Memorandum

Date: FEB 02 2012

To: Joe Grindstaff
Executive Officer
Delta Stewardship Council
980 Ninth Street, Suite 1500
Sacramento, California 95814

From: Dale K. Hoffman-Floerke
Deputy Director
Department of Water Resources

Subject: Staff Comments on the Draft Delta Plan Program Environmental Impact Report (PEIR) Dated November 4, 2011

This memorandum transmits the Department of Water Resources' (Department) staff comments on the Draft Delta Plan PEIR, which is based on the Fifth Staff Draft of the Delta Plan released by the Delta Stewardship Council (DSC) on August 2, 2011.

The current draft of the Delta Plan consists of 12 binding policies and 61 nonbinding recommendations and forms the basis of the 'Proposed Project' analyzed in the draft PEIR, which describes five alternatives to the Proposed Project. The draft PEIR analyzes the potential environmental impacts associated with the Proposed Project and each of the alternatives as required by the California Environmental Quality Act (CEQA).

Department staff appreciates the magnitude and complexity of the task to prepare a PEIR for the Delta Plan. Since there is not a well-defined list of projects associated with the development of the Delta plan, it makes the analysis of environmental impacts extremely difficult. Overlaying the complexity of the Delta itself further increases the level of difficulty in conducting the environmental analysis and the subsequent preparation of text to provide a document in a format that can be understood by the general public. This PEIR represents a substantial amount of work and provides a comprehensive resource on many issues in the Delta.

Following are the comments by Department staff; they are organized by chapter, page and line number to facilitate the DSC's review and understanding of these comments. As in the past, Department staff will continue to be available to respond to questions regarding Department reports, analyses, and comments provided in this attachment.

If you have any questions regarding the Department's comments, please contact me, or your staff can contact Robert Yeadon at (916) 651-9823.

Dale K. Hoffman-Floerke

Dale K. Hoffman-Floerke
Deputy Director
(916) 653-8045

Attachment

cc: Kamyar Guivetchi
Art Hinojosa
Kathy Kelly
Cathy Crothers

California Department of Water Resources

Staff Comments on the Draft Delta Plan
Program Environmental Impact Report
November 2011
(February 2, 2012)

General Comments:

The twelve binding policies described in the Fifth Staff Draft of the Delta Plan form the essential framework of the Proposed Project. Department staff believes that there should also be an analysis specific to these twelve policies since they will have the force and effect of law. Instead, the Draft Delta Plan Program Environmental Impact Report (PEIR) analyzes the impacts of the perception of what the Delta Plan regulatory policies and recommendation will do and the consequential impacts of these policies and recommendations in very general terms. The Department understands the complexity of this undertaking; however, additional effort should be taken to analyze the individual impacts associated with the specific policies proposed in the Delta Plan.

Due to the generalized nature of the impact analysis many sections of the EIR are repetitious. This repetition makes it difficult for the reader to focus on the concerns relevant to each subsection and makes it difficult to provide a comprehensive review.

Some of the more significant concerns of the Department's staff are as follows:

- Significant data errors. For example, the estimates of lands irrigated with water from the Delta (700 million acres versus 3 million acres);
- Inconsistencies and errors in the use of technical terms;
- Some of the California Environmental Quality Act (CEQA)/National Environmental Policy Act (NEPA) documents relied upon for analysis in this document may not be sufficiently relevant to base an analysis on;
- Numerous unsupported conclusions in the impact analysis;
- Inadequate discussions on the Cumulative Impacts; and
- Inadequate discussions in the Comparison of Alternatives.

Finally, there is no conclusion provided in the document. The specific comments below demonstrate and/or elaborate on the above points.

EXECUTIVE SUMMARY

Page ES-2, first footnote

The Department suggests that a word-for-word copy of the relevant part of the California Water Code be used for this footnote:

85057.5. (a) "Covered action" means a plan, program, or project as defined pursuant to Section 21065 of the Public Resources Code that meets all of the following conditions:
(1) Will occur, in whole or in part, within the boundaries of the Delta or Suisun Marsh.
(2) Will be carried out, approved, or funded by the state or a local public agency.
(3) Is covered by one or more provisions of the Delta Plan.
(4) Will have a significant impact on achievement of one or both of the coequal goals or the implementation of government-sponsored flood control programs to reduce risks to people, property, and state interests in the Delta.

The summary definition of "covered action" that is provided is inaccurate and could mislead some readers. The Water Code also clarifies that there are seven types of plans, programs, projects, or activities that are not considered "covered actions." A link to the Water Code section which contains these exceptions, as well as more information on covered actions, would be useful to readers. (http://www.leginfo.ca.gov/cgi-bin/displaycode?section=wat&group=85001-86000&file=85050-85067.)

Page ES-2, second footnote

For clarity and consistency DWR recommends that the phrase "… the Delta Plan will be successful …" be changed to "…the Delta Plan will be successfully implemented …"

Page ES-3, fourth paragraph

For clarity and consistency DWR recommends that the phrase "… through regional self-reliance …" be changed to "…through increased regional self-reliance …"

Page ES- 3, end of Paragraph 6

For clarity and consistency DWR recommends that the phrase "… Delta as a place" be changed to "… Delta as an evolving place."

Summary of Environmental Impacts

Page ES-10, Table ES-1

The Department recommends that an introductory/explanatory paragraph be inserted above Table ES-1. The only description of the table is provided on page ES-7. A description of the purpose of the table, what the various column headers indicate and any conclusions that are drawn from information in the table would be helful. It would also benefit the reader to have an upfront explanation of the various abbreviations used in the table As currently drafted an there is not an explanation of the abbreviations until Page 56 of the Executive Summary.

Section 2A Proposed Project and Alternatives

2.1 Overview of the Delta Plan

Page 2A-1, lines 10-14

The text states that the Delta Plan functions as a strategic document and provides guidance and recommendation to cities, counties, State, federal and local agencies and that the Council will work with these agencies to promote and coordinate implementation of these recommendations. However, the Delta Plan is much more, especially with respect to implementation of consistency determinations for covered actions. The DSC will become a regulatory agency and will have direct authority over any decisions deemed to be covered actions.

The Department is concerned with the implementation of consistency determinations on covered actions as stated in our comments on the Fifth Staff Draft of the Delta Plan. It appears that the DSC is interested in the regulation of many of the Department's activities including water management, water transfers, and levee rehabilitation. Numerous laws, regulations, negotiated settlements, and policies already exist that govern the many complex issues in the Delta. Department staff question the 'value added' of an additional regulatory process, especially if it is added on to the very end of a difficult permitting process and environmental review. This new process will likely add to project delays and costs in the Delta, including those projects specifically recommended by the DSC. The Department provided an estimate of costs and staff time associated with implementation of the Delta Plan. This CEQA process should provide a more thorough analysis of the impacts to land-use and planning of other State and local agencies to provide full information to the decision makers.

2.2.2.2.1 Floodplain Restoration

Page 2A-30, lines 8-39, Dredging

The discussion on dredging is very rudimentary. There are several Regional Board orders regulating dredging activities in the Delta. Some orders are for the maintenance dredging activities for the deep ship channels and another is a general order for smaller dredging projects. The existing orders would have little to do with any dredging activities for floodplain restoration. The discussion that follows illustrates a lack of understanding of dredging in the Delta. For example, the text in lines 15 and 16 discusses the use of dredges on the landside of the levee.

2.2.4.2 Overview of Flood Risk Reduction in the Delta Programs

Page 2A-47, lines 14-17

The text states that the: "Proposed Project encourages DWR to complete by January 1, 2013, *A Framework for Department of Water Resources Investments in*

Delta Integrated Flood Management (DWR 2011b) to guide investments between 2010 and 2030 to improve integrated flood management in the Delta for maintenance, facility improvements, new structural facilities and non-structural solutions, habitat enhancement, emergency preparedness with response and recovery, subsidence reversal, and studies (RR P4 and RR R5)." This line softens the actual language of the policy that states if DWR does not complete the strategy by Jan. 1, 2013 the Council will provide one as indicated in the following text:

Appendix C, C-6, RR P4

This Policy states that DWR needs to complete a Framework for Department of Water Resources Investments in Delta Integrated Flood Management by January 1, 2013. If DWR does not complete this framework document the Delta Stewardship Council will define a strategy for State investments.

2.2.5.1 Overview of the Economic Sustainability Plan

Page 2A-53, lines 1-5

The Economic Sustainability Plan has been completed since the drafting of this CEQA document. This Plan did recommend that Delta levees be brought up to the PL 84-99 standard. However, as the Department has stated in other correspondence on this subject, we do not believe this would comport with the Delta Plan's requirement to prioritize levee investments in the Delta or Section 85306 of the Water Code.

2.3.2.3 Water Quality Improvement

Page 2A-88, lines 1-25

The Department recommends inclusion of a discussion of the impacts to water quality associated with agricultural drainage both outside and inside the Delta. This is an important topic that should be addressed in this document.

2.4 Organization of Resource Sections

Page 2B-9, Table 2B-2

Under the heading of Potential Facilities or Actions the term 'Less than Proposed Project' is used. It is not clear what 'LESS THAN PROPOSED PROJECT' means. Does this mean that under the No Project Alternative there would be fewer projects than the Proposed Project or fewer impacts or something else? Again, there is little description provided for what appears to be an important table. This needs to be clarified. Unless the Delta Plan results in a significant amount of money being made available for projects, the Department would disagree that there would be fewer projects under the No Project Alternative.

SECTION 3 WATER RESOURCES

3.1 Study Area

Page 1, line 27

The Department recommends that here and throughout the document, the phrase “areas outside of the Delta that use Delta water” should be changed to “areas outside of the Delta that use water exported from the Delta.” The vast majority of the water exported from the Delta is water that comes from outside the Delta, much of it from reservoirs within the Delta watershed, but some of it from a reservoir outside the Delta watershed.

Page 3-1, lines 32 & 33

Rewriting this as, “Areas outside of the Delta that use Delta water exports include parts of the Tulare Lake, San Francisco Bay, and Central Coast Hydrologic Regions, plus parts of Southern California.”would be more accurate.

Page 3-1, line 32

During some wet water years, such as this past one, some of the runoff from the Tulare Lake basin has flowed downstream into the Delta.

3.3 Environmental Setting

Page 3-3, lines 10 & 11

To be consistent with the language of Section 7 of this EIR, the phrase “adopting the proposed Delta Plan or implementing the alternatives” should be changed to “adopting the proposed Delta Plan and some of the projects it encourages, or else implementing one of the alternatives to the Delta Plan.”

Page 3-3, lines 33 & 34

The text states that: “Precipitation is the source of 97 percent of California’s water supply.” Does this take into account groundwater?

3.3.2 Overview of California Water Resources

Page 3-4, lines 26-29

This text should be clarified. Colorado River water was being diverted and transported to irrigate the Imperial Valley before the Hetch Hetchy system was used to send water to the Bay Area.

3.3.3.1 Surface Water Hydrology

Page 3-10, line 3

The statement that: "approximately 520,000 acres of Delta land is used for agriculture" is out-of-date, and is significantly too high. The recently adopted Delta Protection Commission's Economic Sustainability Plan for the Sacramento-San Joaquin Delta states in its agriculture chapter that at present the "Total cropped acreage in 2010 was 423,727 acres, not including approximately 38,000 acres of grazing land."

3.3.3.4 Water Use and Infrastructure

Page 3-13, line 27

For clarity and accuracy purposes, the Department recommends that the phrase "Delta water is used by two-thirds of California's population" be changed to "water exported from the Delta helps to provide part of the municipal water supply for about two-thirds of California's population."

Page 3-13, lines 27 & 28

Water exported from the Delta makes up at least part of the irrigation water supply for about three million acres of California farmland. The EIR text states that: "The Delta also supplies water to more than **700 million acres of irrigated land** in various regions of California …" As this number is drastically elevated, if the environmental impact analysis was made with the 700 million figure then the analysis needs to be reconducted to accurately account for the actual acreage of 3 million..

Page 3-13, lines 41 & 42

The sentence, "After local users, the major users of Delta surface water are the CVP and SWP" incorrectly implies that more Delta surface water is used in the Delta than is exported to either the CVP or SWP service areas.

3.3.4.1.3 Groundwater Hydrology

Page 3-19, 3-20

This section does not describe groundwater hydrology in the Delta itself. Delta groundwater is very complex and differs from the discussion provided for the Sacramento Valley. This is especially true for the subsided islands in the Delta. The

analysis of water resources is incomplete without a description of the Delta groundwater system.

3.3.4.1.4 Water Use and Infrastructure

Page 3-21, lines 20-22

The text states that: "The Red Bluff Diversion Dam is located approximately 2 miles south of the City of Red Bluff and diverts water from the Sacramento River into the Tehama-Colusa and Corning canals." This information is now out-of-date and should be revised.

The Red Bluff Diversion Dam is located about two miles south of the City of Red Bluff and diverted water from the Sacramento River into the Tehama-Colusa and Corning canals since 1966. However, the Red Bluff Diversion Dam gates were lowered for the last time in August of 2011, by Court Order, to protect the endangered Chinook Salmon, whose passage was impeded by the Dam. Diversion of water from the Sacramento River into the Corning and Tehama-Colusa Canals will be done by the existing pumping plants until the new Red Bluff Pumping Plant comes online in May of 2012.

Page 3-22, lines 13-35

A lot more has occurred in California during the past ten years involving water transfers and the Delta than is described here. Much of it relates to potential Project and Alternatives impacts on water resources. Additional analysis is needed on this complex and important subject.

3.3.4.2 San Joaquin River Watershed

Page 3-22, lines 39 & 40

During some wet or very wet water years, some water from the "Tulare Lake watershed" flows into the San Joaquin River watershed.

Page 3-23, lines 26-31

This text should be updated with more recent information about the progress of the San Joaquin River Restoration Program.

3.3.4.2.3 Groundwater Hydrology

Page 3-27, lines 39 & 40

The text states that: “In the 1990s, groundwater levels were so low that many wells were inoperable and many groundwater users were obligated to construct new deeper wells.” This is an overstatement of all the wells in the region, relatively few actually became “inoperable.” And lowering the bowls on existing wells, as well as sometimes deepening or refurbishing existing wells, was a far more common response to falling groundwater levels than was drilling entirely new wells.

3.3.5.1.4 Water Use and Infrastructure

Page 3-43, lines 19-23

The Department requests that the time periods for the annual groundwater use estimates be included for reference.

Page 3-44, lines 1 & 2

Please note that residential metering programs are having success in cities such as Fresno and Bakersfield, where flat-rate water users are slowly being converted to metered users.

Page 3-44, lines 4-7

The large amount of water transferred from east-to-west during the 2007-09 water shortage and drought should be considered.

Page 3-45, lines 7-8

The text states that: “The Kern Water Bank (KWB) comprises 7,000 acres of recharge ponds that are filled with surplus SWP water that is allowed to infiltrate into the subsurface.” Strictly speaking, there is no surplus SWP water delivered to the Kern County Water Agency (KCWA), as that term is used by the Department. Also, within the past 20 years, the majority of the water used to recharge the KWB has not been SWP water but rather Kern River water. Some CVP water has also been stored in the KWB. Also note that the KWB occupies about 20,000 acres.

3.3.5.2 San Francisco Bay Area

Page 3-46, lines 13-15

The document states that: “The Bay Area has three distinct regions of land use: (1) agricultural farmland in the north, (2) a dense urban area in San Francisco, and (3) a mix of urban and rural in the south.” However, the Bay Area does not have “three distinct regions of land use.” There are plenty of “dense urban areas” in area cities other than San Francisco, such as Oakland, Berkeley, San Jose, Santa Rosa, and so

on. There is also some remaining farmland in the east and southern edges of the Bay Area.

Page 3-46, lines 22 & 23

The text states that: “Rainfall amounts vary … but are highest in the east-facing mountains (over 40 inches).” For the Bay Area, however, rainfall is greatest on the west-facing slopes of the area’s mountains. With most rain-bearing storms coming in from the west and southwest, the east-facing slopes are often in the “rain shadow” of the mountains or ridges.

Page 3-48, line 10

The text states that: “Agricultural use [in the San Francisco Bay Region] covers 943,000 acres of irrigated farmland.” This estimate appears to be based upon a survey, if so please provide the year in which the survey performed. The estimate seems too high. The Department’s latest available preliminary estimate of irrigated farmland in the San Francisco Bay Hydrologic Region is only about 82,000 acres, for 2006.

It appears that the 943,000 acres estimate from this EIR chapter may be for a region that is much larger than the true Bay Area. It may also be out-of-date. It may also include non-irrigated agricultural land.

Page 3-48, lines 12 & 13

The text states that: “Urban [water] uses occur in San Francisco, Silicon Valley, and Sonoma County.” However, major urban water use occurs in other parts of the Bay Area as well, such as the East Bay cities.

Page 3-49, lines 19 & 20

The document states that: “Over 30 reservoirs with a storage capacity of greater than 800,000 acre-feet capture and store water in the Bay Area.” Does each reservoir have a capacity of more than 800,000 acre-feet, or is the 800,000 plus acre-feet estimate a total for all the reservoirs? The text should be revised to clarify this.

Page 3-49, line 27

The statement is made that: “For over a century, a majority of urban water supplied to the area has been from imported sources.” This is inaccurate. Construction of O'Shaughnessy Dam was not finished until 1923. The Hetch Hetchy system was not completed until 1934. The Pardee Dam and Mokelumne Aqueduct were not completed until 1929.

