

DELTA-MENDOTA CANAL/ CALIFORNIA AQUEDUCT INTERTIE VOLUME 3: COMMENTS AND RESPONSES

Prepared for:

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California Aqueduct Intertie
Volume 3:
Comments and Responses**

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Environmental Assessment/ Initial Study Contents

		Page
Chapter 1	Introduction	1-1
	1.1 Project Background and History	1-1
	1.2 Purpose of Document	1-1
	1.3 Public Board Meeting for Adoption of the Negative Declaration	1-2
Chapter 2	Commentors, Comments, and Responses	2-1
	2.1 Introduction	2-1
	2.2 Format of Comments and Responses	2-1
	2.3 List of Commentors.....	2-2
	2.4 Comments and Responses.....	2-2
	DWR—Department of Water Resources Katherine F. Kelly.....	2-2
	SEWD—Herum Crabtree Brown Jeanne M. Zolezzi	2-4
	CCWD—Contra Costa Water District Richard A. Denton	2-8
	SDWA—South Delta Water Agency John Herrick.....	2-20
	PCL—Planning and Conservation League Mindy McIntyre	2-29
	DK—Delta Keeper Bill Jennings and Dan B. Odenweller.....	2-38
	SWRCB—State Water Resources Control Board Diane Riddle	2-39
	DOT—California Department of Transportation Timothy C. Sable	2-39
	MID—Modesto Irrigation District Celia Aceves	2-40
	Comment Letters Received	follow 2-40
Chapter 3	Revisions to EA/IS	3-1
	3.1 Revisions Based on Agency and Public Comments	3-1
	Volume 1	3-1

Tables

Follows Page

2-1	List of Commentors.....	2-2
3.2-2	Harvey O. Banks Pumping Plant Table A Contract Amounts Demands and Maximum Pumping Capacity	3-3

Acronyms and Abbreviations

Authority	The San Luis & Delta-Mendota Water Authority
CBDA	California Bay-Delta Authority
CEQA	California Environmental Quality Act
COA	Coordinated Operation Agreement
CVP	Central Valley Project
DO	dissolved oxygen
DRERIP	Delta Regional Ecosystem Restoration Implementation Plan
DSM2	the best Delta water quality simulation model presently available
EC	electrical conductivity
ERP Commitments	Ecosystem Restoration Program
ESA	Federal Endangered Species Act
EWA	Environmental Water Account
Intertie	The Delta-Mendota Canal and California Aqueduct Intertie
JPE	juvenile production estimate
mg/L	milligrams per liter
msl	mean sea level
MWD	Metropolitan Water District of Southern California
NEPA	National Environmental Policy Act
NOAA	National Oceanic and Atmospheric Administration
NOAA BO	National Marine Fisheries Service's Biological Opinion
OCAP	Operations Criteria and Plan
ROD	Bay-Delta Program Programmatic Record of Decision
SDIP	South Delta Improvement Program

SDIP	South Delta Improvements Project
SWP	State Water Project
TDS	total dissolved solids
TMDL	Total Maximum Daily Load
USFWS	U.S. Fish and Wildlife Service

1.1 Project Background and History

The Delta-Mendota Canal and California Aqueduct Intertie (Intertie) is a proposed action in the August 2000 CALFED Bay-Delta Program Programmatic Record of Decision (ROD). The ROD recommended investigation of a number of interties and bypasses in the water system aimed to improve Sacramento-San Joaquin River Delta conveyance.

The Intertie consists of constructing and operating a pumping plant and pipeline connection between the Delta Mendota Canal and the California Aqueduct. The Intertie would be used in a number of ways to achieve multiple benefits, including meeting current water supply demands, allowing for the maintenance and repair of Central Valley Project (CVP) Delta export and conveyance facilities, and providing operational flexibility to respond to emergencies related to both the CVP and State Water Project (SWP).

On November 29, 2004 a proposed Finding of No Significant Impact/Negative Declaration and Draft Environmental Assessment/Initial Study was noticed in the Federal Register and circulated to the California State Clearinghouse, pursuant to requirements of the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA). The public and agency review and comment period expired on December 30, 2004.

1.2 Purpose of Document

This document reviews and responds to public and agency comment letters received during the review period. Responses contained in this document are intended to provide decision making authorities with appropriate background to the issues and concerns of the commenting agencies and public and to ensure that the comments received as well as their corresponding responses, are considered prior to adoption of the Intertie project.

This response document, together with the proposed Finding of No Significant Impact/Negative Declaration and Draft Environmental Assessment/Initial Study for the Delta Mendota Canal/California Aqueduct Intertie circulated on

November 29, 2004, constitutes the final Finding of No Significant Impact and Negative Declaration under consideration for adoption by the Bureau of Reclamation and Delta Mendota Authority.

1.3 Public Board Meeting for Adoption of the Negative Declaration

The Delta Mendota Authority will hold a public board meeting whereby it will adopt the Negative Declaration in light of the analysis provided in the Initial Study and the comments received thereafter. The public board meeting is scheduled to be held on April 20, 2005.

Chapter 2

Commentors, Comments, and Responses

2.1 Introduction

This chapter contains responses to comments received on the proposed Finding of No Significant Impact/Negative Declaration and Environmental Assessment/Initial Study. In addition, all written comments received during the review period are included in their entirety, and have been coded for comment/response cross-referencing.

2.2 Format of Comments and Responses

Each comment letter received has been coded, with a unique number given to each comment presented. Responses to the comments precede the letters, with individual responses coded in a manner corresponding to the relevant comment letter. Where a response requires revisions in the Environmental Assessment/Initial Study, those revisions can be found in underline strike-through in Chapter 3.

Some comment letters received include comments similar to those contained in other letters. Where a comment could be responded to with a response to an earlier comment, reference to that response is provided.

2.3 List of Commentors

Table 2-1 lists the individuals and organizations that provided written comments. Included for reference is the comment letter code and chapter page number where the comment letter and responses can be found.

Table 2-1. List of Commentors

Commentor	Agency/Organization	Letter Code	Page Number
Katherine F. Kelly	Department of Water Resources, Bay-Delta Office	DWR	2-2
Jeanne M. Zolezzi	Herum Crabtree Brown, for Stockton East Water District	SEWD	2-4
Richard A. Denton	Contra Costa Water District	CCWD	2-8
John Herrick	South Delta Water Agency	SDWA	2-19
Mindy McIntyre	Planning and Conservation League	PCL	2-27
Bill Jennings Dan B. Odenweller	Delta Keeper	DK	2-35
Diane Riddle	State Water Resources Control Board, Division of Water Rights	SWRCB	2-36
Timothy C. Sable	Department of Transportation	DOT	2-36
Celia Aceves	Modesto Irrigation District	MID	2-37

2.4 Comments and Responses

DWR—Department of Water Resources Katherine F. Kelly

DWR-1

The comment is noted. No change to the EA/IS is required.

DWR-2

The comment is noted. No change to the EA/IS is required.

DWR-3

The comment is noted. No change to the EA/IS is required.

DWR-4

The comment is noted. Appropriate revisions to the use of entitlement and demand can be found in Chapter 3, Revisions to EA/IS.

DWR-5

Work would occur along the upper slopes of the named drainage, but would not involve any fill or disturbance to the drainage below the ordinary high water mark. The potential for indirect effects would be prevented through the incorporation of erosion control measures. Taken together, the described construction would not affect the drainage. To clarify, appropriate revisions can be found in Chapter 3, Revisions to the EA/IS.

DWR-6

The comment is noted. Appropriate revision has been included and can be found in Chapter 3, Revisions to the EA/IS.

DWR-7

Several of the projects listed in Section 3.2.4 of the EA/IS that reference the qualitative cumulative analysis would include land-disturbing activities. For example, if implemented, the North of Delta Offstream Storage project would likely result in sizable land disturbance. Nevertheless, the location of this new reservoir, if ever constructed, would be a far distance from the Intertie and would not be expected to contribute to any cumulative vegetation or wildlife impact. The logic follows for other land disturbing activities listed in Section 3.2.4.

DWR-8

The comment is noted. Appropriate revisions can be found in Chapter 3, Revisions to the EA/IS.

DWR-9

The comment is noted. Appropriate revisions can be found in Chapter 3, Revisions to the EA/IS.

DWR-10

Plots for Martinez EC included in Appendix E are based on the output from the DSM2 model simulations. When conducting their own model runs, DWR presents Martinez EC based on the input to the model simulations. Because the model output is generated for a slightly different physical location to the model input boundary condition, the presented EC for Martinez appears different than what DWR is accustomed to seeing. This difference does not affect the accuracy of the simulations used in the analysis of Intertie impacts.

SEWD—Herum Crabtree Brown Jeanne M. Zolezzi

SEWD-1

Reclamation acknowledges the passage of P.L. 108-361 in October 2004. The timing of this bill's passage did not allow for the details to be included in the EA/IS. Reclamation has reviewed the requirements of P.L. 108-361 and believes we are proceeding in accordance with those requirements. We disagree with the commentor's interpretation of P.L. 108-361. Construction of the Intertie can proceed at this time. Development of a water quality program and a plan is currently underway in order to meet all existing Stanislaus and lower San Joaquin Rivers and Delta water quality standards and objectives for which the CVP has responsibility. In fact, we have initiated one element of the program to meet standards. The element we have initiated is a revised plan of operation for New Melones. We are on schedule to complete development of a program to meet standards by October 2005. Operation of the Intertie would not occur until the following year, well after the program to meet standards has been developed and initiated.

SEWD-2

CALSIM II model runs for the Intertie are designed to show the effect of the Intertie on deliveries and other system functionality. Instead of specifically forecasting operations for an individual project, the model may show effects to storage or delivery for that project. To better understand the potential effect of the Intertie on Stanislaus River operations, stakeholders should compare baseline

and with-project model results for project deliveries and for water quality and fishery releases from New Melones Reservoir.

Reclamation's annual operating plans for the Stanislaus take existing and forecasted system conditions into consideration along with IOP measures and input from stakeholders. The CALSIM II model must govern operations by some constant set of regulations over a 73-year period. In the absence of other approved plans, the IOP remains the best way currently available to represent Stanislaus River operations for planning modeling purposes.

SEWD-3

We disagree with the commentor. In the absence of other approved plans, the IOP remains the best way currently available to represent Stanislaus River operations for planning modeling purposes. The specific outcomes of the water quality program, developed under P.L. 108-361, are speculative at this time; therefore, it is inappropriate to move beyond the currently approved IOP.

SEWD-4

See response to SEWD-2.

SEWD-5

The IOP remains the best way currently available to represent Stanislaus River operations for planning modeling purposes. The specific outcomes of the water quality program, developed under P.L. 108-361, are speculative at this time; therefore, it is inappropriate to move beyond the currently approved IOP.

SEWD-6

Appendix C.1.1 describes all of the appropriate regulatory framework currently in place. P.L. 108-361 requires that a water quality program be developed. Until this program is developed and implemented we will not want to speculate on what changes would occur in the overall regulatory framework.

SEWD-7

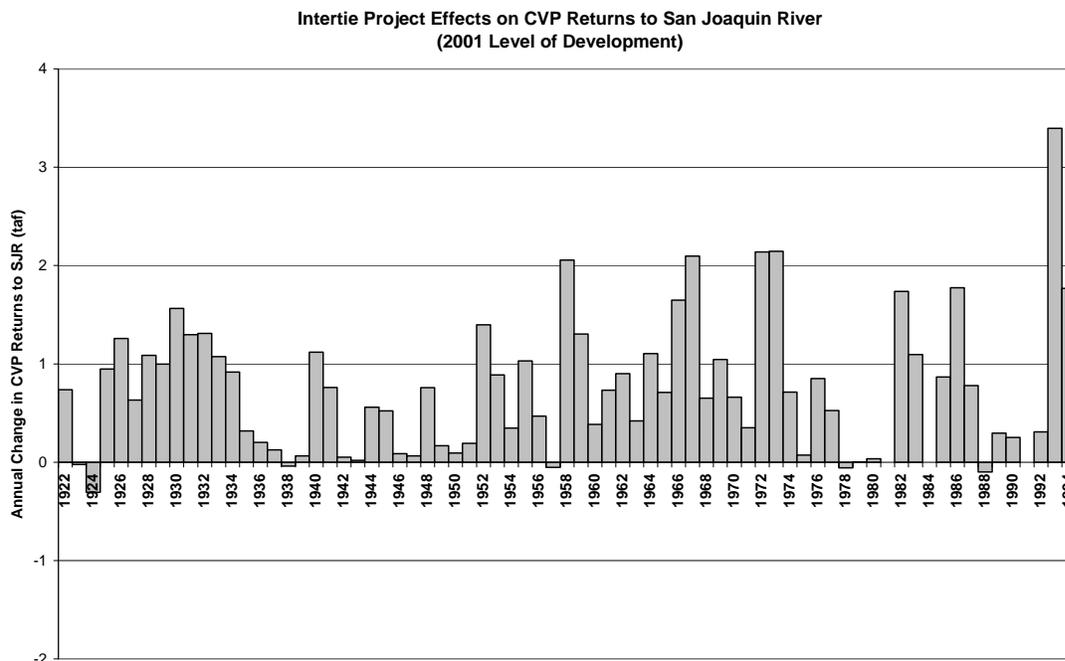
See response to comment SEWD-2.

SEWD-8

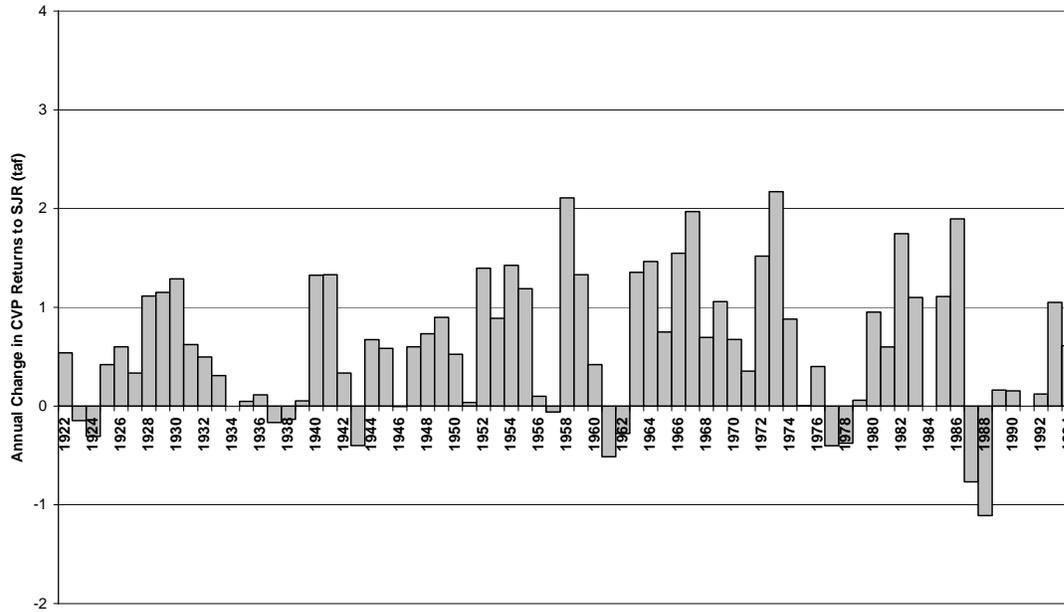
See response to SEWD-5.

SEWD-9

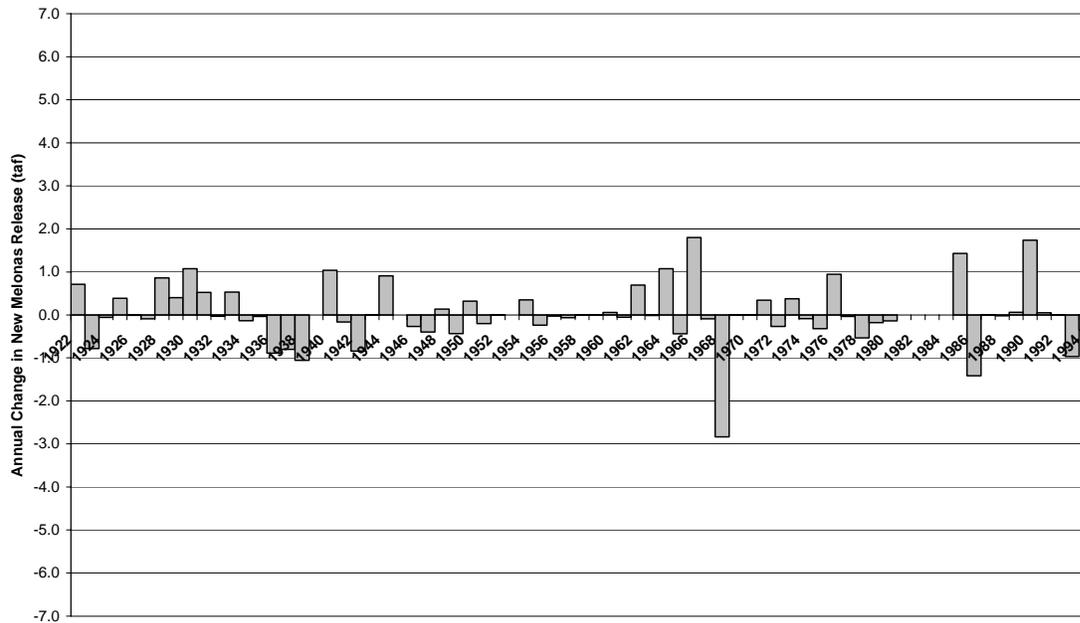
The CALSIM II model dynamically responds to changes in agricultural drainage from DMC contractors (agricultural, refuge, and Exchange) to the San Joaquin River. Additional releases from New Melones are made if necessary, and if the maximum annual water quality release cap is not exceeded, to achieve Vernalis EC standards. Simulated CVP contractor return flows to the San Joaquin River for the Base and Intertie studies are shown in the figures below. The average annual returns in the Base are over 100 taf/yr. Simulated changes in return flows to the San Joaquin River are less than 2 taf/yr. As a result of this small change in return flow, the contribution to increased salt load to the San Joaquin River at Vernalis is small. Annual New Melones releases in the Base average to approximately 1004 taf/yr. Simulated annual average New Melones releases with the Intertie are also 1004 taf/yr. The attached plot (New Melones Summary sheet) indicates that while the average annual release is the same, changes may occur, per individual year, in New Melones releases. However, these release changes are generally less than 5 taf/yr.

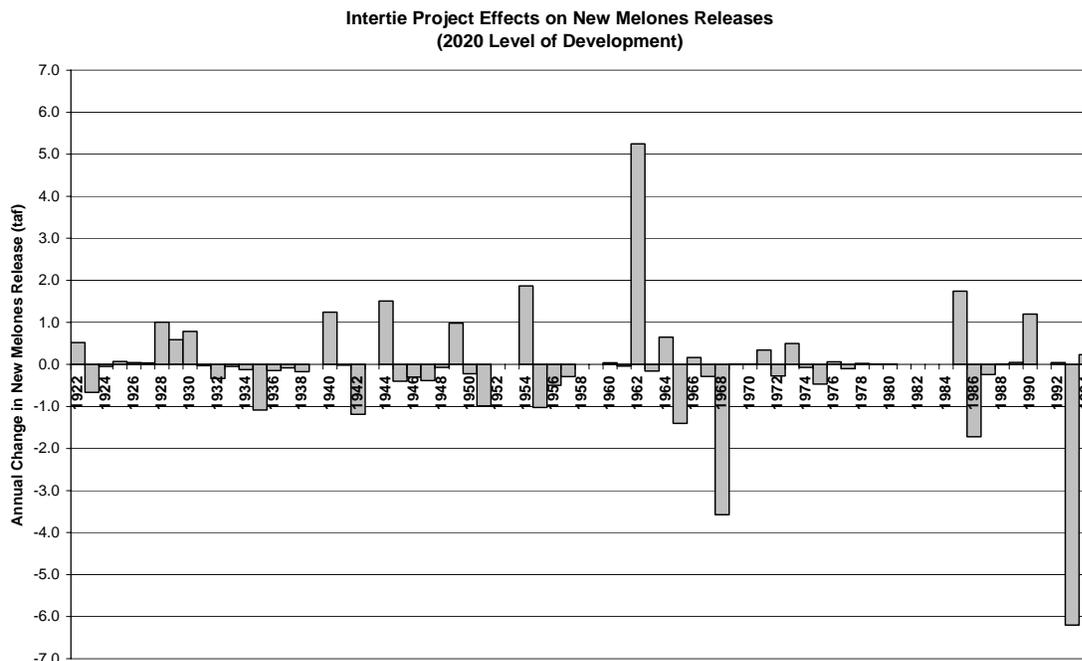


**Intertie Project Effects on CVP Returns to San Joaquin River
(2020 Level of Development)**



**Intertie Project Effects on New Melones Releases
(2001 Level of Development)**





SEWD-10

Until the specific outcomes of the water quality program and Delta Water Quality Plan authorized under P.L. 108-361 are known, it is inappropriate to revise the CALSIM II modeling procedure described in SEWD-9.

CCWD—Contra Costa Water District Richard A. Denton

CCWD-1

Contra Costa Water District’s cover letter summarizes comments provided in detail in their attachment. Responses are provided for each specific comment in the attachment.

CCWD-2

An EA/IS is prepared to provide sufficient evidence and analysis for determining whether to prepare an EIS/EIR, or a finding of no significant impact/negative declaration. The criteria for preparation of a FONSI/NegDec under NEPA and CEQA do not require that a Project have absolutely no effect whatsoever, but that there be no substantial evidence that a significant impact on the environment may

occur. The analysis provided in the EA/IS acknowledges potential impacts and has demonstrated that there are no significant impacts from the proposed action.

Furthermore, the comments regarding potential significance all disregard the fact that the Project will be operated as part of the CVP and SWP, within all of the existing hydrologic and regulatory constraints applicable to both of those projects, as analyzed in the BO for CVP OCAP. Operation of the Intertie must be within those constraints. The EA/IS has properly analyzed the Project within the context of those operations. Comments that fail to acknowledge that Project operations will be constrained by regulations applicable to the CVP and SWP are, not fact-based considerations. The responses to comments below describe the errors, lack of factual background, and speculation that lead the Authority to conclude that they do not present substantial evidence supporting a fair argument that the Intertie may have a significant effect on the environment.

