Appendix 1C: Comments from Regional and Local Agencies and Responses

1C.1.14  Santa Clara Valley Water District

September 29, 2015

Mr. Ben Nelson, Bureau of Reclamation
Bay-Delta Office
801 1st Street, Suite 140
Sacramento, CA 95814-2536
Via Email: bnelson@usbr.gov

Subject: Comments on Draft Environmental Impact Statement on Impacts of Implementing the 2008 U.S. Fish and Wildlife Service Biological Opinion and the 2009 National Marine Fisheries Service Biological Opinion, including Reasonable and Prudent Alternatives, for the Coordinated Long-Term Operation of the Central Valley Project and State Water Project

Dear Mr. Nelson:


The Santa Clara Valley Water District (District) is the primary water resources management agency for Santa Clara County, providing wholesale water supply, stream stewardship and flood protection for the County’s two million residents and the vital high-tech economy known as “Silicon Valley.” Santa Clara County has been called the “economic engine” of the Bay Area, with over 200,000 workers commuting daily from other parts of the region and from the San Joaquin Valley for employment. The District also serves agricultural water users in the southern portion of the County.

The importance of water supply from the Central Valley Project (CVP) and the State Water Project (SWP) for Santa Clara cannot be overstated. The District was formed in 1929 to address groundwater overdraft and land subsidence in San Jose and adjacent cities, serious conditions that were successfully resolved by the importation of water from the CVP and SWP. Ongoing operation of the District’s conjunctive management program and aggressive water use efficiency help maintain groundwater reserves to meet the County’s needs in dry years, and prevent the recurrence of land subsidence and salt water intrusion. However, these operations can only be sustained with adequate CVP and SWP water supplies.

In general, the District finds the Draft EIS wholly inadequate. The Bureau of Reclamation (Reclamation) has taken a convoluted approach to analyzing the impacts of implementing the 2008 and 2009 BiOps and, as such, has failed to utilize the National Environmental Policy Act (NEPA) process to inform Reclamation and the public of its decision regarding the coordinated long-term operations of the CVP and SWP. The United States District Court for the Eastern
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District of California concluded that the implementation of the BiOps is a "major federal action because it substantially alters the status quo in the Project's operations." The Draft EIS contravenes this conclusion by making the implementation of the 2008 and 2009 BiOps the No Action Alternative, i.e., the status quo. The District encourages Reclamation to develop a document that 1) has the implementation of the 2008 and 2009 BiOps as the proposed action, not the No Action Alternative, 2) includes a range of alternatives to the appropriate proposed action and 3) identifies all relevant, reasonable mitigation measures that could alleviate the project's environmental effects. For a more detailed discussion on the overall inadequacies of the Draft EIS, the District refers to the comment letters submitted by the State Water Contractors and the San Luis & Delta-Mendota Water Authority.

The District's more specific comments are provided below, with detailed comments provided in Attachment 1.

A. The Draft EIS Unreasonably Minimizes the Impacts and Costs Associated with Making Up for Shortages in Surface Water Supplies

The Draft EIS makes several unreasonable assumptions regarding alternative water supplies that minimize the finding of environmental consequences of the No Action Alternative. The assumption that water demands would be met on a long-term basis in dry and critical dry years based on a combination of conservation, CVP and SWP water supplies, other imported water supplies, groundwater, recycled water, infrastructure improvements, desalination water treatment, and water transfers and exchanges essentially ignores the costs and environmental consequences of taking these types of actions.

First, this assumption minimizes the importance of CVP and SWP supplies to Santa Clara County. Santa Clara County's current annual water demands total approximately 375,000 acre-feet. Approximately 45% of the County's water supply, on average, is from locally developed surface water and groundwater. The remaining 55%, on average, is imported into the County from the CVP and the SWP, and by San Francisco Public Utilities Commission ("SFPUC") from the Hetch-Hetchy system. During years of dry coastal hydrology, local supplies are substantially reduced and the County's dependence on imported supplies increases significantly. In critically dry years such as 2013 and 2014, these imported water supplies made up over 90% of the water needed at the District's three drinking water treatment plants and are vital to maintaining emergency groundwater reserves for successive dry years.

In addition, reliable conveyance through SWP and CVP pumping plants is required to secure supplemental supplies. The District has invested in the Semitropic Groundwater Banking Program in Kern County for 350,000 acre-feet of banking capacity and enters into a variety of water exchange, transfer, and management agreements with various parties to help protect against and respond to water shortages. The District's ability to make use of banking and transfers as planned to offset dry conditions depends on reliable conveyance through SWP and CVP Delta pumping plants.

Second, this assumption essentially ignores the costs and consequences of taking these types of actions. The reduction in the District’s CVP and SWP supplies in all years as a result of implementing the 2008 and 2009 BiOps and their associated RPAs (the Draft EIS No Action Alternative) exacerbates the already adverse effects associated with drought, and other water shortages. During wet periods, the District’s ability to restore the reserve supplies it needs to respond to future water shortages or emergencies, and its ability to carryover surface water supplies in case the following year is dry, is diminished as a result of the implementation of the 2008 and 2009 BiOps. During dry periods and other water shortages, the District will need to respond to reduced CVP and SWP supplies by a) increasing groundwater pumping, b) reducing groundwater recharge, c) reducing local surface storage, d) increasing withdrawals from Semitropic, e) locating and purchasing replacement supplies, or f) some combination of these actions. Each of these options available to the District comes at a cost.

For example, increasing withdrawals from Semitropic comes at a significant financial cost to the District and reduces the District’s available reserves to manage droughts and other water shortages. In addition, the amount of water that the District can withdraw from Semitropic is tied to SWP allocations, and thus may be reduced concurrently with the implementation of the No Action Alternative. Locating adequate short-term replacement supplies during drought conditions is difficult due to the increased state-wide demand and reduced supply. Finally, the water shortage caused by implementing the 2008 and 2009 BiOps, (the Draft EIS No Action Alternative) increases the economic and financial hardship for the District and its local water users due to increased costs to acquire short-term replacement supplies, reduced water sales and revenues, and no relief from fixed charges under existing CVP and SWP contracts.

B. The Draft EIS improperly points to groundwater supplies as the replacement for shortages of supplies via the Delta due to implementation of the proposed action

The Draft EIS improperly points to groundwater supplies as the replacement for shortages, including those caused by implementing the 2008 and 2009 BiOps. Increasing local groundwater pumping decreases groundwater reserves that would otherwise be available for future shortages and emergencies and decreases groundwater levels; thereby, increasing the risk of land subsidence. The District manages the groundwater resources within Santa Clara County by augmenting natural recharge with a managed recharge program to offset groundwater pumping, to maintain storage reserves for use during water shortages and emergency outages, and to minimize the risk of land subsidence. On average, the District actively recharges about 110,000 acre-feet of local and imported water annually into the Santa Clara County groundwater basins, with at least half of it being imported water. As Santa Clara County developed in the 1900’s, the Santa Clara Valley subbasin was substantially overdrafted and land subsidence occurred. Downtown San Jose land surface elevations sank 13 feet, despite development of local conservation reservoirs and an aggressive recharge program. This trend was reversed only after the SWP, and later the CVP, began to deliver supplemental water in the 1960’s. With the infrastructure in place today in urban and commercial areas of Silicon Valley, the impacts of even a foot of additional land surface subsidence could result in ruptured water, stormwater, and sewer lines and could compromise the integrity of roads, highways, buildings, and flood control levees. In 1999, the USGS estimated direct costs of subsidence to Santa Clara Valley to be approximately $300,000,000 in 1998 dollars (Circular 1182). This cost estimate was based primarily on a limited evaluation of flood control levees, and it is likely that
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Total impacts including existing transportation and other infrastructure would be substantially greater.

Reducing groundwater recharge also may impact riparian resources and listed species within the streams used for that recharge. Of the 163 miles of local streams used by the District for instream groundwater recharge, 122 miles are considered to be habitat for threatened and endangered species. Santa Clara County supports a wide variety of environmental resources, including 32 species of plants, 60 species of wildlife, six amphibians and three aquatic species listed as special status species under state and federal law. Local reservoirs, streams and artificial recharge ponds provide habitat for 11 native species and 10 nonnative species of fish. Populations of steelhead trout are known to exist in Coyote Creek, Guadalupe River, Stevens Creek, and San Francisquito Creek and their tributaries, and the District has undertaken a Fisheries and Aquatic Habitat Collaborative Effort to improve habitat conditions. With reduced imported water supplies and dry hydrology, releases to streams and ponds for groundwater recharge are expected to be reduced and potentially eliminated, resulting in potential impacts to riparian resources and listed species.

C. The Draft EIS Improperly Forecloses the Need for Mitigation

By describing the implementation of the 2008 and 2009 BiOps as the No Action Alternative, the Draft EIS improperly forecloses the need for mitigation measures. The Draft EIS, unfortunately, fails to identify or examine mitigation measures that may help mitigate the types of impacts described above. For example, Section 7.4.3.8 of the Draft EIS states:

...implementation of Alternatives 1 through 5 as compared to the No Action Alternative would result in either similar or less groundwater pumping and potential for land subsidence; and similar groundwater quality conditions. Therefore, there would be no adverse impacts to groundwater; and no mitigation measures are needed.

This approach skews the environmental effects analysis and forecloses any meaningful discussion of mitigation.

D. More Information Should Be Provided Regarding the Impacts on San Luis Reservoir Storage Levels and Water Quality

The Draft EIS does not provide a detailed assessment of the No Action Alternative's, or other alternatives', impact on San Luis Reservoir (SLR) storage levels and water deliveries. Summary information presented in the Draft EIS indicates that the projected SLR storage levels are significantly lower under the No Action Alternative than under the Second Basis of Comparison. The Draft EIS overlooks the fact that if San Luis Reservoir is drawn down too low, the reliability and water quality of deliveries to the San Felipe Division, which includes the District, are adversely affected. When SLR storage levels drop below an elevation of 369 feet, about 300,000 acre-feet (AF) in storage or the "low point", algal blooms occurring during the summer can enter the lower intake of the Pacheco Pumping Plant and deliveries of the District's CVP supplies can be adversely affected; water quality within the algal blooms is not suitable for municipal and industrial water users relying on existing water treatment facilities in Santa Clara County. Deliveries to the San Felipe Division may be severely or completely interrupted when storage levels are drawn down such that there is insufficient hydraulic head to effectively
operate Pacheco Pumping Plant. The EIS should provide more detail on the existing low point issue, and existing Reclamation operational protocols designed to minimize low point conditions. It should also provide greater analysis and detail on the impacts of the action alternatives on SLR levels, and on the District's water supplies due to low point conditions.

As with water supply impacts, the Draft EIS does not analyze the water quality impacts associated with the potential increased frequency of low point conditions under the No Action Alternative and other alternatives. The available information in the Draft EIS is not clear whether the frequency of low point conditions would increase under the alternatives, adversely affecting the District's municipal and industrial beneficial use of water stored at SLR. Concentrations of algae (as measured by chlorophyll-a) that are not suitable for existing water treatment facilities would increase at the District's water supply intake. The water quality impact analysis should include this impact. Because the increased frequency of low point conditions could increase District operational and water treatment costs as well as impair the ability to utilize its CVP supplies, the EIS should include a discussion regarding mitigation for increased costs to the extent they are actually incurred.

In sum, the District encourages Reclamation to significantly revise the Draft EIS so that it can meet its obligations per NEPA. The District appreciates Reclamation's consideration of these comments. If there are any questions regarding the comments, please contact Cindy Kao at 408-630-2346, or ckao@valleywater.org.

Sincerely,

Garth Hall
Deputy Operating Officer
Water Supply Division

Enclosure: Attachment 1
ATTACHMENT 1

Santa Clara Valley Water District Detailed Comments on Chapter 7 of the Draft EIS

Page 53/184, Lines 17-20
The northern and central portions of the subbasin are locally referred to as the Santa Clara Plain subbasin of the Santa Clara subbasin (SCVWD 2011). The southern portion of the subbasin consists of extensive alluvial deposits of unconsolidated and semi-consolidated sediments and is referred to as the Coyote Valley subbasin of the Santa Clara subbasin (SCVWD 2010).

Page 53/184, Lines 21-23
The central portions and areas along the edges of the Santa Clara Plain subbasin consist of unconfined aquifers that provide recharge, also known as the Shallow Aquifer (SCVWD 2010, 2011). Comment: The unconfined aquifer and shallow aquifer are two different things. The unconfined aquifer is the recharge area, the portion of the basin that does not have laterally extensive clay layers. The shallow aquifer are the aquifers or water bearing sediments that are less than 150 feet deep, regardless of whether they are in the unconfined or confined zones.

Page 53/184, Lines 23-25
The Principal Aquifer provides most of the groundwater supply for the Santa Clara Valley and is separated from the Shallow Aquifer by a confining lens. Comment: The confining lens does not extend throughout the Santa Clara Plain.

Page 53/184, Lines 35-37
Regionally, groundwater in the Santa Clara Subbasin County generally flows northwest toward the San Francisco Bay and Delta.

Page 53/184, Lines 43
Artificial recharge program has resulted in rising groundwater levels since the late 1960s-1965.

Page 54/184, Lines 3-4
The groundwater quality in the Santa Clara subbasin is of good to excellent quality mineral composition and suitable for most beneficial uses. The groundwater

Page 54/184, Lines 5-8
meets all drinking water standards and can be used without additional treatment (SCVWD 2001, 2010). Some areas affected by historical saltwater intrusion exist in the northern portion of the Santa Clara subbasin in the Shallow Aquifer especially near areas of historical subsidence. Recent groundwater monitoring Comment: The area of historical land subsidence is much larger than the area of salt water intrusion.

Page 54/184, Lines 8-13
especially near areas of historical subsidence. Recent groundwater monitoring has indicated that seawater intrusion appears to be stabilizing (SCVWD 2012a). High nitrate and organic carbon concentrations occur in localized areas of the Coyote Valley Santa Clara Plain subbasin.
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Ongoing programs have been implemented to cleanup contamination related to high perchlorate concentrations near historic industrial sites in southern Santa Clara County (SCVWD 2012b). Comment: The District is not aware of high organic carbon concentrations in the Santa Clara subbasin. Nitrate is an issue in the Coyote Valley, the southernmost portion of the Santa Clara Subbasin. Perchlorate is not an issue for the Santa Clara Subbasin; it is an issue in the Llagas Subbasin, the northern portion of the Gilroy-Hollister Valley Groundwater Basin.

Page 59/184, Lines 35-39 agencies in order to promote conjunctive use of groundwater. The water entities in the Santa Clara subbasin that use treated surface water include the cities of Milpitas, Mountain View, Palo Alto, San Jose, Santa Clara, and Sunnyvale; California Water Service (Los Altos), Great Oaks Water Company, Purissima Water District, and San Jose Water Company. Comment: Palo Alto receives water from Hetch Hetchy, not the District. Greats Oaks uses 100% groundwater, no treated water from the District.

Page 57/184, Lines 6-11 The Santa Clara Valley Water District is responsible for groundwater management in the Santa Clara subbasin, and operates a robust and flexible conjunctive use program that uses a variety of surface water sources: local supplies, imported SWP and CVP supplies, and imported transfer options in conjunction with surface water supplied to some water users by the San Francisco Public Utilities Commission (SCVWD 2001, 2010). Comment: The individual cities receiving Hetch Hetchy water contract directly with SFPUC.