Page 3-52, line 34

The estimate made in the statement: “As of 2001, SCVWD had stored about 140,000 acre-feet in the water banking program” is ten years out-of-date. Please provide a more recent estimate.

Page 3-54, lines 4 & 5

The text states that reduction in surface storage from sedimentation affects existing water supply reliability. What about the Hetch Hetchy and Pardee Reservoirs? Do they also suffer from sedimentation problems?

3.3.5.4 Southern California

Page 3-59, lines 33-37

The Department suggests that each section that describes a region in this chapter start with a small map of that region. This provides clarity to the reader regarding how the Council is defining each geographic area.

Page 3-67, line 46

What is meant by “early 1900s”? Does this refer to the 1900 to 1910 period, the 1900 to 1930 period, or something else? This is important for clarity reasons.

Page 3-68, line 1

The statement: “After the 1900s, Southern California gradually changed from an agricultural region ….” This should be changed to, “After 1910, …” After the 1900s would be the 2000s.

Page 3-68, lines 9-11

Contrary to what is stated in the text, “Water conservation” is not one of the “water supply sources” listed in Table 3-11.

Page 3-69, lines 44 & 45

Neither the Coachella Valley WD nor the Imperial ID is within the South Coast HR (as shown in the map on Page 64) or the Southern California region (as described in this section.)

Page 3-72, line 4

The statement is made that: “Currently, over 758,000 acre-feet per year of groundwater is recharged.” For what time period is this estimate based on?

Page 3-73, line 45

In this three-paragraph subsection, titled, “Water Recycling and Water Conservation,” there is not a single word about water conservation. Water conservation programs are quite widespread, and important, throughout Southern California. Please provide a description of the current and planned programs.

Pages 3-75 to 3-76, Table 3-15

There is a lot of valuable information in this well-crafted table.

3.4.2 Thresholds of Significance

Page 3-77, lines 1-16

This important subsection defines “Thresholds of Significance.” As a criterion for determining when that threshold is crossed, in regard to water supply or water resources, it uses the word “substantially” four times:

1. “substantially degrade water quality”,
2. “Substantially deplete groundwater supplies”,
3. “or interfere substantially with groundwater recharge”, and
4. “Substantially change water supply availability …”

However, this chapter fails to contain objective guidance for determining when a change or effect is large enough to be judged to be “substantial.”

3.4.3.1 Reliable Water Supply

Page 3-77, lines 21 & 22

The document states that: “…the Delta Plan seeks to improve water supply reliability ….” This is true, but the Delta Plan seeks to do far more than just that. And the projects, programs, and actions which the Delta Plan encourages, which would do more than just “improve water supply reliability,” also have impacts upon California water resources. The significance of those impacts should also be evaluated in this chapter.

Page 3-79, lines 39-42

The text concludes: "However, because named water supply reliability projects and projects encouraged by the Delta Plan could result in the potential violation of water quality standards due to construction activities and operation of facilities that would disturb the water chemistry and liberate certain pollutants in waterways, the potential impacts are considered **significant**."

This important conclusion is not adequately supported by the evidence presented in the preceding two pages of this subsection. In fact, most of that evidence contradicts the conclusion:

1. "However, these impacts would be less than significant after standard construction BMPs for mitigation measures …" [Page 3-78, lines 15 & 16]
2. "For this project, the SFPUC found that water quality impacts associated with project construction would be less than significant or less than significant with mitigation." [Page 3-78, lines 22 & 23]
3. "The lead agency found that the project could violate water quality standards or waste discharge requirements, but that the impacts would be less than significant with the implementation of a SWPPP and standard mitigation measures …" [Page 3-78, lines 44 – 46]
4. "However, reservoirs will likely be operated in a manner to meet water quality and temperature objectives …" [Page 3-79, lines 14 & 15]
5. "The lead agency found that the project would not result in significant adverse changes in Delta water quality …" [Page 3-79, lines 18 & 19]
6. "…the lead agency found that changes in flows caused by the project … had the potential to influence salinity and water temperature in some parts of the Delta, but that those impacts would be less than significant following implementation of mitigation measures by the water purchasers …" [Page 3-79, lines 24-27]
7. "Therefore, the operation of desalination plants is not expected to cause adverse effects on water quality." [Page 3-79, lines 36 & 37]

In fact, on these two pages, there is no evidence presented of a particular significant impact on water resources that was not quickly opposed by a stronger counter-argument presented in the document. The conclusion does not match or flow from the preceding text.

3.4.3.1.2 Impact 3-2a: Substantially Deplete Groundwater Supplies or Interfere Substantially with Groundwater Recharge

Page 3-81, lines 46 & 47

The document states that: "It is therefore concluded that this impact [upon groundwater] would likely be less than significant." This conclusion appears to be well-supported by the evidence presented in the preceding two pages.

Page 3-84, line 37

This section concludes: “This impact [upon groundwater] would be less than significant.” The Department concurs that the evidence presented in this subsection supports this conclusion.

3.4.3.2.3 Impact 3-3b: Substantially Change Water Supply Availability to Water Users that Use Delta Water (Delta Ecosystem Resotration)

Page 3-84, 3-85

The text states that adoption of Delta Flow objectives to a more natural flow regime could reduce water supply reliability within and outside of the Delta. The text further goes on to state that ‘other aspects’ of the Proposed Project would ensure that such an impact would be less than significant. The Department disagrees. Establishing a flow objective that creates a more natural flow regime has the potential to impact the reliability of exports, storage operations and salinity in the Delta that will be nearly impossible to reduce to less than significant. This statement either should be stricken or a detailed explanation of what the ‘other aspects’ of the Delta Plan entail and how they would mitigate for impacts to water supply reliability needs to be added.

3.4.3.3.3 Impact 3-3b: Substantially Change Water Supply Availability to Water Users that Use Delta Water (Water Quality Improvement)

Page 3-88, lines 3-14

The Department disagrees that the impact to water supply availability could be reduced to less than significant if a more natural flow regime is implemented. The authors of this document need to study water supply reliability in the western Delta. Cities like Antioch and other areas in the western Delta need fresh water releases to ensure that the water supply is not impacted by salt water intrusion. A more natural flow regime would result in higher salinities in the western Delta by design. A more thorough discussion is needed under this very important topic for the analysis to be complete.

3.4.3.4.1 Impact 3-1d: Violate any Water Quality Standards or Waste Discharge Requirements or Substantially Degrade Water Quality (Flood Risk Reduction)

Page 3-89, lines 1-11

The discussion with respect to methyl mercury associated with flood risk reduction is misplaced. The text uses the North Delta Flood Control and Ecosystem Restoration Project as reference for this discussion. The text should note that methyl mercury impacts described in the referenced North Delta EIR is in context with the ecosystem restoration not the levee rehabilitation. The discussion of methyl mercury in the flood risk reduction section should be removed.

3.4.5.1.1 Impact 3-1: Violate any Water Quality Standards (Alternative 1A)

Page 3-94, lines 41-43

The text states that construction of levees in the Delta would be less likely under Alternative 1A. The Department disagrees. The Delta Levees Program will continue under existing authorities.

3.4.5.1.3 Impact 3-3: Substantially Change Water Supply Availability to Water users Located Outside of the Delta that Use Delta Water

Page 3-95, lines 39-40

This very crucial analysis for Alternative 1A is handled in fewer than 10 lines. The text states that impacts on water supply availability under 1A would be the same as for the proposed project; yet this topic is the critical difference between the two alternatives. Additional discussion is needed to adequately compare the Proposed Project to Alternative 1A.

3.4.6 Alternative 1B

Page 3-96, line 11

The text states that there would be no ocean desalination projects under Alternative 1B. This statement is overreaching. Most ocean desalination projects are planned at a more local level, and there still may be ocean desalination projects regardless of the fate of various alternatives of the Delta Plan. Subsequent analyses predicated on this assumption need to be reanalyzed.

Alternative 2

3.4.7.1.1 Impact 3-1: Violate any Water Quality Standards or Waste Discharge Requirements or Substantially Degrade Water Quality

Page 3-98, lines 12-14

It is stated that under Alternative 2 the emphasis on resource protection would likely improve water quality. This analysis has to be clear on what is meant by improve water quality. Improvement of water quality for biomass production in a carbon starved estuary means more organic carbon is needed. However, improvement in drinking

water quality means a reduction in organic carbon to limit trihalomethane precursors. Dissolved solids concentrations (salts) are important to the organisms in an estuary but are undesirable in drinking water. The Delta issues surrounding water quality are very complex, and a much more in-depth discussion is needed to provide an adequate analysis of impacts associated with the Delta Plan.

3.4.7.1.2 Impact 3-2: Substantially Deplete Groundwater Supplies or Interfere Substantially with Groundwater Recharge

Page 3-99, lines 3-5

It is stated that Alternative 2 provides increased emphasis on developing more natural hydrographs on rivers upstream of the Delta, and this would likely increase groundwater recharge. This is an oversimplification. Groundwater recharge is very dependent on the stream section and whether or not it is gaining or losing. It is also very dependent on whether or not the aquifer in a particular area is confined or semi-confined or unconfined. The discussion provided in this section is too simplistic.

3.4.7.1.3 Impact 3-3: Substantially Change Water Supply Availability to Water Users Located Outside of the Delta That Use Delta Water

Page 3-99, lines 12-18

The text provides a discussion on how Alternative 2 would increase the extent of activities associated with groundwater projects, ocean desalination, recycled wastewater and stormwater projects, water transfers, and water use efficiency and conservation programs. This would improve water users' ability to make up for reductions in the loss of water for water supply outside the Delta under Alternative 2. The activities described in this section come at a substantial cost; however, no discussion is made of these impacts to water users. High costs for alternative water supplies can translate into a less reliable system.

SECTION 4 BIOLOGICAL RESOURCES

4.4.3 Proposed Project

4.4.3.2.1 Impact 4-1b: Substantial Adverse Effects on Sensitive Natural communities, Including Wetlands and Riparian Habitat

Page 4-69, lines 29-32

The potential impact to sensitive natural communities associated with ecosystem restoration is considered significant. This conclusion is not consistent with ecosystem restoration projects' goals to enhance wetlands and riparian habitat in the Delta and will have to have a net benefit

4.4.3.2.3 Impact 4-3b: Substantial Adverse Effects on Fish or Wildlife Species Habitat

Page 4-71, lines 4-7

Again, the text states that impacts on fish and wildlife species habitat associated with ecosystem restoration projects over the long term could be significant. These projects may impact some common mono-typical ecosystems by transforming them into a more diverse and more natural functioning ecosystem. Any short-term adverse impacts need to be weighed against long-term beneficial impacts to multiple species, inclusive of listed species.

4.4.3.3.1 Impact 4-1b: Substantial Adverse Effects on Sensitive Natural communities, Including Wetlands and Riparian Habitat

Page 4-73, lines 3-39

Improvements of water quality needs to be defined in the document. This section discusses both water quality for the environment and water quality for drinking water supply. These are two very different water quality objectives, especially with respect to constituents such as salts or dissolved total organic carbon.

4.4.3.4 Flood Risk Reduction

4.4.3.4.2 Impact 4-2d: Substantial Adverse Effects on Special-status Species

Page 4-77, lines 20-28

This section discusses effects on special-status species associated with levee rehabilitation. The Delta Levees Program is administered by the Department in partnership with the Department of Fish and Game (DFG). Impacts to special-status species such as the Swainson's hawk are avoided due, in large part, to the long-standing partnership and close working relationship with DFG. In fact, the enabling legislation for the Delta Levees Program requires net habitat enhancement as a requirement for levee rehabilitation projects. This unique program forwards much of the habitat enhancement activities in the Delta with emphasis on constructing habitat for special-status species. Therefore, the Department disagrees with the conclusion that flood risk reduction projects encouraged by the Proposed Project would have a significant impact on special-status species.

4.4.5 Alternative 1A

4.4.5.1.3 Impact 4-3: Substantial Reduction of Fish and Wildlife Species Habitat

Page 4-88, lines 31-32

Earlier in this section it is stated that Alternative 1A has less emphasis on Delta ecosystem restoration. However, these lines state that significant impacts on fish and wildlife habitat would be **less than** under the Proposed Project. These two statements appear to contradict each other. The Department believes that ecosystem restoration in the Delta would increase fish and wildlife habitat, and the impacts would be beneficial.

SECTION 5 DELTA FLOOD RISK

5.3.4 Overview of Flood Management Facilities in the Delta Watershed and the Delta

Page 5-3, line 9

Line 9 should read: "In 1893, the California Debris Commission was established to regulate hydraulic mining, plan for improved navigation, deepen channels, protect river banks, and afford relief from flood damages."

Page 5-4, lines 39-40

Management of seepage water on Delta islands is primarily for agricultural purposes, not flood management.

5.3.4.1.2 Sacramento River Project Levees in the Delta

Page 5-8, lines 14-24

This section should note that, although the US Army Corps of Engineers is responsible for rehabilitating bank erosion along project levees in the Delta, for many years this work went unfunded. The FloodSAFE initiative has moved this work forward in recent years.

5.3.4.3 Non-project Levees in the Delta and Suisun Marsh

Page 5-10, lines 7-16

This section of the document appears dated as evidenced by the author's citation of a 1995 DWR publication. In 1996, Assembly Bill 360 expanded the Delta Levees Program to include the entire Delta and the portions of Suisun Marsh (approximately 12 miles of levees on islands bordering the Northern Suisun Bay from Van Sickle Island westerly to Montezuma Slough) as outlined in Section 12311 of the California Water Code. Funding for the Delta Levees Program was established at $6 million per year for Subventions (primarily Delta levee maintenance) and $6 million per year for the Special Flood Control Projects. Actual funding was typically less. In November 2006 the voters passed Propositions 84 and 1E, which substantially increased funding for Delta levees, and the Department published Guidelines for funding projects in 2009, 2010 and2011..

This funding may be spent on project and non-project levees, in accordance with Water Code; however, the emphasis has been to fund non-project levees in accordance with the guidelines. It may be implied as read that non-project levees are regulated by the Central Valley Flood Protection Board when most are not (see C.C.R. Section 112, for a list of water courses actively regulated by the CVFPB. This section should be significantly revised.

Page 5-10, line 30

Please review text as there are project levees along the San Joaquin River, specifically those levees constructed as part of the "Lower San Joaquin River and Tributaries Project" which was completed in 1968. These project levees are a criteria for the Levee Flood Protection Zones later referenced in section 5.3.5.1.3 "DWR Analyses."

5.3.4.4 Delta Drainage Facilities

Page 5-11, lines 6-7

It is stated that Delta Islands are near or below sea level and depend on interior drainage and pumping to stay dry. This is an over generalization. This is true for islands or tracts in the estuarine portion of the Delta but not for all islands in the non-estuarine portion.

Page 5-11, line 24

Consider adding the sentence: "Delta levees have an additional stress in that they hold back water 365 days each year, regardless of weather or season."

5.3.5.1 Flood Risks

Page 5-12, line 5

Consider going to a consistent phrase of "against the levee." Currently the text vacillates between "on" and "in" the levee. The first sentence should read "Levee failure can occur through levee seepage and under seepage, and excessive water pressure against the levees." Similarly, line 13 would change to read "…is the buildup of excessive water pressure against the levee, which could….."

Also, breaching of a levee is not synonymous with overtopping. We suggest that the sentence read: "While Overtopping was the most common type of failure mechanism in the past, more recent failures are related to seepage and underseepage….."

5.3.5.1.1 FEMA Analysis

Page 5-12, line 32

Consider including a diamond section for PAL since it figures so heavily in the upcoming geographical descriptions in the next section.

5.3.5.1.3 FEMA Flood Areas

Page 5-15, beginning at line 31

The name is incorrect. "Protected" should be "Protection" every time it appears in "Levee Flood Protection Zones." The actual wording comes from AB 156.

5.3.5.2 Earthquake Risks

Page 5-20, line 26

Consider adding a brief definition of liquefaction for clarity purposes

5.3.7.2 Emergency Response Authorities and Responsibilities

Page 5-27, line 1

The sentence "Many reclamation districts have material and some equipment available for conducting flood fights should the need arise" overlooks the critically important fact that not all reclamation districts are properly prepared. The Department suggest that the text should read: "Many – but not all – reclamation districts…."

Page 5-27, line 4

For consistency and clarity, the text should refer to the Flood Center as the State Federal Flood Operations Center.

Page 5-27, line 12

More emphasis should be given to the inconsistent level of planning and preparedness amongst reclamation districts to emphasize that this disparity is a public safety issue. The text should read: "However, the degree of planning and preparedness varies widely between reclamation districts and can lead to delayed or ineffective emergency response."

Page 5-30, line 36

The roles of DWR and Division of Flood Management appear to be reversed. Consider revising the text to: “As a component of DWR, the Division of Flood Management coordinates flood operations with…..”

Page 5-31, line 7

For clarity of organization structure consider revising the sentence to: “The Flood Operations Center coordinates with Cal EMA on flood events….”

Page 5-31, line 10

Consider revising this to read: “Most flood emergencies begin as local events. The State Federal Flood Operations Center is continuously ready to assist locals and coordinate state response. The FOC coordinates state flood response activities, including Delta high water…..”

Page 5-31, line 25

There appears to be too much emphasis on an old plan (Delta IFEOP) and not enough emphasis on the new plan. Consider deleting everything after “of a response” through “if appropriate.”