CCWD-3

The significance criteria used in the evaluation of water quality impacts in the EA/IS are essentially those requested by the commenter. Water quality impacts were evaluated using existing adopted water quality standards as well as substantial adverse changes in water quality affecting beneficial uses, including municipal drinking water supply and agriculture. In the latter case, a change equivalent to 10% of the adopted water quality standard was employed as a reference for indicating the potential for beneficial use degradation. These two thresholds ensure that project effects were evaluated based on whether they would exceed water quality standards or if they would cause a net adverse change in water quality affecting beneficial uses. Such a method of evaluation is what appears to be advocated by the commenter.

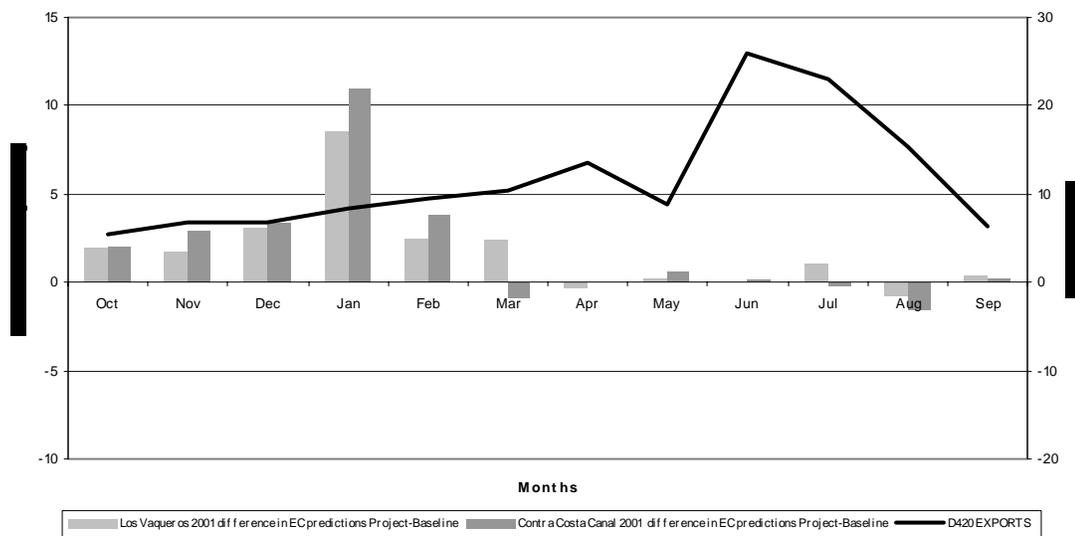
Thresholds of significance for water quality, based on CCWD's commitments to its customers, are not appropriate and do not take into account the many beneficial uses of the State's water resources. CCWD has set very high standards for drinking water quality and the operation of its Los Vaqueros Reservoir. These standards for water quality are several times more stringent than State promulgated water quality objectives for drinking water sources. For this very reason, CCWD conceptualized and eventually constructed its Los Vaqueros Reservoir as a facility to help achieve its own high standards for delivered drinking water quality.

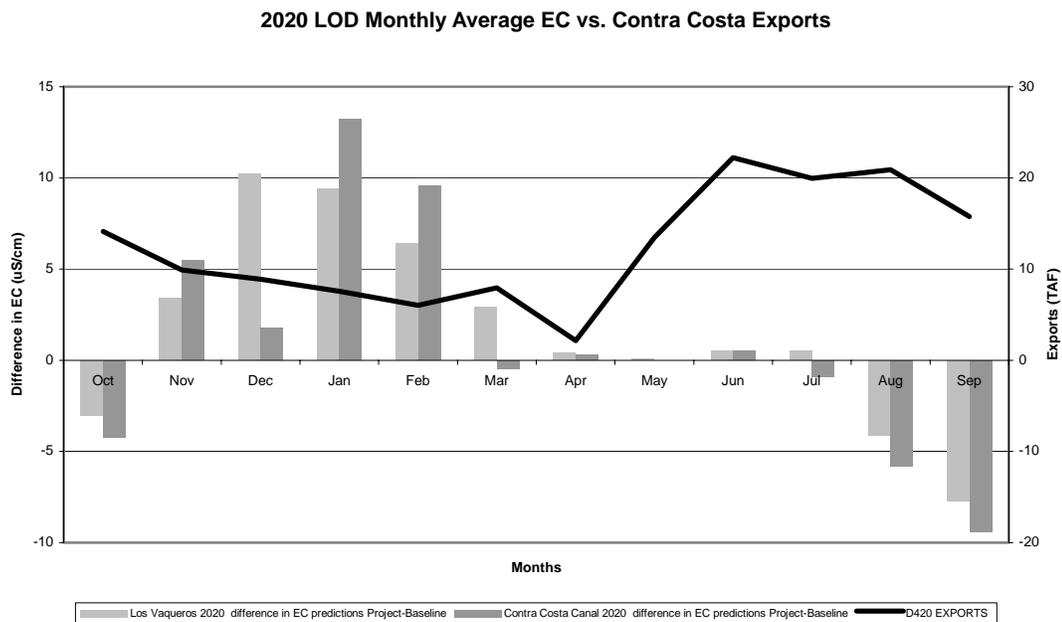
The magnitude of the potential changes in electrical conductivity (EC) as a consequence of Intertie implementation is simulated using the best Delta water quality simulation model presently available (DSM2). The water quality simulation model was used to represent a 16-year period, which captures the historic 1977 and 1987-1992 drought periods. The average simulated EC at CCWD's intake at Rock Slough over this 16-year period was increased by 1 $\mu\text{S}/\text{cm}$ with the Intertie when compared to simulated 2001 and 2020 baseline conditions (Table 3.4-1). When evaluated in the context of a cumulative water

quality effect (2001 baseline to 2020 proposed action), the increase in average EC at Rock Slough was simulated to be 8 $\mu\text{S}/\text{cm}$, similarly judged to be less than significant.

When comparing aggregate average CCWD water export generated by the CALSIM model with the salinity effects of the Intertie, the majority of CCWD pumping would occur during monthly periods when the Intertie's simulated monthly effects on EC are least. The following charts graphically demonstrate this (Intertie effect data is taken from Appendix E or the EA/IS). The greatest change in average monthly simulated EC occurs between November and February, coincident with the time that CCWD is pumping the least. When pumping is at it's greatest, there is no change in average monthly EC, or there is a simulated improvement in average monthly EC.

2001 LOD Monthly Average EC vs. Contra Costa Total Exports





Measurement of salinity in the field and simulation of salinity in models have inherent limitations in accuracy, particularly when dealing with a dynamic system such as a tidal estuary. These limitations impact absolute determinations or conclusions drawn from results that fall within the accuracy limitations of the measurement or modeling method, specifically small changes. In documentation for CALFED’s “Los Vaqueros Reservoir Expansion Studies,” a project benefiting CCWD, this limitation is acknowledged in the analysis of water quality impacts to Delta waters and Rock Slough related to the expansion of Los Vaqueros Reservoir. Specifically, the expansion study states:

Changes in salinity that exceeded the greater of 5 percent or 5 milligrams per liter (mg/L) chloride (i.e., 10 mg/L total dissolved solids [TDS]) triggered additional analysis to determine if the potential impacts would be real (as distinct from a modeling aberration) and systematic (i.e., attributed to a specific operation of the expanded reservoir) and therefore potentially significant. (Note that field measurements and salinity models have accuracies to approximately 5 percent or 5 mg/L chloride [10 mg/L TDS]). (CALFED, 2004; pg. 5.1-8)

A change of 5 mg/L Cl⁻ is equivalent to a change in EC of about 20 to 25 μS/cm EC. Even when comparing the simulated average salinity effects of the Intertie to these thresholds of potential significance, direct and cumulative impacts would be found less than significant. Following the logic presented in the expansion studies report, such small changes in salinity, as simulated for the Intertie, would not lead to degradation of drinking water quality, increased health risks related to disinfection byproducts, nor to a limitation of available water supply during drought or emergency, as is suggested in the comment. Rather, the simulated

increases in salinity would be found to be less than significant as is disclosed in the EA/IS.

For added perspective, simulated EC at Rock Slough was 533 and 540 $\mu\text{S}/\text{cm}$ for the 2001 and 2020 baseline comparisons. This is equivalent to the actual historical EC for the 1976-1991 period, including droughts, which was about 544 $\mu\text{S}/\text{cm}$. Maintenance of this average historic salinity over time is, in large part, due to the implementation of the 1995 WQCP objectives in the D-1641 decision.

CCWD prefers to use chloride as their reference variable; using the measured ratio of Cl^-/EC at Rock Slough (Figure D-37 in Appendix D of EA/IS), a change in 1 $\mu\text{S}/\text{cm}$ would be equivalent to a change of about 0.20 mg/l Cl^- (in their comments CCWD consistently uses a conversion factor of 0.25 mg/l Cl^- to 1 $\mu\text{S}/\text{cm}$ EC which is observed at EC values higher than what was simulated). Relative to the established 150 mg/l and 250 mg/l Cl^- objectives that have been established to protect drinking water quality at Rock Slough, an average change of 0.2 mg/l Cl^- is small. A simulated average change of 1 $\mu\text{S}/\text{cm}$ for direct project effect and a simulated average change of 8 $\mu\text{S}/\text{cm}$ for cumulative effect, within the large natural seasonal variation of EC in the Delta, is not considered a substantial degradation in beneficial use, and when considered within the noise of natural seasonal variation, would be very difficult to measure and observe in the field.

CCWD-4

The comment is factually incorrect. Both CEQA and NEPA require the evaluation of impacts compared to an environmental baseline. This comparison for CEQA is accomplished through the evaluation of the Intertie's effects relative to a 2001 level of development. NEPA requires an evaluation of project effects compared to a baseline environmental condition that does not include the project. For the Intertie, this comparison, referred to as the No Action condition, accounts for a future environmental condition where there are changes in demands and diversions, set to a 2020 level of development. Therefore, the comparison of the Intertie's effects at a 2001 level of development to the 2001 Existing condition, and a comparison of the Intertie's effects at a 2020 level of development to the 2020 No Action condition appropriately addresses the legal requirements of both CEQA and NEPA.

The comparison that the commentor calls for is in fact a cumulative analysis. This comparison was conducted and is summarized in the Cumulative Impacts section of the water quality discussion (Section 3.4.4, Cumulative Impacts). In the cumulative analysis section the average increase in EC, although greater than the respective increases in EC relative to the 2001 or 2020 comparison, is not considered substantial when evaluated against the previously discussed significance criteria. Please see response CCWD-3.

CCWD-5

The commenter uses a Cl/EC conversion factor of 0.25 to translate simulated EC increases into values of chloride. The Cl/EC ratio at Rock Slough is only about 0.20, and approaches 0.25 under conditions of high EC. Despite differences in converting EC to Cl, the increases reported in Table 3.4-1 and Appendix E are considered extremely small relative to the large seasonal variability of water quality in the Delta, and when evaluated against the previously discussed significance criteria. See response CCWD-3.

Modeling results were rounded to the nearest digit place. Any possible error due to rounding to the digits place is well within the degree of accuracy of these models.

CCWD-6

As previously discussed, impacts to water quality were evaluated to determine if they would cause an overage of water quality objectives or cause a net change that would adversely effect beneficial uses. It was determined that simulated increases in EC would not result in significant impacts to water quality.

The simulated EC at Rock Slough under modeled conditions is improved compared to the historical EC conditions observed in the 1976-1991 period. This is the result of SWRCB and other CALFED agencies, including Reclamation and DWR, implementing the 1995 WQCP objectives in D-1641. Furthermore, the Byron and Veale Tract salinity improvement projects have been funded by CALFED and it is believed that CCWD is indeed benefiting directly from the California Bay-Delta Authority (CBDA) implementation of these CALFED actions.

CCWD-7

The simulated daily differences cited in the comment are exaggerated because they are the result of “lags” between one simulation of monthly step changes and another. Actual field-collected EC data at Rock Slough does not change this much from one day to the next. Therefore, focusing on a single day or monthly DSM2 prediction is not appropriate. In fact, the monthly average change statistic (average monthly change over the 16-year modeling period) is the most detailed descriptor that can be reliably extracted from the DSM2 model runs. The average yearly EC change (average yearly change of the 16-year modeling period) further compensates for the lags between monthly step changes, further smoothing the influence of a single outlying data point.

Although the yearly average EC change was presented in the body of the EA/IS (Table 3.4-1), monthly average EC change (as well as yearly average) is

presented in Appendix E to the EA/IS. The value cited by CCWD is not an average monthly EC change, rather a single monthly EC change value (i.e., maximum monthly EC change). In fact, the greatest simulated average monthly EC change from the 2001 baseline is reported to be 11.7 uS/cm EC at Rock Slough for the month of January (Table A-7, Appendix E) and the greatest simulated average monthly EC change from the 2020 baseline is reported to be 15.4 uS/cm EC at Rock Slough for the month of January (Table B-7, Appendix E). These monthly average EC values were considered less than significant in the EA/IS analysis and occur during a time of low exports by CCWD. Furthermore, both of these values fall below the accuracy limitation thresholds described in the Los Vaqueros Expansion Studies Report, and thus would have been considered less than significant.

CCWD-8

These simulated monthly changes will not have any substantial effects on CCWD operations of Los Vaqueros or the delivered water quality. The flexibility that CCWD has established with two intakes and a water quality storage facility (Los Vaqueros Reservoir) is designed specifically to deal with the large seasonal variations in water quality within the Delta. Months with reduced salinity will allow slightly lower salinity to be delivered and/or stored in Los Vaqueros. Months with slightly higher salinity will be compensated with better quality deliveries from Los Vaqueros, if necessary, to satisfy the delivery target (i.e., 65 mg/l Cl). The fluctuations that the modeling suggests should be well within the expected range for the CCWD operations.

CCWD does not provide the necessary information to validate its claim that the simulated increases in salinity would truly equate to an effective loss of Los Vaqueros Reservoir capacity. On its face it appears difficult to validate the conclusion that the Intertie would impact Los Vaqueros Reservoir to an effective amount equaling 2,000 acre-feet. Through a simple salt balance calculation, such an effective loss of 2,000 acre-feet would require an average change in salinity equal to 30 μ S/cm in the summer months, far greater than the simulated impact of the Intertie.

CCWD-9

Emergency storage levels are specified in the operations plan for Los Vaqueros, and will not be affected by Delta salinity. The amount of emergency storage is a function of water year type and not a function of water quality. Emergency water is not used by CCWD except in circumstances of a delivery emergency and, therefore, this emergency water volume would carry over to the next year under normal non-emergency situations. Consequently, the volume carried over from one year to the next is due to the past emergency, and is not a product of Delta salinity.

CCWD-10

CCWD's water quality protection program is outstanding. CCWD's new ozone treatment process reduces the DBP threat to their customers dramatically. The 0.5 mg/l increase in chloride will not change bromide ion concentrations enough to affect bromate formation. One of the great advantages of the Los Vaqueros project has been to reduce the peak chloride in the treated water to much less than historical levels. The Intertie will not increase bromate or any other DBP in CCWD delivered water.

CCWD-11

The EA/IS does address full buildout of the Intertie in as much detail as possible. Terrestrial effects are addressed since the constructed area described is large enough to be able to add pumps in the future if a pumping expansion were to be authorized. However, future operational effects are not analyzed because they are not reasonably foreseeable. Although Reclamation received authorization for a Feasibility Study, no funding for the study has yet been appropriated. A Feasibility Study and EIS/EIR would need to be completed and submitted to Congress for construction authorization. Chapter 4, Section 4.2.1, describes the additional study process that would be implemented prior to any increase in authorized pumping capability at Tracy pumping plant.

CCWD-12

Mitigation is not required when impacts are found to be less than significant. The Intertie will neither alone, nor cumulatively, degrade water quality to any significant extent. CCWD water quality is substantially improved with the D-1641 Delta operating requirements compared with the previous historical D-1485 standards from 1978-1994. CCWD water quality is also being directly improved by the Byron and Veale Tract projects. These have been implemented for the direct benefit of CCWD as part of the overall CALFED water quality program. The Intertie is considered a water supply action that is within the overall planning and implementation of the

CALFED Program. CCWD water quality is being protected and improved by the overall CALFED program implementation.

CCWD-13

We believe the Intertie Project is being implemented consistent with the CALFED program. Construction and operation of the Intertie will not result in any significant impacts as determined in the EA/IS. Accordingly, it is

appropriate and consistent with the CALFED program to construct and operate the Intertie.

CCWD-14

Although it is noted in section 3.4.4, Cumulative Impacts, that several of the reasonable foreseeable projects could result in improved water quality, the modeling for the Cumulative Impacts assessment does not assume that these projects are in place in the future. The Cumulative Impacts modeling reflects increased demands, but not additional projects. This is consistent in the Fisheries section (p. 3-87). The CALSIM II modeling is used for the quantitative analysis and the conclusion is one of no significant impact.

The qualitative analysis does acknowledge a number of future actions that could take place. However, since not all of these actions are agreed upon by all CALFED agencies, the qualitative assessment substantiates our conclusion, but is not the basis for our conclusion of no significant impact.

CCWD-15

The EA/IS does evaluate cumulative impacts. Cumulative impact discussions can be found at the end of each environmental resource section. Cumulative impacts are discussed in;

- Section 3.2.4 for water supply and Delta water management
- Section 3.3.4 for Delta tidal hydraulics
- Section 3.4.4 for water quality
- Section 3.5.4 for fish
- Section 3.6.4 for vegetation and wildlife
- Section 3.7.4 for air quality
- Section 3.8.4 for noise
- Section 3.9.4 for power production and energy
- Section 3.10.4 for cultural resources
- Section 3.11.4 for environmental justice, and
- Section 3.12.4 for Indian trust assets

Indirect and growth inducing effects are discussed in Section 3.13, Growth Inducing Effects.

CCWD-16

Please see responses CCWD-13. We believe the Intertie Project is being implemented consistent with the CALFED program.

Please see responses CCWD-14, CCWD-15, CCWD-17, CCWD-18, and CCWD-19. Cumulative effects were addressed in the EA/IS and found to be less than significant.

CCWD-17

The CALSIM model holds inflow salinity at a constant concentration set to a historical average. The commentor suggests that the result of this modeling assumption makes the cumulative analysis inadequate and faulty. We disagree. The DSM2 model includes salinity boundaries at all inflow locations to the Delta and the tidal boundary at Martinez. CALSIM salinity mass balance on the San Joaquin River provides the salinity boundary conditions at Vernalis. All other boundary conditions are constant through time and are not adjusted based on level of development. The approach used is consistent with DWR analysis and assumptions.

Sacramento River EC is approximately 1 percent of that at the Martinez boundary (approximately 0.2 mS/cm compared to 25 mS/cm. Vernalis EC is approximately three times greater than Sacramento River EC. Many programs within the Delta, and watershed as a whole, will potentially change the EC at the boundaries. The analysis could not possibly capture the future impacts of all these programs. While the commenter highlights projects that may increase EC in the Delta, several programs such as San Joaquin salinity management suggest that EC at Vernalis will be reduced in the future. The modeling included in the analysis uses simplifying assumptions for EC at the boundaries. Even if impacts of all programs could be assessed, it is unlikely that the impact of the proposed project would change.

CCWD-18

Appendix B identifies the assumptions and projects included in the CALSIM runs. Freeport, Long-Term EWA, South Delta Improvements Project, and the Intermediate Integrated Operations are not included in the quantitative cumulative impacts analysis because they were not sufficiently defined to be considered “reasonably foreseeable” at the time that the model runs were made. These potential projects as well as others were however, included in a qualitative cumulative impact analysis. In particular, the EA/IS includes a qualitative discussion of Freeport and some quantitative discussion of transfers. JPOD Stage 3 can be considered part of the transfer element. Transfers were evaluated for the months of July to September. Because the Delta outflow would not change, there

are no anticipated cumulative effects from these transfers; outflow would be held to a constant or rise with carriage water. The possible future effects from all CVP and SWP operations have been properly evaluated in the 2020 CALSIM and DSM2 modeling.

CCWD-19

CCWD does not provide the necessary information to validate its claims of a significant impact. Please see responses to CCWD-8 and CCWD-9. When attempting to validate the claim using available information contained in disclosure documents for the Sacramento Regional Wastewater Treatment Plant and Freeport projects, the CCWD claims cannot be supported.

The Sacramento Regional Wastewater Treatment Plant discharges about 250 cfs (165 mgd) now and may in the future discharge 500 cfs (350 mgd). Sacramento River chloride concentration is about 10 mg/l and the current wastewater effluent chloride is about 200 mg/l. The mixed river concentration is a maximum of 19 mg/l when the river flow is just 5,000 cfs (99.8% of the time flows are higher). The additional potential future 250 cfs of wastewater would increase the inflow chloride by 8 mg/l, from 19 mg/l to about 27 mg/l when the Sacramento River flow is 5,000 cfs. When the Sacramento River flow is less than 10,000 cfs (15% of the time, or 85% of river flows are greater than 10,000 cfs) the salinity effect from the expanded Sacramento treatment plant will be greater than 4 mg/l. CCWD does not explain how this would virtually remove 3,000 af from Los Vaqueros blending volume.

The greatest effect of the Freeport diversion on salinity can be calculated from the maximum diversion of 150 cfs compared with the lowest river flow of about 5,000 cfs. The Freeport diversion would increase the inflow chloride from 19 mg/l to about 19.25 mg/l at a flow of 5,000 cfs. With the future wastewater discharge the inflow concentration will increase from 27 mg/l to about 27.5 mg/l at a flow of 5,000 cfs. The impact on salinity will be less than half these small values when the river flow is higher than 10,000 cfs (85% of the time). CCWD does not explain how this would virtually remove an additional 3,000 af from Los Vaqueros blending volume.

CCWD-20

The comment is noted. The chart provided in the comment demonstrates the effect that a varying hydrology plays on the quality of water. The chart also demonstrates that the chloride objective of 250 mg/l has been achieved in all years except 1977.

