impact Report for the Delta Conveyance Project.

Please acknowledge timely receipt.

Please feel free to contact me if you have any questions.

Respectfully,

Chris Shutes

Chris Shutes FERC Projects Director

Water Rights Advocate

California Sportfishing Protection Alliance (510) 421-2405

Delivery has failed to these recipients or groups:

DeltaConveyanceScoping@water.ca.gov (MAILTO:DeltaConveyanceScoping@water.ca.gov)

Your message couldn't be delivered. Despite repeated attempts to deliver your message, querying the Domain Name System (DNS) for the recipient's domain location information failed.

For more information and tips to fix this issue see this article: https://go.microsoft.com/fwlink/? LinkId=389361.

Diagnostic information for administrators:

Generating server: BN8NAM12HT095.mail.protection.outlook.com Receiving server: BN8NAM12HT095.eop-nam12.prod.protection.outlook.com

IMCEAMAILTO-DeltaConveyanceScoping+40water+2Eca+2Egov@namprd03.prod.outlook.com 4/18/2020 3:00:58 PM - Server at BN8NAM12HT095.eop-nam12.prod.protection.outlook.com returned '550 5.4.312 Message expired, DNS query failed(ErrorRetry)' 4/18/2020 2:54:56 PM - Server at namprd03.prod.outlook.com (0.0.0.0) returned '450 4.4.312 DNS query failed [Message=ErrorRetry] [LastAttemptedServerName=namprd03.prod.outlook.com] [BN8NAM12FT026.eopnam12.prod.protection.outlook.com](ErrorRetry)'

Original message headers:

ARC-Seal: i=1; a=rsa-sha256; s=arcselector9901; d=microsoft.com; cv=none;

b=HAal+g/5ugYWW0Y5Fd8mVFpvx0kvF5DBq1UIyI4wgItZSrcmaNhXSu+2TRCgXiBWFiQ0QXBJ+3wzYQkndsJHoJhjS90AqzpNfptpQh6 WmJlWUPjsISDW/isa7w6ArY3uFqEGWCXFnoE0lgETUTGjC8wS90WU6j0Dspg0v/3GP5SsVozaoYulobBipJhytoCeeU1T85x/ B0nYcTFGEKJrXbuMqr4mu08xKddAq/diu9SNUXhAs5dYw/0Fc4i1nSZWbbHqWji0Nm9zV6JgK09+J07WsjH0Cmut1w0mPxWioVCS8TgpLn MDy9/qaC3otcWnic+a20pPgZIE/bQAlE0ZkQ==

ARC-Message-Signature: i=1; a=rsa-sha256; c=relaxed/relaxed; d=microsoft.com;

s=arcselector9901;

h=From:Date:Subject:Message-ID:Content-Type:MIME-Version:X-MS-Exchange-SenderADCheck;

bh=/1zPMrMrolAFvS/+1TFUZMLpZItk5sLwMGi6002bFVw=;

b=Zv425ca+xZlGhXkWrpOdc1GzEdHwmUaD5dUB4o+ds/pBmpJrVsuUJ0dSVR0zzUh2uZwpMrybwEBl2Crj1xEvR6T8diPePV8B3l+ isx4GWK+YPzAShTYI/7p5LbaKH5vf1vyAwYorfkx+3Es7XnxOMTwknfnq01Ip+id6USJydYYZ6M5fSaAQev+/AwftPfe9t0xalzh8qg/ Uv24N9dCPaXvSGgXw00x29lm236JhDFYSIRIoGOdwyhYwduIt/WVVj6qB2WPc8MQv0o626+LhWqY7JZE081inxCgMwV/ LQY6YcWg9CcJKPf3/1/P15CkAwoisG2AiXXm52WzWUaN/eA==

ARC-Authentication-Results: i=1; mx.microsoft.com 1; spf=none; dmarc=none;

dkim=none; arc=none

7/22/2020

California Water Research Mail - RE: CSPA et al. comments, NOP for proposed Delta Conveyance

DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed; d=msn.com; s=selector1; DCS1008

h=From:Date:Subject:Message-ID:Content-Type:MIME-Version:X-MS-Exchange-SenderADCheck;

bh=/1zPMrMrolAFvS/+1TFUZMLpZItk5sLwMGi6002bFVw=;

b=g3yr24kooei2lSvL6cXHFD4xA9p4L8uM65jzqp4psrv7avC149JpVyJJkrpOUxPK4evaEANFlXfVKiCQp23z6sdYmSX4Z/ eoOgxPDTWUY2znJQd3xHJ0Tu2n4yO9DXnFGMYJaJvWuO+tCmh3pEv130nU1GCIZlHurspQK+Mdh+rT2p9aGpj1Ttru7CXy4VPFxpyCxzAP PtV4MOT8SNV2jQ6Kdj0rYGVL4vYGkPV093ZOX7M4uQlSJhEMjazQ2C5VZwxWFjE1wMhz4dFFJ803CNemn0OoNCNnMe ZkGwonRKCNjCLFhL1KUfzQak0QvEIB452jA2zMpB29EWtg0TVZig==

Received: from BN8NAM12FT064.eop-nam12.prod.protection.outlook.com

(2a01:111:e400:fc66::48) by

BN8NAM12HT095.eop-nam12.prod.protection.outlook.com (2a01:111:e400:fc66::185)

with Microsoft SMTP Server (version=TLS1_2,

cipher=TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384) id 15.20.2921.12; Fri, 17 Apr

2020 15:00:29 +0000

Received: from SN6PR03MB3853.namprd03.prod.outlook.com

(2a01:111:e400:fc66::52) by BN8NAM12FT064.mail.protection.outlook.com

(2a01:111:e400:fc66::118) with Microsoft SMTP Server (version=TLS1_2,

cipher=TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384) id 15.20.2921.12 via Frontend

Transport; Fri, 17 Apr 2020 15:00:29 +0000

Received: from SN6PR03MB3853.namprd03.prod.outlook.com

([fe80::bc:eaef:2cca:4fd]) by SN6PR03MB3853.namprd03.prod.outlook.com

([fe80::bc:eaef:2cca:4fd%6]) with mapi id 15.20.2921.027; Fri, 17 Apr 2020

15:00:29 +0000

Content-Type: multipart/mixed;

boundary="_000_SN6PR03MB3853452759C533C9EE38088ED8D90SN6PR03MB3853namp_"

From: Chris Shutes <BlancaPaloma@msn.com>

To: "DeltaConveyanceScoping@water.ca.gov"

<IMCEAMAILTO-DeltaConveyanceScoping+40water+2Eca+2Egov@namprd03.prod.outlook.com>

CC: Bill Jennings <deltakeep@me.com>, Deirdre Des Jardins

<ddj@cah2oresearch.com>, Mike Jackson <mjatty@sbcglobal.net>, Barbara Vlamis

Subject: CSPA et al. comments, NOP for proposed Delta Conveyance

Thread-Topic: CSPA et al. comments, NOP for proposed Delta Conveyance

Thread-Index: AQHWFMhyAgsD/B9VKEGKe+a6rWiVhw==

Date: Fri, 17 Apr 2020 15:00:29 +0000

Message-ID: <SN6PR03MB3853452759C533C9EE38088ED8D90@SN6PR03MB3853.namprd03.prod.outlook.com>

Accept-Language: en-US

Content-Language: en-US

X-MS-Has-Attach: yes

7/22/2020

X-MS-TNEF-Correlator: <SN6PR03MB3853452759C533C9EE38088ED8D90@SN6PR03MB3853. DCS1008 namprd03.prod.outlook.com>

x-incomingtopheadermarker: OriginalChecksum:20BD3ACFD914055FCC87A6C25F430A404EF320DFD3FF876B31471EB2EF06 15C9;UpperCasedChecksum:B927F0B69C37EAF1939796AC5FB076F4ACCE7B257A4D9D4F3398904DFD82 007E;SizeAsReceived:7173;Count:43

x-tmn: [tB8pNiOUoFrr6lBHKmFxn+SYFOokJQoRwXG+1LuFLmp78KqC7WkS3cdYPXxDXW2b]

x-ms-publictraffictype: Email

x-incomingheadercount: 43

x-eopattributedmessage: 0

x-ms-office365-filtering-correlation-id: 33a7ccd2-5cd7-4123-9c38-08d7e2e011ce

x-ms-exchange-slblob-mailprops: VlsgVBy4cKVXw4F5GvlbxNSXDaTUtD5CQRqY1pvNv4/DVM4tBfG0pj5QIsLNYugIrL4FumHEa o/ad/+p28Wg01FqNRUmtxBrACcUOuP2WfDMcTmdeLQROG3i3zj1Fn/yP0LRhGt8dp8Dc2TAnJ2IcmqDwqZaTPhURt56/ nBEIDIdjYLzpU1FfsStzLbVMDogg97gkPk+V4ICqjYTHBfoRABN/KY4Fyn0/DCNVPSG6qq7j8hbdauFQjRHj+HBvzE6/ hJedijs6TGC6vbWoB1KsKd224cKUqBD0+YIt8rgwPPIj9PYWQ7kGNbt7ThjTzIyjNlpn2h3NGZhy02Mqsuplj16bpLS58 XGmeJSUlY3SeWu04IRai+azwx4ycgtDthHzK6DBiPtljCt0d0IFUvXdbJvYDdmRSBN4Vv0rjS14qAVuu6 IFyVM3M5M1Che5I1Pn1Y4hfPU7ZsEWh0qpA1bDSbkNMBBeog88T4TScn3YEus1sF2ngBXk0ygPqmdWZp/7s+5urgADf+ jGezqz66zeRqEQgIJsp0bX3+pob1xQ6hoLHOLettx7KT5ApZtoXpiBhEi+4dEZN3KUN1LBTGYQBfu9j2/ QeAp0WI6bicpzHWfCBK8t1swp+Y95GgMLENjFv3GJZueVxg=

x-ms-traffictypediagnostic: BN8NAM12HT095:

x-microsoft-antispam: BCL:0;

x-microsoft-antispam-message-info: Ix8IVwRtC/sxdpiA2mMJHBkKvYGM9tsZTF8Zf+tp3cTu2Iyy562oNp7lXbAxCGyk5KY6 ceIZSyNWfB00ryDsHoc8NOwLaACpbQjxhUQGm0taZi3oLpRqMdfj0sUFqg4Klj+xdpk/HfBAj6ePMvpcxvbp2BABBpP5HA/ DTHzCp3rYEAdZyzTQgB7jGTW6F3NXYYWRFe7oZiVg5pCtLTe8I55/rkWufRe7hJIHH3u0ez066MdWX051XggRTEdf1Coo

x-forefront-antispam-report: CIP:255.255.255.255;CTRY:;LANG:en;SCL:0;SRV:;IPV:NLI; SFV:NSPM;H:SN6PR03MB3853.namprd03.prod.outlook.com;PTR:;CAT:NONE;SFTY:;SFS:;DIR:OUT;SFP:1901;

x-ms-exchange-antispam-messagedata: s6FkrD8Dw8cCtTlq3WEr64dL84HU64j0I8hBr62I7COs0L1WusA6cAdrIiR3/ Ux1JbRaq1M4P0sRwWEmZ5rGoX8XrInvZ6mTJ053E2LTqbJ/j2J8wkag/0xxqJA6u9gpEwVRmxDYybAWfVmkBSI XWrhLZ1ZT7Iw5K6zYcB08efSRkgaxmz3LQejWZAEs6m8F3qN+ZR1e2PwsmxXE2SL81A==

x-ms-exchange-transport-forked: True

MIME-Version: 1.0

X-OriginatorOrg: outlook.com

X-MS-Exchange-CrossTenant-RMS-PersistedConsumerOrg: 00000000-0000-0000-0000-00000000000

X-MS-Exchange-CrossTenant-Network-Message-Id: 33a7ccd2-5cd7-4123-9c38-08d7e2e011ce

X-MS-Exchange-CrossTenant-rms-persistedconsumerorg: 00000000-0000-0000-000000000000

X-MS-Exchange-CrossTenant-originalarrivaltime: 17 Apr 2020 15:00:29.4170

(UTC)

X-MS-Exchange-CrossTenant-fromentityheader: Internet

X-MS-Exchange-Transport-CrossTenantHeadersStamped: BN8NAM12HT095

DCS1008



July 22, 2020

Via email

Sarah Palmer, Chair, and members Stakeholder Engagement Committee Delta Conveyance Design and Construction Authority 1121 L Street, Suite 1045 Sacramento, CA 95814

Re: Comments on Stakeholder Engagement Committee Agenda Item 4a, DWR General Updates and Alternatives Formulation

Dear Ms. Palmer and Stakeholder Engagement Committee members,

Although the Department of Water Resources ("DWR") and the Delta Conveyance Design and Construction Authority ("DCA") have stated that they want to establish trust with Delta stakeholders in considering alternatives in the Delta tunnel design process, we are not seeing any real commitment to analyzing more protective alternatives in that process.

Stakeholder Engagement Committee members and members of the public were stopped from offering alternatives to the WaterFix intake design and locations in the Stakeholder Engagement Committee process. Instead, they were directed to submit comments on alternatives to intakes in the EIR scoping comment process.

There was an email server issue, and the comments by California Water Research, California Sportfishing Protection Alliance, California Water Impact Network, and AquAlliance were not received by the Department of Water Resources' <u>DeltaConveyanceScoping@water.ca.gov</u> email address before 5:00 pm on April 17, 2020, although they were emailed at 8:00 am on Friday, April 17, 2020. We notified the Department of Water Resources staff as soon as we discovered the issue, and there was no indication that the scoping comments would not be accepted. We only found out when the comments were not included in the Scoping Report.

Now the Department of Water Resources and the Delta Conveyance Design and Construction Authority have stated they will refuse to accept any requests for consideration of alternatives in the DCA Stakeholder Engagement Committee process.

California Water Research is formally submitting these comments to the Delta Conveyance Design and Construction Authority and the Stakeholder Engagement Committee members and requesting that these alternatives be considered in the DCA's engineering design process. California Water Research makes the following requests, which we believe would be supported by many Delta stakeholders:

The DCA and DWR consider the potential impacts of flooding due to sea level rise and/or increased frequency of river flooding on the project during the proposed construction period and early long-term operations. The DCA and DWR analyze an alternative that improves Delta levees over the near term to protect infrastructure, people, and property in the Delta.

The DCA and DWR evaluate a range of locations for project intakes that would make the project reliable under a range of reasonably foreseeable potential sea level rise over the expected service life of the project, according to the best available science. We request such analysis under sea level rise of up to two meters by 2100.

The DCA and DWR should dismiss as an unreasonable alternative the 3,000 cfs intake design and locations previously proposed for the "California WaterFix" project, because this these locations cannot reasonably protect fish and other aquatic species.

The DCA and DWR must evaluate a smaller intake design that will allow juvenile salmon and sturgeon to be exposed to the intakes for no more than 15 minutes at the proposed minimum bypass flows. Tentatively, we suggest that the DCA and DWR analyze intakes with a capacity of 1,000 cfs.

The DCA and DWR must analyze near-screen sweeping velocities at the proposed intake locations. The DCA and DWR must evaluate alternative locations with smaller intakes on the outside bends of the river channel to provide adequate near-screen sweeping velocities.

The DCA and DWR must ground its consideration of project alternatives to reduce impacts to terrestrial species in biological surveys conducted on terrestrial species and their habitat within the footprint of the project facilities and their construction area. The DCA and DWR must analyze alternatives that fully mitigate those impacts, including relocation of facilities away from the sites selected for the previous "California WaterFix" project. The DEIR must analyze project impacts on golden eagle, bald eagle, Swainson's hawk, greater sandhill crane, California black rail, California clapper rail, giant garter snake, riparian brush rabbit, burrowing owl, tricolored blackbird, bank swallow, least bell's vireo, California yellow warbler, western yellow-billed cuckoo, loggerhead shrike, pallid bat, valley elderberry longhorn beetle, vernal pool invertebrates, and rare or sensitive native plants.

The DCA and DWR must analyze the effects of the project construction and operation on Delta levees, including potential increased risks of flooding.

The DCA and DWR must analyze an alternative that relocates intakes away from Delta legacy communities.

The DCA and DWR should reject locating the project along the Central Delta Corridor as an unreasonable alternative because of impacts to terrestrial species, Delta levees, local communities, and Delta recreational uses.

The DCA and DWR must situate the proposed project in the context of the existing overappropriation and overallocation of water in the Bay-Delta watershed and the Central Valley. The DCA and DWR should consider the cumulative effect of project construction and operation together with future demands under existing water rights, particularly those in the areas of origin.

The DCA and DWR should consider an alternative that maximizes local water supplies, including conservation, water recycling, stormwater capture, brackish groundwater desalination and other groundwater remediation.

Finally, we request that the DEIR fully describe and disclose the Delta Conveyance Design and Construction Authority's engineering design efforts, ongoing since May of 2019, and must describe how the DCA's efforts relate to DWR's CEQA process. The DEIR must provide a clear timeline for DWR's approval of the design of the project. The DEIR must describe the sequence of permit applications for the project and of approvals under CEQA by responsible agencies that will be issuing permits for the project.

Sincerely,

Deirdre Des Jardins, Director California Water Research 145 Beel Dr. Santa Cruz, CA 95060 831.566.6320 ddj@cah2oresearch.com

Attachment: CSPA et. al. comments scoping Delta Conveyance Email RE: CSPA et al. comments, NOP for proposed Delta Conveyance

cc:

Kathryn Mallon, Executive Director, Delta Conveyance Design and Construction Authority Richard Atwater, President, Delta Conveyance Design and Construction Authority Board Carolyn Buckman, Environmental Manager, Department of Water Resources Karla Nemeth, Director, Department of Water Resources The Honorable Wade Crowfoot, Secretary of Natural Resources

DCS1008

Delta Legacy Communities Delta Protection Commission









April 17, 2020

Department of Water Resources DeltaConveyanceScoping@water.ca.gov

Re: Comments on January 15, 2020 Notice of Preparation of Environmental Impact Report for the Delta Conveyance Project

Dear Sir or Madam:

The California Sportfishing Protection Alliance, California Water Impact Network, AquAlliance and California Water Research respectfully submit the following comments on scoping for the Department of Water Resources' (DWR) proposed Delta Conveyance Project, as described in the January 15, 2020 Notice of Preparation of Environmental Impact Report for the Delta Conveyance Project.