Page 5-32, line 7

After “decisions” consider inserting a new sentence: “The program states that DWR will respond to a Delta flood emergency according to the following priorities: 1) protection of life and public health and safety; 2) protection of critical infrastructure; and 3) protection of the environment.”

Page 5-32, line 26

This section is outdated. Consider changing the paragraph to: “The Task Force held its most recent public meeting on January 5, 2012. The Task Force Report was approved by the Task Force members and is being submitted to the Cal EMA Secretary for approval. A public draft is not yet available.” Consider deleting all text from page 5-32 line 29 through page 5-34, line 4.

5.4.3.1 Reliable Water Supply

Page 5-37, lines 9-12

The text states: “However, the Proposed Project specifically names the DWR Surface Water Storage Investigation, which includes the North-of-the Delta Offstream Storage Investigation (Sites Reservoir), Los Vaqueros Reservoir Project (Phase 2), and the Upper San Joaquin River Basin Storage Investigation Plan (Temperance Flat

Reservoir)." Each of these proposed projects should be discussed in more detail so the reader understands in context why they are applicable. This comment applies to all of the sections in the PEIR. Many sections refer to projects without further definition. Further examples of needed definition can be found on 5.4.3.2, page 5-44, lines 25-31 and 5.4.3.3, page 5-49, lines 34-42.

Page 5-37, lines 39-41

Of the three surface storage reservoirs considered by the DWR Surface Water Storage Investigation, only the Los Vaqueros Reservoir Expansion Project has been studied in an EIS/EIR; the other two projects have not. Do the other projects listed in this document have associated environmental documents? This information would be helpful for the future Lead Agencies when implementing the Delta Plan. This comment applies to all of the sections in the PEIR. In each of these sections, please state if the projects listed in this PEIR have other CEQA environmental documents.

5.4.3.1.1 Impact 5-1a

Page 5-38, lines 39-41

This potential impact would most likely occur in rivers downstream of confluences of major rivers that have upstream reservoirs, such as downstream of the confluence of the Sacramento and American rivers, which would impact the cities of West Sacramento and Sacramento, among others. Consider listing the other cities.

5.4.3.2.1 Impact 5-1b: Substantially Alter the Existing Drainage Pattern of the Site or Area

Page 5-45, lines 15-26

The discussion regarding setback levees and impacts to drainage with respect to the Delta is incorrect. The text states that moving a levee further into the floodplain (the author's concept of a setback levee) could remove some water storage space from the floodplain. It should be noted that subsided Delta islands should not be considered part of the floodplain. Flooding of a subsided Delta island spells disaster for the reclamation district in that the island will fill with water if a levee is breached. The island will not act as a traditional floodplain. Setback levees in the Delta are typically constructed by broadening the levee to the landside and contouring the waterside of the levee to mimic more natural conditions. Ponding of water and other changes to the drainage is minimal since most islands have a designed agricultural drainage system utilizing pumps to dewater the island.

Contrary to the statement in line 24, setback levees in the Delta are not constructed across the floodplain flow path. This section needs to be updated as such and any analysis relying on that premise should be redone. The Department does not

believe that changes to drainage patterns associated with the construction of setback levees are significant.

5.4.3.3.5 Impact 5-5c: Place Within a 100-year Flood Area Structures Which Would Impede or Redirect Flows

Page 5-55, lines 11-19

Setback levees will not be constructed across the floodplain flow path. The Department disagrees with the conclusion that impacts to drainage patterns will be significant.

5.4.4 No Project Alternative

Pages 5-70 to 5-71, lines 32-44 and 1-15 respectively

The text states that adverse impacts on flood management resulting from the No Project Alternative would be greater than the Proposed Project. Unless adoption of the Delta Plan brings a significant amount of additional funding for water supply reliability and flood management activities, these two alternatives may be similar. The formation of a more regionalized levee maintaining agency could increase overhead costs for program implementation and result in less levee rehabilitation work being completed, unless more money is made available. This would result in the No Action Alternative having less adverse impacts to flood management.

Also, contrary to what is written in this section, conditions in Delta flood management have not declined and do not continue to decline. The implementation of levee rehabilitation projects in the Delta and associated habitat enhancement projects has increased since the passage of SB34 and AB360 that established and continue the Delta Levees Program. The infusion of significant funding from Propositions 84 and 1E has funded levee rehabilitation projects to an unprecedented level in the past few years. This section should be reanalyzed and efforts for closer coordination between the Central Valley Flood Protection Planning effort, the Delta Levees Program, and the Delta Plan should be made.

5.4.6 Alternative 1B

Page 5-73, lines 41-43

It is stated that there would be no setback levees or subsidence reversal projects under Alternative 1B. This is untrue. The Department continues to plan, develop and construct setback levees and subsidence reversal projects in the Delta under its Delta Levees Program.

SECTION 6 LAND USE AND PLANNING

6.2.1 Local Land Use Plans

Section 6, page 6-6, Map legend

The Map legend indicates Yolo County is outlined by highlighted dotted line. It should be labeled “Sacramento County”.

6.4.3.4.1 Impact 6-1d: Physical Division of an Established Community

Page 6-58, lines 8-38

It is stated that flood risk reduction activities such as construction of setback levees and restoration of floodplain areas would have a significant impact with respect to the physical division of established communities. The Department disagrees. Since setback levees and floodplain restoration areas are on water bodies that already physically separate these communities, these types of projects would have little, if any, additional impacts.

SECTION 7 AGRICULTURE AND FORESTRY RESOURCES

7.1 Study Area

Page 7-2, lines 13-14

A footnote should mention that in some wet years, water from the Tulare Lake Basin flows into the Delta, although that land is evidently not included in the “Delta watershed” of this PEIR. It would be helpful to include a map of that watershed in this section, or have a reference to such a map elsewhere in the PEIR.

Page 7-2, lines 22 and 23

The sentence, “The Delta Plan policies and recommendations will have a greater impact within the Delta than elsewhere,” should be changed to: “The Delta Plan policies and recommendations will have a greater direct impact within the Delta than elsewhere.” In the long run, including both direct and indirect impacts, the choice to adopt the Delta Plan and implement its policies and recommendations, when compared to the No Action alternative, could have significant impacts in the Delta service area.

7.3.2.1.1 Agriculture and Land Use

Page 7-4, Table 7-1

What was the Farmland Mapping and Monitoring Program’s (FMMP) mapping date or dates for the estimates of prime farmland etc., shown in Table 7-1? Right below

the table is the note, “Source: DOC 2009.” But that does not indicate when the actual farmland mapping took place. That could have occurred in 2006, 2007, or 2008.

Also, the text or table heading should indicate for what year or years are the values in Table 7-1. Just because a table comes from an unnamed “DOC” report published in 2009 does not necessarily mean that that table represents Delta land use patterns in 2009.

Page 7-5, line 3

The phrase “the region” should be replaced by “most of the Delta’s primary zone.” Peat soils make up a much smaller proportion of the soils in the Delta’s secondary zone than they do in the primary zone.

Page 7-5, line 4

According to Table 7-1, prime farmland comprised 54 percent of the Delta’s total acreage for an unspecified recent year and 48 percent of the total acreage (including water) of the Delta plus Suisun Marsh. The “4748 percent” figure should be corrected, and the year to which that estimate applies should be stated.

Page 7-5, starting on line 24

This paragraph on the Williamson Act should mention that the State has greatly reduced its financial support for this Act in recent years and that the ability of this Act to protect farmland from urbanization in future years remains uncertain.

7.3.2.1.2 Agricultural Production

Page 7-10, line 4

Not so long ago, sugar beets were a common Delta crop. But recent years have seen the closure of all the Northern California sugar mills which once refined those beets. Sugar beets are no longer grown in the Delta, according to DWR Land and Water Use Scientists who survey the Delta.

Page 7-10, lines 7-9

Parts of the cited 2007 DWR study are now out-of-date. Research for a January 2011 DWR paper revealed that between 2005 and 2009 the opposite trend occurred: away from higher-valued truck, tree and vine crops, and toward lower-valued field crops. This trend was also mentioned in a February 2011 UC Agricultural Issues Center report presented to the DSC. It remains to be seen if this is just a short-term ‘blip’ in a long-term trend toward higher-valued truck, tree and vine crops, or if the record between

2005 and 2009 represents the start of a new trend. The future may not be promising for higher-valued truck, tree and vine crops in the Delta – especially in the Primary Zone.

Page 7-10, line 11

Irrigated pasture is a permanent crop, not a rotational crop.

7.3.2.2.1 Forestland and Timber Resources

Page 7-10, lines 31-32

Concerning the statement, "approximately 44,530 acres of private timberland, one-half of which is composed of western oaks, are located in the five Delta counties." The text should not confuse the "Delta counties" with the Delta. Relatively few of those 44,530 acres of private timberland are located within the legal Delta.

Page 7-11, line 11

The text should explain the meaning of the terms "naturally recruited" second-growth "woodlands."

7.3.3.1 Agriculture

Page 7-12, line 12

The report states: "Agriculture in the Central Valley produces 57 percent of California's agricultural products." How is this defined? Is this by weight, by value, or by some other measure? And for what year is the estimate?

7.3.3.1.1 Agricultural Land Use

Page 7-14, lines 3-4

The text should make clear that most-to-all of the farmlands in the areas of the Central Coast and Southern California which receive some of their water supply from water exported from the Delta are not actually irrigated with much, if any, water from the Delta. The majority of the agricultural water used in those areas of the Central Coast and Southern California comes from ground water, local surface water, recycled water, or Colorado River water.

7.3.3.1.2 Agricultural Production

Page 7-14, lines 9-12

The term “export value” needs to be explained. Relatively little of the Delta’s agricultural output is exported to foreign countries. Also, the Department is not aware of any published estimates of the value of the Delta’s agricultural output that is exported. Also, there are relatively few nut orchards in the Delta. If “export value” and “nuts” are removed from this sentence, it would be accurate.

Page 7-14, lines 12-14

Many of the activities cited as examples of farm-based tourism, such as “fishing” and “inns”, would probably not be considered farm-based. And although these activities may, taken together, constitute a significant portion of the Delta’s economy, they do not “represent substantial land uses in the Delta.”

Page 7-14, lines 16-18

Sugar beets, almonds, and nectarines do not constitute “common crop types” in the Delta. The Department is not aware of any commercial poultry farms in the Delta.

7.3.3.2.2 Timber Production Zones

Page 7-14, lines 25-27

The claim made about “Timber Production Zones” is appears to be incorrect or misleading. There is significant timber production in California in areas outside the Delta watershed and areas which use water exported from the Delta. Some of that timber comes from the North Coast south of Del Norte County, some comes from the foothills of the southern Sierras, and some comes from the Lake Tahoe Area, or just north and south of it in areas that are just outside the Delta watershed. There was even some from Santa Cruz County as recently as 1998. CalFire forest economists may be able to provide more information.

7.3.4.1 Agriculture

Page 7-16, lines 11-12

The statement: “Outside of the Central Valley, land is mostly urban, built up, or not suitable for farming” is misleading. There is a substantial amount of productive irrigated farmland outside the Central Valley, which produces about a third of the value of California’s crop output year-after-year. These areas include the Napa Valley, the Salinas Valley, the Santa Maria Valley, the Oxnard Plain, the Coachella Valley, the Imperial Valley, and the Palo Verde Valley. There is also significant irrigated agriculture in Lake County, San Benito County, Sonoma County, San Diego County, and in some of the valleys of NE California. And, if one includes grazing as a farming activity, then there is even more land suitable for farming in California that lies outside the Central Valley than there is that lies within that valley.

7.3.4.1.1 Agricultural Land Use

Page 7-17, line 2

A definition should be provided here of what the authors mean by the phrase "in the areas outside the Delta that use Delta water." Does this area include only the areas which receive water exported from the Delta? Or does it also include areas that use water diverted from rivers or streams whose waters eventually flow into the Delta?

Page 7-17, Table 7-7

Based on the lines directly above Table 7-7, it appears that the 5.2 million acres of California "farmland" under Williamson Act protections "Outside the Delta That Used Delta Water in 2009" includes land that is grazing land. The text should indicate if the 5.2 million acres includes grazing land, which is mostly unirrigated pasture and range.

7.3.4.1.2 Agricultural Production

Page 7-17, lines 13-14

The list of "common crop types" for the Delta watershed appears to be word-for-word the same as the list of common crop types for the Delta. Some of the crops on this list are insignificant or uncommon in either the Delta or the Delta watershed outside the Delta, but are significant or common in the other area. Also, most of the "crop types" in this list are not crop types at all – they are crops.

7.4.1 Assessment Methods

Page 7-18, lines 20-21

The phrase "mitigation measures … may not be adequate to mitigate impacts to a less-than-significant level" needs more explanation. The geographic context of this statement, and similar statements in this EIR, should be established. Are the authors referring to all of California, or the Delta watershed plus Delta water export area, or the Delta watershed alone, or the six counties which contain the Delta, or the legal Delta alone? It would be helpful to put the discussion of mitigation measures in context in terms of the area considered both for impacts and mitigation measures.

7.4.3.1.1 Impact 7-1a: Conversion of Farmland to Nonagricultural Use

Page 7-20, lines 39-41

The document states: “particularly if local lands have specific soil conditions (such as peat soils in the Delta) that support high-value crops that cannot be readily grown elsewhere in the Delta watershed.” Note that there is less peat soil in the Delta today than there was 30 years ago. Also, according to a Department survey of Delta agriculture during the 2005-to-2009 period, the large majority of the Delta’s acreage today does not “support high-value crops that cannot be readily grown elsewhere in the Delta watershed.” The only high-value crop common to the Delta that cannot be readily grown elsewhere in the Delta watershed is asparagus, a crop that has been in sharp decline in California during the past ten years.

Page 7-21, lines 25-27

The document makes the statement that: “… it is likely that the agricultural resources impacts of projects of a similar nature encouraged by the Delta Plan could be mitigated to a less-than-significant level for short-term construction impacts, but not for more permanent conversions of farmland.” The Department concurs with the first assertion, with regard to the second assertion, we suggest changing the language to say that it may not be possible to mitigate to less-than-significant for permanent conversions.

7.4.3.1.3 Impact 7-3a: Conflict with Existing Zoning for, or Cause Rezoning of, Forestland, Timberland, or Timberland Zoned for Timberland Production

Page 24, Lines 35-37

The text states: “However, because named projects and projects encouraged by the Delta Plan could result in conflict with existing timber or forest zoning or TPZ, this potential impact is considered significant.” First, this section of the EIR has not established to what extent projects encouraged by the Delta Plan lie within lands that fall under the definition for forestland and timberlands, nor the extent of such lands. Also, the word “significant” denotes a certain scale of impact that is above slight, minor, and insignificant. Yet no estimates have been given in this Section on the scales of the possible conversions of agricultural or forest lands due to the implementation of some of the Delta Plan’s recommendations. The conclusion is not supported by the evidence presented.

7.4.3.1.4 Impact 7-4a: Loss of Forestland or Conversion of Forestland to Non-forest Use

Page 7-24, lines 40-45

The statement is made: “The USFS estimates indicate that approximately 44,530 acres of private timberland, half of which is composed of western oaks, are located in the five Delta counties.” For what year is this USFS estimate and does more recent and

relevant data exist? The Department has an estimate of the acres of forest lands in the Delta in 2007, which may be of some use to the authors.

Page 7-25, line 2

The statement is made: "3,288 acres of hardwood habitats are located in the Delta." The same issues reside with this statement, such as a full citation, the year of the data, and some statement as to the current accuracy of the data.

Page 7-25, lines 3-4

The text states that: "8,980 acres of riparian forest habitat are in the Delta." Again, the document should includea full citation, the year of the data, and some statement as to the current accuracy of the data. In earlier drafts of the Delta Plan, the Department commented on many instances of old, out-of-date estimates concerning Delta agriculture being presented as current estimates or estimates for recent years. The forest land estimates on Page 25, Lines 2 – 4 are quite relevant to the EIR. The document should state the year or years in which the surveys were conducted that produced those estimates. That information should be available from the *original* documents which contained those estimates. The acreage estimates are often not for the years in which the documents that contain them are published.

Page 7-25, lines 8-11

The authors should explain how "forestlands in the Delta watershed and areas outside the Delta that receive Delta water" would be affected by the adoption of projects recommended by the Delta Plan if they are located "in abandoned, low-lying fields."

Page 7-25, lines 17-18

The claim is made that if some of the projects recommended by the Delta Plan are adopted: "… groundwater wells could be constructed throughout the Delta …": The large majority of the Delta has a water table that is so high and farmland that is so close to Delta waterways, that groundwater is simply not pumped. According to a Senior Land and Water Use Scientist in the Department Regional Office that covers the Delta, there are only a few wells located in the Delta, all along the edges of the Delta. It is difficult to contemplate a water project that would result in groundwater wells being constructed throughout the Delta.

Page 7-25, lines 24-26

The text states that "Construction of these facilities (such as those considered under DWR's Surface Water Storage Investigation (SWSI)) could potentially cause a substantial conversion of forestland." There is no data provided to back this statement.

