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2650	1	<p>Adverse impacts to Delta Water Quality Violate Anti-Degradation Policies and The Delta Reform Act and Are Avoidable by Elimination of Isolated Delta Conveyance</p> <p>Adverse impacts to Delta Water Quality result both from operation of the isolated conveyance alternatives and from the habitat mitigation and so-called restoration projects.</p>	<p>Please refer to Master Response 14 regarding assessment of water quality degradation in the EIR/EIS, and the relevance of federal and state antidegradation policy considerations in the CEQA/NEPA process. The descriptions of the federal antidegradation policy (Section 8.2.1.3 of Chapter 8, Water Quality, of the EIR/EIS) and the state policy (Section 8.2.2.6 of Chapter 8, Water Quality, of the EIR/EIS) are sufficient for the purposes of the EIR/EIS analysis. Please also refer Final EIR/EIS Appendix 3J, which addresses compatibility of Alternative 4A with the Delta Plan and Appendix 3I, which addresses consistency with the Delta Reform Act. The analysis of the BDCP satisfies the requirements of Water Code 85320, as explained in PDEIR/S Appendix 3I - BDCP Compliance with the 2009 Delta Reform Act. In addition, as explained in the RDEIR/SDEIS and Final EIR/EIS, the BDCP and California WaterFix alternatives (4 and 4A, respectively) are designed to further the coequal goals by reducing reverse flows in the south Delta while improving water supply reliability. See also Master Response 31 regarding compliance with the Delta Reform Act.</p>
2650	2	<p>The reported resulting increases in electrical conductivity in Tables EC-8A and EC-8B show that average EC for a 5 year drought period will increase at Prisoner's Point in February from 6% to 7% in March from 20% to 30% and April from 17% to 26%, and in September from 12% to 14%. For agriculture in the central Delta this is significant adverse impact. Salt accumulation in the soil during periods of drought is aggravated by the lack of rain, and due to the soil and groundwater conditions increasing leaching fractions is not feasible. Elimination of exceedences of the water quality control plan objective will not eliminate the degradation and given the historic application of emergency authority to circumvent WQCP objectives during drought it is unlikely that even the objective would limit operation of any isolated conveyance during drought. Compliance with water quality objectives rather than avoidance of degradation assumes that the objectives avoid significant harm. There is no supporting analysis for such assumption. The analysis of effects ignores the adverse impact to water quality from conservation measures due to increased salinity intrusion from increase of the tidal prism, shortening the path for intrusion and increased evaporative losses. Degradation is the result of the desire to increase exports and is inconsistent with the Delta Reform Act requirements to honor the statutory and water right priorities, enhance Delta agricultural values, reduce reliance on the Delta and make the Delta water supply more reliable.</p>	<p>See the response to Comment 2650-1, above. Adverse effects to agricultural uses due to changes in EC were evaluated relative to Bay-Delta Water Quality Control Plan compliance locations for protection of agricultural uses. Prisoner's Point EC objectives in the Bay-Delta Water Quality Control Plan are for protection of fish and wildlife uses. The water quality assessment in Chapter 8, Water Quality, evaluates impacts relative to degradation and effects on beneficial uses, per the significance criteria in Section 8.3.2.3, Determination of Effects. Note that conservation measures related to habitat restoration are not a component of the preferred Alternative 4A (or Alternatives 2D or 5A).</p> <p>For more information on water quality, please see Master Response 14. Also see Master Response 22, Mitigation. Regarding compliance with the Delta Reform Act, please see Master Response 31. Water rights issues are also discussed in Master Response 32.</p>
2650	3	<p>The determination that the effects on boron concentrations are less than significant ignores the adverse impact associated with accumulation in the Delta soils, especially during drought conditions.</p> <p>Table B0-5 shows significant interior Delta increases in concentration of boron in both the full year and drought year averages with some monthly increases as high as 37%. The analysis ignores the impact of increased evaporative losses and the result reduced assimilative capacity due to the conservation measures. The resulting degradation violates the policies against degradation as well as the Delta Reform Act.</p>	<p>As noted in Section 4.3 of the RDEIR/SDEIS, boron is not a bioaccumulative constituent, thus any increased concentrations would not result in adverse boron bioaccumulation effects to aquatic life or humans. Relative to Existing Conditions, Alternative 4A would not result in substantially increased boron concentrations such that frequency of exceedences of municipal and agricultural water supply objectives would increase. Long-term average boron concentrations would decrease in Delta water exports to the SWP and CVP service area, which may contribute to reducing the existing CWA Section 303(d) impairment of agricultural beneficial uses in the lower San Joaquin River.</p>
2650	4	<p>The determination that there is no available mitigation to address the significant adverse impacts from increases in methyl mercury concentration measures is the result of the desire to export water that is not surplus to the needs of the Delta and other areas of origin. Operation and improvement of the through Delta conveyance coupled with reduction of exports to provide sufficient to protect fish would avoid the need for conservation measures which increase methyl mercury. As set forth in previous comments, the assumed benefits from the proposed conservation measures some of which increase methyl mercury are not supportable.</p>	<p>Please refer to Master Response 14 regarding the water quality analysis related to mercury.</p> <p>Please note that the preferred alternative is now Alternative 4A, which no longer includes an HCP. Therefore, under Alternative 4A, there would be substantially fewer acres of multiple habitat types enhanced and restored. The potential for an increase in recreationists' exposure to pathogens under Alternative 4A is considered less than significant because of the reduced amount of restored habitat conducive to pathogens that would be implemented under this alternative compared to Alternative 4 and the localized nature of pathogens (i.e., pathogen concentrations are greatly influenced by proximity to the source), and because the rapid die-off of some types of pathogens in water would not create sufficient</p>

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		<p>The increase in pathogens resulting from the conservation measures is determined not to be significant because it is localized and public access can be prevented. Preclusion of Public Access to tidal wetlands requires a control structure disconnect from the navigable water and control of trespass even with such a disconnect is uncertain. Additionally, the confinement of the increased pathogens to isolated areas is impossible with tidal wetlands and uncertain with floodplain inundation.</p>	<p>magnitudes of pathogen generation that could affect recreational beneficial uses. No mitigation is required. Increased frequency and magnitude of Microcystis blooms may occur in the Delta in the future, relative to Existing Conditions, due to increased residence times resulting from restoration activities unrelated to the project alternative, as well as climate change and sea level rise that are expected to increase Delta water temperatures. Such increases in residence time and water temperatures would not be caused by implementation of Alternative 4A. While long-term water quality degradation related to microcystin levels may occur and, thus, impacts on beneficial uses could occur, these impacts are not related to implementation of Alternative 4A. Although there is uncertainty regarding this impact, the effects on public health related to Microcystis from implementing water conveyance facilities are determined to be less than significant.</p>
2650	5	<p>Microcystis is already a significant health hazard in the Delta to recreational users and animals, and the Delta is a source of drinking water to export and local users. Isolated conveyance will remove substantial quantities of the good quality Sacramento River water from passing through the interior of the Delta to the export pumps near Byron. This will reduce velocities in some areas and increase residence time. Elimination of the flushing action and dilution from the cross-delta flow will increase residence time in many locations and .increase the concentration of constituents contributing to algal blooms. Water temperature and clarity increases could also result. Further investigation and implementation of operational measures to manage residence time is clearly not a good faith effort to fully consider all reasonable alternatives. The most obvious of which is to eliminate isolated conveyance, provide adequate flushing flows and export only water which is truly surplus.</p> <p>The microcystis effects from conservation measures could certainly be mitigated by eliminating those which create the problem. The impacts to fish which the conservation measures are intended to mitigate can be mitigated with water flow and other measures including the reduction of export of water which is not truly surplus and sensitivity as to when to run the export pumps.</p>	<p>Please refer to Master Response 14 regarding the water quality analysis related to Microcystis blooms and associated toxicity in the affected surface water bodies, as well as project effects to water quality in general. See also Master Response 23 regarding other stressors.</p>
2650	6	<p>The Delta is an important wintering ground for waterfowl of the Pacific Flyway including Sandhill Cranes. The routing for alternatives 4A, 2A and 5A pass through the heart of the wintering grounds for such waterfowl. The fourteen years of construction activity and presence of electrical transmission lines will result in short and long term adverse impacts. Suggested avoidance and minimization measures and mitigation has not been demonstrated to be adequate. Landuse in the Delta primary zone is highly restricted and much of the land is not suitable for vineyards and orchards. The lands are already available habitat. The mitigating effect of so-called compensation for the loss of foraging and nesting habitat has not been demonstrated.</p> <p>The analysis does not appear to have adequately considered impacts to Sandhill Cranes in other Delta areas, including Bouldin Island, Mandeville Island and others. The proposed tunnel material disposal site on Bouldin Island will greatly impact Sandhill Crane winter foraging habitat on the island for 14 years or more. See Figure 4 on Exhibit 30-1.</p> <p>The tunnel construction disturbance and electric transmission lines crossing Mandeville Island and others will adversely impact migrating waterfowl, including Sandhill Cranes during the winter and will adversely impact important wetland nesting areas. See Table 2 of Exhibit 30-2. Mandeville Island contains the multi-thousand acres of wetland and waterfowl management areas of the Tuscany Research Institute, which have not been considered.</p>	<p>The commenter states that the avoidance and minimization measures and proposed conservation have not been demonstrated to be adequate but did not provide any specific reference to what aspects of the proposed AMMs and Environmental Commitments are inadequate. The effects on waterfowl and measures that would serve to offset those effects are presented in Impacts BIO-178 through BIO-183.</p> <p>The commenter further states that the analysis of impacts on sandhill cranes does not adequately consider effects on sandhill crane habitat “in other Delta areas, including Bouldin Island, Mandeville Island and others.” The greater sandill crane analysis specifically discusses impacts on Bouldin and Mandeville Islands, as well as Staten and Bacon Islands.</p> <p>The analysis of effects on natural communities and species on considers all areas mapped within the study area and is not tailored to specifically consider property information (e.g., ownership) but rather the presence of biological resources. Older existing utility lines are not necessarily required to avoid and minimize bird strikes. The proposed addition of bird flight diverters in these areas would serve to minimize bird strikes in the Delta.</p> <p>For more information about the sufficiency of biological resource impact analysis, please see Master Response 17, Biological Resources. See also Final EIR/EIS Chapter 12, Terrestrial Biological Resources.</p>

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2650	7	Alternative tunnel locations away from the important waterfowl wintering and nesting areas in the Delta have not been considered. Tunnel locations such as beneath the I-5 and 205 highways or easterly would greatly reduce the adverse impacts to waterfowl including Sandhill Cranes.  With such alternatives, impacts to roads and agriculture lands could be reduced. The need for additional electrical transmission lines could also be reduced. Improvement of conveyance through the existing Delta channels coupled with a limitation on exports to truly surplus water consistent with the mandates of law is also an alternative not given objective consideration.	Please see Master Response 4 regarding the range of alternatives selected and the process used to do so. The alternatives included in the Draft EIR/EIS represent a legally adequate reasonable range of alternatives and the scope of the analysis of alternatives fully complies with both CEQA and NEPA. The Lead Agencies carefully considered all potential alternatives that were proposed during the scoping process and during time of preparation of the Draft EIR/EIS. In response to public input, several new alternatives have been studied in the Recirculated DEIR/EIS and a new preferred Alternative (4A) identified. The specific proposals that were considered but ultimately rejected by the Lead Agencies are discussed in Appendix 3A of the DEIR/EIS, Identification of Water Conveyance Alternatives, Conservation Measure 1. Appendix 3A thoroughly explains why various proposals were not analyzed in the EIR/EIS.  For a discussion on waterfowl impacts please see Chapter 12, Biological Resources, Final EIR/EIS, and Master Response 17.
2650	8	Sea Level Rise Assumptions Used In The analysis Fail to examine A Sufficient Range of Possibilities Including the Possibility of No Increase In The Rate of Increase And Possible Decline	The range of sea level rise projections was taken from the best available science including reports from the Intergovernmental Panel on Climate Change and National Research Council. By selecting sea level rise projections that are higher than those suggested by the commenter, the lead agencies have ensured that the analysis provided in the DEIR/EIS and RDEIR/SDEIS provide conservative analyses (i.e., disclosure of worse impacts). Also, please see Climate Change, Master Response 19, for more information.
2650	9	ATT1: DISTRIBUTION, ABUNDANCE, AND MIGRATION TIMING OF GREATER AND LESSER SANDHILL CRANES WINTERING IN THE SACRAMENTO-SAN JOAQUIN RIVER DELTA REGION OF CALIFORNIA	Please see the response to Comment 6, above. The comment does not raise any additional environmental issues related to the environmental analysis.
2650	10	[ATT1:ATT2 Figure 4. Distribution of greater (black triangles) and lesser sandhill crane (grey triangles) winter foraging locations in the Sacramento-San Joaquin Delta, California, winters 2007- 08 and 2008-09.]	Please see the response to Comment 6, above. The comment does not raise any additional environmental issues related to the environmental analysis.
2650	11	ATT2:Mandeville Island Biological Surveys	Please see the response to Comment 6, above. The comment does not raise any additional environmental issues related to the 2015 RDEIR/SDEIR or 2013 DEIR/DEIS.
2650	12	[ATT3:Tuscany Research Institute Information]	Please see the response to Comment 6, above. The comment does not raise any additional environmental issues related to the 2015 RDEIR/SDEIR or 2013 DEIR/DEIS.
2650	13	ATT4:Mean Sea Level Trend 9414290 San Francisco, CA	Please see the response to Comment 8, above. The comment does not raise any additional environmental issues related to the 2015 RDEIR/SDEIR or 2013 DEIR/DEIS.
2651	1	We [Central Delta Water Agency] request to incorporate all of our previously submitted public draft EIR/S comments by reference to also equally apply to this revised public draft BDCP EIR/S and all of these comments contained herein to the first public draft BDCP EIR/S.  There are a number of analyses, e.g., construction groundwater drawdown levels, included in the revised draft EIR/S that were done for the new Proposed Project and alternatives that were not conducted or updated for the original public draft project alternatives. NEPA requires equal levels of analysis of the Proposed Project and all of the project alternatives. The updated analyses must be conducted for all of the previous alternatives to the same	Consistent with the requirements of the California Environmental Quality Act (CEQA Guidelines §15088) and the National Environmental Policy Act (Council on Environmental Quality § 1503.4) and policies held by all Lead Agencies governing the implementation of CEQA and NEPA, all responses to comments received on the DEIR/EIS and RDEIR/SDEIS are included with the Final EIR/EIS. Please see Master Responses 42 regarding treatment of public comments.  The proposed project and all alternatives were evaluated using the same methods and tools. Specific to the impact referenced in this comment (GW-1), the analysis of construction-related groundwater drawdowns

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2651	2	The BDCP relied upon the HCP/NCCP document for a number of critical components to support the EIR/S. With the new alternatives dropping the HCP/NCCP from their scope, the supporting materials from the HCP; such as the implementing agreement and structure, implementation schedule, compliance and reporting, funding, regulatory assurances, adaptive management, contingency processes, permitting requirements and plan, and project lifespan and supporting rationale; are now no longer represented for the new alternatives included in the BDCP PRDEIR/S. The BDCP must take the components of the HCP/NCCP which were still relevant to defining the nature and scope of the revised Proposed Project and other alternatives included in the PRDEIR/S and recirculate those for public comment.	<p>The rationale for the changes to BDCP and the new Proposed Project are described in 2015 RDEIR/SDEIS Section 4.0. The decisions that led to the new Proposed Project were based on all of the material published in December 2013 Draft BDCP and Draft EIR/EIS, including all of the components cited by the commenter. Because the new Proposed Project does not seek ESA Section 10(a) (1) (B) permits from USFWS or NMFS, or an NCCP Act permit from CDFW, many of the components cited by the commenter are no longer required. If DWR and Reclamation select a project alternative that includes the BDCP, the elements listed in the comment would be further developed to support new ESA Section 10(a) (1) (B) permit applications to USFWS and NMFS, and a new NCCP Act permit application to CDFW and released to the public at that time as part of a new public draft BDCP.</p> <p>Based on the proposed project, Alternatives 4A, an MMRP will be adopted as part of the CEQA decision-making process, and an AMP will be included in the final project.</p>
2651	3	By the BDCP utilizing section 7 instead of section 10 for ESA compliance, there should be no SWP Incidental Take Permits (ITP) coverage for the existing operations and ongoing impacts for the SWP that were the original driving regulatory compliance need and rationale for initiating the BDCP project in the first place. The BDCP mitigations only address the construction and operations impacts of the Proposed Project. The BDCP project does not mitigate any ongoing impacts of the SWP (e.g., fish genetic introgression from continued blockage of fish upstream passage by the continued existence of the Oroville Dam, degradation of genetic integrity from continued unnatural reproductive selection resulting from elevated water temperatures from the continued existence of and operation of Oroville Dam, ongoing habitat quality and quantity degradation from continued sediment and large woody debris capture at Oroville Dam, continued salt accumulation degradation of soils and agricultural productivity in the SWP service area from ongoing SWP export of salts in the delivered irrigation water, and many other significant and ongoing impacts from the SWP, continued groundwater overdraft and subsidence in the SWP service areas from variations in SWP water delivery quantities, etc. See Oroville Relicensing EIR for a more comprehensive list of ongoing SWP impacts. SWP maintenance activities occur outside of the plan area analyzed by the BDCP, so these activities also must not be covered by any ITP or other permits issued based on the BDCP. Reservoir and upstream of reservoir impacts of SWP operations were also excluded by the BDCP analysis and mitigations so any ITPs or other permits must also not address these SWP operations and impacts in these areas. Because the BDCP does not mitigate any of these ongoing impacts of the SWP, any ITPs issued as a result of the BDCP must not cover current SWP operations, only the new facilities and directly related operations within the plan area that are adequately analyzed, disclosed and mitigated by the BDCP.	<p>The ESA Section 7 consultation and the 2081(b) permitting process each seek incidental take authorization for the proposed construction and operation of the SWP and CVP Delta facilities as described in the BA. Operation of the Oroville facilities will have incidental take coverage through the FERC relicensing process. Operations of other upstream facilities will continued to be governed by the existing BiOps, as the CWF does not propose changes in their operations. Also see Master Response 25 regarding upstream operations. Please see FEIR/EIS Appendix 3D for updates defining existing conditions, no action alternative, no project alternative and cumulative impact analysis for the proposed project. Also see the description of the incidental take requested in the Biological Assessment available on the CWF website. See also Master Response 29 regarding the Endangered Species Act and Master Response 45 regarding permitting.</p>
2651	4	BDCP stands for "Bay Delta Conservation Plan." The new BDCP alternatives do not include a conservation plan. I'm not sure that there is anything more fundamental that indicates that the new alternatives proposed are not the same project as what has previously been noticed, scoped, developed, and disclosed than the fact that the project no longer even fulfills the core characteristic included in the project name. The BDCP has proposed a name change to "California WaterFix." This is because the BDCP project has failed and the former BDCP proponents want to continue their efforts with a new project scope, purpose, and need and new project name, but they want to make these fundamental changes without	<p>The fundamental difference between the previously proposed project (Alternative 4) and the FEIR/EIS proposed project (Alternative 4A) is the mechanism by which incidental take authorization is sought. As part of this adjustment, REIR/SEIS was released in 2015 to describe the rationale for the adjustment, include new alternatives, provide additional public meetings and outreach, and allow for an additional comment period. Please also see Master Response 46 regarding recirculation of the EIR/EIS.</p>

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		<p>going back to the beginning of the public noticing and scoping as they must do for this new project.</p> <p>The BDCP NOI [Notice of Intent] and NOP [Notice of Preparation] do not describe the current BDCP proposed project as the notices describe a canal with an HCP/NCCP. The California WaterFix is a tunnel with no HCP/NCCP and there is almost no commonality of what is described in the noticing compared to the new BDCP alternatives. The BDCP public noticing does not describe the California WaterFix project and must be renoticed as a new project. The BDCP project scoping no longer is applicable to the project being proposed by the California WaterFix. The new California WaterFix alternatives do not reasonably meet the BDCP purpose and need and project objectives. The only thing that is the same between the two very different projects is that the proponents are the same. The California WaterFix project, as a new project, must conform to NEPA and CEQA requirements, must be publicly noticed [and] scoped, [and must] develop a purpose and need that describes what the project is to accomplish, undergo a full alternatives development process with this new scope, and develop a new (not partially recirculated) EIR/S for public disclosure, review, and comment.</p>	
2651	5	<p>CEQA requires "lead agencies" to include in their Environmental Impact Reports (EIRs) information deemed necessary for actions to be taken or considered by "responsible agencies." (CEQA Guidelines, [Section] 15082, subd. (b)) Information provided in the BDCP EIR is not sufficient to support decision making for responsible agencies issuance of permits, including, but not limited to: State Water Resource Control Board 401 Certification and certification as compliant with the Water Quality Control Plan for the Delta, Caltrans Right of Way and other permits, CDFW 303, Delta Stewardship Council Delta Plan Consistency Certification, local fire and emergency response, railroad crossings, Reclamation Districts, etc.</p>	<p>Please refer to Master Response 45 regarding permits being sought for the proposed project and how responsible agencies will use this EIR/EIS.</p>
2651	6	<p>The revised public draft BDCP EIR/S is not a project-level project description or analysis. As an example, one of the project proponents, Kern County Water Agency [KCWA], recently commented that the PRDEIR/S fails to sufficiently define the level of mitigation that would be required for the compensation of impacts from the construction footprint of the project. "The RDEIR/SDEIS must clearly articulate the environmental commitments that PWAs [Public Water Agencies] are required to implement to address the construction-related impacts of the proposed Project." (<a href="http://www.kcwa.com/public/documents/PublicBoardPacket.pdf">http://www.kcwa.com/public/documents/PublicBoardPacket.pdf</a>, page 125, second to last paragraph.) "It is difficult to determine, however, the extent to which these commitments relate to the construction footprint. Thus, the Agency requests that the RDEIR/SDEIS be revised to more fully explain how the environmental commitments address construction-related Project impacts." (Last paragraph, pdf page 125, same document.) If the BDCP project were described, analyzed and mitigated at a project level of detail, KCWA would not have a basis for this concern."</p>	<p>Please refer to Chapter 3 in the FEIR/EIS for the latest information on the level of mitigation required under the proposed project. In addition, each resource chapter includes details on mitigation and environmental commitments that will be used to offset project impacts specific to the resource being analyzed. Details on construction footprint impacts to natural communities (and covered species habitat) along with required mitigation can be in Chapter 12 (Terrestrial Biological Resources). It should be noted, however, that other permitting processes such as ESA and CWA, may define additional mitigation requirements, but this does not affect the mitigation included for the proposed project and adopted as part of the MMRP.</p> <p>For more information regarding project level analysis, please see Master Response 2.</p>
2651	7	<p>The BDCP EIR/S is poorly organized and is not accessible to the public for reasonable comprehension in its current form. "Environmental documents should be well-organized and written in plain language so that decision-makers and the public can understand them (e.g., 40 C.F.R. Section 1502.8). As is, the RDEIR/SDEIS does not lend itself to being easily understood by the public. The complexity of the RDEIR/SDEIS makes it difficult for the average reader to understand the relationship between the various BDCP alternatives and the new alternatives, with respect to the proposed conveyance structures, operations,</p>	<p>As they did with the Draft EIR/EIS, the Lead Agencies balanced readability with thoroughness in describing and analyzing the new alternatives in the RDEIR/SDEIS. To assist reviewers, the Lead Agencies provided a "Document Review Road Map" at the beginning of the RDEIR/SDEIS. Chapter 1, Section 1.3, of the RDEIR/SDEIS describes the contents of the document and provides references to the locations where readers may find specific discussions and analyses. Table 1-2 in the RDEIR/SDEIS identifies the exact portions of the Draft EIR/EIS that are modified in the RDEIR/SDEIS. In addition, the PDFs of the RDEIR/SDEIS, the Draft EIR/EIS, and the Draft BDCP are bookmarked so that readers may quickly navigate to the proper</p>

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		<p>environmental commitments and other conservation measures." (<a href="http://www.kcwa.com/public/documents/PublicBoardPacket.pdf">http://www.kcwa.com/public/documents/PublicBoardPacket.pdf</a>, pdf page 126, first paragraph.) We [Central Delta Water Agency] concur with KCWA [Kern County Water Agency]'s comments letter to Mark Cowin, DWR, on this comment and request that the BDCP EIR/S be reorganized to a more understandable and logically presented with greater content continuity and connectivity with improved references between sections with dependent and/or supporting information. This will require the EIR/S to be reformatted, reorganized, with embedded hyperlinks between sections of related and dependent content and for the document to be recirculated for public comment.</p>	<p>section. See Master Response 38 for further discussion of document organization.</p>
2651	8	<p>The BDCP is in violation of the First Amendment MOA [Memorandum of Agreement] Collaboration BDCP between the BDCP lead agencies dated December 15, 2011. MOA section "I L" states that the BDCP shall comply with the 2009 Delta Reform Act. The Delta Reform Act requires the BDCP to include an NCCP to be incorporated into the Delta Plan and to be eligible for state funding. The BDCP does not include a NCCP in its scope anymore so it is not compliant with the Delta Reform Act in violation of this MOA. Section "I R" of this MOA says the BDCP must be an HCP; it is not. MOA section "II B" identifies that a contractor has been selected for the EIR/S. That contractor was HDR Engineering. Instead, DWR violated this agreement by utilizing ICF International, not the selected contractor HDR. MOA section II D states that the ROD [Record of Decision] is to be completed by February 2013. DWR has violated this agreement by missing that deadline. MOA section II J directs that the BDCP shall result in regulatory assurances. With the BDCP no longer including an HCP/NCCP, the BDCP no longer will result in regulatory assurances which is in violation of this MOA. Section "II Q" of the MOA states that DWR shall, in accordance with NEPA, consult with the NEPA lead agencies prior to retaining consultants for the EIR/S. DWR did this for the HDR contractors, but not for ICF International, which is in violation of this agreement.</p>	<p>In April 2015 state and federal agencies announced a new sub-alternative—Alternative 4A (California WaterFix) —which replaced Alternative 4 (the proposed BDCP) as the state's proposed project. Alternative 4A reflects the state's proposal to separate the conveyance facility and habitat restoration measures into two separate efforts: California WaterFix and California EcoRestore. These two efforts are a direct reflection of public comments and fulfill the requirement of the 2009 Delta Reform Act to meet co-equal goals.</p> <p>Master Response 31 addresses the consistency of the proposed project with the Delta Reform Act.</p> <p>Because an HCP/NCCP is no longer the proposed project, the terms of the MOA do not readily apply to the current permitting process.</p>
2651	9	<p>NEPA regulations provide that the lead agency, not the applicant, is ultimately responsible for selecting the environmental contractor to prepare an EIS. 40 CFR 1506.5(c). <a href="http://www.swca.com/images/uploads/Facts_About_National_Environmental_Policy_Act.pdf">http://www.swca.com/images/uploads/Facts_About_National_Environmental_Policy_Act.pdf</a>. Reclamation, FWS and NMFS are the BDCP federal lead agencies and yet they did not select or even participate in the selection of the ICF International team which prepared the BDCP EIS. The federal lead agencies clearly violated NEPA requirements for them, not the applicant, to select the environmental contractor. Due to this NEPA violation and federal contracting violation, all works and materials produced by the ICF International team must be viewed as FACA [Federal Advisory Committee Act] contaminated and all materials created by this unlawfully selected and contracted consultant team must be discarded.</p>	<p>Under CEQA, a lead agency is the public agency that has the principal responsibility for carrying out or approving a project which may have a significant effect upon the environment (Public Resource Code Section 21067). DWR has primary responsibility over changes to the SWP and its operations.</p> <p>Under NEPA, a lead agency is the federal agency with primary responsibility for complying with NEPA on a given proposed action (40 CFR 1508.16). In this case Reclamation has the primary responsibility over actions that could affect CVP operations in the Delta. Following the move away from the BDCP as the preferred alternative, USFWS and NMFS became cooperating agencies, primarily responsible for compliance with the ESA.</p> <p>Use of a common consultant to support preparation of environmental documents by both lead and cooperating agencies is a typical industry practice that helps ensure efficiency and facilitates sharing of information between involved agencies.</p>
2651	10	<p>On June 1, 2010, DWR, Reclamation, U.S. Fish and Wildlife Service (USFWS) National Marine Fisheries Service (NMFS) and consultant HDR, Inc., executed Agreement Regarding Preparation of a Joint Environmental Impact Report/Environmental Impact Statement for the Bay Delta Conservation Plan (Lead Agency Agreement) to define the roles and responsibilities of the agencies with respect to preparing the EIR and EIS for the BDCP. ICF International, whose name is identified as the principal consultant preparer of the PRDEIR/S, was not party to that or any subsequent agreement authorizing them to act as consultant contractor to prepare the EIR/S. The federal and state contracting requirements have not been conformed to and the development and delegation of authority to third parties to</p>	<p>The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.</p>

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		develop the EIR/S that were not party to this agreement are in violation of this agreement. All materials prepared by unauthorized preparers of the EIR/S should be disregarded by the lead, responsible and cooperating agencies involved in the BDCP.	
2651	11	<p>The water contractors funding the development of the EIR/S have exhausted their budget for the environmental review so they have asked the consultants to do some work for free to reflect the failures of the document to meet its requirements and all the wasted work effort to date. Asking the consultants to do work for free violates federal contracting standards as it is a "payoff" for awarding the contract. "The major water contractors that stand to benefit from the project -- including the Metropolitan Water District of Southern California and Westlands Water District in the San Joaquin Valley -- have already put up \$240 million for the planning so far. Only about \$15.8 million of that remains, and there is a lot of work left to do." "Our directive is that the (water) contractors are not putting more money into the planning process," Gardner said. "So we need to finish it with the money we have left."</p> <p>(<a href="http://www.wineindustryinsight.com/ex_nf.php?url=http://www.sacbee.com/news/local/environment/article4644687.html">http://www.wineindustryinsight.com/ex_nf.php?url=http://www.sacbee.com/news/local/environment/article4644687.html</a>) These quotes from the BDCP/DHCCP Program Coordinator, Chuck Gardner of The Hallmark Group, clearly indicate the violation of state and federal contacting standards by having the consultant team work for free in exchange for them keeping the contract going forward in the project. The BDCP must dismiss the program manager for this contracting violation, discard any work products that were coerced from the contractors for no pay, and must submit any decision-makers or supervisors that were involved in this contracting violation for disciplinary action, dismissal or criminal enforcement.</p>	<p>There is no evidence that contractors are being asked to work for free. As noted in the comment letter- "Our directive is that the (water) contractors are not putting more money into the planning process," ... This statement does not support the conclusion that the contractors are working for free. The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.</p>
2651	12	<p>DWR and Reclamation broke state and federal contracting rules by awarding a contract to Hallmark Consulting Group for program management of the design and construction phase of the BDCP conveyance without going through a competitive bid process. DWR and Reclamation were premature in committing funding to the development of contracts for design and construction of a project that has not yet been approved. Not only is this clearly a predecisional act in assuming the project will be approved, but this contracting is an irretrievable commitment of resources (staff time and cost) as well as any potential contact cancelation fees. DWR and Reclamation are both not allowed, by their respective CEQA and NEPA handbooks, to commit funds to a project that has not yet been approved and funded. Additionally, a reportedly \$11 million contract for the Hallmark Group for the next phase of the project is way too large an expenditure of public funds to not go through the competitive bid process. There is no support for the Hallmark Group being uniquely qualified, to the exclusion of all other potentially suitable contractors, as the company has never been Program Manager of a water conveyance design and construction project before and there are many engineering firms that have successfully completed program management on similar site and complexity water conveyance construction projects. The engineering firms (URS and Black and Veatch) that won the environmental planning and initial project design (10%) were specifically excluded from bidding the final design and construction phases of the project so that there would not be a conflict of interest. This mutual exclusion of the program director consultant for the environmental planning phase should also be mutually exclusive for the selection of the Program Manager for the final design and construction phase. DWR and Reclamation's contracting of the Hallmark Group for the next phase of the BDCP project while precluding the retention of the incumbent engineering firm is the application of an inconsistent logic and contracting selection criteria.</p>	<p>This comment addresses the alleged illegalities of the contracting process and alluding that the pre-project planning activities are pre-decisional. Contracting issues by State and Federal entities are overseen by contracting offices. The questions related to the appropriateness of the contracts do not affect the adequacy of the EIR/S.</p> <p>The claim that various planning studies, including engineering support and condemnation were pre-decisional is invalid. For the preparation and assessment of the environmental studies, various details are necessary to evaluate the actions at a project level sufficient to inform the decision-makers and the public of the environmental ramifications. This is typically done by conducting engineering studies and pre-design to support alternatives development and project description to allow the subject matter experts sufficient information to evaluate the types of environmental effects. In some cases, this includes accessing the site to identify the resources or conditions that would potentially be affected by project implementation. Please see Master Response 4 regarding timing of the development of information pertaining to the proposed project. This issue does not address the adequacy of the EIR/S.</p> <p>SAIC was charged with preparing the BDCP HCP/NCCP which was essentially the project description. A project description is usually prepared by the project proponent. Data sources for the preparation of environmental documents are obtained by various sources. This information is analyzed by subject matter experts and disclosed to the decision-makers and the public in the form of the CEQA/NEPA documents. The comment does not allude that there are any inaccuracies associated with the data.</p>

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		<p>The development of the Public Condemnation Process document (<a href="http://restoredelta.org/wpcontent/uploads/2015/08/DCE-Cm1-Property-Acquisition-Plan-1-Fr-MWD-PRA-2015.pdf">http://restoredelta.org/wpcontent/uploads/2015/08/DCE-Cm1-Property-Acquisition-Plan-1-Fr-MWD-PRA-2015.pdf</a>) is an irretrievable commitment of resources (staff time and cost) as well as any potential contact cancelation fees. DWR and Reclamation are both not allowed, by their respective CEQA and NEPA handbooks, to commit funds to a project that has not yet been approved and funded. DWR and Reclamation must cease and desist from these predecisional activities and commitments of resources. An investigation must be initiated to determine who approved these unauthorized expenditures and appropriate sanctions and legal remedies applied.</p> <p>The SAIC [Science Applications International Corporation] Team, which ICF International was a part of, was contracted by ZONE 7 (a SWP water contractor) to produce the BDCP HCP/NCCP. The revised public draft BDCP EIR/S has dropped the HCP and NCCP from the scope of the new proposed alternatives so there is no scope overlap at all from the previous responsibilities of the HCP/DHCCP team and the preparation of the revised BDCP public draft EIR/S. SAIC and ICF International should not have anything at all to do with preparing an EIR/S for the BDCP when their contact only covered preparing an HCP which is no longer even proposed in the revised public draft EIR/S. All materials prepared by this consultant team should be abandoned by the lead and responsible agencies of the BDCP EIR/S as the team that prepared the document had no contractual right to prepare the document. All materials prepared by these state water contact hired consultants violate federal contracting guidelines and FACA [Federal Advisory Committee Act] requirements.</p>	
2651	13	<p>As evidence of contracting violations by DWR and Reclamation, the selected BDCP EIR/S Prime Contractor, HDR Engineering, does not have a single staff member identified as a contributing author in the EIR/S. HDR is not even identified as part of the consultant team prior to 2011; their omission is factually incorrect. The consultant team preparing the EIR/S was effectively completely replaced without the lead agencies conforming to contracting regulations. The contract was not renoticed in the Federal Register, a Request for Proposals was not circulated, Proposals were not evaluated and scored using an accepted system, qualified teams were not interviewed, a winning proposal team was not selected and contract negotiations did not follow state or federal procedures. ICF International replaced the consultant team that was selected that conformed to contracting regulations. The ICF International team did not go through any of the contracting approval process and procedures. The Lead Agencies have violated their contracting rules by replacing the selected consultant team without following any of the state or federal contracting requirements.</p> <p>As a result of these contracting illegalities, the work product produced by this unauthorized group must be set aside by the agencies and unauthorized fees paid to these contractors must be recovered. The environmental review consultant team contracting process must be restarted to properly conform to contracting regulations or the HDR team re-engaged. Once properly selected with a process that does conform to state and federal standards, the lead agencies must review and revise the developed materials into a suitable and appropriate informational and decision document.</p> <p>The Hallmark Group directed work on the development of the EIR/S, but was also not part of any team reviewed or selected by the Federal Lead Agencies or that conformed to their contracting regulations. Hallmark materially directed the EIR/S project schedule, policy and technical issue resolution, and content reviews in the EIR/S.</p>	<p>Contracting issues by State and Federal entities are overseen by contracting offices. The questions related to the appropriateness of the contracts do not affect the adequacy of the EIR/S. Additionally, as CEQA and NEPA lead agencies, DWR and Reclamation, respectively, directed the development of the EIR/EIS.</p>

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2651	14	NEPA EIS contractors must execute a disclosure statement, prepared by the lead agency, specifying that the contractor has no "financial or other interest in the outcome of the project." 40 CFR 1506.S(c). The companies [The Hallmark Group, ICF International, and Science Applications International Corporation] were not part of the EIR/S consultant team, so disclosure statements submitted by the original HDR Engineering team do not apply to these companies. These companies and the Federal Lead Agencies are in violation of NEPA regulations if they did not submit disclosure statements prepared by the lead agencies prior to them engaging in developing work products for the EIS.	None of the contractors involved in preparing the EIR/EIS have any financial conflicts of interest related to the California WaterFix. All preparers signed a disclosure statement.
2651	15	Since ICF International, SAIC [Science Applications International Corporation], The Hallmark Group and others were not contracted to prepare the EIR/S, the materials developed by these companies violate the Federal Advisory Committee Act (FACA). Paid third party advocates prepared critical elements of a decision document which is supposed to be independent and unbiased and which may result in them getting privileged information and/or an unfair advantage in future contracting. The EIS is required to be an objective, good faith attempt at full disclosure, and could be invalidated in court if it is found to be biased.  In addition to the FACA violations of the environmental consultants, materials [and edits] prepared for the BDCP HCP/NCCP that were developed by the project proponents, e.g., Metropolitan Water District, Kern County Water Agency, etc., were used wholesale and verbatim in the EIR/S. Since the entities that prepared these materials for the HCP/NCCP were not contracted to develop the EIR/S, these materials also violate FACA.	Please see responses to comments 2651-13 and 2651-14.
2651	16	The Biological Assessment (BA) for the BDCP was not in the scope of the original HCP/NCCP or EIS/EIR contract, so ICF International's FACA [Federal Advisory Committee Act] violations should conflict them out of potential contention for future contracting of the BA or any future BDCP contracts.	Please see response to comment 2651-13.
2651	17	The NOP [Notice of Preparation] and NOI [Notice of Intent] both identify the project as having co-equal goals of habitat restoration and water supply reliability. The Proposed Project (Alt 4A) no longer includes a habitat restoration component (other than mitigation), and therefore either is an entirely new project which must be renoticed, rescoped and reanalyzed or it is an alternative that fundamentally failed to meet the habitat restoration component identified in the public noticing process and therefore should have failed to pass alternative screening process and should not have been included in the revised public draft EIR/S and certainly could not have qualified as the Proposed or Preferred Project.	For detail on why the addition of new sub-alternatives 4A, 2D and 5A to the EIR/EIS does not require a new Draft EIR/EIS be prepared versus a Partially Recirculated Draft EIR/Supplemental Draft EIS (RDEIR/SDEIS), please see Master Response 4. The fact that Alternative 4A has been improved to include revised operational criteria and a more environmentally benign conveyance facility alignment than its original formulation does not violate CEQA or NEPA. The fact that Alternative 4A (California WaterFix) bears a different name than Alternative 4 (BDCP) is only indicative of the revised permitting approach, since the three additional alternatives do not include an HCP. Alternatives 4A, 2D and 5A are described in the RDEIR as sub-alternatives for Alternatives 4, 2A and 5A because of the similarity of these alternatives to the original alternatives presented in the Draft EIR/EIS. For example, Alternative 4A consists of the identical modified pipeline tunnel alignment and features as presented for Alternatives 4, with slight changes to the conveyance facility operations and a reduction in the amount of habitat restoration, consistent with the revised ESA and CESA compliance approach. Alternatives 2D and 5A include similar conveyance facility features as Alternative 4A (and Alternative 4) with changes in the number of North Delta intakes included compared to Alternative 4A (two more for Alternative 2D and two fewer for Alternative 5A).  For additional detail on the Project Purpose and Need, please refer to Master Response 3.
2651	18	The Proposed Project (Alt 4A) does not meet the purpose and need identified in the public noticing or public scoping, so in order to move forward with Alt 4A, the project proponents must renotify and rescope their project.	The commenter does not include details supporting the assertion that the project does not meet the purpose and need identified in public noticing for the project. Please refer to Master Response 3 regarding the purpose and need, and Master Response 4 regarding alternatives development. See Master Response 46 for the standards for scoping and recirculation.

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2651	19	The name of the project has changed from "BDCP" on the PDEIR/S to "BDCP/California WaterFix" on the RDEIR/S. This is yet another indication that the PDEIR/S presented is actually a different project than the previous BDCP PDEIR/S and therefore must be treated as a new project requiring public notice, scoping, new alternatives development, new analysis, and a new PDEIR/S.	Please see responses to comments 2651-4 and 2651-17.
2651	20	The project described in the 75940 Federal Register / Vol. 78, No. 240 / Friday, December 13, 2013 / Notice has little resemblance or scope overlap with the current project proposed by the BDCP. In the Federal Register Notice, ". . . the Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS), are considering the proposed action of issuing 50-year incidental take permits (ITPs) under the Endangered Species Act (ESA). . ." The project is no longer proposing an HCP which was the justification for the ITP period of 50 years. The current BDC-proposed ITP would be based on a Section 7 ESA consultation which would issue a Biological Opinion [BO] which would contain Reasonable and Prudent Measures that the project would have to implement in order to ensure the impacts of the project on special status species were protected and would be updated any time there were changes in the effects of the project on those species or in the status of those or newly listed species. Because the ITPs will be updated anytime a revised BO is produced (every few years recently), the ITPs are not for a 50-year period. Since the Federal Register description of the proposed project is increasingly inaccurate and misinformed, the project must renounce the new project and return to public scoping and alternatives development.	Please see response to comments 2651-4 and 2651-17, and Master Response 4 regarding alternatives development and Master Response 46 regarding scoping and noticing for the REIR/SEIS. Also see Chapter 32 regarding noticing.
2651	21	Due to all of the inaccuracies in [the Federal Register] notice, this notice should be revised and reissued. Since this notice will have to be retracted and republished, the EIS comment period should be adjusted to reflect the delayed environmental document review starting and ending dates.	On April 30, 2015, State and Federal lead agencies noticed the proposal of a modified sub-alternative to the previously proposed Alternative 4. A RDEIR/SDEIS was made available for public review and comment from July 10, 2015 through October 30, 2015. Also see Master Response 46 and Chapter 32 regarding noticing, and Master Response 39 regarding the public review period.
2651	22	75940 Federal Register / Vol. 78, No. 240 / Friday, December 13, 2013, "Covered activities in the Plan include the construction, operation, monitoring, and maintenance associated with water conveyance, ecosystem restoration, and other activities in the Sacramento-San Joaquin Delta (Delta) and vicinity as described in the BDCP." "The Applicants seek 50-year incidental take permits for covered activities within the proposed Plan Area. The Plan Area encompasses the Delta and additional areas in which conservation measures may be implemented pursuant to the Plan." The BDCP Proposed Project no longer includes ecosystem restoration; it only includes habitat mitigations. The federal register notice of the project is misleading in the scope described and the federal notice must be reissued and the project rescope and subject to subsequent public scoping processes. The project no longer even goes under the same name as used in the federal notice. In the notice, the project is the BDCP and in the current PRDEIR/S, the project is the BDCP/California WaterFix.  The following descriptions of the BDCP in the 75940 Federal Register / Vol. 78, No. 240 / Friday, December 13, 2013, are no longer accurately descriptive of the current BDCP Proposed Project or RDEIR/S alternatives. "In order to comply with the requirements of the Federal ESA, the proposed Plan addresses a number of elements, including: Species and habitat goals and objectives; an evaluation of the effects of covered activities on covered species, including indirect and cumulative effects; a conservation strategy; a monitoring and adaptive management program; descriptions of changed circumstances and remedial measures; identification of funding sources; and an assessment of alternatives to take of listed animal species. Activities proposed for incidental take coverage include all Plan activities related to the development and operation of water conveyance infrastructure;	Please see response to comments 2651-4 and 2651-17, and Master Response 4 regarding alternatives development and Master Response 46 regarding scoping and noticing for the RDEIR/SDEIS. Also see Chapter 32 regarding noticing.

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		<p>habitat protection, restoration, creation, and enhancement; and other conservation measures to address important stressors in the aquatic environment. The conservation measures were developed to achieve a package of landscape-scale, natural community, and species biological goals and objectives." Only the single reference to the conveyance is still included in the scope of the current BDCP/California WaterFix project. Seeing that the previous quote is 90+% inaccurate in its description of the project, the notice significantly mischaracterizes the scope, objectives and nature of the project such that the project must be renoticed in order to inform the public of the intent and actions of the federal agencies on this project and to make the public aware of the pending action.</p> <p>As illustration of the increasingly inadequate and inaccurate description of the federal register notice for the BDCP, of the 7 bullets of project objectives identified, the following 5 no longer apply to the currently proposed project. "Protection of existing functioning natural communities that are not currently protected. Restoration of specific natural communities in areas that do not currently support those communities. Improvement of existing habitat functions within existing natural communities. Ongoing management of natural communities and habitat for covered species to maximize the ecological function in the lands conserved by the Plan over the long term. Reduction of the adverse effects on covered fish species that result from specific stressors such as predation, toxic constituents in water or sediment, and illegal harvest." This means that only 28% percent of the scope described in the Federal Register notice still accurately describes the scope and activities of the currently proposed project by the BDCP. By any standard, this fails to adequately describe and disclose the intent of the project. The notice is now no longer at all representative of what the project actually intends to do and more functions to confuse or mislead the public than it is to inform and disclose.</p> <p>Here is more description of the BDCP in the Federal Register notice that now no longer is accurate in describing the BDCP proposed project. "To minimize and mitigate, to the maximum extent practicable, the effects on covered species of the activities proposed in this Plan; and (2) to provide for the conservation and management of covered species in the Plan Area. Restoration, protection, or enhancement of the following natural community types would be undertaken under the proposed Plan: Tidal freshwater and brackish emergent wetland; tidal perennial aquatic; transitional upland areas; seasonally inundated floodplain; channel margin; valley foothill riparian; grassland; vernal pool complex; alkali seasonal wetland complex; managed seasonal wetland; non-tidal perennial emergent wetland and non-tidal perennial aquatic; and cultivated lands. The Plan also intends to provide public benefits, including helping to prevent species from becoming threatened or endangered, improving ecosystem health . . ." Again, that is 90+% of the description of the BDCP project in the notice that is no longer applicable to or representative of the currently proposed BDCP project. This project must be renoticed with a correct description, recognized as a new project (it does have a new name, too) and must start over as a new project and go through public scoping, alternatives development, and agency and public review processes as both NEPA and CEQA require.</p>	
2651	23	<p>Current alternative does not include analysis or mitigations for ongoing impacts of the CVP or SWP. Since these impacts are not covered in the EIR/S, then any ITP [incidental take permit] issued based on the BDCP EIR/S must not include maintained operations outside of the plan area in the Delta. This is yet another facet of the public noticing of the scope of the BDCP that has been violated by the BDCP alternatives. Since the BDCP will not get ITPs to cover these maintenance and ongoing impacts as was specified in the NOI [Notice of Intent]</p>	<p>Please see response to comments 2651-4 and 2651-17, and Master Response 4 regarding alternatives development and Master Response 46 regarding scoping and noticing for the RDEIR/SDEIS. Also see Chapter 32 regarding noticing and response to comment 2651-3 regarding what is covered by the BDCP/CWF permits.</p>

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		and NOP [Notice of Preparation], then the public noticing is additionally deficient and misleading for the project that is currently being proposed by the BDCP.	
2651	24	DWR misrepresents the nature and scope of the BDCP project in public press releases. "The two-month extension gives the public, government agencies, and independent scientists more time to consider refinements and changes made since last summer to the plan that seeks to secure California's water supplies and improve ecosystem conditions in the Sacramento-San Joaquin Delta." ( <a href="http://resources.ca.gov/docs/press_release/150722-Public_Comment_Period_on_Revised_Delta_Conveyance_Document.pdf">http://resources.ca.gov/docs/press_release/150722-Public_Comment_Period_on_Revised_Delta_Conveyance_Document.pdf</a> ). The Proposed Project no longer includes an HCP/NCCP which would have contributed to improving ecosystem conditions, and instead the project plans to only mitigate for the damage to the ecosystem that the project precipitates. This press release is a significant misrepresentation to the public on the nature of and proposed scope of the BDCP project. DWR must publicly retract and correct this communication and all others that misrepresent the BDCP project as contributing to improving ecosystem restoration.	See Master Response 3 regarding project purpose and need. No change to the press release is necessary.
2651	25	BDCP EIR/S FAQ -- page 2, p1, line 2: ". . . because no long-term assurances are issued for a large list of covered species, the same level of detailed documentation as to the potential effects to species, sufficiency of mitigation for these effects. . ." Just because the BDCP has shifted from a section 7 to a section 10 consultation, does not mean that the level of completeness of analysis and use of best available science is reduced. Similarly, switching to a section 10 consultation also does not relieve the project of the responsibility to credibly demonstrate that the proposed mitigation actions fully mitigate impacts on the listed species. This statement by the BDCP makes it clear that the EIR/S did not do as complete and detailed an analysis of the listed species in the new alternatives under the section 10 consultation assumption as it did for the previous alternatives which assumed a section 7 consultation ESA permitting pathway.	The use of best available science in the evaluation of effects is applicable under ESA, regardless if Section 7 or 10 is used. As such, the BA has incorporated best available science into the analysis, based on coordination with the fish and wildlife agencies. Additionally the BA was reviewed by an Independent Science Panel and the results of that review will be incorporated into the BiOp. Section 7 requires that impacts on listed species are minimized and mitigated to the extent practicable, and the BA has proposed minimization and mitigation consistent with other approved projects in the Delta for the species covered in the BA. Also see response to comment 2651-1. See also Master Response 29 regarding the Endangered Species Act and Master Response 45 regarding permitting.
2651	26	NEPA requires an equal level of detail in the analysis of the proposed project/action as the alternatives, so the document is deficient as an unequal level of effort and disclosure in the impacts of the alternatives and mitigations have been applied in the EIR/S. The deficient, unequal level of effort and detail of analysis by alternative in the EIR/S must be remedied and the material changes of the document must be recirculated for public comment.	Please see response to comment 2651-1.
2651	27	The BDCP EIR/S from November 2013 Purpose and Need [P&N] identifies "regulatory assurance and stability" as a main purpose, need and objective for the BDCP project. The new BDCP alternatives with ESA compliance without an HCP/NCCP does not provide a "no surprises" or regulatory assurances project result. The lack of regulatory assurances resulting from the new BDCP alternatives means they completely fail to meet this critical P&N criteria. This failure to meet any aspect of this critical project purpose and need means that these alternatives fail to reasonably satisfy the purpose and need and therefore should have never been considered viable project alternatives. Other alternatives that do achieve regulatory stability should have been considered prior to alternatives which do not. Instead of the original 50+ proposed covered species and resulting regulatory stability vs. alternatives with no covered species and no regulatory stability, the BDCP should have included an alternative that addresses an aquatic species-only HCP/NCCP. An aquatic species-only HCP/NCCP would have simplified the HCP/NCCP, reduced the costs and impacts of the project, would have addressed the species that are actually affected by the CVP/SWP (the terrestrial species are generally not), and would have resulted in a stable regulatory	Please see Master Response 3 regarding purpose and need.