Page 109/184, Lines 19-22 Act, most groundwater users in California must develop Groundwater Sustainability Plans (GSPs) by 2020 or 2022, and meet the sustainable goal within 20 years after adoption of the plan. This EIS analysis assumes that groundwater users have developed the GSPs by 2030. Comment: Groundwater Sustainability Agencies are required to complete GSPs by 2022 at the latest. The assumption should be that GSPs are completed by 2022 as mandated by law.

Page 109/184, Lines 31-37 For example, if CVP and SWP water supplies are decreased and water users increase the amount of groundwater withdrawals, groundwater levels could decline. Changes in groundwater levels resulting in levels declining could result in a decrease in well yields. Changes in groundwater levels also could result in different groundwater pumping costs, as analyzed in Chapter 12, Agricultural Resources, and Chapter 14, Socioeconomics, for agricultural and municipal water users of CVP and SWP water supplies, respectively. Comment: The impacts of decreasing surface water supplies are understated and incomplete in this discussion. Long term increases in groundwater pumping will invariably lead to declining water levels. Additional impacts include land subsidence and salt water intrusion.

Page 111/184, Lines 34-37 Similarly, a decrease in CVP and SWP water supplies could result in a short-term increase in groundwater use; however, due to groundwater use restrictions in the groundwater management plans or adjudicated basin requirements, long-term groundwater use is assumed to not increase.
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SCVWD 22 continued

Comment: The assumption that there will not be a long term increase in groundwater usage is unwarranted. If the demand is present the amount of water lost from surface water supplies will likely be replaced in part, if not in whole, by groundwater. There are no groundwater use restrictions in Santa Clara County or most of the State. SGMA provides this authority to GSAs, but how, or if, this authority is implemented is unknown. Therefore, the assumption that there will be groundwater use restrictions can’t be supported.

Page 112/184, Lines 22-41
7.4.1.3 Changes in Groundwater Quality
Comment: This section does not address the impact on quality due to reduced recharge. Nitrate is an issue in Southern Santa Clara. District monitoring has indicated improved groundwater quality downgradient of recharge facilities due the recharge of higher quality surface water. Decreasing the availability of this surface water may have negative effect on groundwater quality in this area.

Page 133/184, Lines 7-10
Increased use of groundwater and lower groundwater levels would result in a decreased increased potential for additional land subsidence under Alternative 3 as compared to the Second Basis of Comparison in the Santa Clara Valley Groundwater Basin in the San Francisco Bay Area Region.
Comment: The sense of subsidence impact from pumping seems reversed.

1C.1.14.1 Responses to Comments from Santa Clara Valley Water District

SCVWD 1: Comment noted.

SCVWD 2: Responses to the comments related to the definition of the No Action Alternative in the EIS, range of alternatives, and mitigation measures as submitted by State Water Contractors are presented in Section 1.D.1.14 of Appendix 1D, Comments from Interest Groups and Responses. Responses to the comments related to the definition of the No Action Alternative in the EIS, range of alternatives, and mitigation measures as submitted by San Luis & Delta-Mendota Water Authority are presented above in Section 1.C.1.14 of this appendix.

SCVWD 3: Responses to comments in Attachment 1 of this comment letter are presented below in responses to Comments SCVWD 10 through 24.

SCVWD 4: Section 7.4 of Chapter 7, Groundwater Resources and Groundwater Quality, and Section 19.4, Socioeconomics, have been modified to describe the difficulties for several areas of the state to increase groundwater pumping.

SCVWD 5: The economic impacts of implementing water conservation, changing crop patterns, and increased groundwater pumping for agricultural water users due to reduced water supplies is discussed in Chapter 12, Agricultural Resources, of the EIS. The economic impacts of implementing water conservation, alternative water supplies (e.g., desalination), increased groundwater pumping, and water transfers for municipal users is discussed in Chapter 19, Socioeconomics. The analysis using the CWEST model specifically includes consideration for Santa Clara Valley Water District water storage ability in the Semitropic Groundwater Banking Program; as well as other conjunctive use programs within Santa Clara County.
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**SCVWD 6:** Section 7.4 of Chapter 7, Groundwater Resources and Groundwater Quality, and Section 19.4, Socioeconomics, have been modified to describe the difficulties for several areas of the state to increase groundwater pumping.

**SCVWD 7:** As described in Section 3.3, Reclamation had provisionally accepted the provisions of the 2008 USFWS BO and 2009 NMFS BO, and was implementing the BOs at the time of publication of the Notice of Intent in March 2012. Under the definition of the No Action Alternative in the National Environmental Policy Act regulations (43 CFR 46.30), Reclamation’s NEPA Handbook (Section 8.6), and Question 3 of the Council of Environmental Quality’s Forty Most Asked Questions, the No Action Alternative could represent a future condition with “no change” from current management direction or level of management intensity, or a future “no action” conditions without implementation of the actions being evaluated in the EIS. The No Action Alternative in this EIS is consistent with the definition of “no change” from current management direction or level of management. Therefore, the RPAs were included in the No Action Alternative as Reclamation had been implementing the BOs and RPA actions, except where enjoined, as part of CVP operations for approximately three years at the time the Notice of Intent was issued (2008 USFWS BO implemented for three years and three months, 2009 NMFS BO implemented for two years and nine months).

As described in Section 3.3, Reclamation included the Second Basis of Comparison to identify changes that would occur due to actions that would not have been implemented without Reclamation’s provisional acceptance of the BOs, as required by the District Court order. However, the Second Basis of Comparison is not consistent with the definition of the No Action Alternative used to develop the No Action Alternative for this EIS. Therefore, mitigation measures have not been considered for changes of alternatives as compared to the Second Basis of Comparison.

**SCVWD 8:** As presented in Tables C.12.1 through C.12.6 in Appendix 5A, Section C, CalSim II and DSM2 Model Results, water elevations in San Luis Reservoir below 369 feet would occur in critical dry years under Alternative 5. This change would represent less than a 5 percent change as compared to conditions under the No Action Alternative. As described in Chapter 5, Surface Water Resources and Water Supplies, changes in CalSim II model results of 5 percent or less are considered to be “similar.”

Additional details have been added to the affected environment and impact assessment discussions in Chapter 6, Surface Water Quality, to address water quality of CVP and SWP water supplies, including water quality in San Luis Reservoir related to the algal blooms and the “low point” conditions.

**SCVWD 9:** Reclamation has included modifications in the Final EIS in response to comments received on the Draft EIS. On October 9, 2015, the District Court granted a very short extension to address comments received during the public review period. This extension dictates Reclamation to issue a Record of Decision by no later than January 12, 2016. Reclamation is committed to continue working...
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toward improvements to the USFWS and NMFS RPA actions through either the
adaptive management process, Collaborative Science and Adaptive Management
Program (CSAMP) with the Collaborative Adaptive Management Team (CAMT),
or other similar ongoing or future efforts.

SCVWD 10: These suggested changes have been included in Chapter 7,
Groundwater Resources and Groundwater Quality, of the Final EIS.

SCVWD 11: These suggested changes have been included in Chapter 7,
Groundwater Resources and Groundwater Quality, of the Final EIS.

SCVWD 12: These suggested changes have been included in Chapter 7,
Groundwater Resources and Groundwater Quality, of the Final EIS.

SCVWD 13: These suggested changes have been included in Chapter 7,
Groundwater Resources and Groundwater Quality, of the Final EIS.

SCVWD 14: These suggested changes have been included in Chapter 7,
Groundwater Resources and Groundwater Quality, of the Final EIS.

SCVWD 15: These suggested changes have been included in Chapter 7,
Groundwater Resources and Groundwater Quality, of the Final EIS.

SCVWD 16: These suggested changes have been included in Chapter 7,
Groundwater Resources and Groundwater Quality, of the Final EIS.

SCVWD 17: These suggested changes have been included in Chapter 7,
Groundwater Resources and Groundwater Quality, of the Final EIS.

SCVWD 18: These suggested changes have been included in Chapter 7,
Groundwater Resources and Groundwater Quality, of the Final EIS.

SCVWD 19: These suggested changes have been included in Chapter 7,
Groundwater Resources and Groundwater Quality, of the Final EIS.

SCVWD 20: The EIS assumptions due include completion of the Groundwater
Sustainability Plans by 2020 or 2022, as mandated by law. The sentence referred
to in this comment has been modified in the Final EIS.

SCVWD 21: The groundwater analysis, as described in subsequent portions of
Section 7.4 of Chapter 7, does assume that there would be long-term declines in
groundwater elevations and increased potential for subsidence under alternatives
with less CVP and SWP water deliveries as compared to the No Action
Alternative and Second Basis of Comparison.

SCVWD 22: The discussion in this paragraph referred to in this comment has
been modified in the Final EIS, including additional text that reflects restrictions
in adjudicated basins.

SCVWD 23: The discussion in this section of Chapter 7 referred to in this
comment has been modified in the Final EIS to include a discussion of
groundwater quality benefits of groundwater recharge programs.

SCVWD 24: These suggested changes have been included in Chapter 7,
Groundwater Resources and Groundwater Quality, of the Final EIS.
1C.1.15 South Delta Water Agency

SOUTH DELTA WATER AGENCY
4255 PACIFIC AVENUE, SUITE 2
STOCKTON, CALIFORNIA 95207
TELEPHONE (209) 956-0150
FAX (209) 956-0154
E-MAIL: brenkson@usbr.gov

Directors:
Jerry Robinson, Chairman
Robert K. Ferguson, Vice-Chairman
Natasha Bacchetti
Jack Alvarez
Mary Hildebrand

Counsel & Manager:
John Herrick

September 29, 2015

Via E-Mail brenkson@usbr.gov

Mr. Ben Nelson
Bureau of Reclamation
Bay-Delta Office
801 I Street, Suite 140
Sacramento, CA 95814-2356

Re: Comments by South Delta Water Agency to DEIS for Coordinated Long-Term Operation of the CVP and SWP

Dear Mr. Nelson:

The following are the comments of the South Delta Water Agency to the above-described EIS. The SDWA has for its inception been dealing with the Department of Water Resources and the U.S. Bureau of Reclamation with regard to their operations and the effects therefrom on the water quality, levels and circulation in the southern Delta. DWR and USBR (collectively "Projects") continue to undertake actions and emphasize exports to the detriment of southern Delta water users. Although the EIS is part of an overall effort to implement the fishery agencies Biological Opinions, the Projects should only be doing such in a manner that also complies with other state and federal law and that does not adversely impact third parties and senior water right holders.

For clarity, the implementation of the BO mandated actions are referred to as "the project" while DWR and USBR are referred to as "the Projects."

A. It is unclear how the EIS actually evaluates any proposed project in that the No-Action Alternative includes continued operations of the projects under the 2008 and 2009 BO's; the implementation of the BO's being the project. Thus, the comparisons between the No-Action and the preferred alternative (Alternative 27) are simply an examination over time of how operations and effects therefrom will change due to other factors and not due to the project. The EIS attempts to cure this by having Alternative 1, which for the most part is CVP and SWP operations without the BO's being implemented. The net result of this is an inability to actually evaluate the impacts of the project which of course means that any possible mitigation becomes elusive. The EIS is deficient because of this faulty construction of alternatives.

The EIS is also deficient because it includes alternatives which are contrary to existing law and the permits under which the CVP and SWP operate. For example, under Alternative 3 New Melones operations do not include any releases under D-1641 for either water quality on the San Joaquin River (or in the southern Delta?) or for fishery flows including the pulse flows.
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Each of these requirements are current conditions of the USBR permits for New Melones. Although it might be arguable that the USBR could meet these requirements by other measures, the Alternative assumes other USBR operations remain consistent and thus preclude meeting the permit conditions. Other criteria/conditions in this and other proposals are similarly contrary to existing USBR and DWR obligations. There would seem to be no legal basis to evaluate alternatives which are directly contrary to existing permit conditions and would result in violations of water quality standards.

B. WATER QUALITY CHAPTER 6.

Chapter 6 of the EIS attempts to examine the effects of the project on water quality. However, in what appears to be an effort to hide any such effects, the EIS fails to separate out impacts by sources. All the Alternatives include climate change assumptions which are anticipated to impact water quality in the system overall. Alternatives which include the RPA’s from the 2008 and 2009 BO’s (all but Alternative 1) include such things as increased flows at some times in some places, increased Delta outflow at some times, and impacts to export rates. These changes will also impact water quality by affecting the amount of flows at other times and the storage which is needed to provide the flows when natural flow is insufficient. However, the EIS does not separate out the impacts of these two actions (project related and climate change related). Hence the public cannot discern what the impacts are from the BO’s mandated actions as opposed to those from climate change assumptions. Thus the EIS is deficient in that it does not examine how project induced increased flows, increased Delta outflow or changes in export rates affect water quality.

For example, the analysis of Alternative 2 to the No-Action Alternative is described as being the same as the comparison of the No-Action Alternative to Alternative 1 (page 6-95). That analysis begins on page 6-85, section 6.4.3.1. In that section the EIS states that the San Joaquin River would have lower salinity during April and October, but higher in all other months. Such a conclusion is either wrong or misleading. In times when water quality is a function of “natural” and upstream (of the Stanislaus) flow, New Melones makes no releases to maintain Vernalis water quality. Thus, the impacts of the BO’s would be insignificant or non-existent during those times. However, when existing flows are low or contain high concentrations of salts, New Melones makes releases to maintain the water quality standard at Vernalis according to its permits. When the standard is 0.7 EC, the USBR typically maintains somewhere near 0.6 EC at Vernalis. During such controlled release times, the river is of a “constant,” artificially maintained quality. Would not the USBR still meet the same quality goal even if the project adversely affected the river’s quality? Thus the project may have no effect on river water quality unless of course prior releases (under the BO’s) or hydrologic conditions result in insufficient water in New Melones to comply with the permit condition. Whatever the situation, the EIS makes no apparent effort to show how the actions under the BO’s will affect the ability of the USBR to meet the Vernalis requirement, and thus do not show how the project affects river quality.

As is typical in an environmental document produced by the USBR, there is only a small reference to the three interior southern Delta water quality standards; which standards are permit requirements of both DWR and USBR. These three standards have compliance measuring points at Brandy Bridge on the San Joaquin River, Old River at Middle River and Old River at Tracy Blvd. Bridge (see D-1641). The USBR and DWR are obligated to meet the water quality objectives (standards) for agricultural beneficial uses at these three locations, although the standards apply throughout the channels (see 2006 Bay-Delta WQCP). Historically, the USBR
and DWR have been unable to meet these standards on a regular basis and unwilling to undertake any actions to seek compliance or even improve water quality if not comply. Included herewith various printouts from the DWR Delta Ops webpage dealing with Delta water quality showing the instances of violations of the 0.7/1.0 EC standards in recent years, which exceedances are violations of the Projects' permits. The 0.7 applies from April through August and the 1.0 applies from September through March. There have been over 1000 violations in recent years.

The EIR makes no mention of how the project will affect water quality at the three interior southern Delta compliance points, only mentioning that "the standards are under review." Regardless of any such review, the failure to evaluate the project's impact on water quality at points for which DWR and USBR are obligated to meet certain standards makes the EIS deficient. However it gets worse.