Page 7-26, lines 3 -5

Although it does not give any estimate or forecast of the scale of forestland conversions due to the implementation of some Delta Plan-recommended projects, the section concludes that: “this potential impact is considered significant.” Given the evidence presented in this report, we recommend changing the language to : “this potential impact *mayt be* considered significant.” The recommendation applies throughout the document where the documents makes a categorical statement that the impact “is considered significant”. There are so many unknowns about so many of these actions, that the Department suggests changing the language to “may be considered significant”.

7.4.3.1.5 Impact 7-5a: Involve Other Changes in the Existing Environment That, Because of Their Location or Nature, Could Result in Conversion of Farmland to Nonagricultural Use or Conversion of Forestland to Nonforest use

Page 7-26, lines 31-33

This section should provide a few examples of non-native species which might be spread by the construction of projects encouraged by the Delta Plan.

Page 7-27, lines 1-2

One or two examples of “projects that are encouraged by the Delta Plan” which “could result in *reduced* water deliveries to areas outside the Delta” should be given.

Page 7-27, lines 4-6

It is stated that “Continuous longer term fallowing and changes in agricultural practices resulting from reduced water deliveries could eventually result in the physical conversion of agricultural land to a nonagricultural use.” Reduced agricultural water deliveries could result in farmland fallowing for a year or two at a time. These reduced deliveries could eventually lead to the retirement of vulnerable farmland from irrigated production. However, such reduced deliveries would not result in “continuous longer term fallowing.” In fact, farmland fallowing is neither continuous nor long term.

Also, farmland that is frequently fallowed may indeed be eventually retired from irrigated production. However, in much of California, such formerly irrigated farmland is not “converted to non-agricultural use.” Instead, it is dryland farmed every year or two, or grazed by cattle or sheep. It returns to its owner far less gross or net revenue, on average, than when it was irrigated. However, the land remains in agricultural use.

Page 7-27, lines 8-11

DWR Bulletin 118 is not a potential water project.

Page 7-27, lines 45-46

Again, some indication of the scale of potential conversion of agricultural or forest lands due to projects named in, or encouraged by, the Delta Plan is needed before one can reasonably conclude that "this potential impact is considered **significant**" [emphasis in the original.] This conclusion is not supported by the evidence presented.

7.4.3.2 Delta Ecosystem Restoration

Page 7-29, line 4

The phrase, "including removal of invasive vegetation," should be changed to, "including the reduction or removal of non-native invasive vegetation, fish, and wildlife."

Pages 7-29, lines 28-31

In response to the "reduced export of water from the Delta," it is indeed true that, "Water users in the areas outside the Delta that use Delta water would likely respond to reduced supplies by constructing facilities to improve water supply reliability and improve water quality." Other actions would include an increase in ground water extractions, including those from overdrafted aquifers, in an attempt to replace most of the water lost due to the reduction in Delta water exports,

farmland fallowing, orchard abandonment, switching some acreage to crops which return less net income but which use less water, and purchasing transfer water from lands to the east and north of those which had relied on a certain level of Delta water exports.

These actions would all have environmental impacts in wide areas of California. And some of those impacts, such as land subsidence, lost habitat for wildlife, increased carbon emissions, and increased soil erosion, would be negative.

7.4.3.2.1 Impact 7-1b: Conversion of Farmland to Nonagricultural Use

Page 7-30, lines 40-42

As discussed above, change the statement to to "It is likely that the agricultural resources impacts of projects encouraged by the Delta Plan could be mitigated to a less-than-significant level for short-term construction impacts, but may not be for more permanent conversions of farmland; for example, when a project cannot be redesigned to avoid farmland conversion."

Page 7-31, lines 2-7

Again, the text should state for which area the “potential impacts” are “considered significant.” Are the impacts considered significant to “agricultural resources” in the Delta, in the six counties which contain the Delta, in the Delta watershed, in Northern California, or for the entire state? Also, this EIR section needs to present more evidence to support this important conclusion.

7.4.3.2.2 Impact 7-2b: Conflict with Existing Zoning for Agricultural Use or a Williamson Act Contract

Page 7-31, line 15

The text states: “These temporary effects could become permanent where areas are cleared for replanting or restoration of nonagricultural habitats, such as tidal marsh, riparian corridors, and grassland.” Throughout California, grasslands are used for grazing sheep or cattle, which is an agricultural use.

7.4.3.2.3 Impact 7-3b: Conflict with Existing Zoning for, or Cause Rezoning of, Forestland, Timberland, or Timberland Zoned for Timberland Production

Page 7-32, lines 40-42

Since some of the projects encouraged by the Delta Plan involve, at least in part, restoring riparian forest habitat, the Delta Plan could result in a net gain in the acreage of valuable riparian forests in the Delta region. Please add this net benefit to the analysis.

Page 7-33, line 9

Also, more evidence should be presented in this part of the PEIR to support the conclusion that there are potential significant adverse impacts to various regions analyzed by the PEIR.

7.4.3.2.4 Impact 7-4b: Loss of Forestland or Conversion of Forestland to Nonforest Use

Page 7-33, lines 12-14

The document should distinguish between the acres of forests and timberlands in the Delta versus the acres in the “five Delta counties.”

Page 7-33, lines 17-18

For what year or years do these estimates apply? The date the surveys were done should be reported, not the year or years in which the reports that contained these estimates were published.

Page 7-34, lines 11-12

The document states that "the potential impacts [on forest resources] of projects encouraged by the Delta Plan are considered **significant**." The document should provide more evidence to support this conclusion. . The text uses phrases such as "there are no project-specific details or associated reviews" concerning the impacts on forests of the projects encouraged by the Delta Plan, that impacts "could occur," and that "it is not known at this time" what the impacts might be. As suggested before, the Department recommends that the conclusion be that that the potential impacts "may be considered **significant.**"

7.4.3.2.5 Involve Other Changes in the Existing Environment That, Because of Their Location or Nature, Could Result in Conversion of Farmland to Nonagricultural Use or Conversion of Forestland to Nonforest use

Page 7-34, lines 30-32

Data should be provided to support the claim that "disturbance and removal of existing vegetation as a part of construction activities could result in the spread of invasive species to new areas, negatively affecting the health or viability of surrounding agricultural or forest uses."

Page 7-35, lines 17-19

Suggest changing the text to "the potential impacts of projects encouraged by the Delta Plan may be considered **significant**"

7.4.3.3 Water Quality Improvement

Page 7-35, line 31

The phrase, "Agricultural runoff treatment" should be changed to "Agricultural water runoff reduction and reuse." Throughout California there are programs to reduce and reuse agricultural runoff. The Department is not aware of any programs to treat that runoff, as one treats, for instance, urban wastewater.

7.4.3.3.1 Impact 7-1c: Conversion of Farmland to Nonagricultural Use

Page 7-37, lines 4-5

It is stated that: "The Davis-Woodland Water Supply Project identified a significant and unavoidable impact related to conversion of agricultural land." The PEIR should provide more information on years of data regarding crops, cropping years, and acreage to support conclusions and to allow the reader to begin to understand the significance to local and regional agriculture and agricultural resources of the conversion of any agricultural lands due to the Davis-Woodland Water Supply Project.

Page 7-37, lines 22-23

Suggest changing the document to state: "However, because named projects and projects encouraged by the Delta Plan could result in conversion of agricultural land to nonagricultural use, this potential impact may be considered significant."

Page 7-38, Lines 18-19

The EIR/EIS for the Davis-Woodland Water Supply Project is not on-line. However, there is a detailed summary of that EIR/EIS, at http://ice.ucdavis.edu/education/esp179/?q=node/185 . That summary made no mention of any "significant and unavoidable impact related to conversion of agricultural land." Therefore, it is difficult for the reader to understand the data behind assumptions and conclusions in this PEIR.

Page 7-38, line 33

Suggest changing the conclusion to, "…this potential impact may be considered **significant.**" t

7.4.3.3.3 Impact 7-3c: Conflict with Existing Zoning for, or Cause Rezoning of, Forestland, Timberland, or Timberland Zoned for Timberland Production

Page 7-39, lines 27- 29

Suggest changing the conclusion to, "… this potential impact may be considered significant."

7.4.3.3.4 Impact 7-4c: Loss of Forestland or Conversion of Forestland to Nonforest Use

Page 7-40, lines 27- 29

Suggest changing the conclusion to: "However, because named projects and projects encouraged by the Delta Plan could result in conversion of forestlands to nonforest use, this potential impact may beconsidered significant." No indication of the scale of likely, or even possible, forest impacts is given. Also, some habitat restoration projects encouraged by the Delta Plan would likely result in the creation of new riparian

forest habitat, which is quite valuable to fish, birds, and wildlife, and for the sequestration of carbon.

7.4.3.3.5 Involve Other Changes in the Existing Environment That, Because of Their Location or Nature, Could Result in Conversion of Farmland to Nonagricultural Use or Conversion of Forestland to Nonforest Use

Page 7-41, line 40

Suggest changing the conclusion to "…this potential impact may beconsidered significant."

7.4.3.4.1 Impact 7-1d: Conversion of Farmland to Nonagricultural Use

Page 7-43, line 22

Suggest changing the conclusion to states "…this potential impact may be considered **significant**." The text on this page, preceding the conclusion states "This [North Delta Flood Control and Ecosystem Restoration Project] EIR found that agricultural resources impacts were either less than significant or less than significant with mitigation …" [from Lines 6 and 7.] The document needs to note that encouragement of flood risk reduction projects may ultimately protect Delta farmlands and may have a net positive effect.

Page 7-44, lines 2-4

The text states that "Implementing the Proposed Project could increase investments in levee improvements in the Delta. The improvements could primarily be to existing levees and typically would not alter their basic shape and configuration, except for the use of setback levees." This may be an inaccurate generalization. Large seismic resistant levees with broad footprints may differ in basic shape and configuration than typical Delta levees. In addition, most these levee improvement programs will proceed with or without the Proposed Project.

Page 7-44, lines 26-28

Suggest changing the conclusion to state: "…this potential impact may be considered significant."

7.4.3.4.3 Impact 7-3d: Conflict with Existing Zoning for, or Cause Rezoning of, Forestland, Timberland, or Timberland Zoned for Timberland Production

Page 7-45, lines 1-31

Again there is a stated concern that "potential conflicts with forestland zoning and TPZ could occur" near 16 cities in or near the Delta, without any indication of how many acres or square miles of land near those cities is zoned for forestland or Timber Production Zones. That information should be readily available from CDF. Most forests in the Delta are thin strips of riparian forests and fields with a few oak trees in them. Suggest chaging the conclusion to, "this potential impact may be considered **significant**."

Page 7-46, lines 13-33

This section is full of uncertainty:

- "Operation of these facilities *could* convert forestland …"
- "The details of many of the aspects of these projects, however, are *not currently known* …"
- " … *it is possible* that significant impacts …"
- "It is *not known* at this time …"

This section also lacks any indication of scale, or estimates or forecasts of measured impacts, such as acres of converted land or dollars of lost revenue. Suggest changing the conclusion to: "However, because named projects and projects encouraged by the Delta Plan could result in conversion of forestlands to nonforest use, this potential impact may be considered significant."

7.4.3.4.5 Involve Other Changes in the Existing Environment That, Because of Their Location or Nature, Could Result in Conversion of Farmland to Nonagricultural Use or Conversion of Forestland to Nonforest Use

Pages 7-47 to 7-48, line 21 Line 7, respectively

The PEIR text cites the "North Delta Flood Control and Ecosystem Restoration Project" as an "analogous project," similar to one encouraged by the Delta Plan. It then summarizes conclusions from that project's EIR: "This EIR found that agricultural resources impacts were less than significant with mitigation …" Then the draft Delta Plan PEIR states that:

Based on this example, it is likely that some agricultural resources impacts of named projects and projects encouraged by the Delta Plan could be mitigated to a less-than-significant level.

For other named projects where an environmental impact analysis has not been prepared, it is expected that this impact analysis provides a reasonable analysis of potential effects that would occur if the projects of a similar nature and similar setting were implemented. Yet this section of the draft Delta Plan EIR concludes : "However, because named projects and projects encouraged by the Delta Plan could indirectly

result in conversion of forest or agricultural lands, this potential impact is considered **significant**." Suggest changing the conclusion to one of "not significant" or at the most to be "may be significant"

7.4.3.5 Protection and Enhancement of Delta as an Evolving Place

Page 7-48, lines 19-21

The statement is made that "The [Delta] Economic Stability Plan is not an activity that would generate agriculture or forestry resources impacts; therefore, it is not discussed further in this section." We suggest more discussion of the Plan. If even some of the activities, programs, and projects called for or encouraged by this plan were to be implemented, they could have profound and significant impacts on Delta agriculture.

"

7.4.3.5.1 Impact 7-1e: Conversion of Farmland to Nonagricultural Use

Page 7-48, lines 34-37

The text claims that "These facilities could adversely impact agricultural land locally, particularly if these lands have specific soil conditions (such as peat soils in the Delta) that support high-value crops that cannot be readily grown elsewhere in the Delta watershed by converting such land to nonagricultural use." As stated previously, the only crop, of high or low value, that is grown commercially in the Delta, and which "cannot be readily grown elsewhere in the Delta watershed," is asparagus, whose acreage has been in sharp decline (due to economic reasons) in the Delta during the past ten years. Any Delta asparagus acreage that is lost, and cannot be replaced by growing asparagus on other Delta acreage, could be replaced by new asparagus acreage in the Salinas Valley.

Page 7-49, lines 5- 6

The text states that "…the San Luis Rey River Park project found significant and unavoidable impacts related to conversion of farmland to nonagricultural use, because the park itself was sited on farmland." Department staff reviewed the San Luis Rey River Park Master Plan[1], and did not draw the same conclusion.

According to the Master Plan, the large majority of the proposed 1,640-acre park is not situated on farmland. Only one section, of only 54 acres, is classified as "agricultural land." Based on the photo of that land in the report, it appears to be low-value grazing land. No claim is made that it is prime farmland. The loss of such land

[1] http://www.co.san-diego.ca.us/reusable_components/images/parks/doc/mpcondensed.pdf

would not appear to have a significant environmental impact affecting the agricultural or natural resources of San Diego County. During each year of recent decades in that county, hundreds of acres of much-higher valued farmland were lost to normal urban development pressures and economic forces, such as high and rising water costs, reduced water supply reliability, and increased competition from low-cost foreign producers.

The actual, entire conclusion of San Luis Rey River Park Master Plan is as follows: "The San Luis Rey River Park will be an outstanding recreational and open space legacy for San Diego County residents. The park balances accommodation of the recreational needs of surrounding communities with the establishment of a large open space preserve, protecting one of the most biologically-diverse segments of the SLR river corridor, and critical habitat for several threatened and endangered species. Encouraged interaction with the park's wealth of cultural/ biological resources will instill park users with a broad understanding and appreciation for the river's dynamic natural systems and the ecological richness that attracted Native Americans to inhabit the corridor thousands of years ago."

Based upon the San Luis Rey River Park Master Plan, the Department does not believe that the proposed park would a have a noticeable impact on county agriculture and should not be used to support the conclusions that certain potential impacts of projects encouraged by the Delta Plan would be "significant."

Page 7-49, line 18

Suggest changing the conclusion to be , "…this potential impact may be considered **significant.**" .

7.4.3.5.2 Impact 7-2e: Conflict with Existing Zoning for Agricultural Use or a Williamson Act Contract

Page 7-49, lines 25-27

It is stated that "… these activities could potentially be in conflict with agricultural zoning or Williamson Act contracts if water supply projects are not permitted uses under such contracts …" The activities described in this section are habitat restoration projects encouraged or named by the Delta Plan, not "water supply projects."

Page 7-50, line 21

Suggest changing the statement to say"…this potential impact may be considered **significant.**"

7.4.3.5.3 Impact 7-3e: Conflict with Existing Zoning for, or Cause Rezoning of, Forestland, Timberland, or Timberland Zoned for Timberland Production

Page 7-50, lines 29-31

The document states that "However, because there is no existing timber or forest zoning or TPZ in the Delta counties in which activities enhancing the Delta as an evolving place would occur, there would be **no impact** at the program level." This finding is inherently reasonable, but it contradicts several earlier assertions where the PEIR text states or implies that there is indeed "existing timber or forest zoning or TPZ in the Delta counties." In fact, the EIR text lists more than a dozen communities in or near the Delta and states that there is – or at least could be – forest land or land zoned for timber production near the Delta-area communities. Therefore, the text concluded "…this potential impact is considered **significant**."

Yet in this case, the text states that there is no such forestland in or near the Delta, therefore "…there would be **no impact** ..." This conclusion, which appears to be supported by the evidence presented, appears to contradict several earlier and subsequent conclusions in this PEIR concerning forest resources.

7.4.3.5.4 Impact 7-4e: Loss of Forestland or Conversion of Forestland to Nonforest Use

Page 7-51, lines 2-3

The statement is made that "Forestlands in the Delta watershed that are most likely to be located near future construction sites …" There are indeed a lot of forests in the Delta watershed, but it is difficult to see how they would be impacted by projects in the Delta designed to "protect and enhance the Delta as an evolving place." It appears as if text from one section of the Delta Plan PEIR was possibly copied and pasted unto another section of the PEIR without careful consideration as to whether it applied to the situation described in the new section.

Page 7-51, lines 24-26

Suggest that the text be changed to "However, because named projects and projects encouraged by the Delta Plan could result in conversion of forestlands to nonforest use, this potential impact may be considered significant."

