



State Water Resources Control Board



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Agency Secretary

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Arnold Schwarzenegger
Governor

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Mr. Paul Marshall
SDIP EIR/EIS Comments
CA Department of Water Resources
Bay Delta Office
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Dear Mr. Marshall:

SOUTH DELTA IMPROVEMENTS PROGRAM DRAFT ENVIRONMENTAL IMPACT STATEMENT/ ENVIRONMENTAL IMPACT REPORT

The State Water Resources Control Board (State Water Board), Division of Water Rights (Division) provides the following comments on the South Delta Improvements Program (SDIP) Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) prepared by the Department of Water Resources (DWR) and the U.S. Bureau of Reclamation (USBR). The State Water Board/Division has water rights authority concerning the proposed project through issuance of water right permits/licenses to DWR for the State Water Project (SWP) and USBR for the Central Valley Project (CVP) and other water right holders that may transfer water under Stage 2 of the proposed project. In addition, the State Water Board/Division has water quality authority through implementation of the 1995 Water Quality Control Plan for the San Francisco Bay-Sacramento/San Joaquin Delta Water Quality Control Plan (1995 Plan) in Decision 1641 (D-1641) and 401 water quality certification authority pursuant to the Clean Water Act (CWA) and California Code of Regulations Title 23 section 3855(b).

Executive Summary

The first full paragraph on page ES-2 states that the baseline condition for the EIR/EIS for Stage 1 of the project is the "existing operational rules, including the permitted limit for SWP pumping at CCF." It is unclear which "permitted limit" the EIR/EIS is referring to. The U.S. Army Corps of Engineer (USACOE) permits allow diversions of 6,680 cubic feet per second (cfs) (except from mid-March to mid-December when higher diversions may be allowed), but the water right permits for the SWP allow diversions of 10,300 cfs. The EIS/EIR should clarify the pumping limits under the various permits/license for this project and should specify the conditions currently constraining operations, including the USACOE permits and satisfaction of conditions for use of Joint Points of Diversion (JPOD). This issue should also be clarified in the last paragraph on page ES-3 and the first paragraph on page ES-4.

What does "nonjurisdictional riparian habitat" mean on page ES-5? Whose jurisdiction is the EIS/EIR referring to? Is it referring to the USACOE under CWA section 404? Does the statement mean that land is going to be purchased that is riparian to something other than a water of the US or a tributary thereto? If so, using the word "riparian" makes this confusing.

What is the "avoidance and credit system" that is referred to on p. ES-6?

Chapter 1

The description of the Environmental Water Account (EWA) on page 1-11 is so unclear that a reader who is not already familiar with the EWA would have difficulty understanding it. The discussion in Appendix B on page B-4 is more understandable.

The discussion of the purpose of the Vernalis Adaptive Management Plan (VAMP) on page 1-14 appears to be somewhat inconsistent with the VAMP study design. The EIS/EIR states that "The purpose of the VAMP is to identify the true fall-/late fall-run Chinook salmon smolt and Delta smelt populations and survival in the lower San Joaquin River and improve aquatic habitat conditions in the Delta for fall-/late fall-run Chinook salmon and Delta smelt." However, the stated purpose of the VAMP is to determine the relative effects of flows in the San Joaquin River and exports in the Delta with a fish barrier at the Head of Old River on the passage and survival of Chinook salmon smolts through the Delta. In addition, the VAMP is designed to provide environmental benefits on the lower San Joaquin River during the April/May pulse flow period. The VAMP study is not designed to assess Delta smelt populations or to specifically protect Delta smelt.

While Table 1-6 includes the 1994 Bay-Delta Accord and Order 95-6, it does not include the 1995 Water Quality Control Plan for the 1995 Plan. The 1994 Accord and the 1995 Plan are not synonymous and should be listed separately. In addition, Order 95-6 should be listed with the 1995 Plan and not the 1994 Bay-Delta Accord.

The description of D-1641 on page 1-27 is very poorly worded and is not entirely accurate. The following corrections should be made:

1. The EIS/EIR states, "D-1641 is the water rights decision implementing the 1995 Delta Water Quality Control Plan (WQCP) objectives, including the water quality standards on the San Joaquin River and Mokelumne River and Cache and Putah Creeks." D-1641 does not implement any water quality standards. Instead, D-1641 implements certain flow dependant water quality *objectives* included in the 1995 Plan. In addition, there are no water quality standards or objectives on the Mokelumne River, Cache Creek, or Putah Creek. DWR negotiated with parties on the Mokelumne River and Cache and Putah creeks to provide certain flows from those water sources to help meet the flow dependant

objectives in the Delta. D-1641 includes the required flows for the Mokelumne River, however, these flows are not water quality standards.