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		environment with no surprises. Before the lead agencies can approve an alternative that does not meet a primary purpose and need for the project the EIR/S must evaluate a common sense alternative of a reduced species list aquatic species only HCP/NCCP.	
2651	28	The BDCP EIR/S from November 2013 says habitat restoration component of Purpose and Need will now be addressed by California EcoRestore, but California EcoRestore says, "California EcoRestore is unassociated with any habitat restoration that may be required as part of the construction and operation of new Delta water conveyance." ( <a href="http://resources.ca.gov/ecorestore/">http://resources.ca.gov/ecorestore/</a> ) DWR and Reclamation cannot have this both ways, both as a project to hand off project requirements from the 2009 Delta Reform Act to as well as making the other project "unassociated" so as to duck the obvious project impact piecemealing violations.	The Proposed Action includes habitat restoration as necessary to mitigate significant environmental effects and satisfy applicable CWA, ESA and CESA standards. Programs for long-term conservation efforts for species recovery separate from the Proposed Action would be addressed by other state and federal programs as part of California EcoRestore. The RDEIR/SDEIS analysis considers restoration actions that are independent of the Proposed Action, such as EcoRestore, as part of the cumulative impact analysis. For more information regarding the lead agencies' analysis of the project as a whole, please see Master Response 8.
2651	29	The BDCP EIR/S from November 2013 purpose and need identified that the project would have "coequal goals". Water Code [Section] 85054: "'Coequal goals' means the two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place." The new alternatives in the RDEIR/S, including the Proposed Project alternative 4A, by definition do not meet this core purpose and need as they do not include the habitat restoration component (they only include mitigation for impacts from construction and operation of the project) and therefore, by statutory definition, do not meet the project purpose and need and therefore should not have been considered for full analysis in the EIR/S and the lead agencies should not have selected one of them as the Proposed Project. The scope and objectives of the BDCP project must be revised such that they are consistent with existing plans, policy and water code of the State of California.	The project objectives and purpose and need statement have been revised somewhat to reflect the change in project approach mentioned in this comment. The RDEIR/SDEIS's underlying project purpose is now to make physical and operational improvements to the system to restore and protect ecosystem health, water supplies of the SWP and CVP south of the Delta and water quality within a stable regulatory framework, consistent with statutory and contractual obligations. Alternatives 4A, 2D and 5A have been determined to meet this underlying purpose and as well as objectives and the purpose and need statement in the RDEIR/SDEIS and this Final EIR/EIS. Although the mitigation proposed for these alternatives is lower than the amount of restoration that was proposed when the plan was an HCCP/NCP, operation of the facilities would improve river flows for special status fish species and the new North Delta Diversion points would provide operators flexibility to reduce fish effects while improving SWP/CVP water supply reliability. Also see Master Response 31 regarding compliance with the Delta Reform Act and Master Response 3 regarding the Purpose and Need.
2651	30	BDCP EIR/S Nov 2013, page 2-2, line 30, "DWR's fundamental purpose in proposing the BDCP is to make physical and operational improvements to the SWP system in the Delta necessary to restore and protect ecosystem health, water supplies of the SWP and CVP south-of-Delta, and water quality within a stable regulatory framework, consistent with statutory and contractual obligations." The revised EIR/S did not alter these stated CEQA project objectives. The new alternatives substantially fail to reasonably meet these essential criteria in every facet and therefore should not have been carried forward for analysis as project alternatives and other previously proposed project alternatives that better and more fully meet these criteria should have been advanced for full analysis as alternatives in the revised EIR/S.  Let's take this point by point. The new alternatives do not restore or protect ecosystem health. The new alternatives only mitigate for the impacts of implementing the project and do little to no restoration that is above and beyond just repairing the damage the project causes. The new alternatives do not restore natural flow regimes in the Delta as the BDCP claims, the alternatives just reduce the amount of unnatural flow regime caused by the CVP/SWP operations by 40%. Other flow-related effects from reduced western and southern Delta tributary flows are completely unaddressed by any BDCP alternative. The new alternatives also fail to meet the criteria to restore the water supplies as the project results in very little additional water as compared to the No Action/No Project condition and fails to result in a restoration of water supplies to the previous D-1641 levels. The new alternatives of the BDCP do not restore water quality and in fact these alternatives	The Proposed Project is intended to provide a more reliable water supply, with diversions that are more protective for fish, in accordance with the Delta Reform Act co-equal goals of improving water supply reliability and Delta ecosystem health. Please refer to Master Response 31 (Compliance with the Delta Reform Act). DWR's fundamental purpose of the proposed project is to make physical and operational improvements to the SWP system in the Delta necessary to restore and protect ecosystem health, water supplies of the SWP and CVP south of the Delta, and water quality within a stable regulatory framework, consistent with statutory and contractual obligations. By establishing a point of water diversion in the north Delta and new operating criteria, the proposed project is designed to establish a more natural east-west flow for migratory fish, improve habitat conditions, and allow for greater operational flexibility. Please refer to Master Response 3 (Purpose and Need). It is projected that water deliveries from the federal and state water projects under a fully-implemented California Waterfix project would be about the same as the average annual amount diverted in the last 20 years.  The alternatives included in the Draft EIR/EIS and Final EIR/EIS represent a legally adequate reasonable range of alternatives and the scope of the analysis of alternatives fully complies with both CEQA and NEPA. The Lead Agencies carefully considered all potential alternatives that were proposed during the scoping process and during the time of preparation of the EIR/EIS. In fact, as a direct result of the extensive public comments and agency input, the water facility and conveyance options proposed as part of the project changed significantly during the planning process in ways that reduce impacts to the Delta communities. Additional unique alternatives that were proposed during review of Administrative Drafts of the BDCP and EIR/S were also considered and described. See Appendix 3A of the EIR/EIS and Section 4 of the RDEIR/SDEIS. Please also refer to Master Response 4 (Alternatives), Master Response 14 (Water Quality),

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		<p>precipitate some potentially catastrophic impacts on water quality that were determined to be significant and unavoidable by the BDCP EIR/S. Other significant water quality impacts caused by the alternatives were incorrectly omitted from the findings of the EIR/S, e.g., dissolved oxygen, algal blooms, selenium, bromine, etc.</p> <p>The new alternatives do not include an HCP/NCCP, so these alternatives do not result in any regulatory assurances or stability as new listed species could constrain operations or require new actions to mitigate at any time. The new alternatives that do not include the NCCP are not consistent with the requirements 2009 Delta Reform Act as the act requires the BDCP to include a NCCP. These new BDCP alternatives [are] not only inconsistent with the requirements of this law, but [are] in outright violation of it. The new alternatives fail to comply with existing statutory and contractual obligations of the CVP/SWP in at least two fundamental ways. The BDCP clearly triggers the necessity to update the Coordinated Operating Agreement, but the BDCP has not included this contractual obligation consideration in the project analysis or disclosure- see related comments. The new BDCP alternatives no longer include implementation of the current CVP/SWP OCAP [Operation Criteria and Plan] BO [Biological Opinion] RPA [Reasonable and Prudent Alternative] statutory obligations in their scope and they defer the compliance with these CVP/SWP obligations to some future, as yet to be initiated, other project.</p> <p>In summary, the new BDCP project alternatives do not restore habitat, do not protect ecosystems, do not restore water supply, do not restore water quality (and in fact degrade it), do not result in a stable regulatory framework, [are] not consistent with existing laws and statutes and fail to fulfill several essential existing contractual obligations of the project. Out of the 7 components of the Project Objectives identified, the new BDCP project alternatives fail to reasonably meet every single one of them. These new alternatives should have never been advanced to full analysis in the EIR/S and should, by any reasonable or consistently applied standard, never have passed the alternatives screening process. Other previously identified alternatives that more reasonably meet the project objectives should have been advanced for full analysis in the EIR/S before these other current BDCP alternatives.</p>	<p>and Master Response 45 (Permitting). Also see response to comment 2651-3 regarding the relationship to the existing BiOps.</p>
2651	31	<p>November 2013 BDCP EIR/S, page 2-3, line 1: "The fundamental purpose, in turn, gives rise to the following project objectives, which were presented in the Notice of Preparation for this EIR: Respond to the applications for incidental take permits [ITPs] for the covered species that authorize take related to:</p> <ol style="list-style-type: none"> <li>1. The operation of existing SWP Delta facilities and construction and operation of facilities for the movement of water entering the Delta from the Sacramento Valley watershed to the existing State Water Project (SWP) and Central Valley Project (CVP) pumping plants located in the southern Delta;</li> <li>2. The implementation of any conservation actions that have the potential to result in take of species that are or may become listed under the ESA, pursuant to the ESA at [Section] 10(a)(1)(B) and its implementing regulations and policies;</li> <li>3. The diversion and discharge of water by Mirant LLC for power generation in the Western Delta."</li> </ol> <p>The new BDCP alternatives fail to reasonably meet these project objectives. The new alternatives do not include "covered species" as they are not HCP/NCCPs. The BDCP EIR/S</p>	<p>Since the time of the Draft EIR/EIS, DWR and Reclamation have circulated for public review a partially recirculated draft EIR/supplemental draft EIS (RDEIR/SDEIS) which presents 3 new alternatives that do not include an HCP/NCCP. The RDEIR/SDEIS discloses slightly revised project objectives and purpose and need statement which Alternatives 4A, 2D and 5A have been determined to meet. Please refer to Chapter 2, Project Objectives and Purpose and Need of this Final EIR/EIS. Modification to the SWP are limited to facility changes in the Delta with no changes to operating criteria for upstream storage reservoirs. The California Water Fix Biological Assessment has been prepared under Section 7 of the ESA versus pursuing and HCP/NCCP under ESA Section 10. These documents provide ample detail about the potential effects and benefits of the California WaterFix which will be considered during project approval and the ESA/CESA permitting process. Please refer also to Master Response 3, Purpose and Need and Master Response 4, which addresses development of Alternatives.</p>

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		<p>does not address impacts of large portions of the CVP/SWP system, e.g., reservoirs, upstream effects above reservoirs, south-of-Delta conveyance operations and leakage, service area water delivery (e.g., salt accumulation) and downstream of service area drainage impacts. Because these impacts of the ongoing operations of the CVP/SWP are not evaluated, disclosed, characterized, quantified, avoided, minimized or mitigated by the BDCP project, the EIR/S may not be used as the basis to justify issuance of ITPs on the existing CVP/SWP operations. The ITPs based on the BDCP EIR/S can only cover what is evaluated in the EIR/S and that would be the proposed project and impacts within the Delta. In the objective to have ITPs that cover the existing and ongoing CVP/SWP impacts and the rest CVP/SWP infrastructure, the BDCP fails to meet this project objective. The new alternatives still pump 60% of the diversions from the south delta and the project has done nothing to mitigate for these ongoing impacts nor have the alternatives included any substantial compensatory actions to make up for these ongoing impacts.</p> <p>Given the ongoing impacts to fisheries from the proposed south Delta operations and the lack of mitigations for these impacts, the BDCP should not be awarded ITPs on the proposed new facilities or operations either. Mirant does not appear to be in the new alternatives so this criteria is failed as well. Out of the 3 criteria here, the new BDCP alternatives fail all 3 so these alternatives never should have been advanced for analysis in the EIR/S and the lead and responsible agencies must not approve alternatives that do not meet the stated project objectives.</p>	
2651	32	<p>November 2013 BDCP EIR/S, page 2-3, line 14: "To improve the ecosystem of the Delta by:</p> <ol style="list-style-type: none"> <li>1. Providing for the conservation and management of covered species through actions within the BDCP Planning Area that will contribute to the recovery of the species; and</li> <li>2. Protecting, restoring, and enhancing certain aquatic, riparian, and associated terrestrial natural communities and ecosystems.</li> <li>3. Reducing the adverse effects to certain listed species of diverting water by relocating the intakes of the SWP and CVP."</li> </ol> <p>The new BDCP alternatives do not contain actions that contribute to species recovery. The habitat restorations included in these new alternatives are only sufficient to mitigate for the impacts of implementing the project and have no component that contributes to conservation or restoration of the affected species. The new alternatives do not "protect" or "restore" or "enhance." The third objective is flawed and is predecisional. It is appropriate to say that an objective is for the project to reduce the impacts of water diversions. It is highly inappropriate for a project objective to predecisionally dictate how that objective would be accomplished as it precludes other and potentially better and more effective methods of achieving the objective. The BDCP has been consistent in the implementation of this predecisional bias. Yes, relocating the intakes is potentially one method of reducing the impacts of water diversions, although the locations selected by the BDCP just move the point of impact and do not change the nature of the impacts. The new diversion location exposes more salmonids to the diversion operations than the existing south Delta facilities. The new diversion locations are still within the range of critical habitat for the Delta and longfin smelt so those species are still impacted by diversion operations. The BDCP EIR/S failed to demonstrate or conclude specifically that the relocated intakes resulted in a reduction of adverse effects to the listed species so the new alternatives failed to meet this</p>	<p>Please see the discussion in Section 1, Introduction, of the RDEIR/SEIS regarding the new sub-alternatives incorporating an alternative implementation strategy to achieve the project goals and objectives, focusing on the conveyance facility improvements necessary for the SWP and CVP to address more immediate water supply reliability needs in conjunction with ecosystem improvements to significantly reduce reverse flows and direct fish species impacts associated with the existing south Delta intakes. The effects of the new sub-alternatives were analyzed in in the resource chapters of the Finale EIR/EIS, and mitigation measures are included as necessary and feasible. Master Response 4 describes the development and evaluation of alternatives. Chapter 11 describes the effects of the alternatives on aquatic resources. The proposed NDD are located outside the main range for Delta and longfin smelt. Any effects to Delta Smelt critical habitat are addressed through the ESA consultation process, and longfin smelt are not federally listed and therefore do not have designated critical habitat.</p>

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		<p>project objective.</p> <p>Further, due to the predecisional outcome of this project objective, the BDCP also failed to consider other alternatives that would have successfully reduced diversion operation effects on listed species. It is impossible for the BDCP to refute that improvements at the south Delta diversions, e.g., fish screens, behavioral devices to steer fish away from the intakes and improved fish salvage equipment and processes would not also result in a reduction in the effects of diversion operations on listed fish species. In fact, the modification of the existing diversion facilities to reduce water diversion impacts more reasonably meets this project objective than moving the intake locations as under the new alternatives with the new intake locations, the old unimproved south Delta intakes are still operated 60% of the time.</p>	
2651	33	<p>November 2013 BDCP EIR/S, page 2-3, line 21: "Restore and protect the ability of the SWP and CVP to deliver up to full contract amounts, when hydrologic conditions result in the availability of sufficient water, consistent with the requirements of state and federal law and the terms and conditions of water delivery contracts and other existing applicable agreements."</p> <p>All of the BDCP alternatives considered to date fail to meet this project objective. None of the alternatives yield substantially more water deliveries than the No Action/No Project and none of them make any significant progress to restoring deliveries to D-1641 quantities. The water supply is not protected from disruption or reduction in quantity from new and additional environmental compliance operational constraints as the new BDCP alternatives do not include an HCP/NCCP and therefore there are no regulatory assurances or stability from the BDCP project. The BDCP not only failed to meet this project objective with the current alternatives, but it failed to analyze the project alternatives proposed that would allow for this objective to be satisfied. These alternatives were for additional upstream and/or downstream water storage which would allow this objective to be achieved. Additional storage is the only strategy identified that does meet this objective and with the inclusion of other components to these alternatives, e.g., south Delta diversion fish screen improvements, [is] successful in meeting all the project objectives and screening criteria. The BDCP must include these water storage alternatives as there is no reasonable or equally applied screening criteria that preclude them.</p>	<p>All of the alternatives evaluated in the EIR/EIS would only divert water under existing water rights which were issued to DWR and Reclamation by the State Water Board with consideration for senior water rights and Area of Origin laws and requirements. The proposed project does not seek any new water rights nor reduction in total water rights issued to DWR and Reclamation. It is understood that water rights issued to DWR and Reclamation are not fully available in many years to deliver total contract amounts to SWP and CVP water users due to available water supplies and demands of senior water rights holders and regulatory requirements.</p> <p>The concept of providing increased predictability is part of the Project Objectives and Purpose and Need for the BDCP alternatives as indicated in Chapter 35, Glossary, of the Draft BDCP EIR/EIS, under the definition of "water supply reliability." This term is defined as "The occurrence of water supplies of sufficient quality and certainty to enhance or sustain a diverse portfolio of economic activity and ecosystem health and maintain quality of life." The alternatives were developed to deliver SWP and CVP water up to the upper limit of legal SWP and CVP contractual water amounts, with the understanding that full contract amounts would not be delivered on average for the alternatives considered in the BDCP EIR/EIS.</p> <p>The proposed project is not intended to serve as a state-wide solution to all of California's water problems, and it is not an attempt to address directly the need for continued investment by the State and other public agencies in water storage projects as well as agricultural and municipal/industrial water conservation, recycling, desalination, treatment of contaminated aquifers, or other measures to expand supply and storage. Please see Master Response 3 regarding purpose and need and Master Response 4 regarding alternatives.</p>
2651	34	<p>November 2013 BDCP EIR/S, page 2-3, line 27: "To ensure that the BDCP meets the standards for an NCCP by, among other things, protecting, restoring, and enhancing aquatic and terrestrial natural communities and ecosystems that support covered species within the Plan Area." The new BDCP alternatives do not include an NCCP, so they completely fail to meet this project objective. Other reasonable alternatives that must be considered that do meet this objective would be a NCCP that only covers aquatic species.</p>	<p>Please refer to Master Response 4 regarding Alternatives Development.</p>
2651	35	<p>November 2013 BDCP EIR/S, page 2-3, line 30: "To make physical improvements to the conveyance system in anticipation of rising sea levels and other reasonably foreseeable consequences of climate change." The BDCP alternatives partially satisfy this objective in that the north Delta intakes [are] somewhat less affected by sea level rise than the current south Delta intakes, but these alternatives still rely upon the south Delta intakes for 60% of their diversions so the amount of improvement in protection from sea level rise from these alternatives is modest at best and does absolutely nothing to improve the system to compensate for climate change. Further, the EIR/S is deficient in its analysis of this project</p>	<p>The Draft EIR/EIS included quantitative impact analyses of changes in conditions between Existing Conditions and the No Action Alternative and action alternatives due to climate change and sea level rise at Year 2060. The Final EIR/EIS included quantitative impact analyses of changes in conditions between Existing Conditions and the No Action Alternative and Alternatives 2D, 4A, and 5A due to climate change and sea level rise at Years 2025-2030 period.</p> <p>As described in the response to Comment 2651-33, the proposed project is not intended to serve as a state-wide solution to all of California's water problems, and it is not an attempt to address directly the need</p>

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		<p>purpose and need as future climate change and sea level rise are only qualitatively analyzed in the project Late Long Term (LLT). Best available science requires the BDCP to provide a quantitative analysis of LLT climate change and sea level rise impacts.</p> <p>An alternative that has been suggested many times which improves the system for both sea level rise and climate change is additional upstream and/or downstream storage. Additional upstream storage would allow for increased water capture of the lower snowfall component of precipitation. Downstream storage would allow large portions of water diversions to occur in periods of the year when diversion have the lowest environmental impacts and lowest operational constraints, e.g., "gulp" diversions occurring at peak flow events in the winter. Additional storage as a project alternative much more fully and reasonably meets this project objective.</p>	<p>for continued investment by the State and other public agencies in water storage projects as well as agricultural and municipal/industrial water conservation, recycling, desalination, treatment of contaminated aquifers, or other measures to expand supply and storage.</p>
2651	36	<p>November 2013 BDCP EIR/S, page 2-3, line 32: "To make physical improvements to the conveyance system that will minimize the potential for public health and safety impacts resulting from a major earthquake that causes breaching of Delta levees and the inundation of brackish water into the areas in which the SWP and CVP pumping plants operate in the southern Delta."</p> <p>All of the current BDCP alternatives only partially satisfy this project objective as none of them address the full CVP/SWP system vulnerabilities to earthquakes, i.e., California Aqueduct failures from the same (and more likely source) earthquakes they are worried about in the Delta, and they have traded one type of risk (levee failure) for another risk (conveyance tunnel failure). Further, the EIR/S is deficient in its analysis of this project purpose and need as the draft EIR/S does not include an analysis of the resilience of the conveyance system from a levee failure event or disclose the measures to avoid, minimize or mitigate the impacts from an earthquake event on the proposed project and alternatives. Without this statutorily required analysis, (California Water Code 85320(b)(2)(F)), it is impossible for the reader, decision-maker or the BDCP to determine if any of the alternatives meet this project purpose and need.</p> <p>A more robust alternative to satisfy this project objective would be to have additional upstream and/or downstream water storage. Downstream storage would give more reserves to draw from while the CVP/SWP was shut down from a catastrophic earthquake event and would be less vulnerable to aqueduct failures as the water supplies would be closer to the end users. Additional upstream could be used to flush the Delta to restore fresh water to diversion locations rather than waiting for natural hydrologic conditions to occur that would accomplish this flushing. The storage alternative much more fully and reasonably meets this project objective and any of the current alternatives. Additional storage could also be complimented with levee improvements and improvements to the aqueducts.</p>	<p>The proposed project and most of the alternatives have been determined to meet the objective cited in this comment. Creation of a new point of diversion on the Sacramento River will provide a redundant system that could be operated in the event that a seismic event creates water quality conditions in the southern and western Delta that would preclude operating the current export pumping system. It is acknowledged that damage to other portions of the SWP and CVP system could result in effects on operation of the system; however, implementation of the proposed project would not interfere with potential maintenance and upgrading activities to address earthquake risks to other parts of the SWP/CVP conveyance system. Regarding analyzing an alternative with more storage capacity, please refer to Appendix 3A describing the conveyance facility screening and Master Response 4 related to development of alternatives.</p>
2651	37	<p>November 2013 BDCP EIR/S, page 2-3, line 36: "To develop projects that restore and protect water supply and ecosystem health and reduce other stressors on the ecological functions of the Delta in a manner that creates a stable regulatory framework under the ESA and NCCPA." The new BDCP alternatives do not include "other stressors," conservation measures or a NCCP (or a stable regulatory framework), so they completely fail to meet this project objective and should not have been included as alternatives in the EIR/S. None of the BDCP alternatives restore or protect water supply or the ecosystem. Out of the 6 components of the objective, the current BDCP proposed project does not reasonably meet</p>	<p>Please refer to Master Response 4 regarding Alternatives Development.</p>

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		any of them. The original BDCP alternatives only partially satisfy 3 out of the 6 components of this project objective.	
2651	38	<p>November 2013 BDCP EIR/S, page 2-4, line 1: "To identify new operations and a new configuration for conveyance of water entering the Delta from the Sacramento River watershed to the existing SWP and CVP pumping plants in the southern Delta by considering conveyance options in the north Delta that can reliably deliver water at costs that are not so high as to preclude, and in amounts that are sufficient to support, the financing of the investments necessary to fund construction and operation of facilities and/or improvements."</p> <p>This project objective is predecisional. The objective should state that the project solution must be economically viable, yes. The objective is predecisional in that it mandates a specific approach to satisfying the objective to satisfying the criteria of economic viability of the project. This predecisional bias precludes adequate and full consideration of other project alternatives that may have lower costs, higher water delivery yields, and lower environmental, social and community impacts. Since the current proposed project and all of the other project alternatives evaluated to date result in little to no additional water delivered, but are extremely expensive (\$24 - \$65 billion depending on the estimate), the incremental cost of the additional water delivered (\$6,000- \$8,000/AF [acre-foot] by some estimates) by the project fails to meet this project objective. The BDCP must consider other project alternatives which may yield a better economically viable project. This would require both a less expensive project and one which yields more water. The proposed alternative of criteria fish screens at the south Delta pumps would definitely be less expensive than any other current projects and with criteria screens and fish salvage the operational constraints on the CVP/SWP would be reduced such that additional water delivery yields are likely. This alternative must be given full consideration as it is more likely and reasonably to meet this project objective than any of the current alternatives under consideration by the BDCP.</p>	<p>The current estimated cost of the project is approximately \$15 billion. No decisions have been made with regards to funding or economic feasibility for each of the public water agencies that would need to finance the project. Additionally, this is not a CEQA or NEPA issue. Please also see Master Response 4 regarding alternatives.</p>
2651	39	<p>November 2013 BDCP EIR/S, page 2-4, line 13: "The purposes of the proposed actions are to achieve the following.</p> <ol style="list-style-type: none"> <li>1. Consider the applications for incidental take permits for the covered species that authorize take related to the actions listed below. <ol style="list-style-type: none"> <li>a. The operation of existing SWP Delta facilities.</li> <li>b. The construction and operation of facilities and/or improvements for the movement of water entering the Delta from the Sacramento Valley watershed to the existing SWP and CVP pumping plants located in the southern Delta.</li> <li>c. The implementation of any conservation actions that have the potential to result in take of species that are or may become listed under the ESA, pursuant to the ESA at section 2110(a)(1)(B) and its implementing regulations and policies."</li> </ol> </li> </ol> <p>The new BDCP alternatives fail to reasonably meet these project purposes. The new alternatives do not include "covered species" as they are not HCP/NCCPs. Purpose 1a) does not make sense as a federal purpose. The federal purpose cannot be for the continued operation and permitting of a state facility. Further, the EIR/S fails to accomplish this purpose anyway. The BDCP EIR/S does not address impacts of large portions of the CVP/SWP system, e.g., reservoirs, upstream affects above reservoirs, south-of-Delta</p>	<p>The project objectives and purpose and need are included in Final EIR/EIS Chapter 2. The project purpose and need have been modified and the CWF action alternatives that were developed to meet these objectives and as indicated in the 2015 RDEIR/SEIS and Final EIR/EIS Alternative 4A has been identified as the preferred alternative.</p> <p>The purpose and need statement indicates that the federal action includes increasing the operational flexibility of the Central Valley Project and to improve the existing water conveyance system to respond to the increased demands upon and risks to water supply reliability, water quality, and the aquatic ecosystem.</p> <p>Similarly, the project objectives indicate that the project would improve the SWP and CVP conveyance that have the potential to result in take of species listed under the ESA and CESA and improve the Delta ecosystem by diverting water through establishing additional points of diversion.</p> <p>The effects of the alternatives, as defined, are evaluated using the appropriate NEPA and CEQA baselines. Both baselines generally include the ongoing operation of the CVP and SWP. The comparison of the existing conditions (CEQA baseline) to the No Action Alternative (NEPA baseline) provides an analysis of the effects of continued operation of the CVP and SWP. See Master Response 1 regarding the baselines used for evaluation.</p> <p>Master Response 3 provides and overview of the initial development of the project's purpose and need and Master Response 8 addresses the scope of the alternatives evaluated. Also see response to comment 2651-3 regarding the take sought for ESA and CESA compliance. See also Master Response 29 regarding the</p>

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		<p>conveyance operations and leakage, service area water delivery (e.g., salt accumulation) and downstream of service area drainage impacts. Because these impacts of the ongoing operations of the CVP/SWP are not evaluated, disclosed, characterized, quantified, avoided, minimized or mitigated by the BDCP project, the EIR/S may not be used as the basis to justify issuance of ITPs [incidental take permits] on the existing CVP/SWP operations. The ITPs based on the BDCP EIR/S can only cover what is evaluated in the EIR/S and that would be the proposed project and impacts within the Delta. In the objective to have ITPs that cover the existing and ongoing CVP/SWP impacts and the rest CVP/SWP infrastructure, the BDCP fails to meet this project purpose. The new alternatives still pump 60% of the diversions from the south Delta and the project has done nothing to mitigate for these ongoing impacts nor have the alternatives included any substantial compensatory actions to make up for these ongoing impacts.</p> <p>Given the ongoing impacts to fisheries from the proposed south Delta operations and the lack of mitigations for these impacts, the BDCP should not be awarded ITPs on the proposed new facilities or operations either. Purpose 1c): The new alternatives are not HCP/NCCPs so the project is not covered for ITP of species that may become listed under the ESA. Out of the 3 project purposes here, the new BDCP alternatives fail all 3 so these alternatives never should have been advanced for analysis in the EIR/S and the lead and responsible agencies must not approve alternatives that do not meet the stated project purposes.</p>	<p>Endangered Species Act and Master Response 45 regarding permitting.</p>
2651	40	<p>November 2013 BDCP EIR/S, page 2-4, line 23: "2. Improve the ecosystem of the Delta by implementing the actions listed below.</p> <p>a. Providing for the conservation and management of covered species through actions within the BDCP Planning Area that will contribute to the recovery of the species.</p> <p>b. Protecting, restoring, and enhancing certain aquatic, riparian, and associated terrestrial natural communities and ecosystems.</p> <p>c. Reducing the adverse effects on certain listed species due to diverting water."</p> <p>a) The new BDCP alternatives do not contain actions that contribute to species recovery. The habitat restorations included in these new alternatives are only sufficient to mitigate for the impacts of implementing the project and have no component that contributes to conservation or restoration of the affected species.</p> <p>b) The new alternatives do not "protect" or "restore" or "enhance."</p> <p>c) Relocating the intakes is potentially one method of reducing the impacts of water diversions, although the locations selected by the BDCP just move the point of impact and do not change the nature of the impacts. The new diversion location exposes more salmonids to the diversion operations than the existing south Delta facilities. The new diversion locations are still within the range of critical habitat for the Delta and longfin smelt so those species are still impacted by diversion operations.</p> <p>The BDCP EIR/S failed to demonstrate or conclude specifically that the relocated intakes resulted in a reduction of adverse effects to the listed species so the new alternatives failed to meet this project objective. Further, due to the predecisional nature of the related CEQA project objective, the BDCP also failed to consider other alternatives that would have successfully reduced diversion operation effects on listed species. It is impossible for the</p>	<p>Please response to Letter 2651-32.</p>

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		<p>BDCP to refute that improvements at the south Delta diversions, e.g., fish screens, behavioral devices to steer fish away from the intakes and improved fish salvage equipment and processes would not also result in a reduction in the effects of diversion operations on listed fish species. In fact, the modification of the existing diversion facilities to reduce water diversion impacts more reasonably meets this project objective than moving the intake locations as under the new alternatives with the new intake locations, the old unimproved south Delta intakes are still operated 60% of the time.</p>	
2651	41	<p>November 2013 BDCP EIR/S, page 2-4, line 29: "3. Restore and protect the ability of the SWP and CVP to deliver up to full contract amounts, when hydrologic conditions result in the availability of sufficient water, consistent with the requirements of state and federal law and the terms and conditions of water delivery contracts held by SWP contractors and certain members of San Luis Delta Mendota Water Authority, and other existing applicable agreements."</p> <p>First, it is inappropriate for a federal purpose to be to restore and protect a state facility and operations. This purpose must be revised to one that has a federal nexus. All of the BDCP alternatives considered to date fail to meet this project purpose. None of the alternatives yield substantially more water deliveries than the No Action/No Project and none of them make any significant progress to restoring deliveries to D-1641 quantities. The water supply is not protected from disruption or reduction in quantity from new and additional environmental compliance operational constraints as the new BDCP alternatives do not include an HCP/NCCP and therefore there are no regulatory assurances or stability from the BDCP project.</p> <p>The BDCP not only failed to meet this project purpose with the current alternatives, but it failed to analyze the project alternatives proposed that would allow for this purpose to be satisfied. These alternatives were for additional upstream and/or downstream water storage which would allow this purpose to be achieved. Additional storage is the only strategy identified that does meet this purpose and with the inclusion of other components to these alternatives, e.g., south Delta diversion fish screen improvements, [is] successful in meeting all the project purpose and screening criteria. The BDCP must include these water storage alternatives as there is no reasonable or equally applied screening criteria that preclude them.</p>	<p>Please see response to comment 2651-33.</p>
2651	42	<p>November 2013 BDCP EIR/S, page 2-5, line 1: "The above Purpose Statement reflects the intent to advance the coequal goals set forth in the Sacramento-San Joaquin Delta Reform Act of 2009 of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem." The new BDCP alternatives do not treat habitat restoration and species conservation as a co-equal goal to water conveyance. The BDCP has foisted habitat and species conservation aspects of the original BDCP project to some other project, California EcoRestore, which has no schedule, staffing, or funding identified. The new BDCP alternatives not only completely fail this project purpose but it is in violation of the Reform Act because it no longer includes the required NCCP. The BDCP must consider an alternative that does meet this objective which would be an aquatic-only species NCCP. This alternative would be more co-equal goal and would not be in violation of the 2009 Delta Reform Act.</p>	<p>Alternatives 4A, 2D and 5A are consistent with the text referenced in the Draft EIR/EIS because they would provide for restoring, protecting and enhancing habitat effects related to the conveyance facility, terrestrial effects, and include similar operational criteria as presented for Alternative 4, 2A and 5, which are BDCP alternatives. The operational criterion included for 4A would maintain and improve Delta ecosystem functions for listed fish species. In addition, the text quoted from the Draft EIR/EIS was introductory text providing context for an explanation that purpose statement number 3 is not meant to imply that attaining full contract amounts is a requirement. Rather, contract amounts are the upper bound used to develop alternatives. It is not intended to imply that increased quantities of water would be delivered under the project.</p> <p>California EcoRestore will be implemented by the State and in some cases will allow for Delta habitat restoration at a more rapid pace than what would have been possible under the BDCP. A schedule and other information can be found at <a href="http://resources.ca.gov/ecorestore">http://resources.ca.gov/ecorestore</a>. The commenters also express an opinion that an aquatic-only species NCCP would better meet the co-equal goals but does not support this opinion. Please refer to Master Response 4 related to alternatives development for additional discussion of selection</p>

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			of EIR/EIS alternatives and Master Response 31 regarding compliance with the Delta Reform Act.
2651	43	November 2013 BDCP EIR/S, page 2-5, line 7: "As indicated by the "up to full contract amounts" phrase, alternatives need not be capable of delivering full contract amounts on average in order to meet the project purposes. Alternatives that depict design capacities or operational parameters that would result in deliveries of less than full contract amounts are consistent with this purpose." Yes, but in order to reasonably meet the intent of this project purpose the alternatives must consistently and reliably deliver more water than the No Action/No Project alternatives. All of the BDCP alternatives fail to reasonably meet this purpose as they do not deliver significantly more (e.g., 10% more like other flow-related significance criteria) water than the No Action/No Project.	The lead agencies believe that the 2013 Draft EIR/EIS and 2015 RDEIR/SDEIS are complete in their evaluation of impacts (using the best available science and modeling), direct and cumulative, that the project description is complete and satisfies the requirements of NEPA, and that the project objectives are also precise and complete and satisfy the requirements of CEQA. The lead agencies believe that the 2013 Public Draft EIR/EIS and 2015 RDEIR/SDEIS provided the public and decision-makers with sufficient information on which to make informed comments which have been considered and incorporated into the Final EIR/EIS. Please see Master Response 3 regarding the Purpose and Need, and Master Response 4 for additional information regarding the development of the project alternatives.
2651	44	November 2013 BDCP EIR/S, page 2-5, line 17: "There is an urgent need to improve the conditions for threatened and endangered fish species within the Delta." The new BDCP alternatives fail to meet this project need as the project does not contribute to the protection and restoration of fish species and habitat and in fact results in the degradation of water quality and adversely modifies designated critical habitat for listed fish species	The effects on water quality are evaluated in Chapter 8, and the effects of Alternative 4A, the preferred alternative, were found to be less than significant with mitigation, with the exception of methylmercury effects associated with the restoration proposed for Alternative 4A. The majority of the effects were less than significant without any mitigation. The effects on aquatic resources are described in Chapter 11. Similar to the conclusions for water quality, the analysis determined that none of the impacts on threatened or endangered species would be significant, and changing the point of diversion would reduce entrainment and improve flow conditions in several areas of the Delta. The effects on designated critical habitat are specifically evaluated in the BA, with mitigation proposed to offset these effects. The determination regarding adverse modification will be made by FWS and NMFS in their BIOps.
2651	45	November 2013 BDCP EIR/S, page 2-5, line 18: "Improvements to the conveyance system are needed to respond to increased demands upon and risks to water supply reliability, water quality, and the aquatic ecosystem." None of the BDCP project alternatives deliver significantly more water so they fail to meet this project need to respond to increased demands. The new BDCP alternatives do not include an HCP/NCCP so there is no assurance of water supply reliability from new environmental operational constraints from new listed species or from degradation in conditions to existing listed species so they fail to meet this project need. Water supply reliability from earthquake risk has only been partly addressed by any of the BDCP alternatives (only addressed risks in the Delta and not elsewhere and shifted one source of risk for another new risk) and could be better and more fully addressed by other project alternatives (upstream and downstream storage). All of the BDCP project alternatives result in a degradation to water quality as compared to the No Action/No Project so they all fail this project need. The new BDCP alternatives do not respond to increased demands on the aquatic ecosystem as the project makes no improvements to the system other than just mitigating the impacts from implementing the project so these alternatives also fail to meet this project need.	The proposed project provides benefits to listed species. It would enable DWR to construct and operate new conveyance facilities that improve conditions for endangered and threatened aquatic species in the Delta while at the same time improving water supply reliability, consistent with California law (see, e.g., Cal.Wat. Code, § 85001[c]). Implementing the conveyance facilities would help resolve many of the concerns with the current south Delta conveyance system, and would help reduce threats to endangered and threatened species in the Delta, including entrainment at the south Delta export facilities. For instance, implementing a dual conveyance system would align water operations, and their location, to better reflect natural seasonal flow patterns by creating new water diversions in the north Delta equipped with State-of-the-art fish screens, thus reducing reliance on south Delta exports during times of the year when listed aquatic species are present and most vulnerable.  In addition, the proposed project would restore and protect the ability of the SWP and CVP to deliver up to full contract amounts, when hydrologic conditions result in the availability of sufficient water, consistent with the requirements of state and federal law and the terms and conditions of water delivery contracts and other existing applicable agreements. A dual conveyance system would help protect against the future risks of climate change, sea level rise, and seismic impacts, thus increasing the resiliency and reliability of the water supply. For more information on seismic risks, please see Appendix 6A, and Appendix 3E, Potential Seismic and Climate Change Risks to SWP/CVP Water Supplies, in the FEIR/EIS.  Please see Master Response 4 regarding alternatives.
2651	46	November 2013 BDCP EIR/S, page 2-5, line 22: "Variability in the location and timing of flows, salinity, and habitat was common in the pre-European Delta. But for the past 70 years, the Delta has been managed as a tidal/freshwater system. During the same period, the ecological productivity for Delta native species and their habitats has been in decline."  There are a number of problems with these unsupported and misleading statements. First, the claim of variability in Delta conditions is unsupported by any scientific reference and	This comment questions text provided in Chapter 2, Project Objectives and Purpose and Need and suggests that additional evaluation of the cause of decline of Delta species over the last 15-20 years should be explored to a greater degree to inform potential alternatives to address these issues. Some of the major issues facing the Delta today are outlined in Appendix 1A, Delta Primer, including demand for water supply, Delta salinity, water quality, suspended sediments, Delta levees, land subsidence, the pelagic organism decline, fish entrainment and non-native species introduction. All of these issues have been considered in developing alternatives for the EIR/EIS, but not all of them are addressed by the California WaterFix which is

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		<p>since they are referring to 1840, they definitely did not directly observe these variations. What happened in 1945 to change Delta operations? This would be important to know as the next claim is that the Delta species have been in decline ever since. This BDCP claim is not really true anyway as some of the largest documented salmonid runs in the Central Valley have occurred since 1945. What is true but is not mentioned anywhere in the BDCP EIR/S is that there has been a significant acceleration of the decline of the Delta species in the last 15-20 years. Much more focus of the causal or coincidental changes that have occurred in the Delta since the beginning of the period of accelerated species decline needs to be identified, characterized and explored in the BDCP document and process. Certainly a number of factors changed during this period and each deserves individual evaluation so that their relationship to the impacts the project is seeking to address can be woven into the development of project alternatives which actually will benefit the species. Up to this point, the BDCP EIR/S analysis has only proven that the alternatives proposed to date all fail to significantly benefit the Delta species in decline.</p>	<p>focused on restoring and protecting ecosystem health, water supply of the SWP and CVP, and water quality within a stable regulatory framework. All of the action alternatives meet the project objectives and purpose and need statement to varying degrees and have been carried forward in the EIR/EIS, because they have been determined to meet the underlying purpose, project objectives and purpose and need. Refer to Master Response 3 (Purpose and Need) and Master Response 4 (Alternatives Development). Also see response to comment 2651-45.</p> <p>Additionally, the CWF includes an Adaptive Management Program that will be used to reduce uncertainty related to the project over time. Please see Master Response 33 for more information.</p>
2651	47	<p>November 2013 BDCP EIR/S, page 2-5, line 25: "Removal of much of the variable pre-European heterogeneous mix of fresh and brackish habitats, necessary to support various life stages of some of the Delta native species, has had a limiting effect on the diversity of native habitat within the Delta. In addition, urban development, large upstream dams and storage reservoirs, diversions, hydraulic mining, and the development of a managed network of navigation, flood control, and irrigation canals have all affected water flow patterns and altered fish and wildlife habitat availability. Most of the original tidal wetlands and many miles of sloughs in the Delta were removed by channelization and levee construction between the 1850s and 1930s."</p> <p>Right. Species decline did not begin to occur until approximately 1945 which is 15 years after the physical modifications to the Delta were completed in their vast majority. If these physical modifications which were largely complete well before 1930 were substantial contributing factors to the species decline, it would have been apparent in less than a 15-year lag time. Salmonids, perhaps one of the most easily tracked populations due to spawning counts and their economic importance, have a 3-year life cycle so it would be at least 5 generations (cohorts) of fish that would have occurred between the last large physical modifications and the on-set of documented Delta species decline. The BDCP has been focused on physical restoration of habitat when clearly this is not the original causal factor to the species decline. Although the supposition is correct that there is less habitat now than before, it is not the cause of the decline and it is not the-limiting factor to the recovery of these species now.</p> <p>The BDCP is correct to focus on Delta species decline as a need for the project but it is incorrect in assuming that the quantity of habitat available is the cause of it that needs to be remedied. The BDCP needs to focus on the factors that are actually degrading the Delta species, not just the easy to identify ones. More focus should be placed on the coincidence of the species decline and the increase in the volumes of CVP/SWP diversions and strategies to fully restore the Delta species from those effects. One obvious approach to addressing this CVP/SWP impact and the need to address the species decline is to put full criteria fish screens on the south Delta diversions. We [Central Delta Water Agency] are in agreement in the need to address the Delta species decline, but we disagree with the flawed and self-contradictory assumption by the BDCP that habitat quantity is a causal factor in the current species decline. The BDCP must refocus the response to this need to other factors that are more closely temporally correlated with change that coincide with the increase in</p>	<p>The preferred alternative, 4A, does not propose substantial tidal restoration. However, habitat loss has been identified as one of several important stressors on Delta fish and wildlife. The operational criteria proposed for Alternative 4A are meant to minimize and avoid effects on listed fish species, and provide for reduced effects of the south Delta facilities. Other stressors are outside the scope of this project. Please also see Master Response 4 regarding alternatives and Master Response 23 regarding other stressors.</p>

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		the rate of decline of the Delta species. These would include: increased CVP/SWP pumping volumes, reduced tributary flows from western and southern Delta tributary flow contributions, hormones and nitrites in waste water discharges, exotic and invasive species, hatcheries, etc.	
2651	48	November 2013 BDCP EIR/S, page 2-6, line 3: "Fishery resource changes may be attributable to numerous factors, including water management systems and facilities, water quality/chemistry alterations, and nonnative species introductions." Here is a whole list of project needs to address the species decline, but the new BDCP project alternatives addresses only one of them and only partially at that. The new BDCP alternatives do not do anything to address nonnative species introductions and actually makes water quality and chemical alterations worse than the No Action/No Project conditions. The BDCP alternatives do propose to create new facilities with new impacts to these declining species, but they fail [to] provide any improvement to the existing south Delta facilities which have been widely accepted as a major contributor to the species decline and the project alternatives still propose to utilize those facilities for 60% of their water diversions. Clearly even this component of meeting a project need is a failure, as only partially improving the impacts on only 40% of the volume of the diversions cannot be considered reasonably meeting the project need.	Please see responses to comments 2651-43 and 2651-47. By establishing a point of water diversion in the north Delta and new operating criteria, the proposed project is designed to improve native fish migratory patterns and allow for greater operational flexibility.
2651	49	November 2013 BDCP EIR/S, page 2-6, line 7: "The distribution of precipitation and water demand in California is unbalanced. Most of the state's precipitation falls in the north, yet substantial amounts of water demand are located south and west of the Delta, including irrigation water for southern Central Valley agriculture, and municipal and industrial uses in Southern California and the Bay Area." Yes, this is the core of the water supply need, more water falls in the north and we use more in the south. That is why the project must consider upstream and downstream storage as a project alternative. Additional storage much more directly and completely addresses this core and fundamental need of water supply. An upstream storage can capture more of the precipitation that falls in the north and allow for release when it is needed and southern storage allows the stockpiling of water where it is needed and for when it is needed. Additional storage allows operations of the Delta component of the CVP/SWP at times of year that have reduced environmental conflicts, impacts and operational constraints. An additional storage alternative much more directly completely satisfies this water supply project need than some largely ineffectual replumbing of the Delta that has proven not to adequately address this core water supply project need.	The proposed project is not intended to serve as a state-wide solution to all of California's water problems, and it is not an attempt to address directly the need for continued investment by the State and other public agencies in water storage projects as well as agricultural and municipal/industrial water conservation, recycling, desalination, treatment of contaminated aquifers, or other measures to expand supply and storage. Please see Master Response 4 regarding the alternatives.
2651	50	November 2013 BDCP EIR/S, page 2-6, line 16: ". . . the USFWS and NMFS Biological Opinions [BO], including the Reasonable and Prudent Alternatives [RPA]. . ." DWR and Reclamation have not complied with the vast majority of the current OCAP [Operations, Criteria, and Plan] BO RPAs. There is a very significant unstated need for this project and that is for the CVP/SWP to become completely compliant with these legal and current obligations of the project. The BDCP has always claimed that compliance would come through the implementation of the BDCP, but the new BDCP alternatives do not include actions that satisfy this project need. The new project alternatives also fail this critical project need. The lead and responsible agencies must not approve a project or issue permits based on an alternative that fails to result in compliance with the OCAP BO RPAs.	Current operations are compliant with the existing BiOps and several other physical improvements (i.e., habitat restoration) are underway. The CWF in no way interferes with this compliance and provides the same or more protective operational criteria than the existing BiOps. New BiOps would be required and DWR and Reclamation would comply with any conditions included in those BiOps.
2651	51	November 2013 BDCP EIR/S, page 2-6, line 18: "Regulations for the combined SWP and CVP operations are intended to protect the beneficial uses of Delta water, which include municipal, industrial, and agricultural water uses, fish and wildlife uses, environmental	The statement refers to the existing regulations currently applicable to CVP and SWP operations. Please refer to Master Response 14 regarding assessment of water quality degradation in the EIR/EIS, and the relevance of federal and state antidegradation policy considerations in the CEQA/NEPA process. None of the