Our comments are organized by number as a series of recommendations. The numeric designation is for ease of reference, and does not reflect any particular priority. Though we attempt to organize related issues sequentially, many issues have multiple facets, and we may not have fully reflected their connection to other issues in our comments.

Ownership of the Project and Federal Participation

1. The Draft Environmental Impact Report (DEIR) must describe who will own the project. It must describe who will pay for the construction and operation of the project and how they will pay for that construction and operation.

1

- 2. The DEIR must identify the actual project investors and beneficiaries. It must describe how much the beneficiaries will contribute to project cost and how much water they will be assured on what schedule in return for their investment.
- 3. The DEIR must describe whether and if so to what degree and under what conditions the Bureau of Reclamation and its contractors will receive water conveyed through the proposed new conveyance facilities. If the role of the Bureau of Reclamation in the proposed project is unknown or unresolved at the time the DEIR is issued, the DEIR must analyze the effects of various reasonably foreseeable levels of the Bureau of Reclamation's participation as part of the alternatives and cumulative effects analyses. The DEIR cannot segment analysis by deferring the effects of the Bureau of Reclamation's participation in the proposed project or project alternatives to a separate NEPA analysis.
- 4. If the Bureau of Reclamation and its contractors will receive water conveyed through the proposed new conveyance facilities, the DEIR must explicitly describe whether the Bureau of Reclamation will obey state law and recognize the authority of the State Water Resources Control Board and other California jurisdictional entities regarding the delivery and use of water so conveyed and regarding any other requirements the Board or other state entity may place on interrelated operation of the Central Valley Project (CVP). In such case, the DEIR must explicitly state the enforcement mechanisms DWR proposes to assure compliance by the Bureau of Reclamation with state law and authorities.

Operations

- 5. The DEIR must describe all sources of water that the project will divert. It must describe generally what amounts of water the project will divert from each source and under what conditions it will divert water from each source. The DEIR must also clearly describe the amounts of water historically diverted from each source.
- 6. The DEIR must describe the destinations of the water that the proposed project will divert, including but not limited to south of Delta conveyance and surface storage, groundwater banks, and groundwater replenishment. The DEIR must describe how DWR will make operational decisions about where to direct the water so diverted.
- 7. The DEIR must describe who will operate the project. It must describe how operators will make decisions about operations, and to whom operators will be accountable.
- 8. The DEIR must describe the role that the Bureau of Reclamation and/or the San Luis and Delta Mendota Water Authority will have in directly making operational decisions about the proposed new facilities and will have indirectly on the operation of the proposed new facilities by participating with DWR in decisions about the overall joint operation of the State Water Project (SWP) and CVP.

- 9. The DEIR must state how the project will operate during droughts and must specify the proposed constraints on operations during droughts. Reliance on Temporary Urgency Change Petitions is not an acceptable description for drought operation. The DEIR must evaluate an operational alternative would meet all current Bay-Delta Water Quality Control Plan requirements, as well as any proposed "appropriate Delta flow criteria," in an extended drought,
- 10. The DEIR must describe operational alternatives for the project under a variety of critically dry, dry, average and wet water year conditions and sequences, including how much water the project will divert through new facilities and through new and existing Delta export facilities in combination.
- 11. The DEIR must clearly analyze present and future discretionary operations of the SWP and CVP as part of the alternatives analysis and not as part of baseline conditions. Existing SWP and CVP facilities are part of the baseline condition. Operation of existing SWP and CVP facilities to meet regulatory requirements are part of the baseline condition. Discretionary operations of the SWP and CVP are ongoing operational choices, not part of the baseline condition; the DEIR must analyze discretionary operations as part of the various project alternatives.
- 12. The DEIR must describe whether the new project facilities will divert water under the Joint Points of Diversion provisions of Water Rights Decision 1641 (D-1641), and if so under what claimed basis in right and under what circumstances, and whether the Bureau of Reclamation will obey state law and recognize the authority of the State Water Resources Control Board and other California jurisdictional entities regarding the delivery and use of water so conveyed.
- 13. The DEIR must describe the operations and cumulative impacts of the project in conjunction with proposed new south of Delta storage, including Pacheco Reservoir, the San Luis Dam raise, Temperance Flat Reservoir and with all other proposed south of Delta Proposition 1 Water Storage Investment Program water storage facilities.
- 14. The DEIR must analyze the difference in annual project diversions under assumptions that the Export Limits in Table 3 of D-1641 (export to Delta inflow ratio) apply or do not apply to diversions using the new north Delta diversion facilities.
- 15. The DEIR must clearly describe and analyze operations of the proposed new South Delta Forebay in conjunction with the existing Clifton Court Forebay.

Climate Change

16. The DEIR must present a complete operations plan for the proposed new conveyance facilities as an adaptation to climate change. It must describe how DWR will determine preferred use of the proposed facilities as opposed to diverting water from the south Delta

3

at the south Delta diversion facilities of the SWP and (if applicable) the CVP. The DEIR must evaluate operations under sea level rise of one half meter (18 inches) by 2060.

- 17. The DEIR must describe how climate change and associated shifts in hydrology will affect project operations and existing project facilities, including Clifton Court Forebay. It must describe how project operations under changed climate conditions will alter project impacts.
- 18. The DEIR must consider the potential impacts of flooding due to sea level rise and/or increased frequency of river flooding on the project during the proposed construction period and early long-term operations. The DEIR must analyze an alternative that improves Delta levees over the near term to protect infrastructure, people, and property in the Delta.
- 19. The DEIR must evaluate a range of locations for project intakes that would make the project reliable under a range of reasonably foreseeable potential sea level rise over the expected service life of the project, according to the best available science. Tentatively, we recommend such analysis under sea level rise of up to two meters by 2100.

Upstream Storage and Impacts

- 20. The DEIR must clearly describe the existing operations of SWP and CVP storage facilities, including Trinity, Shasta, Oroville, Folsom, and San Luis reservoirs. This description must set forth existing operations as a set of rules or contingencies. Proffering a model run that professes to incorporate or embed existing SWP and CVP reservoir operations is not an acceptable description of baseline conditions of SWP and CVP reservoir operation. *See County of Amador et al. v. El Dorado County Water Agency et al.* (1999) 76 Cal.App.4th 931, 955, 956.
- 21. The DEIR must describe how operators will integrate the operation of proposed conveyance facility with the operation of the SWP and the CVP.
- 22. The DEIR must analyze impacts of the project on the operation of SWP and CVP storage facilities, including Trinity, Shasta, Oroville, Folsom, and San Luis reservoirs, and describe how the project will affect storage in these facilities. This analysis must consider a reasonable range of alternatives for reservoir operation, such as a high delivery scenario and a high carryover storage scenario.
- 23. The DEIR must analyze impacts of the project on fishery resources in rivers downstream of SWP and CVP storage facilities, including Trinity, Shasta, Oroville, and Folsom reservoirs, and describe how operation of the proposed new facilities will affect these resources under a reasonable range of reservoir operations. It must describe how the project would affect the ability of the DWR and Bureau of Reclamation to meet fish

Comments of California Sportfishing Protection Alliance, California Water Impact Network, AquAlliance, and California Water Research on January 15, 2020 Notice of Preparation of EIR for Delta Conveyance Project

4

protection requirements downstream of these reservoirs as applicable, including Order WR 90-05 and the existing and proposed American River flow standard.

- 24. The DEIR must describe whether the project will redivert water from the Trinity River, and must describe impacts of the project to the Trinity and Sacramento rivers that result from changes in the operation of the Shasta-Trinity Division of the CVP.
- 25. The DEIR must describe the cumulative impacts of the project in incentivizing the construction of new storage projects upstream of the Delta, particularly the proposed Sites Reservoir, the proposed raise of Shasta Dam, and other Proposition 1 Water Storage Investment Program water storage facilities.

Delta Flows and Impacts on Aquatic Species

- 26. The DEIR must describe the operation and performance of the project under a reasonable range of alternative flow requirements for the Sacramento River, Delta inflow and Delta outflow.
- 27. The DEIR must describe how the proposed project will conform to the Delta Reform Act of 2009 requirement that the State Water Resources Control Board include "appropriate Delta flow criteria" in the order approving the Change in Point of Diversion.
- 28. The DEIR must deploy an appropriate temporal scope for its cumulative effects analysis. It must describe the cumulative impacts of the past and present operation of the SWP and CVP taken together with the proposed future operation of the SWP and CVP under the proposed project; the DEIR must not limit analysis to the incremental impacts of the proposed project compared to the existing operations of the SWP and CVP. These cumulative impacts must include, non-exclusively, impacts to fisheries and aquatic ecosystems.
- 29. The DEIR must consider an alternative that is designed to "halt species population declines and increase populations of ecologically important native aquatic species, as well as species of commercial and recreational importance, by providing sufficient water flow and water quality at appropriate times to promote species life stages that use the Delta," as stated in the Biological Goals in the 2010 Department of Fish and Wildlife's *Quantifiable Biological Objectives and Flow Criteria for Aquatic and Terrestrial Species of Concern Dependent on the Delta.*
- 30. The DEIR must clearly specify proposed bypass flow criteria at the project's new intake facilities as an enforceable condition. The DEIR must clearly describe why the proposed intake and screen design and bypass operation will protect fish and other aquatic resources. The bypass criteria must clearly specify whether they are average daily or instantaneous bypass flow requirements. The DEIR must evaluate the design and capacity of the proposed North Delta intakes simultaneously with bypass flow criteria,

5

and must analyze the operation of the intakes for the full range of tidal flows at their proposed location.

- 31. The DEIR should dismiss as an unreasonable alternative the 3,000 cfs intake design and locations previously proposed for the "California WaterFix" project, because this design at these locations cannot reasonably protect fish and other aquatic species.
- 32. The DEIR must evaluate a smaller intake design that will allow juvenile salmon and sturgeon to be exposed to the intakes for no more than 15 minutes at the proposed minimum bypass flows. Tentatively, we suggest that the DEIR analyze intakes with a capacity of 1,000 cfs.
- 33. The DEIR must analyze near-screen sweeping velocities at the proposed intake locations. The DEIR must evaluate alternative locations with smaller intakes on the outside bends of the river channel to provide adequate near-screen sweeping velocities.
- 34. The DEIR must explicitly specify proposed daily and instantaneous diversion operations. Any dependence of diversion amounts on bypass flow requirements must clearly describe how diversions will be modified with the tidal cycle. The DEIR must consider an alternative that establishes minimum sweeping velocities at the diversion intakes as an instantaneous value adequate to protect all aquatic species. The DEIR should analyze a sweeping velocity greater than 0.67 feet per second.
- 35. The DEIR must establish minimum sweeping velocities at the diversion intakes as an instantaneous value. It must explicitly specify whether the sweeping velocities refer to both upstream and downstream movement of water or only to downstream movement of water.
- 36. The DEIR must base its analysis on transparent modeling to assess impacts on flow, water temperature, and water quality. The DEIR must clearly state all modeling assumptions. The DEIR must make publicly available all models and all model input and output generated in support of the DEIR.
- 37. The DEIR must disclose the impacts of the project to the food web in the Delta, including impacts resulting from diversions at the new project facilities and impacts of releases from storage.
- 38. The DEIR must evaluate an operational alternative that would restore a more natural hydrograph to the Bay-Delta ecosystem.
- 39. The geographic scope of the DEIR should extend to Suisun, San Pablo and San Francisco bays, and should extend into the Pacific Ocean as far west as the Farallon Islands. Changes in Delta outflow and water quality that are reasonably foreseeable to occur as a result of the proposed project may affect both water resources and aquatic resources.

6

40. The DEIR must analyze and disclose the impacts of the project on circulation, water quality and marine habitat in Suisun, San Pablo, and San Francisco bays.

Terrestrial Impacts

- 41. The DEIR must ground its analyses of project impacts to terrestrial species in biological surveys conducted on terrestrial species and their habitat within the footprint of the project facilities and their construction area. The DEIR must analyze alternatives that fully mitigate those impacts, including relocation of facilities away from the sites selected for the previous "California WaterFix" project. The DEIR must analyze project impacts on golden eagle, bald eagle, Swainson's hawk, greater sandhill crane, California black rail, California clapper rail, giant garter snake, riparian brush rabbit, burrowing owl, tricolored blackbird, bank swallow, least bell's vireo, California yellow warbler, western yellow-billed cuckoo, loggerhead shrike, pallid bat, valley elderberry longhorn beetle, vernal pool invertebrates, and rare or sensitive native plants.
- 42. The DEIR must analyze an alternative that will contribute to the recovery of the at-risk terrestrial species in the Bay-Delta estuary and its watersheds, meeting the Biological Goals and Objectives identified in the Department of Fish and Wildlife's 2010 *Quantifiable Biological Objectives and Flow Criteria for Aquatic and Terrestrial Species of Concern Dependent on the Delta*.
- 43. The DEIR must analyze and disclose the impacts of project operations on water birds, including impacts on north and south of Delta wildlife refuges and other habitat, as well as food sources in San Francisco Bay and the Farallon Islands. The DEIR must explicitly analyze impacts to migratory waterfowl, greater sandhill cranes, cormorants, pelicans, and the common murre.

Impacts to Local Communities and Recreation

- 44. The DEIR must describe both the short-term and long-term impacts of each project alternative and its construction to Delta communities and Delta recreational uses, particularly those in the vicinity of the proposed intakes. This includes, non-exclusively, noise impacts, traffic impacts, impacts to boat traffic, and impacts to recreational fishing and associated businesses.
- 45. The DEIR must analyze the effects of the project construction and operation on Delta levees, including potential increased risks of flooding.
- 46. The DEIR must analyze an alternative that relocates intakes away from Delta legacy communities.

7

47. The DEIR must reject locating the project along the Central Delta Corridor as an unreasonable alternative because of impacts to terrestrial species, Delta levees, local communities, and Delta recreational uses

Water Rights and Other Permits

- 48. The DEIR must describe the water rights that will apply to the project, and who will own them. The DEIR must provide the priority date of the water rights and all sources of water. The DEIR must describe whether use of those rights implies or requires extension of time to put water to beneficial use.
- 49. The DEIR must consider reasonably foreseeable changes to existing SWP and CVP facilities that DWR and the Bureau of Reclamation might seek to make if the State Water Resources Control Board were to grant pending petitions by the Department of Water Resources and the Bureau of Reclamation for extension of time to put water to beneficial use under the SWP and CVP water right permits. Such reasonably foreseeable changes include potential increases in the capacity of the California Aqueduct and the Delta-Mendota Canal. The DEIR must analyze operation of the proposed project in conjunction with such reasonably foreseeable changes in infrastructure.
- 50. The DEIR must specify whether the project facilities will divert water under water rights for the CVP, and if so when and on what basis.
- 51. The DEIR must describe how operation of the new project facilities will affect use at existing south Delta SWP and CVP diversion facilities of the Joint Points of Diversion provisions of D-1641.
- 52. The DEIR must situate the proposed project in the context of the existing overappropriation and overallocation of water in the Bay-Delta watershed and the Central Valley. The DEIR must consider the cumulative effect of project construction and operation together with future demands under existing water rights, particularly those in the areas of origin.
- 53. The DEIR must describe the complete regulatory setting, including contingencies should a preferred regulatory approach or outcome prove infeasible. The DEIR must describe all permits and approvals necessary to complete the project and bring it on line, and must describe how proponents will sequence proceedings to obtain such permits and approvals.
- 54. The DEIR must fully describe and disclose the Delta Conveyance Design and Construction Authority's engineering design efforts, ongoing since May of 2019, and must describe how the DCA's efforts relate to DWR's CEQA process. The DEIR must provide a clear timeline for DWR's approval of the design of the project. The DEIR must describe the sequence of permit applications for the project and of approvals under CEQA by responsible agencies that will be issuing permits for the project.

8

Water Quality

55. The DEIR must disclose the water quality impacts of the project, including impacts in the Sacramento River and the Delta resulting from diversions at the new project facilities and impacts of releases from storage. The water quality analysis must pay particular attention to salinity, water temperature, and algal blooms.

Groundwater

56. The DEIR must disclose impacts of the construction and use of new project facilities on groundwater resources in the Delta and adjacent groundwater basins.

Water Supply and SWP Service Area

- 57. The DEIR must quantify the amount of water that the project will reliably produce on an annual basis under a quantified variety of bypass flow and other physical and regulatory scenarios.
- 58. The DEIR must describe the end users of water that the project diverts.
- 59. The DEIR must evaluate reasonably foreseeable changes in water supply demand in the SWP service areas. Among these changes are impacts to both agricultural and urban demand caused by the COVID-19 pandemic and the resulting economic contraction. Also among these changes are recent reductions in population projections by the California Department of Finance due to changes in migration into and out of California.
- 60. The DEIR must demonstrate that the proposed project will conform to the requirements in the Delta Reform Act of 2009 to reduce reliance on the Delta, and must describe how it will do so.
- 61. The DEIR must consider an alternative that maximizes local water supplies, including conservation, water recycling, stormwater capture, brackish groundwater desalination and other groundwater remediation. The DEIR must analyze and compare embedded greenhouse gas emissions of the local water supply alternative and the proposed project.
- 62. The DEIR must use the current best available scientific information on seismic sources and ground movements in the Delta to determine the maximum considered earthquake in the Delta. The DEIR must use the same assumptions about seismic hazards and geotechnical conditions to analyze both the existing Delta levees and the proposed new project facilities.
- 63. The DEIR must analyze a reasonable range of project alternatives that are sufficiently distinct from one another. We recommend that the DEIR evaluate an alternative that includes a smaller conveyance facility than that of the proposed project, with smaller

9

intakes as described in the section of these comments on Delta Flows and Impacts on Aquatic Species, above.