2. The EIS/EIR should make clear that the Sacramento Valley Water Management Agreement (SVWMA) is a negotiated agreement between Sacramento Valley water users and DWR and USBR to which the State Water Board is not a party.
3. In the first sentence on page 1-28, instead of saying the State Water Board "incorporated" certain requirements in the 1995 Plan, the EIS/EIR should state that the State Water Board "took into consideration" the requirements of the other agencies.
4. In the first bullet on page 1-28 "water year classifications," should be replaced by "export limits" in describing the requirements. In context, it is currently unclear, since the classification is just a part of the requirement.
5. In the second bullet on page 1-28, standards should be changed to objectives.
6. The last bullet on page 1-28 stating that Delta inflow does not include rainfall is not entirely correct. Delta inflow includes streamflows into the Delta, which result from precipitation. This bullet should be rewritten to be more clear.
7. Another bullet should be added discussing the export limitations included in D-1641 that are based on San Joaquin River flows.
8. Another bullet should be added on page 1-28 discussing the Delta Cross Channel Gate operating criteria.

Chapter 2

In the discussion of Joint Points of Diversion (JPOD) in Chapter 2, the EIS/EIR states that D-1641 subjects use of JPOD to a plan to protect fish, wildlife, and other legal users of water. The EIS/EIR should clarify that D-1641 approved JPOD in stages subject to various terms and conditions prior to use (see D-1641, pages 150-153 and 155-158), not only a plan to protect fish, wildlife, and other legal users of water. Under Stage 1, USBR can use Banks Pumping Plant¹ to serve the Cross Valley Canal contractors and Musco Olive, to support a recirculation study, and to recover export reductions taken to benefit fish. Under Stage 2 JPOD, USBR can use the Banks Pumping Plant for any purpose authorized under its permits, except that the total pumping at Banks cannot exceed the current limits of the USACOE permit. Under Stage 3, USBR can use the Banks Pumping Plant up to the physical capacity of the pumping plant. The EIS/EIR should discuss the conditions for all stages of JPOD since increased pumping to 8,500 cfs at the Banks Pumping Plant for the benefit of the USBR's contractors is contingent upon use of Stage 3 JPOD. To date, DWR and USBR have submitted the required plans for use of JPOD up to Stage 1, including a Water Level Response Plan and a Water Quality Response Plan. However, DWR and USBR still must submit an operations plan to protect fish and wildlife and other legal users of water for Stage 2 JPOD. In addition, DWR and USBR must also submit a Water Quality

¹ D-1641 also approved JPOD use by DWR of USBR's Tracy pumping plant subject to similar conditions. However, the SDIP primarily involves use by USBR of DWR's Banks Pumping Plant.

Response Plan for Stage 3 JPOD and meet the further requirements for Stage 3 JPOD for an operations plan to protect aquatic resources and their habitat and other legal users of water if pumping rates will exceed the limits of the current USACOE permits. Further, Stage 3 JPOD requires DWR and USBR to protect water levels in the southern Delta adequate for diversion of water for agricultural uses. D-1641 specifies that this requirement may be satisfied through construction and operation of three permanent tidal barriers (currently referred to as gates) in the southern Delta as proposed in the SDIP.

Chapter 5

The following comments pertain to Table 5.1-1 regarding the CALSIM II model assumptions for the SDIP baselines and operational scenarios:

1. Why are the minimum flows below Lewiston Dam less in the 2001 baseline than the preferred alternative in the Trinity EIS?
2. For the Yuba River the EIS/EIR indicate that Decision 1644 flows are used. The EIS/EIR should indicate whether those are the interim flows or the long-term flows.
3. For the American River, the EIS/EIR utilizes Decision 893 flows, which are much lower than actual flows maintained by USBR and which are likely to be replaced in the future as a result of ongoing work by the Water Forum. As such the EIS/EIR should utilize the Water Forum flows in the 2020 level analysis.
4. Does the base case for exports assume relaxation of the export/inflow ratio pursuant to the requirements of D-1641? The EIS/EIR should specify.