In response to DWR notifying the SWRCB that it and USBR would not meet the 0.7 EC standard as of April 2005, the SWRCB conducted a Cease and Desist hearing against DWR and USBR. That proceeding resulted in Order WR 2005-0006, which ordered the Projects to "obviate" future violations. When the Projects were incapable of complying with that Order, a second or follow-on Cease and Desist hearing was conducted which resulted in WR 2010-0002 (included herewith). That Order, continued the mandate to "obviate" future violations, but assumed the consideration of new standards (i.e. relaxing the standards because DWR and USBR refused to meet the existing standards). The Projects were mandated to present a plan to meet the standards (or changed standards if such changes occurred) within "180 days" of the completion of a water right proceeding implementing any new standards. (WR 2010-0002 at page 21). However, the SWRCB gave itself until January 1, 2013 to complete a water rights proceeding following any change in the standards. Since this "drop-dead" deadline has expired, DWR and USBR are in violation of the CDO by not having come up with a plan to meet the interior southern Delta standards.

Thus, the EIS simply ignores not only that the Projects are obligated to meet these water quality standards, but that they are in violation of a Cease and Desist Order to have a plan to meet the standards. When the EIS assumes "continued operations" of the CVP, it is assuming a violations of permit conditions, water quality standards and the Clean Water Act and Porter Cologne Act (under which the SWRCB sets water quality standards). An EIS cannot assume such violations.

The failure to comply with law does not end there. In 2004 PL 108-361 (HR 2828, included herewith) was enacted. That federal law placed certain obligations on the USBR. One such obligation required the USBR to, within one year "develop and initiate implementation of a program to meet all existing water quality standards and objectives for which the Central Valley Project has responsibility." This phrase is a federal mandate for the USBR to meet not only the Vernalis salinity standard, but also the three interior southern Delta salinity standards. The EIS ignores this obligation, does not mention the common violations of the standards or propose how the USBR will operate (in conjunction with DWR) to meet those standards. Other water quality standards for fish and wildlife are also regularly violated by the USBR and DWR, and PL 108-361 makes their compliance a federal mandate too. However, the EIS simply states that the Alternatives include "continued long-term operation of the CVP and SWP in accordance with ongoing management policies, criteria and regulations, including water right licenses (sic) issued by the SWRCB." Such a statement is incorrect and the EIS is deficient in not addressing legal obligations of USBR and DWR. The public has no way to evaluate the impacts of the project on surface water quality.
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It is also noteworthy that PL 108-361 also mandates the USBR to install the permanent operable barriers in the southern Delta (a method of partially mitigating Project impacts on water levels and quality) no later than September 30, 2007. However, the 2009 BO directs that no such barrier project shall go forward. It is incumbent on USBR to address this NPS directive which is in contravention of the federal law. Further, PL 108-361 mandates that the USBR find ways to decrease the use of New Melones for such compliance purposes; another federal mandate ignored by the EIS and the USBR.

C. WATER RESOURCES AND WATER SUPPLY CHAPTER 5.

The EIS’ analysis of the effects on surface water and water supplies is inadequate. In the past three years DWR and USBR have petitioned for and received at least 12 temporary changes to their various water right permits (see for example attached Temporary Emergency Change Order). These changes have allowed relaxation of numerous water quality standards for which the Projects are responsible. The changes were sought (and authorized) not just during the second and third year of a drought, but also within the first six months of the drought. This means that the Projects are not being operated to meet permit conditions, which conditions are to protect water quality objectives for the protection of beneficial uses, including fish and wildlife and agriculture. If the Projects cannot meet their basic, minimum obligations, any analysis on the effects of the project that do not take this into account is illusory. The EIS assumes that current operations under the 2008 and 2009 BO’s is in compliance with state and federal statutory and regulatory requirements. Given the recent history of the Projects regularly securing relaxation of their obligations, it is improper to assume such compliance in the EIS. When the EIS notes decreased flows or decreased exports, those numbers are meaningless if in actuality USBR and DWR secure permit changes to not meet standards and to continue to export water. The models used for the EIS’ analysis assume the operations by the Projects will result in compliance with permit terms and conditions. Thus the analysis contained in the EIS is assumed that compliance will occur and then identifies impacts. If compliance is not occurring, then the actual impacts cannot be identified.

The EIS lists various increases and decreases in storage, flows and exports, but these do not inform the public of just how the project will affect the environment because the analysis is of some imaginary set of conditions and operations. For example, when the EIS makes conclusions about impacts to O&M Flows in dry or critical years, it is ignores the fact that the fishery agencies agreed to changes of such flows during the drought. Similarly, when the EIS notes changes in Delta outflow resulting from the project, it ignores the SWRCB’s multiple changes to outflow standards during the drought. There is no way to evaluate the impacts when the base case (USBR and DWR operations) is not what the EIS describes.

As in the comments to Water Quality, the EIS makes no attempt to identify what impacts result from climate change assumptions and what results from the project. When the BO’s mandate increased flows, increased Delta outflow, and decreased exports one would expect that this would change reservoir carryover storage which affects the amounts of water available for downstream uses including fish and wildlife needs. However the EIS turns a blind eye to reality and does not even attempt to describe how such changes might affect the ability of the Projects to meet their various obligations in the short or long term. Rather the EIS simply assumes everything works out and the only impacts are worse water quality and less supply sometimes for some interests. The past three years have shown that even after a short term drought the Projects cannot make south of Delta deliveries, cannot meet cold water needs, cannot meet Delta outflow and cannot meet salinity requirements. The whole purpose of the EIS is to inform the public of
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how the BO mandated operations will affect the rest of us. It does not. Instead it simply calculates changes via models as if no one or no reservoir ever runs out of water. This complete failure to do a meaningful analysis makes the EIS deficient.

The EIS indicates that Shasta storage changes under various year types, including mostly increases during some months and decreases in others (page 5-75). As above, this analysis does not inform the public of how the decreases and increases affect each other and thus we cannot tell if the net impact is positive or negative or how it affects future supplies for all needs. The EIS even shows under some Alternatives that storage increases in all year types in many reservoirs. It would seem impossible to mandate higher flows and end up with more storage.

The EIS notes that river flows (especially on the San Joaquin River) decrease in certain months (page 5-86) but tells us nothing about how such decreased flow will affect downstream users. This past year the SWRCB curtailed certain water right holders due to low flows. If the project might exacerbate this, the EIS must analyze it. Similarly, the amount of flow entering the southern Delta from the San Joaquin affects the efficiency of the temporary barrier project. The EIS makes no mention of these barriers or how the changes in flows (or water quality) might affect the operation of the barriers or impact those dependent on them. The temporary barrier project is a mandated obligation of DWR and USBR pursuant to the CDO discussed above and a necessary aspect of the settlement to a lawsuit filed by SDWA against the USBR.

The EIS also describes differences in carryover storage in New Melones. However, the changes in carryover are provided only in elevation/feet. This gives the public no ability to determine how much less water is in storage or how the decrease may affect future year’s supplies. As we have seen, New Melones like other reservoirs has dropped to critically low levels during the drought. Does the project make such critical low levels more likely or more extreme? The EIS gives the public no useful information in regard to this.

Similar problems with the EIS are in the portions dealing with carryover storage in San Luis Reservoir (filled by exports) (see page 5-88 for example). Showing monthly changes in elevation does not indicate any net change in storage in acre feet. How does a 20 feet drop from elevation 523 feet compare with a 46 foot drop from elevation 422? How do these drops affect total year-end storage?

On page 5-91 the EIS tells us that Delta outflow “would be similar or increase” up to 3,114 cfs. Given that Delta outflow mandates have been temporarily changed 10 or more times in the past three years, what is the basis for the EIS to conclude that in dry years outflow will go up? Will the BO mandated new flows somehow result in more water in each succeeding dry year? Do the 2008 and 2009 result in more water?

The EIS also notes the changes in south of Delta exports, describing amounts by which SWP and CVP deliveries decrease (see for example page 5-93). In recent drought years CVP deliveries to south of Delta agriculture have been zero. How does the EIS conclude that deliveries in dry and critical years go down by 14 TAF or 39 TAF, respectively? How can zero deliveries be reduced by thousands of acre feet? The point being that the EIS again ignores actual operations and thus evaluates fanciful conditions and produces meaningless information.

SDWA 8

SDWA 9

SDWA 10

SDWA 11

SDWA 12

SDWA 13
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D. OTHER LEGAL MANDATES

The EIS fails to mention that the Legislation authorizing the Coordinated Operations (PL 99-546) requires the USBR, in conjunction with DWR to meet any adopted water quality standards unless it is determined that the compliance is not consistent with congressional directives applicable to the CVP. Since the USBR has made no such determination of inconsistency, the USBR must meet its obligations; including meeting the Venetis and southern Delta salinity standards. The USBR did not do so for much of this year and last. Thus the EIS assumptions are unsupportable.

The EIS fails to mention that one of the purposes of the CVP and SWP is repulsion of salinity. Thus USBR’s failure to meet Delta outflow requirements including X2 are contrary to its federally mandated directives.

State law applying to the Projects requires them to not only provide such salinity control, but also to provide water quality and supply to in-Delta interests prior to exporting any water. The EIS is deficient in not examining Project operations which include such limitations on exports.

E. FAILURE TO USE AVAILABLE INFORMATION

Attached hereto are excerpts from both the EIS and the BO’s which highlight the failure of USBR to develop information by the deadlines specified in the BO’s. This failure resulted in the USBR having insufficient information to conduct a meaningful evaluation in the EIS. Additional excerpts indicate that the EIS fails to adequately evaluate increased fish screening as a meaningful alternative to increased habitat.

SDWA hereby adopts and includes the reference those comments submitted by the Central Delta Water Agency.

Please call me if you have any questions or comments.

Very truly yours,

[Signature]

JOHN HERRICK

Attachments

1

2

3 1C.1.15.1 Attachments to Comments from South Delta Water Agency

Attachments to the South Delta Water Agency Comment letter are included in Attachment 1C.3 located at the end of Appendix 1C.

Comments from South Delta Water Agency and Central Delta Water Agency as attached to the South Delta Water Agency Comment letter are presented in Section 1C.1.16, South Delta Water Agency and Central Delta Water Agency.

1C.1.15.2 Responses to Comments from South Delta Water Agency

SDWA 1: Comment noted.

SDWA 2: As described in Section 3.3, Reclamation had provisionally accepted the provisions of the 2008 USFWS BO and 2009 NMFS BO, and was implementing the BOs at the time of publication of the Notice of Intent in March 2012. Under the definition of the No Action Alternative in the National Environmental Policy Act regulations (43 CFR 46.30), Reclamation’s NEPA Handbook (Section 8.6), and Question 3 of the Council of Environmental
Quality’s Forty Most Asked Questions, the No Action Alternative could represent a future condition with “no change” from current management direction or level of management intensity, or a future “no action” conditions without implementation of the actions being evaluated in the EIS. The No Action Alternative in this EIS is consistent with the definition of “no change” from current management direction or level of management. Therefore, the RPAs were included in the No Action Alternative as Reclamation had been implementing the BOs and RPA actions, except where enjoined, as part of CVP operations for approximately three years at the time the Notice of Intent was issued (2008 USFWS BO implemented for three years and three months, 2009 NMFS BO implemented for two years and nine months).

As described in Section 3.3, Reclamation included the Second Basis of Comparison to identify changes that would occur due to actions that would not have been implemented without Reclamation’s provisional acceptance of the BOs, as required by the District Court order. However, the Second Basis of Comparison is not consistent with the definition of the No Action Alternative used to develop the No Action Alternative for this EIS. Therefore, mitigation measures have not been considered for changes of alternatives as compared to the Second Basis of Comparison.

SDWA 3: As described in the response to Question 2b of the Council on Environmental Quality Forty Most Asked Questions, a “potential conflict with local or federal law does not necessarily render an alternative unreasonable, although such conflicts must be considered.” Therefore, the range of alternatives considered in this EIS does include actions that are not necessarily consistent with existing federal and state requirements for the existing long-term operation of the CVP and SWP. The selection of the range of alternatives considered in the EIS was informed by several factors, including scoping comments, as described in Section 3.4 of Chapter 3, Description of Alternatives, in the EIS. Alternative 3 was developed through consideration of scoping comments from the Coalition for a Sustainable Delta, Oakdale Irrigation District, and South San Joaquin Irrigation District, as described in Section 3.4.5.

SDWA 4: The No Action Alternative, Second Basis of Comparison, and Alternatives 1 through 5 include consistent climate change and sea level rise conditions. The EIS assumes that there will be no changes in regulatory or operational requirements due to climate change in the future. The EIS analyzes the alternatives in a comparative manner, and does not analyze any of the alternatives individually. Therefore, the impact analysis compares conditions under the Alternatives 1 through 5 to the No Action Alternative; and conditions under the No Action Alternative and Alternatives 1 through 5 to the Second Basis of Comparison. This comparative approach eliminates effects of climate change and sea level rise and indicates the differences in the comparisons of alternatives r

SDWA 5: The text referred to in the comment on page 6-95 indicates that CVP and SWP operations in Alternative 2 are identical to operations in the No Action Alternative. The CVP and SWP operations in Alternative 1 are identical to operations in the Second Basis of Comparison. Therefore, comparison of water
quality conditions under Alternative 2 to conditions under the Second Basis of
Comparison are identical to the comparison of water quality conditions under the
No Action Alternative as compared to the Second Basis of Comparison.

Appendix 6E Section B.15 shows changes in salinity at San Joaquin River at
Vernalis. The analysis in Chapter 6, Surface Water Quality, is consistent with
these results. It is true that meeting water quality objectives may not be the
controlling factor on New Melones operations. This is in fact consistent with the
discussion in the chapter. If water quality was the controlling objective in all
months, then there would not be a difference in salinity except in extreme
conditions when there is no water in the reservoir.

However, the results shown in the Appendix 6E simply are due to pulse flows
released from New Melones for fisheries purposes. In the absence of such pulse
flows in October and April under the Second Basis of Comparison, less water is
released from the reservoir that ends up with higher salinity conditions (although
the conditions meet SWRCB D-1641 requirement).

The difference in other months can be described by different flow patterns in the
river. The fishery flow patterns are different under the Second Basis of
Comparison. In addition, there may be spills from New Melones in winter
months under the Second Basis of Comparison that would cause freshening in
river flows.

SDWA 6: The text referred to in the comment as “standards are under review”
(page 6-63, lines 9 and 10) are referring to the ongoing development of water
quality objectives for the San Joaquin River flows and southern Delta water
quality.

Reclamation and DWR meet the flow-dependent water quality objectives
included in SWRCB D-1641 through the use of temporary barriers that raise the
water elevations, not the use of flows to dilute salinity in the Delta. Reclamation
and DWR considered installation of permanent barriers; however, these plans
were not completed due to ecosystem impacts. Reclamation is continuing to work
with the SWRCB to determine requirements to address changes in Delta water
quality due to CVP operations through the development of water quality
objectives for the San Joaquin River flows and southern Delta water quality. It
should be noted that Reclamation’s operations is only one of several actions that
contribute to water quality issues in the Delta; and therefore, Reclamation is only
partially responsible to meet the SWRCB Delta water quality objectives.