CCWD-21

The referenced statement in the EA/IS, that “several of the reasonably foreseeable project could result in improved water quality” was not intended to suggest that the EA/IS was relying on any other project to “mitigate” Intertie effects. In fact, Intertie direct and cumulative effects were found to be less than significant in their own right. The basis for a determination of no significant cumulative impacts is the quantitative analysis of the CALSIM II simulation. The qualitative analysis identifies that the projects described there have not been sufficiently defined to be considered “reasonably foreseeable,” which is why they are addressed qualitatively. The statement was intended to acknowledge that there were foreseeable (at the time of document preparation) projects and actions that were intended to benefit water quality, but were not included in the DSM2 simulations.

The Veale and Byron Tract drainage projects do not eliminate drainage. Through the use of a discharge diffuser, the drainage is completely mixed so as to redistribute the salt load between CCWD, CVP, and SWP intakes. In effect, where the bulk of the salt load is currently drawn up by CCWD, the use of a diffuser would lessen the same salt burden on CCWD and increases the salt burden on other Delta exporters.

CCWD-22

The Authority has determined that it is the proper lead agency under CEQA. California regulations define “Lead Agency as the public agency which has the principal responsibility for carrying out or approving a project” (14CCR15367). The principal thrust of the project is to achieve increased DMC capacity to utilize CVP pumping for CVP purposes, with integration of the CVP-SWP as an additional purpose. The San Luis & Delta-Mendota Water Authority (Authority) is the party that performs operations and maintenance on the DMC, and Congress has authorized the evaluation and construction of the Intertie as an operation and maintenance activity [P.L. 108-361].

Reclamation and the Authority will enter into an agreement with DWR to identify responsibilities and procedures for operation of the Intertie. DWR will also have a role because it is ultimately responsible for the operation of the pumping plant at Banks and for SWP integration with the CVP. While the role of DWR is not one of “principal responsibility for carrying out” the Intertie project, even if DWR did meet CEQA’s Lead Agency criteria, where more than one agency meets the Lead Agency criteria then the first to act should be the lead agency. The Authority will need to act first to enter funding and other agreements with Reclamation before the project will occur and before any action by DWR.

The factual circumstances are different than those in *Planning and Conservation League v. Department of Water Resource*. In the Planning and Conservation

League case, DWR was a party to all of the contracts and the one responsible for administering the SWP, whereas the local entity's only role over the entire action was to perform the environmental review. Here the Authority both will act first and is Reclamation's agent to operate and maintain the DMC, with a principal role in carrying out the project. For these reasons, the Authority is the appropriate Lead Agency for CEQA purposes.

CCWD-23

The alternatives analysis complies with NEPA/CEQA guidelines for an EA/IS. An EA/IS is required to address the No Action and Proposed Action, which this document does. The analysis of growth-inducing impacts is sufficient. The EA/IS properly analyzes the effects that could result from construction of the Intertie and from additional water supplies available to CVP contractors. The water delivered as a result of this project will go to existing CVP contractors and is not growth inducing for the following reasons:

1. Water will be used to compensate for reductions of historic delivery/supply to CVP contractors.
2. Water will be used in the existing CVP service areas and place of use.
3. Water will be delivered in the same manner, using the existing diversion facilities as past CVP deliveries.
4. No change in the contract amount of CVP contracts.
5. Other sources available are available to some CVP water contractors.

Any future expansion of the Intertie would be subject to separate environmental compliance and a new Feasibility Study as defined in section 4.2.1. The Intertie as being constructed/implemented is the proposed action and has independent utility as a stand-alone project.

SDWA—South Delta Water Agency John Herrick

SDWA-1

An EA/IS is prepared to provide sufficient evidence and analysis for determining whether to prepare an EIS/EIR, or a finding of no significant impact/negative declaration. The criteria for preparation of a FONSI/NegDec under NEPA and CEQA do not require that a Project have absolutely no effect whatsoever, but that there be no substantial evidence that a significant impact on the environment may occur. The analysis provided in the EA/IS acknowledges potential impacts and has demonstrated that there are no significant impacts from the proposed action.

Furthermore, the comments regarding potential significance all disregard the fact that the Project will be operated as part of the CVP and SWP, within all of the existing hydrologic and regulatory constraints applicable to both of those projects, as analyzed in the BO for CVP OCAP. Operation of the Intertie must be within those constraints. The EA/IS has properly analyzed the Project within the context of those operations. Comments that fail to acknowledge that Project operations will be constrained by regulations applicable to the CVP and SWP are not fact-based considerations. The responses to comments below describe the errors, lack of factual background, and speculation that lead the Authority to conclude that they do not present substantial evidence supporting a fair argument that the Intertie may have a significant effect on the environment.

SDWA-2

We believe that a sufficient number of alternatives were evaluated for the EA/IS. A number of other alternatives were considered, but failed to meet the Purpose and Need for the action and were eliminated from further consideration. This project is intended minimize conveyance restrictions in the DMC. Relying only on JPOD would still result in an unmet need for additional CVP south-of-Delta water supplies, a mismatch between authorized Tracy Pumping Plan export capacity and DMC conveyance capacity, and would not allow for the maintenance and repair of CVP Delta export and conveyance facilities.

SDWA-3

A purpose of the proposed project is to “to minimize the DMC conveyance conditions that restrict the CVP Tracy Pumping Plant to less than its authorized pumping capacity of 4,600 cubic feet per second (cfs).” Evaluation of alternatives that reduce CVP demand, while perhaps reducing the gap between deliveries and demand, will not address conditions restricting the fully authorized use of Tracy Pumping Plant, and would not allow for the maintenance and repair of CVP Delta export and conveyance facilities. We believe a sufficient number of alternatives were evaluated.

SDWA-4

The comment is factually incorrect. The modeling of the future condition (2020 baseline) does include greater upstream watershed water use associated with land use changes (agriculture and urbanization). These upstream changes result in impacts to the CVP and SWP water supplies for use in satisfying Delta obligations, for allocation to fish and wildlife purposes, or for delivery to contractors. The results of such changes are included in the water supply modeling of the Intertie.

Greater urbanization in the upper watersheds may not actually decrease water supplies for the CVP. If urbanization is accomplished through agricultural land conversion then it is likely that an increase in water supplies will be the result due to reduced consumptive use and higher return flows. Furthermore, we are not aware of any “area of origin” rights in place now or in the future that are at the stage of certainty to be considered reasonably foreseeable under NEPA/CEQA. Therefore, it is speculative to include any such future potential claims of this sort.

SDWA-5

The commentor confuses the hypothetical bounding analysis that was performed for setting. This analysis was presented in the EA/IS in order to develop an understanding of CVP and SWP pumping effects under hypothetical conditions such as zero pumping (unimpaired condition) and maximum pumping. The extremes in zero pumping and maximum pumping set the “bounds” of CVP and SWP effect on stage and flow in order to ascertain water level and circulation response. This demonstrated that pumping had small incremental effects on south Delta stage, and that large steps in pumping were required to produce noticeable changes in stage (see Table 3.3-1 and Figures 3.3-1 and 3.3-2). It is important to understand, however, that this bounding analysis did not address the effects of the Intertie.

This bounding analysis was performed as a case example on a single August month in a single year of the hydrologic record (water year 1997). A representative base flow of 1,500 cfs at Vernalis was used for this bounding analysis case example. To present the effects of pumping on stage, barriers were not included in the bounding analysis.

In contrast, Intertie effects were simulated using the 16-year DSM2 analysis with CALSIM boundary flows. In this dynamic simulation, Vernalis flows were governed by hydrologic conditions of record, operations of the San Joaquin facilities, and requirements at Vernalis. Summertime flows in this dynamic simulation varied from 677 cfs to over 17,000 cfs. This range in simulated flows encompasses the variability experienced in the past several years.

Effects of the Intertie were presented in Figures 3.3-3 through 3.3-12. Table 3.3-2 tabulated simulated results of the Intertie on stage and flow for an example of the maximum project effects, based on the period spanning water year 1976–1980.

SDWA-6

Again the commentor confuses the hypothetical bounding analysis developed for setting with the impact analysis. Please see response to SDWA-5 for further explanation. As explained in response to SDWA-5, the dynamic analysis was

used for the evaluation of Intertie effects. The dynamic analysis included temporary barriers in both the baseline (2001 and 2020) and project alternatives (2001 and 2020).

The EA/IS evaluated the effects of stage change based on the magnitude of change between the project and the baseline as well whether the minimum stage would be lowered during the April to October irrigation season. Stage in the south Delta is not static. Due to tides, the stage rises and falls multiple times throughout the day. DSM2 was used to simulate effects of the Intertie. The many data points generated in the DSM2 simulations were sorted by year and month and the results of the sorting presented in Table 3.3-2. In the example period shown, the maximum adverse effect of the Intertie on the minimum stage is 0.05 feet (about one half inch) with the majority of simulated minimum stages showing no change between the baseline and the Intertie (this is to be expected since the hypothetical bounding analysis demonstrated that noticeable changes in stage required changes in pumping on the order of several thousand cfs, not several hundred cfs as is the case with the Intertie). Figures 3.3-3 through 3-3-12 further demonstrate throughout the whole simulated period that no significant change between the baseline and project would occur. Compared to the normal tide induced stage change of 3 feet over a tidal cycle, the occasional changes in stage of less than an inch would not affect siphons efficiency.

DSM2 simulated at some locations in the baseline that the minimum stage would fall below 0.0 feet mean sea level (msl) between April and October. It is at stages of less than 0.0 feet msl that effects to siphons are expected to occur. However, the few irrigation season months that showed a minimum stage change of less than one half inch (few as demonstrated by Table 3.3-2) would not result in any noticeable reduction in efficiency or energy costs. It is important to remember that within a tidal cycle, the time water levels remain at the minimum stage is short and the remainder of the time the stage is above the water level that impacts siphons. Furthermore, by June stage is maintained above 0.0 feet msl at most locations by the temporary barriers through the remainder of the irrigation season.

SDWA –7

The Intertie does not fall under the category of JPOD and, as such, is not responsible for a water level response plan to use existing capacity at Tracy. Rather, the temporary barrier program is holding minimum stage at 0.0 feet msl. Periodically however, the Intertie may be used via Banks pumping plant when the Tracy pumping plant or fish facility are being maintained. The JPOD would then be used and the response plans, which limit impact, followed. In this situation though, there is no increase in exports because use of the JPOD is in lieu of Tracy pumping.

SDWA-8

Simulations of Old River at the Tracy Road Bridge, the nearest simulation location to Tom Paine Slough shows less than significant impacts to stage related to the Intertie. Reclamation believes and the State Board agrees, that the Response Plan is adequate. While Tom Payne Slough has experienced problems recently, it is an assumption on the part of the commentor that exports are the cause. The Department of Water Resources is investigating the source of the problem and as an initial step they have cleared out much of the water hyacinth in this area and are monitoring the situation.

SDWA-9

The commentor is confusing the hypothetical bounding analysis for the dynamic analysis of Intertie effects. See responses to SDWA-5 and SDWA-6. Simulation results for the Intertie shows that for the majority of time the Intertie has no effect on stage, and where a change is simulated the change would be no greater than about one half of one inch. This is not considered a significant effect.

SDWA-10

The EA/IS addresses the Intertie's simulated effects on circulation in Section 3.3, Delta Tidal Hydraulics, effects on water supply in Section 3.2, Water Supply and Delta Management, and effect on water quality in Section 3.3, Water Quality. It is true that circulation and flow are closely tied to issues of water quality; hence the water quality analysis is based on these simulations. The effects of the Intertie on tidal flows is summarized for the period of water years 1976 to 1980 in Table 3.3-2 and graphically depicted for all simulated years in Figures 3.3-3 through 3.3-12.

Permanent barriers, proposed as part of the South Delta Improvement Program (SDIP), were not simulated. Temporary barriers, however, were simulated. The simulated direct and cumulative water quality effects of the Intertie were analyzed and found to be less than significant. Please see responses to CCWD-3 and CCWD-4 with regard to similar water quality comments.

SDWA-11

The reference to the 0.54-foot stage change is to a value presented in Table 3.3-1 of the hypothetical bounding analysis. Effects to stage from the Intertie are much less (in the hundredths of a foot).

The state of the CALSIM modeling is such that all flows can only be approximated as monthly averages. CALSIM results serve as the freshwater

boundary conditions to the DSM2 model. The DSM2 model can simulate hydrodynamics and water quality on a smaller time step; however, DSM2 daily differences are regularly exaggerated due to “lags” between one simulation of monthly step changes and another. The monthly reporting statistic is the appropriate descriptor of simulated results. See also the response to CCWD-7.

SDWA-12

The commentor refers to measurement locations related to EC objectives that do not come into effect until April 1, 2005 and that were tied to the completion and operation of the permanent barriers. Nevertheless, this future EC objective of 700 uS/cm was recognized, and in the appropriate figures and discussion of the Intertie’s effects with regard to this imminent standard were evaluated (see Figures 3.4-13 through 3.4-16).

Simulation locations used in the water quality analysis were selected because they are either existing monitoring locations or representative of conditions in the south Delta. Simulations were conducted for Middle River (see Table 3.4-1 and Figures 3.4-15, 3.14-16). DSM2 provides output for the Brandt Bridge location, however this data was not included in the EA/IS because it was believed to be justly represented by other simulation locations (consequently, similar judgments were made for other possible locations). In response to the commenter, the DSM2 output was reviewed for this Brandt Bridge location. In summary, the DSM2 model indicated an average increase of 0.38 uS/cm EC at this location, a less than significant increase in EC.

SDWA-13

See response to SDWA-11.

SDWA-14

Measurement of salinity in the field and simulation of salinity in models have inherent limitations in accuracy, particularly when dealing with a dynamic system such as a tidal estuary. These limitations prevent absolute determinations or conclusions drawn from results that fall within the accuracy limitations of the measurement or modeling method, specifically small changes. The average increases in EC used to evaluate impacts were very small, in the range of 1-8 uS/cm, and are considered to fall within the limitations of accuracy. Stated another way, the small average changes simulated for the Intertie are virtually equivalent to the baseline condition, and thus no degradation would occur.

Water quality impacts were evaluated using existing adopted water quality standards as well as substantial adverse changes in water quality affecting

beneficial uses, including municipal drinking water supply and agriculture. In the latter case, a change equivalent to 10% of the adopted water quality objective was employed as a reference for indicating the potential for beneficial use degradation, not as an absolute indication of significance. A change reported to be greater than 10% of the baseline triggered an evaluation of that change to determine if it would result in an impact to beneficial uses. The column titled “number of changes >100 uS/cm” lists the number of average monthly changes that surpass this reference line. As indicated, in no month was this reference exceeded. These two thresholds ensure that project effects were evaluated as to whether they would exceed water quality standards or if they would cause a net adverse change in water quality affecting beneficial uses.

The simulations did show a few instances where these thresholds are exceeded at various monitoring locations (see Figures 3.4-15 through 3.4-18). These instances were reviewed as part of the analysis and were believed to be artifacts in the CALSIM and DSM2 modeling related to the time step lags (see response CCWD-7) and CALSIM’s underestimate of the necessary Delta outflow required to protect the EC objective. These salinities above objectives would not be allowed to occur in real day-to-day operations.

SDWA-15

The DSM2 modeling included the effects of the four temporary barriers. Seasonal installation and removal of the barriers were appropriately included in the analysis (both when they are in place and when they are not in place). In that respect, the baseline and project conditions appropriately account for the placement of the barriers, and therefore, do not rely on the barriers to mitigate for Intertie effects. In fact, the barriers are seasonally installed and removed as part of a settlement agreement between SDWA and the California Department of Water Resources, and have generally been in place since the early 1990’s. When installed, the temporary barriers function to maintain water levels in south Delta channels, but are not installed to mitigate for the Intertie or any other future project. As simulated, with the barriers in or out as appropriate depending on the season (generally April 15 to September 30 for the agricultural barriers and September 15 to November 30 for the Head of Old River barrier), the Intertie does not have a significant effect on water levels, circulation, or water quality.

The EA/IS does not ignore effects downstream of the barriers. Simulation locations at Clifton Court Ferry and the Highway 4 Bridge are both downstream of the barriers.

SDWA-16

The EA/IS does analyze the impacts to dissolved oxygen (DO) in the Stockton Deep Water Ship Channel where a DO Total Maximum Daily Load (TMDL) is

in effect. This analysis can be found beginning on page 3-50. Impacts to DO were found to be less than significant.

As with other water quality parameters, DO is sensitive to changes in flow. Dissolved oxygen problems in the Deep Water Ship Channel correlate well with flow. To the extent that flow is simulated to change in other Delta channels, DO can be analyzed. As shown in Figures 3.3-3 through 3.3-16, the Intertie would not significantly change baseline flows, and therefore, would not significant effect DO in Delta channels.

SDWA-17

No specific implementation approach or actions have been identified in the salt and boron TMDL, so at present it is speculative to judge the effects of the salt and boron TMDL on summer flows in the Interior Delta.

The existing Environmental Water Account (EWA) was modeled as part of the baseline. Therefore, the simulated Intertie effects account for the range of flow effects the EWA might have on Delta hydrodynamics.

SDWA-18

The commentor incorrectly compares the water supply results between the 2001 and 2020 analysis. Under conditions of a 2001 level of development, the Intertie is expected to increase CVP exports by an average of 34 thousand acre-feet (TAF) per year. Under conditions of a 2020 level of development, the Intertie is expected to increase CVP exports by an average 31 TAF per year. The two should not be subtracted.

There are corresponding decreases in average exports at the SWP. This is expected due to the arrangement between CVP and SWP to increase CVP capacity as accomplished by the Intertie. In effect, the Intertie returns water from the SWP to the CVP; part of the average gains in CVP exports is accomplished through the return of CVP water from the SWP which are realized as average decreases in SWP exports.

SDWA-19

As the federal lead agency for the South Delta Improvements Project (SDIP) EIR/EIS, Reclamation is of course aware of the status of work on that project. While work on SDIP was ongoing, at the time of publication of the Draft Intertie EA/IS, the draft SDIP EIR/EIS had not yet been published. Because SDIP is a project that has undergone many changes, and may yet undergo further changes, the use of quantitative modeling of SDIP in the draft Intertie EA/IS was deemed

too speculative. Freeport, Long-Term EWA, and the Intermediate Integrated Operations were also not included in the quantitative cumulative impacts analysis because they were not sufficiently defined to be considered “reasonably foreseeable” at the time that the model runs were made. These potential projects as well as others were however, included in a qualitative cumulative impact analysis. In particular, the EA/IS includes a qualitative discussion of Freeport and some quantitative discussion of transfers. JPOD Stage 3 can be considered part of the transfer element. Transfers were evaluated for the months of July to September. Because the Delta outflow would not change, there are no anticipated cumulative effects from these transfers; outflow would be held to a constant or rise with carriage water. The possible future effects from all CVP and SWP operations have been properly evaluated in the 2020 CALSIM and DSM2 modeling.

TMDL processes for salt and boron and DO, as well as the Ag Waiver Program, do not have any specific actions identified with them. The objective of these programs is to improve water quality. The extent to which they may or may not decrease flows on the San Joaquin River is speculative.

The commentor incorrectly interprets the document as not including barriers in the 2001 and 2020 baseline scenarios and including barriers in the 2001 and 2020 proposed action scenarios. Temporary barriers were included in both baseline and project scenarios.

SDWA-20

The commentor is incorrect in their statement that Intertie effects on water quality, quantity, and levels were not addressed. The EA/IS addresses direct and cumulative effects of the Intertie on all three of these resources, as presented in Section 3.2, Water Supply and Delta Water Management, Section 3.3, Delta Hydraulics, and Section 3.4, Water Quality. The analysis concluded that there were no significant effects.

An EA/IS is prepared to provide sufficient evidence and analysis for determining whether to prepare an EIS/EIR, or a finding of no significant impact/negative declaration. The criteria for preparation of a FONSI/NegDec under NEPA and CEQA do not require that a Project have absolutely no effect whatsoever, but that there be no substantial evidence that a significant impact on the environment may occur. The analysis provided in the EA/IS acknowledges potential impacts and has demonstrated that there are no significant impacts from the proposed action.

As the federal lead agency for the South Delta Improvements Project (SDIP) EIR/EIS, Reclamation is of course aware of the status of work on that project. While work on SDIP was ongoing, at the time of publication of the Draft Intertie EA/IS, the draft SDIP EIR/EIS had not yet been published. Because SDIP is a project that has undergone many changes, and may yet undergo further changes,

the use of quantitative modeling of SDIP in the draft Intertie EA/IS was deemed too speculative.

The Administrative Record for this project would not include the modeling for the SDIP since that proposed action is not part of the existing conditions. The Bureau's 1980 report on the effects of the CVP on the Delta and San Joaquin River has been superseded by many other regulatory requirements that are more appropriately used in the modeling framework. The environmental baselines used for CEQA and NEPA compliance were the 2001 existing condition and 2020 future no action.

PCL—Planning and Conservation League Mindy McIntyre

PCL-1

See response to CCWD-22.

PCL-2

Each claim within the comment is developed in greater detail in the remainder of the comment letter. These claims are responded to below.

PCL-3

See response to CCWD-22.

PCL-4

An EA/IS is prepared to provide sufficient evidence and analysis for determining whether to prepare an EIS/EIR, or a finding of no significant impact/negative declaration. The criteria for preparation of a FONSI/NegDec under NEPA and CEQA do not require that a Project have absolutely no effect whatsoever, but that there be no substantial evidence that a significant impact on the environment may occur. The analysis provided in the EA/IS acknowledges potential impacts and has demonstrated that there are no significant impacts from the proposed action.

Furthermore, the comments regarding potential significance all disregard the fact that the Project will be operated as part of the CVP and SWP, within all of the existing hydrologic and regulatory constraints applicable to both of those projects, as analyzed in the BO for CVP OCAP. Operation of the Intertie must be within those constraints. The EA/IS has properly analyzed the Project within the context of those operations. Comments that fail to acknowledge that Project operations will be constrained by regulations applicable to the CVP and SWP are not fact-based considerations. The responses to comments below describe the errors, lack of factual background, and speculation that lead the Authority to conclude that they do not present substantial evidence supporting a fair argument that the Intertie may have a significant effect on the environment. **PCL-5**

The BO did not make a finding of significance as is required under NEPA. Both the BO and the EA/IS identified that increased pumping at Tracy as a result of having the Intertie in place would likely result in some increases in entrainment. The BO made a finding of No Jeopardy to the continued existence of salmonid species. The Intertie operation was included in the formal consultation portion of the NOAA opinion. Through the NEPA process it was concluded that although there may be some increased entrainment, this would not appreciably reduce survival or recovery of salmonid species. This determination is consistent with the Biological Opinion.