If the modeling for the SDIP regarding JPOD pumping and water transfers (including EWA water transfers) does not do so already, it should assume that these diversion will only be allowed when DWR and USBR are in compliance with all of their permit and license conditions (including meeting the southern Delta electrical conductivity objectives and the San Joaquin River flow objectives) pursuant to the requirements of D-1641 (page 150 and 156) and the April 2005 Water Quality Response Plan (page 6), which subjects transfers to the requirements of the Water Quality Response Plan. While a revised Water Quality Response Plan will be required for Stage 3 JPOD diversions, the Division assumes that transfers will continue to be subject to the conditions of the Water Quality Response Plan.

Page 5.1-2 states that the SDIP operational alternatives will not modify the water quality and flow objectives for the Delta that the SWP and the CVP are responsible to meet. The EIS/EIR should specifically state as part of the project description that DWR and USBR will not increase diversions pursuant to the SDIP unless they are in compliance with the various terms and conditions of their water right permits (and USBR's license) for diversion and use of water, including water quality and flow requirements.

The discussion of appropriative rights on page 5.1-5 should include a discussion of pre-1914 appropriative rights. Further, in addition to the discussion concerning the State Water Board's

ability to reserve jurisdiction over water right permits and licenses, the EIS/EIR should state that the State Water Board has continuing authority to revise water right permits and licenses for certain purposes, even if the State Water Board has not reserved jurisdiction.

Under the discussion of the 1995 WQCP on page 5.1-7, it is not correct to refer to "...the State Water Board and Reclamation's final EIR for implementation [of the 1995 Plan]..." The State Water Board prepared the EIR for implementation of the 1995 Plan. USBR's environmental document had nothing to do with implementation of the 1995 Plan. It was solely for the purpose of supporting USBR's petition to change its place and purpose of use. Further, there were two separate environmental documents and not one joint document as the EIS/EIR appears to state.

The EIS/EIR should include a description of the types of transfers that may occur pursuant to Stage 2 of the proposed project, including the associated regulatory requirements that must be satisfied for the various transfers to occur. Due to the programmatic nature of the analyses concerning water transfers included in the EIS/EIR, any transfers conducted pursuant to Stage 2 of the proposed project requiring approval by the State Water Board may require additional analyses beyond those included in the EIS/EIR to determine that specific transfers meet the requirements of the California Water Code, including no injury to other legal users of water and no unreasonable effects on fish, wildlife, or other instream beneficial uses of water.

Chapter 5 should specifically discuss how the proposed project will comply with the requirements for using all three stages of JPOD included on pages 150 through 153 of D-1641, including compliance with the response plans to protect water levels, water quality, and fisheries and other legal users of water, and the further requirements for use of Stage 3 JPOD.

The EIS/EIR states that water levels may be reduced to less than 0 feet mean sea level under certain operational scenarios at various sites. While the EIS/EIR states that these impacts are expected to be less than significant due to the characteristics of the pumps, the EIS/EIR should include contingency mitigation if water level impacts are identified.

Chapter 6

Chapter 6 identifies significant impacts to Delta smelt from reduction in food availability and states that the impacts will be mitigated to be less than significant by minimizing entrainment losses of Delta Smelt associated with increased SWP pumping. It is unclear how minimizing entrainment of Delta smelt will fully mitigate food supply impacts. Though Delta smelt would presumably experience less direct mortality from entrainment due to the mitigation, they would continue to experience the effects of reduced food supplies, which may lead to mortality. While ensuring that X2 does not move upstream substantially may provide some level of mitigation for these food supply impacts, there may still be impacts from Stage 2 operations related to water moving too quickly through the system for proper phytoplankton and zooplankton production.

The EIS/EIR should address this potential impact. Specifically, the State Water Board is concerned how any JPOD diversion would affect this issue.

The EIS/EIR does not appear to discuss the effects of permanent operable gate operation on juvenile and adult steelhead migration. The EIS/EIR should discuss this issue.

The EIS/EIR should discuss how the proposed project will affect USBR's ability to meet the daily average temperature target of 56 degrees Fahrenheit on the Sacramento and Trinity rivers. While the EIS/EIR does provide estimates of Chinook salmon and Steelhead temperature survival indices for the Sacramento River, it is not clear what the actual change in temperature would be under the proposed project and how those changes would affect USBR's ability to meet the temperature target.