7.4.3.5.5 Impact 7-5e: Involve Other Changes in the Existing Environment That, Because of Their Location or Nature, Could Result in Conversion of Farmland to Nonagricultural Use or Conversion of Forestland to Nonforest Use

Page 7-52, lines 22-24

The document states that: "… the San Luis Rey River Park project found significant and unavoidable impacts related to conversion of farmland to nonagricultural use." Please refer to the above comments on Pages 7-12 and 13 concerning the real impacts of the San Luis Rey River Park project, as described in the Master Plan for that project.

Page 7-52, lines 33-34

Suggest changing the text tot: "…this potential impact may be considered significant."

7.4.3.6 Mitigation Measures

7.4.3.6.1 Mitigation Measure 7-1

While the Department considers the mitigation measures listed to be ones that should be considered by project proponents, we suggest that the document require project proponents to consider the mitigation measures and adopt them where applicable. We have provided some additional comments on some of the six proposed mitigation measures listed in this section:

Page 7-53, lines 14-15

Attempting to avoid or reduce the loss of the highest valued farmland (a.k.a. "prime farmland") when a project is adopted is a worthy goal. But it should not be the only goal or even the most important goal. Modifying a proposed water supply project or habitat restoration project or "Delta as a place enhancement" project to reduce the loss of prime farmland "to the greatest extent feasible" may turn a good project into a less desirable one. This requirement could turn a project with an overall, net positive impact on the environment to one which has an overall, net negative environmental impact. The cultivation and irrigation of some prime farmland can be quite damaging to the environment. It can also produce an overall net economic loss to society as a whole. Converting such farmland to certain non-agricultural uses, such as habitat restoration, could be quite beneficial to the environment and to society.

Page 7-53, lines 19-23

This paragraph may demand to much of "project proponents," who are given responsibility for "acquiring easements, making lot line adjustments, and merging affected land parcels" instead of using the market, subject to the appropriate land use regulations, and with the approval, where required, of the local governmental authorities.

Page 7-53, lines 24-28

This proposed requirement may not be practical in many cases. It also elevates agricultural uses of land affected by projects above all other uses. For all sorts of construction projects, a temporary interruption of access to roads or utilities is quite common, and simply unavoidable. Although a permanent loss of such access may call for appropriate compensation, it is not feasible to require creating alternate access in all cases for disruptions which could last only a few hours to a few days. This provision could derail many otherwise worthwhile proposed projects.

Page 7-53, lines 29-37

This proposed requirement is unclear, contains contradictions, and is confusing. This should be rewritten for the following reasons:

- The first sentence refers to invasive species impacts "on adjacent agricultural land," while the second sentence refers to such impacts on "nearby agricultural lands." Please clarify the required proximity.
- The second sentence switches subjects when it states, "where a project has the potential to introduce sensitive species or habitats …" Sensitive species are not the same as invasive species.
- The next-to-last sentence discusses "… temporary or intermittent interruption in farming activities (e.g., because of seasonal flooding or groundwater seepage)," rather than invasive or sensitive species.
- Finally, key terms, such as "sensitive species," should be defined, and the paragraph, which deals with two different subjects, should be split in two.

Page 7-54, lines 14-16

It is stated that "In cases where substantial areas of lands would still be converted from agricultural use, these related impacts would remain significant." This would depend on a number of factors, including the nature of the agricultural lands being converted, the services those lands provide, and the amount of converted land when compared to the total agricultural land of that type in the study area. Certainly the impacts could remain potentially significant, *if* "substantial" agricultural lands were converted. But it may be too much to insist that they would be significant in all such cases.

7.4.3.6.2 Mitigation Measure 7-2

Page 7-54, lines 33-35

Impacts could be significant, but it is not correct to state or imply that in all cases where “substantial areas of incompatibility would exist” with Williamson Act protections or agricultural zoning, the impacts would always be significant.

7.4.3.6.4 Mitigation Measure 7-4

Page 7-55, lines 25-26

The wording here is too absolute, as it is in some similar earlier paragraphs which refer to land zoned for agriculture, or placed in agricultural preserves.

Page 7-55, lines 36-37

Conversion of “substantial” agricultural or forestlands might not always result in significant environmental impacts, depending on the quality of the lands being converted, what those lands are converted to, over how many years those conversions take place, and the proportion of total agricultural or forest lands that would still remain in the region impacted by the proposed project. The wording “would remain significant” should be changed to “could remain significant.”

7.4.5.1.1 Impact 7-1: Conversion of Farmland to Nonagricultural Use

Page 7-57, lines 12-13

Suggest changing the text to “As compared to existing conditions, the impacts related to conversion of farmland under Alternative 1A may be **significant**.”

7.4.5.1.2 Impact 7-2: Conflict with Existing Zoning for Agricultural Use or a Williamson Act Contract

Page 7-57, line 32

Suggest changing the conclusion to mpacts under “…Alternative 1A could be significant.”

7.4.5.1.3 Impact 7-3: Loss of Forestland or Conversion of Forestland to Nonforest Use

Page 7-58, lines 7-8

No estimates of the likely scales of impacts are presented.

7.4.5.1.4 Impact 7-4: Conflict with Existing Zoning for, or Cause Rezoning of, Forestland, Timberland, or Timberland Zoned for Timberland Production

Page 7-58, lines 23-25

The term “would be” should be changed to “could be” in each of these lines. Under all the Project alternatives, potential future conflicts with lands zoned to protect forests could be heightened, reduced, or eliminated, as the zoning laws and regulations covering the Delta evolve over time.

7.4.5.1.5 Impact 7-5: Involve Other Changes in the Existing Environment That, Because of Their Location or Nature, Could Result in Conversion of Farmland to Nonagricultural Use or Conversion of Forestland to Nonforest Use

Page 7-59, lines 1-2

Suggest changing language to say that impacts may be significant

7.4.6.1.1 Impact 7-1: Conversion of Farmland to Nonagricultural Use

Page 7-59, lines 38-39

The preceding four paragraphs of the chapter explain the many major differences between the Proposed Project and “Alternative 1B.” However, the PEIR concludes that, “The same type of agricultural land conversion impacts would occur under Alternative 1B as described under the Proposed Project.” Please explain how, if the projects are so different, they have the same type of agricultural land conversion impacts.

Page 7-60, lines 11-12

Suggest changing the text to t “As compared to existing conditions, the impacts related to conversion of farmland under Alternative 1B may be **significant**,”

7.4.6.1.2 Impact 7-2: Conflict with Existing Zoning for Agricultural Use or a Williamson Act Contract

Page 7-60, lines 32 -33

Suggest changing conclusion to “the impacts related to conflicts with existing agricultural zoning or Williamson Act contracts under Alternative 1B may be significant.”

7.4.6.1.3 Impact 7-3: Loss of Forestland or Conversion of Forestland to Nonforest Use

Page 7-61, lines 11-12

Suggest changing the conclusion to state that "the impacts related to loss of forestland or conversion of forestland to nonforest uses under Alternative 1B may be significant." A sense of the scale of likely forestland conversions relative to existing forestlands in the various regions of the study area should be provided.

7.4.6.1.4 Impact 7-4: Conflict with Existing Zoning for, or Cause Rezoning of, Forestland, Timberland, or Timberland Zoned for Timberland Production

Page 7-61, lines 32-33

Suggest changing the conclusion to "the impacts related to conflicts with existing forestland and timberland zoning under Alternative 1B may be significant."

7.4.6.1.5 Impact 7-5: Involve Other Changes in the Existing Environment That, Because of Their Location or Nature, Could Result in Conversion of Farmland to Nonagricultural Use or Conversion of Forestland to Nonforest Use

7.4.6.2 Mitigation Measures

Page 7-62, lines 18-19:

Suggest changing the conclusion to, "these potential impacts [under Alternative 1B] are may be considered **significant and unavoidable**."

7.4.7.1.1 Impact 7-1: Conversion of Farmland to Nonagricultural Use

Page 7-63, lines 1-2

The document states that "…Alternative 2 would encourage the retirement or fallowing of about 380,000 acres of agricultural land within the San Luis Drainage Area …": Note that there is a large difference, in terms of agricultural impacts, socioeconomic impacts, and environmental impacts, whether a plot of farmland is retired or fallowed. In the PEIR's study area, farmland retirement is permanent – the land is no longer irrigated. Sometimes it is simply abandoned. Other times it is converted to non-agricultural uses. And sometimes, depending on its location and the agricultural economy, it is grazed by sheep or cattle, or is occasionally used to grow dryland grains or safflower. These activities usually return to the land's owners only a

small fraction of the gross and net revenues that the land produced when it was irrigated.

Farmland fallowing, however, is temporary. A field is not irrigated or cultivated for a year or two, and then it is returned to production for at least one year, and usually a lot longer. In California, farmland fallowing is sometimes done for economic or agronomic reasons, and it is sometimes done to make water available for sale and transfer. This PEIR needs to describe how many acres would be permanently retired from irrigated production and how many acres would be periodically or occasionally fallowed within the San Luis Drainage Area.

Page 7-63, lines 4- 6

The text states that "This alternative would influence about the same amount of habitat restoration …, although there would be greater emphasis on floodplain restoration. Thus, the level of farmland conversion resulting from ecosystem would be about the same as the Proposed Project." Based upon this PEIR's description of Alternative 2, it appears that this alternative would encourage a somewhat greater amount of California farmland to be restored to habitat. This would occur mainly through Alternative 2's "greater emphasis on floodplain restoration."

Page 7-63, lines 10-11

The text states that "…under Alternative 2, there would be fewer levee improvements compared to the Proposed Project …" Fewer levee improvements in the study area would, over time, mean more farmland would be inundated, some of it permanently. This would increase the likely agricultural impacts.

7.4.7.1.2 Impact 7-2: Conflict with Existing Zoning for Agricultural Use or a Williamson Act Contract

Page 7-63, line 27

This section states that "…Alternative 2 would have no major water storage facilities …." This statement appears to conflict with the statement Page 7-62, lines 43 and 44, which describes an important part of Alternative 2: "The development of surface storage in the Tulare Lake Basin could result in the inundation of up to about 320,000 acres of agricultural land…."

Page 7-63, lines 30-32

The "development of surface storage in the Tulare Lake Basin" plus the "greater emphasis on floodplain restoration" under Alternative 2, could *increase* the "likelihood of conflict with agricultural zoning or Williamson Act contracts."

Page 7-64, lines 5-6

The text concludes that "Overall, significant impacts related to conflicts with existing agricultural zoning or Williamson Act contracts under Alternative 2 would be less than under the Proposed Project." Please explain this conclusion.

Page 7-64, lines 7-8

Suggest changing this conclusion to "the impacts related to conflicts with existing agricultural zoning or Williamson Act contracts under Alternative 2 may be **significant.**" It would be helpful if this PEIR stated how many of the 320,000 acres of agricultural land in the Tulare Lake Basin subject to inundation under Alternative 2 are now protected by the Williamson Act or agricultural zoning, and if that estimate would be a substantial number relative to the total agricultural land in that Basin.

7.4.7.1.3 Impact 7-3: Loss of Forestland or Conversion of Forestland to Nonforest Uses

Page 7-64, lines 33-34

Suggest that the conclusion of significant impacts related to forestland conversions be modified to say that the impacts may be considered significant. A sense of the scale of impacted forestlands to total forestlands in the study area or areas would be helpful.

7.4.7.1.4 Impact 7-4: Conflict with Existing Zoning for, or Cause Rezoning of, Forestland, Timberland, or Timberland Zoned for Timberland Production

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Page 7-65, lines 21-22

Suggest that the conclusion of significant impacts related to forestland zonings be modified to say that the impacts may be considered significant A sense of the scale of impacted zoned forestlands to total zoned forestlands in the study area would be helpful. .

7.4.7.1.5 Impact 7-5: Involve Other Changes in the Existing Environment That, Because of Their Location or Nature, Could Result in Conversion of Farmland to Nonagricultural Use or Conversion of Forestland to Nonforest Use

Page 7-65, lines 32-33

The text states that "… the overall footprint of possible disturbance areas would be smaller than for the Proposed Project." According to the EIR, under Alternative 2, "The development of surface storage in the Tulare Lake Basin could result in the inundation of up to about 320,000 acres of agricultural land considered Farmland of Statewide Importance." That is a large 'footprint' and appears to be larger than the expected footprint under the Proposed Project.

Page 7-66, lines 5-6

The text concludes that "Overall, significant impacts related to indirect conversion of agricultural land and forestland under Alternative 2 would be less than under the Proposed Project." This conclusion needs more evidence.

Page 7-66, lines 7-8

Suggest changing the conclusion to "As compared to existing conditions, the impacts related to indirect conversion of agricultural land and forestland under Alternative 2 may be **significant**."

7.4.7.2 Mitigation Measures

Page 7-66, lines 12-15

The text states that: "Because it is not known whether the mitigation measures listed above would reduce Impacts … to a less-than-significant level for Alternative 2, these potential impacts are considered significant and unavoidable."

7.4.8 Alternative 3

7.4.8.1.1 Impact 7-1: Conversion of Farmland to Nonagricultural Use

Page 7-67, lines 3-4

Suggest changing the conclusion to "the impacts related to conversion of farmland under Alternative 3 may be **significant**."

7.4.8.1.2 Impact 7-2: Conflict with Existing Zoning for Agricultural Use or a Williamson Act Contract

Page 7-67, lines 21-22

There does not appear to be sufficient evidence to demonstrate that there would be "*significant* impacts related to conflicts with existing agricultural zoning or Williamson Act contracts under Alternative 3." However, the Department agrees that any such conflicts are likely to be less common under Alternative 3 than under the Proposed Project.

Page 7-67, lines 23-24

Suggest changing the conclusion to "As compared to existing conditions, the impacts related to conflicts with existing agricultural zoning or Williamson Act contracts under Alternative 3 may be **significant**." It would be helpful to have more information, for example, it how many acres of what types of farmland that would be impacted by Alternative 3 projects are protected by the Williamson Act or special agricultural zones and would such protections lead to conflicts with the uses those lands would be put to under Alternative 3? T

7.4.8.1.3 Impact 7-3: Loss of Forestland or Conversion of Forestland to Nonforest Uses

Page 7-67, lines 28-30

The document states that "This alternative would have less extensive ecosystem restoration projects …, resulting in a smaller affected-area footprint and, therefore, a reduced likelihood of loss or conversion of forestland." Sometimes ecosystem restoration projects result in the *creation* of new forestland, or the enhancement and expansion of existing forestland. A newly developed riparian forest has been created during the past 20 years as part of an ecosystem restoration project at the Cosumnes River Preserve, south of Sacramento, in and near the Delta.

Page 7-67, lines 39-42

Suggest changing the conclusion to say that there may be "significant impacts related to loss of forestland or conversion of forestland to nonforest uses under Alternative 3."

7.4.7.1.4 Impact 7-4: Conflict with Existing Zoning for, or Cause Rezoning of, Forestland, Timberland, or Timberland Zoned for Timberland Production

Page 7-68, lines 17-20

Suggest changing the conclusions to say that there "may be significant impacts" It would be helpful to compare acres of zoned forestlands in the Delta, Delta region, or Delta watershed with the acres in the "footprints" of proposed Alternative 3-encouraged projects. Earlier sections that dealt with zoned forestlands or timberlands in or near Delta Plan encouraged projects indicated there were very few such acres, when

compared to the total forestlands in the Delta watershed. This section states that such impacts or conflicts with forestland zoning would be even less under Alternative 3 than under the Proposed Project.data.

7.4.8.1.5 Impact 7-5: Involve Other Changes in the Existing Environment That, Because of Their Location or Nature, Could Result in Conversion of Farmland to Nonagricultural Use or Conversion of Forestland to Nonforest Use

Page 7-68, lines 38-41

Suggest changing conclusion to say that there may be "significant impacts related to indirect conversion of agricultural land and forestland under Alternative 3 ..."

7.4.3.2 Delta Ecosystem Restoration

Page 7-29, line 4

The phrase, "including removal of invasive vegetation," should be changed to, "including the reduction or removal of non-native invasive vegetation, fish, and wildlife."

Pages 7-29, lines 28-31

The most immediate and widespread response to a significant reduction in water exported from the Delta would be an increase in ground water extractions, including those from overdrafted aquifers, in an attempt to replace most of the water lost due to the reduction in Delta water exports.

Other actions that would likely be taken by urban and agricultural water users in Central and Southern California in response to a reduction in water exported from the Delta include farmland fallowing, orchard abandonment, switching some acreage to crops which return less net income but which use less water, and purchasing transfer water from lands to the east and north of those which had relied on a certain level of Delta water exports.

The Department knows that these actions would occur in the months and years following a reduction in Delta water exports, because it has occurred in the regions that received such water during the drought in California from 2007 through 2009 that saw major reductions in Delta water exports. The increase in ground water usage was significant.

Finally, this part of Chapter 7 should note that these actions which are likely to be taken in response to a reduction in water exports from the Delta – increased ground

water pumping, farmland fallowing and crop shifting, and increased water transfers – would all have environmental impacts in wide areas of California. Some of those impacts, such as land subsidence, lost habitat for wildlife, increased carbon emissions, and increased soil erosion, would be negative.

7.4.3.3 Water Quality Improvement

Page 7-35, line 31

The phrase, "Agricultural runoff treatment" should be changed to "Agricultural water runoff reduction and reuse." Throughout California there are programs to reduce and reuse agricultural runoff. The Department is not aware of any programs to treat that runoff, as one treats, for instance, urban wastewater.