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		<p>protection, flood management, navigation, water quality, power, and recreation." There is not a single one of these beneficial uses of water that are not degraded by each and every of the alternatives considered by the BDCP as compared to the No Action/No Project. The frequency, duration, magnitude and geographic extent of water quality exceedances increases under every alternative as compared to the No Action/No Project.</p> <p>These "significant and unavoidable" (and unmitigated) water quality exceedances degrade the beneficial uses of water supply for municipal, industrial, agricultural, recreation, wildlife, and fisheries. The BDCP alternatives all have structures constructed in navigable waters so each and every one of the BDCP project alternatives degrades navigation beneficial uses of water. The BDCP alternatives change the timing of CVP/SWP reservoir water releases to increase in the spring when less hydroelectric power is needed and are reduced in the summer when more hydroelectric power is needed so the BDCP degrades the power-related beneficial uses of water. The BDCP degrades flood protection beneficial uses of water by reducing channel capacities with in-water and in-floodplain construction (and vegetation), and redirected flood risks from levee alterations and tunneling vibration risk of levee failure. The protection of beneficial uses of water is a primary need of the BDCP project but all of the alternatives fail to meet this criteria as they all result in a degradation of beneficial uses of water.</p>	<p>water quality effects of Alternative 4A are significant and unavoidable. The other issues raised in the comment have been evaluated in various resource chapters of the EIR/EIS. See also Section 8.2.1.3 of Chapter 8, Water Quality, of the EIR/EIS for a description of the federal antidegradation policy and Section 8.2.2.6 of Chapter 8, Water Quality, of the EIR/EIS for a description of the state antidegradation policy.</p>
2651	52	<p>November 2013 BDCP EIR/S, page 2-6, line 22: "The water rights of the SWP and CVP are conditioned by the State Water Board to protect the beneficial uses of water within the Delta under each respective project's water rights." Correct, and as junior water rights holders, CVP/SWP operations are not allowed to impair the water rights of senior water rights holders. Under the existing conditions the CVP/SWP routinely violate water quality standards which impair the suitability of irrigation water quality of senior water rights holders. Under the proposed project and all of the alternatives, the BDCP would increase the frequency, severity, duration and number of affected parties with their new operations increased rate of water quality violations. The current project and all of the BDCP alternatives fail to meet this project need.</p>	<p>All of the alternatives evaluated in the EIR/EIS would only divert water under existing water rights which were issued to DWR and Reclamation by the State Water Resources Control Board with consideration for senior water rights and Area of Origin laws and requirements. The proposed project does not seek any new water rights nor reduction in total water rights issued to DWR and Reclamation. The CALSIM II model assumptions used in the EIR/EIS impact analysis prioritize water releases from the SWP and CVP reservoirs to meet Delta outflow and water quality criteria above other water uses. Then, water demands for senior water rights are met prior to deliveries to SWP and CVP water contractors. Master Response 14 further describes the water quality assessment. Additionally, the SWRCB is currently conducting hearings relative to the change in point of diversion petition submitted by DWR and Reclamation.</p> <p>SWP/CVP operators have had a high degree of success in meeting all operative water quality standards since 1978. Even though rare instances of water quality exceedances have occurred, these instances have been due to factors beyond the SWP/CVP's reasonable control. With the North Delta Diversion, the SWP/CVP still will be required to meet all salinity and flow objectives regardless of which diversion location is being used. See also Master Response 28 regarding operational criteria.</p>
2651	53	<p>November 2013 BDCP EIR/S, section 2.5.3: The "need" that is missing from this discussion is that the CVP/SWP "needs" to stop operationally violating water quality standards. The BDCP must add this criteria to its project needs and the responsible agencies considering issuing permits on this project must not issue permits for a project that violates the law by exceeding water quality parameters. The analysis of all of the BDCP alternatives and the No Action/No Project demonstrate that the project does, will under the no action and under all alternatives continue to violate water quality standards, which literally cannot be permitted.</p>	<p>Operation of the SWP/CVP occurs in a dynamic and challenging environment. Among other things, SWP/CVP operations are adjusted in real time to compensate for hydrologic and tidal influences to ensure that SWP/CVP remain in compliance with the flow and water quality standards established by the State Water Resources Control Board to protect other legal users of water as well as the environment.</p> <p>The new CWF diversion locations will increase the options available to SWP/CVP operators and increase the flexibility to more effectively balance the Bay-Delta system in real-time to protect all beneficial uses of water whether for water supply, water quality, or fishery protection purposes.</p> <p>SWP/CVP operators have had a high degree of success in meeting all operative water quality standards since 1978. Even though rare instances of water quality exceedances have occurred, these instances have been due to factors beyond the SWP/CVP's reasonable control. With the North Delta Diversion, the SWP/CVP still will be required to meet all salinity and flow objectives regardless of which diversion location is being used.</p>

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			See also Master Response 28 regarding operational criteria and Master Response 14 regarding water quality.
2651	54	<p>The BDCP project is inconsistent with and is in direct conflict with existing policy and water code of the State of California. Water Code [Section] 85021: "The policy of the State of California is to reduce reliance on the Delta in meeting California's future water supply needs through a statewide strategy of investing in improved regional supplies, conservation, and water use efficiency." DWR and many of the municipal and agricultural water districts in the state are investing a huge proportion of their time and limited human and financial resources in the BDCP. If you were to sum the time and money that have gone into and are continuing to go into the planning efforts for the BDCP (\$250 million and counting) and compare it to the sum of all the water conservation and alternative water supply planning efforts for the rest of the state, the BDCP would be larger than all the other efforts combined. This distraction and level of effort is continuing even after the failure of the BDCP project to deliver in the first and second rounds of public draft EIR/S a single alternative that truly has less adverse impact than the No Action/No Project.</p> <p>The new BDCP alternatives fail to reasonably meet the stated Purpose and Need and Project Objectives of the BDCP. By all definitions for a planning process, the BDCP is a failed project but the lead agencies so far have refused to acknowledge this fact and to shut down the project. The BDCP is in conflict with the California Water Code. The BDCP project is in fact attempting to make the recipients of the water from the SWP and CVP systems even more reliant upon Delta exported water by taking time, human resources, motivation and available funding for projects that would reduce reliance on Delta water and would be consistent with this water code requirement. The BDCP is a failed project by every definition. The longer it takes for the state to admit that this is a failed project, the longer it thwarts the initiation of true efforts to address the problems in the Delta and the longer it will be before significant efforts to reduce reliance on Delta water resources to begin in earnest. The State and other lead and responsible agencies must shut down the BDCP project and redeploy the human resource talent and capital to projects which are consistent with this water code requirement to reduce reliance on Delta water supplies.</p>	<p>The EIR/EIS discusses regional demand management measures that occur independent of the proposed action in Appendix 1C, Demand Management Measures. Nothing in the California WaterFix would restrict pursuit of water supply demand management measures in California. With the introduction of the California WaterFix as the preferred CEQA/NEPA alternative in the RDEIR/SDEIS, the overall purpose of the project was modified slightly to "make physical and operational improvements to the system to restore and protect ecosystem health, water supplies of the SWP and CVP south of the Delta, and water quality within a stable regulatory framework, consistent with statutory and contractual obligations." The California WaterFix would be consistent with the stated project objectives and purpose and need as presented in Chapter 2 of the EIR/EIS. See Master Response 3 regarding purpose and need, Master Response 4 regarding development of alternatives, Master Response 5 regarding planning efforts, Master Response 6 regarding desalination and demand management, and Master Response 31 regarding compliance with the Delta Reform Act.</p>
2651	55	<p>The Draft Environmental Impact Statement (EIS) for the Coordinated Long-Term Operation of the Central Valley Project (CVP) and State Water Project (SWP) (ES.3, line 17) acknowledges that many of the provisions of the RPAs [Reasonable and Prudent Alternatives] identified in the biological opinions [BOs] require further study and monitoring and further environmental documentation necessary before any future facilities can be constructed or modified. The BDCP EIR/S is inconsistent with the OCAP [Operations Criteria and Plan] EIS in that the proposed project and new alternatives no longer include implementation of the OCAP BO RPAs prior to or concurrently with the construction of the proposed new conveyance facilities and modification of existing facilities related to water conveyance. The BDCP EIR/S proposed project must be made consistent with the OCAP BO EIS as these are concurrent documents with the same lead agencies and the OCAP BO is part of the baseline condition of the BDCP EIR/S. Therefore the assumption of RPA implementation prior to CVP/SWP modification and construction must take supremacy over the BDCP proposed project assumption of modifying existing and constructing new facilities prior to implementation of the OCAP BO RPAs.</p>	Please see response to comment 2651-50.
2651	56	<p>The BDCP is inconsistent with and in violation of the 2009 Delta Reform Act as it does not include a NCCP and is not CEQA compliant. As a result of the lack of conformance with the act, the BDCP does not qualify for state funding. The State must quit funding the BDCP</p>	See Master Response 5 regarding planning efforts and Master Response 31 regarding compliance with the Delta Reform Act. Funding is outside the scope of the EIR/EIS process.

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		project.	
2651	57	<p>California Water Code section 85320(b)(2)(F) requires the BDCP EIR to include analysis of "The resilience and recovery of Delta conveyance alternatives in the event of catastrophic loss caused by earthquake or flood or other natural disaster." In order to qualify to be potentially judged consistent with the Delta Stewardship Council Delta Plan, the BDCP must include this analysis. The BDCP has incorrectly deferred this analysis to the final EIR/S. Resilience of the CVP/SWP water supplies from Delta levee failures is one of the stated core rationale for the need of the BDCP project. The BDCP has failed to provide an analysis of Proposed Project and alternatives for this fundamental need of the project. How the CVP/SWP recovers from a levee failure event has impacts that must be disclosed in the BDCP EIR/S. The impacts to water supply, the environment and how the proposed conveyance interacts with and potentially exacerbates environmental impacts from a levee failure are material disclosures that are required that are missing from the revised public draft EIR/S. Avoidance, minimization and mitigation measures developed to improve conveyance alternative resilience to a levee failure will have environmental impacts that are currently not identified, described, evaluated or disclosed in the BDCP EIR/S. These material omissions of content required by the California Water Code must be included in a revised and recirculated public draft EIR/S.</p>	<p>Alternative 4A compatibility with the Delta Plan is included as Appendix 3J in the EIR/EIS. Chapter 29, Climate Change, addresses the resiliency of the project related to climate change and sea-level rise. Master Response 16 describes what could happen if a levee broke from a seismic or other event. Additional information is also provided in Appendix 3E, Potential Seismic and Climate Change Risks to SWP/CVP Water Supplies.</p>
2651	58	<p>The BDCP is not consistent with flow criteria for the Delta contained in "Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem Prepared Pursuant to the Sacramento-San Joaquin Delta Reform Act of 2009", SWRCB, August 3, 2010. "Water Code section 85086 (See Appendix B), contained in the Delta Reform Act, was enacted as part of the comprehensive package of water legislation adopted in November 2009. Water Code section 85086 requires the State Water Resources Control Board (State Water Board) to use the best available scientific information gathered as part of a public process conducted as an informational proceeding to develop new flow criteria for the Delta ecosystem to protect public trust resources. The purpose of the flow criteria is to inform planning decisions for the Delta Plan and the BDCP." (<a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/Deltaflow/docs/final_rpt080310.pdf">http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/Deltaflow/docs/final_rpt080310.pdf</a>, page 2, paragraph 1)</p> <p>The SWRCB developed the flow criteria as required by the Delta Reform Act, but the BDCP proposed alternatives operations are not consistent with this SWRCB flow criteria. The Delta Reform Act required the SWRCB to produce "flow criteria for the Delta"; it did not require the update of the Bay-Delta Plan. The BDCP must conform to the flow criteria in this document, not the Bay-Delta Plan in order to be compliant with the Delta Reform Act. The SWRCB considered these flow criteria to be necessary for the protection of fish in the Delta and any less flow regime proposed by the BDCP operations would be, by definition, not fully protective of fish species in the Delta.</p>	<p>As described in Appendix 3A, Identification of Water Conveyance Alternatives Conservation Measure 1, of the EIR/EIS, one of the potential alternatives considered was based upon the State Water Resources Control Board 2010 Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem, which described providing up to 75 percent of unimpaired flow into the Delta to improve aquatic resources habitat conditions. However, the report developed by the SWRCB was narrowly focused only on fish in the Delta, and no other beneficial uses were considered. This is inconsistent with the purpose and need of the project. Additionally, this potential alternative was not evaluated in detail because the flow recommendations in the 2010 report could not be achieved without adverse impacts to cold water management for fisheries in the Sacramento, Feather, and American rivers and reductions in non-SWP and non-CVP water rights diversions. The purpose and need of this EIR/EIS would not allow changes to non-SWP and non-CVP water rights. However, Alternatives 7 and 8 in the EIR/EIS reflect similar flow criteria in a manner that would only affect SWP and CVP water rights. Please see Master Response 4 regarding development of alternatives and Master Response 31 regarding compliance with the Delta Reform Act.</p>
2651	59	<p>Here is a comparison of the SWRCB recommended flow criteria to be protective of fish species in the Delta to the average flow conditions from the CVP/SWP that the BDCP proposes to perpetuate. "In order to preserve the attributes of a natural variable system to which native fish species are adapted, many of the criteria developed by the State Water Board are crafted as percentages of natural or unimpaired flows. These criteria include:</p> <p>-75% of unimpaired Delta outflow from January through June;</p>	<p>Please see response to comment 2651-58.</p>

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		<p>-75% of unimpaired Sacramento River inflow from November through June"</p> <p>"In comparison, historic flows over the last 18 to 22 years have been:</p> <p>-approximately 30% in drier years to almost 100% of unimpaired flows in wetter years for Delta outflows;</p> <p>-about 50% on average from April through June for Sacramento River inflows"</p> <p>(<a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/Deltaflow/docs/final_rpt080310.pdf">http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/Deltaflow/docs/final_rpt080310.pdf</a>, page 5)</p> <p>The BDCP proposed perpetuation of the historical flows above Freeport in the Sacramento River result in flows being 50% lower in April through June than the flow criteria specified by the SWRCB that are defined as being protective of Delta fish species. The BDCP proposes, however, to even further reduce Sacramento River flows below the north Delta intakes so that flows would be even less than these historical flow conditions in the Sacramento River reach between Hood and the confluence with the San Joaquin River. The Delta outflows under the BDCP alternatives are also 50% below the flow criteria deemed by the SWRCB to be necessary for protection of Delta fish species. Flows more than 50% lower than the SWRCB flow criteria to be protective of Delta fish species resulting from the BDCP. These BDCP flows obviously would not protective of Delta fish species and should be deemed unacceptable by the fisheries agencies charged with protection of these public trust resources.</p>	
2651	60	<p>"The flow criteria identified in this report highlight the need for the BDCP to develop an integrated set of solutions, to address ecosystem flow needs, including flow and non-flow measures. Although flow modification is an action that can be implemented in a relatively short time in order to improve the survival of desirable species and protect public trust resources, public trust resource protection cannot be achieved solely through flows -- habitat restoration also is needed. One cannot substitute for the other; both flow improvements and habitat restoration are essential to protecting public trust resources." (<a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/Deltaflow/docs/final_rpt080310.pdf">http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/Deltaflow/docs/final_rpt080310.pdf</a>, page 7, 5th paragraph)</p> <p>The BDCP does not address the ecosystem flow needs as defined by the Sacramento River flow SWRCB criteria of 75% of unimpaired; it makes them worse as compared to the existing condition and No Action/Project by diverting water at the north Delta intakes so average flows will be less than 50% of unimpaired flows below Freeport. The new BDCP alternatives do not include habitat restoration above and beyond the minimum required for compensatory mitigation to reduce some of the impacts to less than significant from significant and leaving other significant impacts as "unavoidable." All of the BDCP alternatives, especially the ones that do not restore habitat above compensatory mitigation levels, obviously do not meet the criteria defined by the SWRCB either by flow improvements or by habitat restoration.</p>	<p>Please see response to comment 2651-58.</p> <p>Alternative 4A also includes mitigation to reduce the effects of constructing and operating the conveyance facilities. The State is also implementing the California EcoRestore program, a related but separate program, to further improve the Delta ecosystem. EcoRestore would restore up to 30,000 acres of habitat in the Delta. See Master Response 4 regarding development of alternatives and Master Response 5 regarding planning efforts.</p>
2651	61	<p>The BDCP alternatives do not comply with the flow criteria or biological objectives contained in the CDFW document, "Quantifiable Biological Objectives and Flow Criteria for Aquatic and Terrestrial Species of Concern Dependent on the Delta Prepared pursuant to the Sacramento-San Joaquin Delta Reform Act of 2009". "In November 2009 the Legislature passed several bills focused on better protecting Delta resources. Senate Bill No. 1 (SB 1)</p>	<p>The CDFW flow criteria and biological objectives are recommendations, as opposed to criteria requiring compliance (in contrast to the Bay-Delta Water Quality Control Plan, for example). Note that the SWRCB is currently in the process of updating the Bay-Delta Water Quality Control Plan, which has a scope broader than the proposed project (Alternative 4A), and applies to all water users in the Delta, including the CVP and SWP. Once the updated WQCP is adopted, the CVP and SWP will be required to comply, even if the criteria</p>

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		<p>(Stats. 2009 (7th Ex. Sess.) Ch 5, [Section] 39) contains the Sacramento-San Joaquin Delta Reform Act of 2009 (Delta Reform Act) which establishes and requires the Delta Stewardship Council (DSC) to develop, adopt, and commence implementation of a comprehensive management plan for the Delta (Delta Plan) on or before January 1, 2012. To inform the planning processes of the Delta Plan and the Bay Delta Conservation Plan (BDCP), the Delta Reform Act requires that the State Water Resources Control Board (SWRCB) develop new flow criteria for the Delta ecosystem and that DFG [CDFW] identify quantifiable biological objectives and flow criteria for the species of concern in the Delta." (<a href="https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=25987">https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=25987</a>, pdf page 5, paragraph 3)</p>	<p>included in the WQCP are different than what is adopted for the BDCP/CWF. See also Master Response 28 regarding operational criteria.</p>
2651	62	<p>"Terrestrial Species Biological Goals</p> <p>-Achieve, first, recovery and then self-sustaining populations of the following at-risk native species dependent on the Delta, Suisun Bay and Suisun Marsh, with emphasis on valley elderberry longhorn beetle, Suisun ornate shrew, Suisun song sparrow, soft bird's-beak, Suisun thistle, Mason's lilaeopsis, Lange's metalmark butterfly, Antioch Dunes evening primrose, Contra Costa wallflower, and Suisun marsh aster.</p> <p>-Contribute to the recovery of the following at-risk native species in the Bay-Delta estuary and its watershed: Delta green ground beetle, giant garter snake, riparian brush rabbit, least Bell's vireo, California black rail, California clapper rail, bank swallow, western yellow-billed cuckoo, greater sandhill crane, Swainson's hawk, California yellow warbler, Delta tule pea, Delta mudwort, and Delta coyote thistle.</p> <p>-Protect and/or restore natural communities in the Bay-Delta Estuary and its watershed for ecological values such as supporting species, functional habitat types, and ecological processes." (<a href="https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=25987">https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=25987</a>, pdf page 6)</p> <p>The new BDCP alternatives do not include an NCCP or address any covered terrestrial species. The new BDCP alternatives propose to do nothing beneficial for these species beyond compensatory mitigation for the construction-related footprint impacts of the project to reduce their impacts from significant to less than significant.</p>	<p>The goal of the proposed environmental commitments, avoidance and minimization measures, and mitigation is to offset the project alternatives' impacts on the environment so that they are less than significant.</p> <p>Although Alternatives 4A, 2D, and 5A include only those habitat restoration measures needed to provide mitigation for specific regulatory compliance purposes, habitat restoration is still recognized as a critical component of the state's long-term plans for the Delta. Such larger endeavors, however, will likely be implemented over time under actions separate and apart from these alternatives. The primary parallel habitat restoration program, California EcoRestore (EcoRestore) will be overseen by the California Resources Agency and implemented under the California Water Action Plan. Under EcoRestore, the state will pursue restoration of more than 30,000 acres of fish and wildlife habitat by 2020. These habitat restoration actions will be implemented faster and more reliably by separating them from the water conveyance facility implementation.</p> <p>See also Master Response 4 regarding development of alternatives, Master Response 5 regarding planning efforts, and Master Response 17 and Chapter 12 regarding terrestrial biological resources.</p>
2651	63	<p>"Aquatic Species Biological Goals</p> <p>-Halt species population declines and increase populations of ecologically important native species, as well as species of commercial and recreational importance, by providing sufficient water flow and water quality at appropriate times to promote species life stages that use the Delta.</p> <p>-Establish water flows through the Delta that will likely benefit particular species, community or ecosystem functions in a manner that is: (1) comprehensive, (2) not overly complex, and (3) encourages production. Functional flow criteria shall be established for at least:</p> <p>Yolo Bypass</p> <p>Sacramento River and its basin</p> <p>San Joaquin River and its basin</p>	<p>Please see responses to comments 2651-58 and 2651-62, Master Response 14 regarding water quality effects, Master Response 31 regarding compliance with the Delta Reform Act, and Chapter 11 regarding fish and aquatic resources.</p>

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		<p>Eastside streams and their basins</p> <p>Interior Delta including Old and Middle rivers</p> <p>Delta outflow" (<a href="https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=25987">https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=25987</a>, pdf page 6)</p> <p>The new BDCP alternatives do not include an NCCP or address any covered aquatic species. The new BDCP alternatives propose to do nothing beneficial for these species beyond compensatory mitigation for the construction-related footprint and operational impacts of the project to reduce their impacts from significant to less than significant. In some cases, significant impacts remain on aquatic species even after mitigation, so those significant unavoidable impacts on aquatic species remain. The BDCP alternatives do not result in a halt of species population decline and they do not result in an increase in these populations either. According to the SWRCB flow criteria, the BDCP does not provide sufficient water flow either. The most notable "significant and unavoidable" unmitigated impacts to fish species are from BDCP water quality impacts. The BDCP did not establish flow criteria for Yolo Bypass, the San Joaquin River or eastside streams. In summary, the BDCP did not meet any of the CDFW terrestrial or aquatic species biological goals. The BDCP alternatives must be reformulated so that they do conform with and integrate the flow criteria and biological goals of the SWRCB and CDFW in compliance with the Delta Reform Act.</p>	
2651	64	<p>The ELT [Early Long Term] No Action period in which the new project alternatives were evaluated (incorrectly using interpolated modeling results rather than actual modeled results) incorporates little to no climate or sea-level change. The LLT [Late Long Term] analysis of the Proposed Project/Action and other new alternatives were only evaluated qualitatively so they had no analysis of the impacts of climate change and sea level rise. The Delta Reform Act of 2009 requires the BDCP EIR to include an analysis of climate change and sea level rise. The LLT must be evaluated quantitatively, including climate change assumptions, in order for it to comply with the Delta Reform Act legal requirements. Once the BDCP EIR/S is revised to address this material deficiency, it must be recirculated for public comment.</p>	<p>The ELT uses climate change assumptions for 2025-2030 and the LLT uses climate change assumptions for 2060. The HCP alternatives were evaluated based only on the LLT (No Action in the LLT compared to the action alternative in the LLT) and the non-HCP alternatives, including Alternative 4A, were evaluated in the ELT (No Action in the ELT compared to the action alternative in the ELT). The effects of climate change are described in the analysis of the No Action alternative where it is compared to the existing conditions. This analysis is done for both the No Action in the ELT and the No Action in the LLT. Additionally, Chapter 29, Climate Change, addresses the resiliency of the project related to climate change and sea-level rise. See also Master Response 19 regarding climate change analysis.</p>
2651	65	<p>Dropping of the BDCP implementation of the OCAP [Operations Criteria and Plan] BO [Biological Opinion] RPAs [Reasonable and Prudent Alternatives] in early implementation is in direct conflict with the requirements [of] the 2007 BDCP Memorandum of Agreement between the state and federal lead agencies responsible for the BDCP. The current EIR/S scope omitting the OCAP BO RPAs from implementation is in violation of this agreement and the scope of the BDCP alternatives must be revised to conform with this current policy and agreement.</p> <p>Dropping the HCP/NCCP component from the new BDCP alternatives is in direct conflict with the BDCP Planning Agreement. "The participants in the proposed BDCP signed a Planning Agreement that contained the following Planning Goals.</p> <ul style="list-style-type: none"> <li>-Provide for the conservation and management of covered species within the planning area.</li> <li>-Preserve, restore, and enhance aquatic, riparian, and associated terrestrial natural communities and ecosystems that support covered species within the planning area through conservation partnerships.</li> <li>-Allow for projects that restore and protect water supply, water quality, ecosystem, and</li> </ul>	<p>Please see responses to comment 2651-4, 2651-8 and 2651-17, and Master Response 46 regarding recirculation and scoping. See also Master Response 5 regarding planning efforts.</p>

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		<p>ecosystem health to proceed within a stable regulatory framework.</p> <p>-Provide a means to implement covered activities in a manner that complies with applicable State and Federal fish and wildlife protection laws, including the Natural Conservation Community Planning Act or CESA [California Endangered Species Act], ESA, and other environmental laws, including CEQA and NEPA. Provide a basis for permits necessary to lawfully take covered species. Provide a comprehensive means to coordinate and standardize mitigation and compensation requirements for covered activities within the planning area.</p> <p>-Provide a less costly, more efficient project review process which results in greater conservation values than project-by-project, species-by-species review.</p> <p>-Provide clear expectations and regulatory assurances regarding covered activities occurring within the planning area." (March 2010 BDCP Scoping Report, page 1-3, line 41)</p> <p>The new BDCP alternatives which do not include a HCP/NCCP do not have covered species, do not conserve species (the alternatives only mitigate impacts to less-than-significant levels in some cases and leave other species impacts as significant and unavoidable), do not preserve or restore habitat above levels that are required by compensatory mitigation, preclude the implementation of other conservation efforts both through conflicts for space as well as impacts that preclude implementation of other conservation actions, do not provide a comprehensive framework to address species in a manner other than a project-by-project and one-species-at-a-time basis, and because [they do] not include an HCP/NCCP [they do] not provide for regulatory assurances. Since the new BDCP alternatives only potentially meet one of criteria of the Planning Agreement, the California WaterFix project is a new project with new proponents, a new scope and one which requires a new purpose and need. The new California WaterFix project must start from the beginning of the EIR/S process with public noticing, scoping, and a new, from scratch and complete public draft EIR/S.</p>	
2651	66	<p>The OCAP [Operations Criteria and Plan] BO [Biological Opinion] determined that without the RPAs [Reasonable and Prudent Alternatives] that the CVP/SWP continued operations would result in jeopardy of listed species. Six and seven years after the FWS and NMFS Bos made their jeopardy determinations, DWR and Reclamation have yet to implement the vast majority of these mandatory actions to avoid jeopardy. These actions were previously incorporated into the project description of the conservation actions in the BDCP proposed project/action and alternatives. The revised public draft BDCP EIR/S has dropped most of these BO RPA compliance actions from the project description of the new proposed project/action and alternatives in the revised public draft EIR/S. The mandatory actions from the OCAP Bos are still part of the environmental baseline as they were required prior to the initiation of the BDCP project and baseline date definitions for the BDCP project. By dropping the BO RPAs from the BDCP as well as the other actions which were designed to contribute to the conservation of the proposed covered listed species, the BDCP is proposing to implement a project that will continue to jeopardize these species and result in continued violation of ESA and the requirements of the OCAP Bos. In the previous public draft BDCP EIR/S the environmental analysis determined that CM1, the tunnel conveyance, did not contribute to the conservation or recovery of listed species. Since now BDCP is proposing just the conveyance with little to no other actions to benefit the listed species, the Biological Assessment and in turn the Biological Opinion to be based upon this EIR/S cannot determine anything other than a jeopardy call on the BDCP proposed project and</p>	<p>Please see response to comment 2651-50. Also the Final EIR/EIS Chapter 3 Alternatives, Appendix 3D Defining Existing Conditions, No Action Alternative, No Project Alternative, and Cumulative Impact Condition provide information on how RPAs required under the 2008 and 2009 NMFS and USFWS BiOps were included in the No Action Alternatives analysis. Table 3D-5 identifies how the RPAs were treated in the analysis.</p> <p>The ESA consultation and related Biological Opinions will be based on the July 2016 BA.</p> <p>See also Master Response 1 regarding environmental baselines, Master Response 29 regarding the Endangered Species Act, and Master Response 45 regarding permitting.</p>

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		alternatives which do not include 1) the BO RPAs, and 2) additional conservation measures to contribute to the conservation and recovery of the listed species.	
2651	67	<p>The BDCP has dropped from the scope of the Proposed Project and new alternatives included in the RDEIR/S the actions that would bring the SWP/CVP into compliance with the OCAP [Operations Criteria and Plan] BO [Biological Opinion] RPAs [Reasonable and Prudent Alternatives]. The OCAP BO RPAs are part of the baseline and No Action condition, but now are not part of the Proposed Project. By not including compliance with the OCAP BO RPAs in the BDCP project scope, the BDCP has deflected the impacts of the implementation of their current legal requirements to comply with the OCAP BOs to another, as yet to be initiated project, California EcoRestore. When the California EcoRestore project is finally started (a date yet to be officially determined) the impacts of that project will include the BDCP project (if approved and funded) [and] the BDCP would be part of California EcoRestore's baseline and No Action condition.</p> <p>What California EcoRestore will find in its impact analysis, prior to approval or implementation, is the same as the BDCP original public draft discovered which was that the environmental impacts of implementing both the BDCP conveyance and the OCAP BO RPAs precipitates unacceptable and unviable environmental impacts and continues to jeopardize endangered and threatened special status species and adverse modifications to designated critical habitat. If the BDCP project is approved prior to implementation of the OCAP BO RPAs, the OCAP BO RPAs will never be approved as the impacts that will occur will be adverse to the requirements of not jeopardizing the T&amp;E [threatened and endangered] species. Therefore, the CVP/SWP must comply with the pre-existing OCAP BO RPAs to avoid jeopardy of T&amp;E species before approval of the BDCP can ever be considered. Otherwise, the NMFS and USFWS lead agencies for the BDCP that issued the OCAP BO RPAs will be precluding implementation of the BO conditions and therefore jeopardizing the species they are supposed to protect.</p>	Please see response to comment 2651-66. See also Master Response 29 regarding the Endangered Species Act and Master Response 45 regarding permitting.
2651	68	The primary requirement for issuance of the incidental take permit is that the action must minimize and fully mitigate the impacts of the proposed take. The EIR/S finds several impacts as significant and unavoidable which result in adverse modification of designated critical habitat for ESA listed species. These significant unavoidable impacts are not fully mitigated or sometimes even partially mitigated by the BDCP. For some significant unavoidable impacts, the BDCP claims there are no mitigations to reduce this impact to less than significant on these listed species. Since there are significant impacts to ESA listed species that the BDCP does not mitigate, the fisheries agencies may not issue any incidental take permits for the BDCP project based on this environmental document.	Alternative 4A, the preferred alternative, does not have any significant unavoidable effects on ESA or CESA species (Chapter 11 and 12). The 2081(b) permit process for CESA and the Section 7 consultation for ESA will ultimately decide if and how incidental take will be authorized. DFW will ultimately determine whether the CESA standard to 'minimize and fully mitigate' has been met. FWS and NMFS will determine if there is adverse modification to designated critical habitat. The analysis in the EIR/EIS is consistent with the analysis included in the BA and 2081 permit application. See also Master Response 29 regarding the Endangered Species Act and Master Response 45 regarding permitting.
2651	69	The BDCP incorrectly assumes that the SWP water supply contract renewal will be approved in the same quantities as the existing contracts. This contract renewal project does not meet the criteria of reasonably foreseeable for inclusion in the No Action/No Project or Cumulative as there are no guarantees in the current contract that the contracts will be renewed or renewed for the current contract amounts. It is much more likely that, if the contracts are renewed at all, the contract amounts would be lower than the current amounts as the lower delivery amounts would make the contracts consistent with the requirements of the 2009 Delta Reform Act and of the 2014 California Water Action Plan to reduce reliance on Delta water supplies. The BDCP must remove this assumption of this project being included in the No Action/No Project definition. If the BDCP wants to include continued operations assumptions beyond 2035 when the current contracts expire, the	<p>Rationale for including future water supply scenarios in cumulative impacts is discussed in Chapter 5. See Master Response 31 and Appendix 3I of the EIR/EIS regarding compliance with the Delta Reform Act.</p> <p>Alternative 4A as well as Alternatives 2D and 5A are analyzed at the Early Long-Term period, or approximately Year 2025 conditions, which is prior to the contract expiration dates of existing SWP water contracts and many of the CVP water contracts.</p>

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		<p>BDCP must adopt a range of scenarios to analyze from contract renewals with some delivery reduction (to be consistent with current plans and policies such as the Delta Reform Act) to scenarios where they are not renewed at all.</p>	
2651	70	<p>The January 2014 California Water Action Plan specifies a number of requirements for the BDCP. The BDCP developed new alternatives that, according to the BDCP, were in response to the BDCP public draft EIR/S comments received in June of 2014. These new BDCP alternatives that were developed after the California Water Action Plan was implemented by the Governor, fail to meet every criteria and requirement defined in the Water Action Plan.</p> <p>"Complete Comprehensive Plans to Recover Populations of Threatened and Endangered Species in the Delta and Improve Water Supply Reliability for Users of Delta Water</p> <p>State and federal agencies will complete planning for a comprehensive conservation strategy aimed at protecting dozens of species of fish and wildlife in the Delta, while permitting the reliable operation of California's two biggest water delivery projects. The Bay Delta Conservation Plan (BDCP) will help secure California's water supply by building new water delivery infrastructure and operating the system to improve the ecological health of the Delta. It will also restore or protect approximately 145,000 acres of habitat to address the Delta's environmental challenges. The BDCP is made up of specifications, called conservation measures, to improve the Delta ecosystem. It includes 22 conservation measures aimed at improving water operations, protecting water supplies and water quality, and restoring the Delta ecosystem within a stable regulatory framework. The project will be guided by 214 specific biological goals and objectives, improved science, and an adaptive management approach for operating the water conveyance facilities and implementing other conservation measures including habitat restoration and programs to address other stressors. As the Delta ecosystem improves in response to the implementation of the conservation measures, water operations would become more reliable, offering secure water supplies for 25 million Californians, an agricultural industry that feeds millions, and a thriving economy."</p> <p>(<a href="http://resources.ca.gov/docs/california_water_action_plan/Final_California_Water_Action_Plan.pdf">http://resources.ca.gov/docs/california_water_action_plan/Final_California_Water_Action_Plan.pdf</a>, page 8, paragraph 2)</p> <p>The BDCP new alternatives are not a "comprehensive conservation strategy" as the project is no longer an HCP/NCCP and does not do habitat restoration above levels required for compensatory mitigation. The BDCP does not "protect" species. The BDCP does not improve the SWP/CVP reliability as it trades one form of system engineering failure risk for another type and ignores other significant infrastructure reliability and risk factors of the CVP/SWP. The CVP/SWP is no more reliable from operational constraints from endangered species as the new ESA compliance method chosen by the BDCP does not result in any regulatory assurances or stability. The BDCP operations do not improve Delta ecological health as the first and second public draft EIR/S did not determine any positive impacts from the conveyance on fisheries or other wildlife species. The new BDCP alternatives do not propose to restore 145,000 acres of habitat. The new BDCP alternatives do not include 22 conservation measures. The BDCP dropped the biological goals and objectives when it dropped the HCP/NCCP from its scope. The Delta Science Panel and the Delta Stewardship Council (DSC) have concluded that the BDCP adaptive management is not fully formed sufficiently as to be functional or achieve the objectives of adaptive management. There are no operating rules described or disclosed by the BDCP EIR/S for adaptive management of</p>	<p>The proposed project is one element of the California Water Action Plan that would contribute towards the achievement of co-equal goals for the Delta. The other elements include implementing the Delta Plan, developing and implementing comprehensive plans to help recover populations of threatened and endangered species in the Delta and improve water supply reliability for Delta water users, accelerate and implement habitat restoration and implement near-term Delta ecosystem improvement projects. These strategies, when taken together along with the proposed project, constitute a comprehensive conservation strategy. Additionally, the Water Action Plan was updated in 2016 to reflect the revised approach to Delta conveyance and habitat restoration. For more information regarding adaptive management please see Master Response 33.</p> <p>The Proposed Project would enable DWR to construct and operate new conveyance facilities that improve conditions for endangered and threatened aquatic species in the Delta while at the same time improving water supply reliability, consistent with California law (see, e.g., Cal.Wat. Code, § 85001(c)). Implementing the conveyance facilities would help resolve many of the concerns with the current south Delta conveyance system, and would help reduce threats to endangered and threatened species in the Delta, including entrainment at the south Delta export facilities. For instance, implementing a dual conveyance system would align water operations and their location to better reflect natural seasonal flow patterns by creating new water diversions in the north Delta equipped with state-of-the-art fish screens, which would reduce reliance on south Delta facilities during times of the year when listed aquatic species are present and most vulnerable. For more information on mitigation measures to minimize impacts to fish species, including Delta and longfin smelt, please see Chapter 11, Fish and Aquatic Species. See also Master Response 5 regarding planning.</p>

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		<p>operations. This was also a criticism of the BDCP EIR/S by the DSC. The new BDCP alternatives do not address "other stressors" conservation measures.</p> <p>The Water Action Plan describes water supply operations reliability as being dependent upon Delta ecosystem improvement response. The BDCP does not improve the Delta ecosystem, so there is no BDCP water supply reliability either from regulatory assurances or from Delta ecosystem improvements. The new BDCP alternatives that were developed after the California Water Action Plan was implemented by the Governor fail to meet every criteria and requirement defined in the Water Action Plan. The BDCP project was initiated prior to the 2014 California Water Action Plan, but the new alternatives were developed after. Compliance of the new BDCP alternatives with the Water Action Plan should have been an overriding consideration in the screening process new alternatives had to pass prior to development into full alternatives evaluated in the EIR/S. Lack of compliance with the Water Action Plan should have disqualified these new BDCP alternatives from full consideration in the EIR/S and certainly should have disqualified the selection of one of these non-compliant alternatives as the BDCP Proposed Project.</p>	
2651	71	<p>"Once the BDCP is permitted, it will become part of the Delta Plan."  (<a href="http://resources.ca.gov/docs/california_water_action_plan/Final_California_Water_Action_Plan.pdf">http://resources.ca.gov/docs/california_water_action_plan/Final_California_Water_Action_Plan.pdf</a>, page 8, paragraph 3, last sentence)</p> <p>The BDCP will not become part of the Delta Plan as the new alternatives do not include an HCP/NCCP. The BDCP is applying the project to the DSC [Delta Stewardship Council] for consideration of a compliance consistency with the Delta Plan so the BDCP fails to meet this requirement of the California Water Action Plan. The BDCP is not consistent with the Delta Plan and must not be certified as compliant with the Delta Plan.</p>	<p>The California Water Action Plan was updated in 2016 to reflect progress toward the goals identified in the January 2014 Plan to which the commenter refers. The CA Water Fix and CA Eco Restore were identified in the 2015 California Water Action Plan Implementation Report as "updated plans to achieve Delta ecosystem restoration and water supply reliability. (Actions 3, 4, 9)". <a href="http://resources.ca.gov/docs/california_water_action_plan/CA_WAP_Impl_2015_Update.pdf">http://resources.ca.gov/docs/california_water_action_plan/CA_WAP_Impl_2015_Update.pdf</a></p> <p>Appendix 3J, Compatibility with the Delta Plan, discusses how Alternative 4A would demonstrate consistency with the Delta Plan. Appendix 3J provides a description of the process that would apply, if Alternative 4A is selected, in order to demonstrate the proposed project's consistency with the Delta Reform Act's co-equal goals.</p> <p>See also Master Response 4 regarding development of alternatives, Master Response 5 regarding planning efforts, and Master Response 31 regarding compliance with the Delta Reform Act.</p>
2651	72	<p>The alternatives that do not include the HCP/NCCP must include the assumptions of the California EcoRestore project in their future conditions baseline assumptions as the California EcoRestore is the designated project, in those cases, for DWR and BOR [Reclamation] to comply with the current mandated OCAP [Operations Criteria and Plan] BO [Biological Opinion] reasonable and prudent actions. Other previously submitted alternatives and alternatives components that more fully meet the Purpose and Need and Project Objectives than the new BDCP alternatives must be included for full evaluation in the EIR/S. Examples of previously proposed alternatives and alternative components (and in various combinations) which better meet the BDCP Purpose and Need and Project Objectives include, but are not limited to: central and south Delta distributed intakes, Sacramento Deep Water Ship Channel as a conveyance, upstream and/or downstream storage, criteria fish screens at Clifton Court, aquatic species-only HCP/NCCP, etc.</p> <p>The revised BDCP plan did not update the Alternatives Scoping Report for the new project alternatives included in the revised EIR/S. The Alternatives Scoping Report is an integral component of the process and deliverable product of preparing an EIR/S (Title 14 California Code of Regulations section 15000 et seq.)(40 Code of Federal Register 1501.7). The BDCP has failed to disclose this essential and material information on how the new alternatives passed each of the screening criteria used for developing project alternatives. The BDCP must show their rationale and justification as to how these new alternatives meet the</p>	<p>Appendix 3A of the Final EIR/EIS was updated to discuss how Alternative 4A, 2D and 5A meet the alternatives screening criteria. Maintaining the original alternatives while coming up with new options is entirely consistent with long-standing CEQA and NEPA principles. As noted by the California courts, "[t]he CEQA reporting process is not designed to freeze the ultimate proposal in the precise mold of the initial project; indeed, new and unforeseen insights may emerge during investigation, evoking revision of the original proposal." Kings County Farm Bureau v. City of Hanford (1990) 221 Cal.App.3d 692, 736-737.</p> <p>See Master Response 4 for a discussion of the identification and screening of alternatives, and why the alternatives evaluated in the EIR/EIS and RDEIR/SDEIS are adequate. Also see Master Response 1 regarding environmental baselines, Master Response 5 regarding planning efforts, and Master Response 46 regarding scoping and recirculation.</p>

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		purpose and need and project objectives which are the basis of the alternatives development screening criteria. In other comments we [Central Delta Water Agency] have gone over, in detail, how the new alternatives do not meet the purpose and need and project objectives. The BDCP must provide an updated Alternatives Scoping Report which does document the process and consistent application of screening criteria and rationale for these new BDCP alternatives. This update constitutes material new information so the Scoping Report and the entire contents of the BDCP EIR/S must be submitted for an additional round of public review and comment.	
2651	73	<p>March 2010 BDCP Scoping Report (downloaded from <a href="http://bayDeltaconservationplan.com/EnvironmentalReview/EnvironmentalReview/Scoping/Scoping2009.aspx">http://bayDeltaconservationplan.com/EnvironmentalReview/EnvironmentalReview/Scoping/Scoping2009.aspx</a>) Page 1-2, line 22: "Scoping frequently continues throughout the preparation of the Draft EIS."</p> <p>Yes it does, but the process used to develop and screen new alternatives must be documented, disclosed, consistent evaluation of concepts against screening criteria applied and supporting rationale provided by the project to justify alternatives development decisions made. The BDCP has failed to document, disclose or provide supporting rationale as to how the new alternatives were developed and why and how other alternative concepts that more fully and reasonably meet the screening criteria than the new alternatives were not developed and advanced for full evaluation in the revised public draft BDCP EIR/S. The BDCP must disclose this alternatives development process and include other equally well qualified alternatives in a recirculated public draft EIR/S. The BDCP claims that the new alternatives are based on concepts included in comments received on the first public draft. Those specific comments and all the other comments must be disclosed. The BDCP must also give equal effort for development and screening of other concepts which were included in the first public draft comments.</p>	<p>In the RDEIR/SDEIS, refinements to the Project Objectives and Purpose and Need statements were made that are consistent with the purposes and requirements of CEQA and NEPA. Please see Master Response 3 and the revisions to the Final EIR/EIS for additional information.</p> <p>The alternatives included in the Draft EIR/EIS, RDEIR/SDEIS, and Final EIR/EIS represent a legally adequate reasonable range of alternatives and the scope of the analysis of alternatives fully complies with both CEQA and NEPA. The Lead Agencies carefully considered all potential alternatives that were proposed during the scoping process and during time of preparation of the EIR/EIS. Although many of the proposed alternatives included meritorious water policy principles, the proposals rejected by the Lead Agencies did not qualify as appropriate alternatives for various reasons. The text of Chapter 3 (section 3.2) and Appendix 3A thoroughly explain the process used to develop the alternatives and explain why certain potential alternatives were considered but ultimately rejected. For additional information regarding the formulation and selection of alternatives for evaluation in the EIR/EIS, please see the revisions to the Final EIS/EIR and Master Response 4.</p> <p>All of the comments received are included in the FEIR/EIS. Also see Master Response 46 and Chapter 32 regarding scoping and noticing.</p>
2651	74	<p>March 2010 BDCP Scoping Report, page 1-3, line 6: "The goal of the BDCP participants is to formulate a plan that could ultimately be approved by USFWS and NMFS as a HCP under the provisions of ESA Section 10(a)(1)(B) and by CDFW as a Natural Community Conservation Plan (NCCP) under Fish and Game Code Sections 2800 et seq., and/or the California Endangered Species Act (CESA), Sections 2050 et seq." None of the content in the Scoping Report regarding the scope, purpose, need, objectives, covered species, planning area, framework, Potentially Regulated Entities, planning agreements or process related to the HCP or NCCP are applicable to the new BDCP alternatives which do not include a HCP/NCCP.</p>	<p>Please see response to comments 2651-4 and 2651-17, Master Response 4 regarding alternatives development, and Master Response 46 regarding scoping and noticing. Also see Chapter 32 regarding noticing.</p>
2651	75	<p>March 2010 BDCP Scoping Report, page 2-1, line 33: "To improve the ecosystem of the Delta by: Providing for the conservation and management of covered species through actions within the BDCP Planning Area that will contribute to the recovery of the species; Protecting, restoring, and enhancing certain aquatic, riparian, and associated terrestrial natural communities and ecosystems." The new BDCP alternatives do not have covered species and the project does not conserve or manage species or contribute to recovery of species. The new BDCP alternatives do not protect, restore or enhance aquatic habitat above levels that are required for compensatory mitigation to reduce project impacts to less-than-significant levels and in some cases leaves species impacts as significant and unavoidable.</p>	<p>Please see response to comments 2651-2, 2651-4 and 2651-17, Master Response 4 regarding alternatives development, and Master Response 46 regarding scoping and noticing. Also see Chapter 32 regarding noticing.</p>
2651	76	<p>March 2010 BDCP Scoping Report, page 2-2, line 5: "The State agencies involved in the BDCP process will be functioning within a statutory framework modified significantly by the</p>	<p>Please see Master Response 31 regarding compliance with the Delta Reform Act.</p>

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		enactment of Senate Bill X7 1, which includes the Sacramento-San Joaquin Delta Reform Act of 2009." The new BDCP alternatives are not compliant with SBX7 1, the Delta Reform Act or the Delta Plan.	
2651	77	March 2010 BDCP Scoping Report, page 2-2, line 15: "Respond to the applications for incidental take permits for the covered species that authorize take related to: The operation of existing SWP Delta facilities and construction and operation of facilities for the movement of water entering the Delta from the Sacramento Valley watershed to the existing SWP and CVP pumping plants located in the southern Delta; The implementation of any conservation actions that have the potential to result in take of species that are or may become listed under the ESA, pursuant to the ESA at Section 10(a)(1)(B) and its implementing regulations and policies; and The diversion and discharge of water by Mirant for power generation in the western Delta." The new BDCP alternatives do not have covered species; the analysis does not cover all of the ongoing effects of the SWP/CVP system so permits must not cover those undescribed and unanalyzed activities, e.g., reservoir fluctuations and fisheries effects upstream of reservoirs; do not cover species that may be listed in the future; do not use a section 10 ESA process; and do not cover Mirant operations.	Please see responses to comments 2651-2 and 2651-3. See also Master Response 29 regarding the Endangered Species Act and Master Response 45 regarding permitting.
2651	78	March 2010 BDCP Scoping Report, page 2-2, line 36: "The planning area for the proposed BDCP will consist of the aquatic and terrestrial ecosystems and natural communities and adjacent riparian and floodplain natural communities within the statutory Delta." The new BDCP alternatives do not include natural communities and ecosystem restoration as goals so the scope of the planning area needs have changed. The BDCP must revise their planning area definition as the previously supplied rationale no longer applies.	For purposes of public disclosure and clarity the Plan Area identified for BDCP alternatives in the Draft EIR/EIS was retained for non-HCP alternatives (including Alternative 4A) to maintain consistency across alternatives on the area within the Delta that is evaluated. Alternative 4A and other non-HCP alternatives have similar Delta areal effects as the HCP alternatives for construction of conveyance facilities. Effects of the non-HCP alternatives related to habitat restoration and other Environmental Commitments built into these Alternatives would generally occur over a smaller area than the effects described for HCP alternatives but their Delta effects would still occur entirely within the described Plan Area. No change to the planning area definition has been made.
2651	79	March 2010 BDCP Scoping Report, page 2-3, line 4: "Existing Delta conveyance elements and operations of the SWP and CVP." The first and second public draft BDCP EIR/S did not evaluate or mitigate all of the ongoing impacts from the continued operation of the CVP/SWP. These ongoing impacts of continued CVP/SWP operations that are not covered by the BDCP EIR/S impact analysis and therefore cannot be used as a basis to justify take permits for include, but are not limited to: salt accumulation in the soils and groundwater in the CVP/SWP service areas, genetic introgression of fish at the terminal dams, reservoir operations effects on reservoir and upstream fisheries and wildlife, hatchery impacts, aqueduct leaks, greenhouse gases, and other[s].	The current operations of the SWP and CVP are part of the baseline (see Master Response 1).  Also see response to comment 2651-3 regarding what is expected relative to incidental take permits, Master Response 9 regarding cumulative impact assessment Master Response 29 regarding the Endangered Species Act, and Master Response 45 regarding permitting.
2651	80	March 2010 BDCP Scoping Report, section 2.2.5: The list of concepts identified in the course of the EIR/S process must be updated and revised to reflect all of the alternative concepts that were submitted in the first and second public draft EIR/S. The BDCP claims that the new alternatives are based on comments received in the first public draft EIR/S, so the revised scoping report list of alternative concepts identified must include all concepts from the EIR/S comments, not just the ones which align with the outcome desired by the project proponents as they currently have done.  March 2010 BDCP Scoping Report, section 2.3.2: Since the current BDCP alternatives have very little commonality with the public noticing project description, the public noticing and public meetings for the new California Water Fix project must be conducted to comply with NEPA and CEQA requirements.	Please see response to comment 2651-73.