- 64. The DEIR must analyze an alternative that includes reducing agricultural water demand in the SWP service area and adjacent areas through crop shifting, agricultural water conservation, and soil management, as well as retirement of marginally productive lands and land without reliable dry year supply. The DEIR must also discuss and evaluate greater reliance on local supplies for agricultural and urban entities south of Delta, in lieu of a new Delta conveyance facility, consistent with the Delta Reform Act.
- 65. The DEIR must describe the imminent necessary reduction in agricultural water supply as an underlying baseline condition created by the cumulative effect of agricultural business decisions and the diversion of water; it must not describe such reduction as the product of regulatory response to the impacts of the underlying baseline condition.
- 66. The DEIR must describe how the project will incentivize or facilitate water transfers from Sacramento Valley water rights holders or CVP and/or SWP contract holders to other entities. The DEIR must identify the likely recipients of such transfers by geographic region and by the types of water rights and/or contracts the recipients hold. The DEIR must disclose impacts of any such transfers, including impacts to Sacramento Valley groundwater.
- 67. The DEIR must describe the cumulative impacts of the project in incentivizing the continuation and expansion of irrigation on lands in the southern San Joaquin Valley that would otherwise likely cease or never begin production; among these impacts, the DEIR must identify increasing groundwater overdraft based on the occasional availability of surface water for irrigation.
- 68. The DEIR must consider the ongoing process of the salinization of soil and groundwater in the San Joaquin Valley, and the resulting loss of productivity. The DEIR should analyze an alternative that does not include any further state investments in impaired lands, except for funding for habitat acquisition and restoration.

Document Structure

69. Finally, the DEIR must be a stand-alone document that does not rely on references to previous iterations of CEQA documents for the Bay-Delta Conservation Plan and/or the "California WaterFix." The DEIR will be an extensive and complex document. Previous EIR's and supplements for the Bay-Delta Conservation Plan and California WaterFix are 90,000 pages in volume and were already daunting due to the difficulty in understanding which sections which were superseded by subsequent documents. Retention of previous CEQA documents would force even a well-informed reader to conduct a treasure hunt through earlier documents to extract pertinent information. The problem is not so much whether there is useful information in previous documents, but in determining which

10

specific information would be relevant and germane to the instant new proposed project. Reliance on cross-referencing with earlier documents would thus defeat the informational purpose of CEQA.

Thank you very much for the opportunity to comment on the *Notice of Preparation of an Environmental Impact Report for the proposed Delta Conveyance Project.*

Respectfully submitted,

Chy n this

Chris Shutes, Water Rights Advocate California Sportfishing Protection Alliance 1608 Francisco Street Berkeley, CA 94703 510.421.2405 blancapaloma@msn.com

Michael Jackson, Counsel to California Sportfishing Protection Alliance and California Water Impact Network P.O. Box 207, 429 W. Main St. Quincy, CA 95971 530. 283.0712 <u>mjatty@sbcglobal.net</u>

Bill Jennings, Executive Director California Sportfishing Protection Alliance Director, California Water Impact Network 3536 Rainier Avenue Stockton, CA 95204 209.464.5067 209.938.9053 <u>deltakeep@me.com</u> <u>www.calsport.org</u>

Deirdre Des Jardins, Director California Water Research 145 Beel Dr. Santa Cruz, CA 95060 831.423.8857 ddj@cah2oresearch.com

11

B. Vlanna

Carolee Frieger

Barbara Vlamis, Executive Director AquAlliance P.O. Box 4024 Chico, (530) 895-9420 CA 95927 info@aqualliance.net Carolee Krieger, President California Water Impact Network 808 Romero Canyon Road Santa Barbara, CA 93108 (805) 969-0824 caroleekrieger@cox.net

From:	Humphrey, Shay
Sent:	Thursday, July 23, 2020 11:15 AM
То:	DCP Scoping Comments
Subject:	FW: CSPA et al. comments, NOP for proposed Delta Conveyance
Attachments:	CSPA et al comments scoping Delta Conveyance 041720.pdf

SHAY HUMPHREY | Manager | +1.916.231.7673 direct | Shay.Humphrey@icf.com | icf.com **ICF** | 980 9th Street, Sacramento, CA 958114 USA | +1.661.304.5839 mobile Learn how ICF <u>makes big things possible for its clients.</u>

From: Deirdre Des Jardins <ddj@cah2oresearch.com>
Sent: Saturday, April 18, 2020 11:09 AM
To: DWR Delta Conveyance Scoping <DeltaConveyanceScoping@water.ca.gov>
Cc: Bill Jennings <deltakeep@me.com>; Deirdre Des Jardins <ddj@cah2oresearch.com>; Mike Jackson
<mjatty@sbcglobal.net>; Barbara Vlamis <barbarav@aqualliance.net>; Carolee Krieger <caroleekrieger7@gmail.com>
Subject: Fwd: CSPA et al. comments, NOP for proposed Delta Conveyance

There appears to be a DNS issue with the email address <u>DeltaConveyanceScoping@water.ca.gov</u>.

Deirdre Des Jardins California Water Research



831 566-6320 cell 831 423-6857 landline_ <u>cah2oresearch.com</u> twitter: <u>@flowinguphill</u>

------ Forwarded message ------From: **Chris Shutes** <<u>BlancaPaloma@msn.com</u>> Date: Sat, Apr 18, 2020 at 10:08 AM Subject: CSPA et al. comments, NOP for proposed Delta Conveyance To: <u>DeltaConveyanceScoping@water.ca.gov</u> <<u>IMCEAMAILTO-</u> <u>DeltaConveyanceScoping+40water+2Eca+2Egov@namprd03.prod.outlook.com</u>> Cc: Bill Jennings <<u>deltakeep@me.com</u>>, Deirdre Des Jardins <<u>ddj@cah2oresearch.com</u>>, Mike Jackson <<u>mjatty@sbcglobal.net</u>>, Barbara Vlamis <<u>barbarav@aqualliance.net</u>>, Carolee Krieger <<u>caroleekrieger7@gmail.com</u>>

To whom it may concern:

I sent this e-mail and comment letter yesterday, April 17, 2020, at 8:01 am. Those copied on this e-mail can confirm the time. This morning, I received notice that the e-mail had not been delivered. As can be seen from

DCS1008 the notice of non-delivery pasted below, effort by my server was made at 15:00 on April 17 to deliver this letter to your server. 15:00 on April 17 is still timely.

The spelling of the e-mail address is correct.

Please confirm receipt of this e-mail. Please confirm timely receipt of these comments.

Thank you.

Good morning,

Attached please find the comments of California Sportfishing Protection Alliance, California Water Impact Network, AquAlliance, and California Water Research in response to the January 15, 2020 Notice of Preparation of Environmental Impact Report for the Delta Conveyance Project.

Please acknowledge timely receipt.

Please feel free to contact me if you have any questions.

Respectfully,

Chris Shutes

Chris Shutes FERC Projects Director Water Rights Advocate California Sportfishing Protection Alliance (510) 421-2405

Delivery has failed to these recipients or groups:

<u>DeltaConveyanceScoping@water.ca.gov (MAILTO:DeltaConveyanceScoping@water.ca.gov)</u> Your message couldn't be delivered. Despite repeated attempts to deliver your message, querying the Domain Name System (DNS) for the recipient's domain location information failed.

For more information and tips to fix this issue see this article: <u>https://go.microsoft.com/fwlink/?LinkId=389361</u>.

Diagnostic information for administrators:

Generating server: <u>BN8NAM12HT095.mail.protection.outlook.com</u> Receiving server: <u>BN8NAM12HT095.eop-nam12.prod.protection.outlook.com</u>

IMCEAMAILTO-DeltaConveyanceScoping+40water+2Eca+2Egov@namprd03.prod.outlook.com

4/18/2020 3:00:58 PM - Server at <u>BN8NAM12HT095.eop-nam12.prod.protection.outlook.com</u> returned '550 5.4.312 Message expired, DNS query failed(ErrorRetry)'

4/18/2020 2:54:56 PM - Server at <u>namprd03.prod.outlook.com</u> (0.0.0.0) returned '450 4.4.312 DNS query failed [Message=ErrorRetry] [LastAttemptedServerName=<u>namprd03.prod.outlook.com</u>] [<u>BN8NAM12FT026.eop-nam12.prod.protection.outlook.com</u>] (ErrorRetry)'

Original message headers:

ARC-Seal: i=1; a=rsa-sha256; s=arcselector9901; d=microsoft.com; cv=none;

b=HAal+g/5ugYWW0Y5Fd8mVFpvx0kvF5DBq1UIy14wgItZSrcmaNhXSu+2TRCgXiBWFiQ0QXBJ+3wzYQkndsJHoJh jS90AqzpNfptpQh6WmJlWUPjsISDW/isa7w6ArY3uFqEGWCXFnoE0lgETUTGjC8wS90WU6j0Dspg0v/3GP5SsVoza oYulobBipJhytoCeeU1T85x/B0nYcTFGEKJrXbuMqr4mu08xKddAq/diu9SNUXhAs5dYw/OFc4i1nSZWbbHqWjiON m9zV6JgK09+J07WsjH0Cmut1w0mPxWioVCS8TgpLnMDy9/qaC3otcWnic+a20pPgZIE/bQAlEOZkQ== ARC-Message-Signature: i=1; a=rsa-sha256; c=relaxed/relaxed; d=microsoft.com; s=arcselector9901;

h=From:Date:Subject:Message-ID:Content-Type:MIME-Version:X-MS-Exchange-SenderADCheck; bh=/lzPMrMrolAFvS/+lTFUZMLpZItk5sLwMGi6002bFVw=;

b=Zv425ca+xZlGhXkWrpOdclGzEdHwmUaD5dUB4o+ds/pBmpJrVsuUJ0dSVR0zzUh2uZwpMrybwEBl2Crj1xEvR6T 8diPePV8B3l+isx4GWK+YPzAShTYI/7p5LbaKH5vf1vyAwYorfkx+3Es7XnxOMTwknfnq0lIp+id6USJydYYZ6M5f SaAQev+/AwftPfe9t0xalzh8qg/Uv24N9dCPaXvSGgXw00x29lm236JhDFYSIRIoGOdwyhYwduIt/WVVj6qB2WPc8 MQv0o626+LhWqY7JZE08linxCgMwV/LQY6YcWg9CcJKPf3/1/Pl5CkAwoisG2AiXXm52WzWUaN/eA== ARC-Authentication-Results: i=1; mx.microsoft.com 1; spf=none; dmarc=none; dkim=none; arc=none

DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed; d=msn.com; s=selector1; h=From:Date:Subject:Message-ID:Content-Type:MIME-Version:X-MS-Exchange-SenderADCheck; bh=/lzPMrMrolAFvS/+lTFUZMLpZItk5sLwMGi6002bFVw=;

b=g3yr24kooei2lSvL6cXHFD4xA9p4L8uM65jzqp4psrv7avC149JpVyJJkrpOUxPK4evaEANFlXfVKiCQp23z6sd YmSX4Z/eoOqxPDTWUY2znJQd3xHJ0Tu2n4yO9DXnFGMYJaJvWuO+tCmh3pEvl30nU1GCIZlHurspQK+Mdh+rT2p9a GpjlTtru7CXy4VPFxpyCxzAPPtV4MOT8SNV2j06Kdj0rYGVL4vYGkPV093ZOX7M4u0lSJhEMjaz02C5VZwxWFjE1w Mhz4dFFJ8O3CNemn0OoNCNnMeZkGwonRKCNjCLFhL1KUfzQak0QvEIB452jA2zMpB29EWtgOTVZig== Received: from BN8NAM12FT064.eop-nam12.prod.protection.outlook.com (2a01:111:e400:fc66::48) by BN8NAM12HT095.eop-nam12.prod.protection.outlook.com (2a01:111:e400:fc66::185) with Microsoft SMTP Server (version=TLS1_2, cipher=TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384) id 15.20.2921.12; Fri, 17 Apr 2020 15:00:29 +0000 Received: from SN6PR03MB3853.namprd03.prod.outlook.com (2a01:111:e400:fc66::52) by BN8NAM12FT064.mail.protection.outlook.com (2a01:111:e400:fc66::118) with Microsoft SMTP Server (version=TLS1 2, cipher=TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384) id 15.20.2921.12 via Frontend Transport; Fri, 17 Apr 2020 15:00:29 +0000 Received: from SN6PR03MB3853.namprd03.prod.outlook.com ([fe80::bc:eaef:2cca:4fd]) by SN6PR03MB3853.namprd03.prod.outlook.com ([fe80::bc:eaef:2cca:4fd%6]) with mapi id 15.20.2921.027; Fri, 17 Apr 2020 15:00:29 +0000 Content-Type: multipart/mixed; boundary="_000_SN6PR03MB3853452759C533C9EE38088ED8D90SN6PR03MB3853namp_" From: Chris Shutes <BlancaPaloma@msn.com> To: "DeltaConveyanceScoping@water.ca.gov" <IMCEAMAILTO-DeltaConveyanceScoping+40water+2Eca+2Eqov@namprd03.prod.outlook.com> CC: Bill Jennings <deltakeep@me.com>, Deirdre Des Jardins <ddj@cah2oresearch.com>, Mike Jackson <mjatty@sbcglobal.net>, Barbara Vlamis <barbarav@aqualliance.net>, Carolee Krieger <caroleekrieger7@gmail.com>

Subject: CSPA et al. comments, NOP for proposed Delta Conveyance

Thread-Topic: CSPA et al. comments, NOP for proposed Delta Conveyance Thread-Index: AQHWFMhyAqsD/B9VKEGKe+a6rWiVhw== Date: Fri, 17 Apr 2020 15:00:29 +0000 Message-ID: <SN6PR03MB3853452759C533C9EE38088ED8D90@SN6PR03MB3853.namprd03.prod.outlook.com> Accept-Language: en-US Content-Language: en-US X-MS-Has-Attach: yes X-MS-TNEF-Correlator: <SN6PR03MB3853452759C533C9EE38088ED8D90@SN6PR03MB3853.namprd03.prod.outlook.com> x-incomingtopheadermarker: OriginalChecksum: 20BD3ACFD914055FCC87A6C25F430A404EF320DFD3FF876B31471EB2EF0615C9; UpperCa sedChecksum:B927F0B69C37EAF1939796AC5FB076F4ACCE7B257A4D9D4F3398904DFD82007E;SizeAsReceiv ed:7173;Count:43 x-tmn: [tB8pNiOUoFrr6lBHKmFxn+SYFOokJQoRwXG+1LuFLmp78KqC7WkS3cdYPXxDXW2b] x-ms-publictraffictype: Email x-incomingheadercount: 43 x-eopattributedmessage: 0 x-ms-office365-filtering-correlation-id: 33a7ccd2-5cd7-4123-9c38-08d7e2e011ce x-ms-exchange-slblob-mailprops: VlsqVBy4cKVXw4F5GvlbxNSXDaTUtD5CQRqY1pvNv4/DVM4tBfG0pj5QIsLNYuqIrL4FumHEao/ad/+p28Wq01FqN RUmtxBrACcUOuP2WfDMcTmdeLQROG3i3zj1Fn/yP0LRhGt8dp8Dc2TAnJ2IcmqDwqZaTPhURt56/nBEIDIdjYLzpU lffsStzLbVMDogg97gkPk+V4ICqjYTHBfoRABN/KY4Fyn0/DCNVPSG6qq7j8hbdauFQjRHj+HBvzE6/hJedijs6TG C6vbWoB1KsKd224cKUqBD0+YIt8rgwPPIj9PYWQ7kGNbt7ThjTzIyjNlpn2h3NGZhy02Mqsuplj16bpLS58XGmeJS UlY3SeWu04IRai+azwx4ycqtDthHzK6DBiPt1jCt0d0IFUvXdbJvYDdmRSBN4Vv0rjS14qAVuu6IFyVM3M5M1Che5 I1Pn1Y4hfPU7ZsEWhOqpAlbDSbkNMBBeog88T4TScn3YEus1sF2ngBXkOygPqmdWZp/7s+5urgADf+jGezqz66zeR qEQgIJsp0bX3+poblxQ6hoLHOLettx7KT5ApZtoXpiBhEi+4dEZN3KUN1LBTGYQBfu9j2/QeAp0WI6bicpzHWfCBK 8t1swp+Y95GgMLENjFv3GJZueVxg= x-ms-traffictypediagnostic: BN8NAM12HT095: x-microsoft-antispam: BCL:0; x-microsoft-antispam-message-info: Ix8IVwRtC/sxdpiA2mMJHBkKvYGM9tsZTF8Zf+tp3cTu2Iyy562oNp7lXbAxCGyk5KY6ceIZSyNWfBO0ryDsHoc8N OwLaACpbQjxhUQGm0taZi3oLpRqMdfj0sUFqq4Klj+xdpk/HfBAj6ePMvpcxvbp2BABBpP5HA/DTHzCp3rYEAdZyz TOqB7jGTW6F3NXYYWRFe7oZiVq5pCtLTe8155/rkWufRe7hJIHH3uOezO66MdWXO51XqqRTEdf1Coo x-forefront-antispam-report: CIP:255.255.255.255;CTRY:;LANG:en;SCL:0;SRV:;IPV:NLI;SFV:NSPM;H:SN6PR03MB3853.namprd03.pr od.outlook.com;PTR:;CAT:NONE;SFTY:;SFS:;DIR:OUT;SFP:1901; x-ms-exchange-antispam-messagedata: s6FkrD8Dw8cCtTlq3Wer64dL84HU64j0I8hBr62I7COs0L1WusA6cAdrIiR3/Ux1JbRaqlM4P0sRwWEmZ5rGoX8Xr InvZ6mTJ053E2LTqbJ/j2J8wkag/0xxqJA6u9gpEwVRmxDYybAWfVmkBSIXWrhLZ1ZT7Iw5K6zYcB08efSRkgaxmz 3LQejWZAEs6m8F3qN+ZR1e2PwsmxXE2SL81A== x-ms-exchange-transport-forked: True MIME-Version: 1.0 X-OriginatorOrg: outlook.com X-MS-Exchange-CrossTenant-RMS-PersistedConsumerOrg: 00000000-0000-0000-0000-00000000000 X-MS-Exchange-CrossTenant-Network-Message-Id: 33a7ccd2-5cd7-4123-9c38-08d7e2e011ce X-MS-Exchange-CrossTenant-rms-persistedconsumerorg: 00000000-0000-0000-0000-00000000000 X-MS-Exchange-CrossTenant-originalarrivaltime: 17 Apr 2020 15:00:29.4170 (UTC) X-MS-Exchange-CrossTenant-fromentityheader: Internet X-MS-Exchange-Transport-CrossTenantHeadersStamped: BN8NAM12HT095

DCS1009

Office of Planning and Environmental Review Leighann Moffitt, Director



County Executive Navdeep S. Gill

Department of Water Resources ATTN: Renee Rodriguez P.O. Box 942836, Sacramento, CA 94236 DeltaConveyanceScoping@water.ca.gov

May 28, 2020

Subject: Notice of Preparation of Environmental Impact Report for The Delta Conveyance Project

Please find below the County of Sacramento's comments on the NOP for the Delta Conveyance Project EIR.