SDWA 7: The CVP and SWP operations prioritize meeting federal and state
regulatory requirements and deliveries to senior water rights holders. The
modeling analyses presented in the EIS include these prioritizations for long-term
operation of the CVP and SWP using an 82-year hydrology analyzed with the
CalSim II model. This analytical approach results in low water storage elevations
in CVP and SWP reservoirs and low deliveries to CVP agricultural water service
contractors located to the south of the Delta in critical dry periods. The modeled
operations do not include changes in SWRCB requirements intended to reduce the
effects of extreme flood or drought events, such as the recent changes in CVP and SWP drought operations.

Droughts have occurred throughout California’s history, and are constantly shaping and innovating the ways in which Reclamation and DWR balance both public health standards and urban and agricultural water demands while protecting the Delta ecosystem and its inhabitants. The most notable droughts in recent history are the droughts that occurred in 1976-77, 1987-92, and the ongoing drought. More details have been included in Section 5.3.3 of Chapter 5, Surface Water Resources and Water Supplies, and Section 6.3.3.6 of Chapter 6, Surface Water Quality, in the Final EIS to describe historical responses by CVP and SWP to these drought conditions, including reductions in recent deliveries of CVP water and use of water from Millerton Lake to the San Joaquin River Exchange Contractors.

**SDWA 8:** Table 5.14 in the EIS presents changes in Shasta Lake storages by month and by water year types. Similar changes in other CVP reservoirs and SWP reservoirs are also presented in Chapter 5. Monthly changes in reservoir storage by water year type are presented because many of the subsequent analyses, including fisheries analyses need to consider specific monthly changes related to life stages.

Changes in reservoir storage in different months are reflective of the overall coordinated long-term operation of the CVP and SWP, and are not considered in a manner to “offset” other impacts. When assessing flows versus storage, system operations need to be considered as a whole. The upstream storage (for example stored water in Shasta Lake) is dependent on both the magnitude and the pattern of flows released. For example, Alternatives 1, 3, and 4 do not include operations related to the 2008 USFWS BO Old and Middle River RPA actions; therefore, flow releases from reservoirs for CVP and SWP water deliveries would occur in early spring when it is more efficient (related to water quality objectives) to convey the flow through Delta as opposed to releasing water for exports in the summer which requires more water releases to maintaining SWRCB D-1641 salinity requirements. As another example, higher end-of-September storage in Shasta Lake under Alternatives 1, 3, and 4 as compared to the No Action Alternative is due to both the change in flow patterns and the absence of 2008 USFWS BO RPA Action 4 (Fall X2) in Alternatives 1, 3, and 4 (see Figure C-2-3 in Appendix 5A, Section C, CalSim II and DSM2 Model Results).

**SDWA 9:** As described in response to Comment SDWA 7, the EIS does not address potential changes by the SWRCB which are not controlled by Reclamation or DWR. The EIS also assumes that the temporary barriers are operated in all years in all alternatives.

**SDWA 10:** As shown in Figures C.6.1 through C.6.3 and Tables C.6.1 through C.6.6 of Appendix 5A Section C, CalSim II and DSM2 Model Results, of the EIS, present changes in New Melones Reservoir storage volume. Figures C.13.1 and C.13.2 and Tables C.13.1 through C.13.6 present changes in New Melones Reservoir water surface elevations. These plots and tables need to be used in a
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comparative manner to assess the increased or decreased likelihood of low storage conditions. As shown in these figures and tables and the tables in Section 5.4.3 of Chapter 5, lower reservoir storage in New Melones Reservoir is more likely to occur under Alternative 5 than under the No Action Alternative and Second Basis of Comparison; and less likely to occur under Alternative 3 than under the No Action Alternative and Second Basis of Comparison. Conditions under Alternatives 1, 2, and 4 would be similar to the No Action Alternative and Second Basis of Comparison for the New Melones Reservoir storage.

SDWA 11: As shown in Figures C.5.1.1 through C.5.1.6 and Tables C.5.1.1 through C.5.1.3 of Appendix 5A Section C, CalSim II and DSM2 Model Results, of the EIS, present changes in San Luis Reservoir storage volume. Figures C.12.1 and C.12.2 and Tables C.12.1 through C.12.6 present changes in San Luis Reservoir water surface elevations.

SDWA 12: The comment refers to changes in Delta outflow in dry years under the No Action Alternative as compared to the Second Basis of Comparison (page 5-91, lines 10 and 11). As described in Chapter 5 of the EIS, this difference is primarily a result of the 2008 USFWS BO RPA and the 2009 NMFS BO RPA actions related to Old and Middle River flow criteria under the No Action Alternative as compared to the Second Basis of Comparison.

SDWA 13: As described in response to Comment SDWA 7, the values in Table 5.26 for critical dry years represent an average over 15 percent of the total 82-year hydrology, as presented in Appendix 5A, Section C. As shown in Figure C.19.1.2 (see Appendix 5A, Section C), deliveries to CVP agricultural water service contractors are projected to decrease to zero in about 9 percent of the water years analyzed in the CalSim II model.

SDWA 14: The CalSim II model used in the EIS analysis includes assumptions to meet the federal and state flow and water quality requirements, including water rights and SWRCB D-1641 criteria. It is understood that the SWRCB could change the operations in a specific year during extreme flood or drought conditions.

As described in the response to Comment SDWA 6, Reclamation and DWR meet the flow-dependent water quality objectives included in SWRCB D-1641 through the use of temporary barriers. Reclamation is continuing to work with the SWRCB to determine requirements to address changes in Delta water quality due to CVP operations through the development of water quality objectives for the San Joaquin River flows and southern Delta water quality.

SDWA 15: The range of alternatives considered in the EIS include a range of CVP and SWP operational criteria that result in changes in CVP and SWP Delta exports. For example, water deliveries to CVP and SWP water contractors (not water rights holders, settlement, or exchange contractors) would average about 22 to 30 percent of full contract amounts under critical dry year water conditions under all of the alternatives as shown in in Tables C-19 and C-20 in Appendix 5A, Section C, CalSim II and DSM2 Model Results (see Table 5A.B.1 in Appendix
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5A, Section B, CalSim II and DSM2 Modeling Simulations and Assumptions, for full contract amounts).

SDWA 16: Responses to the attached comments referred to in Comment SDWA 16 are presented in Section 1C.1.16, South Delta Water Agency and Central Delta Water Agency.

SDWA 17: Responses to Central Delta Water Agency comments are presented in Section 1C.1.1, Central Delta Water Agency.
1C.1.16 South Delta Water Agency and Central Delta Water Agency

The project also covers the environmental affects of the CLTO reoperation of the SWP, so this document also must conform to CEQA requirements. This document must be revised to conform with CEQA requirements and recirculated for public comment. Alternatively, DWR as State Lead could produce it's own independent CLTO EIR.

ES.3, line 14 “In accordance with the October 1, 2014, District Court's order in the Delta Smelt Consolidated Cases, the Final EIS and Record of Decision are to be completed on or before December 1, 2015” It is logistically impossible for the EIS to comply with this court ordered schedule at this point. Even if months or weeks of revisions of the public draft EIS were not required to address material omissions (missing alternatives) and deficiencies (incorrect No Action definition), the federal agency mandatory review period for the Final EIS no less than 30 days prior to the ROD and the lead time required for publishing the ROD in the federal register are substantially longer than the period between the close of public draft comments and the December 1 deadline. Since Reclamation has had 3 years to get to a public draft and it is clear that it will miss its mandated court deadline, the environmental review period for the public should not be constrained to this unjustifiably short one month period. Since Reclamation has been afforded so much time to develop the draft and it will miss its deadline anyway, the public should be given a three month or longer comment period to review and provide input on these materials. As it stands now, the opportunity for public participation has been artificially constrained by Reclamation's artificially confined schedule which thwarts the intent and spirit of public participation in the NEPA process. IF Reclamation is provided another time extension by the court, it must include additional time for public comment and input into the NEPA process.
Many of the provisions of the RPAs, as set forth in the 2008 USFWS BO and the 2009 NMFS BO, will require further study, monitoring, consultation, implementation of adaptive management programs, and subsequent environmental documentation for future facilities to be constructed or modified. It has been 7 years since Reclamation was required to implement the OCAP BO RPAs and yet it still claims that the plans to implement these mandatory actions lack sufficient specificity to allow analysis of impacts. Reclamation is required to utilize the best available information to complete this EIS. So either Reclamation has not utilized the best available information or, as it claims, no information on how these actions would be implemented, operated, constructed and their project-level (or even conceptual designs) has been developed by Reclamation in the 7 years since these legal requirements of the project were incurred. If it is the latter case, as Reclamation says, then Reclamation clearly has failed to apply any good faith effort to comply with the OCAP BO RPAs that are required in order for the CVP (and SWP) to avoid jeopardizing the endangered species. FWS website “On December 15, 2008, the Fish & Wildlife Service issued a biological opinion (BO) on the Long-Term Operational Criteria and Plan (OCAP) for coordination of the Central Valley Project and State Water Project. The Service determined that the continued operation of these two water projects, as described in the plan, was likely to jeopardize the continued existence of the delta smelt and adversely modify its critical habitat. The inclusion by the Service of reasonable and prudent alternatives, and their acceptance by the water agencies, avoided jeopardy and adverse modification.” Since the water agencies never implemented any of the RPAs, these species must therefore as a result of the water agency inaction and non-compliance, be in jeopardy and have adversely modified critical habitat.
ES.3, line21 "Specific actions related to these provisions are not known at this time." If Reclamation had not failed to comply with the OCAP BO RPA deadlines there would be a substantially greater amount of information and specificity on the implementation and characteristics of the more fully developed OCAP BO RPAs to analyze in the CLTO EIS. Since these required actions should have already been completed by Reclamation (and DWR), the information to evaluate the impacts of these actions should have been available for inclusion in the CLTO EIS. NEPA requires that the best available information is utilized in the analysis of a project's impacts. The CLTO EIS has declared that it has not evaluated any of these OCAP BO RPAs other than delta operations because there is insufficient information to analyze. Since so many of these actions were to have been completed and so many supporting design preparation and post-construction/action implementation results monitoring that it is not possible that, categorically, these materials are not at all available. Following is an incomplete list of deadlines and milestones of the OCAP BO RPAs that should have provided detailed information to support the preparation of the CLTO EIS. The CLTO EIS is deficient for not making full use of utilizing the best available information to evaluate these impacts and if there truly is no information available from Reclamation or DWR on all of these actions, plans and reports, Reclamation and DWR are grossly in violation of the OCAP BOs and continue to jeopardize the listed species through their inaction and continued operations.

The OCAP BO RPAs required Reclamation to provide information that must be included in the EIS and it includes: • Annual report on spawning gravel augmentation efforts in compliance of NMFS 2009 OCAP BO Action I.1.3. This report was due by December 31 each year. Reclamation shall provide a report to NMFS on implementation and effectiveness of the gravel augmentation program. • Documentation of completion of replacement of the Spring Creek Temperature Control Curtain in Whiskeytown Lake in compliance with the 2009 NMFS OCAP BO Action I.1.4. This was due to be completed by Reclamation by June 2011. • Clear Creek salmonid habitat suitability studies per the 2009 NMFS OCAP BO Action I.1.6. • Reclamations proposed operational flow recommendations to NMFS for Clear Creek per the 2009 NMFS OCAP BO Action I.1.6. This was to be completed by Reclamation within 6 months of the flow studies. • Long-term performance report in compliance with the 2009 NMFS OCAP BO Action I.2.1. This is due from Reclamation every 5 years with the latest due in June 2014. • Monthly reports to NMFS in compliance with the 2009 NMFS OCAP BO Action I.2.3.B. Reclamation shall submit a projected forecast, including monthly average release schedules and temperature compliance point. To be completed within 7 business days of receiving the DWR runoff projections for that month.
• Contingency plans submitted to NMFS in compliance with the 2009 NMFS OCAP BO Action I.2.3.C. By March 1, (each year) justification that all actions within Reclamation’s authorities and discretion are being taken to preserve cold water at Shasta Reservoir for the protection of winter-run. The contingency plan shall, at a minimum, include the following assessments and actions: a) Relaxation of Wilkins Slough navigation criteria to at most 4,000 cfs. b) An assessment of any additional technological or operational measures that may be feasible and may increase the ability to manage the cold water pool. c) Notification to State Water Resources Control Board that meeting the biological needs of winter-run and the needs of resident species in the Delta, delivery of water to nondiscretionary Sacramento Settlement Contractors, and Delta outflow requirements per D-1641, may be in conflict in the coming season and requesting the Board’s assistance in determining appropriate contingency measures, and exercising their authorities to put these measures in place. • Annual Temperature Management Plan in compliance with the 2009 NMFS OCAP BO Action I.2.4. Due from Reclamation May 15th each year.

• Prioritized list of projects from Appendix 2-B and an implementation schedule submitted to NMFS in compliance with the 2009 NMFS OCAP BO Action I.3.5. Due by Reclamation by 12/15/09.

• Annual report to NMFS on implementation and effectiveness of projects in compliance with the 2009 NMFS OCAP BO Action I.3.5. Reclamation was to implement, monitor and report on these projects for 5 years.
Comment continued:

• Plans submitted to NMFS in compliance with the 2009 NMFS OCAP BO Action I.6.1. Due from Reclamation by December 31, 2011. This plan should have included an evaluation of options to:
  (1) restore juvenile rearing areas that provide seasonal inundation at appropriate intervals, such as areas identified in Appendix 2-C or by using the Sacramento River Ecological Flow Tool (ESSA/The Nature Conservancy 2009) or other habitat modeling tools; (2) increase inundation of publicly and privately owned suitable acreage within the Yolo Bypass; (3) modify operations of the Sacramento Weir (which is owned and operated by the Department of Water Resources) or Fremont Weir to increase rearing habitat; and (4) achieve the restoration objective through other operational or engineering solutions. An initial performance measure shall be 17,000-20,000 acres (excluding tidally-influenced areas), with appropriate frequency and duration. This plan also shall include:
  (1) specific biological objectives, restoration actions, and locations;
  (2) specific operational criteria; (3) a timeline with key milestones, including restoration of significant acreage by December 31, 2013;
  (4) performance goals and associated monitoring, including habitat attributes, juvenile and adult metrics, and inundation depth and duration criteria; and (5) specific actions to minimize stranding or migration barriers for juvenile salmon; and (6) identification of regulatory and legal constraints that may delay implementation, and a strategy to address those constraints. This is a critical missed Reclamation compliance deadline as if they had complied with the legal requirements of the OCAP BO RPAs, all of the design and operational features for the Yolo Bypass RPAs would have been sufficiently developed to allow for full analysis in the CLTO EIS.

Comment continued:

• Annual progress reports submitted to NMFS in compliance with the 2009 NMFS OCAP BO Action I.6.1. This is a Reclamation requirement of the BO RPAs.