7.4.3.5 Protection and Enhancement of Delta as an Evolving Place

Page 7-48, lines 19-21

The Department's Website describes this plan as follows: "The Delta Protection Commission has released the second draft of a Delta economic stability plan. It looks at key elements of the Delta economy, including agriculture, recreation and tourism, and considers strategies to enhance their sustainability."[2] This section of the Delta Plan EIR needs to discuss the "[Delta] Economic Stability Plan."

7.4.3.5.1 Impact 7-1e: Conversion of Farmland to Nonagricultural Use

Page 7-49, lines 5- 6

The text states: "…the San Luis Rey River Park project found significant and unavoidable impacts related to conversion of farmland to nonagricultural use, because the park itself was sited on farmland." Department staff reviewed the San Luis Rey River Park Master Plan[3], and it makes no such finding Please review conclusion.

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[2] http://www.water.ca.gov/deltainit/docs/DeltaEnews082511.pdf

[3] http://www.co.san-diego.ca.us/reusable_components/images/parks/doc/mpcondensed.pdf

SECTION 8 VISUAL RESOURCES

8.3.2.1.1 Waterways

Page 8-2, line 26

Contrary to the statement made, levees were not constructed to increase flood capacity.

8.4.3.2.3 Impact 8-3b: New Sources of Substantial Light or Glare

Page 8-31, lines 1-27

The likelihood of small structures associated with ecosystem restoration is minimal. The potential for new sources of glare is slim, and, therefore, the Department disagrees with the conclusion that potential impacts would be significant.

8.4.3.4.1 Impact 8-1d: Substantial Degradation of Visual Qualities

Page 8-37, lines 34-37

The text states that operation of flood control structures or setback levees could permanently affect scenic vistas. This statement is misplaced with respect to the Delta. Existing levees currently limit open views. Setback levees and other flood control structures in the Delta would not impact open views significantly. Setback levees would enhance views from the water side after previously rocked levees are replaced with native riparian forest. Contrary to the conclusion of this section, DWR believes that impacts would not be considered significant.

SECTION 10 CULTURAL RESOURCES

This section is well written and provides a succinct and comprehensive overview of cultural resources in the Delta.

10.4.3.4.2 Impact 10-2d: Discovery of Unrecorded Human Remains

Page 10-41, lines 1-3

This section concludes that because human remains could be unearthed during flood risk reduction projects the potential impact is considered significant. This is typically not the case. Levees are generally broadened and the height is increased as a result of adding fill. Little excavation is done and this limits the potential for disturbing human remains. Borrow material is typically received from existing borrow sites. On the occasion that remains are found, standard mitigation measures typically can reduce this impact to less-than-significant.

SECTION 11 GEOLOGY AND SOILS

11.5.3.1.7 Impact 11-7a: Exposure of People or Structures to Potential Substantial Adverse Effects, Including the Risk of Loss, Injury, or Death Involving Landslides

Page 11-44, lines 21-26

This section concludes that construction activities encouraged by the proposed project could result in the increased occurrence of landslides at a significant level. The document should note that within the Delta, the potential for landslides is minimal and the potential for increased landslides is insignificant.

SECTION 12 PALEONTOLOGICAL RESOURCES

12.4.3.4.1 Impact 12-1d: Destruction of Paleontological Resources of Unique Geological Features

Page 12-19, lines 27-31

This section concludes that potential impacts associated with flood risk reduction projects to paleontological resources would be significant since ground disturbing effects would be similar to water supply reliability actions. This is not the case. As stated above, levees are generally broadened and the height is increased as a result of adding fill. Little excavation is done and this limits the potential for disturbing the ground in the project area. Borrow material is typically received from existing borrow sites. On the occasion that paleontological resources are found, standard mitigation measures typically can reduce this impact to less-than-significant.

SECTION 13 MINERAL RESOURCES

13.3.2 Delta and Suisun Marsh

Page 13-2, lines 24-29

Mining of sand and gravel and dredging activities provide an important source of material for levee maintenance and rehabilitation in the Delta. The document should also mention the large sand mining operation on Decker Island operated by DI Aggregates. Also, Dutra's mining operations at the San Rafael quarry is a significant source of rock for rip rap and levee protection and emergency flood-fight material. This should be discussed in this section.

13.4.3.1.2 Impact 13-2: Result in the Loss of Availability of a Locally Important Mineral Resource Recovery Site Delineated on a Local General Plan, Specific Plan, or Other Land Use Plan

Page 13-10, lines 20-28

It should be noted that mineral extraction sites can be synergistically coupled with ecosystem restoration through a reclamation plan as required under SMARA. This was accomplished through a cooperative partnership between DFG and the Department on Decker Island starting in the late 1990's. Material was excavated from the island (Unlike most Delta islands in the Western Delta, Decker island is composed of a 20 foot mound of dredged material.) to complete levee rehabilitation on several other Delta islands. A 30-acre ecosystem restoration project was developed on the excavated site. Ecosystem restoration projects may not necessarily negatively impact mineral resource sites and may, instead, aid with compliance with SMARA.

Page 13-11, lines 6-19

It should be noted that the Delta Plan also encourages levee rehabilitation projects that protect oil and gas fields on Delta islands. This positive impact may offset the negative impacts described to a less than significant level.

SECTION 14 HAZARDS AND HAZARDOUS MATERIALS

14.5.3.1.1 Impact 14-1a: Create a Significant Hazard to the Public or the Environment Through the Routine Transport, Use, or Disposal of Hazardous Materials or Through Reasonably Foreseeable Upset and Accident Conditions Involving the Release of Hazardous Materials into the Environment

Page 14-19, lines 24-30

This section concludes that the potential impact for a hazard to the public associated with projects encouraged by the Delta Plan is significant. The preceding text does not appear to support this conclusion.

14.5.3.2.2 Impact 14-2b: Be Located on a Site Which is Included on a List of Hazardous Materials Sites Compiled Pursuant to Government Code, Section 65962.5 and, as a Result, Would Create a Significant Hazard to the Public or the Environment

Page 14-24, lines 1-13

This section concludes that the potential impact associated with ecosystem restoration and hazardous waste sites is significant. This is unlikely. In siting

restoration projects, project proponents typically perform site assessments to avoid such conflicts. The Department believes that the potential for impacts is less than significant.

14.5.3.4.1 Impact 14-1d: Create a Significant Hazard to the Public or the Environment Through the Routine Transport, Use, or Disposal of Hazardous Materials or Through Reasonably Foreseeable Upset and Accident Conditions Involving the Release of Hazardous Materials into the Environment

Page 14-19, lines 24-30

This section concludes that the potential impact for a hazard to the public associated with flood risk reduction projects encouraged by the Delta Plan is significant. The preceding text does not to support this conclusion.

14.5.3.4.3 Impact 14-3d: Create a Vector Habitat That Would Pose a Significant Public Health Hazard

Page 14-31, lines 37-40

Again, this section concludes that the potential to create a vector habitat that poses a health hazard associated with flood risk reduction projects is significant. However, the citations in the preceding text imply just the opposite. The analysis does not justify a finding that the potential impacts would be considered significant.

14.5.3.6.1 Mitigation Measure 14-1

Page 14-37, lines 31-35

This section describes a number of mitigation measures and states that these measures would reduce impacts due to hazardous spills to a less-than-significant level. The conclusion then goes on to state that non-covered actions would continue to pose a significant threat of hazardous spills, because these non-covered actions would then be the responsibility and under the jurisdiction of other public agencies. Whether the project is a covered action or not, the project proponents will still have to conduct a CEQA analysis, and the same permitting process will be required. Moreover, there are numerous laws regulating hazardous waste that protect the public. The value added of the Delta Plan's covered action process is not readily apparent in this case.

SECTION 16 POPULATION AND HOUSING

16.3.2.2 Housing

Page 16-9, lines 14-15

The document states: “Thus, based on the 2010 data, housing is in short supply in the Delta region.” If the Policies and Recommendations have actions that adversely affect housing it should be analyzed in the Population and Housing section.

16.4.3.4.1 Impact 16-1d: Induce Substantial Population Growth in an Area, Either Directly or Indirectly

Page 16-25, lines 35-44

This section concludes that impacts to growth associated with flood risk reduction projects would likely be less than significant. However, no discussion is made about the growth inducing impacts of rehabilitating levees to a standard at or above the 100 year or 200 year flood elevations. These types of levee improvements will likely result in significant local pressure to develop housing behind these levees. This is especially dangerous on highly subsided islands in the Delta. This very important topic needs to be addressed in detail in this CEQA document.

16.4.4 No Project Alternative

Page 16-28, lines 33-44

This section concludes that the No Project Alternative would have fewer potential housing related impacts than the Proposed Project and then goes on to state that the resulting impacts could be significant. This does not comport with the previous section on the Proposed Action (that would have more impacts) where it is concluded that the impacts would be less than significant.

SECTION 17 PUBLIC SERVICES

17.4.3.6.1 Mitigation Measure 17-1

Page 17-39, lines 11-34

This mitigation measure should also require the Lead Agency to discuss how many workers will be onsite for the construction and operation of future enhancement projects to ensure that public services will not be impacted. The Lead Agency should be required to discuss response times for Emergency Medical Services, Fire Protection, and Police Protection projects to ensure that public services will not be impacted.

SECTION 18 RECREATION

18.3.2.2 Types of Recreation and Recreational Facilities

Page 18-5, Figure 18-1

The exclusion of Yolo County from the “Primary Market Area” of the Delta on this map warrants some discussion.

Page 18-4, Figure 18-2

There seems to be little value with this figure. The legend “water facilities” is unclear. Much more information could be conveyed with different icons for different types of recreation facilities and a reference to a listing of the facilities.

Page 18-9, Table 18-2

It is not clear if the Personal Water Craft column refers to “Statewide” or the “Primary Market Area.” This needs to be clarified. Extending the data in this table through 2011 would be useful to show impacts of the recent recession on vessel registration.

Page 18-10, lines 16-27

The statement is made that “… 23% of all licensed anglers in the state recreated in the Delta.” Please identify the period and frequency of this activity. For example, does this mean they recreated at least once during the last year in the Delta? What is the relationship of fishing and recreating?

Page 18-11, Table 18-4

In the heading, please clarify that the “Statewide” column is a count of licenses and that the “Delta” column is an estimate of those licensees who recreate at least part of their time in the Delta.

18.3.2.2.2 Constraints Related to Aquatic Recreation

Page 18-13, lines 7-13

This discussion on invasive species omits mention of the “new” spongeweed threat. This should be addressed in this section of the PEIR.

18.3.2.2.3 Wildlife-Oriented Recreation

Page 18-16, line 41

Does “participation” refer to per-capita participation rates? Please clarify.

Page 18-14, Figure 18-4

Is the Legend entry for "Hunting Facility" a misnomer? There is a symbol at Franks Tract where there are no "facilities." If this figure is showing "Public Hunting Lands" instead, then that needs to be clarified. Should there be hunting icons at Stone Lakes and Cosumnes Preserve? Also, public lands shown on Sherman, Twitchell, and Jerseys islands are owned by public agencies but the land is not necessarily open to the public. This figure needs to be corrected.

18.3.3.1 Reservoirs and Lakes

Page 18-21 to 18-28, all reservoir tables:

Clarify if the "Ownership/Management" column refers to land ownership or reservoir ownership.

Page 18-21, Table 18-7

This table, entitled "Reservoirs of the SWP and CVP …" includes reservoirs that are owned by other agencies and are not part of the SWP or CVP, including Englebright, New Bullards Bar, and Camp Far West. Sly Park, which drains to the San Joaquin River in the Delta, should probably be moved to Table 18-8. Several of the listed USBR owned reservoirs may not be "part of the CVP", for example, Lake Berryessa. If the intent was to list all major reservoirs, several are missing.

Also, more visitation data is available than is reported. For example, visitation data for SWP reservoirs including Antelope Lake, Lake Davis, and Frenchman Lake are published annually in DWR's Bulletin 132, Management of the State Water Project and should be used here. DWR also has 1999-2000 studies with visitation data for Stony Gorge and East Park reservoirs. The table or footnotes should state the year for which the visitation is reported.

The USFS does not own the SWP's upper Feather reservoirs, Shasta Lake, Trinity Lake, Lake Red Bluff, and New Bullards Bar Reservoir, nor is Folsom owned by State Parks. The ownership and manager for Sly Park Reservoir appear to be reversed. If land ownership is intended, then please clarify the labels.

Page 18-23, Table 18-8

This table, entitled "Reservoirs of the SWP and CVP …" includes reservoirs that are not part of the SWP or CVP, including Camanche, New Hogan, New Don Pedro, McClure, and Turlock. Several SWP or CVP reservoirs in this watershed are listed in Table 18-10 instead of this table, including San Luis and O'Neill. If the intent was to list all major reservoirs, several are missing. Also, more visitation data is probably available than is reported. New Don Pedro Reservoir is not owned by Don Pedro Recreation Agency, nor is Turlock Lake or Millerton Lake owned by State Parks. If land ownership is intended to be shown, then the labels should be clarified.

18.3.3.2 Rivers

Page 18-25, lines 3-6

The "conservative estimate" of current visitation, based on the 27-year-old estimate of American River Parkway (ARP) visitation is not accurate or reliable. Many people park outside of Park boundaries and enter through the very numerous entry points along the ARP.

18.3.3.3 Wildlife Areas

Page 18-25, Table 18-9

There are many more wildlife areas and refuges in the Delta watershed, as well as many conservation easements then are shown on this table. This table needs to be updated.

18.3.4.1 Northern California and Central Valley Reservoirs

Page 18-27, Table 18-10

Please confirm that the reservoirs in this table, entitled "… Reservoirs that Receive Water Exported from the Delta by the SWP and CVP …", actually receive SWP or CVP water. This is not true for Los Banos, and may not be true for Los Vaqueros or the small lakes on Buena Vista lake bed.

Table 18-10 should add or clarify in Footnote "d" that Los Banos Reservoir does NOT receive "SWP" water. This same error recurs in the text of Subsection 18.3.4.1: Los Banos Reservoir is NOT "part of the SWP"; also, Footnote "5" on Page 18-26 needs to be corrected – Los Banos Reservoir is NOT part of the "CVP" either.

18.3.4.2 Southern California Reservoirs

Page 18-28, Table 18-11

Visitation data for SWP reservoirs are published annually in DWR's Bulletin 132, Management of the State Water Project. Castaic Lagoon is not mentioned, nor is the Castaic Boating Instruction Safety Center (BISC). Castaic, Silverwood, and Perris all have paved boat ramps.

Page 18-28, Table 18-12

Please confirm that Lake Piru receives SWP water (as opposed to Piru Creek flows) as stated in the title of the table.

18.3.4.3 Aqueducts and Rivers

Page 18-29, lines 17-18

Please revise the statement "Approximately 70 miles of bicycle trail extend from Bethany Reservoir with plans to provide similar trails along the entire length of the aqueduct." While this was originally considered, there are no longer any current plans to extend a bicycle trail along the aqueduct past its current end at San Luis SRA.

18.3.4.4 Wildlife Areas

Page 18-29, Table 18-13

Some of these wildlife areas are not "Outside of the Delta Watershed" as stated in the title.

18.4.3.1.1 Impact 18-1a:

Page 18-33, lines 14-19

There seems lacking any specifics or rationale describing why "less" out-of-Delta water storage (and consequential impacts) is a foregone conclusion. The goal of "increased water supply reliability" in the context of a prospect of increased water use efficiency may lead to more reliable/stable storage under some Plan alternatives.

18.4.3.2 Delta Ecosystem Restoration

Page 18-36, lines 21-25

The text declares "no impacts" from certain "Invasive Species Actions." Although details of those actions are not provided, past mussel-containment/prevention actions have had significant impacts on recreational boaters. This may need additional analysis.

18.4.3.2.3 Impact 18-3b:

Page 18-38, lines 29-36

This finding of short-term impact ignores the long-term benefits of these ecosystem restoration projects on the environment and on recreation. Similar comments apply to the findings in Sections 18.4.3.1.2; 18.4.3.2.1; 18.4.3.2.2; 18.4.3.4.1; 18.4.3.4.2; and 18.4.3.4.3.

18.4.3.4.1 Impact 18-1d:

Page 18-41, lines 32 -44

Most of the listed flood risk reduction projects would reduce flood risk to recreational facilities, which would provide some beneficial impacts in the long term.

18.4.3.4.1 Impact 18-1d: Impair, Degrade, or Eliminate Recreation Facilities and Activities

Page 18-42, lines 32-35

This section concludes that there is a potential significant threat to recreation facilities in the Delta associated with flood risk reduction projects. Just the opposite is true. Delta levees protect most recreational activities (including marinas) in the Delta. Additional flood risk reduction projects would likely result in a net positive impact to Delta recreation.

18.4.3.4.2 Impact 18-2d: Increase the Use of Existing Recreational Facilities Such that Substantial Physical Deterioration of the Facility Would Occur or Be Accelerated

Page 18-43, lines11-14

This section concludes that impacts to recreational facilities could be significant associated with flood risk reduction projects while the preceding text would imply just the opposite. Please refer to the comments above on Page 18-42, lines 32-35.

18.4.3.5 Protection and Enhancement of Delta as an Evolving Place

Page 18-44, lines 7-8

This section lists three prospective new State Parks – but that there seems no mention in this document of the proposed closure of Brannan Island SRA. This should be added to the analysis provided in this section.