As indicated in the NOP (pg. 9), the Delta Conveyance Project DEIR will analyze certain environmental impacts related to transportation, including vehicle miles traveled and effects on road and marine traffic. Although level of service and delay-based metrics are no longer applicable to CEQA transportation analysis, the DEIR must still describe and analyze the effects the project will have on access, safety, construction activities, and cultural resources (e.g.; historic bridges), as detailed below.

Access

The DEIR must describe and analyze the effects the project will have on access into and out of the Delta. For example: (1) how will levee failures and mean sea level rise affect circulation, (2) will all roads remain passable for vehicles (e.g.; for farm to market roads, evacuation roads, etc.), (3) will there be any roads that have to be realigned, and if so what is the required right-of-way, and (4) what will be the source of funding for future roadway realignments and/or right-of-way acquisition.

Safety

Many of the roadways in the Delta do not meet the County's current standards for rural roadways, which include two twelve-foot (12') travel lanes and two six-foot (6') shoulders. The DEIR should evaluate how construction activities and the presence of heavy equipment will impact safety on these substandard roadways for all users (e.g.; farm equipment, recreational vehicles, boat trailers, cyclists). Additionally, Sacramento County's old draw bridges are operating at their threshold. Any additional activities that occur as a result of this project could put them above their safe operating levels of service. Presently, no oversized and/ or overweight trucks are allowed on Sacramento County's draw bridges in the study area. The applicant should coordinate with Sacramento County DOT for structural limits on each bridge.

Construction Activities

Early roads in the Delta were built over old trails that ran along the tops of levees, on peat, or in tidal areas. Roads were built with the structural standards of that time and no longer meet present structural standards. At a minimum, this analysis must include the impacts to roadways by any heavy equipment used to do work on the levees. For instance, how will heavy equipment affect and accelerate the degradation of the existing roadways in the Delta? Construction impacts may require

reconstructing roadways to current structural standards. Delta-area experience has demonstrated that, due to limited oversight, sub-contract haulers do not adhere to prescribed haul routes. The analysis should therefore consider all roadway segments potentially impacted by construction activities. The DEIR must address all roadway maintenance issues related to the Delta Conveyance project (e.g.; potholes, raveling). Lastly, the DEIR must address the impacts of construction activities on recreational and barge traffic.

Hazards and Hazardous Materials

The DEIR should address the project's haulage, which will generate thousands of tons of nuisance dusts, asbestos from brake linings, and petroleum drips and spills. Trucks frequently cut corners, causing gravel and motor vehicle fluids to enter the water. This could be mitigated by widening and improving the levee roads prior to hauling activities, requiring all aggregate and spoil loads to be tarped beyond minimum requirements, and environmental monitoring of construction materials movement-related activities.

Cultural Resources

Construction activities may impact bridges that have architectural or historical importance and will need to be preserved per the County General Plan.

Sincerely,

Tim Hawkins Environmental Coordinator

From:	Dylan Powell (youarent@ymail.com) Sent You a Personal Message
To:	DWR Delta Conveyance Scoping
Subject:	Delta Conveyance Scoping Comment
Date:	Wednesday, September 9, 2020 9:12:10 AM

Dear The CA Dept of Water Resources,

Hello Ms. Rodriguez:

I am writing to urge the Department of Water Resources to fully include and consider a ?no tunnel? alternative in the environmental impact report (EIR) of the Delta Conveyance Project.

For years, the Bay-Delta ecosystem has been severely depleted of freshwater flows that has led to the loss of natural habitat for species and reduced the livelihood of residents in Delta communities.

This project will hasten the decline of the Delta.

The EIR should analyze alternatives that increase Delta outflow and reduce exports as compared to current conditions in the Delta. Specifically, the EIR should examine a ?no tunnel? alternative that analyzes the use and investment in water conservation, efficiency, and additional demand reduction measures that are less environmentally harmful than the tunnel and achieve the same water supply reliability goals and targets.

California needs a water management system that is in accordance with the Delta Reform Act?s policy of reducing reliance on the Delta and provides benefits and protections for California?s native fish, wildlife species, and communities.

!!!- Please consider looking into the placement of swales on contour throughout watersheds in order to raise water tables, reduce runoff, encourage healthy and hydrated forests, and granted - overtime - increase available water resources to the southern portion of California. This is the only truly sustainable means of handling our water situation that I can see supporting a healthy future for everyone here. This also seems perfect for our current, covid affected situation, as don correctly this can be achieved with very minimal intermingling of 'swale installers'. Thank you.

Sincerely,

Dylan Powell 5240 Edgewood In. Paradise, CA 95969 youarent@ymail.com (530) 828-3754

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

From:	Anne Hoagland
То:	DCP Scoping Comments
Subject:	FW: Isaac Kinney Public Comment - Delta Tunnel Conveyance Project
Date:	Tuesday, October 20, 2020 4:14:34 PM

From: Isaac Kinney <watershedregenventures@gmail.com>
Date: Tuesday, October 20, 2020 at 3:39 PM
To: "deltaconveyance@water.ca.gov" <deltaconveyance@water.ca.gov>
Subject: Fwd: Isaac Kinney Public Comment - Delta Tunnel Conveyance Project

Just wanted to send this here incase you all never received it yet.

------ Forwarded message ------From: Isaac Kinney <<u>watershedregenventures@gmail.com</u>> Date: Tue, Oct 20, 2020 at 3:37 PM Subject: Isaac Kinney Public Comment - Delta Tunnel Conveyance Project To: <<u>DeltaConveyanceScoping@water.ca.gov</u>>

To whom this may concern,

My name is Isaac Kinney, I am a Yurok Tribal citizen, business owner and have a family of four that live and work in the Trinity River watershed at the confluence of the Klamath and Trinity rivers.

Currently, the salmon populations in the Klamath and Trinity Rivers and Sacramento River/Bay Delta are at the brink of extinction due to the obsolete infrastructure. TheCalifornia State and Federal water projects have assisted in the decline of all living things relying on the Trinity River for survival.

Although this project is in the central part of the State it will require more diverted water from the Trinity and Sacramento watersheds. Furthermore this project will adversely effect the people living in these watersheds and their economies. And because so much in the region relies so much on local clean water, this project directly diverts the natural flowing tributaries and their ecosystems.

Additionally, Tribes in California are clear decision making agencies in this project and must include all tribes along the Trinity and Sacramento Rivers as well as the Bay Delta. Because of the natural interconnectedness of these tributaries, project scope must include impacts on all watersheds in the upcoming Environmental Impact Report. Tribal consultation in relation to that EIR needs to have adequate time for project review and needs to include a status quo or "no build" alternative.

More projects like the Delta tunnel conveyance project has many issues that need to be addressed before moving forward:

• Delta Conveyance Team must include all Federally, State, and locally recognized (i.e.

"Tsunungwe" people living in the Trinity watershed) Tribes in their official consultation. This includes connected Tribes such as the Hoopa Valley and Yurok Tribes.

- Delta Conveyance Team must analyze the cumulative impacts of the Delta Conveyance in relation to Gov. Newsom's Water Portfolio and Trump Administration's Biological Opinion/Water Plan
- Delta Conveyance Team must analyze the cumulative impacts of the Delta Conveyance in relation to the Site Reservoir, Shasta Dam Raise and Klamath Dam Removal Projects
- Delta Conveyance Team must include cultural impacts from this project
- This project needs more time for public comment and input due to pandemic
- Include scalable and long term water conservation strategies for the no build alternative for the EIR

California salmon can show the bio-region and the World about diverse pathways to ecological regeneration on multiple scales; but we must keep this large obsolete infrastructure like the Delta Tunnel Conveyance Project out of California for good.

Please include me on future scoping opportunities and project development timelines.

Wo-hlaw (Thank you)

Isaac Kinney CEO, Watershed Regenerative Ventures watershedregenventures@gmail.com



December 11, 2020

SENT VIA EMAIL: DeltaConveyanceScoping@WATER.CA.GOV

Renee Rodriguez Department of Water Resources P.O. Box 942836 Sacramento, CA 94236

Re: Supplemental Comments on Notice of Preparation of EIR for the Delta Conveyance Project

Dear Ms. Rodriguez:

Thank you for the opportunity to further comment on the Notice of Preparation ("NOP") for the development of an Environmental Impact Report ("EIR") for the Delta Conveyance Project ("Project" or "DCP"). This letter is written on behalf of Local Agencies of the North Delta ("LAND"), which is a coalition of local reclamation and water districts in the northern Delta working to protect Delta agriculture and communities. LAND previously submitted comments on April 17, 2020, regarding the Delta Conveyance Project NOP.

LAND is disappointed that the Department of Water Resources ("DWR") is proposing the same intake locations as the failed California WaterFix project. This letter explains that: (1) the proposed intake locations identified in the NOP along the Sacramento River were not approved in any way by the Fish Facilities Technical Team ("FFTT"); (2) the proposed intake locations would be a disaster for fish; (3) the DCP must include protections for all fish in the river, not just listed fish; and (4) the proposed intake locations were not selected with any regard for the nearby Delta communities. The Draft EIR for the project must evaluate alternative intake locations that could lessen the significant impacts to fish and Delta communities.

NOP Intake Locations Were Not Approved by Fish Facilities Technical Team

The currently proposed intakes are the same as those proposed in the abandoned California WaterFix project, and were not the result of any agency decision that those locations were the only options available. Moreover, DWR and the Delta Conveyance Design and Construction Authority's ("DCA") decision to retain the cancelled WaterFix project intake locations is absolutely contrary to Governor Newsom's directive to limit impacts of the Project on Delta legacy communities and fish. Furthermore, the intake locations were never approved by the FFTT.

Renee Rodriguez Department of Water Resources December 11, 2020 Page 2 of 7

While it has been suggested by DWR staff and staff for the DCA that the FFTT recommended the three intake locations proposed in the NOP, that is not true. For instance, a member of the DCA's Stakeholder Engagement Committee asked:

I would like to know who in the California Department of Fish and Wildlife approved intake locations 2, 3, and 5, and when? And how did they consider effects of the intakes on North Delta communities and North Delta businesses in making that approval? Particularly on the towns of Hood and Clarksburg? And will they give a presentation to the Stakeholder Engagement Committee on their "constraints and siting criteria?¹

The DCA engineer Phil Ryan responded:

As you know, a detailed assessment of a variety of resource issues were completed as part of the BDCP/California WaterFix environmental review process. Where appropriate, the information from that process was reviewed and updated for application to the Delta Conveyance Project. For BDCP/California WaterFix, a Fish Facilities Technical Team (FFTT) comprised of expert resource agencies (including USFWS, NMFS, CDFW, USBR, and DWR) and consultant members was formed to evaluate intake sites. The FFTT conducted a series of evaluations using a wide variety of criteria (focusing [primarily] on engineering feasibility and avoidance of impacts to sensitive fish species but also considering land use effects) to select the number and location of suitable intake sites for the project. **The** agency members of the FFTT ultimately provided final recommendations regarding intake siting. That process and associated impact analysis were summarized in the BDCP/California WaterFix EIR. For the Delta Conveyance Project, the original analyses from the WaterFix Project were reviewed by DCA and DCO, with input from USFWS, NMFS, and CDFW, and supplemented with more current information regarding the study area, including new bathymetric data and characteristics of the area. Suitable sites were identified as part of that process and they turned out to be substantially the same as those recommended for the BDCP/California WaterFix Project, primarily due to river bathymetry. A comparative analysis between sites was conducted, and sites 2, 3 and 5 were recommended for further consideration. The results of the updated siting analysis were shared with agency staff, including representatives from

¹ Question ID 12.31, SEC Member Question/Comment Tracking Master Log Updated 11.05.2020, available at: <u>https://www.dcdca.org/wp-</u> <u>content/uploads/2020/10/MasterSECTrackingPacket.pdf</u>.

Renee Rodriguez Department of Water Resources December 11, 2020 Page 3 of 7

> USFWS, CDFW, and NMFS, and will again be summarized in the EIR for the Delta Conveyance Project. Effectively, DWR determines the actual intake locations if and when the project is approved and the only specific "approval" from the regulatory agencies for these sites would come in the form of permits for implementing the propose project DWR will analyze.

(*Ibid.*, bold added.) This answer misrepresents the FFTT process by making it sound as though the five sites on the Sacramento River considered previously are the only possible intake sites in the entire Delta that the FFTT determined could be used by the project.

In 2008, the FFTT was initially directed by the BDCP consulting team to consider specific locations for intakes (2008 FFTT, p. 2), and were given a very narrow geographic scope: "on the Sacramento River between Sacramento and Walnut Grove." (2008 FFTT, p. 12.)² Following the 2008 FFTT report, it was *the BDCP consulting team that actually specified the locations* for the intakes by applying the 2008 FFTT location guidance in addition to its own political and economic analysis: "The DHCCP engineering teams placed the conceptual diversions at the locations agreed upon based on information of the FFTT in 2008 and a Value Planning Study, as well as the integrated considerations of the EIR/EIS team." (2011 FFTT Recommendations ["2011 FFTT"], p. 13.) In this way, the BDCP advanced DWR's and the consultants' proposed locations and did not evaluate other alternatives.

In 2011, a new geographic scope *without a specified range* was formalized for the FFTT locations by the 5-Agency Group, consisting of representatives from DWR, California Department of Fish and Game (now called Department of Fish and Wildlife), U.S. Bureau of Reclamation, U.S. Fish and Wildlife Service (, and the National Marine Fisheries Service. This time, the BDCP consulting team had been given direction by the BDCP Steering Committee in July 2010 to look at more than 5 locations because of the potential for significant reduction in Salmonid mortality if one or more intakes were located upstream of the American River.

This second effort resulted in the 2011 FFTT Recommendations that provided siting parameters that "could allow intakes along much of the river." (2011 FFTT Recommendations 1-2, p. 6.) In other words, the FFTT did not choose or give any specific recommendations for particular intake locations, but only gave general recommendations that could be applied to review potential diversion locations. Potential

² The 2011 and 2008 FFTT Reports are available at <u>https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/petitioners_exhibit/dwr/dwr_219.pdf [2008 FFTT Report begins at PDF p. 57].</u>

Renee Rodriguez Department of Water Resources December 11, 2020 Page 4 of 7

diversion locations were "identified by the EIR/EIS team and DWR." (2011 FFTT, p. 42.) Moreover, the FFTT actually advised review of additional locations for analysis of suitability, assessment of actual risk to fish species and evaluation of final suitability for diversion. (2011 FFTT Recommendations 1-21, pp. 6-8.)

Noting the high level of uncertainty stemming from the type and magnitude of impacts from the proposed intake facilities, FFTT stressed that the entire population of several anadromous species (Sacramento basin salmonids and green sturgeon) must pass through the river reach to complete their life cycles. (2011 FFTT, p. 33.) As a result, FFTT specified a number of studies to be completed prior to final design. A selection is provided in its 2011 report. (2011 FFTT Recommendations, pp. 37-38: Table 1. List of Near-Term Aquatic Studies Needed Prior to Diversion Structure Construction to Reduce Key Uncertainties.) Further, currently proposed NOP intake locations (i.e., BDCP-selected diversion locations) and FFTT alternatives can be compared to scoring and initial ranking of suitability by the 2011 FFTT on pages 57-60.

In summary, the FFTT made a series of recommendations for general criteria applicable to siting new diversion intakes along the Sacramento River in 2008 and again in 2011, but never approved specific intake locations. The FFTT report was then modified by BDCP to select locations for further engineering without the evaluations of alternatives. The intake sites were never approved by the FFTT or the fish agencies, and would nevertheless result in take of listed fish, as acknowledged in the Biological Opinions issued for the California WaterFix project in 2017.³

Using the Proposed Locations Would be a Disaster for Fish

The intakes reviewed by the FFTT, proposed for the failed California WaterFix project, and now proposed for the DCP, have been roundly criticized by fish experts.⁴ Even with two rather than three diversions, the primary criticisms lodged by fish screening expert Dave Vogel remain relevant. As he explains,

• There is a high probability the structures will be catastrophic for salmon and severely undermine progress for salmon restoration in upstream areas.