• Liberty Island/Lower Cache Slough implementation reports and interim monitoring reports submitted to NMFS in compliance with the 2009 NMFS OCAP BO Action I.6.2. Reclamation shall monitor this action for the subsequent five years, at a minimum, to evaluate the use of the area by juvenile salmonids and to measure changes in growth rates. Interim monitoring reports shall be submitted to NMFS annually, by September 30 each year, and a final monitoring report shall be submitted on September 30, 2015, or in the fifth year following implementation of enhancement actions.
Comment continued:

• Plans, status and annual reports submitted to NMFS on the Lower Putah Creek enhancements in compliance with the 2009 NMFS OCAP BO Action I.6.3. By December 31, 2015, Reclamation and/or DWR shall develop and implement. As described in Appendix 2-C, including stream realignment and floodplain restoration for fish passage improvement and multispecies habitat development on existing public lands. By September 1 of each year, Reclamation and/or DWR shall submit to NMFS a progress report towards the successful implementation of this action. Since this BO RPAs required implementation of this action by 12/31/15, these plans must have either been available for inclusion in the CLTO EIS analysis or Reclamation has failed to comply with the OCAP BO RPA implementation schedule and failed to meet the test of even a good faith effort to develop and implement these actions.

Comment continued:

• Annual reports submitted to NMFS on the Lisbon Weir improvements in compliance with the 2009 NMFS OCAP BO Action I.6.4. By December 31, 2015, Reclamation and/or DWR shall assure that improvements to the Lisbon Weir are made that are likely to achieve the fish and wildlife benefits described in Appendix 2-C. Improvements will include modification or replacement of Lisbon Weir, if necessary to achieve the desired benefits for fish. By September 1 of each year, Reclamation and/or DWR shall submit to NMFS a report on progress toward the successful implementation of this action. Since this BO RPAs required implementation of this action by 12/31/15, these plans must have either been available for inclusion in the CLTO EIS analysis or Reclamation has failed to comply with the OCAP BO RPA implementation schedule and failed to meet the test of even a good faith effort to develop and implement these actions. • OCAP BO note regarding rationale for I.6.2 – I.6.4, “These improvements are necessary to off-set ongoing adverse effects of project operations, primarily due to flood control operations.” Since these have not been implemented, they do not offset the on-going impacts of flood control operations and therefore these species remain in jeopardy from the SWP and CVP operations.

Comment continued:

• Plan submitted to NMFS in compliance with the 2009 NMFS OCAP BO Action I.7. By December 31, 2011, as part of the plan described in Action I.6.1, Reclamation and/or DWR shall submit a plan to NMFS to provide for high quality, reliable migratory passage for Sacramento Basin adult and juvenile anadromous fishes through the Yolo Bypass. Since this BO RPAs required implementation of this action by 12/31/11, these plans must have either been available for inclusion in the CLTO EIS analysis or Reclamation has failed to comply with the OCAP BO RPA implementation schedule and failed to meet the test of even a good faith effort to develop and implement these actions.
Comment continued:

• Written reports to NMFS on the status of its efforts to complete the 2009 NMFS OCAP BO action I.7, in cooperation with the Corps. By June 30, 2010, including milestones and timelines to complete passage improvements. If Reclamation had complied with this BO RPA, there would have been sufficient detail regarding this action to analyze in the CLTO EIS.

• Note regarding rationale for NMFS BO I.7, “This action offsets unavoidable project effects on adult migration and minimizes the direct losses from flood management activities associated with operations.” Since these actions have not been implemented, they do not offset the on-going impacts on these species and are in jeopardy from the SWP and CVP operations.

Comment continued:

• Operations Forecast and Temperature Management Plan submitted to NMFS in compliance with the 2009 NMFS OCAP BO Action II.2. Due by Reclamation by May 15th each year.

Comment continued:

• Proposed plans submitted to NMFS in compliance with the 2009 NMFS OCAP BO Action II.3. This is a report on the evaluation of physical and structural modifications that may improve temperature management capability which was due from Reclamation by June 30th 2010. Since this BO RPAs required implementation of this action by 6/30/10, these plans must have either been available for inclusion in the CLTO EIS analysis or Reclamation has failed to comply with the OCAP BO RPA implementation schedule and failed to meet the test of even a good faith effort to develop and implement these actions. • Copy of notice of completion of implementation submitted to NMFS in compliance with the 2009 NMFS OCAP BO Action II.3. This was due from Reclamation by 12/15/10.

Comment continued:

• Completed HGMP in compliance with the 2009 NMFS OCAP BO Action II.6.1. Due from Reclamation by 3/31/12.

• Draft plan HGMP in compliance with the 2009 NMFS OCAP BO Action II.6.3. Due from Reclamation by June 2013.
Comment continued:

• Note regarding Eastside CVP operations, NMFS BO pdf pg 621, “The fundamental operational criteria are sufficiently ill-defined in the CVP/SWP operations BA as to provide limited guidance to the Action Agency on how to operate. This suite of actions provides sufficiently specific operational criteria so that operations will avoid jeopardizing steelhead and will not adversely modify their critical habitat. Operational actions to remove adverse modification of critical habitat include a new flow schedule to minimize effects of flood control operations on functionality of geomorphic flows and access of juvenile steelhead to important rearing areas.” If Reclamation has not implemented to these actions, then from this BO language, it is clear these ESA species would remain in jeopardy. It is clear from the BOs that just implementing changes to water operations were insufficient to avoid continued jeopardy of the species by CVP/SWP.

Comment continued:

• Annual summaries submitted to NMFS in compliance with the 2009 NMFS OCAP BO Action III.1.1.

Comment continued:

• Plans, schedules and monitoring and final reports on gravel augmentation in compliance with the 2009 NMFS OCAP BO Action III.2.1. Reclamation shall submit a plan, including monitoring, and schedule to NMFS for gravel augmentation by June 2010. Reclamation shall begin gravel augmentations no later than summer 2011. Implementation completed by 2014. Reclamation shall submit to NMFS a report on implementation and effectiveness of action by 2015. Spawning gravel replenishment sites shall be monitored for geomorphic processes, material movement, and salmonid spawning use for a minimum of three years following each addition of sediment at any given site. If Reclamation had complied with the OCAP BO RPAs, this information would have been available for inclusion in the CLTO EIS impact analysis.

Comment continued:

• Operations plans and implementation reports in compliance with the 2009 NMFS OCAP BO Action III.2.2. Reclamation shall submit a proposed plan of operations to achieve this flow regime by June 2011. This plan shall include the minimum flow schedule identified in Action III.1.2, or shall provide justification for any proposed modification of the minimum flow schedule. Reclamation will implement strategy starting in 2012. If Reclamation had complied with the OCAP BO RPAs, this information would have been available for inclusion in the CLTO EIS impact analysis.
Comment continued:

• List of projects, implementation and monitoring reports submitted to NMFS compliance with the 2009 NMFS OCAP BO Action III.2.3. Reclamation was due to submit plan to NMFS by June 2010. Reclamation shall begin implementation of NMFS-approved projects by June 2011. Reclamation shall submit a report of project implementation and effectiveness by June 2016. If Reclamation had complied with the OCAP BO RPAs, this information would have been available for inclusion in the CLTO EIS impact analysis.

Comment continued:

• Proposed engineering solutions submitted to NMFS in compliance with the 2009 NMFS OCAP BO Action IV.1.3. Due by March 30, 2012. Reclamation or DWR shall provide a final report on recommended approaches by March 30, 2015. If Reclamation had complied with the OCAP BO RPAs, this information would have been available for inclusion in the CLTO EIS impact analysis.

Comment continued:

• Weekly reports from Reclamation and DWR to the interagency Data Assessment Team (DAT) regarding the results of monitoring and incidental take of winter-run, spring-run, CV steelhead, and Southern DPS of green sturgeon associated with operations of project facilities per the 2009 NMFS OCAP BO. This information would have informed Reclamation regarding relationships of operations and ESA species response to operations influenced behavioral responses. This information is for adaptive management of operations which Reclamation claims it does not have available to include in the CLTO EIS.

Comment continued:

• Reclamation and DWR annual written report to NMFS following the salvage season of approximately October to May. This report shall provide the data gathered and summarize the results of winter-run, spring-run, CV steelhead, and Southern DPS of green sturgeon monitoring and incidental take associated with the operation of the Delta pumping plants (including the Rock Slough Pumping) per the 2009 NMFS OCAP BO. This information would have informed Reclamation regarding relationships of operations and ESA species response to operations influenced behavioral responses. This information is for adaptive management of operations which Reclamation claims it does not have available to include in the CLTO EIS.
Comment continued:

• Reports to NMFS of facility salvage efficiency of 75 percent in compliance with the 2009 NMFS OCAP BO Action IV.4. Reclamation and DWR shall implement the following actions to reduce losses associated with the salvage process, including: (1) conduct studies to evaluate current operations and salvage criteria to reduce take associated with salvage, (2) develop new procedures and modifications to improve the current operations, and (3) implement changes to the physical infrastructure of the facilities where information indicates such changes need to be made. Reclamation shall continue to fund and implement the CVPIA Tracy Fish Facility Program. In addition, Reclamation and DWR shall fund quality control and quality assurance programs, genetic analysis, louver cleaning loss studies, release site studies and predation studies. Funding shall also include new studies to estimate green sturgeon screening efficiency at both facilities and survival through the trucking and handling process. By January 31 of each year, Reclamation and DWR shall submit to NMFS an annual progress report summarizing progress of the studies, recommendations made and/or implemented, and whole facility salvage efficiency. This is probably the most important missed obligation by Reclamation as the plans to meet these salvage efficiencies would have become an important component of a project alternative that would have had lower environmental impacts than the proposed project. In order to meet these goals, it is likely that full criteria fish screens would have been designed for implementation and should have been included in the CLTO EIS. Reclamation cannot both claim it is compliant with the OCAP BOs and that information is not available in sufficient detail to allow analysis in the CLTO EIS. Reclamation must provide NMFS with the designs and operations for the CVP/SWP to become compliant with this RPA and these actions must be included in detailed analysis of an alternative in a revised and recirculated EIS.

Comment continued:

• Fish salvage facility improvement plans submitted to NMFS in compliance with the 2009 NMFS OCAP BO Action IV.4.1. Due from Reclamation by December 31, 2012, to improve the whole facility efficiency for the salvage of Chinook salmon, CV steelhead, and Southern DPS of green sturgeon so that overall survival is greater than 75 percent for each species. In order to meet these goals, it is likely that full criteria fish screens would have been designed for implementation and should have been included in the CLTO EIS. Reclamation cannot both claim it is compliant with the OCAP BOs and that information is not available in sufficient detail to allow analysis in the CLTO EIS. Reclamation must provide NMFS with the designs and operations for the CVP/SWP to become compliant with this RPA and these actions must be included in detailed analysis of an alternative in a revised and recirculated EIS.
Comment continued:

- Studies submitted to NMFS for methods for removal of predators in the primary channel in compliance with the 2009 NMFS OCAP BO Action IV.4.1.1)a. Due from Reclamation by December 31, 2011 + 90 days. (using physical and non-physical removal methods (e.g., electricity, sound, light, CO2), leading to the primary louver screens with the goal of reducing predation loss to ten percent or less. If Reclamation had complied with the OCAP BO RPAs, this information would have been available for inclusion in the CLTO EIS impact analysis.

Comment continued:

- Implementation completion report to NMFS on measures to reduce pre-screen predation in the primary channel to less than ten percent of exposed salmonids in compliance with the 2009 NMFS OCAP BO Action IV.4.1.1)a. Due by Reclamation by 12/31/12. If Reclamation had complied with the OCAP BO RPAs, this information would have been available for inclusion in the CLTO EIS impact analysis.

Comment continued:

- Studies submitted to NMFS for the re-design of the secondary channel to enhance the efficiency of screening, fish survival, and reduction of predation within the secondary channel structure in compliance with the 2009 NMFS OCAP BO Action IV.4.1.1)b. Due by Reclamation by 3/31/11. If Reclamation had complied with the OCAP BO RPAs, this information would have been available for inclusion in the CLTO EIS impact analysis.

Comment continued:

- Communications to NMFS documenting the initiation of the study findings in compliance with the 2009 NMFS OCAP BO Action IV.4.1.1)b. Due by Reclamation by 1/31/12. If Reclamation had complied with the OCAP BO RPAs, this information would have been available for inclusion in the CLTO EIS impact analysis.

Comment continued:

- Copies of plans submitted to NMFS for one or more potential solutions to the loss of Chinook salmon and green sturgeon associated with the cleaning and maintenance of the primary louver and secondary louver systems at the TFCF in compliance with the 2009 NMFS OCAP BO Action IV.4.1.1)c. Due by Reclamation no later than June 2, 2010. In the event that a solution acceptable to NMFS is not in place by June 2, 2011, pumping at the Tracy Pumping Plant shall cease during louver cleaning and maintenance operations to avoid loss of fish during these actions. If Reclamation had complied with the OCAP BO RPAs, this information would have been available for inclusion in the CLTO EIS impact analysis.
Appendix 1C: Comments from Regional and Local Agencies and Responses

Comment continued:

• Documentation of operational procedures implemented to optimize the simultaneous salvage of juvenile salmonids and Delta smelt at the facility in compliance with the 2009 NMFS OCAP BO Action IV.4.1.2. Due by Reclamation by 12/31/11. If Reclamation had complied with the OCAP BO RPAs, this information would have been available for inclusion in the CLTO EIS impact analysis.

Comment continued:

• Documentation of removal of predators in the secondary channel in compliance with the 2009 NMFS OCAP BO Action IV.4.1.3. This is due from Reclamation weekly since the issuance of the OCAP BO. If Reclamation had complied with the OCAP BO RPAs, this information would have been available for inclusion in the CLTO EIS impact analysis.

Comment continued:

• Documentation of equipment installed to monitor for the presence of predators in secondary channel during operations in compliance with the 2009 NMFS OCAP BO Action IV.4.1.3. Due from Reclamation by June 2, 2010. This could include an infrared or low light charged coupled device camera or acoustic beam camera mounted within the secondary channel. If Reclamation had complied with the OCAP BO RPAs, this information would have been available for inclusion in the CLTO EIS impact analysis.

Comment continued:

• Documentation of installation of flow meters in the primary and secondary channels to continuously monitor and record the flow rates in the channel in compliance with the 2009 NMFS OCAP BO Action IV.4.1.6. Due from Reclamation by 1/2/10. If Reclamation had complied with the OCAP BO RPAs, this information would have been available for inclusion in the CLTO EIS impact analysis.

Comment continued:

• Documentation of the Skinner Fish Protection Facility to achieving the minimum 75 percent salvage efficiency for CV salmon, steelhead, and Southern DPS of green sturgeon after fish enter the primary channels in front of the louvers in compliance with the 2009 NMFS OCAP BO Action IV.4.2.1. Due from DWR by December 31, 2012. Since this EIS covers the SWP as well, this OCAP BO RPA compliance information must also be in the EIR. If DWR had complied with the OCAP BO RPAs, this information would have been available for inclusion in the CLTO EIS impact analysis.
Comment continued:

• Report to NMFS on compliance with the 2009 NMFS OCAP BO Action IV.4.2.2(a). DWR is to immediately commence studies to develop predator control methods for Clifton Court Forebay that will reduce salmon and steelhead pre-screen loss in Clifton Court Forebay to no more than 40 percent. Studies complete on or before March 31, 2011. 40% improved predator control shall be achieved by March 31, 2014. Failure to meet this timeline shall result in the cessation of incidental take exemption at SWP facilities unless NMFS agrees to an extended timeline. Since this EIS covers the SWP as well, this OCAP BO RPA compliance information must also be in the EIR. If DWR had complied with the OCAP BO RPAs, this information would have been available for inclusion in the CLTO EIS impact analysis.