18.4.3.6.1 Mitigation Measure 18-1

Page 18-46, lines 4-46

This section describes a number of mitigation measures and states that these measures would reduce impacts to recreation to a less-than-significant level. The conclusion then goes on to state that non-covered actions would continue to pose a significant threat to recreation, because these non-covered actions would then be the

responsibility and under the jurisdiction of public agencies other than the Council. Whether the project is a covered action or not, the project proponents will still have to conduct a CEQA analysis, and the same permitting process will be required. The local counties in the Delta will likely be protective of important recreational values in the Delta. The value added of the DSC's proposed process surrounding covered actions is not readily apparent.

Page 18-46, lines 20-29

This mitigation measure requires the modification, if feasible, of reservoir operating criteria to provide more water for recreation if Delta exports decline. This measure is too prescriptive, especially when the linkage between water supply reliability projects and reservoir levels may not necessarily be negative.

Specifically, the text states: "*If the volume of water exported from the Delta declines over multiple years, the lead agencies that implement local water supplies probably would not be able to develop a long-term replacement water supply for the surface water reservoirs. However, if feasible, reservoir storage operations criteria must be modified to increase the minimum amount of emergency stand-by storage water that remains in the reservoir to also provide water-based recreation. Also, if feasible, water allocations to water users must be modified to provide more surface water in the reservoirs for recreation and provide other water supplies for non-recreation water users. Access facilities must be modified to accommodate lower water elevations or more frequent fluctuations in water elevations that could occur more frequently in the Proposed Project than under existing conditions*."

By statute, the Davis-Dolwig Act (DDA) makes recreational uses that have been incorporated into State water projects including the SWP subordinate to the project's water supply and power functions meaning that they must give way in cases of conflict between the two and are in that sense defeasible (Water Code Section 11918). Certainly, DWR has a long history of trying to avoid conflicts and seeking to accommodate recreational uses to the greatest degree possible, and DWR, DPR, DBW, and DFG have a very successful history of collaborating to this end implementing the DDA. But it is inaccurate to state, certainly in any categorical fashion, that DWR may look to curtailing SWP water supply to mitigate adverse impacts to the subordinate purpose of SWP recreation and fish and wildlife enhancement that was developed and intended to function under typically broad water surface elevations and other operational considerations required for water supply, power, or flood control purposes at SWP reservoirs.

While CEQA requires that environmental impacts such as those on recreation be mitigated if feasible, the reversal of the express statutory preference of water supply over recreation–i.e., curtailing water supply for the benefit of recreation–makes such a mitigation measure under CEQA "infeasible," as it were. Thus, if there is an unavoidable conflict between water supply and recreation, the appropriate CEQA

response is to override the impacts on recreation. An identical situation exists between the water supply and flood control functions of the SWP, except that it is water supply that is the subordinate use and which would have to yield to flood control in circumstances of unavoidable conflict.

Looking at the issue another way, the purpose of CEQA was to make decision-makers consider environmental values and impacts that would otherwise not have been considered in the project decision-making process and to require that impacts be mitigated if feasible. It was not to undo or trump the specific expression of legislative intent in cases where the environmental value in question had already been specifically addressed and balanced by the Legislature in the statute authorizing the project.

The Department also respectfully suggests the DDA should be cited up front in both Chapter 18 of this PEIR as it is fundamentally critical to developing and operating recreation at the SWP, but also in the Regulatory Framework Appendix D of this document. Please consider the following:

While the State Water Project (SWP) is a multi-purpose project approved by the voters in the Burns-Porter Act to include multiple purposes, and thus beneficiaries, including water supply, power, fish and wildlife preservation, flood control, and recreation and fish and wildlife enhancement (RFWE). RFWE at the SWP is a subordinate SWP purpose by statute. While the Davis-Dolwig Act (Water Code Sections 11900-11925) cites an overall objective to maximize the recreational opportunities at the SWP, this objective must be achieved in a manner not to "defeat or impair the orderly operation of any state water project for its other authorized purposes" (Water Code Section 11918) as determined by DWR. Other documents and agreements also clarify and reinforce the subordinate role of RFWE at the SWP including Resources Agency Order No. 6 and the right-of-way agreements conveying to DPR the use of DWR SWP fee right-of-way for the RFWE purpose. These Transfer of Possession and Control agreements typically specify DWR can reclaim any parcels for superior SWP purposes should that need arise in the future. Moreover and by statute, no SWP RFWE costs are allocable to the water and power purpose of the SWP (Water Code Section 11912).

Page 18-46, lines 30-36

This requires that "Ecosystem restoration areas shall be located away from high-use recreational sites, if feasible." This is not flexible enough, especially since many nature-based recreation activities would be enhanced by ecosystem restoration projects.

18.4.3.6.2 Mitigation Measure 18-2

Page 18-47, lines 14-16

Mitigation Measure 18-2, states: "Where impacts to existing facilities are unavoidable, compensate for impacts through mitigation, restoration, or preservation off-site or creation of additional permanent new replacement facilities." Department staff suggests the reopening of existing State Parks that are being closed should be the first measure.

Sections 18.4.5 to 18.4.8

Many of the above comments on Section 18.4.3 also apply to these Alternatives.

Appendix D

Pages D-153 to D-154, Section 16.2

Consider the addition of a discussion of the Davis-Dolwig Act in this section concerning the State's recreation regulatory framework as described above.

SECTION 19 TRANSPORTATION, TRAFFIC, AND CIRCULATION

19.4.4.6.1 Mitigation Measure 19-1

Page 19-48, lines 25-28

This section concludes that in case of road closures, traffic impacts would remain significant. The document should note that these types of impacts are typically short term.

SECTION 20 UTILITIES AND SERVICE SYSTEMS

Page 20-1, lines 23-29

The text states that it is unlikely that the Proposed Project would influence the need for a new wastewater treatment plant. However, the water quality sections in the Delta Plan and this PEIR actually discuss the potential need for wastewater treatment plant improvements. In fact, pressure to reduce ammonia discharges from the Sacramento Regional Wastewater Treatment Plant has resulted in a Regional Board order that will require a substantial upgrade to that plant. Moreover, this plan would encourage desalination plants that require significant power supplies, and that typically adversely impact the aquatic environment in which their intake/outfow is located. The conclusion in this section of no impacts and less than significant impacts needs to be revised.

20.4.3.1.1 Impact 20-1: Require or Result in the Construction of New Water Treatment Facilities or the Expansion of Existing Facilities, the Construction or Operation of Which Would Have Significant

Environmental Effects or Require the Procurement of Additional Water Supply Entitlements

Page 20-8 to 20-9, lines 7-46 and 1-19 respectively

The analysis provided in this section is predicated on the statements that no new land development or population growth are encouraged that would increase demand for water and power. Since the Delta Plan does not encourage growth, this section concludes that potential impacts are less than significant. The Delta Plan encourages the expansion of water supply facilities outside of the Delta. It is a fundamental underpinning of the plan to reduce demands on the Delta. The conclusion provided in this section needs additional analysis.

20.4.3.1.5 Impact 20-5: Require or Result in the Development of New Electricity Generating Facilities or the Expansion of Existing Facilities, the Construction or Operation of Which Would Have significant Environmental Effects

Page 20-13, lines 1-9

This section concludes that potential impacts on new generating facilities are less than significant. One of the references cited is the City of Huntington Beach and the proposed desalination plant. This plant would require 35 megawatts of power. This is substantial. However, the document goes on to state that since this is less than one percent of the electricity demand for Southern California, it is less than significant. Comparing local electricity demand to the entire Southern California demand is unreasonable. These comparisons need to be made at the local level. Depending on where a desalination plant is sited, a new generation facility may be required. This section needs further analysis.

SECTION 21 CLIMATE CHANGE AND GREENHOUSE GAS EMISSIONS

There is no need to include documents in this discussion that were reviewed but did not analyze GHG emissions or potential impacts of climate change on the project as illustrative examples. Consider limiting the discussion to those EIRs or EIS/EIRs that conducted an analysis and remove those that did not.

At the beginning of the Climate Change Section please add a brief discussion about the GHG analysis being addressed as a cumulative impacts analysis. Specific language related to GHG and cumulative analysis is available in the OPR CEQA Guideline Amendments (§15130(f)), the OPR Technical Advisory document (p. 6), the Natural Resources Agency's Final Statement of Reasons (FSOR – p. 17), and the DWR Internal Guidance document.

21.5.1 Assessment Methods

Page 21-6, lines 34-36

Please consider adding language, which clarifies that even though the Proposed Project does not result in direct climate change or GHG emissions impacts, an assessment still needs to be conducted and provide rationale. As it currently reads, it's unclear why this section is needed.

21.5.3.1 Reliable Water Supply

Page 21-9, lines 21-22

Water transfers and some types of water use efficiency projects (i.e. drip irrigation) increase energy use and, therefore, have GHG emissions associated with them, which depending on the size of the project might be significant. Consider revising this statement to acknowledge that.

21.5.3.1.1 Impact 21-1a

Page 21-10, lines 28-30

These two sentences appear contradictory. The project's construction emissions would likely exceed draft threshold of significance, but the conclusion was that project's emissions were not significant. Please clarify.

Page 21-12, lines 22-24

Consider using the same language from the mitigation section for consistency. This version limits the technical report to local air district(s) plans, policies, and regulations while the text in the mitigation section is broader.

21.5.3.1.2 Impact 21-2a

Page 21-13, lines 30-36

An earlier discussion (page 21-11, lines 18-20) stated that operations would have a significant effect, while this discussion states the findings were far less than significant. Please clarify.

21.5.3.2 Delta Ecosystem Restoration

Page 21-15, lines 14-21

The identified programs may be focused on monitoring, study, and coordination, but they will most likely also have recommended actions, related to ecosystem restoration (Delta Conservancy Strategic Plan) or levee modifications (USACE vegetation policy), that may generate significant GHG emissions. Consider revising this statement.

21.5.3.4.1 Impact 21-d

Page 21-23, line 45

In addition to the DWR Framework for Investments in Delta Flood Management, the Delta Plan also encourages the CVFPP and other FloodSAFE initiatives that may have the potential to result in GHG emissions impacts, to be included here to show the scope of potential actions.

21.5.3.6.1 Mitigation Measure 21-1

Page 21-29, lines 21-22

The text states that; "The following mitigation strategies should be considered by lead agencies, as applicable, to develop 21 specific mitigation measures for future projects." This mitigation measure should include a requirement for Lead Agencies to prepare a section discussing cumulative impacts from climate change and greenhouse gas emissions.

21.5.3.6.1 Mitigation Measure 21-1

Page 21-29, lines 36-39

Please note that this list of measures is an excerpt from the full list proposed by the AG's office and CARB and provide this link to the full document: (http://ag.ca.gov/globalwarming/pdf/GW_mitigation_measures.pdf).

SECTION 22 CUMULATIVE IMPACT ASSESSMENT

22.1 CEQA Requirements

Page 22-2, lines 1-7

The text states: "[For] these reasons, the analysis in this EIR is inherently cumulative in many regards, in that the Proposed Project consists of the reasonably foreseeable, probable future projects of other agencies that the Delta Plan will regulate or make recommendations about. The focus of this cumulative impact analysis, therefore, is on how existing conditions (including the current effects of past projects) and reasonably foreseeable and probable future projects that the Delta Plan does not

address … interrelate with the Delta Plan and the alternatives in a manner that could result in cumulative impacts to which the Delta Plan and the alternatives could make a considerable contribution."

This is a good summary of the nature of a Cumulative Impact Assessment and why this PEIR needs one. Because so many different projects are recommended, or at least mentioned, in the Delta Plan, and the impacts of all of those projects are evaluated in the other chapters or sections of the Delta Plan, it is quite true that "this EIR is inherently cumulative in many regards." The challenge in developing this chapter is to identify and evaluate "foreseeable and probable future projects [effecting water resources in the study area] that the Delta Plan does *not* address."

22.2 Cumulative Impacts

Page 22-2, lines 18 & 19

The text states that: "Mitigation measures to reduce significant cumulative impacts are also included." Those measures would only be needed for significant *adverse* cumulative impacts.

22.2.1 Water Resources

Page 22-2, line 36

The "Bay Delta Conservation Plan" is among the list of projects that are not "covered projects" or recommended by the draft Delta Plan. The BDCP, after it is approved, is to become part of the Delta Plan. BDCP projects would then be included among those projects that are encouraged by the Delta Plan.

Page 22-3, lines 24 & 25

The text states ~~that~~: "Erosion and sedimentation impacts from the Proposed Action would be less than significant." No evidence is provided to support this conclusion.

Page 22-3, lines 35 & 36

The document states: "However, these impacts are likely to be less than significant because of the likelihood of overall beneficial effects." Beneficial effects or impacts can also be significant impacts. This EIR needs to differentiate between beneficial and adverse impacts and carefully define the thresholds between significant and less than significant impacts.

Pages 22-2 to 22-3, lines 21-46 and 1-39 respectively

The discussion of cumulative impacts associated with water resources is discussed in a little over one page in this document. This is an important topic and critical to the Delta Plan. This topic is also much more complicated than described. Upon adoption, this plan has the potential to influence water resources throughout the State, and contrary to the conclusions drawn, cumulative impacts will be significant. Some of the cumulative impacts will be positive and some will be negative. Also, there will be tradeoffs and transfers of impacts from one portion of the State to another.

By design, the Delta Plan should improve water supply reliability, restore ecosystem functions in the Delta, and enhance the Delta as an evolving place. Therefore, there will be cumulative impacts. The goal is that these positive impacts will outweigh the adverse impacts, but there will be tradeoffs. A more detailed and complete analysis is needed in this PEIR for the decision-makers.

Page 22-3, lines 38 & 39

The Department concurs that the Proposed Project, as well as some of the "reasonably foreseeable and probable future projects that the Delta Plan does not address," does indeed have "the potential for beneficial effects" upon water resources. These projects would provide for a larger, more secure, stable, and sustainable water supply for water users in the Delta watershed and the regions that receive Delta water exports. And this improved water supply would contribute to prosperity, help provide jobs, promote economic growth, and lead to population gains and the expansion of developed urban areas.

So, one of the most important aspects of the cumulative impacts of the Proposed Project and the other "probable future [water resource] projects" would be their growth-inducing effect. The induced growth would impact water resources in our study area, as well as increase the demand for municipal and industrial water in the study area. These growth-inducing cumulative impacts should be addressed in this Section.

22.2.3 Delta Flood Risk

Page 22-5, lines 4-7

The text states that: "When the impact of actions that the Delta Plan would permit or encourage are considered in connection with the potential impacts of the projects listed in Table 22-1, the combination would result in potentially significant adverse cumulative impacts that are similar to the Proposed Project's impacts on flood management as described in Section 5, Delta Flood Risk." The impacts are declared to be potentially significant, adverse, and similar to those of the Proposed Project. But the magnitude and scale of those additional impacts from projects not recommended by the Delta Plan are not discussed. The text implies that the overall impact would be

"adverse" to flood risk. The impact would then increase the flood risks faced by the Delta's residents, which has not been adequately addressed.

22.2.4 Land Use and Planning

Page 22-5, lines 37-41

Two impacts are described, each deemed to be less than significant, whose total impact is determined to be "less than cumulatively considerable." The document should describe whether or not the cumulative impact on "land use and planning" would be less than significant. Two less than significant impacts, when added together over time and space, would probably not produce an impact of a magnitude that is truly "considerable." However, two less than significant impacts, added together, could produce a significant impact.

Page 22-6, line 4

The text states that the impact of "dividing an established community … would be less than significant." Data is not provided to support this conclusion.

Page 22-6, line 12

The text states that: "[these] impacts are likely to be less than significant because [the] impacts are likely to be beneficial." However, beneficial impacts can also be significant.

22.2.5 Agriculture and Forestry Resources

Page 22-6, Line 28 to Page 22-7, line 19

There are no findings or conclusions in the entire section on "Agriculture and Forestry Resources."

22.2.14 Population and Housing

Page 22-14, lines 44 – 46

The text states that "Physical improvements associated with other water supply, ecosystem restoration, water quality, flood risk reduction, and Delta enhancements projects could displace housing and/or people, which would necessitate the construction of replacement housing elsewhere." The word "would" should be changed to "could," for in the midst of the worst local real estate collapse since the Great Depression, there are still so many unoccupied homes for sale and so many unoccupied rental units in the study area, that it is unlikely that much (if any) new housing would be constructed to

accommodate the relatively few people who would lose their homes as a result of "Physical improvements associated with other" projects.

Page 22-15, lines 5-8

The Department concurs with the two conclusions but only as they apply to short-term and direct impacts upon population and housing in the study area. It is quite reasonable to expect that short-term, direct "cumulative impacts are expected to be less than significant" and that "the Proposed Project … would have a less than cumulatively considerable impact." More evidence to support these two conclusions should have been presented. However, the Department does not concur with the above two conclusions as they apply to the long-term and indirect impacts upon population and housing in the study area due to the Proposed Project plus other likely-to-occur projects.

22.2.15 Public Services

Page 22-15, lines 9-31

This subsection on "Public Services" contains conflicts, conjectures, contradictions, and unsupported conclusions. First, the text concludes that the Proposed Project plus other likely-to-occur projects "would result in potentially significant adverse cumulative impacts that are similar to the Proposed Project's impacts on public services … These cumulative public services impacts would include …" Some of those impacts are then listed, followed by this qualifier and conclusion: "The projects listed in Table 22-1 do not include new land development and/or population growth, and therefore would not add only negligible new demands to existing public services. For this reason, cumulative impacts are expected to be less than significant. Because the Proposed Project also would include similar projects with no new land development or population growth, it would have a less than cumulatively considerable impact."