We disagree with the commentor that the National Marine Fisheries Service's Biological Opinion (NOAA BO) on the Long-Term Central Valley Project and State Water Project Operations Criteria and Plan found that the Intertie would have multiple and significant impacts on fisheries of the Delta system. The simulated direct take at the CVP/SWP pumps is anticipated to increase on average by 10-12 percent over the baseline for all three listed Central Valley salmonids (page 187-188 of the NOAA BO). However, as indicated in Table 7, simulated effects on populations are generally less than 1%, although simulated effects on steelhead approach 2% (assuming similar predation losses, which may not be true because juvenile steelhead are larger and may be better able to avoid predators than juvenile Chinook salmon). NOAA Fisheries went on to state (page 188): "Increased pumping would entrain less than one percent of the juvenile winter-run Chinook salmon population entering the Delta under today and 2020 conditions. Compared to the temperature related losses upstream, the pumping loss would generally be less than the upstream losses except in critically dry years (i.e., using smolt equivalents, 0.76 percent loss in smolts < 1.0 percent loss in eggs/fry mortality)."

Furthermore, NOAA Fisheries stated (page 188): "Continual monitoring at the Delta pumps and use of adaptive management process (i.e., DAT and WOMT) protective actions could minimize the likelihood of this increase occurring." NOAA Fisheries then qualifies the statement: "However, the benefits of these protective actions (i.e., export curtailments through the use of CVPIA(b)(2) and EWA water) at the population level appear to be small and not well understood (Kimmerer 2002) and are therefore used primarily to avoid exceeding incidental

take levels.” The qualification, however, does not diminish the conclusion that is based on the best available information and modeling.

CVP and SWP Delta pumping has not been shown to affect the proportion of flow drawn off the Sacramento River and into either Georgiana Slough or the Delta Cross Channel (see the methods section for the EA/IS). NOAA Fisheries, on page 191, stated the relationship of pumping to DCC and Georgiana Slough flows: “The increase in pumping will not change what goes through the DCC or Georgiana Slough into the interior Delta so any increase in number of fish has to be mostly fish that are in the Delta anyway not new fish entering due to increased pumping.”

According to the terms and conditions on pages 217-218:

3.b. Reclamation and DWR shall submit weekly DAT reports and an annual written report to NOAA Fisheries describing the results of real-time monitoring of Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon and Central Valley steelhead associated with operations of the DCC and CVP and SWP Delta pumping facilities.

Furthermore,

4.b. Reclamation and DWR will monitor the loss of juvenile Sacramento River winter-run Chinook salmon at the CVP and SWP Delta pumping facilities and will use that information to determine whether the anticipated level of loss is likely to exceed the authorized level of 2%, cumulatively, of the estimated number of juvenile Sacramento River winter-run Chinook salmon entering the Delta annually. If either agency or NOAA Fisheries determines the rate of loss has exceeded 1%, cumulatively, Reclamation and DWR shall immediately convene the Water Operations Management Team to explore additional measures which can be implemented to reduce the rate of take and ensure the identified 2% level of take is not exceeded. If either agency or NOAA Fisheries determines the rate of loss is sufficiently high that the estimated loss will likely exceed the 2% identified level, consultation shall be reinitiated immediately.

4.c. Reclamation and DWR will monitor the loss of identified Central Valley springrun Chinook salmon surrogate release groups at the CVP and SWP Delta pumping facilities and use that information to determine whether the cumulative estimated level of loss is expected to exceed one percent. If the estimated rate of loss approaches 1% Reclamation and DWR shall immediately convene the Water Operations Management Team to explore additional measures which can be implemented to reduce the rate of take. If the rate of loss exceeds 1%, consultation shall be reinitiated immediately.

4.d. Reclamation and DWR will monitor the loss of Central Valley steelhead at the CVP and SWP Delta pumping facilities and use that information to determine whether the cumulative estimated level of loss

is expected to exceed one percent of the juvenile production estimate (JPE) for steelhead entering the Delta. Until such time that a suitable JPE has been developed, the cumulative take at the CVP and SWP delta pumping facilities shall not exceed 3,000 steelhead (juveniles and adults combined). If the take level anticipated for Central Valley steelhead is exceeded, Reclamation and DWR shall immediately convene the Water Operations Management Team to explore additional measures which can be implemented to reduce the rate of take. If suitable measures to reduce the rate of take can not be implemented, consultation shall be reinitiated immediately.

Clearly, Reclamation intends to use the adaptive management process (i.e., DAT and WOMT) and implement protective actions that could minimize the likelihood adverse increases in entrainment losses. Consequently, we do not agree that National Marine Fisheries Service found that existing mitigation would not mitigate the effects of proposed increased pumping.

PCL-6

Please see the response to PCL-3. Based on the statements by National Marine Fisheries Service described in the previous response (response to PCL-3), we do not agree that the NOAA Fisheries believes the mitigation of effects of the Intertie are dependent on whether EWA becomes fully functional. The commentor's characterization of NOAA Fisheries' conclusions is based on a description on page 141 of the NOAA BO. NOAA Fisheries indicated that: "In early consultation study 5, the use of EWA reduces Tracy pumping back to 4200 cfs from November through February." However, consultation and assessment of effects was based on studies 4a and 5a. This is supported by NOAA Fisheries' statement in the same paragraph: "The Intertie allows Tracy pumping to increase from 4200 cfs to the full design capacity of 4600 cfs with or without the SDIP being implemented (formal consultation CALSIM studies 4a and 5a)." The comment therefore is based on an erroneous citation of the BO.

PCL-7

Relative to your comment that the National Marine Fisheries Service's Biological Opinion indicates that the only potential mitigation for the Intertie is long-term EWA, please see the response to PCL-4.

The EA/IS conclusion that the impacts are less than significant and mitigation measures are unnecessary is based on acknowledgment of impacts and is consistent with the expert opinion in the NOAA BO. Our conclusions are consistent with and not contrary to the substantive analysis of the expert agency. The comment is based on erroneous characterizations of both the EA/IS and the BO. Although the methods used in the BO and in the EA/IS were slightly different, the level of effects described in the EA/IS are consistent with the level

of effects described in the NOAA BO. For example, effects on winter-run Chinook salmon are described on page 3-65 of the EA/IS:

Under Existing Condition, simulated annual losses of winter-run Chinook salmon vary from about 1,000 juveniles to 5,000 juveniles (Figure 3.5-13). Entrainment losses increase slightly under the Proposed Action, approaching a 15% increase in one year. The simulated change in entrainment is minimal in most years, and the proportion of annual winter-run production that could be lost would likely be small. In addition, reduced entrainment for some years tends to balance increased entrainment in other years. Based on the juvenile production estimate, an estimated 30 thousand to 2.3 million winter-run juveniles historically have passed through the Delta each year (1992–2002). Entrainment losses of 5,000 juveniles would make up a relatively small proportion of the total annual winter-run production.

Figure 3.5-13 illustrates the generally small percentage increase in entrainment losses for the EA/IS, consistent with levels discussed in the NOAA BO. The simulated direct take at the CVP/SWP pumps is anticipated to increase on average by 10-12 percent over the baseline for all three listed Central Valley salmonids (page 187-188 of the NOAA BO). However, as indicated in Table 7, simulated effects on populations are generally less than 1%. NOAA Fisheries went on to state (page 188): “Increased pumping would entrain less than one percent of the juvenile winter-run Chinook salmon population entering the Delta under today and 2020 conditions.”

The EA/IS also acknowledges ongoing measures that would ensure relatively low entrainment losses (page 3-65 of the EA/IS):

Entrainment losses that likely exceed 2% of the annual production would result in reinitiation of consultation with NOAA Fisheries and implementation of measures to ensure that the authorized take is not exceeded (National Marine Fisheries Service 1995). The impact of increased entrainment losses on winter-run Chinook salmon is determined to be less than significant because the increase in proportion of the population lost would likely be small, and reinitiation of consultation would minimize or avoid any substantial increase over existing losses.

This conclusion and statement of CVP and SWP action described in the EA/IS is consistent with the conclusions in the NOAA BO. Ongoing measures would be implemented to minimize future effects, including effects of the Intertie. NOAA Fisheries stated (page 188): “Continual monitoring at the Delta pumps and use of adaptive management process (i.e., DAT and WOMT) protective actions could minimize the likelihood of this increase occurring.” Please see the response to PCL-3 for a more complete description of the NOAA BO analysis and the reasonable and prudent measures that will be implemented to protect winter-run Chinook salmon, spring-run Chinook salmon, and steelhead. The EA/IS and NOAA BO assessments and conclusions, although not identical, are consistent.

PCL-8

We have reviewed the NOAA and FWS analysis. Our conclusion of no significant impact is correct and is consistent with the expert opinions. Both the NOAA and FWS biological opinions concluded that the continued operation of the CVP and SWP would not jeopardize the continued existence of either the Delta smelt, or listed anadromous species. This opinion included the operation of the Intertie project.

PCL-9

We believe that the small percentage increase in entrainment is less than significant for the reasons explained on page 3-65 of the EA/IS. Our conclusions of less than significance are based on our significance criteria, which are based on CEQA and NEPA guidelines. The following significance criteria are provided on pages 3-56 and 3-57:

Under NEPA and CEQA, impacts are considered significant when project actions, viewed with past, current, and reasonably foreseeable future projects, potentially reduce the abundance and distribution of the assessed fish species (Public Resources Code Section 21083; Guidelines Section 15065). Significant impacts may occur through substantial:

- interference with the movement of any resident or migratory fish species;
- long- or short-term loss of habitat quality or quantity;
- adverse effects on rare or endangered species or habitat of the species; or
- adverse effects on fish communities or species protected by applicable environmental plans and goals.

To be determined significant, an impact would likely result in reduction of species population abundance and distribution. Change in survival, growth, reproduction, and movement for any given life stage, however, may not affect the abundance and distribution of a species. Quantifying population level effects is complicated by annual variation in species abundance and distribution in response to variable environmental conditions that may or may not be driven by human activities. In addition, beneficial effects may offset adverse effects for specific aspects of specific life stages, resulting in beneficial or minimal impacts on the overall population.

The significance thresholds under NEPA and CEQA for species population abundance and distribution require maintenance of population resilience and persistence. Resilience is the ability of the species to increase in abundance and distribution in response to improved environmental conditions. Persistence is the ability of the species to sustain itself through periods of adverse environmental conditions. The thresholds include:

- any permanent change in an environmental correlate that would substantially reduce the average abundance of the population over a range of weather related conditions (e.g., water year types);
- any change in an environmental correlate that would permanently limit the geographic range and the seasonal timing of any life stage; and
- any potential reduction in abundance for years with deficient environmental conditions (e.g., water years 1987–1991 or years when weather-related conditions fall below the lowest 20th percentile).

The significance criteria applied in the EA/IS are consistent with CEQA and NEPA guidelines. Based on existing information and available modeling tools, the relatively small proportion of winter-run Chinook salmon, spring-run Chinook salmon, and steelhead populations affected by CVP and SWP Delta pumping and the increase potentially attributable to Intertie operations would not be expected to substantially reduce or restrict the range of any fish species. The analysis and methods are provided in detail in the EA/IS (see responses to PCL-3, PCL-4, and PCL-5).

We are aware that the ESA requires agencies to engage in efforts to recover populations of threatened and endangered species. Based on the conclusion that losses to entrainment would not be expected reduce or restrict the range of any of the listed fish species, recovery of the listed populations should not be impaired.

PCL-10

We agree that an EIR/EIS must analyze alternatives, however, since this is an EA/IS the level of alternatives analysis is appropriate. The project purpose and need is to “minimize the DMC conveyance conditions that restrict the CVP Tracy Pumping plant to less than its authorized pumping capacity of 4,600 cfs.” Several alternatives other than an Intertie were considered, but eliminated for a variety of reasons. The purpose and need statement and alternatives development and analysis are appropriate for this study. The phrase “least environmentally damaging alternative” applies to an alternatives analysis conducted in compliance with Section 404 of the Clean Water Act, not a CEQA or NEPA compliance document.

PCL-11

The EA/IS analyzes appropriate alternatives that meet the purpose and need. While conservation, recycling, and groundwater treatment may meet some south-of-Delta needs, they would do nothing to minimize the conveyance conditions that restrict CVP Tracy pumping to less than its authorized pumping capacity of 4,600 cfs, or to allow for the maintenance and repair of the CVP Delta export and conveyance facilities.

PCL-12

The cumulative impacts analysis is appropriate. The SDIP and other actions are included in a qualitative analysis because they have not been sufficiently defined to be analyzed quantitatively.

PCL-13

The EA/IS provides a qualitative analysis of cumulative effects where information is not sufficient to allow a quantitative analysis. For example, many CALFED projects were in preliminary feasibility stages of review with no specific project alternatives defined. In these cases the cumulative effects analysis qualitatively addressed Intertie's effects to the extent that information was available.

Where sufficient information existed, the cumulative effects analysis was quantitative. Comparison of 2001 baseline to 2020 proposed action effects allows for this quantitative cumulative effects analysis. The qualitative analysis was added to this quantitative analysis where a project with interrelated effects was actively under consideration, but where the project was not sufficiently defined as to be included in the quantitative analysis. To quantify these effects would require a level of speculation inappropriate to the analysis.

PCL-14

In cases where sufficient detail on a project was available to facilitate a quantitative analysis, the quantitative cumulative effects of the Intertie were described. However, for the majority of actions proposed as part of water conveyance, water quality, and restoration efforts, insufficient information was available for the quantification of cumulative effects. In these cases, the potential cumulative effects, to the extent they could be identified, were described qualitatively. In many cases, the difference between cumulative and direct effects could not be quantified to any measurable degree, and thus, the impact conclusions were found to be similar between the two conditions.

PCL-15

The cumulative effects of the Intertie on fish are described on page 3-66 of the EA/IS. The impact conclusions are the same as described for existing conditions. Consequently, the conclusions in the EA/IS are consistent with the NOAA BO for the reasons explained in responses to comments PCL-3, PCL-4, PCL-5, and PCL-7.

The overall conclusion of the NOAA opinion (section VIII. Conclusion, p.203) is that after reviewing the best scientific and commercial information available, the current status of the species, the environmental baseline for the action area, the effects of the proposed action, and the cumulative effects, it was NOAA's opinion that the action as proposed was not likely to jeopardize the continued existence of winter-run salmon, Central Valley spring-run Chinook salmon, Southern Oregon/Northern California Coast Coho salmon, Central Valley steelhead, and Central California Coast steelhead. Accordingly, we believe that the conclusion of no significant impact to fisheries in the EA/IS is appropriate.

To the extent information existed to support a cumulative effects analysis this information was incorporated into the analysis. Numerous projects affecting Delta and tributary resources are in various stages of feasibility study and definition. The total of these projects allow quantitative and qualitative definitions of the effects related to the larger action plan, to which the comment alluded. To the extent possible, without unreasonable speculation, the cumulative effects of these projects were identified and found to be less than significant.

PCL-16

We have used the best available data and the best available modeling tools. The data and modeling tools are similar and consistent with the data and modeling tools used in the NOAA BO. Consequently, the EA/IS analysis supports the conclusions to the extent required under CEQA and NEPA.

PCL-17

We agree that the National Marine Fisheries Service's Biological Opinion provides extensive discussion of the difficulties in determining how pumping increases correlate with increased fish mortality. The difficulties have been identified in the methods section of the EA/IS. We have used the best available data and the best available modeling tools. The data and modeling tools are similar and consistent with the data and modeling tools used in the NOAA BO. Consequently, the EA/IS analysis supports in the conclusions to the extent required under CEQA and NEPA.

PCL-18

Please see responses to PCL-3, PCL-4, PCL-5, PCL-7, and PCL-15.

PCL-19

At this time there is no consensus regarding the potential impact of global warming on agricultural demand or climate in the central valley. It is possible that an increase in ambient temperatures would increase water demand. It is also possible that a shift in weather patterns could increase or change precipitation patterns, thereby decreasing demand for irrigation. Therefore, it is considered highly speculative to base future water demand on the effects of global warming, as the probability of any future changes is simply unknown. Furthermore, any change would occur regardless of this action or alternative. Additionally, more flexibility in managing water, as provided by the Intertie, may be one of the means to address future changes in hydrology that may be manifested by global warming.

PCL-20

See response to CCWD-23.

PCL-21

See response to CCWD-23.

PCL-22

See response to PCL-4.

DK—Delta Keeper Bill Jennings and Dan B. Odenweller

DK-1

The comment is noted.

DK-2

A thirty-day review period for the EA/IS was provided from November 29th to December 30th of 2004. Since the NOAA biological opinion was released a month prior to the release of this document, the 30-day public review of the EA/IS allowed sufficient time for consideration of the biological opinion.

DK-3

The use of CALSIMII and DSM2 remains the standard for comprehensive modeling of the Sacramento/San Joaquin system.

DK-4

A separate program is already in place to address conditions at the Tracy Fish Collection Facility. Additional pumping facilitated by the Intertie will be in accordance with all existing regulatory requirements.

DK-5

The Tracy Fish Collecting Facility has been added to the list of actions on page 3-86 and 3-87 of the EA/IS. Appropriate revisions can be found in Chapter 3, Revisions to the EA/IS in this document. Improvements at the facility would likely increase the effectiveness of the fish screening capability of the CVP.

SWRCB—State Water Resources Control Board Diane Riddle

SWRCB-1

The Lead Agencies recognize their obligations and responsibilities under JPOD and Decision 1641 as noted in Section 2.3.2, Operations, on page 2-4 of the EA/IS. Operation of the Intertie will comply with the requirements for use of JPOD as contained in Decision 1641 as well as California Water Code requirements pertaining to temporary urgency petitions.

SWRCB-2

See response to SWRCB-1.

DOT—California Department of Transportation Timothy C. Sable

DOT-1

Construction would not encroach onto any State Right of Way.

MID—Modesto Irrigation District Celia Aceves

MID-1

The comment is noted. The stated minimum clearance of 17' from overhead transmission facilities will be respected.

Comment Letters Received

ATTACHMENT A

COMMENTS

Public Draft Delta Mendota Canal/ California Aqueduct Intertie
Proposed Finding of No Significant Impact & Environmental Assessment/ Initial Study
DWR December 28, 2004

Comment No.	Page /Paragraph Reference	Comment
1	Page 2, FONSI, Proposed Action, third paragraph Page 2-3, Section 2.3 Proposed Action, third paragraph	DWR concurs that an agreement will be necessary to identify the responsibilities and procedures for operating the Intertie. Additionally, DWR believes a permanent easement for the Intertie, located within the SWP right-of-way, will be an acceptable method of addressing the placement of Federal facilities on property owned by the State of California.
2	Page 3, FONSI, first paragraph, fourth through sixth sentence	DWR will require a comprehensive pre- and post-construction assessment of the California Aqueduct integrity at the proposed intertie location and a contingency corrective action plan.
3	Chapter 3 – General	DWR recommends deleting the use of the term “entitlement” in regards to State water supplies. The preferred terminology is “contract water amounts” or “delivery amounts” (for both federal and State, though the governing settlement agreement only applies to the state). The other term “demand” should not be used in conjunction with the state water contract water supplies. The preferred nomenclature is “Table A water” or “Table A water amounts” or “long term water contract supplies”.
4	Page 3-98, Section 3.6.3 Environmental Consequences	The text indicates that construction would require some work in the southern end of the northernmost drainage, but that construction would take place when the drainage is dry. Please be aware that the ACOE has jurisdiction over this drainage, since it is seasonally flooded, and thus an ACOE permit may be required. Also, include reference to Section 2.3.5 "Environmental Commitments" when mentioning the “primary and secondary erosion control measures.”

DWR-1

DWR-2

DWR-3

DWR-4

DWR-5

DWR-6

Comment No.	Page /Paragraph Reference	Comment
5	Page 3-102, Section 3.6.4 Cumulative Impacts	<p>Recommend revision to discussion of cumulative impacts. While support is provided for the assertion that the proposed action will not significantly add to cumulative impacts, little or no information is presented regarding past, current and future projects. The following statement (pg. 3-103) is confusing: "...although many future projects could result in impacts on land-based resources, as described in Section 3.2.4, Water Supply Cumulative Impacts, none of these projects are located near the Proposed Action area." What and where are the land based resources that will be impacted by these projects? It is probably fine to incorporate by reference, e.g. "Past, present and future projects that could potentially result in cumulative impacts w/the proposed action are discussed in Section 3.2.4. However..." Then explain why they will not result in C.U. For example, provide information showing that the impacts will not occur in the project area.</p>
6	Page 2-2, last paragraph	<p>Recommended revision of this paragraph:</p> <p>"Some conveyance and storage facilities are joint CVP/SWP facilities. Both the CVP and the SWP use the San Luis Reservoir, O'Neill Forebay, and more than 100 miles of the California Aqueduct and its related pumping and generating facilities. Reservoir releases and Delta exports must be coordinated to ensure that each project receives its share of benefit from shared water supplies and bears its share of joint obligations to protect beneficial uses. Operation of the Projects is governed by the Coordinated Operation Agreement (COA). The COA was authorized in 1986 and is both an operations agreement and a water rights settlement. Currently, DWR and Reclamation are revising the COA. As a result, Reclamation has issued a Long-Term Central Valley Project Operations Criteria and Plan <u>and Biological Assessment (OCAP & BA) in June 2004</u>; a final OCAP is anticipated to be issued in late 2004. The OCAP outlines future CVP and</p>

DWR-7

DWR-8

Comment No.	Page /Paragraph Reference	Comment
		<p>SWP operations. In conjunction with the OCAP, a biological assessment was released that evaluates the potential effects of CVP and SWP operations on listed and proposed species. <u>Reclamation initiated A-formal Federal Endangered Species Act (ESA) consultation with the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries) on OCAP on March 15, 2004. USFWS issued its Biological Opinion on delta smelt regarding operations of the CVP and SWP on July 30, 2004. NOAA Fisheries issued its Biological Opinion on listed salmonids regarding operations fo the CVP and SWP on October 22, 2004. Reclamation and DWR operate the SWP and CVP consistent with these opinions.</u>"</p>
7	Page 3-37, Section 3.4.1, last paragraph	<p>Recommended revision of this paragraph:</p> <p>The DWR Delta <u>SWP Operations Compliance and Studies</u> Water Quality Section prepares and distributes a daily report of data on flows and EC to assist in decision-making on Delta water project operations.</p>
8	Appendix E – Page 22 and Page 47 – DSM2 Modeling Studies of the Delta Mendota Canal/ California Aqueduct Intertie	<p>It is not clear from the plots for EC at Martinez, if the model output or model input was used (boundary condition). If the model output for Martinez was used DWR considers this to underestimate the values used for boundary conditions and recommends revision.</p>

DWR-8
com't

DWR-9

DWR-10



Jeanne M. Zolezzi
jzolezzi@herumcrabtree.com

VIA EMAIL

December 29, 2004

Ms. Patricia Roberson
United States Bureau of Reclamation
2800 Cottage Way, MP-720
Sacramento, California 95825

Re: Stockton East Water District/NAPA Agreement Negotiations

Dear Patricia:

The following comments are made on behalf of the Stockton East Water District to the Delta Mendota Canal and California Aqueduct Intertie Environmental Assessment/ Initial Study dated September 2004 (EA/IS).