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		<p>March 2010 BDCP Scoping Report, section 3.2: The list of concepts identified in the course of the EIR/S process must be updated and revised to reflect all of the alternative concepts that were submitted in the first and second public draft EIR/S. The BDCP claims that the new alternatives are based on comments received in the first public draft EIR/S, so the revised scoping report list of alternative concepts identified must include all concepts from the EIR/S comments, not just the ones which align with the outcome desired by the project proponents as they currently have done. The public comments from the first public draft EIR/S must be disclosed to the public so we can review all of the comments so we can see if the BDCP correctly captured all of the alternatives concepts contributed. Since the BDCP claims that the new alternatives were based on these comments all comments must be publicly disclosed at this time, prior to the publication of the final BDCP EIR/S.</p>	
2651	81	<p>March 2010 BDCP Scoping Report, pdf page 30, paragraph 2: "The BDCP is being prepared with the participation of the FWS, NMFS, California Resources Agency, CDFW, the State Water Resources Control Board (SWRCB), the PREs [Potential Regulated Entities], and various stakeholders, including The Nature Conservancy, Environmental Defense, Defenders of Wildlife, the California Farm Bureau, the Natural Heritage Institute, American Rivers, Contra Costa Water District, and The Bay Institute. These organizations are members of the Steering Committee that is helping to guide preparation of the BDCP. The regulatory agencies, FWS, NMFS, CDFW and SWRCB are participating in the Steering Committee to provide technical input and guidance in support of the Steering Committee's efforts to complete the BDCP."</p> <p>The first public draft EIR/S proposed project/action was developed and proposed by the project proponents, the BDCP Steering Committee. The proposed project/action was a HCP/NCCP. After the BDCP failed to deliver a viable project in the first public draft EIR/S, the BDCP Steering Committee has been disbanded and is no longer functioning or meeting. Since the Steering Committee was the BDCP proponent but is now disbanded, who did the new BDCP proposed project/action alternative come from? This material omission of critical project information was not disclosed in the revised public draft BDCP EIR/S and is not consistent with the public noticing. The original BDCP proponent group no longer exists and a different group or entity has proposed a new project name, a different set of objectives and purpose for the project and a different proposed project/action alternative. The new proposed project/action alternative is actually a new project which requires new public noticing, new scoping, new alternatives and a new and complete (not partially recirculated) draft EIR/S.</p>	<p>The 2013 DEIR/EIS was developed under the direction and guidance of the lead state and federal agencies (See Chapter 1 of the RDEIR/SDEIS). Please also see response to comment 2651-73.</p> <p>Under CEQA a lead agency is the public agency that has the principal responsibility for carrying out or approving a project which may have a significant effect upon the environment (Public Resource Code Section 21067). DWR has primary responsibility over changes to the SWP and its operations.</p> <p>Under NEPA a lead agency is the federal agency with primary responsibility for complying with NEPA on a given proposed action (40 CFR 1508.16). In this case Reclamation has the primary responsibility over actions that could affect CVP operations in the Delta. Following the move away from the BDCP as the preferred alternative, USFWS and NMFS became cooperating agencies, primarily responsible for compliance with the ESA.</p>
2651	82	<p>March 2010 BDCP Scoping Report, pdf page 33: Of the 7 planning goals identified, the new BDCP alternatives may potentially accomplish only #5.</p> <p>March 2010 BDCP Scoping Report, pdf page 33, last paragraph: "a significant restoration and enhancement program for important habitats within and adjacent to the Delta designed to improve the long-term ecological productivity and sustainability of the Delta." The new BDCP alternatives do not meet this criteria as the habitat restorations are mostly either implementation of existing regulatory obligations from the OCAP [Operations Criteria and Plan] BOs [Biological Opinions] or are compensatory mitigations for adverse impacts of implementing the BDCP project.</p> <p>March 2010 BDCP Scoping Report, pdf page 37, paragraph 4: "In accordance with Title 14, section 15082, subdivision (b)(1)(B) of the California Code of Regulations, responsible and</p>	<p>Please see responses to comments 2651-3, 2651-6, 2651-73, and 2651-81.</p>

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		trustee agencies should indicate their respective level of responsibility for the project to the Lead Agency (Cal. Code Regs., title 14, div.6, ch. 3 (CEQA Guidelines), section 15082, subdivision (b)(1) (B))." The federal lead agencies have changed from the BDCP noticing vs. the lead agencies in the California WaterFix project as NMFS and USFWS are no longer co-federal lead agencies and Reclamation's role in the project has changed from co-owner operator to potentially just an agency that wheels water through the new conveyance. The California WaterFix project must be renoticed for the lead agency roles that it has and cannot rely upon the lead role notices that were used for the BDCP as they are no longer representative or applicable.	
2651	83	March 2010 BDCP Scoping Report, pdf page 37, paragraph 4: ". . . section 15082, subdivision (c)(1) and section 15206, subdivision (b)(4)(E), state that projects of statewide significance should provide notice to cities/counties within which the project would be located." The California WaterFix is a different project than the previously noticed BDCP project. California WaterFix has different lead agencies and lead agency roles, different project proponents, different project objectives and purpose and need, a different geographic scope/footprint, a different ESA permitting pathway, different regulatory assurances, and different covered species than the BDCP. The only thing the two different projects have in common is a general desire to move water across the Delta. Since California WaterFix is a different project with different characteristics and impacts than the previously noticed BDCP project, the California WaterFix project must provide notice to the affected communities/counties in which the project would be located or affect and must not rely upon the notices of a different project to comply with these code requirements.	Please see responses to comment 2651-4 and 2651-81 and refer to Master Response 46 and Chapter 32 regarding notice, scoping, and recirculation.
2651	84	March 2010 BDCP Scoping Report, pdf page 37, last paragraph: "The Department's practice is to make comments, including names, home addresses, home phone numbers, and email addresses of respondents, available for public review." "In the absence of exceptional, documentable circumstances, this information will be released. The Department will always make submissions from organizations or businesses, and from individuals identifying themselves as representatives of or officials of organizations or businesses, available for public inspection in their entirety." DWR and Reclamation are not consistent with their policy and standard practice in this regard as they have not posted or made available in any form the comments received from the first public draft EIR/S for public review. Access to these comments have been formally requested by several different entities and so far, DWR and Reclamation have not complied with this request even though not complying is against "the department's practice to . . . always make submissions. . . available for public inspection in their entirety."	Consistent with the requirements of the California Environmental Quality Act (CEQA Guidelines §15088) and the National Environmental Policy Act (Council on Environmental Quality § 1503.4) and policies held by the Lead Agencies governing the implementation of CEQA and NEPA, all comments received on the DEIR/EIS and RDEIR/SDEIS are included with the Final EIR/EIS. Please see Master Response 42 regarding treatment of public comments.
2651	85	The public scoping comments included project alternative concepts that did not include any habitat restoration (beyond compensatory mitigation). Those alternatives were not included in the first BDCP public draft EIR/S so they must have been screened out for not reasonably meeting the purpose and need and project objectives. The second public draft BDCP EIR/S now includes 3 alternatives, including the proposed project that do not include habitat restoration beyond compensatory mitigation. Why did these alternatives not meet the screening criteria on the first public draft, but did on the second? The screening criteria must have changed or the application of them must have been inconsistently applied for them to have made it through the second time. The BDCP must disclose the screening process, the disposition of each alternative component considered in the development of the alternatives and the supporting rationale for how the alternative components and alternatives were treated. If the new BDCP alternatives are a result of an inconsistently or	Please see response to comment 2651-73.

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		biased application of screening criteria, then the second public draft EIR/S must be discarded and the regulatory agencies not rely upon this EIR/S as a decision support document.	
2651	86	<p>Under NEPA regulations adopted by the Department of Interior, alternatives to be included in an Environmental Impact Statement (EIS) (not counting "No Action") must be: reasonable, meet the purpose and need, and address one or more of the significant issues related to the proposed action (43 CFR [Section] 46.415(b), citing 40 CFR [Section] 1501.7(a)(2-3)). The new BDCP alternatives are not "reasonable" as they do not address half of the co-equal goals, they do not meet almost all of the purpose and need, and they do not even satisfy the one significant issue they attempt to of water supply reliability with regulatory stability.</p> <p>Under NEPA, an EIS need not address an alternative that is not reasonable and fails to meet the purpose and need of a proposed action. The new BDCP alternatives do not reasonably meet the Purpose and Need of the project. Federal lead agencies do retain the discretion to include additional alternatives that do not reasonably meet the project Purpose and Need for informational purposes, such as disclosing the full range and magnitude of environmental effects. This federal lead agency option to include unqualified alternatives for demonstrative purposes does not provide justification or rationale for them to put forward these unqualified alternatives as the Proposed Action.</p>	<p>Alternatives presented in the RDEIR/SDEIS have been determined to meet the purpose and need statement as revised in the RDEIR/SDEIS and recirculated for public review. See also Master Response 3 regarding purpose and need, Master Response 4 regarding development of alternatives, and Master Response 31 regarding compliance with the Delta Reform Act.</p>
2651	87	<p>Under CEQA, any alternatives that are put forward for consideration in the EIR for potential adoption must be feasible. CEQA defines "feasible" as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." (CEQA Guidelines, [Section] 15364) The new BDCP alternatives are not "feasible" in that they result in significant and unavoidable environmental effects which adversely alters designated critical habitat for listed species. Since these alternatives are not environmentally feasible, they must be dropped from further consideration in the FEIR/S. The BDCP alternatives make water too expensive to use for agricultural applications, so they are not economically feasible, either. The new BDCP alternatives are not compliant with the Delta Reform Act, so they are not legally feasible, either.</p>	<p>The alternatives screening analysis presented in Appendix 3A provides a detailed discussion of alternatives considered and which alternatives were selected for detailed environmental review. The environmental analysis in this Final EIR/EIS is presented to disclose significant environmental impacts and provide mitigation measures to reduce these effects to acceptable levels. Where significant and unavoidable effects are identified mitigation measures to reduce these effects, to the extent possible, are presented. CEQA does not require that feasible alternatives are only those that avoid significant and unavoidable impacts, but instead provides for lead agencies to adopt a Statement of Overriding Considerations that describes the social, environmental and economic issues considered in approving projects with unavoidable environmental effects. An overview of the compliance with the Delta Reform Action is included in Appendix 3I, BDCP Compliance with the 2009 Delta Reform Act. Please see response to comment 2651-44 regarding effects on fish and critical habitat. See also Master Response 31 regarding compliance with the Delta Reform Act.</p>
2651	88	<p>NEPA requires an EIS must "objectively evaluate all reasonable alternatives" (40 C.F.R. [Section] 1502.14(a)) and "Reasonable alternatives include those that are practical or feasible from the technical or economic standpoint and using common sense, rather than just desirability from the standpoint of the applicant." (Council on Environmental Quality, Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations, March 23, 1981, Answer 2a) The BDCP cannot have applied a reasonable, objective or consistently applied screening criteria in the selection of project alternatives if: 1) alternatives were included in the second public draft which were excluded from the first public draft because they did not meet the screening criteria, 2) other alternatives more fully met the criteria than the new BDCP alternatives but were excluded from consideration because they were not outcomes that were desired by the project proponents, e.g., upstream and/or downstream storage in combination with other alternative components such as Clifton Court Forebay compliance fish screens and/or an aquatic species-only HCP/NCCP.</p>	<p>Please see response to comment 2651-87 and refer to Master Response 4 related to alternatives development.</p>

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2651	89	<p>Section 7 of ESA requires that a federal agency may not take any action that would "jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification" of designated critical habitat. (16 U.S.C. [Section] 1536(a)(2))</p> <p>The BDCP adversely modifies designated critical habitat of several fisheries species by degrading the dissolved oxygen, salinity, selenium concentration, methyl mercury concentration and other habitat suitability criteria. The new BDCP alternatives do not include implementation of the OCAP [Operations Criteria and Plan] BO [Biological Opinion] RPAs [Reasonable and Prudent Alternatives] which were required by FWS and NMFS to avoid a jeopardy call on listed species; delay the OCAP BO RPAs implementation by making them after the proposed BDCP conveyance is constructed; and preclude the later implementation of the RPAs due to environmental impacts that would occur with the BDCP conveyance as part of the baseline condition. The new BDCP alternatives would result in the continued jeopardy of listed species. Because Section 7 of the ESA prohibits a federal agency from implementing any action that would jeopardize listed species, the new BDCP alternatives never should have passed alternatives screening, should not have been advanced for consideration in the revised public draft and definitely never should have been put forward by the BDCP as the Proposed Project/Action.</p>	<p>Alternative 4A was also analyzed for ESA and CESA compliance, including an evaluation of effects to listed species and their critical habitats. A ROD will not be signed until the CWF Biological Opinion is issued, which will determine if the CWF would cause jeopardy, and if so, require a Reasonable and Prudent Alternative.</p> <p>As written, the BA is meant to cover all CVP and SWP in-Delta operations. It assumes that components of the current RPA that have yet to be implemented would be implemented prior to operations of the CWF. Operational criteria included in the RPAs are incorporated into the CWF operational criteria. The RPA components that address upstream habitats would continue to be implemented as the NMFS BiOp would continue to govern upstream operations.</p> <p>Ultimately, the FWS and NMFS will determine the effects of the CWF on listed species and complete their consultation accordingly.</p> <p>Please refer to the BA on the CWF website and Master Response 14 regarding water quality effects. See also Master Response 28 regarding operational criteria, Master Response 29 regarding the Endangered Species Act, and Master Response 45 regarding permitting.</p>
2651	90	<p>The BDCP requires a "Section 404" permit from the Army Corps of Engineers pursuant to section 404 of the Clean Water Act [CWA]. All Section 404 permits must comply with the Section 404(b)(1) Guidelines developed by EPA in consultation with the Corps. (33 U.S.C. [Section] 1344(b)(1)) The Section 404 (b)(1) Guidelines establish some mandatory elements: 1) the requirement to select the alternative that avoids and minimizes impacts to wetlands to the maximum extent practicable, and is the least environmentally damaging alternative that achieves the applicant's overall project purpose; and 2) the prohibition against projects that would result in significant degradation of water quality (which typically equates with compliance with state water quality standards pursuant to Section 401 of the CWA). The BDCP Proposed Project is not the LEDPA [Least Environmentally Damaging Practicable Alternative] as it has more wetlands impacts than the 3,000 cfs [cubic feet per second] conveyance capacity alternative. None of the BDCP alternatives evaluated to date meet the second criteria regarding prohibition on projects that result in significant degradation of water quality or exceedance with state water quality standards. An alternative that does not achieve the overall project purpose is not considered practicable. (40 C.F.R. [Sections] 230.10(a) and 230.10(a)(2)) The new BDCP alternatives do not meet the overall project purpose. None of the BDCP alternatives meet these mandatory 404 requirements so none of them should have been advanced for full analysis in the EIS or adopted as a Proposed Project/Action.</p>	<p>The assessment of potential water quality effects of the project alternatives fulfills a primary public disclosure purpose of the CEQA and NEPA process and will be utilized by the SWRCB and the U.S. Army Corps of Engineers in fulfilling their regulatory obligations with respect to the project under state and federal law. Clean Water Act regulatory compliance processes, including under section 404, are separate from the CEQA/NEPA process, and involve their own procedures and policies. Please see Master Response 14 for further discussion of water quality issues, including the relevance of state and federal anti-degradation policy. Please see Master Response 45, Permitting, for further discussion of other permitting processes, timing, and requirements.</p>
2651	91	<p>When evaluating which alternative is the least environmentally damaging practicable alternative [LEDPA], it is not appropriate to take into account compensatory mitigation measures that would offset impacts to the aquatic environment. (The 1990 Memorandum of Agreement between the Environmental Protection Agency and the U.S. Army Corps of Engineers) The new BDCP alternatives utilize the conservation measures (all except CM1) for compensatory mitigation. The previous BDCP alternatives with HCP/NCCP components had compensatory mitigation as additional actions on top of their Conservation Measures (all but CM 1). Given the 404 requirement of consideration of LEDPA prior to application of compensatory mitigations, the alternatives including the HCP/NCCP with the smallest construction footprint (i.e., 3,000 cfs [cubic feet per second] total capacity) would be the</p>	<p>"Least Environmentally Damaging Practicable Alternative" analysis is specific to CWA compliance rules and regulations, which is considered by the U.S. Army Corps of Engineers in regulatory compliance proceedings separate and apart from the CEQA/NEPA process. Please see Master Response 4 for further discussion of the range of alternatives analyzed, how the alternatives were evaluated at an equal level of detail, the preferred alternative, and modeling used for alternatives 4A, 2D and 5A. Please see Master Response 45, Permitting, for further discussion of other permitting processes, timing and requirements.</p>

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		only option for the LEDPA selection under the 404 process.	
2651	92	<p>"The BDCP alternatives were selected using a multi-step screening selection process, including consideration of the responsible and cooperating agencies' comments during scoping and on preliminary draft documents. Alternatives were also screened against the Sacramento-San Joaquin 2009 Delta Reform Act requirements to ensure compliance with Water Code 85320." (<a href="http://baydeltaconservationplan.com/Libraries/Dynamic_Document_Library_-_Archived/EIR-EIS_Alternatives_Update_Fact_Sheet_3-6-12.sflb.ashx">http://baydeltaconservationplan.com/Libraries/Dynamic_Document_Library_-_Archived/EIR-EIS_Alternatives_Update_Fact_Sheet_3-6-12.sflb.ashx</a>)</p> <p>The screening criteria used in the development of the BDCP alternatives was not included in the Scoping Report or elsewhere on the BDCP website so this reference from a BDCP poster was used as reference to their alternatives development screening process. Water Code 85320 specifies that the BDCP must comply with Chapter 10 (commencing with Section 2800) of Division 3 of the Fish and Game Code. Section 2800 is the code for the Natural Communities Conservation Planning Act, which the new BDCP alternatives no longer include so they are not compliant with.</p>	<p>The screening reports were provided as appendices to the Alternatives Chapter 3 of the 2013 EIR/S. The alternatives screening process for the BDCP, including the provisions of an HCP, used compliance with the cited statutes. However, as a result of the public review process, additional alternatives were added and a revised environmental document was distributed for public review. The lead agencies developed the modified proposed project (Alternative 4A/California WaterFix) in response to public and agency input. Alternative 4 remains a viable alternative..</p> <p>See Master Response 4 regarding development of alternatives, Master Response 5 regarding planning efforts, and Master Response 31 regarding compliance with the Delta Reform Act.</p>
2651	93	<p>"Screening Level One: Focused on identification of alternatives that would allow for the conservation and management of covered species, protection and restoration of aquatic, riparian and terrestrial habitats, and restoration and protection of SWP and CVP water supply reliability. The first screening process resulted in the development of initial conveyance concepts and operational considerations." (<a href="http://baydeltaconservationplan.com/Libraries/Dynamic_Document_Library_-_Archived/EIR-EIS_Alternatives_Update_Fact_Sheet_3-6-12.sflb.ashx">http://baydeltaconservationplan.com/Libraries/Dynamic_Document_Library_-_Archived/EIR-EIS_Alternatives_Update_Fact_Sheet_3-6-12.sflb.ashx</a>)</p> <p>The new BDCP project alternatives that do not include the HCP/NCCP should not have passed this first screening level. The new BDCP alternatives do not have covered species; do not restore aquatic, riparian, and terrestrial habitat (beyond compensatory mitigation); and they also fail to restore and protect water supply reliability. The new BDCP alternatives should not have passed this first screening level. Any alternatives or alternative components that were previously excluded from advancement by this screening level must now be equally considered in a revised EIR/S.</p> <p>"Screening Level Two: Focused on identification of those alternatives that would meet the project purpose and need while avoiding or substantially reducing potential adverse impacts." (<a href="http://baydeltaconservationplan.com/Libraries/Dynamic_Document_Library_-_Archived/EIR-EIS_Alternatives_Update_Fact_Sheet_3-6-12.sflb.ashx">http://baydeltaconservationplan.com/Libraries/Dynamic_Document_Library_-_Archived/EIR-EIS_Alternatives_Update_Fact_Sheet_3-6-12.sflb.ashx</a>)</p> <p>The new BDCP project alternatives that do not include the HCP/NCCP should not have passed this second screening level, either, as they do not reasonably meet the project purpose and need. None of the BDCP alternatives result in substantially reducing adverse impacts as all of the project alternative result in more adverse impacts than the No Action/No Project.</p> <p>"Screening Level Three: Focused on identification of those alternatives that were technically feasible and practical in terms of design, construction, and cost. Because CEQA and NEPA require only that a reasonable range of alternatives be considered, alternatives were narrowed down to eliminate duplicative analyses." (<a href="http://baydeltaconservationplan.com/libraries/Dynamic_Document_Library_-_Archived/EI">http://baydeltaconservationplan.com/libraries/Dynamic_Document_Library_-_Archived/EI</a>)</p>	<p>With the Project's objectives and purpose and need in mind, the agencies undertook an elaborate process to select an appropriate range of alternatives to be analyzed in the Draft EIR/EIS and RDEIR/SDEIS that fully complied with all applicable legal requirements. This process included numerous public workshops and scoping meetings, extensive input from agencies, stakeholders, and the public, and an extensive multi-level screening process to refine the alternatives to be carried forward for full analysis in the EIR/EIS. As explained in Final EIR/EIS Appendix 3A, "Identification of Water Conveyance Alternatives," the alternatives development process for the EIR/EIS was based upon a number of legal considerations including: (1) the legal requirements for adequate discussions of alternatives in an EIR and EIS, as set forth in CEQA and NEPA respectively, and the regulations and case law interpreting those statutory schemes; (2) the concepts of "potential feasibility" under CEQA and "reasonableness" under NEPA; and (3) the requirements of Water Code Section 85320 from the 2009 Delta Reform Act. The results of a multi-level screening process reflecting these considerations were further compared to the requirements of the Delta Reform Act and scoping comments related to the definition of potential EIR/EIS alternatives as identified by responsible and cooperating agencies under CEQA and NEPA, respectively. Finally, the potential alternatives were evaluated to determine if they would require changes in legal rights, including water rights, of entities that are not participants in the proposed project in a way that could not lawfully or practically be accomplished through the mechanism of an HCP/NCCP or Section 7 alternatives. For additional information on the alternatives screening process and the selection of alternatives, see Final EIR/EIS Appendix 3A, Identification of Water Conveyance Alternatives, Conservation Measure 1, Draft EIR/EIS Chapter 3, Description of Alternatives, and RDEIR/SDEIS Section 4 New Alternatives and Master Response 4 (Alternatives).</p>

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		<p>R-EIS_Alternatives_Update_Fact_Sheet_3-6-12.sflb.ashx)</p> <p>According to this document, 6 alternatives were eliminated by this screening step, but the BDCP does not disclose which ones or what their supporting rationale is for selecting one alternative over another and how similar or not the duplicative alternatives were.</p>	
2651	94	<p>The BDCP proposal to drop the HCP/NCCP from the project is a major alteration to the goals and scope of the project. This change in scope makes the BDCP Steering Committee obsolete which appears to be disbanded. Given that there is a different group now dictating the BDCP scope and objectives and because the objectives have changed so much, the BDCP must go back to scoping and alternatives development for a full review and consideration of the potential project alternatives, must update the scoping report and must include all alternatives that reasonably meet the project purpose and need and project objectives. The BDCP has set the bar very low for what they consider to reasonably meet the project purposes with the new alternatives as upon evaluation against the purpose and need, the new alternatives reasonably meet few if any of the elements of the purpose and need.</p>	Please see response to comment 2651-73.
2651	95	<p>The Draft Environmental Impact Statement (EIS) for the Coordinated Long-Term Operation of the Central Valley Project (CVP) and State Water Project (SWP) (ES.3, line 17) acknowledges that many of the provisions of the RPAs [Reasonable and Prudent Alternatives] identified in the biological opinions [BO] require further study and monitoring and further environmental documentation necessary before any future facilities can be constructed or modified. The BDCP EIR/S is inconsistent with the OCAP [Operations Criteria and Plan] EIS in that the proposed project and new alternatives no longer include implementation of the OCAP BO RPAs prior to or concurrently with the construction of the proposed new conveyance facilities and modification of existing facilities related to water conveyance. The BDCP EIR/S proposed project must be made consistent with the OCAP BO EIS as these are concurrent documents with the same lead agencies and the OCAP BO is part of the baseline condition of the BDCP EIR/S. Therefore the assumption of RPA implementation prior to CVP/SWP modification and construction must take supremacy over the BDCP proposed project assumption of modifying existing and constructing new facilities prior to implementation of the OCAP BO RPAs.</p> <p>The BDCP PRDEIR/S ignored the public comment requests received in the PDEIR/S for consideration of other project alternatives and instead put forward a new set of alternatives that were not based on input provided in the project scoping and comment process. The project alternatives put forward in the PRDEIR/S do not meet the criteria of the Purpose and Need of the project. Many of the other project alternatives that were proposed in public comment and that were not given full consideration and analysis in the PRDEIR/S much more fully meet the criteria of the purpose and need. The BDCP must fully analyze any project alternative that reasonably met the purpose and need of the project at least as well as the new alternatives provided in the PRDEIR/S and recirculate that document for public comment. By not including these other previously identified and submitted project alternatives that more fully meet the purpose and need and project objectives, the BDCP is in violation of both NEPA and CEQA requirements to equally and consistently apply screening criteria and to not apply screening criteria which limit the range of alternative choices arbitrarily, unreasonably and to a biased predecisional outcome of alternative selection.</p>	<p>The No Action Alternative assumes the continued implementation of the OCAP BOs. The modeling incorporates the operational RPAs. Other RPAs, such as physical improvements that have yet to be implemented, will continue to be pursued and implemented as part of the compliance with the current applicable BOs.</p> <p>The EIR/EIS evaluates 18 action alternatives. The action alternatives were selected through a rigorous three-step screening process and documented in Appendix 3A, Identification of Water Conveyance Alternatives- Conservation Measure 1, of the 2013 Draft EIR/EIS. For more information regarding alternatives to the proposed project please see Master Response 4. See also Master Response 3 regarding purpose and need, Master Response 29 regarding the Endangered Species Act, Master Response 31 regarding compliance with the Delta Reform Act, and Master Response 45 regarding permitting.</p>
2651	96	Under NEPA, the project alternatives must accomplish the same objectives as the Proposed	Please refer to response to comment 2651-86.

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		Project. All the other alternatives, except 4A, 2D and 5A, accomplish different objectives from the Proposed Project (alternative 4A), which has dropped the habitat restoration component of the project objectives. All of the other alternatives must be reevaluated and recirculated for public comment with the same objectives as the Proposed Project under NEPA requirements.	
2651	97	The conveyance still referred to as "CM-1" in the EIR/S. This misleading terminology for the tunnel conveyance must be changed as it is no longer a conservation measure if it is not part of an HCP/NCCP. The first BDCP public draft EIR/S proved that the conveyance did not contribute to conservation so even if the alternative does include a HCP/NCCP it is inappropriate and misleading to label the conveyance as a conservation measure.	The action alternatives consist of water conveyance facility components combined with water conveyance operational components (collectively referred to as CM1 in the BDCP alternatives). For purposes of consistency in comparing alternatives, the non-HCP alternatives (4A, 2D and 5A) include similar terminology in describing the conveyance component of the alternative.
2651	98	"California EcoRestore is an initiative to help coordinate and advance at least 30,000 acres of critical habitat restoration in the Sacramento-San Joaquin Delta over the next four years." There is no detailed project schedule, no funding, no NOI/NOP [Notice of Intent/Preparation], no final EIR/S, no NOD/ROD [Notice of Determination/Record of Decision], etc. This is not a project and is not reasonably foreseeable by any test. Any reliance by DWR, BOR [Reclamation] or the BDCP on this project implementing OCAP [Operations Criteria and Plan] BO [Biological Opinion] compliance is unsupported.	Section 5 of the 2015 RDEIR/SDEIS provides a description of the California EcoRestore effort, including the list of projects already identified for implementation. The projects identified have already begun planning processes and therefore can be considered reasonably foreseeable future projects. Please see <a href="http://resources.ca.gov/ecorestore/">http://resources.ca.gov/ecorestore/</a> for more information regarding EcoRestore projects, timelines, and funding.
2651	99	The reduced impact from the change in the intakes from being powered pump facilities to gravity fed facilities that only require temporary transmission lines and lower power transmission lines is a reasonable avoidance and minimization measure that must be applied to all project alternatives that include intakes. If the project description of the other alternatives that contain intakes are not similarly modified to avoid and minimize these impacts, it will be obvious that the BDCP and its lead agencies have purposely made the other alternatives worse in comparison to their Proposed Project due to their predecisional bias towards alternative 4A. The BDCP must modify all of the other alternatives with these same avoidance and minimization measures and then redo the analysis and then recirculate this new information.	See Master Response 4 regarding development of alternatives and Master Response 5 regarding planning efforts.
2651	100	Craig Wilson, former SWRCB Delta water master, "So given that many of the benefits of the tunnels project accrue only to the export water and that there are some potential destructive aspects still available, I ask myself, is there a project available that has many of the benefits and pros of the tunnels and avoids some of the negative aspects? And I believe there is," he said. "I call it the Western Delta Diversion System, and I think that has potential to provide better reliability, good quality water for the export, and reestablishes what seems to me is just a common sense situation. Let the water flow through the Delta as it should naturally, and then pick up that water on the western side of the Delta -- the tunnels or canals that would be built there would be much shorter in length so they'd be less expensive."  Mr. Wilson said there are three aspects to the Western Delta Diversion System. "The first is the diversion works on the western side of the Delta, located on an island called Sherman Island, which is right above the confluence of the Sacramento and San Joaquin Rivers," he said. "A tunnel constructed on the western side would be much less longer in length and require less excavation, and can be built along the existing public right of away so there isn't any eminent domain issue," he said. "Sherman Island is owned by the state, so you have a lot of savings and less disruption, and the fact that a lot of the diversion works in the beginning of the project diverted to the south would be on public lands, you wouldn't have	The EIR/EIS presents an evaluation of the Alternatives screening analysis in Appendix 3A. In this appendix a Western Delta Diversion System, referred to as the Pyke Proposal is evaluated. It was rejected from further consideration in the EIR/EIS, in part, because some of the elements in this proposal are similar to other alternatives carried forward in the EIR/EIS (Alternatives 1C, 2C and 6C), salinity issues exist in the western Delta near Sherman Island, potential issues exist related to flooding Sherman Island, and water quality issues could restrict export water supplies. Please refer to Section 3A.11.4 of Appendix 3A, Identification of Water Conveyance Alternatives, Conservation Measure 1. Please refer also to Master Response 4, which discusses alternatives development for the EIR/EIS.

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		<p>the eminent domain issue and taking land away from private citizens against their will."</p> <p>"But perhaps the biggest benefit of having this western diversion point is just to reestablish this natural flow from east to west," he said. "With the water flowing into the Delta, you get two uses for the price of one. It goes to the Delta, protects the Delta for both the fish and the agricultural community, and then that same water can be used to be exported to the south." (<a href="http://mavensnotebook.com/2015/08/26/legislative-hearing-are-the-Delta-tunnels-good-for-california-part-2-of-2/">http://mavensnotebook.com/2015/08/26/legislative-hearing-are-the-Delta-tunnels-good-for-california-part-2-of-2/</a>)</p> <p>There are few if any experts on the Delta more qualified to speak on this topic than the former Delta Water Master for the SWRCB. All of his points are valid and must be taken with the utmost seriousness and credibility by the BDCP. The BDCP must fully evaluate this credible and fully functional alternative as described. This alternative much more fully meets the Purpose and Need and Objectives of the project as it more fully restores flow patterns and related ecological functions of flows in the Delta than the current Proposed Project/ Action.</p>	
2651	101	<p>Craig Wilson, former SWRCB Delta water master: "The second aspect of the [Western Delta Diversion System] that would address reliability is to consider building an operable gate at Chipps Island which is below the confluence of the Sacramento and San Joaquin river and where the river gets narrow, said Mr. Wilson. "I'm talking about an operable gate that would act much like a flapper on the bottom of a pinball machine," he said. "It would be open 99% of the time, but if there was a problem -- if there was a levee issue, if the Delta got too salty, you could close these gates in the matter of an hour so and protect the reliability of the diversion point and the entire Delta," he said. "It would be reliability for both the export water and the Delta itself. There have been similar-type projects built in Europe for flood protection larger in scale than what would be built at Chipps Island, so it's definitely doable and it would provide that insurance policy, not only for the export water but also for the Delta itself."</p> <p>The third aspect of Mr. Wilson's proposed system is a "treatment polishing" facility. "One concern that people would have with a western diversion is that sometimes the water may be too salty for suitable use to the south," he said. "Most of the time, it is of adequate quality. It's above the confluence of the two rivers, and at least the Sacramento side is pretty good quality, even in the western Delta at Sherman Island, but you could build a polishing type facility to treat this slightly too salty water. I'm talking about water that has 2000 parts per million salt as opposed to seawater which has 35,000 parts per million. You could use some sort of sand filtration system, there's a lot of emerging technology about the use of conductive electrodes to separate salt from water, and you could even build a reverse osmosis plant. . . so there are alternatives."</p> <p>The Western Delta Diversion system has all the pros of the tunnel project with almost none of the negatives, Mr. Wilson said. "You would restore the east-west flow system, take the water after that takes place, you would have the reliability aspect with the operable gates, and you assure adequate quality through a polishing type facility." He noted that other people have studied this, including a company called SolAgra. "I think there is a system that's viable," he said. "I don't think BDCP ever studied a western diversion system that has the three elements that I suggest: a diversion point in the west, a gate system to protect reliability, and a polishing facility to assure adequate quality. . ." "Senator Wolk said that it</p>	Please see response to comment 2651-73 and 2651-100.

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		<p>certainly begs the question as to why that kind of alternative was or is not being studied."</p> <p>"I think there was some fairly cursory analysis of a western Delta diversion," said Mr. Wilson. "I don't believe there has been an adequate study of that type of a comprehensive western diversion conveyance facility or system." (<a href="http://mavensnotebook.com/2015/08/26/legislative-hearing-are-the-Delta-tunnels-good-f-or-california-part-2-of-2/">http://mavensnotebook.com/2015/08/26/legislative-hearing-are-the-Delta-tunnels-good-f-or-california-part-2-of-2/</a>)</p> <p>There are few if any experts on the Delta more qualified to speak on this topic than the former Delta Water Master for the SWRCB. All of his points are valid and must be taken with the utmost seriousness and credibility by the BDCP. The BDCP must fully evaluate this credible and fully functional alternative as described here and in the following comment. This alternative much more fully meets the Purpose and Need and Objectives of the project as it more fully restores flow patterns and related ecological functions of flows in the Delta than the current Proposed Project/Action.</p>	
2651	102	<p>Dr. Jeff Michael, University of the Pacific: "The California WaterFix process has not looked at an appropriate range of alternatives, Dr. Michael said. "I believe there are 15 alternatives in the EIR plan: 14 of them are different sizes and configurations of the isolated conveyance, and there was one alternative of enhanced through-Delta conveyance," he said. "There are a lot of alternatives out there. I've heard a number of iterations of the west Delta intakes diversion concept from a number of reputable people; that is an example of something like the tunnels that you could come up with 14 different versions of and optimize the configuration and the technology used. Similar efforts should be placed towards those sorts of alternatives, as well as others."</p> <p>Dr. Michael said he was aware of two not highly publicized cases where the state has looked at benefits and costs of alternatives to an isolated conveyance facility. The first one was called the Delta Corridors Plan, and one version of the Delta Corridors plan actually had a higher benefit-cost ratio than the tunnels in the BDCP documents, he said. In the late 2000s as part of the Delta Risk Management Strategy effort, DWR did receive a consultant's report that looked at a seismic levee investment strategy and compared to what at that time was an isolated surface conveyance that only cost under \$5 billion, he said. "That analysis which was not released in the late 2000s also showed that the seismic levee upgrade had higher benefits and lower costs than the tunnels, but no effort was made to optimize configurations of that scenario like has been made for the tunnels."</p> <p>"There are a lot of other alternatives that haven't received any analysis at all, and what little analysis we do have shows that it's likely that other alternatives are better," Dr. Michael added.</p> <p>(<a href="http://mavensnotebook.com/2015/08/26/legislative-hearing-are-the-Delta-tunnels-good-f-or-california-part-2-of-2/">http://mavensnotebook.com/2015/08/26/legislative-hearing-are-the-Delta-tunnels-good-f-or-california-part-2-of-2/</a>)</p> <p>Dr. Michael is correct that the BDCP failed to evaluate many alternative concepts that were in the public record and that several of them not only are better and cheaper than the current Proposed Project/Action, but also more fully meet the project Purpose and Need and Objectives. Even the BDCP proponents, Kern County Water Agency, do not believe the current BDCP alternatives provide an economic cost of water supply. "The alternatives in the RDEIR/SDEIS serve as an important initial step in developing a workable solution to the challenges facing California's water resources and the Delta. The alternatives, however, do</p>	<p>The Delta Corridors plan concept is evaluated as Alternative 9 in the EIR/EIS. Please see Master Response 4 for an overview of the alternatives development process and an explanation of why the alternatives evaluated in the 2013 public draft EIR/EIS and the 2015 RDEIR/SDEIS are adequate for the purposes of the CEQA and NEPA analysis. Also see Master Response 46 regarding scoping and recirculation.</p> <p>The economic viability of the BDCP and alternatives to take (which are somewhat different than the EIR/EIS alternatives) are discussed in the 2013 public draft BDCP, Chapter 9. This chapter describes how several alternatives, including BDCP, are economically viable when the economic benefits of water supply reliability, water quality, and water supply are taken into account. Also see response to comment 2651-38.</p>

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		<p>not currently provide PWAs [public water agencies] with a Project that is economically feasible. As described in further detail below, additional efforts need to be taken to reduce the cost of the Project, protect the Project's yield, and improve the likelihood that the Project will be constructed and implemented in a manner that improves water supplies at an affordable cost."</p> <p>(<a href="http://www.kcwa.com/public/documents/PublicBoardPacket.pdf">http://www.kcwa.com/public/documents/PublicBoardPacket.pdf</a>, page 123 of the pdf, paragraph 1)</p> <p>The current BDCP alternatives are not economically viable for the water users that are the intended beneficiaries of the project, so the current alternatives represent a failed project. The BDCP [should] either abandon the project or introduce other alternatives that are more cost-effective (such as identified above) in a revised and recirculated PDEIR/S. The California WaterFix decided to go back to alternatives scoping to develop new alternatives based on some selected comments that were submitted based on the public draft EIR/S. Since some concepts put forward from the first public draft EIR/S comments were evaluated and accepted in a new alternatives scoping round by the BDCP to develop alternatives that were presented in the second public draft EIR/S, all alternative concepts proposed in comments on the first PDEIR/S comments must be given equal consideration. These other concepts, if they were rejected, must have substantiated and consistently applied rationale as to why they were dismissed from further consideration and those analyses disclosed in a revised Scoping Report document that must be recirculated for public comment based on this material new information.</p>	
2651	103	<p>DWR and Reclamation non-compliance with current OCAP [Operations Criteria and Plan] BO [Biological Opinion] RPAs [Reasonable and Prudent Alternatives]: The OCAP BO RPAs are a part of the No Action definition for the BDCP comparative analysis as they are current obligations of the CVP/SWP. The BDCP has failed to accurately represent the vast majority of the OCAP BO RPAs in terms of their environmental effects and their impacts on water operations, storage; fish habitat quality, quantity and distribution; on water rights, water supplies, water quality and many other environmental resources. The BDCP falsely claims that no details were available to represent these OCAP BO RPAs, but in fact most of the actions do have available information and the BDCP has failed to meet the NEPA and CEQA test to utilize the best available information. Other comments included herein identify most of the OCAP BO RPA deliverables that are current obligations of Reclamation and DWR to fulfill. The comments identify the deadlines for the actions and in some cases describe the nature of the information that should be available to the BDCP to incorporate into their EIR/S. If none of this information is available to the BDCP, then it means that Reclamation and DWR have not fulfilled their legal requirement to comply with the OCAP BO RPAs and they are in violation of the ESA.</p>	<p>Please see response to comment 2651-50. The No Action Alternative and all action alternatives evaluated in the EIR/EIS included full implementation of the 2008 USFWS and 2009 NMFS biological opinions. The Existing Conditions also included full implementation of the 2008 USFWS and 2009 NMFS biological opinions operational requirements except for Fall X2 because that provision of the 2008 USFWS biological opinion had not been implemented at the time of the 2009 Notice of Preparation for this EIR/EIS. The CALSIM II model used in the Draft EIR/EIS only included specific operations for implementation of habitat restoration in the Yolo Bypass in accordance with the 2009 NMFS biological opinion in the action alternatives. However, actions to increase the extent and duration of inundation of the Yolo Bypass were included in the No Action Alternative and action alternatives in the Final EIR/EIS.</p> <p>With respect to representing SWP and CVP operations in accordance with the 2008 USFWS and 2009 NMFS biological opinions, the EIR/EIS used a CALSIM II model based on CALSIM II model runs for the Existing Conditions, No Action Alternative, and Alternative 1 models developed in April – May of 2010 (2010 models), which were the state-of-the-art at the time, and formed the basis for universal assumptions in the other action alternatives in the EIR/EIS. However, in August 2011, several model improvements were identified by the water agencies, fishery agencies, and the modeling community, including changes that better reflected actual operations that were occurring within the first two years of SWP and CVP operations under the 2008 USFWS and 2009 NMFS biological opinions. The identified improvements were compiled, and the Existing Conditions, No Action Alternative, and Alternative 1 models were updated in coordination with DWR, Reclamation, USFWS, and NMFS. This update was performed to verify if the compiled model improvements altered the incremental changes between the BDCP Alternative 1 and the Existing Conditions and the No Action Alternative relative to the 2010 models. The findings from the 2011 update showed that the incremental differences between Alternative 1 and the Existing Conditions and the No Action Alternative remained consistent with the 2010 modeling. Therefore, the action alternatives modeled since 2011 continued to rely on the 2010 modeling, allowing consistency and comparability throughout the BDCP EIR/EIS. Similarly, when Alternative 4A was modeled using the 2013 baseline, the incremental changes in the</p>

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			operational results for Alternative 4A as compared to the No Action Alternative were similar to the prior incremental results between the 2010 modeling for the No Action Alternative and Alternative 4A. It should be noted that the modeling used in the EIR/EIS must be used in a comparative manner and not to define absolute values.
2651	104	<p>The BDCP Proposed Project and other new alternatives include a major re-engineering and construction of Clifton Court Forebay and new construction of large pump stations for the conveyance tunnels. With these significant engineering and construction efforts for modification of existing facilities at Clifton Court Forebay included in the scope of the proposed project, there is no plausible rationale for the BDCP to have not included an alternative that integrated criteria compliant fish screens at Clifton Court Forebay for the south Delta export pumps.</p> <p>Criteria compliant fish screens on the export pumps would reduce ESA species take associated with south Delta pump operations which are included in the proposed project "dual" water operations (which according to the BDCP EIR/S is 60% of the time). Detailed descriptions of viable fish screen retrofit to the pumps and Clifton Court Forebay were provided in public scoping and in comments on the PDEIR/S. The BDCP must fully consider an alternative that includes compliant fish screens on the export</p>	<p>DWR and Reclamation are required to improve fish collection efficiency at the existing south Delta salvage facilities as part of facility improvements required by the National Marine Fisheries Service 2009 biological opinion on the SWP/CVP. For example, in 2014 Reclamation replaced the secondary louver system with a traveling screen system. These screens provide protection by guiding fish into the holding tanks while catching debris on pegs and transporting debris to a collection system at the work surface. The technology required at the proposed north Delta intakes and the existing south Delta export facilities differ fundamentally. The north Delta intakes would be located on the side of the river channel and so would be designed to comply with CDFW, NMFS, and USFWS fish screening criteria (Appendix 5B Section 3.B.3.3). The south Delta export facilities are located on dead-end channels and require active collection and salvage of fishes.</p> <p>Screening the intakes at Clifton Court Forebay was analyzed during the water conveyance alternative development process and is described in the 2013 Public Draft EIR/EIS, Appendix 3A. This alternative was eliminated from further evaluation because initial results of recent studies, including information included in the recent NMFS biological opinions, supported a phased approach that would emphasize improvements to operations of fish handling facilities and reduced predator potential within Clifton Court Forebay prior to further analysis of installation of fish screens. Nevertheless, DWR and Reclamation will continue investigating strategies to increase fish salvage efficiency, reduce pre-screen losses, and improve screening efficiencies, consistent with the 2009 biological opinion of the SWP/CVP. Also see Master Response 4 regarding alternatives development.</p>
2651	105	<p>Since the Proposed Project no longer includes a HCP/NCCP, the ongoing impacts of operating intakes (60% of the time) without compliant fish screens must be fully mitigated. This impact can be avoided and minimized by including a project alternative or alternative component that includes criteria compliant fish screens for the south Delta pumps. These south Delta criteria compliant fish screens must be included as a mitigation measure for the ongoing CVP/SWP impacts and for other alternatives as they are a feasible method to avoid and minimize significant impacts to listed fish species that otherwise go unmitigated by the current BDCP dual water operations alternatives.</p> <p>The core of the Coordinated Long-Term Operations (CLTO) of the CVP/SWP is a simple reoperation of the CVP/SWP south Delta intakes to reduce the magnitude of reverse flows in Old and Middle River, which the last few years of reoperation have proven to significantly reduce fish salvage rates that resulted in a significant reduction of the principle impact of the SWP/CVP on the fish species that the project was putting into jeopardy. Since the CL TO CVP /SWP reoperation has been so successful it makes sense to combine project alternatives components with that .reoperation to form other viable BDCP project alternatives to further reduce the rate of take from the CVP/SWP south Delta intake operations. This alternative should include reverse flow restricted operations with other physical modifications to the existing CVP/SWP south Delta facilities such as, but not necessarily limited to: fish screens with criteria compliant approach and sweeping velocities; a reduced distance fish path through Clifton Court Forebay to reduce duration of exposure of fish to predators in the Fore bay; fish behavioral modification devices to manage fish distribution away from the intakes (bubble curtains, acoustic and light deterrents); and improved fish salvage capture, storage and release facilities and operations. Since the fish</p>	<p>The effects of ongoing operations at Clifton Court Forebay, whether in the context of water quality or fisheries, are the result of the application of, and compliance with, existing regulatory requirements and are considered the baseline condition for purpose of analyses. The BDCP/CWF is not obligated to mitigate for these effects. The proposed south Delta operations for Alternative 4A incorporate these OMR restrictions from the 2008 and 2009 BiOps referenced in the comment, and in key periods, include further restrictions to south Delta exports and include a preference for south Delta pumping in July through September months to provide limited flushing flows to manage water quality in the south Delta.</p> <p>The commenter's proposed "fish screen alternative" does not fulfill the BDCP/CWF purpose and need. The lead agencies have defined the purpose of the project as making physical and operational improvements to the SWP/CVP system in the Delta necessary to restore and protect ecosystem health, water supplies of the SWP and CVP in parts of the Bay Area and south of the Delta, and water quality within a stable regulatory framework, consistent with statutory and contractual obligations. With regard to water supply, the project objectives include protecting SWP and CVP exports against sea level rise and other consequences of climate change, increasing system resiliency to potential future seismic and levee failure events, and improving reliability. These goals simply cannot be achieved through implementation of a narrowly defined project alternative such as that proposed by the commenter, however meritorious such a proposal may be when considered in isolation or as a response to one of the several enumerated objectives of the encompassed in the proposed project's purpose.</p> <p>However, the proposed project (Alternative 4A) does meet the implied goal of the commenter's fish screen alternative proposal – improved conditions for listed species. In addition to satisfying the purpose and need described in Chapter 2, Alternative 4A would benefit listed species because it would improve central Delta flow patterns, reduce entrainment of listed species and create a more natural east to west flow</p>