Obviously, new land development and population growth are not the intentions of the projects, or would they be the immediate and direct consequences of the Proposed Project or other projects that are not encouraged by the Proposed Project, but which are likely to occur in the study area.

However, as this Public Services subsection is now written, it contains two conflicting conclusions. The first paragraph declares "the combination would result in potentially significant adverse cumulative impacts." Yet the second paragraph concludes "cumulative impacts are expected to be less than significant" and "it would have a less than cumulatively considerable impact." There is not enough data and analysis between these two statements to explain the turnaround.

22.2.16 Recreation

Page 22-15, line 40

Some of the “physical improvements” associated with the listed projects (such as ecosystem restoration) could potentially enhance recreational facilities and activities in the Delta.

22.2.18 Utilities and Service Systems

Page 22-18, line 39 to Page 22-19, Line 25

This subsection, concerning potential cumulative impacts on “Utilities and Service Systems,” is similar to the subsection on Population and Housing as discussed above.

22.2.19 Climate Change and GHG Emissions

Page 22-20, lines 5-7

The document states that “there is some potential for beneficial impacts [on “Climate Change and Greenhouse Gas Emissions”] during [project] operations, such as the generation of hydroelectric power and carbon sequestration (e.g., from habitat restoration).” Although the Department concurs, more data and analysis are needed on this important topic.

Page 22-20, line 14

The document states that: “cumulative impacts are expected to be less than significant.” The text should acknowledge that those impacts could be positive, even if they are not significant.

Page 22-20, line 27

The text states that: “These impacts could be significant.” The text should make clear that in this case, the reference is to global climate change’s possible impacts upon the Proposed Project and some of the Other Projects.

22.3 Cumulative Impacts of No Project Alternative

Page 22-20, lines 34-42

This important subsection is only one paragraph, and it does not present any evidence or reach any conclusions about significance. This topic clearly needs additional discussion. However, the subsection does end with an important and reasonable statement, which deserves elaboration in this subsection and in many other

places throughout the PEIR: "…existing conditions would continue to degrade due to lack of encouragement of projects and programs that would be encouraged under the Delta Plan." In other words, the status quo concerning the California Delta is not sustainable under business-as-usual practices.

22.4 Cumulative Impacts of Alternative 1A

Page 22-21, lines 1-18

Again, this important subsection, is also too short. It is only one paragraph, and it does not present any evidence or reach any conclusions about significance. It does declare in its last sentence that, "For impacts that are less than cumulatively considerable (as described above for the Proposed Project), the reduced number of projects under Alternative 1A indicate that Alternative 1A also would have less than cumulatively considerable impacts."

The entire analysis of the cumulative impacts of all of the alternatives is inadequate. There is just one paragraph of text for the analysis of the cumulative impacts for each of the following alternatives: the No Project Alternative, Alternative 1A, Alternative 1B, Alternative 2, and Alternative 3.

22.6 Cumulative Impacts of Alternative 2

Page 22-22, lines 4-7

The document fails to identify the significance of any particular impacts. In lines 4-7, it tries to make two important points but leaves out some important words. Suggested editorial changes (in brackets) are as follows: "Thus, existing flood risk [would continue to increase with climate change and continued Delta land subsidence,] and water supply reliability conditions would continue to degrade. Alternative 2 would also make a greater contribution to [the] cumulative conversion of agricultural land by converting the use of [much of the old] Tulare Lake [bed] to water storage."

22.7 Cumulative Impacts of Alternative 3

Page 22, lines 11-26

Again, this section does not reach any real conclusions about the levels of significance of any specific impacts. It also contains a questionable statement on Lines 21 and 22: "Alternative 3 also would make greater contributions to cumulative impacts on flood risk because it involves fewer new levees." Fewer new levees than the Proposed Project should mean *less* of a reduction in flood risk. So, under Alternative 3, the contribution to the positive impacts on flood risk (that is, a reduction in flood risk) would be *less* than with the Proposed Project. Yet the text concludes that Alternative 3 would "make greater contributions to cumulative impacts on flood risk."

Page 22, line 27

The References subsection for Section 22 contains only *one* reference. That is not nearly enough to support the conclusions made in this Section. Also, Table 22-1, which completes this Section, runs for 22 pages and contains detailed and specific information about dozens of Other Projects. The sources of that information should be provided.

Table 22-1 Related Actions, Programs and Projects Considered in the Cumulative Impact Assessment

Overall, the table identifies many "Actions, Programs, and Projects" that are sponsored by, or involve the active participation of, more than one government agency. However, for some of these multi-agency Actions, Programs, and Projects, Table 22-1 lists only one agency in the "Agency" column. Consider changing the column heading to "Lead Agency."

Specific comments on Table 22-1, by page:

Page 22-23

The second box lists two programs, "Surface Water Storage Investigation" and "Shasta Lake Water Resources Investigation" but provides a description of only one of them.

Page 22-24

Near the bottom of the page the phrase "reduce other ecological stressors" should be changed to "reduce ecological stressors." The phrase "modify SWP and CVP Delta water conveyance facilities" should be changed to "modify and/or augment SWP and CVP Delta water conveyance facilities." It is quite possible that the BDCP will not simply call for the modification of existing "SWP and CVP Delta water conveyance facilities" but could also call for the construction of entirely new Delta water conveyance facilities that would connect to existing facilities.

Page 22-26

The description of the "2-Gates Project" should be updated.

Page 22-30

The description of the "San Joaquin River Restoration Program" should be updated.

Page 22-35, bottom

How have the goals of the “San Joaquin County Multi-Species Habitat Conservation and Open Space Plan” been met since the Plan was completed in 2000? The Plan is described as an “ongoing program.”

Page 22-43

The flood risk reduction section of this table needs to include the Delta Long-Term Management Strategy Program, the Delta Levees Program (DWR), and the Delta Flood Emergency Preparedness, Response and Recovery Program (DWR.)

Page 22-39, Table 22-1, Related Actions, Programs, and Projects Considered

At the bottom of the table under Flood Risk Reduction, a discussion of the San Francisco Bay Long-Term Management Strategy (LTMS) for dredging is discussed. However, the Delta LTMS program is not mentioned. This is a significant oversight.

SECTION 23 BAY DELTA CONSERVATION PLAN

23.6.16 Recreation

Page 23-35, line 8

Some of the “physical improvements” associated with the listed projects (such as ecosystem restoration) could potentially enhance recreational facilities and activities.

SECTION 24 OTHER CEQA CONSIDERATIONS

24.1.2.4 Flood Risk Reduction

Page 24-5, lines 22-26

This section concludes that the Proposed Project will not likely result in growth-inducing impacts. As levees are improved to the PL84-99 standard and above, there may be local pressure to build homes behind these levees. This is a dangerous potential for public health and safety, especially on the more deeply subsided Delta islands. Existing laws preventing development in the Primary Zone of the Delta may need additional assurances to protect against development pressures.

24.3 Significant and Unavoidable Impacts of the Proposed Project and Alternatives

Page 24-17, Table 24-1 Summary of Significant and Unavoidable Impacts

Under No. 5, Delta Flood Risk, four significant and unavoidable impacts are listed. Brief descriptions of these are:

5-1 – Substantially alter existing drainage patterns,
5-2 – Create or contribute runoff,
5-4 – Expose people or structures to significant risk, and
5-5 – Place structures in a 100-year Flood Hazard Area

The Department disagrees. Flood risk reduction measures in the Delta will actually have net positive benefits on these four subject areas. Drainage patterns and runoff will not be exacerbated due to proposed risk reduction measures, and exposure of risk to people and structures will be reduced by the actions encouraged by the Proposed Project and most of the alternatives. Please refer to comments on each specific subject area for more detailed discussion.

SECTION 25 COMPARISON OF ALTERNATIVES

The entire comparison of alternatives is discussed in fewer than 11 pages. This section of the EIR is critical for the decision makers to understand the impacts of the Proposed Project and the alternatives. It is important that this EIR provide substantially more discussion and analysis of the alternatives since adoption of the Delta Plan will have far reaching consequences on a state-wide basis.

25.4 Comparative Analysis of Alternatives

Page 25-2, lines 12-14

The document states that: “Fundamentally, the Delta Plan seeks to arrest (and ultimately improve) declining water reliability and declining environmental conditions related to the Delta ecosystem, flood risk, and water quality, as well to improve recreation opportunities in the Delta and protect Delta legacy towns.” First, the term “water reliability” should be changed to “water supply reliability.”

Page 25-2, line 15

The text implies that inaction on the part of government has led to: “… increasing long-term environmental impacts due to inaction.” Inaction on the part of local, State and federal governments, plus Delta stakeholders, is not the only cause of “increasing long-term environmental impacts.” It is inaction plus many stressors including global climate change, land subsidence, and continued seismic risk that threatens major negative long-term environmental impacts in the Delta, the Delta watershed, and areas that receive water exported from the Delta.

Page 25-2, lines 28-36

This paragraph mentions some important differences between the Proposed Project and the five Alternative Projects. However, it should mention two other significant differences between the Proposed Project and some of the Alternative Projects: differing emphasis on water conservation programs and on water transfers.

25.4.1 Water Resources

Page 25-2, lines 39 & 40

Regarding the statement that: "The Delta Plan encourages decreased reliance on imported Delta water …" Does it also require decreased reliance on water diverted from river systems which flow into the Delta? If it does, that should be mentioned here as well.

Page 25-2, line 41

The text states that: "local water supplies, such as groundwater, are over utilized and not sustainably managed in some areas …" Some local water supplies, such as runoff from local storms, are *underutilized* in some parts of the study area. Groundwater is the only type of local water supply that is frequently over-utilized in California.

Pages 25-2 to 25- 3, lines 43 to 1, respectively

The document states that: "The imbalance in water supplies and demands in the state are predicted to be exacerbated with changing climate patterns over the next few decades." The word "in" should be changed to "between." Most climate scientists agree that global climate change will affect California's weather patterns for more than "the next few decades." Negative impacts on California's water resources due to global climate change are expected to slowly increase throughout this century and not suddenly cease or stabilize after only a few decades. Some scientists predict these negative impacts from global climate change will increase at an accelerated rate.

Page 25-3, lines 1-3

The text states: "The water quality in the Delta and the Delta watershed is mostly affected by issues related to high salinity and the occurrence of selenium and methylmercury …" The text should also mention the effects on Delta water quality due to pollution from urban and agricultural runoff and discharges from wastewater treatment plants. As stated previously, this PEIR needs to differentiate between water quality as it relates to the ecosystem and as it relates to drinking water.

Page 25-3, lines 6 & 7

The text states that: “Making up the difference with groundwater, desalination and recycling projects, and efficiency/conservation measures may be difficult.” It would be helpful to add “increased water transfers” to this list of alternatives. Also “water” should be placed before “recycling.”

Page 25-3, lines 19 & 20

The text states that: “Overall, Alternative 3’s water quality impacts would be greater than the Proposed Project.” Would those impacts be positive or negative?

Page 25-3, line 21

If Alternative 2 “includes substantial water quality improvement projects,” it may have a *greater* long-term positive impact on water quality than even the Proposed Project.

Page 25-3, lines 22-25

This section concludes: “It should be noted that the impacts of the Project and Alternatives 1A and 1B are chiefly construction-related and therefore temporary and limited. These alternatives would ultimately provide benefits to water quality, because they would include facilities to prevent further declines in water quality.” These important points should be repeated in some of the other Sections of this PEIR. Also, the words “and programs” should be placed after “facilities.”

25.4.3 Delta Flood Risk

Page 25-4, lines 2-9

The comparative analysis for Delta flood risk is handled in seven lines. This is a much more complicated subject than described in this brief text and deserves substantially more analysis to make a reasonable comparative statement. Also, the first sentence states that the Delta is a vast network of levees and canals that protect and dewater reclaimed land from flooding.

25.4.14 Population and Housing

Page 25-8, lines 20-26

The Population and Housing subsection starts with a list of “types of activities [which] could affect population and housing” in the Study Area due to the Proposed and

Alternative Projects. However, some important long-term impacts are not on this list. The adoption and completion of both the Proposed Project and some of the Alternative Projects would result in a larger, more reliable and secure water supply for the Study Area, increased flood protection for the Delta, and significant environmental gains for California.

Page 25-8, lines 34-36

The document states that: "Projects could also displace some existing housing and people, depending on the size and location of facilities, necessitating the construction of replacement housing elsewhere": In the midst of the local real estate collapse, there are still so many unoccupied homes for sale and so many unoccupied rental units in the Study Area, that it is unlikely that much (if any) new housing would be constructed to accommodate the relatively few people who would lose their homes as a result of the Proposed Project or most of the Alternative Projects.

Page 25-8, lines 40-42

This section concludes that: "Similar types of population and housing impacts would occur under Alternatives 1B, 2, and 3 because these alternatives have more of some of the facilities/actions and fewer of others that could have population/housing impacts than the Proposed Project." The construction of a huge reservoir (in terms of its surface area) on parts of the old Tulare Lake bed under Alternative 2 could have a significant negative impact on population and housing in that region. The loss of Delta-exported water for irrigation of drainage-impaired lands on the west-side of the San Joaquin Valley under Alternative 2 could also have a significant negative impact on population and housing in parts of the west-side of the San Joaquin Valley. Therefore, the "population and housing impacts" under Alternative 2 would not really be similar to those under the other alternatives.

25.4.15 Public Services

Page 25-9, lines 4-6

The text states that: "The Proposed Project, No Project Alternative, and Alternatives 1A, 1B, 2, and 3 do not include new land development and/or population growth, and therefore would not add new demands to existing police, fire protection, and emergency medical services."

25.4.18 Utilities and Service Systems

Page 25-9, lines 38-44

Actions that are encouraged under the Delta Plan have already resulted in a demand for additional wastewater treatment facilities in the Delta, and desalination plants would likely require a significant source of energy.

Page 25-9, lines 38 & 39

The text states in part that: “Demand for municipal utilities—water, wastewater, and stormwater systems—and for solid waste disposal capacity …” would be impacted. Demand for other types of public utilities, such as electricity and natural gas, would also be impacted by the Proposed and Alternative Projects. This PEIR needs to evaluate this in this Section.

25.4.19 Climate Change and Greenhouse Gas Emmissions

Page 25-10, lines 23-25

The GHG emissions impacts of two unique features of Alternative 2 – the construction of a huge reservoir on the old Tulare Lake bed and the loss of Delta-exported water for irrigation of drainage-impaired lands on the west-side of the San Joaquin Valley – should be explored in this subsection.

25.5 Environmentally Superior Alternative

Page 25-10, lines 28 & 29

There is not a Section or subsection in which it was demonstrated that either the Proposed Project or any of the five Alternative Projects would or would not accomplish the “specific goals and objectives that the Delta Plan must accomplish.” Such a Section or subsection belongs somewhere in this draft PEIR.

Page 25-10, lines 36-38

The document states that: “The biggest differentiators among the Proposed Project and alternatives, given their varying focus and the subject matter requirements of the Delta Reform Act, relate to long-term impacts to biological resources, flood risk reduction, water supply and water quality, and agricultural land.” There would also be a significant difference in “long-term impacts” to “population and housing” in the Study Area between the Proposed Project and the No Project Alternative, as well as between the Proposed Project and Alternative 2.

Page 25-11, lines 6 & 7

The text states that: “Among the remaining alternatives, the Proposed Project is the environmentally superior alternative, taking into account both construction and operations impacts.” First, taken in context with the preceding paragraph of text, this statement implies that the No Project Alternative is the overall “environmentally superior alternative.” This *might* be true in the short-term, but it may not be true in the medium-term or long-term, mainly because the status quo concerning the Study Area’s natural environment and water resources is not sustainable under current practices (without BDCP). This, however; needs to be analyzed in the context of a successful BDCP which is not included in this analysis.

The “environmentally superior” alternative may be irrelevant if the environmentally superior alternative is not a feasible alternative. There should be a major Section or subsection in this PEIR where this crucial question is answered for the Proposed Project and each of the five Alternatives: Does this alternative meet the “specific goals and objectives that the Delta Plan must accomplish”?

Page 25-11, lines 17-20

It is stated that: “Alternative 2 would result in … 380,000 acres to be fallowed within the San Luis Drainage Area …”: This is not accurate. Alternative 2 would result in 380,000 acres of farmland in the San Luis Drainage Area being retired from irrigated production. That land would *not* be fallowed.

Page 25-11, line 22

The phrase “Extensive land fallowing” should be replaced by “Extensive farmland fallowing and retirement”. Then a sentence similar to this one should be placed right after the sentence that ends in “dust”: “The periodic fallowing or permanent retirement of farmland from irrigated production in the San Joaquin Valley would also have slight negative impacts on the balance of greenhouse gases in the atmosphere.”

Page 25-11, line 42

This important Section, the last real section or chapter in this 2500 plus page PEIR, deserves a conclusion. Instead, the text just ends, and the reader is left without a clear conclusion. Also, there is no reference subsection at the end of this Section. There should be at least one reference in Section 25, for CWC Sec. 85054, which should be placed somewhere near the start of this Section.