General Comments

The EA/IS studies construction and implementation of the Delta Mendota Canal and California Aqueduct Intertie as anticipated by the CALFED Record of Decision. Yet, the EA/IS does not mention the requirements imposed by Public Law No: 108-361, including the express prohibition against “increasing deliveries through an intertie” until the Secretary develops and initiates implementation of the program described in that law. **The program is a specific pre-requisite to implementation of the project described in the EA/IS, and the project description must include a discussion of the program requirements.**

SEWD-1

Appendix B

Appendix B describes the CALSIM II Modeling Studies of the Delta Mendota Canal/ California Aqueduct Intertie. Table 1 reveals that at current levels of development the environmental document estimated demands on the New Melones Project by the New Melones Interim Operations Plan (IOP). This is not correct for several reasons. First, the IOP inserts 90,000 acre-feet as the maximum allocation to CVP contractors from the project. The actual maximum demand for CVP contractors is 155,000 acre-feet, so the IOP is an inaccurate measure of demands at current levels of development. Further, the United States Bureau of Reclamation has deviated from the IOP in many years, so it cannot be used as a reliable predictor of demands or operations.

SEWD-2

In addition, Table 1 also uses the IOP to determine demands for the New Melones Project at 2020 levels of development. This is not reliable, both for the reasons mentioned above, and also because there is no intention that the IOP will govern operations of the New Melones Project in the long-term. Specifically, as mentioned above, Public Law 108-361 requires that the USBR update the New Melones operating plan to take into account, among other things, the actions to be implemented by the USBR to reduce the reliance on New Melones Reservoir for meeting water quality and fishery flow objectives.

SEWD-3

Table I also describes the IOP as governing operations for the New Melones Project under current levels of development; again, this is not accurate for the reasons described above. Finally, Table 1 uses the IOP to govern operations of New Melones Project at 2020 levels of development. This specifically contradicts the requirements of Public Law 108-361, which specifically requires reoperation of the New Melones Project to address the following changes in operations on the San Joaquin River:

SEWD-4

- ✓ Developing a program a recirculation program to provide flow, reduce salinity concentrations in the San Joaquin River, and reduce the reliance on the New Melones Reservoir for meeting water quality and fishery flow objectives through the use of excess capacity in export pumping and conveyance facilities.
- ✓ Implementing a best management practices plan to reduce the water quality impacts of the discharges from wildlife refuges that receive water from the Federal Government and discharge salt or other constituents into the San Joaquin River.
- ✓ Acquiring from water from willing sellers on streams tributary to the San Joaquin River or other sources to provide flow, dilute discharges of salt or other constituents, and to improve water quality in the San Joaquin River below the confluence of the Merced and San Joaquin Rivers, and to reduce the reliance on New Melones Reservoir for meeting water quality and fishery flow objectives.

SEWD-5

The express purpose of the obligations imposed by Public Law 108-361 is to “reduce the demand on water from New Melones Reservoir used for that purpose and to assist the Secretary in meeting any obligations to Central Valley Project contractors from the New Melones Project.” Consequently, these directed changes are foreseeable and must be analyzed in the 2020 operations scenario to present an accurate EA/IS.

Appendix C

Appendix C.1.1. describes the “Water Supply Regulatory Framework”. However, the described regulatory framework does not describe the requirements of Public Law 108-361 as described above.

SEWD-6

Appendix C.1.2. includes a description of New Melones Reservoir operations, and states that “Operation of New Melones is governed by the interim operations plan. . .”. This is not correct, as the United States Bureau of Reclamation has deviated from the interim operations plan in most of the prior years.

SEWD-7

Appendix D

Appendix D.4 provides a “Summary of DSM2 Salinity (EC) Calculations.” At page D-28 the statement is made: “Releases from New Melones Reservoir are used by Reclamation to control the salinity, but there is a maximum specified volume of water reserved for this purpose.” These assumptions are inappropriate and inaccurate for several reasons. First, the USBR has been operating New Melones without regard for any “maximum specified volume of water” for the control of salinity. In addition, Public Law 108-361 directs the Secretary to change the operation of New Melones for this purpose to reduce such releases. This change is not discussed in the operating scenario.

SEWD-8

The EA/IS does not discuss the impact of increased CVP exports on return agricultural drainage into the San Joaquin River, and resulting adverse impacts to water quality at Vernalis. At page D-28 the reason is revealed, as the model assumptions include the statement that:

“The potential indirect effects of the Intertie providing increased CVP deliveries that would add to the salt load at Vernalis were simulated with the CALSIM model. These slight changes in the salt load are masked by the salinity management with New Melones releases to meet the EC objectives.”

SEWD-9

The EA/IS should not “mask” this impact, as it assumes additional releases from New Melones Reservoir to mitigate for those impacts. Those impacts must be discussed and addressed in the text of the document. In addition, the EA/IS should discuss the appropriateness of assuming additional release from New Melones to mitigate for adverse impacts of these increased CVP return flows in light of the specific mandate of Public Law 108-361 to reduce such flows.

SEWD-10

In summary, it appears that the EA/IS does not discuss, let alone address, all impacts of the proposed project. In addition, the project description does not accurately reflect existing law governing operation of the CVP, and specifically, the limitations imposed upon operation of any intertie by Public Law 108-361.

Very truly yours,



JEANNE M. ZOLEZZI
Attorney-at-Law

JMZ:rl

cc: Congressman Richard Pombo
 Mr. Kevin Kauffman
 Mr. Michael Finnegan



**CONTRA COSTA
WATER DISTRICT**

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December 30, 2004

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Tom Boardman
San Luis & Delta Mendota Water Authority
1521 I Street
Sacramento, CA 95814

Subject: Contra Costa Water District Comments on the Environmental Assessment/ Initial Study for the Delta-Mendota Canal and California Aqueduct Intertie

Dear Ms. Roberson and Mr. Boardman:

Contra Costa Water District (CCWD) appreciates this opportunity to comment on the Environmental Assessment/Initial Study (EA/IS) for the Delta-Mendota Canal and California Aqueduct Intertie. The Intertie is one of several planned projects that will increase water exports from the Delta and thereby increase seawater intrusion into the Delta, causing adverse water quality effects that will have serious public health, water supply reliability, economic, and aesthetic impacts on CCWD and its customers.

CCWD understands the United States Bureau of Reclamation's efforts to improve water supply reliability for its south-of-Delta contractors, and the San Luis & Delta Mendota Water Authority's efforts to improve its members' export water supply reliability. However, such efforts must be implemented in a manner that will not substantially degrade Delta drinking water quality and the Delta's environmental resources.

The EA/IS for the Intertie does not adequately evaluate the project's impacts on the Delta. CCWD requests that a full Environmental Impact Statement/ Environmental Impact Report (EIS/EIR) be prepared for this project.

The EA/IS is insufficient for the following reasons:

- **The water quality impacts of the Intertie are significant.** The analysis of water quality impacts in the EA/IS is fundamentally flawed in a number of key respects, and the evidence supports a fair argument that water quality impacts may be significant. Further analysis is needed, and mitigation for the project's adverse water quality impacts must be identified.

The water quality analysis in the EA/IS confirms that the Intertie project will increase salinity at CCWD's intakes. CCWD operates the Los Vaqueros Reservoir for water quality purposes, and the Intertie, by increasing salinity in the Delta, would reduce the effective capacity of the Los Vaqueros Reservoir (which cost local ratepayers \$450 million in 1995 dollars, and has a present worth of closer to \$650 million) by over 2,000 acre feet. The increased salinity also threatens public health, as it will lead to higher concentrations of harmful disinfection byproducts in drinking water.

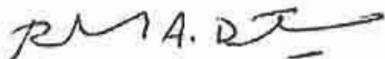
CCWD-1
cont

- **The Intertie is a CALFED project, but is being implemented in a manner that is inconsistent with the CALFED program.** The cornerstone of the CALFED program is the requirement for balanced progress; progress on water quality improvement must be concurrent with progress on water supply improvements such as the Intertie (which will degrade water quality). The Intertie should not move forward unless and until projects that enhance Delta water quality also move forward. The timing of the proposed Intertie implementation is not consistent with the CALFED requirement of balanced progress.
- **The Intertie would contribute to significant future cumulative water quality impacts.** The EA/IS does not contain a legally sufficient analysis of the cumulative water quality impacts of the project in combination with past, present and probable future projects that would also contribute to degraded water quality in the Delta.
- **The San Luis & Delta-Mendota Water Authority is not the proper lead agency under CEQA.** The Department of Water Resources is the State agency with principal responsibility for carrying out or approving the Intertie project.

The technical and legal bases for these comments are detailed in the attachment to this letter. Again, CCWD requests that a full EIS/EIR be prepared for this project, rather than an EA/IS.

If you have any questions regarding these comments, please call me at (925) 688-8187 or call Dr. Leah Orloff at (925) 688-8083.

Sincerely,



Richard A. Denton
Water Resources Manager

Attachment

RAD/LSO

cc: Kirk Rodgers (Reclamation)
Dan Nelson (SLDMWA)

**Contra Costa Water District's Detailed Comments on the Environmental Assessment/
Initial Study for the Delta-Mendota Canal and California Aqueduct Intertie**

- I. **A full EIS/EIR is required.** To adequately analyze and address the adverse environmental effect of a project of this magnitude, with its potentially significant impacts, a full Environmental Impact Statement/Environmental Impact Report rather than an EA/IS is needed.
- A. A strong presumption in favor of requiring preparation of a full Environmental Impact Report (EIR) is built into CEQA. Under CEQA, an agency is prohibited from relying on a Negative Declaration and Initial Study, and must instead prepare a full EIR, for any project that *may* have a significant effect on the environment. An EIR is mandatory whenever there is substantial evidence in the record that supports a fair argument that the project may have a significant impact, even if there is other evidence that may support a finding that there is no significant impact. Moreover, if any aspect of the project may result in a significant environmental impact, an EIR must be prepared, even if the overall effect of the project is beneficial. The "fair argument" test therefore sets a low threshold for preparing an EIR. An EIR is required in this case, as there is a fair argument that the Intertie project may result one or more significant impacts on the environment, including significant impacts on water quality due to salinity increases, and significant cumulative impacts resulting from the project in combination with other reasonably foreseeable projects affecting the Delta. A discussion of these impacts is given below.
- B. NEPA similarly requires a full Environmental Impact Statement (EIS). Like CEQA, NEPA does not require a demonstration that significant effects *will* occur in order to trigger the need for an EIS. Rather, a showing that there are substantial questions regarding whether a project may have a significant effect on the environment is sufficient. Here, there are substantial questions about whether the project will have a significant effect on the environment, so an EIS must be prepared. A discussion of the Intertie's impacts is given below.
- C. The EA/IS states that the Intertie will allow Delta export pumping to increase by 400 cubic feet per second (cfs) during some parts of the year. This is a substantial increment with serious environmental effects. A number of recent projects with smaller pumping capacities have recognized the need for a full EIR/EIS that evaluated effects on Delta water quality; examples include CCWD's Los Vaqueros Reservoir (250 cfs), the South Bay Aqueduct Enlargement (130 cfs), and the Stockton Delta Water Supply Phase 1 (46 cfs). The argument given in the EA/IS that the increased exports due to the Intertie are insignificant because they represent only a small percentage of total Central Valley Project exports does not demonstrate that the effects of increased pumping of Delta water will be minor or insignificant.

CCWD-2

- II. **The water quality impacts of the Intertie are significant.** The analysis of water quality

impacts in the EA/IS is fundamentally flawed in a number of key respects, and evidence supports a fair argument that water quality impacts would be significant. Further analysis is needed, and mitigation for the project's adverse water quality impacts must be identified.

- A. The EA/IS does not adequately consider whether water quality would be substantially degraded. The EA/IS states that the project would result in a significant water quality impact if it would result in beneficial uses of water being substantially adversely affected *and* existing adopted water quality standards being exceeded (p. 3-39). This is an impermissibly narrow standard. A project may have a significant effect on water quality even if it does not result in water quality standards being exceeded. For example, the CEQA Guidelines specifically provide that a project may have a significant effect on the environment if it would *either* violate any water quality standard *or* if it would "otherwise substantially degrade water quality" (CEQA Guidelines, App. G, § VIII a, f). A project that substantially degrades water quality in the Delta, and thus negatively impacts CCWD's ability to provide high-quality drinking water to its many customers, is a project that significantly impacts the environment, especially in the context of other actions that have degraded, and continue to degrade, Delta water quality. The significance standard needs to be revised, and the project's impacts reevaluated. An EIR/EIS should evaluate the extent to which the project would result in degradation to the quality drinking water CCWD provides, including increased salt in drinking water and public health effects caused by increase disinfection byproducts in drinking water. An EIR/EIS also should assess the extent to which the project would limit the availability of drinking water for CCWD's customers during extended droughts and other emergencies. These are serious effects, and must be addressed.
- B. The EA/IS relies on an invalid baseline comparison under CEQA to assess the project's impacts on salinity levels. The EA/IS evaluates water quality impacts under CEQA by comparing (1) a simulation using a 2001 level of development (LOD) without the proposed action (Existing Condition); with (2) a simulation using a 2001 LOD with the proposed action (Proposed Action). See Draft EA/IS at pp. 3-2, 3-38. For salinity changes attributable to the project at Rock Slough, the EA/IS therefore compares electric conductivity (EC) values of 532 microS/cm (Existing Condition), with 533 microS/cm (Proposed Action under 2001 LOD). *Id.* at p. 3-43. The EA/IS concludes that because this change was only about 1 microS/cm, or 0.2% of the Existing Condition baseline, the impacts were considered less than significant. *Id.* But the EA/IS also discloses that under future project conditions, projected with a 2020 LOD instead of a 2001 LOD, EC values at Rock Slough would be 540 microS/cm (not 533 microS/cm). See Table 3.4-1. Thus, a comparison of Existing Conditions (532 microS/cm) with the future project conditions in 2020 (540 microS/cm) yields a difference of 8 microS/cm (not 1 microS/cm). This is the proper comparison under CEQA. By artificially constraining the proposed project to 2001 conditions, and by failing to compare the existing conditions baseline to future project conditions, the EA/IS significantly understates the project's salinity impacts at Rock Slough.

CCWD-3

CCWD-4

C. Even under the baseline comparison used in the EA/IS, the document indicates that the year round average salinity increases of the Intertie at CCWD's drinking water intakes are 0.5 milligram per liter chlorides (mg/L Cl) at both the Rock Slough and Old River intakes for the 2001 Level of Development (LOD) comparison, and 0.2 mg/L Cl at Rock Slough and 0.4 mg/L Cl at Old River for the 2020 LOD comparison, as calculated from the electroconductivity values reported in Appendix E. (The summary table in the EIR/EIS, Table 3.4-1, reports rounded values of the model results, which generally under-report the impacts.) These are significant salinity increases.

CCWD-5

D. The seriousness of salinity impacts of the magnitude described above has been confirmed in other contexts. Water quality analysis for the Freeport Regional Water Project revealed salinity impacts at CCWD's Delta intakes that are comparable to the Intertie impacts; negotiations between CCWD and the Freeport project sponsors resulted in a settlement agreement under which CCWD has the right to have 3200 acre feet of water per year wheeled via Freeport facilities. Another proposed project with similar salinity impacts at CCWD's Delta intakes is the subject of ongoing settlement negotiations.

E. The courts have rejected the notion that a project's impacts may be deemed insignificant solely because the environment is already degraded and the project makes a relatively small contribution to the overall problem. See *Kings County Farm Bureau v. City of Hanford*, 221 Cal. App. 3d 692 (1990); *Los Angeles Unified School Dist. v. City of Los Angeles*, 58 Cal. App. 4th 1019 (1997). See also *Communities for a Better Environment v. California Resources Agency*, 103 Cal. App. 4th 98 (2002). Indeed, precisely because Delta water quality has already been degraded, the CALFED program was designed to ensure that water quality projects would proceed concurrently with other projects (such as the Intertie) that further degrade water quality. Citing the mere percentage of the impact in terms of existing conditions is not sufficient to demonstrate that an impact is not significant.

CCWD-6

F. Salinity impacts at CCWD's drinking water intakes are reported and analyzed in the EA/IS as long-term year round averages of 1 or 2 microSiemens per centimeter (microS/cm) in the EA/IS. This masks the true magnitude of the impacts. Appendix E includes monthly average impacts for each of the 16 years that were modeled, which go as high as 90.8 microS/cm. Daily average impacts, which are not reported in the EA/IS but which are included in the modeling results that the Bureau of Reclamation provided to CCWD, are even larger and are clearly significant:

CCWD-7

2001 LOD at Old River:	94 microS/cm
2001 LOD at Rock Slough:	112 microS/cm
2020 LOD at Old River:	141 microS/cm
2020 LOD at Rock Slough:	116 microS/cm

G. The EA/IS contains information about changes in salinity at CCWD's intakes due to the Intertie, but does not include any discussion of the impacts of these changes on CCWD's

CCWD-8

operations and the public health of drinking water consumers. These impacts are significant:

1. The changes in salinity at CCWD's intakes cause the effective loss of 2000 acre feet (af) of Los Vaqueros Reservoir storage, as calculated by CCWD's CALSIM-based operations model from the EA/IS water quality modeling results. CCWD operates the Los Vaqueros Reservoir for water quality purposes, filling it when Delta salinity is low and releasing high quality water to blend with Delta source water when Delta salinity is high. Increased salinity at CCWD's intakes reduces the periods when the reservoir can be filled, reduces the periods when CCWD can serve its customers from its intakes without releasing blending water from the reservoir, increases the periods when CCWD must release blending water, and increases the amount of blending water that must be released. Modeling results indicate that when the Intertie is in place, the 100,000 af reservoir will supply high quality drinking water to CCWD's customers only as reliably as a 98,000 af reservoir under current conditions. This represents the loss of 2% of CCWD's investment in Los Vaqueros Reservoir, which cost local ratepayers \$450 million in 1995 dollars, and has a present worth of closer to \$650 million.
 2. The changes in salinity at CCWD's intakes also adversely affect Los Vaqueros Reservoir's function as an emergency water supply. The reduced opportunities for filling and the need for increased releases will reduce the quantity of water in the reservoir to be used during extended drought periods and emergencies.
 3. Increased salinity in CCWD's source water corresponds to increased concentrations of bromide ions in the source water, which present a danger to public health. The source water must be disinfected to kill bacteria, viruses, and other pathogens before it can be used as drinking water. However, disinfectants not only kill pathogens but also react with other chemicals in the water, including bromide, forming new compounds known as disinfection by-products (DBPs). DBPs have been linked to increased cancer risk and other health effects. Bromides are called DBP precursors because their presence leads to the formation of DBPs; an increase in DBP precursors results in a corresponding increase in DBPs in the drinking water supply. The Intertie's water quality impacts thus include the adverse public health effects of increased DBPs. An assessment of those effects must be conducted and included in an EIR/EIS.
- H. The EA/IS improperly fails to include analysis of the water quality impacts of the Intertie infrastructure at full buildout. The project as analyzed has a 400 cubic feet per second (cfs) pumping capacity, but includes pipelines with a capacity of 900 cfs, and a pump station footprint sized for eight 112.5 cfs pumps. Moreover, federal law (the CALFED Bay-Delta Authorization Act) specifically requires that the Intertie be designed and constructed in a manner consistent with a possible future expansion of Intertie capacity. The EA/IS fails to evaluate, even in a general fashion, the water quality impacts of this future

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CCWD-10

CCWD-11

expansion. But the impacts of future actions must be analyzed if they are a reasonably foreseeable consequence of the project. See *Laurel Heights Improvement Assn. v. Regents of the Univ. of California*, 47 Cal. 3d 376, 396 (1988). Here, it is evident that the current Intertie is the first phase of a larger project to expand the capacity of the Intertie. Future expansion is reasonably foreseeable and will significantly alter the scope and impacts of the Intertie project. As a result, the full impacts of the expansion must be evaluated now. The EA/IS evaluates only the first phase of the entire project, and is therefore legally inadequate.

CCWD-11
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- I. Because the EA/IS fails to assess the substantial degradation in water quality that will occur, it also fails to identify feasible mitigation measures to minimize, avoid or offset these effects. Along with a full assessment of the effects on water quality, an EIR/EIS should identify mitigation measures designed to protect CCWD's drinking water consumers from these potential adverse effects. Mitigation measures provided by other agencies for projects with similar effects have included provision of high quality water to be used to fill Los Vaqueros Reservoir in order to offset effects of degradation on CCWD's ability to fill the Reservoir with water meeting or exceeding its water quality goals.