Comment continued:

• Revised draft and final updated plans submitted to NMFS in compliance with the 2009 NMFS OCAP BO Action V, NF3. Reclamation is to submit a revised draft report by January 15 of each year. Reclamation and partner agencies shall release a final updated Fish Passage Pilot Plan by March 14 of each year. With 7 years of revised and updated fish passage plans submitted to NMFS, Reclamation should have a great deal of information available on fish passage at their facilities and be able to conduct an impact analysis of implementing those actions and plans in the CLTO EIS.

Comment continued:

• Documentation of the implementation of the Pilot Reintroduction Program in compliance with the 2009 NMFS OCAP BO Action V, NF4. These are due from Reclamation in January starting 2012 and continuing through 2015. Reclamation should have three years of reintroduction studies to utilize as a basis for analyzing the impacts of upstream fish passage that must be included in the CLTO EIS.

Comment continued:

• Documentation of the completion of fish collection facilities in compliance with the 2009 NMFS OCAP BO Action V, NF4.1. Sacramento River Fish Facility – Collection facility shall be operational no later than March 2012. American River Fish Facility – Collection facility shall be operational no later than March 2012. Reclamation should have several years of operational data on the impacts of implementing these actions and this information must be included in the revised and recirculated CLTO EIS. Reclamation should also have completed an EIS on this project prior to its permitting and construction so those materials should also be available to use in the CLTO EIS.
Comment continued:

- Documentation of the completion of construction of adult fish release sites above dams and juvenile fish release sites below dams in compliance with the 2009 NMFS OCAP BO Action V, NF4.2. To be completed by Reclamation by March 2012. Reclamation should have several years of operational data on the impacts of implementing these actions and this information must be included in the revised and recirculated CLTO EIS. Reclamation should also have completed an EIS on this project prior to its permitting and construction so those materials should also be available to use in the CLTO EIS.

Comment continued:

- Documentation of the implementation of upstream fish passage for adults via “trap and transport” facilities in compliance with the 2009 NMFS OCAP BO Action V, NF4.3. To be completed by Reclamation by March 2012. Reclamation should have several years of operational data on the impacts of implementing these actions and this information must be included in the revised and recirculated CLTO EIS. Reclamation should also have completed an EIS on this project prior to its permitting and construction so those materials should also be available to use in the CLTO EIS.

Comment continued:

- Documentation of the implementation of interim downstream fish passage through reservoirs and dams in compliance with the 2009 NMFS OCAP BO Action V, NF4.4. Due from Reclamation starting 2012. Reclamation should have several years of operational data on the impacts of implementing these actions and this information must be included in the revised and recirculated CLTO EIS. Reclamation should also have completed an EIS on this project prior to its permitting and construction so those materials should also be available to use in the CLTO EIS.

Comment continued:

- Plans, designs, documentation of construction completion and evaluations of a prototype head-of-reservoir juvenile collection facility above Shasta Dam in compliance with the 2009 NMFS OCAP BO Action V, NF4.5. Due from Reclamation beginning in January, 2010. Construction shall be complete by September 2013. Reclamation should have several years of operational data on the impacts of implementing these actions and this information must be included in the revised and recirculated CLTO EIS. Reclamation should also have completed an EIS on this project prior to its permitting and construction so those materials should also be available to use in the CLTO EIS.
Comment continued:

• Annual reports on, the elements of the pilot program, including adult reintroduction locations, techniques, survival, distribution, spawning, and production; and juvenile rearing, migration, recollection, and survival in compliance with the 2009 NMFS OCAP BO Action V, NF4.6. Due from Reclamation from 2012 to 2015. A final summary report of the 5-year pilot effort shall be completed by Reclamation by December 31, 2015. Reclamation should have several years of reports on these actions and this information must be included in the revised and recirculated CLTO EIS.

Comment continued:

• Plans for fish passage on the Stanislaus River above Goodwin, Tulloch and New Melones Dams in compliance with the 2009 NMFS OCAP BO Action V, NF4.7. Due from Reclamation by March 31, 2011. This plan shall identify reconnaissance level assessments that are needed to support a technical evaluation of the potential benefits to CV steelhead that could be achieved with passage above the dams, a general assessment of logistical and engineering information needed, and a schedule for completing those assessments by December 31, 2016. Reclamation should have the 3/31/11 report to include in the CLTO EIS.

Comment continued:

• Letter to the USACE specifically in compliance with the 2009 NMFS OCAP BO RPA I.7. This letter from Reclamation is to request modification of Fremont Weir and other facilities to accommodate fish passage and was to include a request for an agreement for Reclamation to provide technical assistance and funding. This letter was due to be submitted to USACE by 9/30/09 and should have included detailed design and operational specifications that should have been included in the CLTO EIS.

Comment continued:

• Plans submitted to NMFS specifically in compliance with the 2009 NMFS OCAP BO RPA I.7 reduction of migratory delays and loss for salmon, steelhead and sturgeon. These were due from Reclamation and DWR by 6/30/11 and this information must be included in the CLTO EIS.

Comment continued:

• Reports to NMFS on specific actions implemented specifically in compliance with the 2009 NMFS OCAP BO RPA I.7 reduction of migratory delays and loss for salmon, steelhead and sturgeon. These were due to be implemented by Reclamation and DWR by 12/31/11 so there should be 4 years of information on the affects of these implemented actions as well as the project-level EIS for implementing them available for inclusion in the CLTO EIS.
Comment continued:

- Plans and designs submitted to NMFS specifically in compliance with the 2009 NMFS OCAP BO RPA IV.4.1. This plan from Reclamation for the secondary channel to enhance the efficiency of screening, fish survival and reduction of predation is the basis for another alternative component in the EIS that should have been included in the document. This was due to be completed by Reclamation and delivered to NMFS no later than 3/31/11.

Comment continued:

- Hatchery Genetics Management Plan (HGMP) submitted to NMFS specifically in compliance with the 2009 NMFS OCAP BO RPA II.6.1. Was due from Reclamation no later than 6/11. This information and its environmental affects should have been included in the CLTO EIS. This omission must be corrected in a revised and recirculated CLTO EIS.

Comment continued:

- Reports of fish predation studies submitted to NMFS specifically in compliance with the 2009 NMFS OCAP BO RPA IV.4.1. Reclamation was due to implement this by 12/31/11. This information would have informed the EIS regarding the impacts, feasibility and adaptive management successes and failures. This information must be included in a revised and recirculated CLTO EIS.

Comment continued:

- Planning and implementation documents submitted to NMFS specifically in compliance with the 2009 NMFS OCAP BO RPA NF 4.1. Reclamation was due to have completed this by the beginning of 2012. Reclamation to design, construct, install and operate adult fish collection, handling and transport facilities to pass fish above project facilities and reservoirs. This information and the impacts of implementing it should have been included in the CLTO EIS.

Comment continued:

- Planning and implementation documents submitted to NMFS on the implementation specifically in response to 2009 NMFS OCAP BO RPA IV.4.1 for the secondary channel to enhance the efficiency of screening, fish survival and reduction of predation. Reclamation was required to implement this no later than 1/31/12 so all of the information required to include this in the CLTO EIS should be available and Reclamation should have several years of operations and monitoring data to add to the analysis.
Comment continued:

Planning and implementation documents submitted to NMFS specifically in response to the 2009 NMFS OCAP BO RPA NF 4.2 and 4.3 for Reclamation to design, construct, install and operate adult fish release facilities upstream of their facilities and juvenile salmonid release facilities downstream of project facilities and reservoirs. Reclamation was required to complete implementation of these by 3/12 so all of the information required to include this in the CLTO EIS should be available and Reclamation should have several years of operations and monitoring data to add to the analysis.

Comment continued:

• Reports submitted to NMFS specifically on the performance of fish passage operations as required in the 2009 NMFS OCAP BO RPA NF 4.2, 4.3, 4.4 and 4.5. Reclamation was required to complete implementation of these by 3/12 so at least 2 years of operational reports should be available to include in the CLTO EIS.

Comment continued:

• Plans and documents submitted to NMFS specifically in response to 2009 NMFS OCAP BO RPA IV.4.1 that Reclamation is to improve the whole facility fish survival efficiency at the Tracy Fish Collection Facility to 75% for Chinook, steelhead and green sturgeon. Reclamation was due to submit this by 12/31/12 so this information should have been included in the CLTO EIS.

Comment continued:

• Monitoring reports submitted to NMFS specifically documenting the achievement of 75% fish survival rates at the Reclamation Tracy Fish Collection Facility in response to 2009 NMFS OCAP BO RPA IV.4.1. Reclamation should have several years of monitoring reports to include in the CLTO EIS.

Comment continued:

• Reports submitted to NMFS on the reduction of fish predation rates to less than 10% in the primary channel in response to 2009 NMFS OCAP BO RPA IV.4.1. Reclamation and DWR were required to implement this no later than 12/31/12 so this information should have been in the CLTO EIS.

Comment continued:

• Predation reduction method reports submitted to NMFS specifically in compliance with the 2009 NMFS OCAP BO RPA IV.4.3. DWR and Reclamation were required to complete this no later than 6/15/11 so this information should have been in the CLTO EIS.
Comment continued:

• Copy of reports submitted to NMFS documenting the improvements of fish salvage monitoring and release survival rates for the south delta pumps specifically in compliance with the 2009 NMFS OCAP BO RPA IV.4.3. Reclamation and DWR were required to complete this by 10/1/09 and annually thereafter. This information should have been in the CLTO EIS.

Comment continued:

• Planning and implementation documents submitted to NMFS specifically in compliance with the 2009 NMFS OCAP BO RPA NF 4.4. Reclamation was required to initiate this action by the beginning of 2012 (before 1/1/12) which was to provide downstream fish passage for project facilities and reservoirs. Since this should have already been completed, the information to evaluate the impacts of this action should have been included in the CLTO EIS. NEPA requires that the best available information is utilized in the analysis of a project's impacts. The CLTO EIS has declared that it has not evaluated any of these OCAP BO RPAs other than delta operations because there is insufficient information to analyze. Since so many of these actions were due to have been completed and so many supporting design preparation and post-construction/action implementation results monitoring that it is not possible that (categorically according to the CLTO EIS) these materials are not at all available.

Comment continued:

• Correspondence and joint work products with the CVP/SWP Fish Passage Steering Committee in response to the coordination requirements from the 2009 NMFS OCAP BO RPA NF 4.5. These materials should be available from both Reclamation and DWR to inform the CLTO EIS analysis.

Comment continued:

• Planning and implementation documents in response to the 2009 NMFS OCAP BO RPA NF 4.5 for Reclamation to design, build and evaluate juvenile fish capture facilities upstream of their facilities. This was required for Reclamation to complete by 9/13 and should have been included in the CLTO EIS.

Comment continued:

• Reports submitted to NMFS specifically regarding DWR’s Skinner Fish Collection Facility reductions in fish predation rates in response to 2009 NMFS OCAP BO RPA IV.4.2. Compliance was required to be achieved no later than 3/31/14. Since the EIS also covers the SWP it must also include this information from DWR.
Comment continued:

- Hatchery Management Plans submitted to NMFS specifically in response to 2009 NMFS OCAP BO RPA II.6.3. This was to be implemented by Reclamation no later than 67/14, so this information should be in the CLTO EIS.

Comment continued:

- DWR reports, plans and correspondence to FWS specifically in response to FWS OCAP BO RPA Component 4: Habitat Restoration, to implement a program to create or restore a minimum of 8,000 acres of intertidal and associated subtidal habitat in the Delta and Suisun Marsh. The restoration efforts shall begin within 12 months of signature of this biological opinion and be completed by DWR (the applicant) within 10 years. The restoration sites and plans shall be reviewed and approved by the Service and be appropriate to improve habitat conditions for delta smelt. Management plans shall be developed for each restoration site with an endowment or other secure financial assurance and easement in place held by a third-party or DFG and approved by the Service. The endowment or other secure financial assurance shall be sufficient to fund the monitoring effort and operation and maintenance of the restoration site. An overall monitoring program shall be developed to focus on the effectiveness of the restoration actions and provided to the Service for review within six months of signature of this biological opinion. The applicant shall finalize the establishment of the funding for the restoration plan within 120 days of final approval of the restoration program by the Service. Since there are only 4 years left for this action to be completely implemented and contracting and construction will take at least that long, the plans and supporting detailed environmental documents and permitting must already be completed. This information should have been included in the CLTO EIS. This omission makes the CLTO EIS materially incomplete and deficient. This deficiency must be remedied and a revised EIS recirculated for public comment.

Comment continued:

- DWR reports or correspondence to FWS specifically in response to FWS OCAP BO RPA Component 5: Monitoring and Reporting, Information on salvage at Banks and Jones is both an essential trigger for some of these actions and an important performance measure of their effectiveness. In addition, information on OMR flows and concurrent measures of delta smelt distribution and salvage are essential to ensure that actions are implemented effectively. Such information shall be included in an annual report for the WY (October 1 to September 30) to the Service, provided no later than October 15 of each year, starting in 2010. This information on the SWP should have been included in the CLTO EIS.
Comment continued:

• Reclamation reports to FWS specifically in response to FWS OCAP BO RPA two for annual evaluations of fish screens at the North Bay Aqueduct (NBA) diversion during January through June. Reclamation was due to submit the proposed evaluation study to USFWS within 3 months of the issuance of the biological opinion so this information and subsequent plan details should have been in the CLTO EIS.

Comment continued:

• Reclamation reports to FWS specifically in response to FWS OCAP BO RPA three for frequency of delta smelt monitoring from December through July, when water is being diverted. The creation of the delta smelt habitat study group, initial habitat conceptual model review, formulation of performance measures, implementation of performance evaluation, and peer review of the performance measures and evaluation that are described in steps (1) through (3) of Attachment B shall be completed before September 2009. This information and subsequent plan details should have been evaluated in the CLTO EIS.

Comment continued:

• Notifications and reports to FWS for BO RPA Action 6. Documentation should include the location, plans, designs, evaluations, environmental documents, permit applications, and status updates and reports to FWS. "A program to create or restore a minimum of 8,000 acres of intertidal and associated subtidal habitat in the Delta and Suisun Marsh shall be implemented. The restoration efforts shall begin within 12 months of signature of this biological opinion and be completed within a 10 year period." Since there are only 4 years left for this action to be completely implemented and contracting and construction will take at least that long, the plans and supporting detailed environmental documents and permitting must already be completed. This information should have been included in the CLTO EIS. This omission makes the CLTO EIS materially incomplete and deficient. This deficiency must be remedied and a revised EIS recirculated for public comment.