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		<p>screens would be criteria compliant and fish survival rates would be significantly raised, some of the flow criteria which currently limit south Delta export volumes could be relaxed and some previous export volumes restored.</p> <p>This south Delta intake criteria compliant fish screen alternative component could also be included as a first phase implementation of other BDCP alternatives so that there are tangible improvements in fisheries conditions while other longer lead time alternative components constructions are implemented. If monitoring during the near term identified that the south Delta intake criteria compliant fish screen conservation measures were adequate to conserve and protect the fish species then the other later implementation phase project components, e.g., north Delta intakes and tunnels, would not need to be implemented.</p> <p>Designs for an isolated Clifton Court Forebay have been discussed many times by DWR and through the CALFED project, but these concepts discussed in the BDCP EIS/R scoping process were not provided adequate consideration for inclusion in the EIS/R alternatives or any equivalent level of effort by the BDCP or DHCCP to develop into a fully functioning concept to even properly screen and evaluate.</p> <p>Isolation of Clifton Court Forebay as a fish-free facility would reduce the magnitude of impacts on fisheries from CVP/SWP south Delta operations. Following is a description of a fish-free isolated Clifton Court Forebay facility with integrated CVP intake that have been previously discussed and proposed (although not as fully developed as described here).</p> <p>Here are the basic elements to this Clifton Court criteria compliant fish screen alternative component: widen the Clifton Court operable gates, install trash racks outside the operable gates, install a course large fish exclusion screen between the trash racks and operable gates, construct a conveyance channel in Clifton Court Fore bay from the operable gates to the western side of Clifton Court Forebay, install criteria compliant fish screens in the conveyance channel, reengineer the current fish salvage facilities, and plumb the CVP intake into the fish-free north side of Clifton Court via a short tunnel. Following is a more detailed description of each of these elements.</p> <p>Widen the Clifton Court Forebay operable gates to the north from their existing location. The width of the new operable gates needs to be sufficient to create a channel cross section of about 15,000 square feet. Dredge and reinforce channels as most economical and reliable from an engineering standpoint. As an example, dredge the approach and channel at the operable gates to a tidal working channel depth of 30' for a total operable gate width of 500'. The new gates should be set back into Clifton Court sufficiently to allow installation of trash racks and course large fish exclusion screens in front of them without reducing the existing channel cross section outside of Clifton Court. The Clifton Court Forebay Gates and tidal operations/storage can continue to function as they do under the existing conditions and No Action/Project so there are no operational impacts from this alternative component on tidal operations of Clifton Court Forebay.</p> <p>Install trash racks outside Clifton Court Forebay outside of the widened Clifton Court operable gate. The trash racks will intercept debris coming in with the diversion water and serve as a behavioral deterrent to the fish to stay in the main channel as much as possible.</p> <p>Behind the trash racks and just in front of the operable gates would be a coarse fish screen designed to keep out only larger "predator" size fish that have much higher swimming</p>	<p>pattern.</p> <p>The addition of armored levees to the commenters desired alternative, while more responsive to the project's purpose and objectives than south Delta fish screens alone, still results in a too narrowly drawn alternative that fails to respond to the project purpose and objectives in a comprehensive manner. For more information regarding the development of alternatives and an explanation of why the alternatives evaluated in the EIR/EIS are adequate for the purposes of the CEQA and NEPA analysis please see Master Response 4.</p> <p>Please also refer to Master Response 46 for discussion of scoping and recirculation, Master Response 37 for discussion of upstream storage and responses to comments 2651-3, 2651-50, 2651-104, and 2651-106 for additional information responsive to this comment generally.</p>

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		<p>performance capability from entering Clifton Court Forebay. With the new 15,000-square-foot cross section of the operable gates and surface area of the coarse fish screens, at full capacity CVP/SWP diversions the approach velocity at the coarse fish screens would be one foot per second. Predator sized fish would easily out swim this approach velocity, but smelt and juvenile salmonid would be pulled through and past the coarse large fish exclusion screen. There would be some predation at the trash racks and coarse fish screens but this can be managed and reduced with predator removal actions and fish traps. The level of predation at the trash racks and coarse fish screens would be the same as the predation rates that occur at the current SWP trash racks and fish louvers under the No Action. This coarse fish screen outside of Clifton Court Forebay is designed to pass smelt and juvenile salmonids without risk of impingement, e.g., 15- 25mm wide screen inlets. This screen would significantly reduce the exposure of juvenile salmonids and Delta smelt to predation as larger predators would be excluded from within Clifton Court Forebay where a large amount of current predation is documented to occur.</p> <p>A conveyance channel would be created in Clifton Court Forebay by segmenting the northern and southern parts of the Forebay with a new sheet pile partition that would draw water from the Clifton Court Forebay operable gates channel directly toward the existing SWP intakes on the southwestern side of the Forebay. The conveyance channel would start at the east side of the Forebay at the north and south ends of the widened operable gates channel. The partition would then quickly (but maintaining orderly water flow vectors) narrow from 500' wide to a width of approximately 250' and deepen from the initial 30' channel depth at the operable gates to a conveyance channel depth of 60 feet. The rest of the length of the conveyance channel would be dredged to 60 feet deep with the channel partitions reinforced as necessary for stability. The channel depth is to accommodate the large surface area of fish screens and to increase the channel cross section to reduce water velocities. The channel would speed the transit of the fish across the Forebay (as compared to the No Action) and keep them from straying out into the Forebay so that they would have a significantly reduced duration of exposure to predation. Fish predation studies of the current Forebay operations have shown that a large portion of the juvenile salmonid and Delta smelt population that enter the Forebay do not make it to the salvage facilities due to predation. By excluding predator size fish from entering Clifton Court, not allowing the smelt and juvenile salmonid fish to stray into the larger part of the Forebay and by shortening the duration and distance of their transit across the Forebay prior to capture and salvage; predation rates on juvenile salmonids and Delta smelt would be significantly reduced with the Clifton Court criteria compliant fish screen alternative as compared to the existing condition, No Action/No Project or in comparison to any of the other alternative which retain dual operations without south Delta intake screens that are criteria compliant.</p> <p>Install criteria compliant fish screens in the conveyance channel in Clifton Court Forebay. Orient the screens in the conveyance channel in a "deep V" (10 to 15 degree angle) across the Clifton Court Conveyance Channel with the bottom of the V in the middle of the new conveyance channel approximately 1/4 mile from the west side of Clifton Court Forebay. The fish screens would be oriented vertically on the sides of the V. The top of the V is on the east side of Clifton Court Fore bay and is attached to the sides of the conveyance channel partitions where the channel comes to approximately 250 feet wide. Each side of the V fish screen would be approximately 6850 feet long with a depth of 60 feet for a total working surface area in their vertical orientation of 822,000 square feet. If greater surface area is desired, alternative designs where the screens are sloped in towards the middle of the conveyance channel at the bottom can be evaluated for cost, operational flexibility and fish</p>	

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		<p>protection performance. The deep V shape of the screen orientation in the conveyance channel creates a shallow angle of approach of water to the screens and creates a sufficient surface area to reduce approach velocities and to have the draw of the export pumps create sweeping velocity across the screens.</p> <p>As an example, water approaching a screen at a 15 degree oblique angle has an approach velocity that is 3.5% of the sweeping velocity. With the conveyance channel at 250 foot wide and 60 feet deep, at maximum CVP/SWP diversion volumes of 15,000 cfs [cubic feet per second], the water column velocity in the conveyance channel would be one foot per second. With a water column velocity of 1 foot per second, a 15 degree angled V screen would result in a sweeping velocity of 0.965 feet per second and an approach velocity of 0.035 feet per second.</p> <p>The total surface area of vertically oriented deep V fish screen configuration is 822,000 square feet with the above assumptions. (As previously mentioned, sloped screen designs could have even larger surface areas if desired.) At the maximum combined CVP/SWP volume of 15,000 cfs the approach velocity to screens with this large surface area is just over 0.018 feet per second. 0.2 foot per second screen approach velocity is the compliance criteria for Delta smelt so the fish screens as described would be only be 10% of the maximum approach velocity for smelt at the maximum CVP/SWP intake volume operations. If this screen configuration is considered over-designed with the 10% of the allowed approach velocity criteria and is excessively protective, and a more relaxed (but still compliant) approach velocity is deemed by the fisheries agencies to be adequately protective, the channel depth could be reduced along with the fish screen height and a narrower channel with a shorter length fish screen could be applied and still easily meet the fish screen criteria requirements. As an example a fish screen only 30 feet deep and half as long would still result in approach velocities that were half as fast as are Delta smelt criteria compliant.</p> <p>Let's compare this criteria compliant fish screen configuration at Clifton Court to the characteristics of the proposed north Delta intakes. Assuming the same compliance of maximum approach velocities of the two different screens and constant maximum diversion operations, the fish exposure duration while passing the screens would be about the same. One of the problems with the north Delta intakes is that they are located in an intertidal zone so some fish would be exposed to the same intake more than one time due to reverse flows that occur in these north Delta diversion reaches. Because the north Delta fish screen intakes cannot be continuously operated due to the twice daily slack tides and lack of compliant sweeping velocities, the other portion of the time the north Delta intakes would have to be operated at a higher diversion rate to make up for lost time. In order to do higher volumes some of the time and still maintain the maximum approach velocity, the north Delta intakes would have to have a larger total surface area than the south Delta intake screens that can run at a constant, compliant, rate. As a result, the total fish exposure to fish screens on the north Delta intakes would be longer than the proposed Clifton Court criteria compliant fish screens. All of the northern Central Valley salmonid runs (e.g., Sacramento, American and Feather Rivers) have to pass the north Delta intakes whereas only a small fraction of that population are exposed to south Delta fish screens. Population exposure of vulnerable species life stages to the screens is dramatically different on at least a factor of 10 or more for the north Delta intake screens as compared to the Clifton Court criteria compliant fish screens.</p>	

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		<p>As stated above, another advantage of the Clifton Court criteria compliant fish screens over the north Delta intake fish screens is that the north Delta fish screens cannot be operated at or near the slack tide periods as they would no longer have any sweeping velocity. The north Delta intake reliance on tributary flow velocities to create sweeping velocities mean that there are several hours twice a day that these intakes may not be operated and be in compliance with sweeping velocity criteria. The Clifton Court criteria compliant fish screens are not vulnerable to tidal conditions as the export pumps themselves make the flow draw across the angled fish screens to create its own sweeping velocity and therefore they can be continuously operated as the CVP/SWP needs to. The draft BDCP EIR/Ss have failed to describe, evaluate or disclose these north Delta intake tidal operations.</p> <p>The fish capture/salvage facility for the Clifton Court criteria compliant fish screen starts at the very bottom end of the fish screen deep V (western side). There is a separation of the "water intake" portion of the screens on the sides of the V for a "fish intake" opening (slot) at the very bottom end of the V that is 4" to 6" wide. A shade structure should be built from the bottom of the V out to at least 50 feet to the east up the V so the intake slot is in deep shade so that fish do not attempt to evade the fish intake. The fish salvage pumps draw water into the fish intake slot at an approach velocity of 3 feet per second. The higher approach velocity of the fish intake slot is so the fish are quickly drawn in and do not swim away. The top 25 feet and the bottom 5 feet of the conveyance channel at the end of the water intake screen would have this fish intake slot. The top and bottom fish intake slots are to reflect the fish distribution in the water column. The juvenile salmonids and smelt will generally be concentrated in this top 25 feet of water column and the juvenile sturgeon at or near the bottom of the water column. With a 30 foot long total intake slot height, 6 inch width and 3 foot per second approach velocity, the fish salvage pumps would need to intake a maximum of 45 cubic feet per second to bring the fish into the fish collection facility. The current collection facility will need to be redesigned and enlarged to support fish/water separation of fish into transport tanks with this larger than current fish capture water flow. The same principles of the current fish salvage facility still apply, but will have improved handling of fish directly into holding tanks with reduced holding times prior to transport and active predator removal with nets (for the few that get through the large fish exclusion coarse fish screens). Other fish salvage facilities, handling, storage, transportation and release protocols can be developed and integrated with this Clifton Court criteria compliant fish screen alternative component.</p> <p>The current fish separation, handling, storage and release operations would need to be revamped as has been previously recommended in many previous meetings, projects and communications. Under the Clifton Court criteria fish screen alternative, predation from salvage operations would be further reduced as compared to the existing conditions, No Action/Project or any of the other BDCP project alternatives because captured juvenile salmonids and smelt would not be stored, shipped and released with predator-sized fish.</p> <p>The existing CVP intake will be plumbed into the fish free northern portion of Clifton Court Forebay via a short tunnel (approximately 1 mile long). The combined diversions of the CVP and SWP on the fish-free side of the screen provide the draw for the flows in the Clifton Court Conveyance Channel. As previously described, the east end of the conveyance channel would stop about a quarter mile east of the west side of Clifton Court Fore bay. This allows the fish-free water from the conveyance canal to go north to the CVP intake or south to the SWP intake in any relative proportion without disrupting the continuity and vector of flows in the conveyance channel so the approach velocities to the screen are uniform and</p>	

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		<p>predictable.</p> <p>This uniformity of flow vectors in the conveyance channel along the entire length of the Clifton Court criteria compliant fish screen is another advantage of this fish screen configuration over the proposed north Delta intake screens. The north Delta intake screens are on hydraulically complex and dynamic conditions on or near bends in the river with changing flows, eddies, shifting thalweg, back currents/reverse flows, swirls, etc. This flow vector variability causes areas of the fish screens to perform poorly and they create predator refuges that increase the resulting take associated with the north Delta intakes. Even worse, this elevated rate of predation from the north Delta intakes predator refuges occur if the intakes are being operated or not. The Clifton Court criteria compliant fish screens suffer none of these shortcomings.</p> <p>Since the concept of an isolated Clifton Court Facility has been discussed, described and debated publicly and by the lead agencies many times (e.g., CALFED) there is no excuse for the BDCP EIS/R project to not have addressed this important project alternative in their alternatives development, screening and alternatives analysis process. None of the project features described in this Isolated Clifton Court Criteria Fish Screen alternative require new technology and all features described have built-out project examples to rely upon for their engineering design, construction methods and for expectations regarding as-built real world performance characteristics. An alternative with criteria fish screens at Clifton Court Fore bay as described above have a number of advantages over other BDCP EIS/R alternatives currently considered: A) the fish screens more directly benefit the affected listed fish species directly by modifying the CVP/SWP facilities that are in majority responsible for take. This is taking action directly on the cause of the problem. All of the current BDCP alternatives only indirectly (put intake screens someplace else and operate them some of the time or utilize fish behavior devices to attempt to steer fish away from the intakes) or cumulatively (create habitat to make up for the south Delta fish take) address this principal source of CVP/SWP impact on listed species. B) The current BDCP EIS/R alternatives that include habitat restoration only generally benefit the listed fish species by increasing the quantity of habitat (which in the case of smelt is not a limiting factor with its current population size). C) The CVP/SWP did not convert aquatic habitat into nonaquatic habitat so habitat restoration actions by the BDCP are only indirectly beneficial to the species with respect to the nature of the impact of the CVP/SWP project on those species. D) The design characteristics requirements of successful fish screens are much more well-understood and less experimental than the habitat restorations. Habitat restorations of the size proposed by the BDCP have little precedence and they have little quantitative documentation of their efficacy in achieving their stated species benefit goals. E) Modified CVP/SWP operations with Clifton Court criteria compliant fish screens avoid adverse modification of ESA species designated critical habitat from water quality impacts (e.g., dissolved oxygen crashes and other impacts) that occur as a result of north Delta intakes and Delta habitat restorations associated with other BDCP project alternatives. And F) The Clifton Court criteria compliant fish screen described above would take place almost entirely on lands currently owned by the state and federal government so private lands confiscation would be minimal (maybe 100 acres) and land use and habitat conversion associated with the habitat restoration components of other alternatives would not occur.</p> <p>Without inclusion and due consideration of this fish screen alternative component, the current BDCP EIS/R document is deficient and should be recirculated after it has been revised to include this alternative. This alternative combining CVP/SWP water reoperations</p>	

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		<p>with criteria fish screens in Clifton Court can be further complemented by an additional alternative which would include additional upstream and/or downstream storage, e.g., Sites Reservoir and/or San Luis Reservoir II. The addition of upstream and/or downstream storage would allow additional operational flexibility to divert water at times of the year in which the listed fish species would be least affected by CVP/SWP water operations. There is nothing in the Purpose and Need statement in the BDCP EIS/R that precludes additional upstream and/or downstream storage as a strategy to allow adaptation of CVP/SWP operations to avoid and minimize take as an alternative to other alternative components that were included in the current EIS/R.</p> <p>The Fisheries Facilities Technical Team (FFTI) and DHCCP Engineering Teams must be convened to review, refine and more fully develop this concept into a fully formed and project-level project description that is suitable for full analysis in a revised EIR/S. This group is well qualified to adapt the preceding description as needed to optimize its function, performance and cost-effectiveness. They can adapt the dimensions of the channels and cross sections to manipulate channel velocities under different tidal and operational scenarios. They can adapt screen size, depth, length, angles and configurations to optimize fish protection, costs, maintenance, etc. As the preceding description and analysis proves, building a criteria compliant fish screen in Clifton Court is technically feasible. The FFTI and DHCCP teams would just cost and biological performance optimize the facility and develop the project-level project description (e.g., dredging volumetrics, sheet pile driving metrics) that would allow project-level analysis in the EIR/S and subsequent potential granting of construction-related permits.</p> <p>This criteria compliant Clifton Court Fish Screen is a win-win alternative. Fish are protected, water supply delivery capacity is restored, and Delta water quality is protected -- all above the No Action/No Project levels and all better than in the other BDCP alternatives. In addition to more fully and reasonably meeting the purpose and need and objectives of the project, the Clifton Court criteria compliant fish screens have a number of significant advantages over current proposed project and other BDCP alternatives. The cost of the Clifton Court fish screens would be approximately the same construction costs as the proposed north Delta intake screens. The Clifton Court fish screens do not require the conveyance tunnels (other than less than 1 mile CVP intake tunnel to the fish-free isolated portion of Clifton Court Forebay) or other conveyance canals, so those major cost centers of the other alternatives do not occur in the Clifton Court Fish Screen alternative. The Clifton Court fish screen construction and staging can all be done on land that is already owned by DWR so there is little or no land condemnation required like all of the other BDCP alternatives. The footprint of the Clifton Court fish screens is much smaller and is all subtidal habitat so the compensatory mitigation of converted habitat is minimal for this alternative compared to any of the other alternatives. From the USACE [U.S. Army Corps of Engineers]'s mandatory 404 process guidelines, this alternative would inevitably become their LEDPA [least environmentally damaging practicable alternative]. Continued pulling of water across the Delta to the south Delta intakes protects central and south Delta water quality to exactly the same level as the No Action. This protection of water quality from future degradation as compared to the No Action means that this alternative does not adversely modify designated critical habitat for listed fish species like the all the other BDCP alternatives do. The Clifton Court criteria compliant fish screen is therefore compliant with the ESA and is 404 permittable by the USACE and EPA (whereas the other BDCP alternatives are not). The Clifton Court criteria compliant fish screen does not require land condemnation which saves several years for the schedule to complete the project as compared to all of the other BDCP</p>	

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		<p>alternatives which will require condemnation of 300 plus parcels which will take years of time. All of the Clifton Court fish screen construction is done in one area, so construction logistics are much simpler and cheaper, e.g., one cement batch plant instead of a half dozen for the other BDCP alternatives. The Clifton Court fish screen minimizes impacts of dual operations alternatives.</p> <p>Following are some comments regarding how the Clifton Court criteria compliant fish screens meet the BDCP project purpose and need and project objectives. Criteria fish screens are the very definition of fish protection for water diversions. As discussed earlier, these screens are more effective at protecting fish than the north Delta intakes. A Clifton Court criteria compliant fish screen alternative has less take than the No Action/No Project. Alternatives that use dual operations that include criteria compliant south Delta intake fish screens are vastly superior to the No Action/No Project condition. Reduced predation rates from the Clifton Court criteria fish screens (as compared to the No Action/No Project and other project alternatives) is also contributory to protection of fish species. Fish collected from the new Clifton Court fish salvage facilities, with much higher survival rates than the existing condition or No Action/Project, can be relocated to better quality habitat in areas where they will have higher survival and increased fecundity which contributes to fish species recovery. As stated in a previous comment, the criteria screens in Clifton Court would allow the relaxation of some of the south Delta operational constraints on reverse flows which would restore some of the previous water supply delivery volumes and still increase protection of listed fish species.</p> <p>If the Clifton Court criteria compliant fish screen alternative component restoration of water supply delivery quantities is not considered adequate to reasonably meet the intent of the purpose and need and project objective of increased water supply reliability, it can be combined with other project components that would, by any judgment, make it reasonably meet this alternative screening and selection criteria. As an example, the Clifton Court criteria compliant fish screens can be combined with an aquatic species-only HCP so that there are regulatory assurances that there will not be future "surprises" that may restrict future CVP/SWP operations from new federally listed fish species. The Clifton Court fish screen alternative component could also be combined with additional upstream and/or downstream storage as a different strategy on achieving additional water supply reliability. It could also be combined with additional levee armoring to reduce in-Delta earthquake risks to conveyance reliability or include earthquake upgrades to the existing south of Delta facilities and conveyance canals to improve water supply reliability.</p> <p>A Clifton Court Forebay criteria compliant fish screen alternative combined with an aquatic species HCP/NCCP, and with some habitat restoration that is above and beyond the amount required for compensatory mitigation (which is much less than what is required for the current BDCP proposed project due to the smaller footprint of disturbance of the criteria fish screens) would reasonably meet every single identified project purpose and need and project objective. If terrestrial species are required by the California Fish and Wildlife for an NCCP, these can be added without substantial cost or land conversion as the CVP/SWP direct, indirect and cumulative operational effects on terrestrial species would be very small. This Clifton Court criteria compliant fish screen based alternative satisfaction of the purpose and need requirements is in stark contrast to the new BDCP alternatives which fail to meet almost all of the purpose and need requirements.</p>	
2651	106	<a href="http://gov.ca.gov/docs/Delta_Fact_Sheets_4.30.15.pdf">http://gov.ca.gov/docs/Delta_Fact_Sheets_4.30.15.pdf</a> , page 6, lower right diagram	As shown in Chapter 3 of the EIR/EIS, minimum north Delta bypass flows in the Sacramento River would

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		depicting BDCP diversion operating rules, shows that at Sacramento River flows of 5,001 CFS [cubic feet per second], the BDCP could divert as much as 540 CFS which represents 10.8% of the flow of the river at a very low flow level. Several recent California water project EIRs that cover these same geographic areas and resources of concern have used significance criteria indicating that any flow changes over 10% are a significant impact. Projects utilizing these impact criteria include: Phase 8, Lower Yuba River Accord, DWR Oroville Facilities Relicensing and others. The same lead agencies on these documents, DWR and BOR [Reclamation], are also the same lead agencies on the BDCP EIR/S. The agencies must provide justification for their inconsistent use of impact criteria on such similar projects or otherwise utilize these same criteria and find the flow change of the BDCP under the proposed operating rules that could result in these proportions of natural flow diversions to be a significant and avoidable impact.	result in no diversions at the north Delta intakes if the Sacramento River flows were 5,000 cfs or less at Freeport. If the flows were 5,001 cfs, the north Delta bypass flows would restrict the diversions so that the Sacramento River bypass flow would not be less than 5,000 cfs, therefore, the diversion could not exceed 1 cfs. The EIR/EIS presents the results of the impact analysis related to changes in environmental resources due to operation of the SWP and CVP under the action alternatives as compared to the Existing Conditions and No Action Alternative. The criteria for determining impact conclusions is described in Chapter 5.
2651	107	DWR Director Cowin: "...we have envisioned this facility as being state-owned; so Reclamation of course will need to have agreements with us to utilize the facility, but because they are not going to own it. ..." ( <a href="http://mavensnotebook.com/2014/05/29/notes-from-metropolitans-special-committee-on-the-bay-delta-metropolitan-prepares-to-comment-on-the-bdcp-s-eir-a-briefing-on-the-design-and-construction-enterprise-and-an-update-on-the-status-of/">http://mavensnotebook.com/2014/05/29/notes-from-metropolitans-special-committee-on-the-bay-delta-metropolitan-prepares-to-comment-on-the-bdcp-s-eir-a-briefing-on-the-design-and-construction-enterprise-and-an-update-on-the-status-of/</a> , last paragraph). Reclamation water wheeling through a state-owned facility would require several agreements and a full set of operating rules about when, under what conditions, and how much water is transferred for who and for how much [money]. These agreements have not been developed or disclosed. When they are, they will alter the operations and impacts of the BDCP conveyance. None of these agreements and impacts and changes to operations have been disclosed in the RDEIR/S. The EIR/S must be revised to include these disclosures and the impacts of the project reevaluated based on the final operating rules based on the changed (and still undisclosed) nature of Reclamation's role in the water operations.	Under the proposed project, DWR and Reclamation will continue to operate the SWP and CVP to meet applicable regulatory and environmental standards in the Delta, including those under the existing Biological Opinions and SWRCB D1641, in addition to new operating criteria developed for the California WaterFix. Any future agreements between DWR and Reclamation must not affect the project's ability to meet Delta water quality and other environmental standards. New operating criteria under the proposed project were developed using the best available science and data at the time of project development and included input from subject matter experts. These criteria are intended to maximize water supplies, while providing the necessary protection to listed species. Any operating plan or other agreements would need to be consistent with these criteria, so that the analysis presented in this EIR/EIS has disclosed the effects of that operation. If new data or science becomes available, either before commencement of operations or during operations through the Adaptive Management Program (AMP) (see Chapter 3 for more information on AMP), suggesting changes to operating criteria are warranted, the lead agencies will have the opportunity to modify operating criteria after approval from regulatory and resource agencies, consistent with state and federal permitting processes. For information on specific modeling assumptions driving estimates of various hydrological parameters, including SWP and CVP export and delivery estimates provided in Chapter 5, FEIR/EIS, please see Appendix 5A. See also Master Response 28 regarding operational criteria.
2651	108	The BDCP EIR/S failed to propose, describe, evaluate, avoid, minimize, mitigate or disclose north Delta intake operations for intertidal conditions. Intake diversion operations must halt when sweeping velocities fall below requirements for criteria compliant fish screen operations. The north Delta intakes are located in an intertidal reach that has slack to negative velocities during its tidal cycle. Every other component of the CVP and SWP that has to do with storing or moving water has an operational model which is used in conjunction with the other operations-related models to plan and evaluate impacts of CVP/SWP operations. The BDCP must develop a set of operating rules for the fish screen criteria compliant operations of the north Delta intakes. The BDCP must apply that rule set in an intake operations model that integrates with other operations-related models (CalSIM, reservoir operations, power generation, DSM2, etc.) so that the interdependent constraints of the facilities impacts on water operations can be determined. This level of analysis of the north Delta intakes is required to determine if the BDCP can operate the north Delta intakes within criteria compliant fish screen requirements and also achieve water supply and water quality objectives that are used in the rest of the BDCP EIR/S document. This operational analysis of the daily operations impacts of the north Delta intakes constitutes material new information which must be disclosed in a recirculated public draft.	As stated in the Appendix 5A of the EIR/EIS, north Delta intakes were modeled considering an assumed 0.4 ft/sec sweeping velocity criteria. In the Final EIR/EIS Alternative 4A CALSIM II and DSM2 modeling, this sweeping velocity restriction was considered in estimating the diversion at the north Delta intakes. DSM2 considers this sweeping velocity restriction on a tidal timescale. The analysis of effects described in the EIR/EIS was based on this modeling.
2651	109	CVP and SWP reservoir releases and operations in the upstream tributaries have been changed in the BDCP alternative operations. These operational changes are no different	The action alternatives evaluated in the EIR/EIS use the same reservoir operational rules as under the Existing Conditions and No Action Alternative. However, there are changes in reservoir conditions especially

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		<p>than most of the other alternative physical modification alternative components that occur in the plan area. Because the BDCP alternatives all have these upstream tributary operations and habitat impacts, these areas should be considered as part of the "Plan Area" and any and all opportunities to improve conditions for species protection should be considered to be within the potential scope of the BDCP.</p>	<p>between Existing Conditions and No Action Alternative due to climate change, operations of the SWP and CVP to maintain Delta water quality with sea level rise, and population growth in the Delta watershed. All of these changes would occur with or without implementation of the proposed project. The EIR/EIS analyzes changes in surface water and fisheries in streams downstream of the SWP and CVP reservoirs located upstream of the Delta under the No Action Alternative and action alternatives as compared to the Existing Conditions; and under the action alternatives as compared to the No Action Alternative.</p>
2652	1	<p>The entire premise of the analysis of the impacts of the BDCP [is] predicated on the equal application of project operational assumptions in different water year types in which the project alternatives are compared to the No Action/No Project to identify and quantify the changes in impacts from the construction and operation of the BDCP.</p>	<p>This comment addresses Alternative 4 (known also as the BDCP) or analysis contained within the draft BDCP Effects Analysis. In response to comments received during the 2013-2014 public comment period, State and Federal agencies decided to add three additional alternatives that potentially achieved meeting the project objectives without preparing a habitat conservation plan or natural community's conservation plan. A modified proposed project (Alternative 4A/California WaterFix) is being considered. For detailed responses on the primary issues being raised with regard to the BDCP or Alternative 4, as well as a discussion of the current status of the draft BDCP Effects Analysis, please see Master Response 5.</p> <p>Numerous comments were received that focused on various elements of the BDCP. Where the comments focused on elements of the BDCP that overlap with elements of Alternatives 2D, 4A, or 5A (e.g., CM1 as it comprises the North Delta Diversions, tunnels, and supporting facilities), specific responses are presented. Where comments raised issues as to whether the BDCP and other HCP/NCCP alternatives in the 2013 Draft EIR/EIS were potentially feasible and could function as an alternative for purposes of meeting CEQA's and NEPA's requirements to analyze a reasonable range of alternatives to the proposed project (e.g., issues regarding the BDCP Effects Analysis of financial feasibility), responses are presented generally in Master Response 5. Where comments submitted on BDCP were focused on elements outside the scope of the environmental analysis or viability of the BDCP and other HCP/NCCP alternatives within the context of CEQA/NEPA, a response is provided generally referring the commenter to relevant information. (e.g., request of specific revisions to the BDCP related to mapping or references).</p> <p>The premise of the California WaterFix is that it will provide environmental benefits while stabilizing water supplies for a large population of California residents, consistent with statutory policy as found in the Delta Reform Act of 2009 (see, e.g., California Public Resources Code, §§ 85001(c), 85002, 85004(a), 85020). Refer to Master Response 31 (Compliance with the Delta Reform Act). Please also refer to Master Response 4 (Alternatives), which addresses the development and selection of the preferred project alternative. Wherever comments in this letter provide grounds for recirculation, please see Master Response 46.</p>
2652	2	<p>We [Central Delta Water Agency] have identified deviations of the CVP/SWP operations that violate the assumptions used in the project impact modeling and assessments. Most recently and ongoing is a waiver of the Delta water quality operational requirements for the CVP/SWP by the State Water Board (see CSPA [California Sportfishing Protection Alliance] Complaint, Violations of Bay-Delta Plan, D-1641, CWA [Clean Water Act], ESA, Public Trust, California Constitution. 21 July 2015, Page 3 of 16,p2) In 2013, the SWRCB Executive Director allowed USBR and DWR to operate to critical year criteria, without being subject to enforcement, instead of to the prevailing dry year criteria for the water year type conditions that were actually occurring. In 2014, the Executive Director issued a series of TUCP [Temporary Urgency Change Petition] Orders substantially weakening and extending the modifications of water quality objectives and requirements on 31 January, 7 February, 14 February, 28 February, 18 March, 9 April, 11 April, 18 April, 2 May and 7 October. The SWRCB denied multiple objections and petitions for reconsideration of the TUCP Orders on 24 September 2014. So far in 2015, the Executive Director has issued a series of TUCP Orders modifying and weakening water quality objectives and requirements on 3 February, 5 March, 6 April and 3 July. (The State Water Resources Control Board has issued an Order</p>	<p>This comment is related to use of temporary urgency change petitions (TUCP) and assumptions for baseline conditions in the CALSIM Modeling performed for the action alternatives. The methodology and results for this modeling are thoroughly explained in Appendix 5A. TUCPs that were approved in the past were not assumed as part of the No Action Alternative and action alternatives modeling because this type of assumption is speculative and the analyses are focused on the potential impacts of the action alternatives. TUCPs, were they to be assumed, would need to be included in the No Action Alternative and the action alternatives assumptions since the action alternatives would not cause the hydrologic conditions that in some below normal water years can lead to requests for TUCPs. This kind of assumption is also speculative because SWRCB has regulatory authority for approval of TUCPs. See also Master Response 28 regarding operational criteria and Master Response 30 regarding modeling.</p>

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		<p>Conditionally Approving a Petition for Temporary Urgency Changes in License and Permit Terms and Conditions Requiring Compliance with Delta Water Quality Objectives in Response to Drought Conditions, Signed by Thomas Howard, Executive Director, July 3, 2015, p. 4.) This consistent temporary suspension of operating rules associated with water year type conditions that are actually occurring means that the baseline assumptions used for the BDCP comparison of project alternatives to determine their impacts are incorrect and do not reflect the actual operations of the CVP/SWP or current plans and policies in place by the regulating agencies. The BDCP may not claim that water quality standards would continue to be violated in the same manner and same frequency magnitude as under the No Action conditions in some sort of off-setting water quality violation impact because NEPA and CEQA does not allow project analysis to include assumptions of violations of the law. The CVP/SWP must adhere to the current water quality standards under all water year types and conditions or the whole analysis of impacts of the BDCP is inaccurate, unrepresentative of actual conditions, and is not a valid comparison or analysis. The BDCP baseline assumptions must be revised to include how the CVP/SWP have actually been operated, not based on the assumption of compliance with water standards that are routinely and consistently ignored and set aside by DWR, Reclamation and the SWRCB.</p>	
2652	3	<p>As identified in previous BDCP EIR/S comment submittals [from Central Delta Water Agency], the source and locations of the supplemental water supplies required to implement the spring Delta outflow requirements were not identified, evaluated, disclosed or impacts associated with these water purchases, releases and transfers avoided, minimized or mitigated in the BDCP EIR/S. These supplemental water supplies are integral to the assumptions of the BDCP operations, environmental impacts, water supply yields, water quality impacts and compliance with the OCAP [Operations Criteria and Plan] BO [Biological Opinions] RPA [Reasonable and Prudent Alternatives] flow-related criteria. The BDCP does not know where these supplemental water supplies will come from, how they will be delivered, the environmental impacts of taking the water from one location to be released and utilized for another purpose, or who will pay for these water supplies. All of this must be defined, analyzed for impacts and disclosed in a revised and recirculated BDCP EIR/S prior to any agency consideration of approval or implementation of this project. The BDCP must not utilize public funds (e.g., Proposition 1) to purchase water for environmental compliance for SWP/CVP operations that benefit the water contractors at the expense of the taxpayer. The Davis-Dolwig Act requires that all costs of the SWP that are integral to the delivery of water be borne by the SWP water contractors and ultimately by their ratepayers who are the beneficiaries of the SWP. The spring Delta outflow requirements are not a habitat enhancement to be borne by the California general fund or taxpayer, but is compliance with the requirements of operating the SWP that are integral to water deliveries that must be borne by the water supply contractor beneficiaries of the SWP.</p>	<p>The text referred to in this comment has been modified in the Final EIR/EIS to not include acquisition of water related to spring outflow criteria. The model results presented in the Final EIR/EIS for Alternative 4A do not include water acquisition methods.</p>
2652	4	<p>Figure ES-1- Figure scale and level of detail [are] insufficient for local landowners to determine if their specific properties are under the project footprint or not. Both NEPA and CEQA require that information is provided in the public review process such that the public can determine the relevance of the project to them. There is nothing more relevant than determining if the project lands on your property or not so the project has materially failed to meet this disclosure requirement. The public draft must be reissued with maps to a scale and accuracy sufficient to allow the public to review the project and determine its relevance to them as well as comment on its relevance to them.</p>	<p>Mapbooks that show greater project footprint details are provided in the 2013 Draft EIR/EIS in Chapter 3 Mapbooks along with a User's Guide in Chapter 1.</p>

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2652	5	Figure 3-19a - The screens encroach on the current cross-section of the river channel which will decrease the channel flow capacity and create a backwater effect that will redirect and increase localized flood risk. This is an unnecessary impact of the project when a setback levee design of the intakes would avoid these impacts. The project is only likely not doing the setback levees on the intake design to avoid these impacts because it is less expensive not to do it. The design shows the pipes from the screens going through the existing levee, so since they have already destroyed the structural integrity of the existing levee, they might as well do the levee setback at the same time.	As described in Appendices 3B and 3C of the Final EIR/EIS, there will be a future submittal of information to the USACE which will include an analysis of flood potential due to construction or operations of the conveyance facilities, including installation of cofferdams, barge docks, Head of Old River Barrier, discharge of water from construction sites, or changes in drainage from constructed facilities locations. This future submittal will include the latest bathymetric information and modeling results, and methods included in the design criteria to meet USACE requirements. The portion of the levee at the intake location will be replaced with a slurry diaphragm wall that will connect into the adjacent levees in a manner that will not compromise flood protection.
2652	6	Figure 3-19a - The figure shows a power substation and electrical building. The electrical infrastructure is inconsistent with the Proposed Project description of the intakes not having pumps and no electrical lines being constructed. Which one of these are wrong? At the very least the project description and representation are inconsistent. With inconsistencies and misrepresentations like these and others in the maps of the project vs. the text describing the project, it is very difficult for the public to discern the true nature and impacts of the project.	Under Alternative 4, the method of delivering power to construct and operate the water conveyance facilities is assumed to be a “split” system that would connect to the existing grid in two different locations—one in the northern section of the alignment, and one in the southern section of the alignment. It is anticipated that only the southern interconnection would remain in place during conveyance facility operations.
2652	7	Figure 3-19a - The figure implies that the intake structure goes through the existing levee instead of up and over the levee to preserve its structural integrity as the USACE [U.S. Army Corps of Engineers] recommends. The intake design should be redesigned to incorporate the USACE's design recommendations for an up-and-over intake.	The construction of the north Delta intakes will require modifications at the intake sites to facilitate construction of the intakes. For a detailed description of the project alternatives and intake facilities, refer to Chapter 3 (Description of Alternatives) in the FEIR/EIS. Also, see Appendix 6A, Section 6A.6.2.1, for a discussion on DWR consistency with the State Plan of Flood Control (SPFC), and Section 6A.6.1.2 for information on project consistency with USACE, CVFPB, and DWR flood standards and regulations. Any levee modifications will comply with applicable flood protection and levee integrity criteria to ensure flood neutrality in the Delta.
2652	8	Figure M3-4 -The locations of the habitat mitigation lands are not disclosed in the maps or document. The affected landowners must be afforded the opportunity to comment on the impacts of this mandatory component of the project scope. The project has already said there would be some three thousand acres of mitigation. Where is it and why is it not disclosed for public review like all other aspects of the project and project footprint must be?	The Environmental Commitments incorporated into the California WaterFix to reduce construction and operational effects essentially serve as mitigation measures to reduce project effects. As such, these Environmental Commitments have been analyzed at a level of detail appropriate for mitigation measures.
2652	9	Figure M3-4, sheet 1 - The intakes show a significant encroachment of the existing channel of the Sacramento River. See previously submitted comments [from Central Delta Water Agency] on this topic regarding the impacts to backwater effects, flow capacity, flood risk, navigation impairments, public safety, recreation impacts, visual and noise impacts.	Please refer to response to comment 2652-5, above.
2652	10	Figure M3-4, sheet 2 - Intake #3 is located on the bend of the river. The Fisheries Facilities Technical Team that the BDCP used to define the size, location, type and features of the intakes specifically recommended that intake locations only occur on straight stretches of the river where hydraulic complexity was minimized. The selected BDCP intake locations clearly has ignored the directives from the team of experts that they convened for the purpose of locating the intakes. The BDCP has ignored their own experts in the location of the intake and failed to avoid impacts that will occur due to this selected location. The thalweg of the river will naturally be on the outside of the bend where the intake is located. The emigrating juvenile salmonids and other special status species that are vulnerable to the intakes (entrainment and impingement) are disproportionately concentrated in the thalweg during active emigration, so the location of this intake will have disproportionately high impact on these species due to the location selected on the outside bend of the river.	The diagram of Intake #3 indicates that the entire construction site does encroach upon the bend along the river bank. However, the intake screen would be located along the straight stretch of the river bank (see double red line along river bank). The intake screen extends only about 30% of the total construction site along the river bank. The remaining portions of the construction site allow for realignment of the roadway.

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2652	11	Figure M3-4, sheet 2 - The intakes are too close together. In the 5-mile reach from the upstream edge of intake 2 to the downstream edge of intake 5, the fish will be exposed to the intakes for a greater distance and duration than they are not exposed to this stressor and source of take. The Fish Facility Technical Team directed that there should be at least one mile between the end of one intake and the beginning of the next in order to allow the fish to rest and recover their swimming ability to avoid the intakes. The BDCP proposed project intake locations violate their own experts' recommendations on the minimum spacing between intakes which will result in elevated levels of take that could have been avoided with a more spatially separated intake location design. The BDCP must revise their intake locations to conform to the recommendation of their expert team and re-analyze the impacts of the revised project configuration for public comment.	<p>Recommendation number 5 from the FFTT Technical Memorandum has the following statement with respect to spacing between intake structures: "While locating diversion structures at least 1 mile apart is generally desirable, closer spacing could be acceptable to assure that each location meets the critical siting conditions (e.g., adequate river depth and bank geometry)."</p> <p>The proposed intakes exceed 1 mile. The bank distances between the intakes 2 and 3 and between 3 and 5 are 1.46 and 2.27 miles, respectively.</p>
2652	12	Figure M3-4, sheet 2 - The tunnel muck disposal triangle is misaligned with the DWR property ownership boundary. It is at least 150 feet farther to the northeast than the property boundary. Since impacts to property by ownership are affected by this representation (i.e., is this disposal area on Sutter Home's property or not?), it is impossible for the public to determine the level to which the project affects them, i.e., is the project just a close neighbor or is my property going to be condemned? This spatial presentation of the project calls into question the accuracy of representation of the entire project footprint. As an example, if intake 5 is similarly misplaced, it makes the difference of whether the Hemly Victorian home on the northern tip of Randall Island will be destroyed by the project or not. With the location of the footprint of the project misrepresented, the impact assessment of the project must also be inaccurate as the actual vs. represented and evaluated footprints are different.	The eastern edge of the triangle shaped Reusable Tunnel Material Area on sheet 2 of M3-4 is correctly aligned with the eastern edge of the triangle shaped parcel from Sacramento County's GIS data.
2652	13	Figure M3-4, sheet 4 - The transmission line is outside of the statutory Delta which is clearly outside of the defined scope that is to occur only within the statutory Delta. Many potential project components for water conveyance and habitat restoration were rejected from the alternatives development screening criteria for being outside of the statutory Delta. The project has included project components, the transmission lines off of Lambert Road, that are outside of the statutory Delta so all alternative components that were dismissed from consideration for being outside of the statutory Delta boundary must be given equal consideration and must not be omitted because they occur geographically outside of the Delta boundaries. All project alternative components that were dismissed for being outside of the Delta boundaries must now be included in project alternatives that are given full and equal level of analysis (per NEPA requirements) as the other previously analyzed alternatives. These re-included alternatives must be analyzed and recirculated for public comment.	This comment requests that project components outside the legal Delta be included in additional alternatives in this Final EIR/EIS because portions of the proposed conveyance facility occur outside the legal Delta. These component locations are explained as "areas of additional analysis" throughout the EIR/EIS and the existence of these areas does not require that additional alternatives be examined. Please refer to Appendix 3A, Identification of Water Conveyance Alternatives, and Conservation Measure 1 for additional discussion about why the action alternatives were carried forward into the EIR/EIS analyses and why other alternatives were considered but rejected from further consideration. Please also refer to Master Response 4, regarding alternatives development.
2652	14	Figure M3-4, sheet 5 - The tunnel muck disposal location representations appear to fill in the linear ponds. This will result in a loss of wetland, GGS [giant garter snake] and riparian brush rabbit habitat which is clearly avoidable if the disposal sites were relocated. The EIR/S is deficient and incomplete as these fills of navigable waters of the U.S. were omitted from disclosure.	The EIR/EIS discloses all of the potential impacts of the conveyance facilities and restoration on wetlands and other waters of the U.S. in Chapter 12, Terrestrial Biological Resources. Please refer to Impact Bio 176 and Mitigation Measure Bio 176. This analysis discloses all of the potential impacts and provides for avoiding and minimizing effects on wetlands in coordination with the CWA Section 404 process which is proceeding with the U.S. Army Corps of Engineers. See also Master Response 17 regarding biological resources and Master Response 45 regarding permitting and Chapter 12, Terrestrial Biological Resources.
2652	15	USACE [U.S Army Corps of Engineers] 404 Notice Map Sheet 7 - There is a large permanent footprint feature on Highway 12 where the tunnel crosses it and where the BDCP desires an undercrossing for access to the tunnel muck disposal area at the south end of Bouldin Island. This footprint is absent from the BDCP EIR/S figures released to date and which is	The improvement of Highway 12 near Bouldin Island is a separate project being undertaken by San Joaquin County and the California Department of Transportation to improve safety. Over that past twelve years, an estimated 72 people have lost their lives on the section of Highway 12 between Lodi and Suisun City according to the San Joaquin - Lodi News Sentinel. Therefore, regardless of whether or not the project is

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		absent from the impact analysis in the BDCP EIR/S. What is even more disturbing than this inconsistency and lack of analysis of project impacts is that this Highway 12 construction is currently underway. The only reason for this overpass in this unpopulated area is to facilitate movement of tunnel muck to the BDCP disposal area that is directly to the south of this overpass. This premature construction is an irretrievable commitment of resources by the BDCP for a project that has not yet been approved. Additionally, this overpass is constructed over drainages that are navigable waters of the U.S. (you can see this even at the 1:24,000 scale of these maps).	approved, this section of Highway 12 will provide shoulders and a concrete median barrier that will eliminate head-on collisions and passing into oncoming traffic. Funding for the project came from the State Highway Operation and protection program (SHOPP). The proposed underpass is fully analyzed for all relevant resource topics in the RDEIR/SDEIS.
2652	16	Figure M3-4, sheet 8 - There is a large portion of the tunnel muck disposal area on Bouldin Island that is not represented. This map is the only place where the project discloses the discrete footprint of the impacts and a significant area of the impacts has been omitted from the maps. The map must be revised to disclose the exact location of all of the areas of the project impact and the public be allowed to review and comment upon it.  Figure M3-4, sheet 8 - The map shows tunnel muck being disposed of in the tributary (Potato Slough?). This tunnel muck disposal in waters of the United States impact of the project was not disclosed or evaluated in the EIR/S.	This portion of the mapbook has been revised. The portion of the project extending into Potato Slough is a proposed barge landing site for the RTM area.
2652	17	Figure M3-4, sheet 11 - There is a permanent electrical line represented north of the Clifton Court Forebay, but it goes to a location where there appears to be only underground tunnels. What is the purpose of this line and what facilities are there for it to service that are not represented on the maps? If there is a facility here, it is a material omission of disclosure in the EIR/S document and must therefore be recirculated for public comment once the facility is added.  Figure M3-4, sheet 15 - Where is the power supply coming in from for the operable barrier? The barrier must not alter either channels flow capacity and must not redirect flood flows or the USACE [U.S. Army Corps of Engineers] must not issue permits for this structure. The omission of the location of the power lines to be constructed for this facility is a material failure of disclosure and must be recirculated for public comment when the power transmission line construction route is provided by the BDCP.	Please see Section 21.1.4, Energy Transmission for the Action Alternatives, of Chapter 21, Energy, for more detail.
2652	18	Figure M12-4, sheet 3 - The map shows a "barge unloading location" in Snodgrass Slough. This reach of Snodgrass Slough is sensitive habitat and is a "no wake zone." Normal boat traffic is limited to 5 mph, but the flat shape of the bow of a barge will still cast a significant wake at 5 mph. The BDCP must propose a mitigation for their barge wake impact by imposing a 1 mph speed limit to minimize wake impacts. These impacts must be identified, evaluated, disclosed, avoided, minimized and mitigated in the EIR/S.	Please refer to Final EIR/EIS Appendix 3B (Environmental Commitments), Section 3B.2.8 "Develop and Implement a Barge Plan", as well as "Mitigation Measure TRANS-1a: Implement Site-Specific Construction Traffic Management Plan" in Chapter 19, Transportation, for additional information regarding barge construction impacts.
2652	19	Figure M12-4, sheet 3 - Since the project has represented the barge facility as "unloading," the project may not utilize this location for any barge "loading" or there will be project impacts that were not identified, evaluated, quantified, avoided, minimized, mitigated or disclosed to the public or decision makers who will rely upon this document.  Figure M12-4, sheet 3 - The water depth in Snodgrass Slough is as shallow as 3 feet in the reaches at and near the proposed "barge unloading location." The draft of the loaded barge probably exceeds the water depth and the tugboat's draft certainly will. Even if the tugboat does not bottom out, the propellers will agitate the muddy shallow bottom of Snodgrass Slough. The agitation of the muddy bottom of the slough will impact the water quality by increasing turbidity and TOC [total organic carbon] and by mobilizing environmental toxins	All of the footprint effects of the barge unloading sites are included in relevant analyses that are based on the Geographic Information System (GIS) analyses performed for EIR/EIS resource topics. Barge unloading sites may be used for loading and unloading and no additional effects would occur related to this distinction. The potential construction related effects of the action alternatives are addressed in Chapter 8, Water Quality. Please see Impact WQ-31. Details about the barge and tugboat size were not included but all equipment used for project construction would be used that is capable of operating effectively and safely. Please also refer to Master Response 2, which addresses the sufficiency of project level and program level analyses in the EIR/EIS.  Criteria pollutant and greenhouse gas (GHG) emissions from operation of marine vessels during construction were quantified and disclosed as part of the impact analysis in Chapter 22, Air Quality. Marine vessels used