CCWD-12

III. **The Intertie is a CALFED project, but is being implemented in a manner that is inconsistent with the CALFED program.** The cornerstone of the CALFED program is the requirement for balanced progress; progress on water quality improvement must be concurrent with progress on water supply improvements such as the Intertie (which will degrade water quality). The Intertie should not move forward unless and until projects that enhance Delta water quality also move forward. The timing of the proposed Intertie implementation is not consistent with the CALFED requirement of balanced progress.

- A. On pages 51 and 52 of the August 28, 2000 CALFED Bay-Delta Program Record of Decision (ROD), an intertie between the Delta Mendota Canal and the California Aqueduct is included as a CALFED conveyance project. The hallmark of the CALFED Program is balanced progress; the CALFED Record of Decision emphasized that water quality and water supply reliability projects would proceed concurrently and in a coordinated manner. The ROD also emphasized that problems in any one program area could not be solved effectively without addressing the problem in all areas at once. And the ROD stated a firm commitment to achieving continuous improvement in the quality of Delta waters. In fact, however, implementation of water quality projects has lagged far behind. As a result, the CALFED goals of concurrent implementation and continuous improvement of water quality have not been fulfilled. Thus, the Intertie project as described in the EA/IS is a part of the CALFED program, but the manner and timing of the Intertie's implementation is inconsistent with the CALFED program.
- B. Federal law also makes clear that the Intertie is part of the CALFED program, and also emphasizes the requirement for balanced progress under that program. The CALFED Bay-Delta Authorization Act (Public Law 108-361, HR 2828), which Congress enacted in

CCWD-13

October 2004, describes the specific activities of the CALFED program, including the evaluation and construction of the current Intertie project. This federal law mandates that these specific activities be carried out consistent with (1) the CALFED Record of Decision; and (2) the requirement that program activities, including activities to protect drinking water, "will progress in a balanced manner." Because funding and approval of water quality projects have lagged under the CALFED program, the timing and manner of the implementation of the Intertie project is inconsistent with the CALFED ROD and its requirement for concurrent and balanced progress in all program areas. The implementation of the Intertie is also inconsistent with the specific requirement of federal law that CALFED activities must progress in a balanced manner.

CCWD-13
cont

- C. The inconsistencies between the manner and timing of the Intertie's implementation and the requirement in the CALFED program for balanced progress in all program areas highlight the deficiencies in the cumulative impact analysis in the EA/IS. For example, in its cursory discussion of cumulative water quality impacts, the EA/IS states that several reasonably foreseeable projects could result in improved water quality. EA/IS at p. 3-53. In its discussion of cumulative impacts on fish, the EA/IS similarly relies on the CALFED program to conclude that water quality in the Delta could improve, thereby benefiting fish and other aquatic species. EA/IS at p. 3-87. The document further states that the CALFED program "is expected to provide a beneficial contribution to cumulative impacts." *Id.* But the CALFED program assumed balanced progress of water quality and water supply reliability projects. Without this balanced progress, the conclusions in the EA/IS are not supported. Cumulative impacts must be re-evaluated to account for the fact that water quality projects are not moving forward concurrently with other projects (including the Intertie) that have the potential to adversely affect water quality.

CCWD-14

IV. The Intertie could contribute to significant future cumulative water quality impacts.
The EA/IS does not contain a legally sufficient analysis of the cumulative water quality impacts of the project in combination with past, present and probable future projects that would also contribute to degraded water quality in the Delta.

- A. The EA/IS fails to analyze cumulative impacts on Delta water quality. Under CEQA, a cumulative impact consists of an impact which is created as a result of the combination of the project together with other projects causing related impacts. See CEQA Guidelines § 15130, 15355. The Guidelines make clear that cumulative impacts "can result from individually minor but collectively significant projects taking place over a period of time." See CEQA Guidelines § 15355. Thus, even if the project's impacts were less than significant (which they are not), this would not justify a finding that the project does not contribute to significant cumulative impacts.
- B. Like CEQA, NEPA requires a thorough and accurate assessment of cumulative impacts. Under NEPA, a cumulative impact is the impact on the environment which results from the incremental impact of the proposed action when added to other past, present and rea-

CCWD-15

sonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions. 40 C.F.R. § 1508.7. As under CEQA, the NEPA regulations make clear that cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time. See 40 C.F.R. § 1508.7.

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C. The CALFED program assumed balanced progress of water quality and water supply reliability projects. Instead, projects continue to be approved that degrade water quality in the Delta, and funding and approval of water quality improvement projects lag behind. Because water quality improvement is not moving forward in advance of or concurrently with this project, the two lead agencies must fully analyze the cumulative effects of this project along with the past, present and probable future projects that will have a combined effect on Delta water quality. As shown below, these cumulative impacts are significant.

CCWD-16

D. The cumulative impacts analysis is inadequate because it improperly limits the types of projects considered as potential contributors to Delta water quality degradation to projects under which "new CVP or SWP facilities are added to the u/s system or different CVP and SWP Delta operational criteria are introduced." EA/IS, p. 3-53. In fact, reasonably foreseeable projects of many other kinds will act to degrade Delta water quality and must be included in the cumulative impacts analysis. These projects include but are not limited to the following types:

1. Sewage treatment plants such as the Sacramento County Regional Wastewater Treatment Plant. Sacramento County Regional Sanitation District has a certified EIR and an approved project that calls for treatment plant enlargement, with documented water quality impacts including increases in salinity at CCWD's Delta intakes. The salinity impacts of this project alone will cause a virtual loss of 3000 acre feet of storage in CCWD's Los Vaqueros Reservoir.
2. Increased diversions of Delta water that are not part of the Central Valley Project or the State Water Project, such as the Freeport Regional Water Project. The certified EIR for this project documents water quality impacts including salinity increases at CCWD's Delta intakes that will result in a virtual loss of 3000 acre feet of storage in Los Vaqueros Reservoir.
3. Increased urban runoff. The reasonably foreseeable population growth and increasing urbanization of California will result in an increase in pollutants carried by urban runoff into the Delta and its tributaries.

CCWD-17

E. The EA/IS discussion of cumulative water quality impacts is inadequate because it does not include analysis of the impacts of reasonably foreseeable Central Valley Project (CVP), State Water Project (SWP), and CALFED projects that will degrade Delta water quality. These projects include but are not limited to the following:

CCWD-18

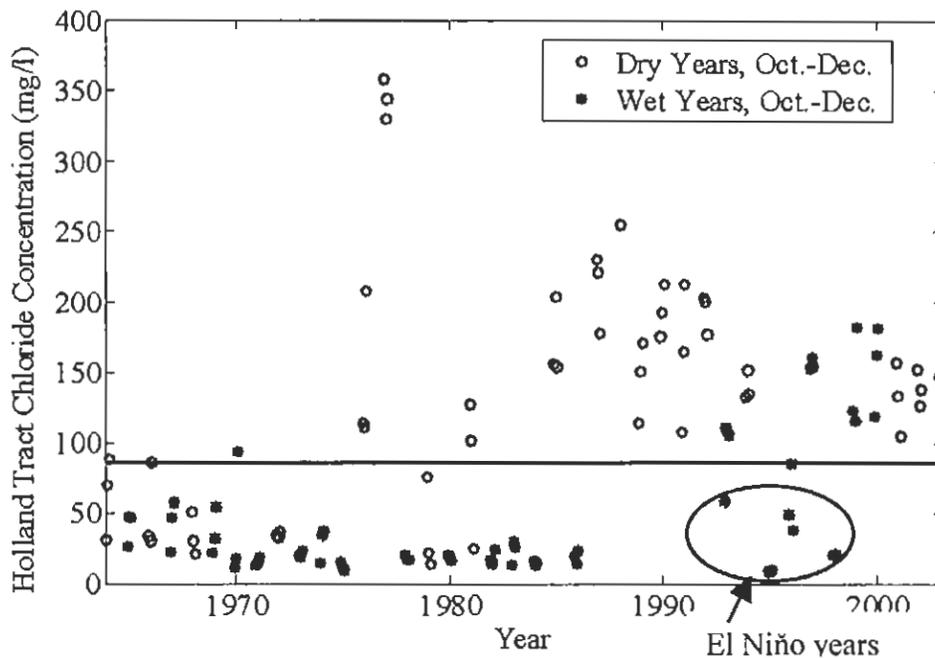
1. The South Delta Improvement Program (SDIP), including expansion of the permitted capacity of the Harvey O. Banks pumping plant to 8,500 cubic feet per second, installation of permanent operable barriers in the South Delta, and associated channel dredging. This is a CALFED and SWP project, with an EIS/EIR under preparation by same federal lead agency that prepared the EA/IS for the Intertie. The potential water quality impacts of this project, including increased salinity at CCWD's Delta intakes, are well known and CALFED's current development of the Delta Improvement Package was motivated by the SDIP's impacts. Preliminary analysis of these impacts indicates that they include the virtual loss of approximately 10,000 acre feet of storage in Los Vaqueros Reservoir.
 2. Re-authorization of the Environmental Water Account with its ability to flex the Delta's regulated export/import ratio and alter the amount and timing of Delta exports, potentially impacting Delta water quality.
 3. Stage 3 Joint Point of Diversion, with its potential to increase Delta export pumping and thereby increase seawater intrusion and Delta salinity levels.
 4. Water transfers, including increased transfers associated with California's loss of Colorado River water. Transfers may increase Delta export pumping and thereby increase seawater intrusion and Delta salinity levels.
 5. Integrated operations of the CVP and SWP as specified in Reclamation's Operations Criteria and Plan, which also act to increase Delta export pumping and thereby increase seawater intrusion and Delta salinity levels.
- F. The cumulative water quality impacts of the projects listed in items E and F above are clearly significant. Salinity increases due to the Intertie, the Sacramento Regional County Sanitation District treatment plant expansion, the Freeport Regional Water Project, and the South Delta Improvement Project represent virtual losses of storage capacity in CCWD's 100,000 acre foot Los Vaqueros Reservoir of, respectively, 2,000 acre feet (af), 3,000 af, 3,000 af, and 10,000 af. (The consequences of such losses are described in item II, above.) When these impacts are combined with impacts from the other reasonably foreseeable future projects that will increase Delta salinity but for which effects on CCWD's operations have not yet been quantified, the result is a cumulative water quality impact that exceeds any reasonable threshold for significance.
- G. These cumulative impacts must also be considered in the context of the major degradation of Delta water quality that has occurred since the mid-1980s, as shown in the figure below. The best water quality in recent years is worse than the best water quality prior to the mid-1970s, with the exception of extremely wet El Niño years.

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CCWD-20

Delta water quality has been severely degraded since the mid-1980s



CCWD-20
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H. The EA/IS improperly relies upon mitigation actions associated with other projects for the determination of no significant cumulative impacts. The EA/IS states that “several of the reasonably foreseeable projects [listed in the water supply cumulative impacts analysis] could result in improved water quality.” However, the only project on that list in the EA/IS that would improve Delta water quality is the CALFED Veale/Byron drainage elimination project which was funded as mitigation for the CALFED South Delta Improvements Program.

CCWD-21

V. **The San Luis & Delta-Mendota Water Authority is not the proper lead agency under CEQA.** The State Department of Water Resources is the public agency with principal responsibility for carrying out or approving the Intertie project.

A. CEQA requires the public agency with principal responsibility to assume the role of lead agency. The agency may not delegate its lead agency status to another agency. See *Planning & Conservation League v. Dept. of Water Resources*, 83 Cal. App. 4th 892 (2000).

CCWD-22

B. The Department of Water Resources (DWR) is charged with operating and maintaining

the State Water Project (SWP), which conveys water from northern California to water users south of the Delta. The California Aqueduct is a major conveyance facility of the SWP. The Intertie project will connect the federal Delta-Mendota Canal to the California Aqueduct, and the EA/IS recognizes that DWR approval will be required for the project. The project cannot go forward without DWR approval and implementation.

CCWD-22
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- C. The increased pumping of water to another part of the State has potential implications throughout the system, with impacts far from the project location. Given that DWR has a statewide perspective and expertise, is responsible for operating and maintaining the SWP and the California Aqueduct, and is a participating agency in the CALFED program, DWR should be the State lead agency for the Intertie project. Failure to use the proper lead agency taints the entire environmental analysis and requires renewed evaluation.

VI. The analysis of alternatives and growth-inducing impacts is insufficient. The EA/IS does not evaluate a sufficient range of alternatives to constitute a reasonable range under CEQA or NEPA. The EA/IS also fails to adequately describe the project's growth-inducing impacts, especially in light of the fact that the Intertie is slated for future expansion. The EA/IS needs to be substantially revised to rectify these deficiencies.

CCWD-23

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December 30, 2004

Via fax: (916) 978-5094

Ms. Patricia Roberson
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Re: Comments to Draft EA/IS for DMC Intertie

Dear Ms. Roberson:

The South Delta Water Agency submits the following comments to the draft EA/IS for the Delta-Mendota Canal/California Aqueduct Intertie dated September 2004. The project should be the subject of a more complete environmental review under an EIS/EIR. The DEA/IS (hereinafter "document") does not sufficiently evaluate the impacts of the project, and therefore does not contain adequate mitigation for such effects.

1. The document does not evaluate a sufficient number of alternatives to the project. Only a No-Action alternative is considered. This is due to the project description being too narrow and the drafters' failure to consider other alternatives for addressing the purported need to increase CVP deliveries. For example, the document concludes that JPOD is unable to address CVP needs. However, JPOD under D-1641 does allow use of State facilities to pump CVP water up to the authorized rate. SWP priorities can easily change especially given the proposed project's adverse effect on SWP exports. In addition, the document should consider other actions that would decrease CVP demand or a reallocation of CVP supplies in order to avoid increasing exports from the Delta.

2. The method by which the impacts of the project are evaluated has some incorrect assumptions and omits other necessary statutory restrictions on exports. The document makes no provision for increased upstream/area of origin needs for watersheds affected by CVP operations. As the areas of origin grow, their water needs will result in a decrease of water available for CVP export. In addition, the modeling uses a summertime flow at Vernalis of 1500 cfs. This flow rate is much greater than should be expected (as indicated by the past few years) but is labeled by

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SDWA-5

the document as a "relatively low" flow condition. Last year, the Vernalis flow rarely rose above 1000 cfs during summer. The document also fails to mention the CVP's affect on San Joaquin River flows.

SDWA-5
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3. The analysis of the project's effects on South Delta water levels and flow is inadequate. The document compares an existing condition without barriers with one that includes the operation of temporary tidal barriers. The appropriate comparison would look at how the project affects water levels and flows by comparing existing temporary barrier conditions with those under project conditions. The document is then also required to examine how the project would affect these same parameters under the permanent barrier program to see if the project will cause, or contribute to significant adverse impacts. The document makes only conclusory statements of "how small" the changes will be. In order to make such a conclusion, the drafters would first have to indicate what the effects are from any change, and then evaluate the resulting impacts. For example, impacts to diversions in the South Delta do not just suddenly occur at certain water levels. As levels drop, diversions are impacted incrementally until the pump or siphon no longer functions. Up to that point, damage to a pump can occur, energy needs can increase, and efficiency decreases. All of these are impacts which develop as levels drop, but are not even mentioned by the document.

SDWA-6

4. The document refers to 0.0 msl as being the level at which water level problems occur. This is incorrect. The Response Plan for Water Levels under JPOD authorization pursuant to D-1641 list levels of 0.0 msl in Grantline Canal and Old River, and 0.3 msl in Middle River as being assumed to be adequate. The document fails to note the 0.3 level, and also how that slight difference can be significant to local diverters. Further, those levels are disputed as being adequate by the SDWA. For each of the last three years, Tom Paine Slough has experienced significant water level problems even though water levels behind the temporary barriers are generally kept above 1.0 msl. This indicates that not only is the 0.0 mark insufficient, but that barriers do not adequately mitigate for export pumping. Any increase therefore would add to a problem and be a contributing factor to a significant effect.

SDWA-7

SDWA-8

5. The document compares water levels at various locations with no pumping and with full CVP and SWP pumping on Table 3.3-1. As an example, the Table shows that the maximum effect on Grantline Canal is a decrease in water levels of .52 feet (without barriers). This shows that the proposed project results in a significant effect, or contributes to a significant effect. However, the document does not then examine how the incremental effect of the project contributes to the effect, it simply labels it as "small." Any lowering of water levels in the South Delta has effects on local diverters. Siphons and pumps are less efficient as levels drop. These effects can not be ignored by assuming that barriers will address the problem. Additional CVP export pumping decreases levels throughout the tidal cycle. Low tides are further lowered, and high tides are shortened and lowered. The result is either additional problems on low tides, or less water trapped on high tides potentially making barrier operation less effective or exacerbating the Tom Paine Slough Problem.

SDWA-9

6. The document also insufficiently examines the effects on flows in the South Delta. It notes changes in flows resulting from export operations, but then simply concludes that the changes are "insignificant." What is required is an analysis of how changes in flows affect circulation, supply and quality in Delta channels. As part of the South Delta Improvement Program, DWR has done substantial modeling to try to predict the effects and efficiency of permanent tidal barriers in the South Delta. Recent modeling results indicate that the permanent

SDWA-10

barriers do not trap enough incoming tidal flow to create a net unidirectional flow in all channels, or provide for local consumptive use needs. Specifically, Old River, between Doughty Cut and the Tracy Old River barrier experiences a slowly moving null zone where the water (and salts) is not flushed out of the system. If not corrected, it will result in an accumulation of salts and violations of water quality objectives for E.C. and DO. The SDIP modeling shows that a net upstream flow of between 50 to 75 cfs occurs in Old River. The document must therefore analyze how the increased CVP exports under the project will affect this circumstance, and adequate mitigation be sought. The modeling information referenced for SDIP can be obtained from Mr. Paul Marshall of DWR and should be made a part of the record here.

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7. The document appears to use averages for both water level changes and for impacts on quality. If the average maximum decrease in water levels is say, .52 feet (as per the example above), then there are necessarily larger impacts. Just because an impact may be infrequent, it does not follow that it is insignificant. This is especially true given the current problem with the SDIP addressing water level and quality problems.

SDWA-11

8. The document sets forth the purported impacts to E.C. at several locations in the South Delta. However, the document does not look at all the SWRCB mandated measuring locations for the objectives. Missing from the examination is the Middle River and Brandt Bridge stations; points at which the objectives for E.C. are measured. The SDIP relies on increased flow from the San Joaquin River into Old River in order to establish (generally) net flow in South Delta channels and provide for consumptive use needs. The proposed project here will cause additional flow into Old River (by decreasing incoming tides) and thus affect both the Middle River and Brandt Bridge sites by causing an increase of salts entering the South Delta and contributing to the low or negative flow in the mainstem from Stockton to the head of Old River.

SDWA-12

9. As above, the monthly averages used in analyzing effects on E.C. mask the true impacts. The average does not allow review of the maximum impacts. In addition, there is no basis for concluding that a 10% increase in salinity is required before an impact is considered significant. Small changes in salinity can adversely affect plant growth and yield as per the testimony on which the SWRCB based its development of the E.C. objectives. The tables used in the document do not allow for a meaningful review of the water quality affects caused by the proposed project. The tables show water quality violations, assumedly cause in part by the project. Further, CalFed, and state and federal regulations and statutes provide a "no degradation" with regard to Delta waters.

SDWA-13

SDWA-14

10. The analysis assumes barrier use to mitigate water level, quality and quantity resulting from the project. However, the document makes no mention of those time when temporary barriers are not installed or those times when permanent barriers may not be allowed to operate. For example, when the temporary barriers are out, water level problems can occur in November and December (and other times), but the document assumes the barriers cure the projects effects on water levels! The document also disregards water level effects downstream of barrier sites, making no mention of why those adverse impacts can be ignored.

SDWA-15

11. The document does not adequately examine the proposed project's effect on DO. The treatment of San Joaquin River flows fails to note that the project will exacerbate the DO problem, and does not make any analysis of DO levels in other Delta channels where an objective also exists. In addition, other ongoing projects including the salt/boron TMDL and EWA will likely result in less water arriving at Vernalis during summer months, which will adversely affect

SDWA-16

SDWA-17

levels, quality and quantity. The project's incremental effects on these criteria will contribute to significant effects.

SDWA-17
cont.

12. The document indicates that the proposed project will increase CVP exports on average 34 TAF, but that exports under the No-Action alternative will increase 31 TAF. Hence the project results in a net increase in CVP supplies of 3 TAF. Just as importantly, the document indicates that the proposed project results in a decrease of SWP exports of 8 TAF, with a further decrease in SWP Article 21 supplies of 4 TAF. Hence, the project results in a net loss of export water at a multi-million dollar cost.

SDWA-18

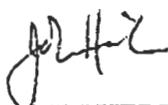
13. The cumulative impacts analysis is inadequate. For water supply, the document presents a less than comprehensive list of projects which may have an effect on South Delta water quality, quantity, and levels. It then simply describes them as being in the "early planning and feasibility" phases. This is certainly not true of the SDIP and EWA. There are ongoing projects such as SJRA, EWA, JPOD, transfers, etc. All of these and more affect Delta water levels and/or quality. The result is that the drafters can ignore how the project contributes to adverse impacts. Further, there is no mention of the ongoing TMDL processes for DO and salt/boron or the Ag Waiver program. Each of these has the likelihood of decreasing San Joaquin River flows and adversely affecting South Delta diverters. For Delta tidal hydraulics, the document first notes the differences between no-project and the preferred alternative (the former without barriers, the latter with barriers) and then concludes there are no effects and thus can be no cumulative effects. This is of course wrong. Any changes to Delta hydraulics, including those indicated by the document can, in combination with other projects, adversely affect diverters.

SDWA-19

The document fails to identify how and what level of changes in exports result in adverse impacts to South Delta water quality, quantity and levels. Because of this, the data presented cannot be used to conclude that no adverse effects will result from the proposed project. The document also does not include any meaningful cumulative analysis. Therefore, neither a FONSI nor a Negative Declaration can issue and further environmental review is necessary. The record for this project should include the modeling for the SDIP, and the Bureau's 1980 Report on the Effects of the CVP on the Delta and San Joaquin River.