Comment continued: • Reclamation or DWR reports to FWS regarding any information about take or suspected take of federally-listed species not authorized in the 2008 FWS OCAP BO. Notification must include the date, time, and location of the incident or of the finding of a dead or injured delta smelt. Prospect Island fish rescue by BOR, Jones emergency levee repair and fish rescue are potential examples of notifications that should have been given. Dissolved Oxygen crashes that result in adverse modification of critical habitat caused by or contributed to by CVP/SWP operations must also be included with this other information in the CLTO EIS.
Comment continued:

The NMFS BO requires addition of salt to water within the tanker trucks to haul salvaged fish to reduce stress of transport (NMFS OCAP BO pg 657, #5). The DWR 401 Certification from the water board does not cover this discharge and this impacts of adding salts to water discharged into the delta must be addressed in the CLTO EIS.

Comment continued:

In conclusion to this series of comments, Reclamation and DWR have missed the vast majority of the OCAP BO RPA implementation deadlines. If Reclamation and DWR had complied with the OCAP BO RPA schedule of implementation, there would be no need for this CLTO EIS seven years after the first of the OCAP BOs were issued as all of the project-level EIS’s for implementing the actions would have already been completed.

ES.5.2, line 21 "The USFWS and NMFS provided RPAs in their respective BOs as an alternative to the project described in the 2008 BA that would not jeopardize listed species or adversely modify critical habitat." The outdated 2008 OCAP BA analysis should not be relied upon as this analysis has been superseded by the BDCP analysis of the No Action which included the OCAP BO RPAs. The more recent and much more thorough (although still flawed in ways we have previously comment on in that process) BDCP analysis of the OCAP BO RPAs which were the vast majority of the actions taken in the CLTO EIS Proposed Action, concluded that there were significant and unavoidable impacts to listed fish species. Primarily these were from water quality impacts that occurred due to the aquatic habitat restorations included in the No Action (similar to those included in the CLTO EIS Proposed Action). Therefore, the CLTO EIS claim that implementing the BO RPAs would not result in adverse modification of critical habitat for ESA species is inaccurate, out-of-date, and does not rely upon the most recent and best available science. It should be noted in this comment that of all the actions required in the OCAP BO RPAs, Reclamation has met the schedule for compliance for only a very few with the vast majority of the OCAP BO RPA mandated deadlines passed and uncomplied with by Reclamation or DWR. If Reclamation and DWR had complied with the OCAP BO RPA schedule of implementation, there would be no need for this CLTO EIS seven years after the first of the OCAP BOs were issued as all of the project-level EIS’s for implementing the actions would have already been completed.
ES.7, line 2 "It is anticipated that the coordinated long-term operation of the CVP and SWP, as described in the alternatives analyzed in this EIS, would continue to at least 2030 before major changes to CVP and SWP operations would be implemented." The BDCP was included in the No Action definition by the CLTO EIS. BDCP, even though incomplete in even its environmental analysis, is not anticipated to be completed until 2050 with its habitat restoration component alternatives. The conveyance only alternative would be completed by approximately 2025. In the first case if the BDCP were to qualify as reasonably foreseeable in the No Action (it does not meet the criteria for that), where BDCP is being implemented and is changing CVP/SWP through the year 2050, the No Action definition of the CLTO is incorrect as 2030 puts the BDCP in the Early Long Term implementation phase which is mid-implementation of the project where many changes to the CVP/SWP system have occurred prior to and post that selected CLTO selected baseline point in time. In the second case of the only conveyance alternative of the BDCP, 2030 comes 5 years after the completion of the BDCP conveyance which represents a major alteration of the CVP/SWP operations. Either way, the inclusion of the BDCP as a No Action assumption is both incorrect and incompatible with the CLTO EIS assumption of the 2030 No Action date. The 2030 date is prior to major CVP/SWP alteration or is prior to the final implementation of the BDCP which would catch that project in mid-implementation which would be extremely difficult to accurately and fairly characterize in the CLTO EIS analysis. The BDCP must not be included in the No Action assumptions as it does not qualify as reasonably foreseeable (see related comments) and the CLTO EIS No Action date would either be after extreme CVP/SWP operational modifications from the BDCP (conveyance only alternative) or it would be mid-implementation of the alternatives that include habitat restoration. Given these BDCP scenarios, the 2030 No Action date is appropriate only if the BDCP is not included in the No Action assumptions. With the exclusion of the BDCP as a No Action assumption, the CLTO EIS No Action modeling and subsequent comparisons must be redone and recirculated for public comment.
Appendix 1C: Comments from Regional and Local Agencies and Responses

ES.8, line 22 "Further development of the alternatives was informed by subsequent comments received during preparation of the Draft EIS." According to this statement the CLTO EIS process was accepting input for alternatives outside of the public comment period. This is in direct contradiction to the ES.10 line 26 statement "In accordance with NEPA review requirements, this Draft EIS will be available for public and agency review and comment for a 60-day period. Written comments from the public, reviewing agencies, and stakeholders will be accepted during the public comment period." Was that input outside the comment period accepted and known to be available to all interested parties or was this input reserved only for those insiders with a bias to the outcome of the project? Since input was accepted from other parties at periods of time which were outside of the public comment period, any and all inputs from outside the public comment period must be given equal weight and consideration as those reportedly received and accepted by the CLTO EIS that were received outside of the public scoping comment period. If the CLTO EIS does not accept these other EIS alternatives development outside of the scoping comment period, then the EIS has shown clear bias towards those other commenter's whom input was incorporated outside of the scoping process comment period. The CLTO EIS must evaluate all alternatives and other input received during this comment period as well as previous and between comment periods at the same level as those comments accepted and analyzed in the EIS.

Table ES 1 and all other impact summary tables - We object to the systematic characterization of most all impacts as being "similar" to the baseline for comparison. "Similar" is an entirely subjective description which only applies to the perspective and judgment of the author and does not inform the reader of the nature, direction or magnitude of differences between the baseline and alternative. The very use of the word, "similar" means they are not the "same" and yet the CLTO EIS treats these two different words as if they were the same. There can be conditions under which the outcomes between an alternative are similar to the No Action under most conditions and yet disastrously different under some other less frequently occurring set of conditions. As an example, water temperatures could be the same in an alternative as compared to the No Action in 90% of excedence probabilities, but 40 degrees warmer 10% of the time. An author using the term, "similar" could describe these conditions as such, but it would be dramatically misleading without the explanation that there would be 100% fish mortality ten percent of the time. The deficient and unsupported representation of the comparisons as "similar" must be corrected with a more full and descriptive disclosure in a revised and recirculated CLTO EIS.
The results of the impact analysis indicated that there were no changes in conditions for the following comparisons, and these items are not included in Table ES.1 and ES.2. Alternatives 1 through 5 as compared to the No Action Alternative and the Second Basis of Comparison. - Geology and Soils Resources. - Agricultural Resources. - Land Use. There are differences in upstream tributary flows between these baselines and alternatives that would affect geomorphic processes and therefore geology and soils. There are differences in water deliveries for agriculture and the suitability of water supply for agricultural beneficial uses between the baselines and alternatives. There are habitat restoration and facilities footprints in the alternatives as compared to the basis for comparison. These impact omissions in the CLTO EIS are material and must be corrected in a revised and recirculated EIS.

Water Quality - It appears that the only comparison done for water quality is for salinity and a couple other constituents. There are many other water quality regulatory requirements and constituents which would be affected by the changes in operations of the CVP/SWP included in the project alternatives as compared to the no action alternatives. As an example, changes in flows from the alternatives would affect the assimilative capacity of waters in the delta and the accumulation and movement of nutrients and chemicals contained in discharges and lower water quality inputs from other drainages. These in turn would affect alternative magnitude, duration, frequency and geographic extent of exceedences of water quality parameters and resulting operational constraints on the CVP/SWP. In particular, the alternatives would affect the frequency, magnitude, duration and geographic extent of dissolved oxygen crashes throughout the delta from Nitrogen and Phosphorus accumulation which is of great concern to water quality impacts as well as the suitability of designated critical endangered species fisheries habitat in the delta.

Reservoir Fisheries - The fluctuations of the reservoir affects on reservoir black bass nest survival also affects reservoir fishery access to upstream tributaries. The timing and duration of fish passage above reservoir sedimentary wedges by reservoir stage elevation affects reservoir fisheries interactions with upstream fish populations for fish predation, competition for food and habitat and disease transmission. Since the CLTO EIS has acknowledged reservoir fluctuations from the alternatives, it must also include impact analysis of fisheries upstream of the reservoirs.
1-15, line 34 "Bay Delta Conservation Plan and California Water Fix" is included in the assumptions for the definition of the No Action. The EIS is in error in including the BDCP as a No Action assumption as the BDCP is only at a public draft EIR/S stage and is not an approved project (no Record of Decision or Notice of Determination) and does not have funding secured for it (bonds not approved and issued) therefore it does not meet the test of being reasonably foreseeable for inclusion in the No Project baseline. Other than a predecisional assumption that the current (or 12/13 version) of the Proposed Project/No Action would ultimately be approved sometime in the future, what were the operational assumptions included in the No Action baseline modeling? The EIS No Action baseline must be redone to correct this error including the BDCP and the impact analysis comparisons of the alternatives to the No Action must be redone and recirculated in a revised public draft.

1-15, line 34 - If the BDCP is to be included in the No Action then the California Eco Restore Project would also have to be included, but it is omitted from this list of projects. If the BDCP is included in the No Action definition, then the No Action must be revised to also include the California Eco Restore project. Because California Eco Restore includes a large quantity of aquatic habitat restorations in the delta that affect water quality and in turn CVP/SWP delta operations, the modeling of the No Action must be updated for this project and the alternative comparisons to the No Action redone in a recirculated public draft EIS.
2-2, line 1 - "The U.S. Court of Appeals for the Ninth Circuit confirmed the U.S. District Court for the Eastern District of California ruling that Reclamation must conduct a NEPA review to determine whether the RPA actions cause a significant impact on the human environment. Potential modifications to the coordinated operation of the CVP and SWP analyzed in the EIS process should be consistent with the intended purpose of the action, be within the scope of Reclamation’s legal authority and jurisdiction, be economically and technologically feasible, and avoid the likelihood of jeopardizing listed species or resulting in the destruction or adverse modification of critical habitat in compliance with the requirements of Section 7(a)(2) of the Endangered Species Act."

Given this definition of project need, any and all alternatives which reasonably satisfy the need to avoid CVP operations resulting in jeopardy of endangered species should be evaluated in this EIS. There have been numerous descriptions of alternatives for criteria fish screens at Clifton Court Forebay which would significantly reduce the take of endangered species from entrainment, impingement and predation associated with the current CVP/SWP south delta intake operations. A description of this alternative is in the following comment and this alternative must be advanced for full evaluation in a revised public draft EIS as it is practically feasible (well founded science and with precedent) and more than reasonably meets the need as defined in the EIS. Although the south delta intake modifications to reduce take of endangered fish species may not be a stand alone solution to jeopardy, in combination with modified CVP/SWP operations it is a viable alternative compared to modified CVP/SWP operations in combination with habitat restoration which would have more land use and water quality impacts than the modified operations and intakes. The following comments describe modifications of Clifton Court Forebay to construct a fish isolated forebay storage, criteria fish screens with sweeping velocities and the plumbing in of the CVP intake into these fish isolated Clifton Court Forebay.
Comment continued:

The core of the CLTO is a simple reoperation of the CVP/SWP south delta intakes to reduce the magnitude of reverse flows in Old and Middle River which the last few years of reoperation have proven to significantly reduced fish salvage rates that resulted in a significant reduction of the principle impact of the SWP/CVP on the fish species that the project was putting into jeopardy. Since the CLTO CVP/SWP reoperation has been so successful, it makes sense to combine project alternatives components with that reoperation to form other viable project alternatives to further reduce the rate of take of the CVP/SWP south delta intake operations. This alternative should include reverse flow restricted operations with other physical modifications to the existing CVP/SWP south delta facilities such as, but not necessarily limited to: fish screens with criteria compliant approach and sweeping velocities; a reduced distance fish path through Clifton Court Forebay to reduce duration of exposure of fish to predators in the forebay; fish behavioral modification devices to manage fish distribution away from the intakes (bubble curtains, acoustic and light deterrents); and improved fish salvage capture, storage and release facilities and operations. This alternative could also be as a first phase of other alternatives so that there is some tangible improvement in fisheries conditions while other longer lead time alternative components are implemented. If monitoring during the near term identified that the conservation measures were adequate to conserve and restore the species then the other project components would not need to be implemented.
Comment continued: Designs for an isolated Clifton Court Forebay have been discussed many times by DWR and through the CALFED project, but these concepts discussed in the CLTO EIS scoping process were not provided adequate consideration for inclusion in the EIS alternatives. Isolation of Clifton Court Forebay would reduce the magnitude of impacts on fisheries from CVP/SWP south delta operations. Following is a description of an isolated Clifton Court Forebay facility with integrated CVP intake) that have been previously discussed and proposed. First, install primary trash racks of the intake at Clifton Court to outside of the Clifton Court operable gate. The trash racks will intercept debris coming in with the diversion water and serve as a behavioral deterrent to the fish to stay in the main channel as much as possible. Behind the trash racks would be a fish screen designed to keep only larger size fish out of the isolated facility. This initial screen outside of Clifton Court Forebay should designed to only pass smelt and juvenile salmonids without risk of impingement, e.g. 15mm wide screen inlets. This screen would significantly reduce the exposure of juvenile salmonids and delta smelt to predation as larger predators would be excluded from within Clifton Court Forebay where a large amount of current predation is documented to occur. Second, the Clifton Court Forebay would be segmented by a new levee that would draw water from the outside channel directly to the intakes. This levee would form a conveyance channel across the south side of the forebay. This would speed the transit of the fish across the forebay and keep them from straying out into the forebay so that they would have a significantly reduced duration of exposure to predation. Fish predation studies have shown that a large portion of the juvenile salmonid and delta smelt population that enter the forebay do not make it to the salvage facilities due to predation. By excluding predators size fish outside of Clifton Court, not allowing the fish to stray into the larger part of the forebay and speeding their transit across the forebay in the new forebay channel, predation rates as juvenile salmonids and delta smelt should be significantly reduced. The west side of the conveyance canal within Clifton Court Forebay should widen out toward the western side to accommodate the installation of criteria fish screens and to reduce approach velocities at the screens.
Comment continued:

Third, install real fish criteria screens at the intake in Clifton Court. Install the screens at an oblique angle across the Clifton Court conveyance channel to get sufficient surface area to reduce approach velocities. The conveyance canal across Clifton Court should be dredged to 60 - 80' deep on the western side on the approach to the screens to create a much larger working surface area of the intake screens to further reduce approach velocities.

Fourth, install pumps to move a much larger volume of water through the fish salvage facility so that there is adequate sweeping velocities across the criteria fish screen. In order to achieve appropriate sweeping velocities at the criteria screen if the SWP was diverting 3,000 cfs, that the salvage pumps would be pulling and recycling 10,000 cfs. The 10,000 cfs that was screened and fish free would be discharged into the portion of the Clifton Court Forebay that is on the north side of the levee that forms the new Clifton Court conveyance channel. The CVP intake can be plumbed into this fish free northern portion of Clifton Court via a tunnel. The volume of water discharged into north Clifton Court re-enters the conveyance channel through debris and fish screens that are installed in the north and east side of the conveyance channel levee. This recirculates the screened water through the conveyance channel and keeps all of the non-conveyance part of Clifton Court fish free. The recycled water also speeds the transit of the juvenile fish and smelt down the conveyance channel (13,000 cfs in this example).