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		<p>(e.g., DDT, selenium, mercury, lead, etc.) that were effectively sequestered and bio-unavailable in the layers of undisturbed sediment at the bottom of the slough. Once disturbed by the barge and tugboats, these contaminants will remain active and impact fisheries and wildlife in the aquatic ecosystem and this sensitive estuary for decades. There is very little flow through this reach so the impaired and impacted water quality would be very persistent and remain undiluted for long periods of time (whole years until the rainy season occurs).</p> <p>Figure M12-4, sheet 3 - The BDCP has not disclosed the size and draft of the barges and tugboats to be used in the project. The project failed to evaluate if the barges to be used on the project will fit through the pilings of the Twin Cities Road (Sacramento County Rd E13) bridge over Snodgrass Slough (California Bridge #CA 24C-53) or if the tugboats will fit under the bridge to disclose if there is any impact to that road infrastructure. The BDCP must revise their document to include this critical information and recirculate the document to the public so that these impacts can be disclosed.</p> <p>Figure M12-4, sheet 3 - The routes the barges and tugboats will take from wherever they are loading to where they are unloading [have] not been disclosed by the BDCP nor have the impacts of their transit routes been evaluated, quantified, and impacts minimized and mitigated. The barge transit routes must be disclosed and evaluated and the document recirculated for public review.</p> <p>Figure M12-4, sheet 3 (and others) - The number and location of barge unloading locations give the impression that a large amount of barge activity will occur with the construction of this project, but the BDCP has given no project specific description of the barge and tugboat operations. Without the make and model of the tugboat, the transit route, the number and timing of trips, the air quality impact of the tugboats and barge operations may not be evaluated. Tugboats are notoriously bad M10 air quality polluters. The BDCP EIR/S is incomplete and materially deficient for not including this level of project analysis to evaluate air quality impacts.</p>	<p>during construction include workboats, passenger boats, and tugboats. Emissions were estimated based on activity data provided by DWR and the California Air Resources Board's (2012) Emissions Estimation Methodology for Commercial Harbor Craft Operating in California. Table 22B-3 in Appendix 22B, Air Quality Assumptions, summarizes the marine vessels and operating activity (e.g., trips per day) assumed in the emissions modeling.</p> <p>Potential increases in criteria pollutant and GHG emissions as a result of marine vessel operation are assessed in Impacts AQ-1 through AQ-4 in Chapter 22, Air Quality. These impacts evaluate potential air quality effects as a result of construction of the entire water conveyance facilities, including tugboat/barge activities. As disclosed, construction emissions could exceed local air district thresholds. The project would implement a robust exhaust control plan, as described in Appendix 3B. The plan would require all marine vessel engines used for construction comply with Tier 3 or higher emission standards.</p>
2652	20	USACE [U.S. Army Corps of Engineers] 404 Notice Map Sheet 12 - There is dredging of Clifton Court Forebay on the USACE maps that is omitted from the BDCP EIR/S maps of dredging activity and from their impacts discussion and disclosure.	Please refer to Table 3-17 in Chapter 3, Description of Alternatives, which indicates that Clifton Court Forebay dredging would be approximately 2,010 acres.
2652	21	USACE [U.S. Army Corps of Engineers] 404 Notice Map Sheet 13 - There is a permanent disturbance area on the south and southeastern edges below the new Clifton Court Forebay that [is] not disclosed on the BDCP figures and [is] not disclosed or discussed in the BDCP EIR/S. There are also transmission tower locations depicted in the USACE figures that are not disclosed in the BDCP EIR/S figures or impact analyses footprint.	The area identified is for transmission tower relocation and was inadvertently omitted from the RDEIR/SDEIS mapbooks. This oversight has been corrected for this Final EIR/EIS.
2652	22	<p>Figure 7-27 - The groundwater drawdown from the construction of the project shows a groundwater drawdown in the area of the Hood municipal water supply well field. The BDCP EIR/S has not identified, evaluated, quantified, avoided, minimized, mitigated or disclosed the impact to the quality, quantity or pumping costs to the municipal well field in the EIR/S. This omission of impacts to the municipal water supply must be addressed in a revised public draft of the document that allows the residents of Hood and other concerned parties to comment and provide feedback on these proposed project impacts.</p> <p>Figure 7-27 - The figure shows the groundwater drawdown from construction dewatering to overlap with the Sacramento River. This means that the dewatering pumps will be</p>	<p>It is assumed that this comment is referring to Figure 7-27 of the Draft EIR/EIS.</p> <p>As described in Chapter 7, Groundwater, and Chapter 14, Agricultural Resources, in the EIR/EIS, during the design phase, DWR would conduct site-specific groundwater analysis to determine the extent of the dewatering activities along the conveyance route, including locations of discharge of the dewatering water. DWR would consult with local reclamation districts to ensure that construction activities would not conflict with reclamation district flood protection measures. Results from groundwater modeling for the Delta are presented in Chapter 7 and Appendix 7A in the EIR/EIS for construction of intakes, tunnel shafts, and forebay levees without installation of slurry walls. These results indicate that groundwater could be affected during construction due to dewatering activities if slurry walls were not installed. In the Final EIR/EIS the description</p>

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		<p>withdrawing water directly from the hydraulically connected Sacramento River. The project does not have water rights for these directly hydraulically connected withdrawals from the Sacramento River. The impact to flows and water quality from this are not identified, evaluated, quantified, avoided, minimized, mitigated or disclosed in the BDCP RPDEIR/S. The document must be revised to address these impacts and mitigations and recirculated for public comment.</p>	<p>of the proposed project, Alternative 4A, was modified to include slurry wall installation to protect local groundwater conditions under construction. Slurry walls would be constructed around the construction site at the intakes, tunnel shafts, and forebays to reduce the effect of dewatering wells. No dewatering would be required along the tunnel alignment. The effects on groundwater at locations with slurry wall installations would not result in significant effects as compared to Existing Conditions. Please see slurry wall environmental commitments in Appendix 3B which are included in the project design. Mitigation measures have been identified in the EIR/EIS to reduce the impacts to less than significant as compared to Existing Conditions. Mitigation Measures AG-1, GW-1, GW-5, and WQ-11 will reduce the impacts to a level of less than significant.</p> <p>As described under Impact SW-4 in Chapter 6, Surface Water, and Impact WQ-31 in Chapter 8, Water Quality, in the EIR/EIS, groundwater removed during construction would be treated as necessary at the dewatering locations. The water may contain elevated levels of sediment, organic carbon, and other constituents. As described in Chapter 8 and Appendix 3B, Environmental Commitments, during design, permits would be obtained from the State Water Resources Control Board that would include Best Management Practices (BMPs) for the discharge of dewatering flows to surface water bodies in accordance with State Water Resources Control Board's NPDES Stormwater General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ/NPDES Permit No. CAS000002). This General Construction NPDES Permit requires the preparation and implementation of Stormwater Pollution Prevention Plans that identify pollution prevention BMPs that would be used to avoid and minimize construction-related contaminant discharges. These permits would be completed during design and prior to construction, and would include a monitoring plan, numerical limits for turbidity, pH, and other specific constituents identified during the design phase for the surface water bodies and groundwater.</p>
2652	23	<p>Figure 27-7 - If the water from the [groundwater] dewatering [near Hood] is discharged to the waters of the state, the project must obtain a permit for and comply with point source discharge water quality requirements from the Central Valley Regional Water Quality Control Board. In order to meet discharge water quality standards, this water would have to be treated. The intake and discharge water quality and quantity, treatment process, facilities and the impacts from those activities were not identified, quantified, avoided, minimized, mitigated or disclosed. The BDCP EIR/S must be revised and recirculated to disclose this information to inform the public and decision makers who will rely upon this document.</p>	<p>The potential water quality effects of temporary construction activities for the project alternatives were identified and assessed in Chapter 8, Water Quality, of the EIR/EIS. Please also refer response to comment 2652-22, above.</p>
2652	24	<p>Figure 27-7 - The legend of groundwater quality drawdown uses white in the map legend for both the -2 and 0 groundwater level drawdown categories and uses other colors to show increases in groundwater levels that apparently do not occur in the output of the model results presented. Using white for multiple groundwater depth drawdown impacts of the project obscures essential information for determining the impacts of the project. As an example, if groundwater is drawn down from 0-2 feet, or 2 feet to 4 feet, the impacts to native grasses and wildlife habitat and grazing and foraging values are significantly different in terms of the impacts to plant species and wildlife habitat and forage productivity that will occur. As an example, cottonwood trees, an important riparian shade and large woody debris source of aquatic and riparian habitat quality, will germinate and successfully colonize where groundwater is at shallow depths of 0-2 feet, but not at depths of 2-4 feet. This impact is obscured by this representation of impacts to groundwater depth from the project and is not included in the impact analysis of terrestrial wildlife habitat quality, quantity and species distribution.</p> <p>Figure 27-7 - The legend is incorrect by not being defined by inclusive ranges, i.e., -2-0 feet.</p>	<p>It is assumed that this comment is referring to Figure 7-27 of the Draft EIR/EIS.</p> <p>As described in response to Comment 2652-22, results from groundwater modeling for Delta are presented in Chapter 7 and Appendix 7A in the EIR/EIS for construction of intakes, tunnel shafts, and forebay levees without installation of slurry walls. These results indicated that groundwater could be affected during construction due to dewatering activities if slurry walls were not installed. In the Final EIR/EIS the description of the proposed project, Alternative 4A, was modified to include slurry wall installation to protect local groundwater conditions under construction. Slurry walls would be constructed around the construction site at the intakes, tunnel shafts, and forebays to reduce the effect of dewatering wells. No dewatering would be required along the tunnel alignment. The effects on groundwater at locations with slurry wall installations would not result in significant effects as compared to Existing Conditions. Mitigation measures have been identified in the EIR/EIS to reduce the impacts to less than significant as compared to Existing Conditions. Mitigation Measures AG-1, GW-1, GW-5, and WQ-11 will reduce the impacts to a level of less than significant.</p>

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		<p>By not identifying the range of values the map represents, the reader (and decision-makers) are left to guess if the color values represent from the previous category, e.g., "-4", or from less than minus 4 or more than minus 2 . . . By choosing a white color to represent drawdown of water tables from -2 to +2 as white, the BDCP is hiding the shallow water impacts to crops, native vegetation and wildlife that rely upon shallow groundwater. The groundwater drawdown impacts from the construction of the project must be revised and recirculated so that the public can be informed and comment on the impacts of shallow groundwater changes as a result of implementing the proposed project.</p>	
2652	25	<p>Appendix A, Figure 8 - Most of these data sets are constrained to a period of 2001- 2006. There is a much longer period of record and more recent data available to utilize and analyze than the BDCP has presented here. The omission of these readily available and directly relevant data sets from the BDCP analysis and disclosure fails to meet the NEPA and CEQA required standards for the use of the best available science. The BDCP must utilize all of the available data, not just choose a convenient subset of the data that leads to potentially skewed results and conclusions that are favorable to the project.</p>	<p>Sufficient information has been presented for the purposes of environmental review analysis. See Chapter 8 and Master Response 14 for more information on water quality analysis.</p>
2652	26	<p>The sensitivity analyses of the originally proposed conservation measures, e.g., CM4, with the new conveyance only alternatives (which do not include conservation measures) in the revised DEIR/S concludes that these actions cannot be combined with the alternatives without resulting in unacceptable significant and unmitigatable impacts. These conservation measures, e.g., CM4 and others, are actions that fulfill the OCAP [Operations Criteria and Plan] BO [Biological Opinions] RPAs [Reasonable and Prudent Alternatives] mandates and are now proposed by the California WaterFix, to be included in a future project, California EcoRestore. But, if as proposed by the BDCP that the OCAP BO RPAs are implemented by another project after the BDCP, then those mandated OCAP BO RPAs will never be implemented as the implementation of those actions in combination with the proposed BDCP conveyance and operations has already been demonstrated to have unacceptable environmental consequences which is what the original public draft BDCP EIR/S concluded.</p> <p>By proposing a bifurcated project, BDCP conveyance, and a separate and later California EcoRestore habitat restoration, the BDCP has made it impossible to implement the OCAP BO RPAs that were an existing obligation of the CVP and SWP before the BDCP project was scoped and developed. The lack of implementation of the OCAP BO RPAs is not only in violation of the law, but the effectively blocked opportunity to implement these actions by the prior implementation of the BDCP (that does not include those actions). This BDCP blocking of implementation of the OCAP BO RPAs is not only illegal, but will result in perpetuating the conditions which led to the 2006 OCAP BO listed species jeopardy call. This BDCP strategy of conveyance first and environmental fixes later is designed to thwart the authority and responsibilities of the regulatory agencies that are entrusted with the protection of these listed species.</p>	<p>Under Alternative 4A, the preferred alternative Environmental Commitments would be implemented to reduce effects of the conveyance facility construction and operations. The acres of tidal restoration proposed for Alternative 4A are not expected to create adverse/significant water quality impacts with proposed mitigation measures. Alternative 4A would further be required to meet the requirements of ESA Section 7 and CESA Section 2081(b). Additional projects, some of which may be implemented as part of the existing BiOps would be required to meet ESA and CESA requirements as well and would need to be designed to comply with these laws. See also Master Response 29 regarding the Endangered Species Act and Master Response 45 regarding permitting.</p>
2652	27	<p>The fisheries agencies must not allow the BDCP to implement a project that precludes implementation of the other necessary and legally compelled habitat restoration actions that are required in order to avoid jeopardy of these listed species. The fisheries agencies must insist that the existing obligations of the CVP/SWP to implement the OCAP [Operations Criteria and Plan] BO [Biological Opinions] RPAs [Reasonable and Prudent Alternatives] are given supremacy in implementation and plan over the construction of a new water conveyance. If the BDCP can do the restoration and conveyance concurrently as previous proposed, fine. If they cannot, as their current revised DEIR/S indicates with these failed</p>	<p>The proposed project assumes that tidal restoration and Yolo Bypass improvements would be completed . The proposed project does not preclude these restoration activities. Furthermore, several operational components of the RPAs are incorporated into the proposed project operational criteria. No inconsistencies between the current BiOps' RPAs and the proposed project have been identified. See also Master Response 29 regarding the Endangered Species Act and Master Response 45 regarding permitting.</p>

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		sensitivity analysis results, then the OCAP BO RPAs must be implemented first and then any future replumbing of the Delta and/or new conveyance can work around those OCAP BO RPA compliance conditions, not the other way around as the BDCP currently [has] prioritized it.	
2652	28	The BDCP alternatives still result in adverse modification of designated critical habitat of listed species. The new BDCP alternatives only increase this ESA violation in comparison to the previously considered alternatives which also violated this ESA requirement.	<p>The authority to issue findings regarding the effects of the BDCP on covered species or critical habitat, or on the question of jeopardy resides with the USFWS and the NMFS. These Services will evaluate the issuance of incidental take permits for the proposed project, as required under Section 7 of the ESA, and will prepare biological opinions stating effects to species and critical habitat, providing incidental take statements, and determining whether the proposed project would jeopardize the continued existence of any proposed, listed or covered species, or destroy or adversely modify its critical habitat. These points will also be addressed by the Services in their statements of findings that accompany the Record of Decision issued at the conclusion of the NEPA process.</p> <p>For the Non-HCP alternatives, the Bureau of Reclamation would be the lead federal action agency for Section 7 compliance. Reclamation's Section 7 compliance would be expected to also address the Section 7 compliance needs for the USACE permit actions. In cooperation with DWR, Reclamation would prepare a biological assessment (BA) for submission to USFWS and NMFS requesting formal consultation under ESA Section 7. Section 7 requires that federal agencies, in consultation with the federal fish and wildlife agencies, ensure that their actions are not likely to jeopardize the continued existence of species or result in modification or destruction of critical habitat. See also Master Response 29 regarding the Endangered Species Act and Master Response 45 regarding permitting.</p>
2652	29	2.1.4. - A number of fisheries impact calls of "no determination" and "uncertain" were categorically changed to "no impact," but no supporting rationale or facts were presented as to the cause for the change of impact call for each case. The document indicates that additional effort was applied, but not what was learned from that effort that led to the change in the impact calls. This omission of information that led to the change in the impact calls is a material omission and does not inform the reader or decision makers who will rely upon this document on how these impact calls were made and what facts and rationale were used to support this impact call change.	In developing the RDEIR/SDEIS, all of the impact conclusions were revisited to ensure consistent application of the methodology, which is further described in Section 11.2 of Chapter 11. Some impacts were changed as a result of this exercise. If new information was pertinent to the revised conclusion beyond the consistently applied methodology, it was added to the impact discussion.
2652	30	2-7, line 9: ". . . exceedances of the Sacramento River at Emmaton EC [electrical conductivity] objective for protection of agricultural beneficial uses (which is a maximum 14-day running average of mean daily EC . . ." The analysis uses DSM2 EC data which is output in 15 minute time steps. The BDCP use of a two week rolling average of daily mean EC values is clearly an attempt to mute the frequency and magnitude of exceedances of the standards that are readily available information from the model output. The analysis must include evaluation of the change in the frequency, duration and magnitude of EC compliance exceedances on a 15 minute time step as is available for analysis from the model. Any analysis short of utilizing the highest temporal resolution of data available from the models falls short of the required standard of the use of best available science and is a clear attempt of the BDCP project to obscure the true impacts of the proposed project and alternatives.	The Bay-Delta Water Quality Control Plan objective at Emmaton is a 14-day running average of mean daily EC. Therefore, EC output from DSM2 was appropriately averaged consistent with the objective definition. For more information on water quality, see Chapter 8 and Master Response 14.
2652	31	2-7, line 17: "The revised version of Alternative 4 would maintain, and not propose to change, the existing compliance point at Emmaton, while all other alternatives assessed in the Draft EIR/EIS (1A, 18,19 1C, 2A, 28, 2C, 3, 5, 6A, 68, 6C, 7, 8, and 9) still include the proposed change to Threemile Slough." The analysis with different assumptions for some alternatives leading to significant impacts is on all alternatives except for the new	Analyses of action alternatives are presented to disclose the potential effects of a reasonable range of alternatives. Nothing in CEQA or NEPA requires that a range of alternatives be defined in the same way or use the same assumptions. The EIR/EIS analyses of the action alternatives provide decision-makers a reasonable range of potential outcomes of each of the alternatives on which to base decisions on the project to be chosen. Should an alternative other than the preferred CEQA/NEPA alternative (Alternative 4A) be

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		alternatives and Alternative 4 is an obvious bias in favor of the proposed project alternative 4A. The analysis of all the other alternatives must be redone so that the compliance point alternatives are the same and the assumptions are not biased in favor of the proposed project. No rationale is provided by the EIR/S to support this biased application of project assumptions. Once the analysis has been redone with equally applied compliance point assumptions, the revised analysis must be re-released for public review and comment.	selected, decision-makers could decide to modify it to include any number of preferred components or project assumptions, including the modeling assumptions used for Alternative 4A. Also, the new alternatives presented in the RDEIR/SDEIS (Alternative 4A, 2D and 5A) as well as Alternative 4 include assumptions for an Emmaton compliance location. No revisions to the modeling assumptions have been made based on this comment.
2652	32	2-8, line 22: ". . . some of these exceedances were found to be modeling artifacts due to monthly-daily patterning effects. . ." The exceedance of this water quality standard could only be explained by this if only the project alternative was conditioned with a systematic problem with the monthly/daily pattern effect that did not also occur in the data conditioning in the baseline for comparison. Since the project alternative and the baseline are supposed to be treated the same in the analysis to have these types of problems cancel each other out, the analysis was either fundamentally flawed because the alternative and baseline were not conditioned using the same methodology or the explanation of the cause of the exceedances is false. Either way, the explanation for the exceedances of this water quality standard lead to a credibility problem with the analysis that must be more fully explained and justified.	Modeling sensitivity analyses presented in Appendix B of the RDEIR/SDEIS have subsequently been updated in this Final EIR/EIS to confirm the results of the analyses in Chapter 8, Water Quality for Alternatives 4A, 2D and 5A. Please refer to Master Response 14 for water quality issues and Master Response 30 regarding modeling.
2652	33	2-8, line 24: ". . . the remaining exceedances could be resolved by assuming the continuation of historical dry year practices of installing barriers earlier in the year." This assumption is a significant change to the operating assumptions of the proposed project and alternatives. The author may not just assume these exceedances would just go away if the project were operated differently than it was defined, disclosed, and analyzed. If the BDCP wants to assume a different set of operations to avoid an impact, then they must propose the project that way and complete the analysis that includes that assumption all the way through the analytical process. These critical exceedances of a mandatory water quality compliance criteria must not just be written off with an after the analysis assumption that the impact would not be significant, so the analysis must be redone in order to prove their assumption of less than significant impact and disclose the actual impacts of this assumption. This is a material change in assumptions so a revised EIR/S must be recirculated for public comment.	Please refer to Master Response 14 (Water Quality) and Master Response 30 (Modeling) for additional information regarding the water quality modeling approach employed in the RDEIR/SDEIS and the adequacy of the modeling approach.  The Lead Agencies will make the final decisions regarding the selection of an alternative (and therefore, an operational scenario) for the purposes of CEQA and NEPA. USFWS and NMFS have authority under the federal Endangered Species Act to determine whether the Proposed Project meets the regulatory standard of ESA Section 7, and CDFW, a CEQA responsible agency, has authority to determine if the Proposed Project meets the regulatory standards of CESA. Please see Section 4.1.2, Description of Alternative 4A, RDEIR/SDEIS for additional information on Proposed Project operations. Please also refer to Master Responses 28 and 29 for more information regarding operational criteria and compliance with ESA, respectively. See also Master Response 46 regarding recirculation.
2652	34	2-8, line 27: "SWP and CVP operations have relatively little influence on salinity levels at these locations, and the elevated salinity in south Delta channels is affected substantially by local salt contributions discharged into the San Joaquin River downstream of Vernalis." If this were true then the analysis would not show significant impacts as compared to the No Action/No Project. The impact significance calls are in comparison to the baseline, so the argument of the author that the impacts are not due to the project are invalid and demonstrate a lack of understanding of the NEPA and CEQA analytical comparison process. Given that the explanation for the significant impact is invalid, the significant impact call must still stand and thus requires project mitigation. Since the revised impact call was incorrect and the appropriate mitigation to address that significant impact was not included in the RPDEIR/S, this error and omission must be corrected and the document recirculated for public review and disclosure.	Please refer to Master Response 14 for a more in-depth discussion of the salinity issue. See also Master Response 46 regarding recirculation.
2652	35	2-8, line 30: "Modeling of all alternatives assumed no operation of the Suisun Marsh Salinity Control Gates, but the project description for all alternatives now assumes continued operation of the Salinity Control Gates. . ." It is clear from this statement that there have been some fundamental changes in operational assumptions (this and the installation and operation of south Delta in dry years to name just two) that have occurred since the	Please refer to Master Response 30 (Modeling) for additional information regarding water quality and modeling and sensitivity analyses results for Alternatives 4A, 2D, and 5A. See also Master Response 46 regarding recirculation.

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		<p>modeling and analysis of all of the project alternatives. These changes, apparently only analyzed in truncated sensitivity type analyses, are significant and could significantly alter the nature, geographic scope, frequency and severity of environmental impacts. An analysis conducted with different assumptions than were used in the impact call justification cannot stand as a valid analysis and this incomplete and incorrect analysis must not be relied upon for decision making or justification for issuance of permits for the project. The analysis must be redone from beginning to end with these new assumptions and the revised analysis with these materially different assumptions and results must recirculated for public comment.</p>	
2652	36	<p>2-8, line 32: "A sensitivity analysis with the gates operational consistent with the No Action Alternative resulted in substantially lower EC [electrical conductivity] levels in Suisun Marsh than indicated in the original modeling results, but EC levels were still somewhat higher there than EC levels under Existing Conditions and the No Action Alternative for several locations in the Marsh and for several months. Another modeling run with the gates operational and restoration areas removed resulted in EC levels nearly equivalent to those found in Existing Conditions and the No Action Alternative, indicating that design and siting of restoration areas has notable bearing on EC levels at different locations within Suisun Marsh. These analyses also indicate that increases in EC levels shown in the modeling conducted for the Draft EIR/EIS were related primarily to the hydrodynamic effects of CM4 under the alternatives assessed (IA, IB, IC, 2A, 2B, 2C, 3, 4, 5, 6A, 6B, 6C, 7, 8, and 9), not operational components of CMI. Based on the sensitivity analyses, optimizing the design and siting of restoration areas for these alternatives consistent with proposed environmental commitments, avoidance and minimization measures, and mitigation measures is expected to be able to reduce EC increases, relative to Existing Conditions and the No Action Alternative, to levels that would be less than significant."</p> <p>These analyses sound informative for revising the proposed project and alternatives project descriptions and assumptions, but these "sensitivity analyses" do not constitute a complete or equal level of effort analysis as required in NEPA and CEQA, and they certainly are inadequate as justification for assuming that impacts would be less than significant if these changes were made to the project. Start over with your revised project assumptions and description and complete a full analysis and resubmit the revised document for public review and comment.</p>	<p>Please see Master Response 30 regarding modeling used to support impact assessments in the RDEIR/SDEIS, and updates to that modeling completed for the Final EIR/S. See also Master Response 46 regarding recirculation.</p>
2652	37	<p>2-9, line 2: "The new alternatives 2D, 4A, and 5A, contain much lower acreage of tidal restoration, and thus are anticipated to not have significant impacts with respect to EC [electrical conductivity] and chloride in Suisun Marsh." So by the wording of this statement, these analyses have not been completed so the document is deficient and incomplete. The document must be completed, so the unsupported supposition of the author that impacts would be reduced can be backed up with a complete set of assumptions and correctly completed analysis.</p>	<p>Updated modeling was completed for the Final EIR/S for Alternatives 2D, 4A, and 5A without habitat restoration. Please see Master Response 30 for additional information regarding the updated modeling and resulting impact conclusions.</p>
2652	38	<p>2-9, line 5: "The assessment of exceedances of the Bay-Delta WQCP [Water Quality Control Plan] 150 mg/L chloride objective in the Draft EIR/EIS was also revised based on discovery of errors made in the original analysis." The explanation for the error following this statement does not hold up to logic based on how comparative analyses are done. These errors in assumptions and model execution would equally apply to the baseline No Action and No Project and therefore the error in commission of these same flawed assumptions and execution in the modeling of the Proposed Project and alternatives would be largely offsetting, e.g., net out as near zero difference. The EIR/S author misrepresents the</p>	<p>Correction to the accounting for exceedances of the Bay-Delta WQCP 150 mg/L chloride objective did not in turn result in previously identified significant impacts in the Draft EIR/S to become less than significant in the RDEIR/SDEIS. As noted on page 2-9, lines 34–35, the results of this correction varied and some alternatives still had a significant impact. As for calendar year 1991, DSM2 modeling results are only available for January through September 1991, because DSM2 only models a 16-year (water year) period and that period modeled for the EIR/S was 1976–1991, to capture a reasonable range of water year types, including an extended drought period. Therefore, the modeling did not simply omit three months of the year. Please</p>

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		<p>explanation for the error as only being applied to the alternatives and therefore the excuse for this significant impact being less than significant is invalid. The number of errors being disclosed in this and other sections in the project descriptions, operating and modeling assumptions and commissions of error in executing the model runs should leave any reviewer and potential decision-maker with significant doubts over the usefulness of these analytical results for quantifying mitigation requirements and their suitability to be relied upon for decision-making. Given the number and magnitude of these modeling problems and the erroneous logic used in the writing-off of these significant impacts to less than significant, the entire BDCP modeling analysis must be revised from beginning to end and recirculated for public comment.</p> <p>2-9, line 20: "This resulted in reporting of exceedances of the objective for calendar year 1991, when in fact the modeling results do not exist to determine if the objective was exceeded." Again, logic supplied by the author is flawed. The analysis omitted three months of analysis, so there was less opportunity for exceedances. If the missing months had been included, there would likely have been more exceedances, not less as the author claims.</p>	<p>see Master Response 30 for additional information regarding modeling.</p>
2652	39	<p>2-12, line 20: "Nevertheless, estimates of residence time increases in these areas are small enough that they are not expected to substantially affect selenium bioaccumulation in the western Delta." The area where significant increases in residence time of water to concentrate additional selenium would occur in the eastern Delta, i.e., San Joaquin River Deep Water Ship Channel near Stockton, Potato Slough, etc., where flow patterns of the No Action/No Project are most altered by the proposed project and alternatives. The analysis and disclosure in the EIR/S is deficient due to its discussion only of the western Delta and its omission of discussion and disclosure of the impacts to the central and eastern Delta. In these areas, due to the change in flow patterns from the proposed project and alternatives, the impacts remain significant and unmitigated.</p>	<p>As described in Appendix 8M of the EIR/EIS, the selenium analysis was conducted at multiple locations in the Delta including near San Joaquin River at Buckley Cove in the eastern Delta and Mokelumne River at Staten Island in the northern Delta. See also Chapter 8 and Master Response 14 regarding water quality.</p>
2652	40	<p>2-13, line 1: "Sensitivity analyses were conducted to evaluate what factors were causing or contributing to bromide increases in Barker Slough. Findings from these analyses were incorporated into the assessment, and mitigation measures were revised to better address the factors contributing to the increases." A sensitivity analysis is typically done on a selected subset of data in a truncated analysis. This selected subset leads to biased analyses that are vulnerable to generating skewed results which lead to erroneous conclusions. Decisions and justifications for permit issuance should never be based on these biased and subjective conclusions based on less than best available science short-cut analyses. The BDCP must reanalyze the impacts of the proposed changes to the project description, operations and mitigations with the full available data of the analytical period of record. Any analysis that does not use the full available data set fails to meet the test of best available science and is therefore incomplete and deficient. The BDCP must conduct the full analysis and recirculate this materially new information in another round of public review and comment.</p>	<p>Decisions and justifications for permit issuance will be made by the respective agencies during the permitting process, and are not within the scope of CEQA or NEPA.</p> <p>Impact WQ-5 in Section 4.3.4, Water Quality, of the RDEIR/SDEIS examines the potential effects on bromide concentrations resulting from facilities operations and maintenance of the proposed project. Increases in exceedances of the 100 µg/L assessment threshold concentration for protecting against the formation of disinfection byproducts in treated drinking water would be 6% or less at all locations assessed, which is considered to be less than substantial long-term degradation of water quality. Further, the use of seasonal intakes for municipal water supply is opportunistic in the areas affected (Antioch and Mallard Island), largely driven by acceptable water quality, and opportunity to use these intakes would remain. As such, the levels of bromide degradation that may occur under Alternative 4A would not be of sufficient magnitude to cause substantially increased risk for adverse effects on any beneficial uses of water bodies within the affected environment. Bromide is not CWA Section 303(d) listed and thus the minor increases in long-term average bromide concentrations would not affect existing beneficial use impairment because no such use impairment currently exists for bromide. See Master Response 46 regarding scoping and recirculation.</p>
2652	41	<p>2-13, line 35: ". . . the potential types of effects on mercury resulting from implementation of the environmental commitments under the new alternatives would be generally similar to those described for alternatives assessed in the Draft EIR/EIS, the magnitude of effects on mercury and methyl mercury at locations in the Delta related to habitat restoration would be considerably lower." The author is making a fundamental mistake in the analytical process as they are comparing the magnitude and significance of the project effects to the</p>	<p>The text cited is relating the effects of restoration area-related environmental commitments under Alternatives 4A, 2D, and 5A on mercury to those described for restoration area conservation measures in the Draft EIR/EIS for Alternatives 1 through 9, to provide a general understanding of the effects under Alternatives 4A, 2D, and 5A. A complete assessment in which the effects of the environmental commitments on mercury related to water quality conditions under Existing Conditions and the No Action Alternative was provided in the RDEIR/SDEIS in Appendix A, Revisions to the Draft EIR/EIS, Chapter 8, Water</p>

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		other alternatives and not to the project baselines of the No Action/No Project. When comparing these new alternative to the No Action/No Project, the degradation of designated critical habitat for listed species and bioaccumulation of toxins to these listed fish species that would not occur under the No Action/No Project [are] still significant and must be mitigated.	Quality, and is provided in Chapter 8, Water Quality, of the Final EIR/EIS in Impact WQ-14. See also Master Response 14 regarding water quality.
2652	42	2-14, line 3: "The proposed tidal restoration may cause or contribute to increased fish tissue concentrations at a local level, though the magnitude of the increase is not quantifiable." It is true that the proposed habitat restorations would increase the production of and tissue concentrations of mercury and that these effects are not quantifiable. However, just because an impact is not quantifiable, does not mean that these are not significant impacts and constitute a significant degradation of critical habitat for listed fish species. The author does not address this significant impact and blows off the topic because it was not quantifiable. The impact is significant and must be mitigated and the revised document recirculated for public comment.	A full impact discussion of mercury and related effects associated with habitat restoration is provided in Chapter 8, Water Quality, in Impact WQ-14. See also Master Response 14 regarding water quality and Master Response 46 regarding recirculation.
2652	43	2-14, line 17: The impact summary misses the aspect of the impact that listed fisheries are harmed and critical habitat is adversely modified. These fish with elevated mercury tissue accumulation are consumed by local fishermen who subsist on these fish, and the fish also move and migrate to other waters in which the elevated mercury content is released upon the decomposition of their bodies. These impacts are not identified, addressed or mitigated in this document. The document must be revised to address these material omissions and deficiencies and the document recirculated for public comment.	Effects of operations on contaminants, including mercury, on covered species are addressed in Chapter 11, Fish and Aquatic Resources, in Impact AQUA-219 for all alternatives. Effects of restoration areas on mercury in fish are similarly addressed in Chapter 11 in Impacts AQUA-44, AQUA-62, AQUA-80, AQUA-98, AQUA-116, AQUA-134, 22 AQUA-152, AQUA-170, AQUA-188, and AQUA-206. Fish consumption is addressed in the Chapter 25, Public Health, Impacts PH-3 and PH-7. See also Chapter 8 and Master Response 14 regarding water quality and Master Response 46 regarding recirculation.
2652	44	2.2.8: The Dissolved Oxygen (DO) analysis discussion focused only on a potential change in San Joaquin River flow effects on DO. The PRDEIR/S did not address the changes in DO that the alternatives would have on the central, south and east Delta from increased residence time of waters in these areas from proposed project operations. The BDCP analysis only addresses these impacts at the most superficial level and dismisses the impact without adequate consideration [or] use of best available science, and the subjective conclusions of no significant impact are unsupported by science or even a set of rationales disclosed in the document. A professional opinion of a finding of no significant impact is meaningless unless there is some consistent and fully formed train of logic presented that supports a conclusion. The EIR/S must use best available science, including implementation of available modeling tools to fully assess this critical project impact. The project will adversely modify designated critical habitat of ESA listed species so this is one of the most important impacts of the project to fully evaluate and disclose and is not a topic that should be given such a cursory and incomplete treatment as it currently receives in the draft EIR/S.	As noted in the dissolved oxygen assessment (i.e., Chapter 8, Water Quality, Impact WQ-9/10), the impact analysis discusses the effects of the primary variables in the Delta that affect dissolved oxygen including water temperature, flow velocity, turbulence, oxygen demanding substances concentrations (e.g., organics), and rates of photosynthesis. As noted in the in the assessment of potential changes in these factors, most effects will be a result of climate change and not the effects of project alternatives. Residence time in the smaller Delta channels is not considered a major factor for dissolved oxygen dynamics, primarily because the hydrodynamics of daily tidal exchange would not be expected to change under project alternatives. Moreover, the potential effects in the entire Delta are considered, and the focus on the San Joaquin River conditions within the Stockton Deep Water Ship Channel and turning basin is appropriate because of the existing impaired dissolved oxygen conditions there and the extensive efforts being undertaken to understand and improve those existing conditions. Effects of operations on covered species are addressed in Chapter 11, Fish and Aquatic Resources. See also Chapter 8 and Master Response 14 regarding water quality and Master Response 46 regarding recirculation.
2652	45	2.2.8: The PRDEIR/S says the flows from the San Joaquin River (SJR) are reduced by the project and therefore there will be less of a DO [dissolved oxygen] problem. There are several problems with this statement. First, the statement is unsupported. Where are the modeling results that show a flow decrease? The document fails to disclose the source of the information, so this is a material omission of disclosure. Secondly, a flow decrease from the project is a counterintuitive result as the project should result in an increase in flows from the SJR as there would be increased drainage return flows to the river from the increased CVP/SWP water deliveries and increased irrigations resulting from the project (otherwise why do the project?). Thirdly, a decrease in flows would result in an increase in the concentration of nutrients, e.g., phosphorus and nitrogen in the SJR from discharges and accumulation which are major contributors of DO problems from algal bloom crashes that	As described in Impact WQ-15 (nitrate) and WQ-23 (phosphorus), the flow changes in the San Joaquin River under the alternatives relative to the No Action Alternative would be small and not contribute to increasing concentrations of these constituents. The dissolved oxygen assessment notes that the small change in San Joaquin River flows that would occur under the project alternatives would not substantially move the point of lowest dissolved oxygen, thus the aeration facility would still likely be appropriately located to keep levels above water quality objectives. Flow modeling results on which the dissolved oxygen assessments are based were provided in Figures 8-65a and 8-65b in Chapter 8, Water Quality. Based on the assessment in Impact WQ-9 and WQ-10 in Chapter 8, Water Quality, the project alternatives would not contribute to an adverse dissolved oxygen problem.

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		occur. Fourthly, a reduced flow means that there is a lower rate of turnover and freshening of water in the area so the nutrient concentrations and resulting DO problems would be even further exacerbated.	
2652	46	[2.2.8]: The author's claim that reduced SJR [San Joaquin River] flows with higher nutrient content and reduced rate of freshening will result in a reduction in the DO [dissolved oxygen] problem is contrary to logic and readily available science on how DO problems occur. The BDCP EIR/S discussion of DO impacts is not just incomplete, flawed, internally logically inconsistent, and wrong; their conclusion is the exact opposite of reality. In more earnest discussion of the project impacts on Dissolved Oxygen (DO), the location of the minimum DO might or might not move substantially due to the shape and location of the Stockton Deep Water Ship Channel and the introduction of SJR nutrient loads, but the magnitude of the DO problem would increase (lower DO readings), the duration of DO standard violations would increase and the geographic extent of the DO sag would expand to encompass even more designated critical habitat for listed fish species. The reduction in flows which concentrate the nutrient load, which will make the DO problem even more severe in magnitude and geographic extent, is a significant impact of the proposed project as compared to the existing conditions and No Action/No Project.	Please see response to comment 2652-45. The DO sag is expected to remain where the current aeration facility can facilitate maintaining dissolved oxygen levels at or above current water quality objectives.
2652	47	[2.2.8]: Under significantly degraded water quality conditions [due to dissolved oxygen (DO) impacts], continued operation of the Stockton Port Aeration Facility would not mitigate the incremental impact that would be precipitated by the proposed project and therefore these impacts are unmitigated by the project. There is not excess capacity of this facility for the BDCP to utilize for mitigation and there is not unreacted oxygen from the facility that would be more fully utilized under the degraded water quality conditions from the Proposed Project. The assertion by the EIR/S document of the aeration pumps "performing adequately" under a range of flow conditions is an inaccurate portrayal of the facilities and the resulting DO conditions.	As noted in the responses to comments 2652-45 and 2652-46, implementation of the project alternatives is not anticipated to substantially change dissolved oxygen depletion conditions in Stockton Deep Water Ship Channel.
2652	48	[2.2.8]: DO [dissolved oxygen] water quality standard violations and significant adverse modification of critical designated habitat occur under the existing conditions and No Action/No Project. It is clear that the proposed project will significantly further degrade and impair DO water quality (increased nutrient load and reduced rate of water turnover), and therefore continuing to run the aeration pumps without any other action to address this DO water quality degradation will result in the significant incremental impacts of the project being unmitigated as compared to the baseline conditions. The BDCP must provide a complete analysis, utilize the best available science for the analysis, fully disclose those analyses and propose actions to avoid, minimize and mitigate these significant impacts. The EIR/S must then be recirculated based on these material omissions from this document.	See responses to comments 2652-44 and 2652-45, above.
2652	49	2-16, line 28: "For all action alternatives other than Alternatives 4A, 2D, and 5A, air quality impacts from implementation of habitat restoration and protection activities (CM2 through CM11) are also evaluated (at the programmatic level)." It is clear from this statement that the proposed project and some of the alternatives were analyzed and presented at a different level of detail. Some alternatives have more programmatic-level analyzed components than other alternatives. NEPA requires an equal level of analysis for all project alternatives. This significant NEPA violation must be remedied in a recirculated public draft EIS. Agencies must not certify a document that violates NEPA or CEQA requirements and must not issue construction-related permits based on a programmatic level of analysis.	CEQA and NEPA both allow mixing program-level and project-level review in the same document. Specifically, lead agencies are afforded substantial discretion to determine what level of analysis is appropriate for a particular project or action. As discussed in Chapter 3, the EIR/EIS provides a project-level assessment of the potential effects of modified and/or new conveyance facilities (CM1). All other conservation measures are presented and analyzed at a program level. Please refer to Master Response 2 regarding adequacy of project level and program level analyses in the EIR/EIS. See also Master Response 46 regarding recirculation.

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2652	50	<p>2-16, line 34: "Where these design and engineering assumptions could result in substantive changes in other impact analyses, such revisions in other impact analyses have also been made since release of the Draft EIR/EIS." This statement leads the reader to conclude that the CM1 conveyance project description has been changed for all of the previous public draft alternatives and not just for the new alternatives presented in the PRDEIR/S. The change in design (height, location), construction footprint size and location, construction materials, amounts of materials, construction timing, construction duration, construction equipment used, construction and operating energy requirements, transmission line locations, construction and operations noise, construction and operations traffic, volumes and locations of tunnel muck transportation and disposal site, construction dewatering of groundwater, and water operations along with their resulting water quality impacts; all change with the new conveyance. If the changes in the nature of the impacts from the alterations in the conveyance facilities construction and operation are taken into consideration as compared to the original draft conveyance proposal, literally every singly impact topic covered in the EIR/S (except for perhaps Environmental Justice and Native American Trust Resources) will have altered impacts and different mitigation requirements. Even if the impacts are lessened in some categories, the mitigation levels required to compensate for the reduced impacts would be altered and the mitigations have impacts on other resources so those would also need to be updated and disclosed. The BDCP RPDEIR/S did not update the analysis and impact disclosures for all of these impact topics for all of the previous project alternatives so the PRDEIR/S is incomplete, has unequal levels of development and analysis between alternatives and is deficient. All of the alternatives must be updated for all of their changes in impacts and these must all be disclosed for public review and comment in a revised and recirculated draft EIR/S.</p>	<p>The RDEIR/SDEIS evaluated changes for Alternatives 4, 4A, 2D and 5A based on revisions to the conveyance facilities detailed in the RDEIR/SDEIS. All of the analyses that warranted change because of these revisions to these alternatives are presented in Section 3 (and Appendix A) and Section 4 of the RDEIR/SDEIS. Where no changes were made to other action alternatives, no additional analyses were presented in the RDEIR/SDEIS. Together, the revised and new alternatives in the RDEIR/SDEIS combined with the other action alternatives presented in the Draft EIR/EIS provide a reasonable range of alternatives and analyses that fairly disclose the range and type of impacts that could occur from these alternatives.</p>
2652	51	<p>2-20, line 1 - ". . . impact analysis has been expanded to assess potential odors from excavated organic matter during removal of reusable tunnel material (RTM) and sediment. If present in the muck and sediment, anaerobic decay of organic material can generate gases, specifically hydrogen sulfide." The EIR/S have been revised to address hydrogen sulfide as an odor impact, but has failed to address this project emission as a threat to human health and impacts to wildlife. "Hydrogen sulfide is highly toxic and inflammable gas. Being heavier than the air, it tends to accumulate at the bottom of a poorly ventilated room or spaces. Although very pungent at first, it quickly deadens the sense of smell, so the potential victim may be unaware of its existence unless it's too late. Hydrogen sulfide is considered as a broad-spectrum poison, meaning it can poison several systems in a body, although nervous system is most affected." (<a href="http://www.answers.com/Q/Is_hydrogen_sulphide_dangerous">http://www.answers.com/Q/Is_hydrogen_sulphide_dangerous</a>) The EIR/S document has failed to identify, evaluate, quantify, disclose or mitigate the dangerous and potentially lethal conditions it could create under various conditions from their tunnel muck disposal. The Bouldin Island tunnel muck disposal site is approximately 1,230 acres (estimated from Google Earth because the size of this site was not quantified or disclosed in the EIR/S document). A condition could occur where the tunnel muck is at its peak acreage and rises to a peak rate of off-gassing of hydrogen sulfide gas. This could occur at a time when there is no wind in the Delta and the heavier than air gas accumulates inside the levee barrier. The levees in this area are at least 25' high so the tunnel muck disposal area could hold a volume of gas of approximately 134 million cubic feet. Since this gas is potentially explosive, this volume of gas ignition could result in catastrophic losses of life, levee integrity and property. None of these risks and potential impacts of the project were identified, evaluated, mitigated or disclosed in the EIR/S.</p>	<p>Although RTM will be excavated from depths as great as 150 feet below the ground surface where oxygen is lacking, it is unlikely that it will be malodorous when managed and stored in the RTM storage areas. DWR's recent preliminary geotechnical tests indicate that soils in the Plan Area are predominately comprised of silt and clay, with a variety of inorganic materials that are not anticipated to result in malodors. The majority of test results for organic constituents and volatile organic compounds were below the method detection limits, indicating that organic decomposition of exposed RTM will be relatively low. Moreover, drying and stockpiling of RTM will occur under aerobic conditions (i.e., it will be ventilated), which will further limit any potential decomposition and associated malodorous byproducts. Please see Appendix 3B, Environmental Commitments, Section 3B.2.18.5, for a detailed discussion of measures that would be implemented for the disposal and potential reuse of reusable tunnel material, spoils and dredged material. The project proponents will consult relevant parties, such as landowners, reclamation districts, flood protection agencies, federal and state agencies with jurisdiction in the Delta, and counties, in developing site-specific spoil, RTM, and dredged material reuse plans. Also, please see response to comment 2652-52. See also Chapter 22, Air Quality and Greenhouse Gases, and Chapter 25, Public Health.</p>

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2652	52	[Hydrogen sulfide] gas accumulation could create a lethal condition for the inhabitants and visitors (boaters, hunters, fishermen) to the area as well as to resident and migratory wildlife. Once a significant amount of gas has accumulated, perhaps over several days, the first slight breeze would begin to mobilize this potentially deadly gas cloud. If there is a slight breeze from the NNW toward the SSE, this could mobilize the concentrated deadly gas cloud off of the southern tip of Boulidin Island directly into little Potato Slough which the levees would then hold in the heavier-than-air gas and prevent mixing. The breeze and the levees would direct the up to 130 million cubic foot gas cloud down to Herman and Helen's Marina which is less than a mile away. There are overnight berths at Herman and Helen's and as the reference above indicates, people can become unaware of its existence until it is too late for them to survive. This scenario is a potential worst case, but it could easily happen and the BDCP has completely failed to identify this significant human health and safety risk. Other scenarios would include more easterly winds which would mobilize the poisonous gas cloud to Honker Cut Marina, Paradise Point Marina and then just a half-mile farther east from there are the new large housing developments off of Eight Mile Road west of 1-5 which are no more than a total of 3 miles away. A half-mile an hour wind would be enough to push the heavier gas over the levees but not promote mixing and dilution. The BDCP has failed to take into account the conditions that could lead to peak off-gassing rates, conditions that could accumulate and concentrate vast volumes of hydrogen sulfide gas and the conditions in which the gas could become mobilized and yet not dispersed and their immediate and potentially deadly impact on local concentrations of human habitation. The BDCP must fully analyze and mitigate this risk to human and wildlife health and safety.	Please refer to Impact AQ-19: Creation of Potential Odors Affecting a Substantial Number of People during Construction or Operation of the Proposed Water Conveyance Facility; this impact is less than significant. As described in Chapter 22 of the Final EIR/EIS, Air Quality and Greenhouse Gases (Section 22.3) the anaerobic (without oxygen) decomposition of organic material by soil bacteria can generate malodorous gases such as hydrogen sulfide. Hydrogen sulfide is commonly described as having a foul or "rotten egg" odor. Although RTM will be excavated from depths as great as 150 feet below the ground surface where oxygen is lacking, it is unlikely that it will be malodorous when managed and stored in the RTM storage areas. DWR's recent preliminary geotechnical tests indicate that soils in the Plan Area are predominately comprised of silt and clay, with a variety of inorganic materials that are not anticipated to result in malodors. The majority of test results for organic constituents and volatile organic compounds were below the method detection limits, indicating that organic decomposition of exposed RTM will be relatively low. Moreover, drying and stockpiling of RTM will occur under aerobic conditions, which will further limit any potential decomposition and associated malodorous byproducts. See also Chapter 22, Air Quality and Greenhouse Gases, and Chapter 25, Public Health.
2652	53	The BDCP must take samples of the tunnel muck that would be deposited at this site and do off-gassing studies. The BDCP must calculate the maximum rates of off-gassing that could occur given the tunnel muck material that would be deposited, the rate of loading of the site given the construction schedule, the rate of off-gassing that could occur under worst case climate conditions. Once that basic and essential project-level work has been done, the BDCP must do site specific wind and dispersal modeling from the tunnel muck site to the sensitive receptor areas of human and wildlife habitation. These types of models do exist and the BDCP must utilize them to meet the test of utilizing the best available science to characterize and quantify this very real and significant project impact. The BDCP must also add avoidance, minimization and mitigation measures to address this significant impact. These could include, but should not be limited to: hydrogen sulfide monitoring stations placed throughout the dump site, limits to the rate at which tunnel muck material can be deposited at the site, installation of monitoring sensors and warning sirens at the sensitive receptor sites, and use of large fans at the disposal site to disperse the hydrogen sulfide gas to prevent it from accumulating.	Please refer to Appendix 3B, Environmental Commitments, Section 3B.2.18 for details regarding the disposal and reuse of spoils, reusable tunnel material, and dredged material. Also see responses to comments 2652-51 and 2652-52.
2652	54	2.3.6. - The analysis was done for 2 alternatives, but not for the other alternatives. NEPA requires an equal level of analysis for all project alternatives so the BDCP must also conduct this analysis for the other alternatives. Since this is a material omission in the revised PDEIR/S, this document must be recirculated for an additional round of public comment.	See Master Response 2 regarding project-level and program-level analysis, Master Response 4 regarding development of alternatives, Master Response 5 regarding planning efforts, and Master Response 46 regarding recirculation.
2652	55	2-21, line 25 - "The features in this GIS dataset, which represents each conveyance facility component (e.g., intakes, intermediate Forebay, tunnels, spoils areas), were overlaid onto resource-specific GIS data layers to identify physical effects of conveyance facility construction. This GIS-based approach facilitated both a component-specific, or project-level, analysis of the individual features of the conveyance facilities, as well as a program-level analysis of construction of the conveyance facilities in aggregate." The GIS	The boundaries in the GIS are correct, but Mapbook M3-4, inadvertently omitted a portion of the reusable tunnel material area. The analyses in the RDEIR/SDEIS are correct and included this area. The map error has been corrected in this Final EIR/EIS. See Master Response 46 regarding recirculation.