SDWA-20

Very truly yours,



JOHN HERRICK

December 28, 2004

Ms. Patricia Roberson
Bureau of Reclamation
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MP-720
Sacramento, Ca 95825

Re: Comments on the Draft EA/IS for the Delta-Mendota Canal (DMC) and California Aqueduct Intertie Proposed Finding of No Significant Impact (FONSI)/Negative Declaration (ND).

Ms. Roberson,

The Planning and Conservation League submits the following comments regarding the Draft Environmental Assessment/ Initial Study (EA/IS) for the Delta-Mendota Canal (DMC) and California Aqueduct (CA) Intertie. We request full consideration of these comments, and emphasize at the outset our strong concern that the wrong state lead agency is conducting this environmental review.

PCL-1

We strongly urge the Bureau of Reclamation to withdraw the proposed Draft EA/IS for the DMC/CA Intertie and the proposed FONSI/ND. The EA/IS was prepared by the wrong state lead agency; reaches facially insupportable conclusions; is inconsistent with the analysis of expert federal agencies; mischaracterizes the significance of impacts; does not perform an adequate cumulative impacts analysis; misuses modeling; fails to properly analyze growth-inducing impacts; and does not account for the effects of global warming. If the project is to proceed, the EA/IS and the Finding of No Significant Impact/Negative Declaration (FONSI) must be withdrawn, and a legally adequate EIS/EIR must be prepared.

PCL-2

PCL requests consideration of the following specific comments:

1. The Wrong State Lead Agency Prepared the EA/IS

It is inappropriate for the San Luis and Delta-Mendota Water Authority to act as the lead agency for CEQA compliance. The Intertie, as the EA/IS repeatedly acknowledges, creates a connection between the federal Delta-Mendota Canal and the state-run

PCL-3

California Aqueduct, and exists solely for the purpose of further integrating the operations of the Central Valley Project (CVP) and State Water Project (SWP). Both the California Aqueduct, which is a component of the SWP, and the State Water Project as a whole are operated by the California State Department of Water Resources (DWR).

PCL-3
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As established by law and expressly stated by the Court of Appeal in the Monterey Amendments litigation, DWR is the “state agency charged with the statewide responsibility to build, maintain and operate” the SWP. (*Planning and Conservation League v. Department of Water Resources* (2000) 83 Cal.App.4th 893, 906; see also Water Code, §§ 12930, *et seq.*) As in that decision, it is “incongruous to assert that any of the regional contractors,” or a local joint powers authority with no statewide responsibility, could lawfully act as lead agency for such a project. (*Ibid.*) Indeed, the lead agency problem is in some respects worse in the present case; to the best of our knowledge, all but one of the 32 member agencies in the San Luis and Delta-Mendota Water Authority (the Santa Clara Valley Water District) are *federal* rather than state water contractors.

As *Planning and Conservation League* illustrates, the preparation of environmental review by the wrong lead agency is a foundational CEQA defect that can prejudice the entirety of that assessment. Failure to honor the lead agency rule in the present project review would also run counter to the settlement agreement PCL and other plaintiffs ultimately reached with DWR and SWP contractors in the Monterey Amendments litigation, which expressly reaffirms DWR’s duties as the state agency responsible for administration and operation of the SWP. To avoid this clear error, the Draft EA/IS must be withdrawn and, if the project is to proceed, a draft EIS/EIR must be prepared with DWR as the state lead agency.

2. The Study’s Conclusion is Facially Irrational

A FONSI/ND is appropriate only where there is not even a fair argument that significant impacts may occur. This FONSI/ND therefore is proper only if the proposed project is virtually certain to cause no significant impacts on the environment, including flow, fisheries, or habitat of the Delta, and if no substantial evidence in the record would support a contrary conclusion.

Despite the EA/IS’s nominal conclusions, that virtual certainty does not exist here. The proposed project would facilitate “a substantial change in CVP pumping capability.” (Draft EA/IS p. 78). The CVP is an enormous irrigation project, and the Delta is one of California’s most stressed ecosystems. It is populated, as the EA/IS acknowledges, by numerous threatened or endangered species. Water quality problems in the Delta are almost constant, and studies by the National Marine Fisheries Service clearly connect many of the environmental ills of the Delta with the enormous amount of water moved by the CVP’s and SWP’s South Delta pumps. Diversion rates were cut five times during the winter and spring of 2003 to reduce the numbers of fish killed at the state and federal export pumps. Even so, the Endangered Species Act “take limit” for spring-run Chinook

PCL-4

salmon was exceeded twice. (The Bay Institute Ecological Scorecard, 2004 <http://www.bay.org/Scorecard/Year%20in%20Water/YiWExSum>). Any project that represents a “substantial change in CVP pumping capability” therefore poses an unmistakable risk of significant environmental effects, and the EA/IS’s conclusion that there is not even a fair argument that such effects will occur lacks any rational basis.

PCL-4
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3. The Study’s Conclusion is Inconsistent with the Analysis of an Expert Agency

The Draft EA/IS states that project construction and operation will have no significant impacts on the environment, including fisheries, compared to current operations. However, the Biological Opinion on the Long-Term Central Valley Project and State Water Project Operations Criteria and Plan issued by the National Marine Fisheries Service in October 2004 (Biological Opinion) found that the Intertie would have multiple and significant impacts on fisheries of the Delta system.¹ NMFS stated that increased pumping facilitated by the Intertie would alter the Delta flow regime, leading to—among other environmental effects—increased habitat impacts and fish entrainment. NMFS also stated that existing mitigation measures would not mitigate the effects of proposed increased pumping.

PCL-5

The Biological Opinion states that the Intertie operations would result in increased entrainment of several salmonid species. That Opinion indicates a need for a fully functional EWA to mitigate for these impacts. Currently there is not a fully functioning long term EWA. The future existence of such an EWA is uncertain, and the EWA is not a component of the action studied by this draft EA/IS. The Biological Opinion states the following regarding the impacts associated with the Intertie operations:

The Intertie allows Tracy pumping to increase from 4200 cfs to the full design capacity of 4600 cfs with or without the SDIP being implemented (formal consultation CALSIM studies 4a and 5a). Pumping at Tracy would increase in the future condition from November through February when listed salmon and steelhead typically are present in the Delta. This increase in winter-time pumping results in a corresponding increase in entrainment of winter-run Chinook salmon, spring-run Chinook salmon,

PCL-6

¹ The Biological Opinion concluded that those impacts would not jeopardize the continued existence of listed species. That conclusion is in error, for it is unsupported by, and indeed is irreconcilable with, the analysis within the Biological Opinion. If a final EA/IS purports to rely on those no-jeopardy determinations, it will be relying upon legally flawed and clearly erroneous conclusions.

PCL also notes that the EA/IS provides no indication that the report authors have even reviewed either the NMFS or FWS biological opinions. They are described as forthcoming, even though they were already released prior to the release of the Draft EA/IS, and the list of documents reviewed does not include either of the biological opinions. While the nominal conclusions of these documents are legally flawed, their substantive analyses demonstrate the fallacy of the EA/IS’s conclusions, and they should be included within the record to be reviewed here.

and steelhead during these months. In early consultation study 5, the use of EWA reduces Tracy pumping back to 4200 cfs from November through February. Therefore, the effect of the Intertie on listed salmonids is dependent on whether a long-term EWA becomes fully functional.

PCL-6
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(Biological Opinion, p 140)

The EA/IS does not properly acknowledge, or propose any mitigation for, these impacts. Similarly, it does not acknowledge the other ways in which the Intertie's alteration of Delta flows would lead to adverse environmental impacts. Moreover, the only potential mitigation identified by the Biological Opinion—operation of the long-term EWA—is not a part of the proposed Intertie project. The EA/IS's conclusion that the project will have no significant environmental effects is therefore directly contrary to the substantive analyses of the expert agency that has previously addressed the intertie.

PCL-7

USBR and the DMC therefore cannot possibly conclude that there is no fair argument that the project would cause significant environmental impacts. With another agency's analysis clearly documenting impacts that would qualify, under any reasonable analysis, as significant, a FONSI/Negative Declaration would be inappropriate.

PCL-8

4. The Study Uses the Wrong Standard of Significance

The EA/IS concludes that the project will not cause significant environmental impacts partly because project-induced mortality of salmonid species will be increased only by a small percentage. The prediction of only a small percentage increase is of dubious credibility; the Biological Opinion states that actual mortality is difficult to determine, and the models the EA/IS used provide no basis for such definitive predictions. However, even if the EA/IS does provide accurate numbers, the conclusion that such increases are insignificant is contrary to both common sense and applicable law.

CEQA's guidelines expressly state that a project's effects must be found significant if the project "has the potential to... cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; or substantially reduce the number or restrict the range of an endangered, rare or threatened species." (CEQA Guidelines, § 15065). Likewise, the Endangered Species Act requires agencies to engage in efforts to *recover* populations of threatened and endangered species, and the Central Valley Project Improvement Act requires USBR and DWR to *double* certain fisheries populations.

PCL-9

These requirements, coupled with the scale of the affected project, preclude the EA/IS from characterizing even a 1% increase in the mortality of protected species as insignificant. The CVP is a major source of salmonid mortality, and even a 1% increase in project-caused mortality would represent a large number of dead fish. Those fish already stand on the brink of elimination, and any actions that increase threats to those species represent steps in an environmentally damaging and legally precluded direction. Indeed, merely compensating for such increases in fish mortality could require a host of

other environmental improvement projects, and the EA/IS includes no such mitigation. To characterize the project's adverse effects on fisheries as unarguably insignificant is therefore clearly erroneous and inconsistent with applicable law.

PCL-9
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5. The Study Fails to Properly Analyze Alternatives

A complete EIR/EIS must analyze project alternatives, including the least environmentally damaging practicable alternative for meeting the identified needs. It also should define its purpose in a non-tautological manner, and cannot merely state that the project itself is the project purpose. Stating that the project purpose as improving water supply reliability, water quality, or environmental restoration is therefore appropriate, but defining the project purpose as increasing system integration or allowing increased pumping is not.

PCL-10

The EA/IS, however, analyzes only an unreasonably narrow set of alternatives, all of which, other than the no-project alternative, closely resemble the intertie, and all of which are directed toward the purpose of increasing pumping and project integration. It does not even address how conservation, recycling, and groundwater treatment could meet South-of-Delta needs and improve reliability and flexibility of water supplies. Such alternatives clearly do exist, as is illustrated by the attached *Investment Strategy for California Water*, November 18, 2004, (Attachment 1) and must be addressed by a proper EIS/EIR.

PCL-11

6. The Study Fails to Properly Analyze Cumulative Impacts

An EA/IS must analyze the cumulative impacts of the proposed project, but the EA/IS fails to properly do so. This failure is symptomatic of a larger problem; for the last two years, DWR and USBR have been engaged in a systematic effort to revise operations of the CVP and SWP, yet they have consistently declined to perform any cohesive NEPA/CEQA analysis of these changes. (See November 30, 2004 letters from Rossmann and Moore to Lester Snow and Kirk Rodgers, Attachment 2.) Instead, USBR and DWR appear to be engaged in a coherent strategy to conduct only partial and piecemeal analysis, with some aspects of revised operations analyzed only in artificial isolation, other aspects never analyzed at all, and the composite whole never addressed by a comprehensive NEPA/CEQA study. The absence of any proper cumulative impacts analysis in the EA/IS perpetuates this unfortunate and illegal trend.

PCL-12

A cumulative impacts analysis must address project impacts that, while not significant when viewed in isolation, are significant when considered along with the impacts of other reasonably foreseeable actions. The EA/IS simply does not perform this analysis. It declines to quantitatively analyze the effects of numerous other concurrent and reasonably foreseeable projects, describing the effects of those projects as too speculative to analyze. In other correspondence and public documents, however, DWR and USBR have repeatedly described those projects as part of their concrete plans for the future. Indeed, some of the cumulative effects of those same actions already have been studied—both qualitatively and quantitatively—by DWR, USBR, and the federal wildlife agencies

through the ESA consultation process, and DWR and USBR are currently engaged in NEPA/CEQA studies of several of the actions, including the South Delta Improvements Project (SDIP) which will further increase pumping, that the draft EA/IS characterizes as too speculative to rigorously study.

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That the SDIP constitutes reasonably foreseeable agency action is now evident from a variety of sources, ranging from the CALFED Record of Decision, recent authorizations of the Bay Delta Authority, and a recent DWR workshop addressing that anticipated project. The California Department of Water Resources' "Fact Sheet on South Delta Improvements Program clearly discloses that, "The Department of Water Resources (DWR) and the Bureau of Reclamation (Reclamation) are preparing a joint Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the South Delta Improvements Program (SDIP). (See Attachment 3, "Facts: South Delta Improvements Program," California Department of Water Resources, August, 2004.) The claim that those projects cannot be analyzed therefore is simply not credible.

The EA/IS does provide a qualitative "analysis" of some impacts to some resources, but those analyses are so terse, speculative, conclusory, and vague that they hardly constitute a hard look at actual environmental effects. Moreover, the conclusions of these "analyses"—that some other unspecified projects may, in combination, improve environmental conditions—are blatantly inconsistent with the analyses of the agencies that have actually studied these projects. For other potential impacts, including power and growth-inducing impacts, the EA/IS provides no cumulative impacts analysis at all.

PCL-13

Finally, for some types of impacts, the EA/IS concludes that because the Intertie will have only small effects, there will be no cumulative effects. This reasoning undermines the entire purpose of a cumulative impacts analysis. A cumulative impacts analysis addresses impacts that are insignificant only when considered in isolation, and the conclusion that the action alone does not have significant effects therefore must be the starting point of the analysis, not the end.

PCL-14

Indeed, the agencies that have actually addressed cumulative impacts have provided analysis that flatly contradicts the EA/IS's significance finding. In its Biological Opinion, NMFS states that the cumulative impacts of the Intertie project and the proposed increased pumping to 8500 cubic feet per second at the Banks pumping facility would result in negative and significant impacts on Delta and upstream fisheries. The Biological Opinion states:

These studies all suggest that the increased mortality associated with the indirect effects of moving water and fish across the interior of the Delta can range from 4 to 40 percent of the juvenile population entering the Delta, using winter-run Chinook salmon juveniles as an example. For other listed species such as steelhead, mortality is expected to be greater for those fish emigrating through the Delta from the San Joaquin River, since a greater portion of that river's flow is exported at the Delta pumping facilities. Operation of the proposed Project under the early consultation is

PCL-15

expected to increase mortality up to the upper range of thresholds established in previous biological opinions as being significant (*i.e.*, past incidental take levels), or in the case for steelhead surpass the threshold and have an effect on the population as well.

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(Biological Opinion, p.178.)

The Biological Opinion also states that

...large numbers of juvenile winter-run Chinook salmon, spring-run Chinook salmon, and steelhead are expected to be drawn into the Central and South Delta as a result of operations of the DCC and the CVP/SWP pumps, where they may be killed through direct entrainment in Project diversions, other unscreened diversions, or otherwise experience lower survival compared to individuals remaining in the mainstem Sacramento and San Joaquin Rivers (see *Assumptions Underlying this Assessment*, below). The habitat impacts are likely to harm, harass, or kill winter-run Chinook salmon, spring-run Chinook salmon, and steelhead by impacting food availability, feeding and growth rates, movement within and among habitats, competitive and predatory interactions, energy expenditures, egg production, ability to find a mate, and spawning success. NOAA Fisheries anticipates that these impacts will occur continually at the levels described at least until the year 2020, the endpoint of this analysis. Some impacts are reduced as a result of adaptive management of DCC gates and temperature control in the upstream areas and under early consultation from the construction of permanent barriers in the South Delta.

(Biological Opinion, p 108.)

These statements are thoroughly inconsistent with the EA/IS's conclusion that the project will have no significant cumulative environmental impacts. In actuality, this project is part of a larger action plan that will have highly significant adverse impacts upon the Sacramento/San Joaquin ecosystem. Those effects must be properly analyzed, both in this project and elsewhere, and the absence of such analysis in the EA/IS renders it legally inadequate.

7. The Study Uses Modeling Inappropriately

The EA/IS supports its insignificance conclusions almost entirely on the basis of modeling. While the models DMC and USBR have used may be useful tools, this complete dependence upon modeling is inappropriate, for the models are not capable of providing the certainty that a FONSI/ND requires.

PCL-16

In order for a FONSI/ND to be appropriate, there must be no fair argument that project could produce significant environmental effects. In other words, the agencies must be

able to show, with virtual certainty, that significant environmental effects will not occur, and that no substantial evidence in the record suggests otherwise.

The models the agencies have used, however, are highly uncertain tools. CALSIM II, for example, while a sophisticated model, has been criticized by a panel of expert reviewers for several weaknesses, including its lack of amenability to proper calibration. (See A. Close, *et al.*, *A Strategic Review of CALSIM II and its Use for Water Planning, Management and Operations in Central California* submitted to California Bay Delta Authority Science Program, December 4, 2003. (See Attachment 4).) In addition, CALSIM II predicts water movements on a *monthly* basis, and is therefore particularly ill-suited for modeling the effects of the short-term fluctuations the Intertie will create. It is the environment of short-term fluctuations, rather than of monthly averages, that actually exists, and CALSIM II's more general predictions of monthly changes may not reflect reality. Additionally, the EA/IS expressly acknowledges that CALSIM II cannot address the costs or benefits of operational changes during maintenance periods, and facilitating operations during those maintenance periods is one of the primary purposes of developing the Intertie.

Furthermore a recent analysis has revealed additional flaws in the statistical basis for CALSIM II. (See Attachment 5, "Analysis of CALSIM's Statistical Basis," by Arve Sjovold, December 28, 2004.)

As a consequence, the CALSIM II analyses fail to address one of the primary changes the Intertie will facilitate. These limitations indicate that CALSIM II does not provide a proper basis for making certain predictions about the environmental effects of future actions.

Models' predictions also can be no more accurate than their input data, and those input data depend upon numerous assumptions about future conditions. Here, those assumptions may be wrong; indeed, as the following section discusses, the EA/IS's assumption that future water flow patterns will be similar to those that have occurred in the past is inconsistent the ample literature on the substantial effects of global warming on California water flows. Similarly, the Biological Opinion provides extensive discussion of the difficulties in determining how pumping increases correlate with increased fish mortality, and states that mortality is likely to be far higher than data gathered only at fish diversion facilities would suggest. These input data errors and uncertainties further undermine the ability of the EA/IS's modeling analysis to make the kind of predictions necessary to support a FONSI/Negative Declaration.

Finally, the EA/IS's presentation of modeling results is flawed. Throughout the EA/IS, modeled predictions—for example, statements that salmonid mortality will increase by a certain percentage—are presented as though certain, and discussion of possible error or of ranges of possible outcomes is almost entirely absent. The models used cannot possibly produce such certainty, however; at best, they can predict, given a certain set of data and assumptions, a range of possible outcomes, with some outcomes potentially more probable than others, and with all predictions limited by both known and unknown

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PCL-18

sources of error. An accurate discussion of the EA/IS's modeling results therefore cannot provide certain predictions, and instead should show the range of possible outcomes. By omitting both possible sources of error and potential outcome ranges, the EA/IS projects a false certainty that the impacts of the project will be relatively small. Indeed, if the modeling results were properly presented, with ranges of outcomes fully described, the study might show that the models actually predict that significantly larger impacts are entirely capable of occurring.

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PCL does not argue that models should never have been used to inform the analysis in the EA/IS. But the models used cannot possibly provide a near-certain conclusion that significant environmental effects will not occur, especially when both common sense, existing knowledge of the Delta system, and the analyses of other agencies all indicate the extremely high likelihood of such impacts. Indeed, PCL believes that if modeling results were properly reported, they would indicate the reasonable likelihood of impacts that even the EA/IS authors would describe as significant.

8. The Study Inappropriately Fails to Account for Global Warming

In recent years, numerous studies have consistently affirmed that global warming is occurring and that it will cause major changes in precipitation and flow patterns in California. California has passed major legislation aiming to curb global warming, and other agencies have factored global-warming-induced changes in hydrological flows into their planning. (Attachment 6.)

In June, 2004, the National Academy of Sciences (NAS) released a study assessing the likely impacts of climate change on California's water supply.ⁱ The NAS study found that precipitation patterns in California are likely to change, with more precipitation falling in the form of rain instead of snow. This change in precipitation could result in a 30%-90% reduction in Sierra snowpack before the end of the century. The report also found that spring and summer stream flow, could be reduced by 40-55% by the end of the century. In addition, the report found that the frequency and severity of dry or drought years could increase from the historic frequency of 32% to 50-64%.ⁱⁱ The NAS study states that these impacts, "could fundamentally disrupt California's water rights system."ⁱⁱⁱ Dr. Michael Hanemann, a researcher involved in the NAS study, noted that the conclusions in the NAS study are likely to be conservative because the results do not include impacts on the Delta from sea level rise, or increased water demand due to population increase.^{iv}

PCL-19

The Draft California Water Plan Update prepared by the California Department of Water Resources states:

Global climate change and other complex factors will likely change California's hydrology as recorded over the past century. While many uncertainties remain—primarily on the degree and timing of change— it is likely there will be reduction in the Sierra snowpack, an earlier snowmelt, and a rise in sea level. These changes have major implications for water supply, flood management, and ecosystem health.

Evidence continues to accumulate that global climate will have significant effects on water resources in California. Climate changes have occurred during the 20th century. Consensus in the scientific community is that measurable warming and other changes caused by human activities are already being observed. The prospects of significant changes warrant examination of how California's water infrastructure and natural systems can accommodate or adapt and whether more needs to be done to detect, evaluate, and respond to water resource system effects.^v

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In addition, there are numerous other scientific reports on the effects that global climate change will have on California's water supplies,^{vi} as well as new tools available to analyze the potential effects of climate change on State Water Project supplies.^{vii}

In spite of this overwhelming evidence that global warming is occurring and will have major effects on the flow of water through California, the EA/IS completely fails to address global warming's effects. Its modeling analysis expressly assumes that past flow patterns will be repeated in the future, and even its "future baseline" assumes that global-warming induced flow changes will not exist. These assumptions are unreasonable; while we may not know exactly what flow regime the future will bring, numerous studies have documented the changes that will occur, and we know that past patterns will not be repeated.