³ See

https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_ waterfix/exhibits/docs/swrcb_staff/usfws_bo.pdf and

https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/exhibit106/docs/cwf_final_biop.pdf.

⁴ See Dave Vogel, The Twin-Tunnels Project: A Disaster for Salmon Parts 1-4 of a Series, Posted on July 30, 2017, August 2, 2017, August 9, 2017, and August 19, 2017, available at: <u>https://calsport.org/fisheriesblog/?author=5</u>. (See <u>Exhibit A</u>.)

Renee Rodriguez Department of Water Resources December 11, 2020 Page 5 of 7

- Except when the Yolo Bypass is flooding, all four runs of Chinook salmon in the entire watershed would be forced to migrate past these enormous diversions.
- Analyses conducted for the project revealed that young salmon could be exposed to each of the three individual WaterFix screens for an astounding one-hour period (not a typo) ... not exactly the original 60 seconds criterion mentioned above.
- In the worst-possible scenario for salmon, all three water intakes are to be located on the same side of the river and in relative close proximity. Water (and therefore fish) will be driven toward the east riverbank, particularly when all intakes are operating in unison.
- [I]ncreasingly fatigued and exposed downstream-migrating juvenile salmon will become more and more consolidated along the east bank of the river as the fish traverse the long length of each individual screen structure and arrive (if the fish have not already perished) at the downstream end
- Predatory fish will unquestionably become accustomed to these ideal "feeding stations" at the lower end of each fish screen.

These criticisms would also apply with the T-Screen concept to the extent that is now being considered, which is known to provide additional habitat for predators.

The DCP Must Include Protections for All Fish in the River, Not Just Listed Fish

The location and design of the intakes cannot be based only on listed fish, such as the Delta smelt and Spring run salmon. The Sacramento River hosts a rich fishery, and has numerous fish species in it throughout the year that would be potentially affected by new large diversions. The constant presence of fish species in the vicinity of the proposed intake sites was discussed in the environmental review documents for the California WaterFix. (See Exhibit B, Fish Presence Table.)

Part 2 of the State Water Resource Control Board's water rights hearing process for the California WaterFix considered: "Will the changes proposed in the Petition unreasonably affect fish and wildlife or recreational uses of water, or other public trust resources?"⁵ The SWRCB is a responsible agency with respect to DWR's environmental review process. In order for the SWRCB to later rely on it, the Draft EIR must disclose

⁵ See SWRCB Notice of Hearing, October 15, 2015, p. 11, available at: <u>https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/docs/cwfnotice_pet_hrg.pdf</u>.

Renee Rodriguez Department of Water Resources December 11, 2020 Page 6 of 7

and provide mitigation for project effects on fish and wildlife or recreational uses of water, and other public trust resources. This includes impacts to unlisted fish.

NOP Intake Locations Were Not Selected with Regard for Nearby Delta Communities

The North Delta intakes currently proposed in the NOP would impact the Delta legacy towns of Clarksburg, Hood, and Courtland. Traffic, noise and other impacts during construction of the intakes would also impact the towns of Locke and Walnut Grove. Since the current proposed intake locations are the same as those proposed in the WaterFix Final EIR/EIS, those documents continue to be relevant.

Specifically, Appendix 3F of the WaterFix Final EIR/EIS documents the process by which DWR selected the intake locations and shows that the engineering and EIR teams made early decisions about the intake locations with minimal consideration of land use impacts in the Delta. For example, Appendix 3F cites a 2010 Technical Memorandum 20-2: Proposed North Delta Intake Facilities for the Draft EIR/S that construction traffic impacts were eliminated from consideration because it represented a short-term impact that is less important than the long-term changes in communities that could result from the intake option. DWR's failure to provide analysis for *any* traffic impacts during construction, as well as lack to consider potential noise impacts, was improper and did not consider land uses, as claimed in the DCA response quoted above.

Appendix 3F shows that proposed intake sites were chosen with minimal consideration of landowner and community impacts. Furthermore, the intakes were constrained to the stretch or river between Courtland and Clarksburg, and no locations were considered that would not have significant and unavoidable impacts on these Legacy communities. Appendix 3F of the WaterFix Final EIR/EIS further serves to show that impacts on Delta communities were not considered, in a general sense, because none of the information referenced indicated that other alternative sites upstream, downstream or elsewhere were infeasible for any particular reason.

Conclusion

As explained above, the Delta Conveyance Project is no better than the failed California WaterFix project in terms of impacts on fish species, the Delta environment and Delta communities. DWR's premature rejection of all alternatives that do not include these same intakes in the North Delta should be reversed, and a full analysis of potential project impacts, project alternatives and mitigation measures prepared. DWR's identified project objectives could still be met by following a proper CEQA alternatives

DCS 1012

Renee Rodriguez Department of Water Resources December 11, 2020 Page 7 of 7

process. Such an approach could provide a pathway for consideration of less impactful alternatives with wider support.

Very truly yours, **SOLURI MESERVE** A Law Corporation

Ode M. Mb By:

Osha R. Meserve

ORM/wra

cc: Kathryn Mallon, Executive Director, Delta Conveyance Design and Construction Authority (KathrynMallon@dcdca.org)

Enclosures

Exhibit A, The Twin-Tunnels Project: A Disaster for Salmon Parts 1-4 of a Series, Posted on July 30, 2017, August 2, 2017, August 9, 2017, and August 19, 2017

Exhibit B, Fish Presence Table

DCS 1012

EXHIBIT A

AUTHOR ARCHIVES: Dave Vogel

The Twin-Tunnels Project: A Disaster for Salmon Part 4 of a Series

Posted on August 19, 2017 by Dave Vogel

Ring the Dinner Bell!

Despite the extraordinary hazards facing salmon as described in the previous Parts 1, 2 and 3, the greatest source of mortality at the Twin Tunnels' water intakes will very likely be caused by artificially-induced predation. This topic in the fourth part of this series is probably the most complex and, arguably, most controversial. Here is where all bets are off and we enter the realmof diverse scientific opinions among experienced fishery biologists.

The high level of concern about predation at proposed massive water intakes on the lower Sacramento River is not new. It boiled to the surface during planning for the infamous "Peripheral Canal" that was roundly rejected by California voters in 1982. Based on an extensive literature review, veteran fishery biologists Odenweller and Brown¹ (1982) summarized the need for minimizing predation associated with the proposed Peripheral Canal fish facilities:

"The literature offers some assistance for minimizing and discouraging predation at the intakes and fish facilities. Piers, pilings, other supportive structures, and corners or other irregularities in a channel are referred to as structural complexities. Such structures may cause uneven flows and can create shadows and turbulent conditions. A structurally complex environment should be avoided."

Unfortunately for salmon, the planning documents for WaterFix reveal that such artificial structures for the Twin Tunnels' intakes will provide a vast detrimentally complex environment favoring predatory fish habitats. The documents provide no credible details on how that crucial problem will be solved.

The 2017 National Marine Fisheries Service Biological Opinion (BiOp) for WaterFix states that 32 – 40 vertical pilings will be placed directly in front of each of the three water intakes (or more than 100 total pilings!). The alignment of the pilings will be positioned just off the face of the fish screens and parallel to the migration pathway for salmon, greatly adding to the formidable gauntlet of waiting predators. Furthermore, an enormously-long floating boom (also parallel to the screens) will be supported by the pilings, accumulating and exacerbating the structural complexity Odenweller and Brown (1982) warned against 35 years ago. Even the BiOp openly admits that *"These structures create habitat that provides holding and cover for predators."* I have heard it said, *"We learn from history that we do not learn from history."*² And so it goes with the Twin-Tunnels Project.

Dave Vogel | California Fisheries Blog

Based on research I have conducted since 1981, salmon predators are highly opportunistic and quickly adapt to habitats where salmon can easily be preyed upon. Remember the giant "toothbrush" wiper blades mentioned in Part 2 of this series? Using a high-tech sonar camera, I have observed predators hiding behind such wiper blades, darting out and eating unsuspecting salmon that have no protective cover. This clear predation predicament will be greatly intensified due to the very low sweeping velocities at the proposed WaterFix fish screens (discussed in Part 1 of this series). Predatory fish (e.g., striped bass and pikeminnow) can easily swim back and forth in front of the screens with minimal expenditure of energy, gobbling up highly-vulnerable, fatigued salmon like popcorn.

Although problems facing salmon will be worse when the intakes are in operation, the in-river structures alone will remain a serious hazard for salmon even when no water is diverted. For example, if those facilities were in place during the recent four-year drought, little or no water would have been diverted into the Twin Tunnels. Nevertheless, the salmon would still have had to migrate past the non-operating intakes where predation would likely remain high. I have already observed large numbers of striped bass concentrated near an artificial structure just upstream of the proposed intakes locations (see: Striped Bass). The WaterFix structures will be permanent fixtures in the river, forever tipping the scales in favor of predatory fish habitats over salmon habitats.

Unfortunately for the salmon, there is not just one, but three intakes for WaterFix. In the worstpossible scenario for salmon, all three water intakes are to be located on the same side of the river and in relative close proximity. Water (and therefore fish) will be driven toward the east riverbank, particularly when all intakes are operating in unison. Up to 3,000 cfs will be removed from the river at each of the three intakes with many baby salmon undoubtedly drawn to the east riverbank. What this means is that the increasingly fatigued and exposed downstream-migrating juvenile salmon will become more and more consolidated along the east bank of the river as the fish traverse the long length of each individual screen structure and arrive (if the fish have not already perished) at the downstream end (Figure 1). This sequence of events will culminate in a very undesirable concentration of salmon, but a perfect environment for the predators as well. Predatory fish will unquestionably become accustomed to these ideal "feeding stations" at the lower end of each fish screen. These highly-adaptable predators simply have to wait for dinner to be delivered at the downstream end of the fish screens. The resultant impacts on juvenile salmon could well be catastrophic. WaterFix does not describe tangible solutions for how this grave predation dilemma can be avoided other than employing the use of "adaptive management" (discussed next in this series).

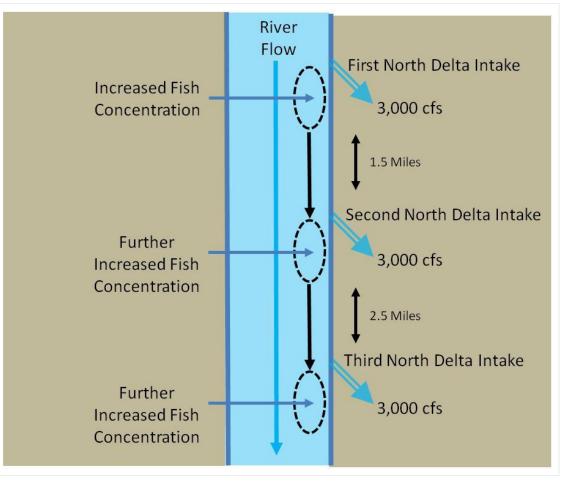


 Figure 1. Conceptual plan-view schematic (not-to-scale) of the three proposed WaterFix intakes on the Sacramento River and the concentrating effect on downstream migrating salmon toward the east or left bank (facing downstream).

References

Odenweller, D.B. and R.L. Brown. 1982. Delta fish facilities program report through June 30, 1982. FF/BIO 4ATR/82-6. IESP Technical Report 6. December 1982. 90 p.

Next in the Series: Adaptive Management – Salmon Salvation?

- Ironically, Odenweller's and Brown's employers (California Department of Fish and Game and California Department of Water Resources, respectively) supported the Peripheral Canal.
- 2. Quote attributed to Georg Wilhelm Friedrich Hegel. **D**

Posted in **Bay-Delta**, **Chinook Salmon**, **Pikeminnow**, **Striped Bass** | Tagged **Waterfix Effects Series**

The Twin-Tunnels Project: A Disaster for Salmon Part 3 of a Series

Posted on August 9, 2017 by Dave Vogel

The Myth of the Salmon "Motels"

As previously discussed in Parts 1 and 2 of this series, due to the poor intake locations of the Twin Tunnels, the unacceptably low sweeping flows past the intakes' fish screens, and exceedingly and harmfully long exposure time of young salmon to the screens, the fish will encounter a formidable gauntlet while attempting to migrate to the ocean. The Twin-Tunnels project proponents begrudgingly realized that the daunting length of the three fish screens will likely result in salmon impingement and other problems. Their solution? Slap on yet another unproven measure to supposedly provide temporary "refuge" for the weakened fish traversing the long screens. As stated in the 2016 WaterFix Final EIR/EIS¹:

"Because of the length of the screens and extended fish exposure to their influence (screens and cleaners), fish refugia areas have been recommended to be incorporated into the screen design of the intakes (FFTT 2011). These areas would consist of small areas created within the columns between the fish screens that will provide small fish resting areas and protected cover from predators. Design concepts for fish refugia are still in their infancy and are usually site-specific, with designs recommended by the fish agencies (Svoboda 2013)."

Essentially, they have recommended embedding miniature, shallow cages (Figure 1) in concrete columns placed between the screens, trusting that as the salmon inevitably become exhausted and by some means avoid being squished by the screen wiper blades (referred to as "cleaners" in the statement above), the fish will somehow enter the small cages and avoid mortal injury.



 Figure 1. Example of a so-called "refuge" for juvenile salmon envisioned for the Twin Tunnels' intakes. This particular structure (dewatered during construction) was installed at a fish screen in Red Bluff, CA and, to this author's knowledge, has never been tested. Photo is from Svoboda 2013.

Envision a weary human traveler driving from New York to L.A. Eventually, the traveler checks into a motel to rest and emerge the next morning with renewed energy to continue the arduous journey to his/her final destination. Such is the basic concept for salmon at the Twin Tunnels' intakes. Essentially, the Twin Tunnels' proponents have suggested providing "motels" in the WaterFix intakes to theoretically provide a respite for the fatigued salmon on their downstream voyage. To continue surviving this gauntlet, once the small fish supposedly enter a motel, the fish ultimately have to leave and continue along the screens until, in theory, another motel is fortuitously encountered. Of course and unfortunately, if salmon enter these motels, so can massive amounts

Dave Vogel | California Fisheries Blog

of riverine debris; the resulting limited space, if any, will have to be shared. Many of these highly experimental motels are proposed for each of the three huge fish screens.

This salmon motel design has never been actually tested in a river and, based on my experience from countless hours of underwater observations of young salmon, has an extremely high probability of failure. I believe this was sort of a "Hail-Mary" attempt to avoid serious scrutiny of likely fish impingement and other problems. This concept was loosely founded on significant discoveries I made when conducting underwater inspections of a fish screen on the Sacramento River and found large numbers of young salmon residing in a very large, deep and wide chamber between trash racks and the screen (see: Salmon Discovery 1 and Salmon Discovery 2). Based on those findings, I offered a different promising bioengineering alternative for the proposed WaterFix fish screens; it was ignored.

Next in the Series: Ring the Dinner Bell!

1. Environmental Impact Report/Environmental Impact Statement D

Posted in Bay-Delta, Chinook Salmon | Tagged Waterfix Effects Series

The Twin-Tunnels Project: A Disaster for Salmon – Part 2 of a Series

Posted on August 2, 2017 by Dave Vogel

Another biological problem with the Twin-Tunnels' intakes: Like gigantic vacuum cleaners, the flow pulled through the river intakes will likely suck baby salmon up against the fish screens (called "impingement"). To minimize this problem, low through-screen water velocities (also called approach velocities) are necessary to hopefully prevent young salmon from encountering physical, injurious contact with fish screens. The WaterFix proponents "promise" to keep those velocities low. The biological problem with this premise is that juvenile salmon are weak swimmers on a sustained basis and cannot tolerate swimming against approach velocities through the screens for long periods. When naturally migrating downstream, the small fish essentially "go with the flow" and do not aggressively fight against the current, except in unavoidable desperation (see: Struggling Salmon). To avoid impingement, the salmon suddenly have to fight against the flow entering the WaterFix intakes. The small salmon can only combat the currents for short periods until fatigue sets in and eventually succumb to the water flowing into the screens.

In the not-so-distant past, to minimize this fish impingement problem, a federal criterion mandated that young salmon should not be exposed to fish screens for more than 60 seconds, even with low approach velocities. The biological concept is to move salmon very quickly past the screens before the fish surrender to the through-screen velocities, come into contact with the screens, and eventually die from abrasions and physical injury. With large, long screens, this poses a very serious predicament. In case of the Twin-Tunnels' screens, it will not be possible to get the

Dave Vogel | California Fisheries Blog

salmon away from the screens in less than a minute because of the large surface area and great length necessary to keep the through-screen velocities low while simultaneously maintaining high water diversion rates. The salmon can only escape if swept by the long screens <u>extremely</u> fast. In this regard, the Twin-Tunnels' fish screens will perform miserably. Because of the poor locations of the intakes discussed in the first of this series, salmon will be exposed to the proposed screens for long periods because of severely low sweeping flows. Analyses conducted for the project revealed that young salmon could be exposed to each of the three individual WaterFix screens for an <u>astounding one-hour period</u> (not a typo) ... not exactly the original 60 seconds criterion mentioned above.