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		<p>location for the tunnel muck disposal sites is misaligned with the parcel boundaries. The GIS based analysis described by the BDCP is therefore flawed and would produce erroneous quantification of impacts of the footprint of the project on all resources that were evaluated using this method. Quantifications of impacts would both be over as well as underrepresented in the disclosure of the EIR/S. Overestimation of impacts are fine, but under reporting of impacts is not and is not offsetting. The BDCP must redo the described analysis, but this time with the correct location of the project footprint respective to the other resources and this material deficiency of the disclosure must be recirculated for public comment.</p>	
2652	56	<p>2-22, line 28 - "As described in Appendix 3B, Environmental Commitments, in Appendix A of this RDEIR/SDEIS, DWR will perform a series of geotechnical investigations along both the selected water conveyance alignment and at locations proposed for facilities or material borrow areas. The work to be performed will constitute a subsurface investigation program to provide information required to support the design and construction of the water conveyance facilities." Although it is good that the BDCP now has a plan in place to collect information to develop a more detailed project design and description and that data collection plan is evaluated in this RDEIR/S, it is clear that even the BDCP understands that the previously submitted public draft was deficient in the amount, quality and representativeness of the subsurface geotechnical information used in the previous public draft EIR/S. A project-level project design and analysis of impacts cannot be developed and evaluated until this proposed geotechnical data becomes available. Many previous comments were submitted on the incomplete geotechnical data and the implications thereof regarding the design, construction and potential impacts of the conveyance and habitat restoration components of the project.</p> <p>Those comments and their implications regarding the incomplete project impact analysis and disclosure still stand valid. The BDCP still cannot to date determine a number of critical factors relating to this missing geotechnical data, including, but not limited to: liquefaction and settling risks from tunnel boring and other disturbance activities (e.g., breaching levees for intake construction), bulk density (and therefore weight and volume of tunnel disposal materials which in turn would determine the number of truck trips, disposal site deposition depths, etc.), off-gassing characteristics of the tunnel muck (volume, rate and proportion of hydrogen sulfide, CO2, methane, and other volatiles), tunnel muck contaminants and required disposal (and related impacts) depending on toxic concentrations, water infiltration rate of the tunnel muck to quantify redirection of surface and flood flows, rate at which the soil conditioner would break down and allow plant and animal colonization, tunnel muck particulate size and wind erosion and resulting air pollution, presence and concentrations of contaminants and environmental toxins (Se [selenium], Pb [lead], Hg [mercury], arsenic, etc.). Until a representative sample that is a statistically defensibly valid sample density and distribution is completed, the BDCP environmental analysis does not meet the criteria for a project-level analysis, and therefore must not be approved or issued construction-related permits.</p>	<p>DWR's Delta Habitat Conservation and Conveyance Program released a description of an expanded geotechnical investigation effort in October 2014, the draft Geotechnical Exploration Plan – Phase 2. That document presents a general geotechnical exploration plan with the rationale, investigation methods, and criteria for obtaining subsurface soil information and laboratory test data to support preliminary engineering and final design of the Modified Pipeline/Tunnel Option (MPTO) with north Delta pumping plants as well as the MPTO with Clifton Court pumping plant. The program involves approximately 600 boring and cone penetration test locations. In proposed tunnel alignments and at pump shafts and safe heaven areas, the explorations will include advancing boreholes to a depth of approximately 300 feet.</p> <p>The Reusable Tunnel Testing Report, prepared by URS and the DHCCP in March 2014, describes the test methods that were developed and the test procedures that were used to evaluate the RTM for geotechnical properties to evaluate constructability, if used as structural fill; its environmental properties to characterize potential toxicity if placed in the environment; and suitability for habitat growth and agricultural use. This report is available for review at DWR's offices. Potential impacts of reusing the material are described in various EIR/EIS chapters, such as impacts on soil wind erosion in Chapter 10 and on agricultural land in Chapter 14. Additional potential impacts, such as potential toxicity of tunnel material, potential odor nuisance from stockpiled RTM, and the suitability of RTM for reuse at off-site locations, are discussed in Master Response 12- Reusable Tunnel Material.</p> <p>Please also refer to Mater Response 2, regarding the adequacy of the project and program level analyses in the EIR/EIS.</p>
2652	57	<p>2-23, line 11: "The proposed subsurface exploration will focus not on environmental impact issues, but on geotechnical considerations. . ." Since [other Central Delta Water Agency comments] have identified that incomplete and unrepresentatively distributed subsurface samples were inadequate to identify, evaluate, quantify, avoid, minimize, mitigate or disclose the full range of environmental impacts from the excavation and disposal of tunnel muck materials, the preceding quote from the revised public draft BDCP EIR/S indicates that</p>	<p>As indicated in Section 2 of the RDEIR/SDEIS, the activities described in the geotechnical plan have been incorporated into the revised impact analysis for Alternative 4 in the RDEIR/SDEIS (see Section 3, Conveyance Facility Modifications to Alternative 4, for a descriptions of other revisions to facility design and Appendix A for revised Draft EIR/EIS text).</p>

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		the project will not ever address these issues and therefore their environmental analysis and disclosure will continue to be incomplete and deficient.	
2652	58	2-23, line 15: "The data obtained during the geotechnical exploration will be used to support the development of an appropriate geologic model, to characterize ground conditions, and to mitigate the geologic risks associated with construction of proposed facilities." With this statement, the BDCP acknowledges that there are unquantified and unmitigated impacts from the construction of the conveyance that have not yet been identified, quantified, disclosed or mitigated by the project as are required in CEQA. The BDCP must complete this sampling plan and fully disclose the geotechnical and other risks and impacts of the project regarding subsurface conditions and construction impacts and recirculate the EIR/S document for public review of this material and new information.	Addressing some mitigation more programmatically is appropriate when the specifics of certain impacts cannot reasonably be determined because, for example, they are dependent on future actions. Where appropriate, performance standards are set forth for such measures. Please see Master Response 22 for a discussion on mitigation measures and Master Response 2 for a discussion of the project vs. program level analysis in the EIR/EIS and why this is adequate and allowed under CEQA and NEPA.
2652	59	2-23, line 23: "Representative samples of subsurface materials will be collected from selected locations along the MPTO [Modified Pipeline/Tunnel Option] alignment and at proposed facility sites, and the collected samples will be tested to support design." The types of information that the BDCP is currently lacking to complete their design work, "compaction, density, handling characteristics, reusability suitability analysis, chemical composition, seismic risks," are all information that is also required to complete a project-level environmental assessment. The fact that "representative samples" are required is evidence that the existing sampling is not representative and is therefore incomplete. Additional sampling is needed on all of these project construction areas that the project currently does not have adequate information to support required design processes is ample evidence of the incompleteness and deficiency of the revised public draft EIR/S. There are long reaches (6 plus miles long) of the proposed 30 mile underground conveyance that have absolutely no subsurface material characterizations. The BDCP must complete this planned and necessary data collection to complete the environmental analysis and recirculate the revised document for public comment and disclosure.	See Chapter 9 and Appendix 3B in the FEIR/EIS for discussion on potential future geotechnical investigations work to be completed prior to and during construction of the water conveyance facilities.  The EIR/EIS contains information regarding project level analysis in Chapter 3, Description of Alternatives, and this analysis, which sometimes relies on construction assumptions (Appendix 3C), determines the potential for environmental impacts of the project. For example, assessment of impacts of the conveyance facility on agricultural resources is conducted by overlaying the conveyance facility foot print on resource maps of agricultural resources using GIS to determine the magnitude and type of impacts. Similar methods are used throughout the EIR/EIS to assess potential environmental effects of the project. Please also refer to Master Response 2 addressing project level versus program level analyses in the EIR/EIS. See also Master Response 46 regarding recirculation.
2652	60	2-23, line 33: "The field exploration program will be planned to evaluate soil characteristics and to collect samples for laboratory testing, which will include soil index properties, strength, compressibility, permeability, and specialty testing to support tunnel boring machine (TBM) selection and performance specification. . ." Throughout the document, the BDCP refers to "reusable tunnel disposal material" and yet without the sampling and testing as described in the preceding quote, the suitability of the tunnel muck material for reuse cannot yet be determined. Reuse of the material will have its own environmental consequences, e.g., additional trucking and equipment usage impacts on traffic and air quality, conditioning operations (turning over, sorting, reserve soils, revegetation, etc.) habitat impacts and redirected flood risks. The BDCP EIR/S has not identified, evaluated, quantified, avoided, minimized, mitigated or disclosed these reuse application impacts. The reason why the BDCP has not evaluated these reuse applications is that they lack the data to perform [this] project-level analysis. The proposed geotechnical data collection described by the BDCP here will provide that information to perform that analysis. The BDCP EIR/S therefore must be revised to utilize this newly collected data, and to address the previous document deficiencies and recirculated for public comment and disclosure.	The Reusable Tunnel Testing Report, prepared by URS and the DHCCP in March 2014, describes the test methods that were developed and the test procedures that were used to evaluate the RTM for geotechnical properties to evaluate constructability, if used as structural fill; its environmental properties to characterize potential toxicity if placed in the environment; and suitability for habitat growth and agricultural use. .  Potential impacts of reusing the material are described in various EIR/EIS chapters, such as impacts on soil wind erosion in Chapter 10 and on agricultural land in Chapter 14.  Additional potential impacts, such as potential toxicity of tunnel material, potential odor nuisance from stockpiled RTM, and the suitability of RTM for reuse at off-site locations, are discussed in Master Response 12 - Reusable Tunnel Material.
2652	61	2-2, line 35: "The proposed Phase 2a and 2b exploration on land will consist of approximately 1,500-1,550 exploration locations including drilling boreholes and performing CPTs [cone penetration tests] as well as conducting approximately 60 shallow test pit excavations (typically 4 feet wide, 12 feet long, and 12 feet deep) in soils to evaluate bearing	Project plans have not advanced yet to the point where engineering and design work are complete. Environmental review is typically conducted based on less complete plans, because complete engineering and design work is not required for impact assessment, and most project proponents are reluctant to invest in complete engineering and design work before they know that their projects have received the

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		<p>capacity, physical properties of the sediments, location of the groundwater table, and other typical geologic and geotechnical parameters." The conveyance surface construction locations and alignment are now located on mostly state-owned or publicly accessible sampling sites and yet the project has determined that its information to understand the physical, chemical and geotechnical characteristics is deficient by 1,500 samples. The original sampling, on which the incomplete and cursory discussion of tunnel muck materials included in the previous and this public draft EIR/S was based on less than 200 samples. The environmental analysis does not require 750% less sampling density and representativeness than the next phase of engineering design. All of the types of data to be collected for the engineering assessment are also necessary to complete a comprehensive environmental assessment and disclosure of project effects. The BDCP has purposely previously under-sampled the data for the environmental analysis and plans to avoid identifying and disclosing project impacts and now plans, concurrent with the completion of the environmental impacts assessment, to collect a huge amount of additional data but not to include it in the environmental impact assessment. This proposed data collection must be completed so that there is a complete and representative sampling and characterization of subsurface and surface soil conditions for use in a revised public draft EIR/S.</p>	<p>entitlements and permits needed to proceed towards construction. Please see Master Response 2 for further information regarding the level of detail provided in the EIR/EIS Analysis.</p>
2652	62	<p>2-24, line 1: "The resulting information correlates to the nature and sequence of subsurface soil strata, groundwater conditions, and physical and mechanical properties of soils. Temporary pumping wells and piezometers may be installed at intake, Forebay, pump shaft, and tunnel shaft sites to investigate soil permeability and to allow sampling of dissolved gases in the groundwater." Yes, and without adequate representative sampling, as the current sampling is obviously deficient or this additional sampling would not be required, it is impossible to complete a comprehensive and project-level environmental impact assessment.</p>	<p>Design-level sampling is not required in order to complete a comprehensive, project-level environmental impact assessment. The spacing explorations and sampling intervals for the design-level geotechnical studies will be determined and directed by a California-licensed civil engineer who practices in geotechnical engineering. This person must abide by professional standards and the work will be peer-reviewed by similarly qualified personnel. See also Appendices 3B and 3C in the final EIR/EIS regarding Environmental Commitments and Construction Activities.</p>
2652	63	<p>2-24, line 24: "Approximately 90-100 overwater geotechnical borings and CPTs [cone penetrating tests] are proposed to be drilled in the Delta waterways. These include approximately 30 overwater geotechnical borings and CPTs in the Sacramento River to obtain geotechnical data for the proposed intake structures. Approximately 25-29 overwater borings and CPTs are planned at the major water under crossings along the planned MPTO [Modified Pipeline/Tunnel Option] tunnel alignment. An additional 30-35 overwater geotechnical borings and CPTs are proposed for the barge unloading facilities and Clifton Court Forebay modifications."</p> <p>Since the overwater areas are waters of the U.S., the BDCP should have completed these samples as part of the EIR/S impacts assessment. The current data used for the EIR/S, especially the barge unloading sites, contains absolutely no information on surface or subsurface conditions. The current available data is not just unrepresentative of these areas, it is inapplicable and therefore, effectively, these impacts have not been evaluated at all in the EIR/S. The BDCP must complete a statistically defensible geographically distributed set of core samples which adequately characterize the condition and composition of the tunnel muck that would be excavated by the project. Once that sampling is done, a complete analysis of the chemical hazards must be conducted. Once the location, nature and magnitude of the tunnel muck disposal material poses to the project, a disposal and handling of contaminated muck plan must be developed and evaluated for its impacts, e.g., filling up Kettleman City with Class 1 disposal materials. The "reusability" claim of the BDCP tunnel muck must also be fully evaluated based on the physical characteristics of the tunnel muck. Since the BDCP has claimed this material is reusable, the BDCP must evaluate the</p>	<p>Design-level sampling is not required in order to complete a comprehensive, project-level environmental impact assessment. The information in this comment is consistent with the approach related to Environmental Commitments and Construction Activities presented in Appendices 3B and 3C of the EIR/EIS. This type of information will be obtained and compiled and the analyses will be completed during the design phase to develop the final design criteria. See also Chapter 22, Air Quality and Greenhouse Gases, and Chapter 25, Public Health.</p>

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		impacts and provide avoidance, minimization and mitigation measures for the impacts that would be precipitated by actually reusing these materials.	
2652	64	2-25, line 20: ". . . Assumptions were developed to incorporate the proposed geotechnical investigations into the analysis of relevant resource topics in this RDEIR/SDEIS." We [Central Delta Water Agency] agree that this information must be included in the EIR/S to address the current data deficiencies. However, any information incorporated from these new samples into the EIR/S represents material new information which requires recirculation of the EIR/S for public comment and disclosure. Further, the collection and analysis of this additional information is not equally applied to all project alternatives as NEPA requires. All project alternatives must be evaluated at this equal level of detail, so substantial additional data collection must occur for the other alternative conveyance alignments which was not described, evaluated or disclosed in this environmental document.	Please refer to responses to comments 2652-56 and 2652-62, above. Please review Master Response 46.
2652	65	2-25, line 30: ". . . treating a proposed tunnel shaft location as an impact and then adding an additional impact for a geotechnical exploration proposed for the same location would lead to an overestimate of the overall impacts." This is an incorrect assumption. There are noise, air pollution, water runoff, soil erosion, habitat and water quality impacts that are not redundant as there are separate and additional impacts in type, magnitude and temporal distribution from the construction footprint of the conveyance that are separate, distinct from and in addition to those impacts precipitated from the geotechnical sampling. This erroneous BDCP EIR/S assumption and resulting substantive omissions from the impact analysis must be addressed in a revised and recirculated public draft.	The EIR/EIS correctly notes that there would be overlapping impacts associated with excavating a tunnel shaft at the same location where geotechnical exploration had occurred. For analyses based on the geographical extent of an impact, it was assumed that those geotechnical exploration sites will be co-located with or located adjacent to another CM1 surface feature were already considered as an affected area for the purposes of the impact analysis. For example, treating a proposed tunnel shaft location as an impact and then adding an additional impact for a geotechnical exploration proposed for the same location would lead to an overestimate of the overall impacts. No revision to the impact conclusion is required.
2652	66	2-27, line 27: "If the Lead Agencies ultimately select an alternative that proposes an alignment different from the modified pipeline/tunnel alignment, it is anticipated that a similar plan for geotechnical exploration would be designed and implemented, as described in Appendix 3B, Environmental Commitments, in 19 Appendix A of this RDEIR/SDEIS." Since the project currently has so little subsurface and geotechnical information on the project, it is very possible that the proposed geotechnical sampling could result in the selection of another conveyance route (e.g., liquefaction problems) over the current proposed project and trigger subsequent sampling as described in the quote. This would mean that an unequal level of effort was applied to the proposed project/proposed action as compared to the other project alternatives and which resulted in a material change in the selection of the project. This unequal level of effort is not compliant with NEPA requirements and therefore, as proposed in the quote, all other alternatives must also receive this same level of sampling and analysis.	In the RDEIR/SDEIS, the analysis of potential impacts of implementing the Draft Geotechnical Exploration Plan for Alternative 4A is provided in the relevant chapters while the analysis for all other alternatives is provided in Chapter 31, Other CEQA/NEPA Required Sections. Although organized differently, the level of analysis is the same for all alternatives.
2652	67	3-4, line 15: "Associated facilities include an access road, fencing and security gates, an electrical building with transformers, switching equipment, a backup generator and fuel tank, storage buildings, communication devices, and an outlet tower." It is good that security lighting is not included in these facilities as the light pollution from these creates undisclosed visual impacts and wildlife habitat impacts that were not addressed in the EIR/S. If the facilities description were modified to include security lighting then this would be a material change in the project description and impacts and would therefore require recirculation for public comment and disclosure.	Please refer to Chapter 17, Aesthetics and Visual Resources regarding light and glare effects and Chapter 12, Terrestrial Biological Resources for operations effects on wildlife.
2652	68	3-5, line 4: "Physical modifications made to Alternative 4 water conveyance facilities did not require revisions to the following chapters in the EIR/EIS: Chapter 1, Introduction; Chapter 2, Project Objectives and Purpose and Need; Chapter 4, Approach to Environmental	Please see Master Response 39 for more information about the public review period. To facilitate review of the changes in the RDEIS/SDEIS compared to the Draft EIR/EIS, a version of the document was made

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		<p>Analyses; Chapter 5, Water Supply; Chapter 29, Climate Change; Chapter 30, Growth Inducement and Other Indirect Effects; Chapter 31, Other CEQA/NEPA Required Sections; and Chapter 32, Public Involvement. . ." In our [Central Delta Water Agency's] estimate then, the changes in alternative 4 precipitated changes in 90+% of the document. Given the complexity of the document and analysis and the importance of continuity and context of discussion and analysis in interpreting the document, nearly the entirety of the document must be reviewed and commented on in light of these alternative 4 changes. It stands to reason then, that the review and comment period for this revised public draft EIR/S should be at least as long as 90% of the period for the original public draft review period. The review period offered by the project is unjustifiably brief given the magnitude of changes in the project as evidenced by the scant number of chapters that did not require modification. The BDCP must provide an extended review and comment period to be proportional to the previous comment period, otherwise, this arbitrarily and unjustifiably truncated review and comment period will stifle public comment and participation and be in conflict with the core principles of NEPA and CEQA for public accessibility to and participation in the EIS and EIR process.</p>	<p>available that included hyperlinks and track changes, in addition to a Section 508-compliant version.</p>
2652	69	<p>3.3.1 - The BDCP says that water supply (water rights) are not addressed in the impact assessment of Alternative 4. This material omission is incorrect as there are water rights issues associated with Alternative 4 (and 2A, 4A and 5A) that must be addressed in a revised EIR/S. The BDCP animation of Delta flows (<a href="http://resources.ca.gov/docs/press_release/150722-Public_Comment_Period_on_Revised_Delta_Conveyance_Document.pdf">http://resources.ca.gov/docs/press_release/150722-Public_Comment_Period_on_Revised_Delta_Conveyance_Document.pdf</a>) between the 52 and 59 second mark (correctly) shows that the origin of the water being pulled into the CVP and SWP south Delta pumps is coming from the Cosumnes and San Joaquin Rivers. At 2 minutes and 52 seconds, the animation shows the south Delta CVP/SWP pumps drawing from the San Joaquin River, Old River, and Victoria Canal, none of which DWR or Reclamation have water rights on. DWR and Reclamation do not have water rights to divert water from the Cosumnes and San Joaquin Rivers either. CSPA [California Sportfishing Protection Alliance] and others have already made this complaint of SWP and CVP violation of water rights by DWR and Reclamation diversions from water they have no rights to, so by reference, those comments are incorporated here. The Proposed Project and other alternatives that continue south Delta operations will continue to be in violation of water rights by diverting water they do not have rights to so the State Water Resource Control Board must not issue any permits that would allow DWR and Reclamation to continue to illegally divert water from tributaries that they have no water rights on.</p>	<p>Please refer to Chapter 5, Water Supply and Chapter 6, Surface Water for specific details of modeled assumptions. The CALSIM II model only diverts water from the Trinity, Sacramento, American, Feather, San Joaquin, and Stanislaus Rivers in accordance with water rights allocated by the State Water Resources Control Board to DWR and Reclamation. All of the alternatives evaluated in the EIR/EIS would only divert water under existing water rights which were issued to DWR and Reclamation by the State Water Resources Control Board with consideration for senior water rights and Area of Origin laws and requirements. The proposed project does not seek any new water rights nor reduction in total water rights issued to DWR and Reclamation. The CALSIM II models used in the EIR/EIS did not divert water for the SWP or CVP from the Cosumnes, Mokelumne, or Calaveras rivers. In addition, none of the alternatives modify the flows on the San Joaquin River upstream of Vernalis as compared to the No Action Alternative. Please also refer to Master Response 32 regarding water rights.</p>
2652	70	<p>3.3.1 - The BDCP omission of discussion of water rights for the Alternative 4 analysis was incorrect. The BDCP animation of Delta flows (<a href="http://resources.ca.gov/docs/press_release/150722-Public_Comment_Period_on_Revised_Delta_Conveyance_Document.pdf">http://resources.ca.gov/docs/press_release/150722-Public_Comment_Period_on_Revised_Delta_Conveyance_Document.pdf</a>) at 2:52 shows that the south Delta pumps are operated so that the Sacramento River flows can continue out to the bay to manage west Delta water quality. The animation correctly reflects the flows that occur under those low tributary flow and south Delta pumping, but again, it explicitly demonstrates that the water being pumped by the CVP and SWP out of the south Delta is water that DWR and Reclamation have no water rights to.</p>	<p>In accordance with the Project Objectives and Purpose and Need (see Chapter 2 of the EIR/EIS), all of the action alternatives would continue the operation of the SWP and CVP in accordance with the existing water rights and regulatory criteria adopted by the State Water Resources Control Board, U.S. Fish and Wildlife Service, National Marine Fisheries Service, and California Department of Fish and Wildlife. All of the alternatives evaluated in the EIR/EIS would only divert water under existing water rights which were issued to DWR and Reclamation by the State Water Resources Control Board with consideration for senior water rights and Area of Origin laws and requirements. The proposed project does not seek any new water rights nor reduction in total water rights issued to DWR and Reclamation. Please refer to response to comment 2652-69, above.</p>
2652	71	<p>3.3.3 - The BDCP proposes "reusable tunnel material areas" that will be stacked several feet thick with this tunnel muck material. The BDCP does not disclose the volume of material to be excavated so it is indeterminate and undisclosed how high the tunnel muck will be raised</p>	<p>The revised estimates of Reusable Tunnel Material (RTM) can be found in the RDEIR/SDEIS in Table 3C-1 "Construction Assumptions for Water Conveyance Facilities" starting on page 3C-40 of Appendix 3C in Appendix A, which details the revised estimates for RTM storage acreage, volume, and potential reuses.</p>

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		<p>in comparison to the surrounding terrain. The BDCP fails to meet the criteria for a project specific document that would warrant issuance of construction-related permits because it does not disclose tunnel muck volumetrics nor the height to which tunnel muck will be stacked.</p> <p>3.3.3. - Some of the tunnel muck disposal areas are as large as several hundred acres, e.g., Bouldin Island tunnel muck disposal area. It is uncertain how large each of these areas are because the EIR/S document fails to list them and disclose their individual sizes. This material information must be disclosed and the document recirculated for public comment.</p>	<p>Mapbook figures M3-4 and M14-7 show potential RTM storage locations. Final locations for storage of RTM would be selected based on guidelines presented in Appendix 3B Environmental Commitments, section 3B.2.18 "Disposal and Reuse of Spoils, Reusable Tunnel Material (RTM), and Dredged Material" starting on page 3B-50, also in Appendix A. Please also see Master Response 12 which provides additional information on Reusable Tunnel Material.</p>
2652	72	<p>3.3.3 - The BDCP failed to disclose the water infiltration rate characteristics of the tunnel muck that would be disposed and the range of tunnel muck water infiltration rate conditions it would encounter in the northern, middle and southern portions of the tunnel excavation. This material omission of project specific information prohibits the water runoff and erosion analysis that must be conducted on each of these tunnel muck disposal areas.</p> <p>3.3.3 - The water runoff and erosion impacts of the tunnel muck disposal areas are only discussed at a programmatic level in the EIR/S and it fails to individually analyze the impacts of each tunnel muck disposal area which will be characteristically different in the type and magnitude of their impacts and the resources affected by them.</p>	<p>See response to comment 2652-71, above. Water runoff and erosion effect at RTM sites would be handled according to standard NPDES permits and site specific SWPPPs.</p>
2652	73	<p>3.3.3 - Here [is an example of analysis] that should have been conducted at a project level of analysis that [was] not done in the EIR/S. To do this analysis, the height, land form shape, size, location, water infiltration rates and peak rainfall events must be known for the tunnel muck disposal sites. All of these are "knowable" for a fully formed project-level analysis:</p> <p>Let's use the second from the north triangular shaped disposal site south of Lambert Rd. It is a DWR-owned property with gravel roads on the south and west sides of it a vineyard on the north and a pond (1-5 overpass excavation) on the east of it. The pond and upland areas around it have been identified as riparian brush rabbit and Giant Garter Snake (GGS) habitat both special status species. The area is about 20 acres in size and we [Central Delta Water Agency] assume the tunnel muck would be piled at least several feet high. The higher elevation of the tunnel muck will result in drainage of any quantity of rainfall exceeding the infiltration rate of the soil in draining off to the adjacent properties. This drainage will result in flooding of the adjacent roads and erosion of the edges of the tunnel muck onto the adjacent properties and into waters of the state. The erosion will clog the drainage adjacent to the roads and will cover the native soils in the upland area adjacent to the pond which is the riparian brush rabbit and GGS habitat. The non-native tunnel muck soil that buried the relatively undisturbed native soil will lead to colonization of exotic and invasive weed species that will crowd out the native grasses which are important food and cover habitat components for the riparian brush rabbit. Drainage from the tunnel muck site into the vineyard could bury the vines in a layer of tunnel muck causing vine disease problems like cancer, flood vines causing disease problems like phytothora, disrupt vineyard operations from flooding (making it impassible for tractors and crews), or even cause wetlands to form or disappear depending on disruption or rerouting of drainage patterns. The disposal area just to the north of the preceding example is adjacent to waterways that feed the Stone Lakes National Wildlife Refuge. Tunnel muck that erodes into the tributaries adjacent to this tunnel muck disposal site will directly affect the turbidity and other water quality parameters of the main water supply for the refuge irrigation and aquatic wildlife.</p>	<p>As described in Appendix 3B of the EIR/EIS, the reusable tunnel material (RTM) would be placed in areas that would avoid changes in drainage flows and in a manner that would avoid transport of the soils or water onto adjacent lands or waterways. The RTM would be placed in a manner that would not affect adjacent agricultural or housing land uses. If the RTM disposal area was located in an area that would disrupt agricultural drainage from adjacent lands, those drainage facilities would be modified in accordance with Mitigation Measures AG-1, GW-1, GW-5, and WQ-11 that will reduce the severity of significant impacts in agricultural areas by implementing activities such as siting project footprints to encourage continued agricultural production; monitoring changes in groundwater levels during construction; monitoring seepage effects; relocating or replacing agricultural infrastructure in support of continued agricultural activities; identifying, evaluating, developing, and implementing feasible phased actions to reduce EC levels; engaging counties, owners/operators, and other stakeholders in developing optional agricultural stewardship approaches; and/or preserving agricultural land through off-site easements or other agricultural land conservation interests. Please also refer to Master Response 2, related to the adequacy of project and program level analyses in the EIR/EIS.</p>

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2652	74	<p>3.3.3 - Here [is an example of analysis] that should have been conducted at a project level of analysis that [was] not done in the EIR/S. To do this analysis, the height, land form shape, size, location, water infiltration rates and peak rainfall events must be known for the tunnel muck disposal sites. All of these are "knowable" for a fully formed project-level analysis:</p> <p>A tunnel material impact analysis that should have been conducted in the EIR/S, but was not, is the tunnel muck disposal area on the southern portion of Bouldin Island. This tunnel muck disposal area, which should have received project specific level analysis, but [did] not, covers the entire southeast quadrant of Bouldin Island. [Central Delta Water Agency] cannot even guess from the figures or project descriptions how big this area is except that it covers well over a thousand acres. For this project-level example analysis, let's look at cumulative drainage and localized flooding potential from the elevated area from the tunnel muck disposal. For our analysis, let's assume a worst case scenario of the soil already being saturated by a previous storm, a near record rain event of 3.75" in a 24-hour period (<a href="http://rainfall.weatherdb.com/l/49/Stockton-California">http://rainfall.weatherdb.com/l/49/Stockton-California</a>) and the tunnel muck having a water infiltration rate of near zero (it does have the consistency of "toothpaste" according to the EIR/S). Approximately 5.7 miles of the perimeter of this tunnel muck disposal area out of the total perimeter area of 9.6 miles is bordered by levees, so the drainage from this disposal area will all be focused on the 3.9 miles of un-leveed border of the tunnel muck disposal area. The surface area of this tunnel muck disposal site is approximately 1,230 acres (as estimated by recreating the boundaries on Google Earth, as the specific amount of area of this site was not disclosed in the EIR/S).</p> <p>The drainage in the rainfall even scenario defined above results in over 14 million cubic feet of water draining from the proposed tunnel muck disposal area onto the adjacent properties (which are already saturated and flooded by their own 3.75" rainfall event). The drainage from the tunnel muck area in this scenario is enough to flood the nearest one square mile of adjacent property an extra one half foot deep. This is certainly a significant impact to the land use and habitat values of the adjacent properties that the EIR/S failed to avoid, minimize, mitigate, evaluate or disclose.</p>	<p>Please see Section 3.6.1 in Chapter 3, FEIR/EIS, for a description of Reusable Tunnel Material (RTM) storage sites and potential reuse. The storage areas would be created by excavating and stockpiling the native topsoil for future reuse. Once the area has been suitably excavated, and if a lined storage area is required, an impervious liner would be placed on the invert of the material storage area and along the interior slopes of the berms surrounding the pond. Additional features of the long-term material storage areas would include berms and erosion protection measures to contain storm runoff if necessary. The construction of storage sites will conform to applicable design guidelines and standards to address potential runoff and drainage issues. Please also refer to Master Response 2, related to the adequacy of project and program level analyses in the EIR/EIS.</p>
2652	75	<p>3.3.3 - The water supply and drainage for the canals and pump system for [tunnel muck disposal] area of Bouldin Island are on the west side about one-quarter way down the southern tip of the island that is proposed by the BDCP to be covered by the tunnel muck. Obviously the drainage for this area will no longer function once it is covered by tunnel muck and the BDCP has proposed no avoidance, minimization or mitigation for this impact.</p>	<p>As described in Appendix 3B of the EIR/EIS, the reusable tunnel material (RTM) would be placed in areas that would avoid changes in drainage flows and in a manner that would avoid transport of the soils or water onto adjacent lands or waterways. The RTM would be placed in a manner that would not affect adjacent agricultural or housing land uses. If the RTM disposal area was located in an area that would disrupt agricultural drainage from adjacent lands, those drainage facilities would be modified in accordance with Mitigation Measures AG-1, GW-1, GW-5, and WQ-11 that will reduce the severity of significant impacts in agricultural areas by implementing activities such as siting project footprints to encourage continued agricultural production; monitoring changes in groundwater levels during construction; monitoring seepage effects; relocating or replacing agricultural infrastructure in support of continued agricultural activities; identifying, evaluating, developing, and implementing feasible phased actions to reduce EC levels; engaging counties, owners/operators, and other stakeholders in developing optional agricultural stewardship approaches; and/or preserving agricultural land through off-site easements or other agricultural land conservation interests. Effects on wetlands and waters of the U.S. associated with RTM sites and other features are also addressed in Chapter 12, Terrestrial Biological Resources, Impact BIO-176. See also Master Response 12 regarding reusable tunnel material.</p>
2652	76	<p>3.3.3 - The USACE [U.S Army Corps of Engineers] must not issue permits for the BDCP project until the EIR/S has at least included project-specific analysis of drainage disruption and flooding impacts of each of the tunnel muck disposal sites with a site and project</p>	<p>Impacts on agricultural drainage and other agricultural infrastructure related to construction of the conveyance facilities are discussed Impact AG-2 of the RDEIR/SDEIS and this Final EIR/EIS. Mitigation Measure AG-1, the Agricultural Lands Stewardship Plan is provided to reduce potential effects agricultural</p>

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		<p>specific level of detail as partially illustrated with the examples above. Once this project-level analysis and impacts have been completed, the project must demonstrate how they have avoided, minimized and mitigated these impacts before any consideration of issuance of permits based on this BDCP EIR/S document.</p> <p>3.3.3 - The local Reclamation Districts must approve the proposed mitigation plans by the BDCP before the USACE can issue permits on the project. Mitigations should include, but are not necessarily limited to: replacement of the drainage/water supply canals and pump and maintenance of those facilities by the project in perpetuity. Mitigation maintenance requirements extend beyond the end of the project period as the existing infrastructure has been permanently been destroyed by the project even long after the BDCP project lifespan is completed. Any mitigations that extend in perpetuity must be funded by a trust that is self-sustaining as the continued existence of DWR and Reclamation and available funding cannot be guaranteed in any other way.</p>	<p>lands and operations. This mitigation measure provides a variety of methods for reducing effects on agricultural lands and operations in consultation with the relevant local, state and federal agencies. No flooding related to the reusable tunnel material storage sites would be expected based on current project design information. Additionally, the RTM areas have largely been relocated to public lands near the intermediate forebay and on Bouldin Island. DWR will conduct additional hydrodynamic analyses as part of the U.S. Army Corps of Engineers Section 408 permitting process. Options for addressing funding of conveyance facility construction and maintenance is presented in Chapter 3, Description of Alternatives in this Final EIR/EIS. Please also refer to supplement information for the Corps of Engineers included in Appendix E of the RDEIR/SDEIS. See also Master Response 45 regarding permitting.</p>
2652	77	<p>3-6, line 36: ". . . modeling assumptions were reviewed. . ." There would be no need for this statement unless there were changes in the groundwater modeling assumptions based on that review. If modeling assumptions were changed for groundwater modeling impacts assessments for one alternative, they must be changed for all of the alternatives, otherwise, the comparative nature of the impact analysis is corrupted and skewed (perhaps so that Alternative 4 has less groundwater impacts than the other alternatives). If changes were made in the groundwater modeling assumptions for some of the alternatives, then the analysis must be redone for all of the alternatives and the BDCP EIR/S recirculated to disclose this material new information.</p>	<p>As described in the EIR/EIS, during construction, slurry walls would be constructed around the construction site at the intakes, tunnel shafts, and forebays to reduce the effect of dewatering wells. No dewatering would be required along the tunnel alignment. The effects on groundwater at locations with slurry wall installations would not result in significant effects as compared to Existing Conditions. Mitigation Measures AG-1, GW-1, GW-5, and WQ-11 will reduce the severity of significant impacts in agricultural areas by implementing activities such as siting project footprints to encourage continued agricultural production; monitoring changes in groundwater levels during construction; monitoring seepage effects; relocating or replacing agricultural infrastructure in support of continued agricultural activities; identifying, evaluating, developing, and implementing feasible phased actions to reduce EC levels; engaging counties, owners/operators, and other stakeholders in developing optional agricultural stewardship approaches; and/or preserving agricultural land through off-site easements or other agricultural land conservation interests.</p>
2652	78	<p>3-7, line 4: ". . . water quality effects associated with construction of water conveyance facilities -- such as those related to discharges from work sites or changes to storm water drainage and runoff patterns -- to occur in different locations as a result of the revised facility footprints." This is an incomplete and misleading statement. The impact of Alternative 4 (and the other alternatives) to water quality has changed by the reduction in the footprint of the facilities, changes in construction methods, construction schedule and construction materials. All of these changes in construction are identified in other sections describing the impact assessment of Alternative 4. These refinements in footprint, construction schedule, equipment, methods and locations, must all be equally applied to the other project alternatives and they [must] be re-evaluated and the results recirculated for public comment.</p>	<p>The EIR/EIS presents a range of alternatives, including a range of construction methods and facilities to be constructed. In response to comments on the Draft EIR/EIS, DWR and Reclamation identified additional alternatives (Alternatives 2D, 4A, and 5A) that would reduce the effects of construction and operation of the conveyance facilities. It is appropriate under CEQA and NEPA to include these new alternatives in the RDEIR/SDEIS in addition to the range of alternatives evaluated in the Draft EIR/EIS as described in Chapters 1 and 3 of the Final EIR/EIS. See Master Response 14 regarding water quality and Master Response 46 regarding recirculation.</p>
2652	79	<p>3.3.8 - ". . . updated assumptions for pile-driving activities for proposed water conveyance facilities. . ." If any assumptions are altered to avoid or minimize impacts for Alternative 4, that those same design and construction assumptions must be equally applied to all other project alternatives that contain those same project components (near or in-water construction in this case). These changed assumptions for in-water work must result in reduced impacts and it would be a biased analysis if these same assumptions and measures were not applied to the other alternatives with these same impacts that could be avoided or minimized in the other alternatives.</p>	<p>Please refer to 11.3.5.1 for an updated discussion for effects of underwater noise during construction. The effects of construction on fish remain the same as presented in the Draft EIR/EIS, including the NEPA and CEQA determinations that for all alternatives, the impacts of construction would be less than significant with mitigation/not adverse; however, additional analyses have been conducted relative to pile driving effects on underwater noise.</p>

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2652	80	3-7, 3.3.9 - The reduced impact from the change in the intakes from being powered pump facilities to gravity-fed facilities that only require temporary transmission lines and lower power transmission lines is a reasonable avoidance and minimization measure that must be applied to all project alternatives that include intakes. If the project description of the other alternatives that contain intakes are not similarly modified to avoid and minimize these impacts, it will be obvious that the BDCP and its lead agencies have purposely made the other alternatives worse in comparison to their Proposed Project due to their predecisional bias towards Alternative 4A. The BDCP must modify all of the other alternatives with these same avoidance and minimization measures and then redo the analysis and then recirculate this material new information.	<p>Refer to Section 3.3.1.1 of the FEIR for information on the physical components of the water conveyance facilities. Under the modified pipeline/tunnel alignment (Alternatives 4, 4A, 2D and 5A), water would be fed by gravity from the intermediate forebay to the major tunnel segment. This approach could be applied to other alternatives as the Lead Agencies make their final decisions regarding the proposed project and associated permits.</p> <p>Please see Master Response 4 regarding alternatives and the level of detail used to evaluate all alternatives and Master Response 46 regarding recirculation.</p>
2652	81	<p>3.3.10 - Alternative 4 has obviously had a substantial additional level of effort and investment in the development and refinement of the conveyance design and siting to avoid and minimize impacts. Since the other previous alternatives have not been reanalyzed, it is obvious that an unequal level of effort and level of detail between the alternatives have been applied, which is a violation of NEPA's requirement for equal treatment of alternatives. The BDCP must apply an equal level of effort to refining the other alternatives to similarly avoid and minimize impacts. These revised alternatives must then be fully analyzed, with the same level of detail and set of assumptions as were done for the new alternatives. This revised document must then be recirculated for public comment and disclosure.</p> <p>3.3.11 - same comment as preceding comment.</p> <p>3.3.22 - Same comment as 3.3.10.</p> <p>3.3.23 - Same comment as 3.3.10.</p> <p>3.3.24 - Same comment as 3.3.10.</p> <p>3.3.25 - Same comment as 3.3.10.</p>	<p>The Lead Agencies carefully considered all potential alternatives that were proposed during the scoping process and during time of preparation of the EIR/EIS. See Appendix 3A of the EIR/EIS and Section 4 of the RDEIR/SDEIS.</p> <p>Although many of the proposed alternatives included meritorious water policy principles, the proposals rejected by the Lead Agencies did not qualify as appropriate alternatives for various reasons. For example, proposals were rejected because they were inconsistent with the project's objectives and purpose and need or included components that are beyond the scope of the project. Chapter 3 (section 3.2) and Appendix 3A thoroughly explain the process used to develop the alternatives, and explain why certain potential alternatives were considered but ultimately rejected by the Lead Agencies. Although the requirements for an alternatives analysis under CEQA and NEPA vary to some degree, neither statute requires that the scope of alternatives included in an EIR/EIS be exhaustive, and lead agencies are not required to consider every conceivable alternative to a project or action.</p> <p>Please refer to Master Response 4 (Alternatives) for additional information regarding how the alternatives, including the preferred 4A alternative, were developed in accordance to the law. Also refer to Master Response 2 regarding program-level and project-level analysis.</p>
2652	82	3.3.11 - Dust from tunnel muck ("reusable tunnel material") will have a different microbial community than the natural surface soils due to different soil physical and chemical composition (especially considering the modifications to it from tunnel slurry conditioning compounds). New disposal sites for "Reusable Tunnel Materials" are adjacent to vineyards and the environmental analysis failed to analyze the impact of the altered soil microbial community from the tunnel muck disposal on the quality, marketability and value of the wine grapes. Published scientific literature on the importance of soil (and grape bunch derived from soil) microbial community influence on grape terroir ( <a href="http://www.pnas.org/content/111/1/5">http://www.pnas.org/content/111/1/5</a> , <a href="http://www.pnas.org/content/111/1/E139">http://www.pnas.org/content/111/1/E139</a> ) determined that wine grape quality are significantly influenced by their soil and grape bunch (derived from their soil) microbes. Introduction of the tunnel muck microbial community from dust mobilization onto the wine grapes will alter the quality and value of the grapes produced in these adjacent and down-wind vineyards. The project must evaluate and disclose this material omission from their analysis and propose measures to avoid, minimize and mitigate these impacts.	As indicated in Appendix 3B, Environmental Commitments, AMMs, and CMs (Section 3B2.18), landowner concerns and preferences will be considered in designating sites for material (spoils, reusable tunnel material, and sediment) storage. DWR will consult directly with landowners to refine the storage area footprint to further minimize impacts to surrounding land uses, including agricultural operations. In some instances, it may be infeasible to transport and reuse spoil, reusable tunnel material, or dredged materials for another use due to factors such as the distances and costs involved and/or any environmental effects associated with transport (e.g., unacceptable traffic concerns or levels of diesel emissions). In such instances, sites will be evaluated for the potential to reapply topsoil over the spoils, RTM, or dredged material and to continue or recommence agricultural activities. See Master Response 12 regarding reusable tunnel material.
2652	83	3-8, line 24: "... refined set of construction equipment and schedule assumptions developed for Alternative 4..." The BDCP is clearly identifying that additional effort has gone into Alternative 4 and that a comparable level of effort and refinement has not been	<p>See Appendix 3A of the EIR/EIS and Section 4 of the RDEIR/SDEIS.</p> <p>Please refer to Master Response 4 (Alternatives) for additional information.</p>

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		<p>applied to the other project alternatives which is in direct violation of EIR requirements.</p> <p>3.3.13 - Same quote and comment as preceding comment.</p>	
2652	84	<p>3-9, line 7 - ". . . revised design of water conveyance facilities (and associated architectural guidelines incorporated in a revised conceptual engineering report) to result in a substantial alteration. . ." So this quote makes it clear that the architectural guidelines were altered for modification of Alternative 4 which resulted "in a substantial alteration," but those revised guidelines were not applied to the other alternatives. Those updated guidelines must be equally applied to all of the other alternatives and all of the analysis must be redone and recirculated for this material new information.</p> <p>3.3.16 - Same quote and comment as preceding comment. Of course these comments are intended to apply to all resource areas and impacts that would be altered from a refined project footprint, design, location, etc.</p>	Please refer to responses to comments 2652-82 and 2652-83, above.
2652	85	<p>3.3.16 - The representations of the highway rerouting on the south side of intake number 5 are not specific enough to allow detailed analysis of compliance of turn radius requirements to accommodate 52' semi-trailer trucks that regularly are required to transit to and from State Highway 160 to and from Randall Island Road to service Greene and Hemly and Elliot Farming cold storage and packing houses. The BDCP must complete the plan to a project level of detail which then must be analyzed for highway turn radius compliance. This material omission of project information and required analysis for securing permits from the California Department of Transportation (Caltrans) and therefore the public draft EIR/S must be revised and recirculated.</p>	Such limitations will be addressed during development of detailed site specific construction traffic management plans as discussed in Mitigation Measure TRANS-1A. See also Master Response 46 regarding recirculation.
2652	86	<p>3.3.18 - The energy impacts analysis must also be revised to reflect the changes not only in construction footprint, but in construction location (different energy sources for modified construction locations), equipment, schedule, construction methods, etc., which according to other EIR/S document sections were modified for Alternative 4. Further, all of these refinements to Alternative 4 must be equally applied to the other alternatives and those alternatives re-analyzed and those results recirculated for public comment.</p>	The improvements in Alternative 4A were also used to evaluate Alternative 4; the other alternatives were not modified. If another alternative is selected by the lead agencies, some of the improvements in the conveyance design for Alternative 4A could be incorporated into the final project. Please also refer to responses to comments 2652-82 and 2652-83, above.
2652	87	<p>3.3.18 - The air quality impacts analysis must also be revised to reflect the changes not only in construction footprint, but in construction location (different air quality attainment basins and different counties for modified construction locations), equipment, schedule, construction methods, etc., which according to other EIR/S document sections were modified for Alternative 4. Further, all of these refinements to Alternative 4 must be equally applied to the other alternatives and those alternatives re-analyzed and those results recirculated for public comment.</p>	Please refer to Chapter 22, Air Quality and Greenhouse Gases, for a summary of the emissions results. See also Appendix 22A, Air Quality Analysis Methodology for calculation methods and assumptions.
2652	88	<p>3-10, line 29: ". . . updated assumptions for pile-driving activities for proposed water conveyance facilities. . ." If any assumptions are altered to avoid or minimize impacts for Alternative 4, that those same design and construction assumptions must be equally applied to all other project alternatives that contain those same components (in-water construction in this case). These changed assumptions for in-water work must result in reduced impacts and it would be a biased analysis if these same assumptions and measures were not applied to the other alternatives with these same impacts that could be avoided or minimized in the other alternatives.</p>	Please refer to responses to comments 2652-82 and 2652-83, above.