Regarding entrainment impacts from Stage 2 of the project on fall-/late fall-run Chinook salmon from the San Joaquin River Basin, due to the uncertainty regarding appropriate mitigation for significant impacts, the State Water Board will require additional information concerning the efficacy of the proposed mitigation measure or additional mitigation for this impact prior to approval of the plan to protect aquatic resources for use of Stage 3 JPOD.

The EIS/EIR should specify how mitigation measures MM-1, MM-2, and MM-3 will minimize entrainment related losses of fish species caused by increased diversions. The State Water Board will require additional specific information regarding how entrainment related losses of fish species will be reduced prior to approval of the plan to protect aquatic resources for use of Stage 3 JPOD.

The mitigation measures for significant entrainment impacts rely on EWA assets that have not yet been acquired. The EIS/EIR should specify that if the EWA does not have sufficient assets to support any necessary mitigation, alternative mitigation will be provided or additional diversions will not be allowed. Approval of the plan to protect aquatic resources for use of Stage 3 JPOD will likely require such measures or equivalent mitigation.

Chapter 8

On page 8-12 and 8-13, the EIS/EIR states that CWA Section 401 certifications are typically processed by the Regional Water Quality Control Board (Regional Water Board) with local jurisdiction and that for the purposes of this project, USBR will obtain certification from the Central Valley Regional Water Board. However, for the SDIP, an application for a Section 401 Water Quality Certification needs to be submitted to the Executive Director of the State Water Board pursuant to California Code of Regulations Title 23 section 3855(b) because the project is associated with a water supply project. The application needs to demonstrate that this project has no impact on water quality, whether short-term (e.g. impacts from construction activities) or long-term (e.g. effects of new dredged channel geometry or long-term barrier/pumping

operations). A certified SDIP EIS/EIR would need to be part of that application. To support a Section 401 Water Quality Certification, the SDIP EIS/EIR would need to address concerns raised in these comments and raised by the Regional Water Board in their comments on the SDIP EIS/EIR and any other substantive relevant comments raised by other parties.

The last paragraph on page 8-21 discusses the parameters included in the Water Quality Control Plans and Basin Plans for the project area. This list should also include dissolved oxygen, chlorides, and flow, which are water quality objectives included in the 1995 Plan.

The first paragraph on page 8-22 states that the project has the potential to affect water quality in the Central Valley region and the San Francisco Bay region, which are governed by the Central Valley Regional Water Board and the San Francisco Bay Regional Water Board, respectively.

The EIS/EIR should also discuss the water quality objectives for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary that are governed by the State Water Board and the Division through the 1995 Plan and its implementation in D-1641.

The first paragraph on page 8-27 under the 1995 Plan states that the State Water Board reviews the Water Quality Control Plan every three years. The EIS/EIR should instead state that the California Water Code at section 13240 requires periodic review of water quality control plans and that the federal CWA, at section 303 (c) requires a triennial review of state water quality standards as defined in the Act.

The first paragraph on page 8-27 under the 1995 Plan also states that the 1995 Plan ordered DWR and USBR to meet the salinity and flow objectives in the 1995 Plan. This is incorrect. Instead, following adoption of the 1995 Plan, the State Water Board adopted Order 95-6 (and subsequently Order 98-9 which continued the temporary terms and conditions included in Order 95-6) which approved petitions by DWR and USBR to temporarily change their water rights in order to implement objectives in the 1995 Plan while the Water Board prepared a long-term water right decision to implement the plan. D-1641 is the long-term water right Decision that implements parts of the 1995 Plan and places responsibility on DWR and USBR to meet specified water quality and flow objectives.

Chapter 10

On page 10-16 and 10-17, the EIS/EIR states that the Central Valley Regional Water Board adopted an amendment to the Basin Plan and that the State Water Board has not taken final action on this issue. The discussion should be updated to state that the State Water Board adopted Resolution 2005-0087 on November 16, 2005 approving an amendment to the Water Quality Control Plan for the Central Valley Region to incorporate a Total Maximum Daily Load (TMDL) for the control of salt and boron discharges into the lower San Joaquin River.

Thank you for the opportunity to comment on the SDIP EIS/EIR.

If you have any questions concerning these comments, please contact Diane Riddle of my staff at (916) 341-5297.

Sincerely,

ORIGINAL SIGNED BY DIANE RIDDLE FOR

Gita Kapahi
Chief Bay-Delta/Special Projects Unit

cc: Les Grober
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