Additionally, it will not be possible to maintain uniform through-screen velocities along the entire length for each of the three screens. Therefore, WaterFix proposes to install "flow-control baffles" directly behind the screens. These would typify tall vertical Venetian blinds (Figure 1). The WaterFix idea is that if too much flow (and therefore unacceptably high through-screen water velocities) occurs in a particular area ("hot spots"), the baffles would be pinched down to restrict flow entering that particular area of the screens. The problem, in reality, is this proposed engineering solution will be like chasing ghosts. As river flows and diversions change dramatically, the through-screen velocities and complex secondary currents will also change significantly over the entire area of the fish screens. Tweak the baffles upstream, then it's time to adjust the baffles downstream, and so on. Once done, everything changes hydraulically and you have to start all over again ... a never-ending battle of futile attempts to achieve the fairytale of flow uniformity over the entire screen face under all river and water diversion conditions. Whew! I would not want to be the poor workers chasing back and forth over the combined ¾ of a mile of fish screens constantly tweaking baffles 24 hours a day, 7 days a week when water is being diverted into the Twin Tunnels.



 Figure 1. Picture of flow-control baffles in the open position (foreground) and flat-plate screens in the background. Entire structure dewatered during construction. Picture by Dave Vogel.

Unlike agricultural diversions in upstream areas that primarily divert water during the spring, summer, and fall, the Twin-Tunnels' intakes will be diverting water over the winter season under high-flow conditions. Unfortunately, this will undoubtedly cause unavoidable massive debris loading on the screens. In attempts to deal with the plugged screen openings caused by debris, enormous vertical "wiper blades" will be in continuous operation going back and forth against the screen surfaces. Envision giant tooth brushes constantly scrubbing in a futile attempt to stop the

Dave Vogel | California Fisheries Blog

persistent "plaque" build-up (Figure 2). Some existing smaller flat-plate screens used in upstream areas (where debris loading is far less and sweeping flows are very high) have successfully employed such wiper blades, but those situations are far different than envisioned with the proposed Twin-Tunnels' intakes during the winter. The Twin-Tunnels' unfortunate reality is that with the poor sweeping flows, it will be extremely difficult, if not impossible, to get rid of the debris. And where will it go? The detritus will merely drift downstream and continue to plug the next screen panel, then the next, etc., etc. The increased debris loading during high river flows is likely to be enormous¹, overwhelming the wiper blades … WaterFix has not adequately addressed this dilemma. And … for those hapless, fatigued young salmon struggling against or impinged on the screens when the robotic wiper blades bear down on the fish under the cover of darkness and muddy water? … Squish.



Figure 2. Picture of a flat-plate screen wiper blade. Entire structure dewatered during construction.
 Picture by Dave Vogel.

Next in the series: The myth of the Twin-Tunnels' salmon "motels".

1. E.g, see pages 133 – 134 "Working Conditions in the Field" in Lufkin (ed.) (1990) 🔁

Posted in Bay-Delta, Chinook Salmon | Tagged Waterfix Effects Series

The Twin-Tunnels Project: A Disaster for Salmon Part 1 of a Series

Posted on July 30, 2017 by Dave Vogel

The proposed "Twin-Tunnels Project" (aka "WaterFix") would divert enormous quantities of water¹ from the Sacramento River to the south Delta for export into the San Joaquin River basin and southern California. If the project is built as presently planned, it will likely be a disaster for salmon for reasons described in this series. Water entering the two gargantuan tunnels would be pulled through three colossal water intakes² directly on the banks of the Sacramento River, a short distance downstream from the City of Sacramento. Except when the Yolo Bypass is flooding, all four runs³ of Chinook salmon in the entire watershed would be forced to migrate past these enormous diversions. Three extremely long flat-plate fish screens would be positioned in front of each huge water diversion intake (Figure 1). The size of these screen structures will be massive, greatly exceeding the size of existing fish protective facilities in California. The combined length of the three screens will extend nearly 3/4th of a mile! The concept has never been tested elsewhere, possess numerous harmful obstacles for fish, and will likely kill large numbers of salmon. There is a high probability the structures will be catastrophic for salmon and severely undermine progress for salmon restoration in upstream areas. This series provides some highlights into the scientific basis to support that premise.



 Figure 1. Conceptual rendering of one of the three on-bank intake facilities on the Sacramento River for the Twin-Tunnels project (Figure 3-19a from the 2016 Final EIR/EIS).

Location, Location, Location

Dave Vogel | California Fisheries Blog

Just like the old adage with real estate, fish screens must be located in good locations. Based on my 35+ years experience in the evaluation and bio-engineering of fish screens, in terms of hydraulic, physical, and biological conditions for fish protection, the proposed water intakes for the Twin-Tunnels are sited in some of the worst locations. Over a period of years, the Twin-Tunnels proponents presented the state and federal fish agencies with multiple hypothetical intake locations. It is evident that the agency representatives had no choice but to play with the losing hand dealt to them and recommended only general criteria that were severely constrained by the intakes sites. All of the options put forth were crappy ... really crappy... for fish protection. It is obvious to me that the sites ultimately designated for the Twin-Tunnels project were not chosen because those locations would provide good fish protection but, instead, viewed as more favorable (but still bad) among the worst locations made available.

Because of the bad locations, the Twin-Tunnels' screens will not have good "sweeping" flows to get the salmon out of the danger zone at the screens. Modern-day fish screens possess several features to help overcome the sweeping flow predicament for the Twin-Tunnels project. Sweeping flow complications can be partially alleviated by locating the screens on the outside bends of the river channel. An existing example of large Sacramento River flat-plate screen location demonstrates how that measure has been successfully implemented (Figure 2).



 Figure 2. Aerial photograph showing an existing Sacramento River flat-plate fish screen located on an outside river bend to maintain high sweeping velocities. Water velocities passing the screen typically range between 2 to 4 feet/second.

In sharp contrast to such a real-world example, the three WaterFix intakes would be positioned in only very slight (or "gentle"⁴) river bends or relatively straight sections of the river channel (e.g. Figure 3) and, in all cases, undesirable lower gradient reaches of the river. Additionally, the Twin-

Tunnels diversion intakes will be located in areas subject to tidal influence, further exacerbating the problems of ensuring protective sweeping flows. When the tide comes in twice a day, sweeping flows are reduced to the detriment of salmon.

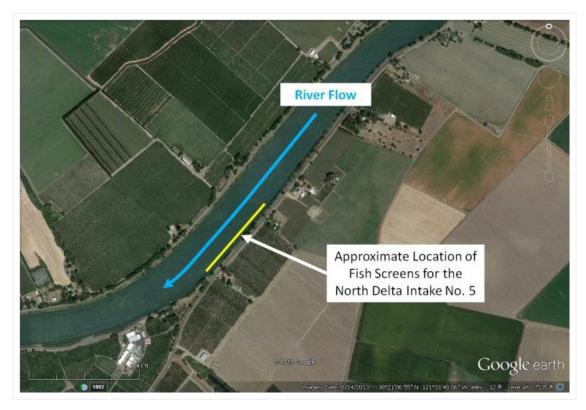


 Figure 3. Aerial photograph showing the approximate location of the proposed WaterFix downstream-most intake (termed "North Delta Intake No. 5").

In summary, the Twin-Tunnels' diversion sites will not provide the near-screen sweeping velocities necessary to protect downstream-migrating salmon. The noteworthy point is that past experience has clearly demonstrated that maintaining high sweeping velocities in front of large riverine flatplate fish screens requires at least one of following to take place:

- 1. Alter river channel geometry and create channel constrictions to control the hydraulic conditions at the fish screens.
- 2. Position the fish screens on the outside sharp (not "gentle") bend of the river channel where high water velocities are naturally present (e.g., Figure 2).
- 3. Angle the fish screen out into the river channel in a downstream direction or jut the entire structure out into the channel in deeper, swifter water to maintain sweeping flows.

Unfortunately, the Twin-Tunnels' intakes do not possess any of those conditions — period. Even the recently-issued National Marine Fisheries Service's Biological Opinion on the Twin-Tunnels Project admitted that there is "<u>a high degree of uncertainty</u>" if the fish screens can be built to meet fish protection criteria because of the immense nature of the proposed screens.

Next in the series: How to squish baby salmon on a fish screen.

- 1. 9,000 cubic feet per second (cfs). **2**
- 2. 3,000 cfs each. 之
- 3. Fall run, late-fall run, endangered winter-run, and threatened spring-run. **D**
- 4. Adjective used in the original Twin-Tunnels EIR/EIS documents 🔁

Posted in Bay-Delta, Chinook Salmon | Tagged Waterfix Effects Series

Restoring Side Channels in the Upper Sacramento River

Posted on January 21, 2017 by Dave Vogel

In a prior blog entry on this site, the importance of restoring juvenile salmon rearing habitats in the upper main stem Sacramento River downstream of Keswick Dam was described: http://calsport.org/fisheriesblog/?s=rearing+habitat. The main river channel is actually a harsh environment for young salmon upon emergence from the river gravels after hatching. The weak-swimming fry are immediately exposed to very high water velocities and most of the riverbed lacks structure to provide those fish with velocity and predator refugia. One hypothesis, albeit very difficult to prove, is that insufficient rearing habitats in the upper river may be a significant limiting factor for the salmon runs, particularly for the endangered winter-run Chinook.

Although the notion of increasing the quantity and quality of rearing habitats in the main stem Sacramento River has been discussed for decades, meaningful on-the-ground restoration actions have been lacking. That circumstance is changing. A management action now being pursued is the restoration of side channels that have lost ecological functions for salmon rearing, primarily because of diminished or total lack of hydraulic connectivity with the main river channel. Many of the historical side channels have become plugged, stagnant, and choked with overgrown vegetation; excellent frog habitat, but not for salmon.

A major endeavor to reopen some side channels, probably the most complex in modern times, was recently completed on the upper Sacramento River in Redding, California (Figure 1). Termed the North Cypress Street Project, multiple agencies and stakeholders successfully planned, initiated, and completed this action in 2016. Finishing touches on the project were completed just prior to the new year. Funding was provided by the Central Valley Project Improvement Act Anadromous Fish Restoration Program. According to the Western Shasta Resource Conservation District which provided oversight for the entire effort, restoration of these side channels will provide rearing habitats for winter-run and fall/late-fall-run Chinook (Figure 2) through the provision of optimal flows, refuge from predators, and increased food sources. The habitats will be particularly important for winter-run Chinook because nearly the entire population now spawns upstream of the site.

EXHIBIT 1

David A. Vogel Senior Fisheries Scientist Natural Resource Scientists, Inc. P.O. Box 1210 Red Bluff, CA 96080 (530) 527-9587 (ext. 12) dvogel@resourcescientists.com

Education

M.S., 1979, Natural Resources (Fisheries), University of Michigan B.S., 1974, Biology, Bowling Green State University

Experience

Dave Vogel specializes in aquatic resource assessments and resolution of fishery resource issues associated with water development. His 39 years of work experience in this field includes large-scale assessments in river systems, lakes and reservoirs, and estuaries, mostly associated with restoration of western United States fishery resources. He has designed and conducted numerous projects to determine fish habitat criteria and population limiting factors leading to development and implementation of innovative measures to increase fish populations. Mr. Vogel has worked on California's Central Valley fishery resource issues for the past 33 years. During the 1980s he served as the U.S. Fish and Wildlife Service's (USFWS) Project Leader in northern California and was responsible for expanding a one-person office in Red Bluff into a large-scale, fishery research facility. In this regard, he directed research on Sacramento River basin salmon and steelhead populations and successfully developed measures to increase fish runs.

Dave Vogel has extensive experience in the design and evaluation of large fish screening facilities. He was the project leader of a major evaluation on fish entrainment into the 2,700 cfs Tehama-Colusa Canal and Corning Canal diversions which lead to the design and installation of state-of-the-art fish screening and fish bypass facilities. Mr. Vogel was a key individual in the development of the biological criteria and associated bioengineering design for those facilities. As a member of multi-agency groups which have developed the concepts and designs of new screening facilities, he is thoroughly familiar with modern-day fish screen technologies. Dave Vogel was the Principal Investigator in a study of fish entrainment at the largest unscreened agricultural diversion in Oregon and developed the conceptual design that ultimately led to a fish screen and bypass facility on the A-Canal in the Klamath Irrigation Project. Mr. Vogel also served as the Principal Scientific Investigator for biological evaluations of the largest riverine diversion in the Central Valley at Glenn-Colusa Irrigation District's (GCID) pumping facility and worked on the bioengineering designs of the retrofits for the old and interim screens and ultimate final 3,000 cfs fish screen facility. On behalf of state and federal agencies and GCID, he developed and implemented the pre- and post-project biological evaluations. This multi-year program involved extensive testing of the new fish screens and bypass systems using fish markrecapture techniques as well as radio- and acoustic-telemetry, electrofishing, angling, juvenile

and adult fish traps, direct underwater SCUBA observations, underwater hand-held videography, surface-deployed underwater videography, surface observations, and extensive use of a dual-frequency identification sonar camera. Additionally, he evaluated the new associated Sacramento River gradient facility by capturing, tagging and monitoring the telemetered movements of adult green and white sturgeon at the site, as well as examining the relative distribution, abundance, and habitats of predatory fish over many years. Dave Vogel has conducted many dozens of underwater inspections of large fish screens, evaluating biological performance, juvenile salmon and predatory fish behavior, characteristics on sedimentation, screen seals, debris loading, and water velocities. Much of his work has led to improved fish screen designs elsewhere.

Dave Vogel has served as a Principal Scientific Investigator for 22 research projects in the north, central, and south Sacramento - San Joaquin Delta. He was the first scientist to successfully employ miniaturized radio- and acoustic-telemetry technology to evaluate juvenile salmon migratory behavior, migration pathways, and survival. He also developed breakthroughs on use of the technology to detect predation on salmon. He served on the Delta Cross Channel Work Team as the principal scientist evaluating the movements of juvenile salmon at the Delta Cross Channel and Georgiana Slough using both radio- and acoustic-telemetry methods. Mr. Vogel was also a Principal Scientific Investigator for the Vernalis Adaptive Management Program from 2006 through 2010 and developed innovative field and analytical techniques toward the end of the program (https://sites.google.com/site/vamp2009team/). He recently conducted four research projects on the behavior and movements of predatory fish in the Delta. Based on his extensive field experience, he has acquired a highly specialized knowledge of the Delta, including fish habitat characteristics, migratory pathways utilized by salmon and fish mortality by reach, juvenile salmon and predatory fish behavior, site-specific sources of fish mortality, and Delta hydrodynamic conditions. He has used a Natural Resource Scientists, Inc. DIDSONTM sonar camera extensively throughout the Delta to study fish habitats, water diversions, agricultural siphons, waste water treatment outfalls, artificial and natural in-channel structures, and predator/prey interactions.

Mr. Vogel served as Task Manager on numerous projects for the U.S. Bureau of Reclamation (USBR), Mid-Pacific Region, to define interrelationships of fishery resources and water project operations. He developed a life history guide for salmon in California's Central Valley to improve interagency coordination and communication concerning fishery and water resource management. He also assessed techniques to estimate the annual run sizes of the endangered winter Chinook salmon to recommend improved methodologies to enhance population restoration. He was the Task Manager for the original Biological Assessment of the federal Central Valley Project and the principal author of biological portions of the original Biological Assessment for the USBR's Klamath Project. Dave Vogel served as the Task Manager to assess options for the disposition of the Tehama-Colusa Fish Facilities. Recently, under contract for the USBR, Mr. Vogel completed a comprehensive in-river survey of all the unscreened water diversions in the Sacramento River between Verona and Red Bluff using a DIDSON® sonar camera and an Acoustic Doppler Current Profiler.

Mr. Vogel has participated in various work teams to evaluate numerous proposed projects in the Delta. He has served on the CALFED Integration Panel and other committees to evaluate and

recommend ecosystem restoration projects. He also worked on the Bay/Delta Oversight Committee's technical team. He has been involved with evaluations of proposed water projects and facilities in the Delta using particle tracking model results and other analytical tools.

Dave Vogel has strong expertise in designing and implementing multifaceted projects to sample entrainment of juvenile fish in small, medium, and large unscreened water intakes. Recently, Mr. Vogel has been serving as the Principal Scientific Investigator on behalf of the State/federal Anadromous Fish Screen Program for multi-year evaluations of fish entrainment in unscreened diversions on the Sacramento River. He is an expert in the design and fabrication of complex fish sampling equipment for installation and operation at challenging field sites capable of withstanding powerful hydraulic forces and heavy debris loading. He personally builds the structures using metal inert gas welding, plasma cutting, and oxyacetylene.

He is an expert SCUBA diver possessing standard, advanced, and research diver world-wide recognized certifications. He is a professional underwater videographer and his footage has been shown on nationwide, prime-time televisions shows, instructional videos, and environmental documentaries. He is a voluntary member of the Tehama County Search and Rescue Team for recovery of drowning victims in northern California rivers and reservoirs. Based on this training and experience, Dave Vogel developed innovative underwater survey techniques to map riverbed substrates on the Sacramento River in deep, swift water. He and his dive team mapped Sacramento River salmon spawning habitats in the three-mile reach downstream of Keswick Dam and in the vicinity of numerous Sacramento River bridges.

Dave Vogel is very knowledgeable of provisions of the federal Endangered Species Act (ESA) having served on the original National Marine Fisheries Service's Winter-Run Chinook Salmon Recovery Team and the U.S. Fish and Wildlife Service's Endangered Lost River Sucker and Shortnose Sucker Working Group. He developed the framework for the original winter-run Chinook salmon restoration program and has worked on projects associated with the endangered monk seal, threatened green sea turtle, bald eagle, and other species. He has given public presentations to a wide variety of groups concerning the ESA including Congressional testimony on three separate occasions. He frequently works on ESA consultations and permitting associated with threatened and endangered fish.

Mr. Vogel previously worked for the U.S. Government in the USFWS's Fishery Research Division and the Fishery Resources Division. He received the "Fishery Management Biologist of the Year" award for six western states and numerous outstanding and superior achievement awards. He served as Chairman of the USFWS SCUBA Diving Control Board for six western states during an eight-year period. Mr. Vogel designed and conducted evaluations of Federal and state fish hatcheries to improve their effectiveness. He was Chairman of the Sacramento River Steelhead Trout Technical Committee for six years. He also developed and directed numerous projects to improve the survival and contribution of hatchery salmon and represented the USFWS on the California Department of Fish and Game's Salmon Smolt Quality Committee during the 1980s.