This failure to address global warming-induced flow changes means that the EA/IS is thoroughly permeated with a major false assumption. Both its no-project and project alternatives are based upon a fictional reality, and its modeling input data all are predicated on the insupportable assumption that an existing and growing problem will somehow disappear. A proper EIS/EIR must correct that false assumption, and must factor global warming into its analysis.

9. The EA/IS Fails to Address Growth-Inducing Impacts

CEQA requires agencies to study the ways in which their projects may induce, foster, or remove obstacles to growth. The EA/IS fails to properly perform such analysis.

The entire purpose of the proposed project is to increase both the amount and reliability of water delivered by the CVP south of the San Joaquin Delta. California's courts have repeatedly affirmed, in the Monterey Amendments litigation and elsewhere, that such changes have the potential to induce growth and that the impacts of such growth must be analyzed.

PCL-20

The EA/IS attempts to circumvent those legal requirements by stating that the increased deliveries will still be less than total contract amounts, that the deliveries will be used only on already-irrigated agricultural lands, and that the deliveries will be relatively small. The first assertion is irrelevant; California's courts have already held that replacing paper water with actual water can affect local planning and therefore induce

growth. The second assertion is unsupported speculation; although the deliveries may be promised to agricultural users, those users may transfer water to urban areas. The final assertion also does not remove the need for analysis; a “small” percentage increase in the deliveries of a project the scale of the CVP still represents a large amount of water, and creates a commensurately large potential for induced growth. Moreover, if properly analyzed along with other concurrent projects also designed to increase delivery capacity, the increases associated with the Intertie could not be characterized as insignificant.

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A proper EIS/EIR therefore must properly analyze, not deny, the growth-inducing impacts of the Intertie. It also must analyze the cumulative growth-inducing impacts of the Intertie and related projects.

PCL-21

Conclusion

Both on its own and in conjunction with other related projects, the Intertie will have major and significant environmental effects. Those effects require proper study and mitigation. If the project is to proceed, we urge the Bureau and San Luis & Delta Mendota Water Authority to withdraw the proposed FONSI/ND and complete a full EIR/EIS on the DMC/CA Intertie.

PCL-22

Respectfully,

Mindy McIntyre
Water Policy Specialist
Planning and Conservation League

Attachments
cc:
Lester Snow, Director
California Department of Water Resources

Michael Chrisman, Secretary
Resources Agency

William Lockyer, Attorney General
State of California Department of Justice

Dan Nelson, General Manager
San Luis Delta Mendota Water Users Association

Antonio Rossmann, Roger B. Moore, David R. Owen
Rossmann and Moore, LLP

ⁱ Emissions pathways, climate change, and impacts on California. June 23, 2004.
<http://www.pnas.org/cgi/reprint/101/34/12422.pdf>

ⁱⁱ Emissions pathways, climate change, and impacts on California. June 23, 2004.
<http://www.pnas.org/cgi/reprint/101/34/12422.pdf>

ⁱⁱⁱ Emissions pathways, climate change, and impacts on California. June 23, 2004.
<http://www.pnas.org/cgi/reprint/101/34/12422.pdf>

^{iv} Notes On The PNAS Paper On Climate Change Impacts In California 8/17/04, Michael Hanemann

^v Draft California Water Plan Update 2003, California Dept. of Water Resources, June 7, 2004 Volume 1, Chapter 3, p 6. <http://www.waterplan.water.ca.gov/b160/workgroups/chapterreviewgroup.htm>

^{vi} Intergovernmental Panel on Climate Change 2001; Summary for Policymakers
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The Effects of Climate Change on the Hydrology and Water Resources of the Colorado River Basin, pp. 337-363 Niklas S. Christensen, Andrew W. Wood, Nathalie Voisin, Dennis P. Lettenmaier, Richard N. Palmer
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DeltaKeeper

a project of WaterKeepers, Northern California
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January 04, 2005

Kirk C. Rogers, Regional Director
Mid-Pacific Region
U.S. Bureau of Reclamation
2800 Cottage Way, MP-700
Sacramento, CA 95825

Tom Boardman
San Luis & Delta Mendota Water Authority
1521 I Street
Sacramento, CA 95814

Gentlemen,

We are writing to submit comments on the draft document titled “Delta Mendota Canal/California Aqueduct Intertie Volume 1: Proposed Finding of No Significant Impact/Negative Declaration & Draft Environmental Assessment/Initial Study,” dated September 2004.

We wish to express our outright surprise at the analysis, and especially the conclusion contained in Finding 5, found on page 4 of the document.

“5) No significant impacts to fisheries have been identified. The operational effects on aquatic resources are included in the ongoing consultation for the Operations Criteria and Plan. Biological opinions from the Service and NOAA Fisheries are expected by September 2004.

DK-1

We wish to make the following points:

- The “OCAP Biological Opinion” (BO) from NOAA Fisheries was not released until October 27, 2004. Since it is not subject to NEPA/CEQA review on its own merits, the NEPA review of this document warrants more than a thirty-day review period. This would allow a careful review of the BO and its mitigation features for this project.

DK-2

- The analysis relies on CALSIM II, a model that has been found to be seriously deficient in a Cal-Fed Science Panel review. DK-3

- The Tracy Fish Collecting Facility (TFCF) is:
 - 1. unable to operate during certain low tide events (water levels drop in the fish salvage facilities, dewatering the fish salvage system,
 - 2. debris clogs the fish salvage facilities, and causes up to three feet of head loss at the trashrack,
 - 3. goes off-line when the secondary channel and the secondary louvers are being cleaned, and
 - 4. has an unscreened primary louver section when the primary louvers are raised for cleaning. DK-4

None of these conditions are addressed in this document, and additional exports (facilitated by the Intertie) will only exacerbate the problems. We understand that Reclamation and NOAA Fisheries are discussing means of correcting the loss and salvage estimates for these factors, however they are not included in this analysis.

- Improvements to the Tracy Fish Collecting Facility (TFCF) are mandated by Public Law 102-575, Title 34, the "Central Valley Improvement Act," Section 3406b4. The improvements are also keystone elements of the Delta Accord, and the Cal-Fed Record of Decision. DK-5

We are concerned by the language found on page 3-86 and 3-87 which describes a program that fails to address the mandated facility improvements. How can the Delta Improvements Package (DIP) fail to comply with existing statute?

Based on these concerns, we believe it would be prudent to withdraw this draft, incorporate the requirements of the CVPIA, and the adjustments to the loss calculation model for the TFCF shortcomings, so that they can benefit from the full disclosure provisions of NEPA.

We can be reached at the letterhead address, or the direct contact information below.

Respectfully,

Bill Jennings
DeltaKeeper
deltakeep@aol.com
(209) 464-5090

Dan B. Odenweller
Fishery Biologist
danodenweller@compuserve.com
(209) 951-2471

cc: Patricia Roberson, USBR

January 4, 2005

Page 3

proberson@mp.usbr.gov



State Water Resources Control Board



Alan C. Lloyd, Ph.D.
Agency Secretary

Division of Water Rights
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P.O. Box 2000, Sacramento, California 95812-2000
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Arnold Schwarzenegger
Governor

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DEC 30 2004

Patricia Roberson
U.S. Bureau of Reclamation
2800 Cottage Way, MP-700
Sacramento, CA 95825

Tom Boardman
San Luis & Delta Mendota Water Authority
1521 I Street
Sacramento, CA 95814

Dear Ms. Roberson and Mr. Boardman:

COMMENTS ON THE DELTA-MENDOTA CANAL/CALIFORNIA AQUEDUCT INTERTIE ENVIRONMENTAL DOCUMENT

State Water Resources Control Board (SWRCB), Division of Water Rights' (Division) staff has reviewed the Delta-Mendota Canal/California Aqueduct Intertie Proposed Finding of No Significant Impact/Negative Declaration and Draft Environmental Assessment/Initial Study (Proposed FONSI/Neg. Dec.) and has the following minor comments related to the Operations section on page 2-4. In the last paragraph concerning the potential use of Joint Points of Diversion (JPOD), please include a discussion of JPOD and the various response plan and other requirements for use of JPOD included in SWRCB Decision 1641. In addition, regarding the discussion of temporary urgency change petitions in this section, please discuss the California Water Code requirements that must be met prior to approval of any petition.

SWRCB-1

SWRCB-2

Thank you for the opportunity to comment on the Proposed FONSI/Neg. Dec. If you have any questions concerning this letter, please contact me at (916) 341-5297.

Sincerely,

Diane Riddle
Environmental Scientist

Classification	ENU 6.00
Project	CVP
Control No.	5000058
Folder I.D.	57194

California Environmental Protection Agency

DEPARTMENT OF TRANSPORTATION

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December 23, 2004

ALA580807
 SCH#2004114005

Ms. Patricia Roberson
 Bureau of Reclamation
 2800 Cottage Way
 Sacramento, CA 95825

Dear Ms. Roberson:

CALIFORNIA AQUEDUCT INTERTIE PROJECT – NEGATIVE DECLARATION/DRAFT ENVIRONMENTAL ASSESSMENT

Thank you for including the California Department of Transportation (Department) in the environmental review process for the California Aqueduct Intertie project. The following comment is based on the Negative Declaration/Draft Environmental Assessment:

Encroachment Permit

Work that encroaches onto the State Right of Way (ROW) requires an encroachment permit that is issued by the Department. To apply, a completed encroachment permit application, environmental documentation, and five (5) sets of plans, clearly indicating State ROW, must be submitted to the address below. Traffic-related mitigation measures will be incorporated into the construction plans during the encroachment permit process. See the website link below for more information.
<http://www.dot.ca.gov/hq/traffops/developserv/permits/>

DOT-1

Sean Nozzari, District Office Chief
 Office of Permits
 California DOT, District 4
 P.O. Box 23660
 Oakland, CA 94623-0660

Please feel free to call or email Patricia Maurice of my staff at (510) 622-1644 or patricia_maurice@dot.ca.gov with any questions regarding this letter.

Sincerely,

TIMOTHY C. SABLE
 District Branch Chief
 IGR/CEQA

c: Ms. Terry Roberts, State Clearinghouse

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FEB 22 2005		2/23
Dacey Davidson		

February 18, 2005

Ms. Patricia Roberson
Bureau of Reclamation
2800 Cottage Way – MP-720
Sacramento, CA 95825

Regarding: Draft EIR & Initial Study Delta Mendota Canal/CA Aqueduct Intertie

Thank you for allowing the District to comment on this referral received on 11/30/04 with a due date of 12/30/04. In order to reply in a timely manner, please provide a minimum of 10 working days review period. If you have any questions, please contact me at 526-7433. Below are our recommendations for this project.

ELECTRICAL

- The Electric Division has Overhead 230kV Transmission Facilities located east of the Delta Mendota Canal near the proposed project location. These facilities do not appear to impact the proposed project.
- A minimum working clearance of 17' from the Overhead Transmission Facilities shall be maintained at all times.

MID-1

IRRIGATION

- No Irrigation Problems at this time.

DOMESTIC WATER

- No comments at this time.

The Modesto Irrigation District reserves its future rights to utilize its property, including its canal and electrical easements and rights-of-way, in a manner it deems necessary for the installation and maintenance of electric, irrigation, agricultural and urban drainage, domestic water and telecommunication facilities. These needs, which have not yet been determined, may consist of poles, cross arms, wires, cables, braces, insulators, transformers, service lines, open channels, pipelines, control structures and any necessary appurtenances, as may, in District's opinion, be necessary or desirable.

Celia Aceves
Celia Aceves
Risk and Property Analyst

Date: 2/18/05

Project	
Control No.	5002004
	59916

3.1 Revisions Based on Agency and Public Comments

Revisions to the text of the EA/IS are provided below. Changes in the text are signified by strike-through where text is deleted, and underline where text was added. Revisions are organized by volume, chapter, and page. The comment code used in Chapter 2, relating to the signified revision, is provided.

Volume 1

FONSI, Proposed Action, pg. 2 of FONSI

The fifth paragraph on page 2 of the FONSI has been revised as follows. This revision is not provided in response to any comment received:

The Intertie would include a 450-cfs pumping plant at the DMC that would allow approximately up to 400 cfs to be pumped from the DMC to the California Aqueduct through an underground pipeline. Because the aqueduct is located approximately 50 feet higher in elevation than the DMC, up to 900 cfs flow could be conveyed from the aqueduct to the DMC using gravity flow.

Section 2.2, Background, pg. 2-2

The third paragraph on page 2-2 has been revised as follows (Comment DWR-8):

Some conveyance and storage facilities are joint CVP/SWP facilities. Both the CVP and the SWP use the San Luis Reservoir, O'Neill Forebay, and more than 100 miles of the California Aqueduct and its related pumping and generating facilities. Reservoir releases and Delta exports must be coordinated to ensure that each project receives its share of benefit from shared water supplies and bears its share of joint obligations to protect beneficial uses. Operation of the Projects is governed by the Coordinated Operation Agreement (COA). ~~The COA was authorized in 1986 and is both an operations agreement and a water rights settlement. Currently, DWR and Reclamation are revising the COA. As a~~

~~result,~~ Reclamation has issued a Draft Long-Term Central Valley Project Operations Criteria and Plan and Biological Assessment (OCAP & BA) in June 2004. ~~a final OCAP is anticipated to be issued in late 2004.~~ The OCAP outlines future CVP and SWP operations. In conjunction with the draft OCAP, a draft biological assessment was released that evaluates the potential effects of CVP and SWP operations on listed and proposed species. Reclamation initiated a formal Federal Endangered Species Act (ESA) consultation with the U.S. Fish and Wildlife Service (USFWS and the National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries) on OCAP was initiated on March 15, 2004. USFWS issued its Biological Opinion on delta smelt regarding operations of the CVP and SWP in February 2005. NOAA Fisheries issued its Biological Opinion on listed salmonids regarding operations of the CVP and SWP on October 22, 2004. Reclamation and DWR operate the SWP and CVP consistent with these opinions.

Section 2.3, Proposed Action, pg. 2-3

The fourth paragraph on page 2-3 has been revised as follows. This revision is not provided in response to any comment received:

The Intertie would include a 450-cfs pumping plant at the DMC that would allow approximately up to 400 cfs to be pumped from the DMC to the California Aqueduct via an underground pipeline. The additional 400 cfs would bring the Tracy Pumping Plant to its authorized amount of 4,600 cfs. Because the California Aqueduct is located approximately 50 feet higher in elevation than the DMC, up to 900 cfs flow could be conveyed from the California Aqueduct to the DMC using gravity flow.

Section 2.3, Proposed Action, pg. 2-4

The first and second listed points on page 2-4 have been revised as follows. This revision is not provided in response to any comment received:

The Intertie would be used under three different scenarios:

1. Approximately Up to 400 cfs would be pumped from the DMC to the California Aqueduct to help meet water supply demands of CVP contractors. This would allow Tracy Pumping Plant to pump to its authorized capacity of 4,600 cfs, subject to all applicable export pumping restrictions for water quality and fishery protections.
2. Approximately Up to 400 cfs would be pumped from the DMC to the California Aqueduct to minimize impacts on water deliveries attributable to required reductions in water levels in the DMC south of the Intertie, or the California Aqueduct north of the Intertie, for system maintenance or because of an emergency outage.

Section 3.2, Water Supply and Delta Water Management, pg. 3-7

Table 3.2-2 and the second paragraph on page 3-7 has been revised as follows (Comment DWR-4).

Table 3.2-2. Harvey O. Banks Pumping Plant Table A Contract Amounts Demands and Maximum Pumping Capacity

Month	SWP Banks <u>Contract</u> <u>Water Amount</u> <u>Demand</u> (taf)	Maximum Volume at 6,680 cfs SWP Banks Capacity (taf)	Additional Needed from San Luis Reservoir (taf)
October	295	411	–
November	261	397	–
December	245	411	–
January	173	411	–
February	203	371	–
March	235	411	–
April	302	397	–
May	407	411	–
June	520	397	123
July	541	411	130
August	532	411	121
September	404	397	7
Total	4,118	4,836	381

SWP = State Water Project.

Source: CALSIM II 2001 LOD

Only in a few years will there be sufficient Delta inflow each month to satisfy the in-Delta water diversions, meet the required Delta outflow for water quality and fisheries protection, supply the full CVP Tracy pumping, and also allow Banks pumping of 4,300 taf to supply the entire SWP Table A water amounts demand plus aqueduct and reservoir losses that are assumed to be 100 taf/yr.

Section 3.2, Water Supply and Delta Water Management, pg. 3-8

The first paragraph on page 3-8 has been revised as follows (Comment DWR-4):

The regulatory limits on SWP Banks and CVP Tracy pumping are important to understanding Delta water management because these regulatory limits collectively restrict the ability of the supply of full CVP and SWP to export water from the Delta demands for Delta exports. These regulatory limits may result from Delta outflow requirements, E/I limits, and permitted export pumping capacity. The Intertie would not change any of these regulatory limits, and would therefore not change the protections provided for water quality and fisheries in the Delta.

Section 3.2, Water Supply and Delta Water Management, pg. 3-9

The fifth paragraph on page 3-9 has been revised as follows (Comment DWR-4):

The Metropolitan Water District of Southern California (MWD) is the largest SWP contractor, with a Table A value of 2.0 maf. There are 12 other contractors in southern California, with delivery amounts entitlements that total 580 taf, whose water must also be pumped over the Tehachapi Mountains through the Edmonston Pumping plant (maximum capacity of 3,250 taf/yr). The Edmonston pumping plant therefore provides a limit for the SWP deliveries to southern California, as a maximum of 3.0 maf can be pumped (with one unit held in reserve). Delivery of the maximum Table A value of 2.58 maf would require operating the Edmonston pumping units at about 85% of capacity. Section 3.2, Water Supply and Delta Water Management, pg. 3-10.

The first paragraph on page 3-10 has been revised as follows (Comment DWR-4):

The San Joaquin Valley agricultural contractors have a combined Table A value of about 1.2 maf (the Kern County Water Authority has a Table A value of 1.0 maf). The South Bay aqueduct has a total Table A value demand of 220 taf. The North Bay aqueduct supplies an Table A value demand of about 76 taf, but this is not pumped at the Banks Pumping Plant.

Section 3.2, Water Supply and Delta Water Management, pg. 3-15

The second and third paragraphs on page 3-15 have been revised as follows (Comment DWR-4):

Table 3.2-9 shows the annual (water year) SWP south-of-Delta firm deliveries (i.e., allocated based on Table A values demands) and deliveries for the simulated Existing Condition and the Proposed Action. The average simulated firm SWP delivery for the Existing Condition was 2,957 taf/yr and was 2,949 taf/yr with the Proposed Action.

The average change in SWP firm deliveries with the Proposed Action would be a slight reduction of 8 taf/yr. The greatest annual reduction was 112 taf in 1947, and the largest increase was 243 taf in 1949. In 50% of the years, the change in SWP firm deliveries was a reduction of 2 taf. Many of these unchanged years are years with fully satisfied Table A values demands that do not require any additional SWP deliveries. These simulated changes in SWP water supply are the result of the CVP more fully using required upstream reservoir releases, which the SWP currently uses in proper accordance with the COA and Delta operational rules for sharing the environmental protection requirements (i.e., Delta outflow and E/I limits).

Section 3.4, Water Quality, pg. 3-37

The third paragraph on page 3-37 has been revised as follows
(Comment DWR-9):

EC monitors at Jersey Point and Emmaton (agricultural salinity compliance stations from April through August) are especially important for managing the linkage between upstream reservoir releases and export pumping that will maintain sufficient Delta outflow to satisfy Delta water quality objectives. The CVP and SWP operations staffs have access to telemetered data from these and several other EC monitors. The DWR ~~Delta SWP Operations~~ Compliance and Studies Water Quality Section prepares and distributes a daily report of data on flows and EC to assist in decision-making on Delta water project operations.

Section 3.4, Water Quality, pg. 3-54

The third paragraph on page 3-54 has been revised as follows
(Comment DWR-4):

Even with additional CVP or SWP facilities, the full impacts of the Proposed Action are disclosed in the impact evaluation shown in this section. This is because the full use of the Proposed Action is already simulated in the 2001 CALSIM II and the 2001 DSM2 modeling scenarios. Nevertheless, the DSM2 model was used to simulate the Proposed Action and No Actions, which include future increased CVP and SWP customer requirements demands.

Section 3.5, Fish, pg 3-86

The fifth paragraph and accompanying bullet list on page 3-86 has been revised as follows (Comment DK-5):

Actions are being proposed in four areas: water supply, water quality, environmental protection, and science. The level of detail currently

available varies, mainly because of differing project timelines, and will change over time. Some projects are in the implementation phase while others are just starting to flesh out the concepts. Not all the potential actions are agreed upon by all the CALFED agencies, and the details of others are being debated. However, there is general agreement by the agencies that these actions are worth evaluating:

- Implement SWP/CVP Integration Plan
- SDIP/Increase SWP Pumping to 8,500 cfs
- SDIP/Permanent Operable Barriers
- San Joaquin River Salinity Management Plan
- Vernalis Flow Objectives
- Old River and Rock Slough Water Quality Improvement Projects
- San Joaquin River Dissolved Oxygen TMDL
- Franks Tract Improvements
- Delta Cross Channel Program
- Through-Delta Facility Feasibility Investigation
- OCAP ESA Consultation
- SDIP ESA Consultation
- Reconsultation regarding CALFED ROD Programmatic ESA and Ecosystem Restoration Program (ERP Commitments)
- EWA
- Delta Regional Ecosystem Restoration Implementation Plan (DRERIP)
- Tracy Fish Collecting Facility Improvements

Section 3.6, Wildlife and Vegetation, pg. 3-98

The last bullet on page 3-98 has been revised as follows (Comment DWR-5 and DWR-6):

- A 16-to-24-inch corrugated pipe would be placed along the western side of the DMC access road to prevent further erosion of the access road. This construction would require some work in the southern end of the northernmost drainage along the upper slopes, but above the ordinary high water mark. ~~However, e~~Construction would take place when the drainage is dry at that location, and primary and secondary erosion control measures to be described in the Erosion and Sediment Control Plan and Stormwater Pollution Prevention Plan (Section 2.3.5, Environmental Commitments) would be implemented during construction to prevent silt and sediment from entering the drainage.