Comment continued: Fifth, the current fish salvage screens would need to be redesigned and much larger (or twenty or more fish salvage facilities of the current design and scale) to deal with the larger flows generated by the sweeping velocities across the fish screens. The associated salvage fish handling, storage and release operations would need to be revamped as has been previously recommended in many previous meetings, projects and communications. Predation from salvage operations would be further reduced as compared to current operations because captured juvenile salmonids and smelt would not be stored, shipped and released with predator sized fish. Sixth, the Clifton Court Forebay Gates and tidal operations/storage can continue to function as before. Since the concept of an isolated Clifton Court Facility has been discussed, described and debated publicly and by the lead agencies many times (e.g. CALFED) there is no excuse for the CLTO EIS project to not have addressed this important project alternative in their alternatives development, screening and alternatives analysis process. None of the project features described in this Isolated Clifton Court Criteria Fish Screen alternative require new technology and all features described have built out project examples to rely upon for their engineering design, construction methods and for expectations regarding as-built real world performance characteristics.
Comment continued:

An alternative with criteria fish screens at Clifton Court Forebay as described above have a number of advantages over other CLTO EIS alternatives currently considered: A) the fish screens more directly benefit the affected listed fish species directly on the CVP/SWP facilities that are in majority responsible for take. B) The current CLTO EIS alternatives that include habitat restoration only generally benefit the listed fish species by increasing the quantity of habitat (which in the case of smelt is not a limiting factor with its current population size). C) The CVP/SWP did not convert habitat so habitat restoration actions are only indirectly beneficial to the species with respect to the nature of the impact of the CVP/SWP project on those species. D) The design characteristics requirements of successful fish screens are much more well understood and less experimental than the habitat restorations that have little precedence and little quantitative evidence of their efficacy. E) modified operations and fish screens result in less adverse modification of ESA species critical habitat than the water quality impacts (e.g. dissolved oxygen crashes and other impacts) that occur as a result of delta habitat restorations associated with other project alternatives. And F) the criteria fish screen described above would take place almost entirely on lands currently owned by the state and federal government so private lands confiscation would be minimal (maybe 100 acres) and land use and habitat conversion associated with the habitat restoration components of other alternatives would not occur. Without inclusion and due consideration of this fish screen alternative component, the current CLTO EIS document is deficient and should be recirculated after it has been revised to include this alternative.

Comment continued:

This alternative combining CLTO water reoperations with criteria fish screens in Clifton Court can be further complimented by an additional alternative which would include additional upstream and/or downstream storage, e.g. Sites, Temperance Flat or San Luis II. The addition of upstream and/or downstream storage would allow additional operational flexibility to divert water at times of the year in which the listed fish species would be least affected by CVP/SWP water operations. There is nothing in the Purpose and Need statement in the EIS that precludes additional upstream and/or downstream storage as a strategy to allow adaptation of CVP/SWP operations to avoid and minimize take as an alternative to other alternative components that were included in the current EIS. Since the OCAP BO RPAs which are the basis of the CLTO EIS address the full CVP/SWP system both at the upstream- and downstream-most parts of the system, the alternatives of the EIS need not be constrained to just the delta geographic area as they currently are developed. The fact that the current EIS alternatives do not include significant alternative components that occur outside of the delta is further evidence of the errors and omissions of the alternatives development and screening process and the resulting deficiency of the current EIS.
1C.16.1 Responses to Comments from Central Delta Water Agency and South Delta Water Agency

SDWA CDWA 1: Because compliance with the California Environmental Quality Act (CEQA) would be under DWR’s purview, Reclamation consulted with DWR on this comment. On October 5, 2015, DWR provided the following response: “The District Court required Reclamation to comply with NEPA on the provisional acceptance of the RPA actions. There is no action for the State of California requiring California Environmental Quality Act (CEQA) review.”

SDWA CDWA 2: At the time the request for extension of the public review period was submitted, the Amended Judgement dated September 30, 2014 issued by the United States District Court for the Eastern District of California (District Court) in the Consolidated Delta Smelt Cases required Reclamation to issue a Record of Decision by no later than December 1, 2015. Due to this requirement, Reclamation did not have sufficient time to extend the public review period. On October 9, 2015, the District Court granted a very short time extension to address comments received during the public review period, and requires Reclamation to issue a Record of Decision on or before January 12, 2016. This current court ordered schedule does not provide sufficient time for Reclamation to extend the public review period.

Also, it is important to note that the previous one-year extensions granted in this process were not specifically granted to complete the NEPA document, but were granted to incorporate new science in the then remanded BOs. Every time there was a one year extension as opposed to a three year extension, Reclamation had to reassess what was possible with the extension, but still not able to plan for a more normal process that was not limited by resources or time. Finally, it is also noteworthy that Reclamation will provide a Final EIS on the NMFS actions almost one year ahead of schedule.

SDWA CDWA 3: The statement referenced (ES, line 17) overstate the number of RPA actions that require further future study and separate environmental documentation. The statement has been revised in the Final EIS. Reclamation is currently implementing the vast majority of the 73 RPA actions from the 2009 NMFS BO and the six RPA actions from the 2008 USFWS RPA. Reclamation is coordinating with NMFS and USFWS for those RPA actions that require further evaluation prior to full implementation.

SDWA CDWA 4: Although many of the RPA actions are not directly reflected in the modeling for the No Action Alternative, all the 2008 USFWS BO RPA and 2009 NMFS BO RPA actions are included in the description of the No Action Alternative. Decisions on how the RPA actions were codified into the CalSim II model were made by a multi-agency group that included Reclamation, NMFS, USFWS, and DWR shortly after the BOs were released. The No Action Alternative model run in this EIS reflects the decisions made by this multi-agency group, as described in Appendix 5A, Section B, CalSim II and DSM2 Modeling Simulations and Assumptions.
In developing the impact assessment for the EIS, the Reclamation team considered the numerous reports and information generated from implementation of multiple and various RPA actions. An RPA Summary Matrix reflecting the status of the RPA actions required in the 2009 NMFS BO is available on the Delta Science Program website at http://www.deltacouncil.ca.gov/science-program-event-products. Reporting requirements for the 2008 USFWS RPA actions are addressed in the Smelt Working Group Annual Report, also available at the aforementioned website.

The specific status of key RPA actions questioned by the commentor include:

**RPA Actions Related to Yolo Bypass**

DWR and Reclamation are engaged in ongoing coordination with NMFS for concurrence on an adjusted schedule that would reflect an alignment of RPA requirements with flood control improvements required under the 2008 Central Valley Flood Protection Act. Development of alternatives for the environmental permitting process is moving forward while this integration is explored. In regards to migration barriers, DWR and Reclamation have identified early implementation actions that are on a faster track than other Yolo Bypass actions. These early implementation actions are being evaluated and, if appropriate, will be implemented in the near future.

For Lisbon Weir and lower Putah Creek RPA actions, DWR and Reclamation are engaged in ongoing coordination with NMFS, and a progress report was sent to NMFS on September 30. The lower Putah Creek action is being implemented under DWR’s Fish Restoration Plan Agreement.

**RPA Actions Related to the American River Basin Structural and Physical Evaluation**

A Folsom Dam temperature control structure analysis is being lead through a Corps agency project under the Dam Raise authority. Temperature management decision support tools are being used for real-time management and monitoring of the coldwater pool at Folsom Dam through Reclamation's coordination with Central Valley Operations and members of the American River Group. The EID TCD structural improvement alternative is proceeding under a cooperative agreement and is seeking to find improvements to cold water management through modification of EID's water supply intake (or some functional equivalent). The completion date for these efforts is expected to take several years.

**RPA Actions Related to Delta Pumps Operation**

The relationship between Delta operations and ESA species' entrainment and survival is being examined by the CAMT. This includes understanding the behavioral response of ESA-listed fishes to hydrodynamics and other physical drivers (i.e. turbidity).

**RPA Actions Related to Fish Passage Activities**
Regarding fish passage related actions, the draft environmental assessment and draft pilot plan are expected to be released at the end of 2015. The pilot project is not expected to be implemented until 2017 because NMFS is developing the 10j experimental population designation and Section 4d rule. It would be premature to include a detailed impact analysis at this time. However, fish passage is considered in the qualitative analysis of the alternatives.

**SDWA CDWA 5:** DWR indicates that salt is added to each truck load to transport salvaged fish to the western Delta to provide salinity of 0.008 parts per thousand. Therefore, the water quality of the discharged water is within the applicable USEPA advisory National Recommended Water Quality Criteria for estuarine water bodies of between 1 parts per thousand 95 percent or more of the time for fresher water bodies and 10 parts per thousand 95 percent or more of the time for salt water bodies.

**SDWA CDWA 6:** Please refer to response to Comment SDWA CDWA 4.

**SDWA CDWA 7:** The statement in Section ES.5.2 of the Executive Summary of the Draft EIS refers to the conclusions of the 2008 USFWS BO and 2009 NMFS BO. This statement does not refer to the analysis in the EIS.

**SDWA CDWA 8:** The mandate of the District Court to remand the 2008 USFWS BO to USFWS was reversed by the Appellate Court on September 16, 2014 and the BO was upheld. Petitions for Writ of Certiorari were submitted to the U.S. Supreme Court; however, the U.S. Supreme Court decided to not hear the cases. The District Court issued the Final Order on October 1, 2014. The mandate of the District Court to remand the 2009 NMFS BO to NMFS was reversed by the Appellate Court on December 22, 2014 and the BO was upheld. The District Court issued the Final Order on May 5, 2015. The BOs were included in the No Action Alternative.

The BDCP, including the WaterFix alternative, is not included in the No Action Alternative, Second Basis of Comparison, or Alternatives 1 through 5. The BDCP is considered in the cumulative effects analysis.

**SDWA CDWA 9:** Project status meeting were held during the preparation of the EIS, as described in Section 23.2.1 of Chapter 23, Consultation and Coordination, of the EIS. Copies of presentations discussed at those meetings was posted on Reclamation’s website. Comments received during those meetings were considered during development of the EIS. Comments also were received on the Administrative Draft EIS in 2013 and in 2015. Those comments also were considered during development of the EIS.

**SDWA CDWA 10:** A footnote has been added to Table ES.1 and similar tables throughout the EIS to summarize the information included in Chapters 5 through 21 related to the use of the term “similar.” As described in these chapters, due to the use of monthly modeling output either directly or in a predecessor step in the analysis, the results of the incremental differences that result from the comparison of alternatives to the No Action Alternative and the Second Basis of Comparison are considered to be similar if the differences are 5 percent or less. With respect
to temperature modeling results used in Chapter 9, Fish and Aquatic Resources, incremental temperature differences of 0.5 degrees Fahrenheit or less were considered to be similar.

**SDWA CDWA 11:** As described in Section 11.4.1.1 of Chapter 11, Geology and Soils, of the EIS, soil erosion along the streams primarily occurs during high peak flow events during storms in wet years. However, as described in Chapter 5, Surface Water Resources and Water Supplies, the results of the modeling analyses indicate the maximum flows would be within the historical range of maximum flows, and the maximum flows would be similar under the No Action Alternative, Second Basis of Comparison, and Alternatives 1 through 5. Therefore these changes are not analyzed in the EIS.

As described in Section 12.4 of Chapter 12, Agricultural Resources, of the EIS, the results of the modeling analyses indicated that the extent of irrigated agriculture would be similar under the No Action Alternative, Second Basis of Comparison, and Alternatives 1 through 5.

As described in Section 13.4 of Chapter 13, Land Use, of the EIS, the community land uses under the No Action Alternative, Second Basis of Comparison, and Alternatives 1 through 5 would be consistent with the future projections in existing general plans for the Year 2030 because adequate water supplies have been identified for the Year 2030 conditions (see Appendix 5D, Municipal and Industrial Water Demands).

The habitat restoration assumptions are consistent under the No Action Alternative, Second Basis of Comparison, and Alternatives 1 through 5. It was assumed that the tidal wetlands and floodplain habitat restoration projects have been initiated and would have occurred with or without implementation of the 2008 USFWS BO and 2009 NMFS BO.

**SDWA CDWA 12:** Changes in nutrients (including phosphorous and nitrogen) and dissolved oxygen are presented in Section 6.4 of Chapter 6, Surface Water Quality. The entries for Water Quality in Table ES.1 have been modified to provide more information from Chapter 6.

**SDWA CDWA 13:** As indicated in Chapter 5, Surface Water Resources and Water Supplies, the reservoir elevations would be similar (within 5 percent or less) in the No Action Alternative, Second Basis of Comparison, and Alternatives 1 through 5 except at San Luis Reservoir. The maximum water elevations in the CVP and SWP reservoirs would not be any greater than under existing conditions. Therefore, the opportunities for predators to move from the lakes to the tributaries upstream of Trinity Lake, Shasta Lake, Lake Oroville, Folsom Lake, and New Melones Reservoir would be similar in all alternatives for any given month. These conditions would not be a concern for tributaries to San Luis Reservoir because it is an offstream storage reservoir.

**SDWA CDWA 14:** The BDCP, including the WaterFix alternative, is not included in the No Action Alternative, Second Basis of Comparison, and Alternatives 1 through 5. As stated in Section 1.8 of Chapter 1, Introduction, of
the EIS, the Related Projects and Activities list includes both activities in the No Action Alternative and projects considered for cumulative effects. Specific information related to projects included in the No Action Alternative are presented in Section 3.3 of Chapter 3, Description of Alternative. Specific information related to projects included in the cumulative effects analysis are presented in Section 3.5.

SDWA CDWA 15: The California WaterFix is considered to be an alternative evaluated under the BDCP program. The California EcoRestore program is a related program to BDCP and also is considered under the cumulative effects analysis. The text on pages 1-15 and 3-46 of the Draft EIS has been modified in the Final EIS to include California EcoRestore.

SDWA CDWA 16: There have been studies initiated to reduce pre-screen loss and improve screening efficiency that could include actions upstream of the Jones Pumping Plant approach channel and Clifton Court Forebay weir, including activities under the 2009 NMFS BO RPA Actions IV.4. It is assumed that these RPA actions would be completed by 2030 under the No Action Alternative and Alternative 5; however, the specific approaches are currently under development in a coordinated manner between Reclamation and DWR.

The analysis in the EIS compares conditions under a range of alternatives (Alternatives 1 through 5) with the No Action Alternative to identify beneficial and adverse impacts for a broad range of physical, environmental, and human resources. The range of alternative concepts were evaluated with respect to screening criteria defined in the purpose of the action (see Chapter 2, Purpose and Need), a determination if the concept addressed one or more significant issues, and if the concept was included in one or more alternatives (see Table 3.1 in Chapter 3, Description of Alternatives). The NEPA analysis does not determine if the alternatives would change the findings of the biological opinions in the determination of the likelihood of the alternatives to cause jeopardy to the continued existence of the species, or destroy or adversely affect their critical habitat.

SDWA CDWA 17: Upstream storage projects are being evaluated under separate studies that are being led by local agencies as well as Reclamation and DWR. Those projects are considered under the cumulative effects analysis of this EIS.
1C.1.17 Stanislaus County

1C.1.17.1 Responses to Comments from Stanislaus County

Stanislaus 1: Comment noted.