Mr. Vogel frequently serves as a volunteer for environmental issues. He serves on the Board of Directors for the Fishery Foundation of California. Dave Vogel was a member of the California

4th Senatorial Environmental Advisory Committee and has provided presentations to California legislative committees on several occasions. Mr. Vogel served as a peer reviewer for the Interim and Final reports of the National Academy of Sciences' National Research Council Klamath Committee (Interim Report: Scientific Evaluation of Biological Opinions on Endangered and Threatened Fish in the Klamath River Basin; Final Report: Endangered and Threatened Fish of the Klamath River Basin: Causes of Decline and Strategies for Recovery). He has given many formal presentations on environmental issues to diverse organizations.

Dave Vogel's clients have included municipal, county, state and federal agencies, water districts, water user organizations, universities, Indian tribes, private landowners, engineering and environmental consulting firms, the timber industry, watershed conservancies, resource conservation districts, law firms, and non-governmental environmental organizations. He is presently working for the Golden Gate Salmon Association and northern California water districts to develop a salmon re-building program for the Sacramento River basin in concert with state and federal agencies and non-governmental organizations.

Selected Primary Authored Reports

Vogel, D.A. 1978. Population estimation of the 1977- 78 winter steelhead run to the Lake Washington watershed. U.S. Fish and Wildlife Service and Muckleshoot Indian Tribe. Olympia, Washington. October 1978.

Vogel, D.A. 1979. Distribution and movement of 1976 Port Susan coho stocks. U.S. Fish and Wildlife Service and Tulalip Indian Tribe. Olympia, Washington. July 1979.

Vogel, D.A. 1980. Instream flow recommendations for fishery resources in the major rivers and streams on the Wind River Indian Reservation, Wyoming. U.S. Fish and Wildlife Service. Lander, Wyoming. October 1980. 85 p.

Vogel, D.A. 1982. Evaluation of the 1981-82 operation of the Tehama-Colusa Fish Facilities. U.S. Fish and Wildlife Service Report. Fisheries Assistance Office. January 28, 1982. 24 p.

Vogel, D.A. 1982. Preferred spawning velocities, depths, and substrates for fall Chinook salmon in Battle Creek, California. U.S. Fish and Wildlife Service, Fisheries Assistance Office. November 18, 1982. 8 p.

Vogel, D.A. 1983. Evaluation of the Tehama-Colusa Fish Facilities. Cal-Neva Wildlife Transactions 1983: 20 – 25.

Vogel, D.A. 1984. Data on daily entrainment for fry and juvenile Chinook salmon into the Tehama-Colusa (Dual-Purpose) and Corning Canals, California, January 1982 through December 1983. March 1984. U.S. Fish and Wildlife Service Report No. FR1/FAO-84-1. 27 p. plus appendices.

Vogel, D.A. 1984. Evaluation of the 1982-83 operation of the Tehama-Colusa Fish Facilities. July 1984. U.S. Fish and Wildlife Service Report No. FR1/FAO-84-2. 9 p.

Vogel, D.A. 1984. Fish passage action program for Red Bluff Diversion Dam. Annual progress report. December 1984. U.S. Fish and Wildlife Service Report No. FR1/FAO-85-4. 72 p. plus appendices.

Vogel, D.A. 1985. Fish passage action program for Red Bluff Diversion Dam. Annual progress report. October 1985. USFWS Report No. FR1/FAO-86-5. 53 p. plus appendices.

Vogel, D.A. 1987. Estimation of the 1986 spring Chinook salmon run in Deer Creek, California. U.S. Fish and Wildlife Service. Fisheries Assistance Office. Report No. FR1/FAO-87-3. January 1987. 10 p.

Vogel, D.A. 1987. Tehama-Colusa Canal Diversion and Fishery Problems Study. U.S. Fish and Wildlife Service Technical Report No. FR1/FAO-87-9.

Vogel, D.A. 1987. Estimation of the 1986 spring Chinook salmon run in Mill Creek, California. U.S. Fish and Wildlife Service. Fisheries Assistance Office. Report No. FR1/FAO-87-12. May 1987. 9 p.

Vogel, D.A. 1989. Tehama-Colusa Canal Diversion and Fishery Problems Study. Final Report. U.S. Fish and Wildlife Service Technical Report No. AFF/FAO-89-6. April 1989. 33 p. plus appendices.

Vogel, D.A. 1989. Sacramento River salmon restoration. Sacramento Valley Landowners Magazine. Pp. 10 - 13.

Vogel, D.A. 1990. Important biological considerations of the proposed Shasta Dam water temperature control device. Congressional briefing paper. October 1990. 9 p.

Vogel, D.A. 1991. Chapter in *California's Salmon and Steelhead: The Struggle to Restore an Imperiled Resource*. Alan Lufkin, ed. University of California Press. p. 124-134.

Vogel, D.A. 1992. Assessment of the fish passage facilities at Lake Lodi in the Mokelumne River. Report prepared for East Bay Municipal Utility District, Oakland, California. Vogel Environmental Services. 42 p.

Vogel, D.A. 1992. Resolving Environmental Issues in the Environmental Age. Chapter in *Achieving Consensus on Water Policy in California*. Edmund G. "Pat" Brown Institute of Public Affairs, California State University, Los Angeles. p. 137-147.

Vogel, D.A. 1992. Preliminary assessment of potential factors limiting populations of the Lost River sucker, *Deltistes luxatus*, and Shortnose sucker, *Chasmistes brevirostris*. Report prepared for the Klamath Water Users Association. Vogel Environmental Services. July 1992. 27 p.

Vogel, D.A. 1992. Reconnaissance-level survey of anadromous salmonid habitat in Little River, California. Report prepared for Louisiana-Pacific Corporation. Vogel Environmental Services. August 1992. 61 p.

Vogel, D.A. 1993. Chinook salmon rearing in the Central Valley. Notes and selected abstracts from the "Workshop on Central Valley Chinook Salmon". University of California, Davis. January 4 – 5, 1993.

Vogel, D.A. 1993. Initial Ecosystem Restoration Plan for the Upper Klamath River Basin with Focus on Endangered Species Recovery and Water Management Improvements. Vogel Environmental Services. January 1993. Report prepared for the Klamath Water Users Association, Klamath Falls, Oregon. 83 p.

Vogel, D.A. 1993. Need for updating fish protection facilities for anadromous and resident stocks in the West Coast of North America. Proceedings of the American Fisheries Society Bioengineering Symposium, Portland, Oregon. August 30 - September 3, 1993. 6 p.

Vogel, D.A. 1994. Evaluation of streambed substrate in anadromous salmonid spawning habitat in Little River, California, 1993. Report prepared for Louisiana-Pacific Corporation. Vogel Environmental Services. January 1994. 43 p.

Vogel, D.A. 1994. Considerations on the use of fish survival indices as a tool to develop fish and wildlife standards in the Sacramento - San Joaquin Delta. Testimony presented on behalf of Delta Wetlands to the California State Water Resources Control Board. Natural Resource Scientists, Inc. July 14, 1994. 16 p

Vogel, D.A. 1994. Proposed operations of the Delta Cross Channel gates to protect downstream-migrant Chinook salmon based on real-time monitoring in the Sacramento River. Written testimony presented on behalf of Delta Wetlands to the California State Water Resources Control Board. Natural Resource Scientists, Inc. October 7, 1994. 8 p.

Vogel, D.A. 1995. Losses of young anadromous salmonids at water diversions on the Sacramento and Mokelumne rivers. Report prepared for the U.S. Fish and Wildlife Service Anadromous Fish Restoration Program. Natural Resource Scientists, Inc. January 1995. 34 p.

Vogel, D.A. 1997. Measurements of total phosphorus and water temperatures in various springs, rivers, streams, and canals in the Wood River Valley, Oregon. Natural Resource Scientists, Inc. March 1997. 31 p.

Vogel, D.A. 1997. Preliminary investigation on fish entrainment into the A-Canal on Upper Klamath Lake. Natural Resource Scientists, Inc. Report to the U.S. Bureau of Reclamation and the U.S. Fish and Wildlife Service. August 1997. 54 p.

Vogel, D.A. 1998. Riverine habitat monitoring data in the Glenn-Colusa Irrigation District's oxbow bypass channel on the Sacramento River. Report prepared for the multi-agency Technical Oversight Committee. Natural Resource Scientists, Inc. 55 p.

Vogel, D.A. 1998. Preliminary assessment of streambed substrate for salmon spawning in Stony Creek, California. Natural Resource Scientists, Inc. Report prepared for the Orland Unit Water Users and Tehama-Colusa Canal Authority. February 1998. 15 p.

Vogel, D.A. 1998. History and status of the lower Mokelumne River fishery resource. Report prepared for East Bay Municipal Utility District and submitted to the California State Water Resources Control Board. June 1998. 46 p.

Vogel, D.A. 2000. Fish monitoring in the vicinity of the future Glenn-Colusa Irrigation District gradient facility on the Sacramento River, 1998 - 1999. Report prepared for the multi-agency Technical Oversight Committee. Natural Resource Scientists, Inc. September 2000. 29 p. plus appendices.

Vogel, D.A. 2001. Juvenile Chinook salmon radio-telemetry study in the northern Sacramento-San Joaquin Delta, January – February 2000. Contract report for the U.S. Fish and Wildlife Service. Natural Resource Scientists, Inc. May 2001. 34 p. plus figures and appendices.

Vogel, D.A. 2002. Juvenile Chinook salmon radio-telemetry study in the southern Sacramento-San Joaquin Delta, December 2000 – January 2001. Contract report for the U.S. Fish and Wildlife Service. Natural Resource Scientists, Inc. June 2002. 27 p. plus figures and appendices.

Vogel, D.A. 2002. Juvenile steelhead/rainbow trout (*Oncorhynchus mykiss*) surveys in Los Trancos Creek, March - May 2002. Report prepared for Stanford University. Natural Resource Scientists, Inc. September 2002. 13 p. plus appendices.

Vogel, D.A. 2002. Assessment of Klamath River water temperatures downstream of Iron Gate Dam during September and October 2002. Report prepared for the Klamath Water Users Association. Natural Resource Scientists, Inc., Red Bluff, CA. December 2002. 20 p.

Vogel, D.A. 2003. Fish monitoring in the vicinity of the Glenn-Colusa Irrigation District Sacramento River gradient facility, 1998 – 2001 (pre- and post-construction). Report prepared for the multi-agency Technical Oversight Committee. Natural Resource Scientists, Inc. February 2003. 45 p. plus appendices.

Vogel, D.A. 2003. Salmon rearing habitats in the main stem Klamath River. Report prepared for the Klamath Water Users Association. Natural Resource Scientists, Inc., Red Bluff, CA. February 2003. 36 p.

Vogel, D.A. 2003. Merced River wing dam gravel monitoring, 2000 – 2002. Final Report to the U.S. Fish and Wildlife Service Anadromous Fish Restoration Program. Natural Resource Scientists, Inc. and Merced Irrigation District. March 2003. 39 p.

Vogel, D.A. 2003. 2002 biological evaluation of the fish screens and gradient facility at the Glenn-Colusa Irrigation District's Sacramento River pump station. Report prepared for the multi-agency Technical Oversight Committee. Natural Resource Scientists, Inc. October 2003. 27 p.

Vogel, D.A. 2003. Evaluation of a proposal for hydraulic salmonid egg deposition. Report prepared for the U.S. Bureau of Reclamation. Natural Resource Scientists, Inc. October 2003. 36 p.

Vogel, D.A. 2003. Merced River Water Temperature Feasibility Investigation: Reconnaissance Report. Contract report prepared for the U.S. Fish and Wildlife Service Anadromous Fish Restoration Program. Natural Resource Scientists, Inc., Red Bluff, CA. December 2003. 89 p.

Vogel, D.A. 2003. Assessment of anadromous salmonid habitat in the Lower Bear River, California. Unpublished report prepared for South Sutter Water District. Natural Resource Scientists, Inc. December 2003. 33 p. plus appendices.

Vogel, D.A. 2004. Juvenile Chinook salmon radio-telemetry studies in the northern and central Sacramento-San Joaquin Delta, 2002 – 2003, Final Report. Contract report for CALFED, administered by the National Fish and Wildlife Foundation. Natural Resource Scientists, Inc. January 2004. 188 p.

Vogel, D.A. 2005. 2003 biological evaluation of the fish screens at the Glenn-Colusa Irrigation District's Sacramento River pump station. Report prepared for the multi-agency Technical Oversight Committee. January 2005. Natural Resource Scientists, Inc. 37 p.

Vogel, D.A. 2005. Klamath fishery science. The Water Report, Issue No. 11. January 15, 2005.

Vogel, D.A. 2005. 2004 biological evaluation of the fish screens at the Glenn-Colusa Irrigation District's Sacramento River pump station. Report prepared for the multi-agency Technical Oversight Committee. May 2005. Natural Resource Scientists, Inc. 24 p.

Vogel, D.A. 2005. Evaluation of adult sturgeon migration at the Glenn-Colusa Irrigation District gradient facility on the Sacramento River during 2003. Report prepared for the multi-agency Technical Oversight Committee. May 2005. Natural Resource Scientists, Inc. 14 p.

Vogel, D.A. 2005. The effects of Delta hydrodynamic conditions on San Joaquin River juvenile salmon. Natural Resource Scientists, Inc. Report submitted to the California State Water Resources Control Board. May 2005. 18 p.

Vogel, D.A. 2005. Assessment of adult anadromous salmonid migration barriers and holding habitats in the Upper Yuba River, Technical Appendix. Report prepared for the CALFED Upper Yuba River Study Program. 34 p.

Vogel, D.A. 2005. Fishery Resources Chapter for the Western Tehama County Watershed Assessment. Natural Resource Scientists, Inc. Prepared for VESTRA and Tehama County. 57 p.

Vogel, D.A. 2006. Evaluation of acoustic telemetry equipment for monitoring juvenile Chinook salmon. Report prepared for the California Department of Water Resources. Natural Resource Scientists, Inc. March 2006. 56 p.

Vogel, D.A. 2006. 2005 biological evaluation of the fish screens at the Glenn-Colusa Irrigation District's Sacramento River pump station. Report prepared for the multi-agency Technical Oversight Committee. Natural Resource Scientists, Inc. May 2006. 40 p.

Vogel, D.A. 2006. 2006 Vernalis Adaptive Management Program pilot study to monitor the migration of juvenile Chinook salmon using acoustic telemetry. Report to the Vernalis Adaptive Management Program Biology Committee. Natural Resource Scientists, Inc. November 2006. Vogel, D.A. 2007. Technical memorandum to participating agencies in the 2007 Vernalis Adaptive Management Program concerning high fish mortality near Stockton, California. Natural Resource Scientists, Inc. May 20, 2007. 5 p.

Vogel, D.A. 2007. 2006 biological evaluation of the fish screens at the Glenn-Colusa Irrigation District's Sacramento River pump station. Report prepared for the multi-agency Technical Oversight Committee. Natural Resource Scientists, Inc. June 2007. 24 p.

Vogel, D.A. 2007. A feasibility investigation of reintroduction of anadromous salmonids above Crocker-Huffman Dam on the Merced River. Report prepared for the U.S. Fish and Wildlife Service Anadromous Fish Restoration Program. Natural Resource Scientists, Inc. December 2007. 110 p. plus appendices.

Vogel, D.A. 2008. Pilot study to evaluate acoustic-tagged juvenile Chinook salmon smolt migration in the northern Sacramento – San Joaquin Delta, 2006 – 2007. Report prepared for the California Department of Water Resources. Natural Resource Scientists, Inc. March 2008. 43 p.

Vogel, D.A. 2008. Biological evaluations of the fish screens at the Glenn-Colusa Irrigation District's Sacramento River pump station, 2002 – 2007. Final Report prepared for the multi-agency Technical Oversight Committee. Natural Resource Scientists, Inc. April 2008. 48 p.

Vogel, D.A. 2008. Evaluation of adult sturgeon migration at the Glenn-Colusa Irrigation District gradient facility on the Sacramento River. Final Report prepared for the multi-agency Technical Oversight Committee.. Natural Resource Scientists, Inc. April 2008. 33 p.

Vogel, D.A. 2008. Evaluation of unscreened diversions, 2007 – 2008. Report prepared for the Anadromous Fish Screen Program, U.S. Bureau of Reclamation and U.S. Fish and Wildlife Service. Natural Resource Scientists, Inc. December 2008. 38 p. plus six appendices.

Vogel, D.A. 2008. Surveys of water diversions in the Sacramento River - 2008. Report prepared for the Anadromous Fish Screen Program, U.S. Bureau of Reclamation and U.S. Fish and Wildlife Service. Natural Resource Scientists, Inc. December 2008. 14 p. plus 27 GB database.

Vogel, D.A. 2009. Concept for a temporary behavioral fish barrier at the head of Old River. Proposal to the California Department of Water Resources. January 5, 2009. Natural Resource Scientists, Inc. 6 p.

Vogel, D.A. 2010. Technical memorandum to the Vernalis Adaptive Management Program Biology Committee on 2008 striped bass tagging. Natural Resource Scientists, Inc. March 26, 2010. 11 p.

Vogel, D.A. 2010. Evaluation of acoustic-tagged juvenile Chinook salmon movements in the Sacramento – San Joaquin Delta during the 2009 Vernalis Adaptive Management Program. Final Report. Natural Resource Scientists, Inc. March 2010. 63 p.

Vogel, D.A. 2010. Evaluation of fish entrainment in three unscreened Sacramento River diversions, 2009. Report to the Anadromous Fish Screen Program, U.S. Bureau of Reclamation, U.S. Fish and Wildlife Service. Natural Resource Scientists, Inc. March 2010. 40 p. plus appendices.

Vogel, D.A. 2011. Evaluation of fish entrainment in seven unscreened Sacramento River diversions, 2010. Report prepared for the Anadromous Fish Screen Program, CALFED Ecosystem Restoration Program, U.S. Bureau of Reclamation, U.S. Fish and Wildlife Service, NOAA Fisheries, and the California Department of Fish and Game. Natural Resource Scientists, Inc. February 2011. 77 p. plus appendices.

Vogel, D.A. 2011. Insights into the problems, progress, and potential solutions for Sacramento River basin native anadromous fish restoration. Report prepared for the Northern California Water Association and Sacramento Valley Water Users. Natural Resource Scientists, Inc. April 2011. 154 p.

Vogel, D.A. 2011. Evaluation of acoustic-tagged juvenile Chinook salmon and predatory fish movements in the Sacramento – San Joaquin Delta during the 2010 Vernalis Adaptive Management Program. Natural Resource Scientists, Inc. October 2011. 19 p. plus appendices.

Vogel, D.A. 2012. Evaluation of fish entrainment in nine unscreened Sacramento River diversions, 2012. Report prepared for the Anadromous Fish Screen Program, CALFED Ecosystem Restoration Program, U.S. Bureau of Reclamation, U.S. Fish and Wildlife Service, NOAA Fisheries, and the California Department of Fish and Game. Natural Resource Scientists, Inc. January 2012. 97 p. plus appendices.

Vogel, D.A. 2012. Insights into the problems, progress, and potential solutions for Sacramento River basin native anadromous fish restoration for consideration in the Bay-Delta Water Quality Control Plan Update. Workshop 2: Bay-Delta Fishery Resources (Anadromous Salmonids). Written submittal on behalf of Glenn-Colusa Irrigation District, Sacramento Valley Water Users, and Northern California Water Association. Natural Resource Scientists, Inc. September 14, 2012. 53 p. plus attached exhibits.

Vogel, D.A. 2012. North/Central Delta salmon outmigration study, 2008 – 2009: Predator fish tagging and mobile telemetry survey results. Technical report prepared for the California Department of Water Resources. Natural Resource Scientists, Inc. December 2012. 43 p. including appendix.

Vogel, D.A. 2013. Evaluation of fish entrainment in 12 unscreened Sacramento River diversions, Final Report. Report prepared for the CVPIA Anadromous Fish Screen Program (U.S. Fish and Wildlife Service and U.S. Bureau of Reclamation) and Ecosystem Restoration Program (California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, NOAA Fisheries). Natural Resource Scientists, Inc. July 2013. 153 p.

Vogel, D.A. 2014. Evaluation of the effectiveness of a potential fish deterrent device on a Sacramento River water diversion. Report prepared for the CVPIA Anadromous Fish Screen Program (U.S. Fish and Wildlife Service and U.S. Bureau of Reclamation). Annual Report. Natural Resource Scientists, Inc. January 2014. 22 p. plus appendices.

Vogel, D.A. and K.M. Clemens. 1982. An evaluation of the contribution of Chinook salmon produced at the Tehama-Colusa Fish Facilities to the ocean fisheries and upper Sacramento River escapement (brood years 1973 – 1977). U.S. Fish and Wildlife Service Report. September 27, 1982. 7 p.

Vogel, D.A. and K.R. Marine. 1991. Guide to Upper Sacramento River Chinook Salmon Life History. Report prepared for the U.S. Bureau of Reclamation, Central Valley Project. July 1991. 55 p. with appendices.

Vogel, D.A. and K.R. Marine. 1992. An assessment of the appraisal study of options for improving fish passage at Red Bluff Diversion Dam. Report prepared for the Tehama-Colusa Canal Authority. Vogel Environmental Services. 29 p.

Vogel, D.A. and K.R. Marine. 1994. Lower Mokelumne River Fisheries Monitoring Program, Evaluation of the downstream migration of juvenile salmon and steelhead in the lower Mokelumne River and the Sacramento - San Joaquin Delta (January through July 1993. Technical Report prepared by Vogel Environmental Services for East Bay Municipal Utility District, Oakland, California. April 1994. 59 p. plus appendices.

Vogel, D.A. and K.R. Marine. 1994. Preliminary assessment of increased Klamath River flows for salmon during the late summer and fall of 1994. Report prepared for the Klamath Water Users Association. Natural Resource Scientists, Inc.. November 1994. 36 p. plus appendices.

Vogel, D.A. and K.R. Marine. 1995. 1994 biological evaluation of the new fish screens at the Glenn-Colusa Irrigation District's Sacramento River pump station. Natural Resource Scientists, Inc. February 1995. 77 p. plus appendices.

Vogel, D.A. and K.R. Marine. 1995. 1995 evaluation of juvenile Chinook salmon transport timing in the vicinity of the new fish screens at the Glenn-Colusa Irrigation District's Sacramento River pump station. Natural Resource Scientists, Inc. Prepared for Glenn-Colusa Irrigation District, Willows, California. November 1995. 34 p.

Vogel, D.A. and K.R. Marine. 1995. A technical memorandum on 1995 predation evaluations near the GCID Sacramento River pump station. Natural Resource Scientists, Inc. Prepared for Glenn-Colusa Irrigation District, Willows, California. December 1995. 17 p.

Vogel, D.A. and K.R. Marine. 1996. Lower Mokelumne River Fisheries Monitoring Program, Evaluation of the downstream migration of juvenile salmon and steelhead in the lower Mokelumne River and the Sacramento - San Joaquin Delta (January through July 1994. Technical Report prepared by Vogel Environmental Services for East Bay Municipal Utility District, Oakland, California. July 1996. 66 p. plus appendices.

Vogel, D.A. and K.R. Marine. 1997. Fish passage and stress effects on juvenile Chinook salmon physiology and predator avoidance abilities. Natural Resource Scientists, Inc. February 1997. 32 p. plus appendices.

Vogel, D.A. and K.R. Marine. 1998. Lower Mokelumne River Fisheries Monitoring Program, Evaluation of the downstream migration of juvenile salmon and steelhead in the lower Mokelumne River and the Sacramento - San Joaquin Delta (January through July 1995. Technical Report prepared by Natural Resource Scientists, Inc. for East Bay Municipal Utility District, Oakland, California. April 1998. 55 p. plus appendices.

Vogel, D.A. and K.R. Marine. 1998. Lower Mokelumne River Fisheries Monitoring Program, Evaluation of the downstream migration of juvenile salmon and steelhead in the lower Mokelumne River and the Sacramento - San Joaquin Delta (January through July 1996. Technical Report prepared by Natural Resource Scientists, Inc. for East Bay Municipal Utility District, Oakland, California. October 1998. 43 p. plus appendices.

Vogel, D.A. and K.R. Marine. 1999. Lower Mokelumne River Fisheries Monitoring Program, Evaluation of the downstream migration of juvenile salmon and steelhead in the lower Mokelumne River and the Sacramento - San Joaquin Delta (January through July 1997. Technical Report prepared by Natural Resource Scientists, Inc. for East Bay Municipal Utility District, Oakland, California. February 1999. 44 p. plus appendices.

Vogel, D.A. and K.R. Marine. 1999. Lower Mokelumne River Fisheries Monitoring Program, Evaluation of the downstream migration of juvenile salmon and steelhead in the lower Mokelumne River and the Sacramento - San Joaquin Delta (December 1997 through July 1998. Technical Report prepared by Natural Resource Scientists, Inc. for East Bay Municipal Utility District, Oakland, California. September 1999. 43 p. plus appendices.

Vogel, D.A. and K.R. Marine. 2000. Lower Mokelumne River Fisheries Monitoring Program, Downstream migration monitoring at Woodbridge Dam during December 1998 through July 1999. Technical Report prepared by Natural Resource Scientists, Inc. for East Bay Municipal Utility District, Oakland, California. March 2000. 38 p. plus appendices.

Vogel, D.A. and K.R. Marine. 2000. Lower Mokelumne River Fisheries Monitoring Program, Downstream migration monitoring at Woodbridge Dam during December 1999 through July 2000. Technical Report prepared by Natural Resource Scientists, Inc. for East Bay Municipal Utility District, Oakland, California. November 2000. 41 p. plus appendices.

Vogel, D.A. and K.R. Marine. 2001. Assessment of salmon spawning gravel characteristics and quality, 1995 – 1997, Lower Mokelumne River Fisheries Monitoring Program. Technical Report prepared by Natural Resource Scientists, Inc. for East Bay Municipal Utility District, Oakland, California. June 2001. 35 p. plus appendices.

Vogel, D.A., K.R. Marine, and J.G. Smith. 1987. Fish passage action program for Red Bluff Diversion Dam. Annual progress report. March 1987. U.S. Fish and Wildlife Service Report No. FR1/FAO-87-6. 56 p. plus appendices.

Vogel, D.A., K.R. Marine and J.G. Smith. 1988. Fish passage action program for Red Bluff Diversion Dam: Final report on fishery investigations. U.S. Fish and Wildlife Service Report No. FR1/FAO-88-19. October 1988. 77 p. plus appendices.

Vogel, D.A., K.R. Marine and J.G. Smith. 1990. A summary of evaluations of upstream and downstream anadromous salmonid passage at Red Bluff Diversion Dam on the Sacramento River, California, U.S.A. Paper presented at the *International Symposium on Fishways '90 in Gifu, Japan*. Proceedings p. 275-281. October 8-10, 1990.

Vogel, D.A. and H. Rectenwald. 1987. Water quality and water quantity needs for Chinook salmon production in the upper Sacramento River. Written testimony prepared for the State Water Resources Control Board 1987 Hearing Process on the San Francisco Bay/Sacramento – San Joaquin Delta Estuary. U.S. Fish and Wildlife Service and the California Department of Fish and Game. 37 p.

Vogel, D.A. and several co-authors. 1991. Assessment of options for excluding adult salmon from entry into the Colusa Basin Drain. Report prepared for Reclamation District 2047. CH2M Hill. September 1991. 19 p.

Vogel, D.A. and G. Taylor. 1987. Survey of the Chinook salmon spawning substrate in the Sacramento River from the Highway 273 bridge to Keswick Dam, July – August 1987. U.S. Fish and Wildlife Service. Joint report by the Fisheries Assistance Office and the Division of Ecological Services Office. 13 p.

Selected Co-Authored Reports

Dorratcague, D., D.A. Vogel, and B. Mitchell. 1999. Guidance Manual for the Fish Protection Evaluation and Monitoring Program. Glenn-Colusa Irrigation District Fish Screen Improvement Project. Montgomery Watson, Natural Resource Scientists, Inc., and Jones & Stokes Assoc. June 1999.

Giddings, J., L. Hall, Jr., K. Solomon, W. Adams, D. Vogel, L. Davis, and R. Smith. 1997. An ecological risk assessment of diazinon in the Sacramento and San Joaquin River basins. Novartis Crop Protection, Inc. Technical Report 11/97. Greensboro, North Carolina. 289 p.

Hallock, R.J., D.A. Vogel, R.R. Reisenbichler. 1982. The effect of Red Bluff Diversion Dam on the migration of adult Chinook salmon, *Oncorhynchus tshawytscha*, as indicated by radio-tagged fish. California Department of Fish and Game, Anadromous Fisheries Branch, Administrative Report No. 82-8. 47 p.

Johnson, S.I. and D.A. Vogel. 1981. Tehama-Colusa Fish Facilities Operational Plan. U.S. Fish and Wildlife Service Report. 27 p.

June, F.C., L.G. Beckman, J. H. Elrod, G.K. O'Bryan, and D.A. Vogel. 1987. Limnological and fishery studies on Lake Sharpe, a main-stem Missouri River reservoir, 1964 – 1975. U.S. Fish and Wildlife Service Technical Report 8, Washington, D.C.

Lindley, S.T., D.L. Erickson, M.L. Moser, G. Williams, O.P. Langness, B.W. McCovey, M. Belchik, D. Vogel, W. Pinnix, J.T. Kelly, J.C. Heublein, and A.P. Klimley. 2011. Electronic tagging of green sturgeon reveals population structure and movement among estuaries. Trans. Am. Fish. Soc. 140(1):108-122.

Marine, K.R. and D.A. Vogel. 1993. Lower Mokelumne River Fisheries Monitoring Program, Monitoring of the upstream spawning migration of Chinook salmon and steelhead during October through December 1992. Technical Report prepared by Vogel Environmental Services for East Bay Municipal Utility District, Oakland, California. June 1993. 40 p. plus appendices.

Marine, K.R. and D.A. Vogel. 1994. Lower Mokelumne River Fisheries Monitoring Program, Monitoring of the upstream spawning migration of Chinook salmon and steelhead during October through December 1993 and monitoring of the emigration of the 1993 fall release of yearling Chinook salmon from Mokelumne River Fish Installation during October 1993 through February 1994. Technical Report prepared by Natural Resource Scientists, Inc. for East Bay Municipal Utility District, Oakland, California. December 1994. 49 p. plus appendices.

Marine, K.R. and D.A. Vogel. 1996. Lower Mokelumne River Fisheries Monitoring Program, Monitoring of the upstream migration of Chinook salmon and steelhead during October through December 1994. Technical Report

prepared by Natural Resource Scientists, Inc. for East Bay Municipal Utility District, Oakland, California. November 1996. 58 p. plus appendices.

Marine, K.R. and D.A. Vogel. 1998. Lower Mokelumne River Fisheries Monitoring Program, Monitoring of the upstream migration of Chinook salmon and steelhead during September through December 1995. Technical Report prepared by Natural Resource Scientists, Inc. for East Bay Municipal Utility District, Oakland, California. April 1998. 47 p. plus appendices.

Marine, K.R. and D.A. Vogel. 1999. Lower Mokelumne River Fisheries Monitoring Program, Monitoring of the upstream migration of Chinook salmon and steelhead during September 1997 through February 1998. Technical Report prepared by Natural Resource Scientists, Inc. for East Bay Municipal Utility District, Oakland, California. February 1999. 44 p. plus appendices.

Marine, K.R. and D.A. Vogel. 1998. Lower Mokelumne River Fisheries Monitoring Program, Monitoring of the upstream migration of Chinook salmon and steelhead during September through December 1996. Technical Report prepared by Natural Resource Scientists, Inc. for East Bay Municipal Utility District, Oakland, California. October 1998. 44 p. plus appendices.

Marine, K.R. and D.A. Vogel. 1999. Lower Mokelumne River Fisheries Monitoring Program, Upstream migration monitoring at Woodbridge Dam during August 1998 through March 1999. Technical Report prepared by Natural Resource Scientists, Inc. for East Bay Municipal Utility District, Oakland, California. December1999. 48 p. plus appendices.

Marine, K.R. and D.A. Vogel. 2000. Lower Mokelumne River Fisheries Monitoring Program, Upstream migration monitoring at Woodbridge Dam during August 1999 through March 2000. Technical Report prepared by Natural Resource Scientists, Inc. for East Bay Municipal Utility District, Oakland, California. September 2000. 48 p. plus appendices.

Meyer, J.H. and D.A. Vogel. 1978. An examination of the smaller benthic invertebrates in Hylebos Waterway, Tacoma, Washington. U.S. Fish and Wildlife Service. Olympia, Washington. April 1978.

Wilkinson, C., R. Churchwell, D. Vogel. 2004. Yolo Bypass Experimental Fish Passage Project, 2003-2004 Interim Report. California Department of Water Resources, Division of Environmental Services, Fish Facilities Section. 19 p.

EXHIBIT B

DCS 1012

DCS 1012 Potential Presence of Fish in Vicinity of Proposed North Delta Diversions

There are likely fish in the vicinity of the proposed North Delta Diversions throughout the year according to the 2016 California WaterFix Final Environmental Impact Report/Statement,¹ which is summarized in the table below.

Potential Presence of Fish in Vicinity of Proposed North Delta Diversions*				
Species	Listing Status	Presence-Adult	Presence- Juvenile	FEIR/S Reference**
Delta Smelt	ESA: Threatened CESA: Endangered	Dec-May/Jan-May	Sep-Dec	p. 11A-5
Longfin Smelt	CESA: Threatened	Jan-Dec	Jan-Dec	pp. 11A-30 to 32
Central Valley Fall- and Late Fall-run Chinook Salmon	CA Species of Special Concern	June-Dec	Dec-June	pp. 11A-103, 104
Winter Run Chinook	CESA: Endangered ESA: Endangered		Jan-Apr/Sep- Dec	p. 11A-50
Spring Run Chinook	ESA: Threatened CESA: Threatened		Jan-Aug/Nov- Dec	p. 11A-77
Central Valley Steelhead	ESA: Threatened CA Species of Special Concern	June-March	Feb-May	pp. 11A-129-130
Sacramento Splittail	CA Species of Special Concern		Apr-June	p. 11A-146
Green Sturgeon	ESA: Threatened (Southern distinct population) ESA: Species of Special Concern (Northern distinct population)	Jul-Dec	Jan-Dec/Apr-Oct	p. 11A-162
White Sturgeon	Not listed	Feb-Jun		p. 11A-178
Pacific Lamprey	Not listed	Mar-Jun		p. 11A-191
River Lamprey	Not listed	Feb-Jun		p. 11A-199

* Location information limited by locations where presence was sampled.

**Where temporal occurrence tables were provided, months listed here are indicated as high or medium abundance.

¹Available at:

https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/exhi bit102/index.html; see also Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem Prepared Pursuant to the Sacramento-San Joaquin Delta Reform Act of 2009, pp. 45-46, 52, available at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/doc s/swrcb_25.pdf.