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2652	89	<p>3-11, line 1: ". . . update the assessment of the creation or exposure of hazardous materials or known hazards sites to people or the environment, as a result of constructing and operating the proposed water conveyance facilities." Under other resource impact areas, they said there were no differences in operations of the conveyance so only construction-related impacts were updated for Alternative 4. This BDCP EIR/S quote identifies that the operating impacts of hazards were updated for Alternative 4. If hazard-related impacts changed for the operations of the conveyance, then many other impact topic area impacts must have also changed for the Alternative 4 operations. The BDCP must update the operational impacts for all impact topic areas and recirculate the document for this material omission.</p>	<p>Analyses in Chapter 24, Hazards and Hazardous Materials were updated to consider changes in construction impacts. The facility changes related operations were also considered.</p> <p>Please refer to the final EIR/EIS Chapter 24.</p>
2652	90	<p>4-1, line 5: ". . . additional sub-alternatives that meet the goals of restoring the ecological functions of the Delta. . ." The November 20, 2013 BDCP DEIR/S project objectives for CEQA from DWR state in 2-2, line 30, "DWR's fundamental purpose in proposing the BDCP is to make physical and operational improvements to the SWP system in the Delta necessary to restore and protect ecosystem health . . ." The PRDEIR/S claim that "restoring ecological functions" meets the project objectives, but that claim bears little resemblance to "restore and protect ecosystem health" nor does their claim reasonably satisfy that objective. Both statements include the word "restore" or "restoring", but the Alternative 4 reference refers to restoring ecological function and the project objective refers to restoring ecosystem health. These are not nearly the same. The BDCP Alt 4 contains the word "ecological" whereas the project objective uses the term "ecosystem." Webster's Dictionary defines these words [as] nearly synonymous in meaning, so the biggest difference in the proposed Alternative 4 and the project objective comes down to the difference of "function" vs. "protect." Webster's Dictionary defines "function" as "the act of executing or performing any duty, office, or calling; performance." Webster's defines "protect" as "to cover or shield from danger or injury; to defend; to guard; to preserve in safety." You can see that there is no reasonable comparison to the intent and implications to the word "function" vs. the word "protect." The BDCP claims that the north Delta diversion will restore natural flow patterns in the Delta, an ecological function. Even forgetting for a moment the huge difference between "function" and "protect", this claim by the BDCP is inaccurate and misrepresentative of the facts. The BDCP claims that by not drawing water from the north Delta across the central and south Delta to the south Delta SWP and CVP pumps that a more natural flow regime and flow direction will be restored.</p>	<p>This comment questions the use of the term ecological functions in reference to a goal of Alternative 4A to improve the ecological functions versus the goal of Alternative 4 to restore and protect ecosystem health. Alternative 4A would be implemented with the goal to meet requirements of Section 7 of the ESA to avoid jeopardizing the continued existence of list species and avoiding adverse effects on critical habitat. Alternative 4 would be implemented under Section 10 of the ESA with the goal of recovery for covered species. Thus, these two alternatives differ with regards to the goal to improve Delta conditions for listed species. Alternative 4 aims to contribute to long-term recovery of species and Alternative 4A would aim to avoid jeopardizing the continued existence of listed species and avoiding adverse effects on critical habitat. Please also refer to Chapter 2, Project Objectives and Purpose and Need of this Final EIR/EIS and Master Response 3 regarding project objectives and the purpose and need for the project. See also Master Response 29 regarding the Endangered Species Act.</p>
2652	91	<p>Natural flow conditions in the Delta will not be restored by the use of north Delta intakes for 2 reasons. First, the BDCP proposes dual operations so they will still use the south Delta pumps as much as 60% of the time. Right there you know that at least 60% of this BDCP claim is not true. Second, in order for the natural flows to be restored to the Delta and thus restoring that ecological function, the flow levels of the eastern and southern tributaries to the Delta would also have to be restored in addition to the cessation of the unnatural flow contributions across the Delta that occur due to the CVP and SWP. Cumulative annual flows of these other, non-Sacramento River, Delta tributaries are in the range of 10% of what they were pre-western development, which is the baseline in which the ecological function of this flow pattern and the development and behavior of the fish species that respond to flow cues was based upon. In order to "restore" the Delta flow pattern the BDCP would not only need to not draw water from the south Delta, but it would also have to increase other, non-Sacramento River, east and south Delta tributary (e.g., Mokelumne, Cosumnes, Calaveras, and San Joaquin Rivers) flows by as much as 90% (which the BDCP does not propose to do). So the BDCP claim that the change in flows of the CVP/SWP operations</p>	<p>See Chapter 11 of the Final EIR/EIS regarding fish and aquatic resources, Master Response 3 regarding project purpose and need, and Master Response 28 regarding Operational Criteria.</p>

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		restoring this ecological function is also clearly false and unsupported by the readily available scientific published documents and flow records.	
2652	92	The difference of function vs. protect: even if the BDCP claim of restoring a flow function were to be correct (it is not), this would not result in the protection ("shield from injury") of the ecosystem as there are still a huge number of other non-flow related factors that are injuring the ecosystem and the Delta species, i.e., water quality contaminants. "Function" is not at all the same as "protect" and even if restoring flow function were accomplished by the project (it is not) it would still not equate to resulting in a protection of the ecosystem. Therefore, the new project alternatives do not reasonably meet the CEQA project objective as defined in the November 20, 2013 BDCP DEIR/S. As a result of not reasonably meeting the project objectives, DWR must drop these alternatives from consideration and choose a different Proposed Action. If the BDCP will not drop these alternatives due to their (incorrect) determination that these new alternatives still reasonably meet the project purpose and need, then any other alternative that was identified in the scoping process that met these criteria equally as comprehensively (or not) must also be given full consideration and analysis in a re-revised public draft EIR/S.	<p>California WaterFix will provide environmental benefits while stabilizing water supplies for a large population of California residents, consistent with the Delta Reform Act of 2009 (see, e.g., California Public Resources Code, §§ 85001(c), 85002, 85004(a), 85020) and other laws. Refer to Master Response 31 (Compliance with the Delta Reform Act). The purpose of the proposed project is to make physical and operational improvements to the SWP system in the Delta necessary to restore and protect ecosystem health, water supplies of the SWP and CVP south of the Delta, and water quality within a stable regulatory framework, consistent with statutory and contractual obligations. Please refer to Master Response 3 (Purpose and Need).</p> <p>As explained in Final EIR/EIS Appendix 3A, "Identification of Water Conveyance Alternatives," the alternatives development process for the EIR/EIS was based upon a number of legal considerations including: (1) the legal requirements for adequate discussions of alternatives in an EIR and EIS, as set forth in CEQA and NEPA respectively, and the regulations and case law interpreting those statutory schemes; (2) the concepts of "potential feasibility" under CEQA and "reasonableness" under NEPA; and (3) the requirements of Water Code Section 85320 from the 2009 Delta Reform Act. The results of a multi-level screening process reflecting these considerations were further compared to the requirements of the Delta Reform Act and scoping comments related to the definition of potential EIR/EIS alternatives as identified by responsible and cooperating agencies under CEQA and NEPA, respectively. Please refer to Master Response 4 (Alternatives) for additional information regarding the development of alternatives.</p>
2652	93	4-1, line 5: ". . . additional sub-alternatives that meet the goals of restoring the ecological functions of the Delta. . ." The November 20, 2013 BDCP DEIR/S project objectives for CEQA from DWR state in 2-2, line 30, "DWR's fundamental purpose in proposing the BDCP is to make physical and operational improvements to the SWP system in the Delta necessary to restore and protect ecosystem health, water supplies of the SWP and CVP south-of-Delta, and water quality . . ." Focusing on this statement, it says that DWR's fundamental purpose for the BDCP is to restore and protect . . . water quality. The BDCP's analysis of water quality concluded that there were significant and unavoidable impacts to water quality resulting from the proposed project. Since the restoration and protection of water quality is a fundamental purpose of the project, any project alternative that has significant and unavoidable impacts to a fundamental project objective should be disqualified from further consideration and not selected as the Proposed Project/Action of the project. Any alternative that has significant and unavoidable impacts to resources that were fundamental objectives to restore and protect should be disqualified from further consideration. If none of the project alternatives meet that criteria, then the project must be withdrawn and shut down or revised until a project alternative can be developed that does not violate this fundamental objective.	The environmental review process for both NEPA and CEQA is intended to inform the decision makers of the environmental effects associated with implementation. Goals and objectives were identified for the project. A range of alternatives were evaluated in the environmental process. Some alternatives performed better for some objectives, and less for other objectives. The analysis for the range of alternatives allows the decision makers to decide if the project should go forward considering the environmental effects. The conclusion that a project has significant and unmitigated impacts does not preclude that project from being implemented. Please see Master Response 4 for additional information on how the alternatives were developed.
2652	94	4-1, line 5: ". . . additional sub-alternatives that meet the goals of restoring the ecological functions of the Delta. . ." The November 20, 2013 BDCP DEIR/S project objective for CEQA from [DWR] state in 2-3, line 14, "To improve the ecosystem of the Delta by: 1. Providing for the conservation and management of covered species through actions within the BDCP Planning Area that will contribute to the recovery of the species; and 2. Protecting, restoring, and enhancing certain aquatic, riparian, and associated terrestrial natural communities and ecosystems. 3. Reducing the adverse effects to certain listed species of diverting water by relocating the intakes of the SWP and CVP." The new BDCP project alternatives do not address item one or two in any way so the new project alternatives	One of the project's objectives as stated in the 2015 RDEIR/SDEIS is to address adverse effects to state and federally listed species related to the operation of the SWP Delta facilities. The objective recognizes that operation of the south delta diversions has resulted in these adverse effects. The objective was developed to encompass the goals of protecting delta aquatic species and while securing a reliable water supplies. See Master Response 3 regarding purpose and need and Master Response 4 regarding alternatives development.

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		fundamentally fail to meet the reasonable intent or objectives of the project. For item three, this was always a flawed objective. This third sub-objective is predecisional in [that] it selects the method of achieving an outcome rather than stating the objective that needed to be attained by the project. The correct statement of this objective would be to: avoid or mitigate the artificial flow pattern of the current south Delta CVP/SWP operations that draw water north to south across the Delta to allow a more natural east to west flow pattern in the Delta. So out of these three fundamental objectives, the new proposed project alternative of the BDCP only partially addresses the third objective (incorrectly stated as an outcome rather than as an objective as previously stated in this comment) of constructing north Delta intakes.	
2652	95	4.1-1, line 7: "Specifically among the comments received on the Draft EIR/EIS was the suggestion that DWR should pursue permit terms shorter than 50 years due to the levels of uncertainty regarding both the long-term effectiveness of habitat restoration in recovering fish populations and the future effects of climate change on the Delta and the Sacramento River watershed." Although BDCP included the suggestion to drop the habitat restoration all together, it did not consider or incorporate in this revised draft this suggestion for a shorter HCP term. The BDCP must include this as an alternative as the alternative to drop the HCP all together is less reasonable as compared to a shorter HCP term in meeting the project objective and purpose and need identified in the 11/20/14 DEIR/S Chapter 2 Purpose and Need. Both NEPA and CEQA require inclusion of alternatives that reasonably meet the purpose and need and project objectives (respectively) and this suggestion for a shorter duration HCP alternative more reasonably meets the purpose and need and objectives than the current Proposed Project/Action and other new alternatives.	Please refer to Appendix 3A in the Final EIR/EIS, for a description of all of the alternatives considered during the screening process. Master Response 4 addresses the adequacy of the EIR/EIS alternatives for environmental review. Should an HCP/NCCP alternative be selected, the potential for revisions with shorter permit terms may be possible.
2652	96	4.1-1, line 11: "Other comments suggested that the proposed conveyance facilities should be untethered from the habitat restoration components of the BDCP, with the latter to be pursued separately. Consistent with this input, the Lead Agencies are analyzing an alternative implementation strategy considered within the new alternatives in this RDEIR/SDEIS (Alternatives 4A, 2D, and 5A)." The BDCP response was not consistent with this input as it did not propose an HCP with a reduced project duration. The agencies did, however, choose to adopt the other suggestion to split the project into two different projects so that the impacts of the whole project that met the project objective and purpose and need would not be recognized and would not have to be mitigated. Splitting the project into two separate projects is called piecemealing and it is direct violation of NEPA and CEQA law. The BDCP has assumed that the habitat restorations should be done later, after the conveyance. Since the vast majority of the habitat restoration actions are current legal obligations of the CVP/SWP, DWR and Reclamation must implement the current legal obligations before constructing the conveyance which conflicts with the ability to implement them if the conveyance is implemented first.	Due to the uncertainty in future environmental conditions (e.g. climate change) and long-term effectiveness of habitat restoration in recovering fish populations, an alternative implementation strategy (i.e. California WaterFix) was presented in the RDEIR/EIS. This strategy significantly reduces the amount of planned habitat restoration and removes the 50-year permit term. Restoration under the new proposed project, Alternative 4A, would be implemented to mitigate impacts due to construction and operations consistent with ESA, CEQA, and NEPA regulatory requirements, among others.  The commenter is correct that a portion of the habitat restoration target under EcoRestore is required by existing biological opinions. Existing efforts (and future actions under EcoRestore) to implement these projects will not be affected by California WaterFix (CWF) implementation. EcoRestore is a separate, independent project of the CWF, which will be implemented regardless of CWF approval. Projects under EcoRestore and the CWF will be required to undergo separate environmental review and permitting processes consistent with applicable environmental laws and regulations.  Please see Master Response 8 for more information regarding analysis of the project as a whole.
2652	97	4.1-1, line 41: ". . . implementing a dual conveyance system would align water operations to better reflect natural seasonal flow patterns. . ." In order for the flows to better reflect seasonal flow patterns in the Delta, the flow levels of the eastern and southern tributaries to the Delta would also have to be restored in addition to the cessation of the unnatural flow contributions across the Delta that occur due to CVP/SWP south Delta diversion operations. Cumulative annual flows of these other, non-Sacramento River, Delta tributaries are in the range of 10% of what they were pre-western development, which is the baseline in which the ecological function of this flow pattern and the development and behavior of the fish species that respond to flow cues was based upon. In order to better reflect natural	See Master Response 3 regarding purpose and need and Master Response 4 regarding alternatives development.

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		Delta flow patterns the BDCP would not only need to not draw water from the south Delta, but it would also have to increase other, non-Sacramento River, Delta tributary flows by as much as 90% (which it does not propose to do). So the BDCP claim that the change in flows of the CVP/SWP operations better reflecting natural flow patterns is also clearly false and unsupported by the readily available scientific published documents and flow records.	
2652	98	4.1-1, line 16: "The alternative implementation strategy would achieve the project objectives and purpose and need by constructing conveyance facility improvements and associated ecosystem improvements." The dropping of the HCP from the new project alternatives is not an "alternative implementation strategy." It is an alternative permitting strategy. Changing permitting strategies is fine as long as the alternatives reasonably meet the project objectives and Purpose and Need. The new project alternatives do not reasonably meet these defined project requirements so they are not alternatives that may be considered or adopted. Further, back to the BDCP quote, the new project alternatives do not have "associated ecosystem improvements" in any meaningful or substantial way in terms of magnitude of area or potential benefits to habitat or species as compared to the scope of proposed actions contributing to habitat and ecosystem restoration included in the previous project alternatives.	Please see Master Response 3 for information on the proposed project's Purpose and Need. See also Master Response 4 regarding alternatives development and Master Response 5 regarding planning efforts.  Minimizing south Delta pumping would provide more natural east-west flow patterns (RDEIR/SDEIS Section 4.1). Overall reductions in OMR reverse flows under all flow scenarios for the proposed project would be beneficial with corresponding increase in net positive downstream flows, during the migration period of Chinook salmon through the interior Delta channels (Appendix B, Supplemental Modeling for Alternative 4A, Section B.7 (RDEIR/SDEIS Section 4.3.7). Refer to Master Response 5, CM1 as a Conservation Measure.
2652	99	4.1-1, line 18: "These changes are necessary for the SWP and CVP to address more immediate water supply reliability needs while reducing the severity of existing ongoing environmental impacts. The strategy would achieve the latter objective and purpose in part by reducing reverse flows and direct fish species impacts associated with the existing south Delta intakes." The BDCP is saying here that the "co-equal goals of habitat restoration and water supply reliability" are not co-equal at all. They propose to build their proposed conveyance "in the short term" (operational 10 years from now in the best case schedule scenario) and to leave the vast majority of actual habitat restoration and species conservation to some later (10-20-30 years?), as yet to even be formed, other project. This other project to fulfill the other half of the project's co-equal objectives does not meet any of the criteria for a reasonably foreseeable project nor does it count in an alternatives screening process to give credit to an alternative for meeting a project requirement by having a different project fulfill that project requirement.  The rationale for doing something to stop the ongoing impacts of the current CVP/SWP as soon as possible is logical and deserves to be treated with the greatest possible diligence (like the OCAP [Operations Criteria and Plan] BO [Biological Opinion] RPAs [Reasonable and Prudent Alternatives] legal requirements. Since we are agreed that short-term action is necessary and prudent (and in the case of the OCAP BO RPAs is the law), the BDCP must include a project alternative with a near term implementation phase. A shorter implementation period and greater fisheries specifies benefits can be realized by a full retrofit of the south Delta intakes with a criteria compliant fish screen. These retrofits to existing SWP/CVP facilities that are within their current facilities footprints would take less than half as much time to do environmental impacts assessments on, permit, and construct than the proposed conveyance construction.	The Proposed Project was developed to improve Delta habitat and SWP/CVP water supply reliability. Through the development of specific operational criteria, some of the actions in the 2008 U.S. Fish and Wildlife and 2009 National Marine Fisheries Service biological opinion reasonable and prudent alternatives would be superseded with the proposed project operational criteria, as described in Chapter 3, Description of Alternatives, in the EIR/S. Although the Proposed Project does not involve HCP or NCCP components, the lead agencies maintain that the Proposed Project would continue to meet the co-equal goals of a reliable water supply and an improved Delta ecosystem to benefit all water users.  The potential for adding fish screens to the existing south Delta intake at Clifton Court Forebay was evaluated and found to not be feasible due to the configurations of the sloughs near the Clifton Court Forebay, as described in Section 3A.7 of Appendix 3A, Identification of Water Conveyance Alternatives Conservation Measure 1, of the EIR/EIS.
2652	100	Please recall that the first BDCP draft EIR/S concluded that the conveyance, CM1, would not result in any benefits to or contributions to recovery of listed species. Criteria fish screens at south Delta facility as retrofits were proposed in the BDCP scoping and were previously submitted in detail in the draft EIR/S comments. The operations and benefits/impacts of the conveyance have not changed from the draft BDCP EIR/S so this means that claim of the	Please see Master Response 4 regarding the range of alternatives that were developed. Please also refer to Master Response 2 and 5 for additional discussion pertinent to Conservation Measure 1.

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		BDCP to construct the conveyance to stop ongoing impacts of the CVP/SWP are false. The BDCP has incorporated other comments as the basis for new alternatives. What is their rationale for not giving equal consideration to other comments as the basis for new alternatives, especially ones that more fully meet the project needs? If expediency is the motivation BDCP cites, then they must put forward an alternative that incorporates the retrofit of existing facilities to avoid, minimize and mitigate the ongoing CVP/SWP impacts.	
2652	101	4.1-1, line 21: "The alternative implementation strategy allows for other state and federal programs to address the long term conservation efforts for species recovery in programs separate from the proposed project." The BDCP is saying here that the "co-equal goals of habitat restoration and water supply reliability" are not co-equal at all. They propose to build their proposed conveyance (not in the long term so it must be the short term) and to leave the vast majority of actual habitat restoration and species conservation to some later (20-30-40 years?), as yet to even be formed, project. This other project to fulfill the other half of the project's co-equal objectives does not meet any of the criteria for a reasonably foreseeable project and breaking the project into two separate projects is piecemealing and is against NEPA and CEQA law.	See response to comment 2652-96, above.
2652	102	4.1-1, line 25: "The California Department of Water Resources (DWR) would not seek 50-year permits under the federal and state endangered species laws for Alternatives 4A, 2D, or 5A. The originally proposed BDCP habitat restoration measures and related Conservation Measures (CMs) (i.e., CM2 through CM21) would not be included as parts of Alternatives 4A, 2D, and 5A . . ." The new alternatives do not reasonably meet the project objectives and purpose and need. Here is another way to look at it. The current Proposed Project/Action includes 95% less conservation measures than the original project alternatives that were determined to meet the project purpose and need and objectives. It is not possible that the original alternatives were so grossly over-scoped or that such a diminished scope of the new proposed alternatives could possibly reasonably meet the project purpose and need and objectives.	See response to comment 2652-96, above.
2652	103	4.1-1, line 27: "The originally proposed BDCP habitat restoration measures and related Conservation Measures (CMs) (i.e., CM2 through CM21) would not be included as parts of Alternatives 4A, 2D, and 5A, except to the extent required to mitigate significant environmental effects. . ." This quote from the BDCP document makes it clear that the new alternatives have no component of habitat restoration or species conservation beyond the minimum amount required for compensatory mitigation of the additional impacts on the habitat and species that the project directly or indirectly precipitates. In other locations in this document, the BDCP claims that there is habitat restoration, which is entirely different that habitat mitigation which the above quote clearly indicates is the only type of habitat action included in the Proposed Project/Action or new alternatives. This is an inconsistent and misleading representation of the project that must be clarified in a revised public draft.	See response to comment 2652-96, above. See also Master Response 5 regarding planning efforts.
2652	104	4.1-1, line 32: "Alternatives 4A, 2D, and 5A would not serve as habitat conservation plans/natural community conservation plans (HCPs/NCCPs) under ESA Section 10 and the NCCPA . . ." The 2009 Delta Reform Act requires the BDCP to include an NCCP as part of its mission and compliance in order to qualify for state funding. The current BDCP alternatives which do not include an NCCP are in direct violation of the 2009 Delta Reform Act and also as a result do not qualify for any state funding.	Please see Master Response 31 regarding compliance with the Delta Reforms Act.

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2652	105	The 2009 Delta Reform Act requires the BDCP to comply with CEQA, which it [does] not. The BDCP has violated CEQA by its inclusion of alternatives which do not reasonably meet the Project Objectives. The new project alternatives do not meet half of the co-equal project objectives to restore and protect habitat. The BDCP has further violated CEQA by rejecting alternatives that more fully and reasonably meet the project alternatives so they have not equally treated alternatives against screening criteria.	For more information regarding the proposed project's compliance with the Delta Reform Act please see Master Response 31. Please also see Master Response 4 regarding alternatives development and screening.
2652	106	The BDCP has violated NEPA by applying a higher level of effort and detail (refinement of the conveyance alignment and addition of more design detail to avoid and minimize impacts) into the current proposed project than were applied to the previously considered project alternatives.	For more information on how the all of the alternatives were evaluated, see Master Response 4.
2652	107	The BDCP has violated NEPA and CEQA by not applying the best available science, e.g., dissolved oxygen impact modeling and assessment. The BDCP has further violated NEPA and CEQA by splitting the project into two separate projects to reduce the impacts to less than significant as compared to their sum if they were a single project. This is called piecemealing a project and it is in violation of NEPA and CEQA.	Based on comments received during the 2013-2014 public comment period, State and Federal agencies evaluated the effects of the Proposed Action on dissolved oxygen in the San Joaquin River at Stockton. The analysis showed that effects of the alternatives on dissolved oxygen remain less than significant. Please refer to Chapter 8 in the Final EIR/EIS, Water Quality, Section 8.3.1.7 for methodological considerations used in the analysis, and Impact WQ-9 in Appendix A for the updates to the dissolved oxygen analysis.  State and Federal agencies developed the modified proposed project (Alternative 4A/California WaterFix) in response to public and agency input. Alternative 4 remains a viable alternative. Alternative 4A reflects the State's proposal to separate the conveyance facility and habitat restoration measures into two separate efforts: California WaterFix and California EcoRestore. Restoration actions that are independent of Proposed Action, such as EcoRestore, are evaluated as part of the cumulative impact analysis. For more information regarding analysis of the project as a whole, please see Master Response 8.
2652	108	4.1-1, line 35: "Alternatives 4A, 2D, and 5A would enable DWR to construct and operate new conveyance facilities that improve conditions for endangered and threatened aquatic species in the Delta. . ." The water operations for these new alternatives are represented in the EIR/S as being exactly the same as those for the previous Alternative 4. The previous public draft EIR/S determined that CM1, the conveyance, did not contribute to the conservation or recovery of the species, so this claim here in the revised draft EIR/S is false and is purposely misleading to the agency decision-makers who would rely upon this document. These misleading claims in the EIR/S must be revised and corrected for factual accuracy and reissued for public comment after these material changes.	Please see Sections 3.1 and 3.2.4 in Chapter 3, FEIR/EIS, for information on which alternatives were designed to contribute towards long term conservation efforts for species recovery. See Master Responses 2 and 5 regarding CM1 as a Conservation Measure.  Also, see Section 3.3.1.2 for details on operational components under all of the alternatives and Master Response 28 regarding operational criteria.
2652	109	4.1-2, line 14: "If Alternative 4A, 2D, or 5A is approved at the end of the CEQA/NEPA process, restoration of habitat in the Delta, beyond these alternatives' mitigation requirements, will instead occur through California EcoRestore, and these activities will be further developed and evaluated independent of the water conveyance facilities." This is exactly what will not happen if the California WaterFix plan is approved. The BDCP project knows this and is purposely misrepresenting the potential of doing both of these projects separately. If the California WaterFix is approved and meets the criteria of a reasonably foreseeable project prior to the development of the California Eco-Restore, the first public draft of the BDCP EIR/S has proven that the impacts of implementing both the conveyance and the restoration actions end up with impacts that are worse than the No Action/No Project of the BDCP alternatives that included both conveyance and restoration.  If the conveyance exists first, the California EcoRestore project (as we already know from the first public draft BDCP EIR/S analysis) will not be able to come up with a proposed project that has impacts less than the No Action/Project and therefore will never be	See the response to comment 2652-107, above. Further, according to CEQA, an EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible.  Due to the substantial modifications to the several of the Draft EIR/EIS alternatives, the Lead Agencies recirculated the EIR/EIS documents for additional public comment. The RDEIR/SDEIS meet the requirements of CEQA in accordance with Public Resources Code Section 21092.1 and State CEQA Guidelines Section 15088.5 and NEPA (40 CFR 1502.9[c][1] and [2]). See also Master Response 46 regarding recirculation.

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		<p>approved or implemented. The BDCP must stop this misrepresentation and the illegal (non-NEPA and CEQA compliant) proposal to piecemeal this project into two parts. The BDCP must either find a project alternative which reasonably meets the project Purpose and Need as it was originally defined and scoped and which is viable from an impacts/benefits perspective or, failing that, must abandon this unviable project. If after abandoning this failed project a project is still desired, then the process can start from scratch with new public noticing, new Purpose and Need, new public scoping, new consultant contracting, new project alternatives, new analysis and new environmental impact disclosure documents.</p>	
2652	110	<p>4.1-2, line 17: "Although DWR and Reclamation have identified these alternatives with a new implementation strategy, they are nevertheless consistent with the Coordinated Operation Agreement (COA) governing the coordinated operation of the federal Central Valley Project (CVP) and State Water Project (SWP)." The statement in the EIR/S does not disclose how the proposed project is consistent with the COA, it just makes the unsupported claim that it is. The document must provide a detailed discussion and disclosure on, point by point of the agreement, how the alternatives are or are not consistent or compliant. This is required by the analysis of a project's compliance with existing agreements, rules and regulations in an EIR/S disclosure document. The issue of the project compliance with the COA is not with regards to the permitting pathway selected to address ESA and CESA [California Endangered Species Act] issues, but is to do with changing the timing, quality and quantity of water deliveries to member agencies, allocation of water deliveries between the water contractors as well as existing and future cost allocations to those agencies. The COA has long been out of date and out of compliance with the terms of the existing COA, but the proposed project and alternatives further violate the agreement terms and further date its obsolescence. The BDCP, in any of its forms, clearly triggers the requirement for the COA to be redone and the impacts of that must be evaluated in this environmental document. If the BDCP fails to address the requirement to revise and update the COA due to the proposed project and alternatives, these impacts of the COA update will go undisclosed and unmitigated.</p>	<p>DWR and Reclamation operate the SWP and CVP in compliance with the terms of their water rights and D-1641. Any impacts from SWP and CVP use of COA will continue to be addressed through SWRCB regulation of DWR's and Reclamation's water rights.</p>
2652	111	<p>4.1-2, line 20: "These new alternatives would, like Alternative 4, address compliance with federal and state endangered species laws with respect to the operation of the existing SWP Delta intake and conveyance facilities, as well as for the construction and operation of conveyance facilities for the movement of water entering the Delta from the Sacramento Valley watershed to the existing SWP and CVP pumping plants in the southern Delta." This is an incorrect assertion of the EIR/S. Alternative 4 included an HCP habitat restoration and contributions to species conservation and recovery and therefore it addressed ongoing impacts of the existence of and operations of the CVP/SWP facilities in the Delta and upstream and downstream of the Delta. Alternatives 4A, 2D and 5A do not include the HCP component in these alternatives and they do not contribute to species recovery or conservation. The mitigations included for these new alternatives only address the new impacts that would occur with the implementation of the tunnels and do not address the ongoing upstream and downstream impacts of the existence of and operations of the CVP/SWP. Therefore, the project with the alternatives without the HCP component would continue to be out of compliance with ESA and CESA [California Endangered Species Act] and provide no justification for issuance of incidental take permits that would cover these ongoing CVP/SWP impacts. The responsible fisheries and wildlife agencies must not issue permits to the BDCP or California WaterFix on these new alternatives as they provide absolutely no compensation for these ongoing upstream and downstream impacts that the</p>	<p>The Proposed Project has been developed with the goals of minimizing and avoiding incidental take of listed species to the maximum extent practicable, and improving ecological conditions in the Delta. In the Final EIR/ES, Chapter 11, Fish and Aquatic Resources, and Chapter 12, Terrestrial Biological Resources, EIR/EIS, describe effects of the proposed project and several alternatives on fish and wildlife species in the Plan Area.</p> <p>Section 7 requires that federal agencies, in consultation with the federal fish and wildlife agencies, ensure that their actions are not likely to jeopardize the continued existence of species or result in modification or destruction of critical habitat.</p> <p>Where the alternative does not include preparation of an HCP, ESA compliance for construction and operation of water intakes in the north Delta and associated conveyance facilities would be achieved solely through Section 7. Reclamation would be the lead federal action agency for Section 7 compliance where a non-HCP alternative is selected. Reclamation's Section 7 compliance would be expected to also address the Section 7 compliance needs for the USACE permit actions. In cooperation with DWR, Reclamation has prepared a biological assessment (BA) for submission to USFWS and NMFS requesting formal consultation under ESA Section 7.</p> <p>DWR and Reclamation will continue to comply with requirements under the existing NMFS 2009 and USFWS 2008 Biological Opinions, including upstream fish passage improvements and Delta habitat restoration,</p>

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		other alternatives that included the HCP integrated into their alternative components.	regardless of CWF implementation.
2652	112	4.1-3,line 6: "CEQA compels an interactive process of assessment of environmental impacts and responsive project modification which must be genuine. It must be open to the public, premised upon a full and meaningful disclosure of the scope, purposes, and effect of a consistently described project, with flexibility to respond to unforeseen insights that emerge from the process." These are correct quotes of CEQA and case precedent, but the assertion of the EIR/S overlooks the part that the purposes of the alternatives must be consistent. The new alternatives are not consistent with the project purpose or the previously considered alternatives. The new alternatives do not reasonably meet the project Purpose and Need and Objectives as they do not co-equally address habitat restoration and species conservation as they do address conveyance. In fact, in the new alternatives, the conveyance component is to the express exclusion of the habitat restoration and species conservation (above the minimum required mitigation of significant project impacts to reduce impacts to less than significant). NEPA says alternatives must reasonably meet the project Purpose and Needs (and CEQA of the Project Objectives). The new alternatives do not reasonably meet the project Purpose and Needs and Objectives. The project must start over with a new purpose and need if it wants to revise the project to the point where it does not reasonably meet the project purpose and needs and objectives. If the BDCP determines that the new alternatives do somehow reasonably meet the Purpose and Need and Objectives, in order to consistently treat potential alternatives in the alternative development process as NEPA and CEQA both require, other alternatives which equally as well meet most of the Purpose and Need and Objectives of the project, must also be fully developed and fully considered as alternatives in the EIR/S analysis and disclosure.	Please refer to Master Response 4 (Alternative Development) and 3 (Purpose and Need) as they demonstrate how the preferred project alternatives are consistent with the project purpose and how, together, they address the adequacy of the EIR/S in meeting CEQA and NEPA requirements.
2652	113	4.1-3, line 19: "When preparing a Final EIS, a federal lead agency must respond to comments on a Draft EIS in one of several ways, 'including by modifying alternatives including the proposed action and by developing and evaluating alternatives not previously given serious consideration by the agency.'" There are many suggested project alternatives that the BDCP did not give serious consideration to and those alternatives must be included in the next revised EIR/S. If the BDCP includes alternatives in the final EIR/S that were not included in the public draft EIR/S; this constitutes material new information and must be publicly disclosed with opportunity for comment in a revised public draft EIR/S.	The EIR/EIS analyzes all alternatives, including Alternative 4A. California WaterFix will provide environmental benefits while stabilizing water supplies for a large population of California residents, consistent with statutory policy as found in the Delta Reform Act of 2009 (see, e.g., California Public Resources Code, §§ 85001(c), 85002, 85004(a), 85020) and other laws. Refer to Master Response 31 (Compliance with the Delta Reform Act). Please refer to Master Response 4, regarding the adequacy of the alternatives and the screening process.  All of the documents, studies, administrative drafts, and meeting materials have been posted online since 2010 in an unprecedented commitment to public access and government transparency (Please see Master Response 41 [Transparency] and 42 [Public Comments]).  See also Appendix 3A of the EIR/EIS and Section 4 of the RDEIR/SDEIS.
2652	114	4.1-3, line 33: ". . . federal courts have long recognized that "agencies must have some flexibility to modify alternatives . . ." The key words here are "some flexibility" which definitely does not imply the latitude for a project to literally drop half of the co-equal goals in the Purpose and Need and Objectives of the project. This reference to case precedent definitely does not adequately address the scope of the modification of the alternatives done by the BDCP. The original draft EIR/S was technically a failed project as the proposed project and alternatives all resulted in worse impacts than the No Action/No Project alternative and the key permitting agencies indicated that the project could not be permitted in its current form. The BDCP had struggled for years to come up with better alternatives that had less impacts and yet in the full analysis had failed to define a project that was better than the current project running into the future with no changes. That is why the BDCP is now currently going to such great lengths to redefine the project, in	The RDEIR/SDEIS provides an overview of the changes made to the Draft EIR/EIS and explains the reasons for changes in new alternatives and analyses. Please refer to Chapter 2, Project Objectives and Purpose and Need in this Final EIR/EIS. As explained in the EIR/EIS, changes to conveyance facility locations and design would reduce environmental effects of the project and operation of the project would provide for more natural flows in the Sacramento River and provide system flexibility to avoid effects on special status fish species. Please refer to Section 4.1.1 of the RDEIR/SDEIS for an explanation of the revisions to the proposed project. See also Master Response 4 regarding alternatives development.

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		contradiction to the original Purpose and Need and Project Objectives, and why it is engaging now in such an extensive (but failed) attempt to justify its alteration of the project in its newly formulated alternatives. The BDCP was and is a failed project and the current justifications of the BDCP to radically redefine the scope the project are not supported by NEPA or CEQA regulations or case precedent. As a failed project, the BDCP must not go forward and if any efforts to go forward with a new and different set of project Purpose and Need and Project Objectives, it would have to do so as a new project from the beginning of the process from public noticing on.	
2652	115	4.1-4, line 17: 'Under Alternative 4A, water conveyance facilities would be constructed and maintained identically to those proposed and analyzed under Alternative 4.' This is not a correct statement by the EIR/S. The location, size, construction materials, construction methods, power infrastructure and many other aspects of the new alternatives are different from those analyzed in the Alternative 4 of the original public draft EIR/S. The EIR/S must be revised to provide material disclosure of the unique aspects of the impacts of the new proposed project and alternatives as they are materially different than those previously analyzed and disclosed.	Conveyance facilities under Alternative 4 and 4A are identical. However, Alternative 4A would not be implemented as an HCP/NCCP, would include mitigation instead of habitat restoration, enhancement and protection, and would have slightly different operational criteria. Please refer to Chapter 3, Description of Alternatives for a detailed description of both alternatives.
2652	116	Table 4.1-1 - There are several problems with the disclosure here that are misleading to the reader and the agency staff who would rely upon this document for decision-making.  Alternative 4 was never proposed as a Section 7 ESA consultation for Reclamation. Throughout the BDCP public draft EIR/S, the Reclamation ESA consultation was represented as a Section 10 consultation.	This comment is related to the ESA compliance approach. Please refer to Master Response 29 for discussion of this issue.
2652	117	Table 4.1-1 - There are several problems with the disclosure here that are misleading to the reader and the agency staff who would rely upon this document for decision-making.  The conveyance is not the same. The location, method of conveyance (pumped vs. gravity), construction methods, footprint and many other features of the conveyance have changed between the originally proposed Alternative 4 vs. the new Alternative 4A. This table misleads the reader by indicating they are the same, but they are not.	This table is only meant to be an overview of the alternatives. The footprint of Alternative 4 was updated in the RDEIR/SDEIS and the alignment footprints of Alternative 4 and Alternative 4A are the same.
2652	118	Table 4.1-1 - There are several problems with the disclosure here that are misleading to the reader and the agency staff who would rely upon this document for decision-making.  It indicates that the operations, except those disclosed, are the same between Alternative 4 and 4A. This is not true and is purposely misleading to the reader and decision makers. Operations between these alternatives are substantially different in that the constraints of water operations from water quality violations that occurred from the increased volume of tidal prism from the implementation of aquatic habitat restorations interactions with water system operations. Water quality conflicts on water operations from aquatic habitat restorations have been substantially reduced by the exclusion of those habitat restorations from Alternative 4A.	The operational criteria that were assumed and used for impact analyses are fully described for all of the alternatives in Chapter 3, Description of Alternatives. Differences in alternatives operations were evaluated using the CALSIM II and DSM2 modeling tools to ensure those differences were captured in the water quality and other relevant impact analyses. See Master Response 28 regarding operational criteria and Master Response 30 regarding modeling.
2652	119	Table 4.1-1 - There are several problems with the disclosure here that are misleading to the reader and the agency staff who would rely upon this document for decision-making.  The project has corrupted the comparability of the alternatives by having a different No Action definition for some alternatives than other alternatives. Early long-term has very few changes from climate change while the late long-term has much more pronounced impacts	The No Action Alternative ELT used for comparison against Alternative 4A, 2d and 5A is presented in the RDEIR/SDEIS because it was judged to better capture no action conditions that would occur in the absence of Alternatives 4A, 2D and 5A. Please refer to Master Response 1 regarding environmental baselines.

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		<p>from assumed climate change. This revised definition of the No Action will result in the new alternatives having few climate change driven or influenced impacts while the previous alternatives must deal with much more severe climate change assumptions. The only way the BDCP could justify the shorter No Action definition would be if the lifespan of the project is constrained to be shut down at the date of this early long term and even then it would need to redo the analysis of the previous alternatives to be consistent with this same end of project period.</p>	
2652	120	<p>Table 4.1-1 - There are several problems with the disclosure here that are misleading to the reader and the agency staff who would rely upon this document for decision-making.</p> <p>The compliance locations for operations modeling are different between Alt 4 and 4A. Alt 4 used a modified compliance point at Three Mile Slough and 4A used the current compliance point at Emmatton. The BDCP must correct these misleading portrayals of the project and complete the required disclosures of operations and analyses that differ between Alternative 4 and 4A.</p>	<p>Table 4.1-1 of the RDEIR/SDEIS does not address compliance locations. Please refer to the Water Quality analysis in Section 4 of the RDEIR/SDEIS and Chapter 8, Water Quality of this Final EIR/EIS. Please see Master Responses 14 related to water quality issues and Master Response 30 which provides additional information on hydrologic modelling.</p>
2652	121	<p>4.1-5 4.1.2.2 - The operations of Alternatives 4 and 4A are not at all the same as water quality driven water operation constraints from aquatic habitat restorations have been substantially reduced in the Alternative 4A which includes very few acres of aquatic habitat restoration in comparison to Alternative 4.</p>	<p>The Final EIR/EIS provides revised CALSIM/DSM2 results for Alternative 4. The results account for the reduction in tidal marsh habitat under this alternative. The operational criteria for Alternative 4A under operational scenario H3+ is fully described in Chapter 3, Description of Alternatives. Under Alternative 4, a range of operations from H1 –H4 are proposed that would be subject to a decisions tree process to determine the appropriate operational scenario. The H3+ operational scenario for Alternative 4A is similar to the H3 scenario under Alternative 4 but also includes additional spring outflow requirements for protection of long fin smelt. See Master Response 33 regarding adaptive management and Master Response 44 regarding the decision tree concept.</p>
2652	122	<p>4.1.2.2, line 13 - "All other criteria included in the USFWS (2008) and NMFS (2009) BiOps [Biological Opinions] and D-1641 will continue to be complied with, subject to adjustments made pursuant to the adaptive management process as already described in the 2008 and 2009 BiOps; as part of the continued operations of the CVP and SWP." This is a substantial misrepresentation of the SWP/CVP compliance with the OCAP [Operations Criteria and Plan] BOs [Biological Opinions]. Following is a list of the Reasonable and Prudent Action (RPAs) required by the OCAP BOs for DWR and Reclamation to implement in the CVP/SWP to avoid continued jeopardy of the listed species. You will see from the list that DWR and Reclamation have missed compliance with almost every single requirement of the BOs. DWR and Reclamation are blatantly in violation of the terms of the OCAP BO RPAs so the BDCP representation that the CVP/SWP are in compliance is a gross' misrepresentation by the EIR/S.</p> <p>DWR and Reclamation are non-compliant with current OCAP BO RPAs. The OCAP BO RPAs are a part of the No Action definition for the BDCP comparative analysis as they are current obligations of the CVP/SWP. The BDCP has failed to accurately represent the vast majority of the OCAP BO RPAs in terms of their environmental effects and their impacts on water operations, storage, fish habitat quality, quantity and distribution, on water rights, water supplies, water quality and many other environmental resources. The BDCP falsely claims that no details were available to represent these OCAP BO RPAs, but in fact most of the actions do have available information and the BDCP has failed to meet the NEPA and CEQA test to utilize the best available information. [Central Delta Water Agency] comments identify most of the OCAP BO RPA deliverables that are current obligations of Reclamation and DWR to fulfill. The comments identify the deadlines for the actions and in some cases</p>	<p>Please refer to: the discussion of project operations and the applicable BiOp requirements that have been included in the action alternatives in Chapter 3, Description of Alternatives in this Final EIR/EIS; Appendix 5A, which identifies all of the assumptions used for operations modeling; the California WaterFix BA for specific information used in ESA consultation; Master Response 29 regarding the Endangered Species Act; and Master Response 45 regarding permitting.</p>

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		describe the nature of the information that should be available to the BDCP to incorporate into their EIR/S. If none of this information is available to the BDCP, then it means that Reclamation and DWR have not fulfilled their legal requirement to comply with the OCAP BO RPAs and they are in violation of the ESA.	
2652	123	<p>The OCAP [Operations Criteria and Plan] BO [Biological Opinions] RPAs [Reasonable and Prudent Alternatives] required Reclamation to provide information that must be included in the BDCP EIR/S and it includes:</p> <ul style="list-style-type: none"> <li>-Annual report on spawning gravel augmentation efforts in compliance of NMFS 2009 OCAP BO Action 1.1.3. This report was due by December 31 each year. Reclamation shall provide a report to NMFS on implementation and effectiveness of the gravel augmentation program.</li> <li>-Documentation of completion of replacement of the Spring Creek Temperature Control Curtain in Whiskeytown Lake in compliance with the 2009 NMFS OCAP BO Action 1.1.4. This was due to be completed by Reclamation by June 2011.</li> <li>-Clear Creek salmonid habitat suitability studies per the 2009 NMFS OCAP BO Action 1.1.6.</li> <li>-Reclamation's proposed operational flow recommendations to NMFS for Clear Creek per the 2009 NMFS OCAP BO Action 1.1.6. This was to be completed by Reclamation within 6 months of the flow studies.</li> <li>-Long-term performance report in compliance with the 2009 NMFS OCAP BO Action 1.2.1. This is due from Reclamation every 5 years with the latest due in June 2014.</li> <li>-Monthly reports to NMFS in compliance with the 2009 NMFS OCAP BO Action 1.2.3.B. Reclamation shall submit a projected forecast, including monthly average release schedules and temperature compliance point. To be completed within 7 business days of receiving the DWR runoff projections for that month.</li> <li>-Contingency plans submitted to NMFS in compliance with the 2009 NMFS OCAP BO Action 1.2.3.C. By March 1, (each year) justification that all actions within Reclamation's authorities and discretion are being taken to preserve cold water at Shasta Reservoir for the protection of winter-run. The contingency plan shall, at a minimum, include the following assessments and actions: a) Relaxation of Wilkins Slough navigation criteria to at most 4,000 cfs [cubic feet per second]. b) An assessment of any additional technological or operational measures that may be feasible and may increase the ability to manage the cold water pool. c) Notification to State Water Resources Control Board that meeting the biological needs of winter-run and the needs of resident species in the Delta, delivery of water to nondiscretionary Sacramento Settlement Contractors, and Delta outflow requirements per D-1641, may be in conflict in the coming season and requesting the Board's assistance in determining appropriate contingency measures, and exercising their authorities to put these measures in place.</li> <li>-Annual Temperature Management Plan in compliance with the 2009 NMFS OCAP BO Action 1.2.4. Due from Reclamation May 15th each year.</li> <li>-Prioritized list of projects from Appendix 2-B and an implementation schedule submitted to NMFS in compliance with the 2009 NMFS OCAP BO Action 1.3.5. Due by Reclamation by 12/15/09.</li> </ul>	<p>The full implementation of the 2008 and 2009 BiOps and associated RPAs are assumed as part of the NAA baseline, and any components of the BiOps that have been implemented are assumed in the CEQA baseline (existing conditions). However, some of the components, including upstream passage, cannot be included in the modeling analysis. The preferred alternative, 4A, does not have any adverse effects to salmonids relating to upstream operations, including temperatures and flows as evaluated in Chapter 11, and would not affect the ability of Reclamation to implement these components of the NMFS BiOp. See Master Response 1 regarding baselines, Master Response 29 regarding the Endangered Species Act, and Master Response 45 regarding permitting and Chapter 11 of the Final EIR/EIS.</p>

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		<p>-Annual report to NMFS on implementation and effectiveness of projects in compliance with the 2009 NMFS OCAP BO Action 1.3.5. Reclamation was to implement, monitor and report on these projects for 5 years.</p> <p>Plans submitted to NMFS in compliance with the 2009 NMFS OCAP BO Action 1.6.1. Due from Reclamation by December 31, 2011. This plan should have included an evaluation of options to: (1) restore juvenile rearing areas that provide seasonal inundation at appropriate intervals, such as areas identified in Appendix 2-C or by using the Sacramento River Ecological Flow Tool (ESSA/The Nature Conservancy 2009) or other habitat modeling tools; (2) increase inundation of publicly and privately owned suitable acreage within the Yolo Bypass; (3) modify operations of the Sacramento Weir or physically modify Fremont Weir to increase rearing habitat; and (4) achieve the restoration objective through other operational or engineering solutions. An initial performance measure shall be 17,000-20,000 acres (excluding tidally-influenced areas), with appropriate frequency and duration. This plan also shall include: (1) specific biological objectives, restoration actions, and locations; (2) specific operational criteria; (3) a timeline with key milestones, including restoration of significant acreage by December 31, 2013; (4) performance goals and associated monitoring, including habitat attributes, juvenile and adult metrics, and inundation depth and duration criteria; (5) specific actions to minimize stranding or migration barriers for juvenile salmon; and (6) identification of regulatory and legal constraints that may delay implementation, and a strategy to address those constraints. This is a critical missed Reclamation compliance deadline as if they had complied with the legal requirements of the OCAP BO RPAs, all of the design and operational features for the Yolo Bypass RPAs would have been sufficiently developed to allow for full project level analysis in the BDCP EIR/S.</p> <p>Annual progress reports submitted to NMFS in compliance with the 2009 NMFS OCAP BO Action 1.6.1. This is a Reclamation requirement of the BO RPAs. Liberty Island/Lower Cache Slough implementation reports and interim monitoring reports submitted to NMFS in compliance with the 2009 NMFS OCAP BO Action 1.6.2. Reclamation shall monitor this action for the subsequent five years, at a minimum, to evaluate the use of the area by juvenile salmonids and to measure changes in growth rates. Interim monitoring reports shall be submitted to NMFS annually, by September 30 each year, and a final monitoring report shall be submitted on September 30, 2015, or in the fifth year following implementation of enhancement actions.</p> <p>Plans, status and annual reports submitted to NMFS on the lower Putah Creek enhancements in compliance with the 2009 NMFS OCAP, BO Action 1.6.3. By December 31, 2015, Reclamation and/or DWR shall develop and implement. As described in Appendix 2-C, including stream realignment and floodplain restoration for fish passage improvement and multispecies habitat development on existing public lands. By September 1 of each year, Reclamation and/or DWR shall submit to NMFS a progress report towards the successful implementation of this action. Since this BO RPAs required implementation of this action by 12/31/15, these plans must have either been available for inclusion in the BDCP EIR/S or Reclamation has failed to comply with the OCAP BO RPA implementation schedule and failed to meet the test of even a good faith effort to develop and implement these actions.</p>	
2652	124	Annual reports submitted to NMFS on the Lisbon Weir improvements in compliance with the 2009 NMFS OCAP [Operations Criteria and Plan] BO [Biological Opinion] Action 1.6.4. By December 31, 2015, Reclamation and/or DWR shall assure that improvements to the Lisbon Weir are made that are likely to achieve the fish and wildlife benefits described in Appendix	As the commenter noted, Lisbon Weir modifications are included in the 2009 National Marine Fisheries Service Biological Opinion for the CVP/SWP as RPA action I.6.4; to date, the modifications have been included as a common element in the project development for RPA actions I.6.1 and I.7. A timeline for implementation has not yet been identified. Although modification of Lisbon Weir was considered as one

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		<p>2-C. Improvements will include modification or replacement of Lisbon Weir, if necessary to achieve the desired benefits for fish. By September 1 of each year, Reclamation and/or DWR shall submit to NMFS a report on progress toward the successful implementation of this action. Since this BO RPAs [Reasonable and Prudent Alternatives] required implementation of this action by 12/31/15, these plans must have either been available for inclusion in the BDCP EIR/S analysis or Reclamation and DWR have failed to comply with the OCAP BO RPA implementation schedule and failed to meet the test of even a good faith effort to develop and implement these actions.</p> <p>OCAP BO note regarding rationale for 1.6.2 -1.6.4, "These improvements are necessary to offset ongoing adverse effects of project operations, primary due to flood control operations." Since these have not been implemented, they do not offset the ongoing impacts of flood control operations and therefore these species remain in jeopardy from the SWP and CVP operations.</p>	<p>component of CM2 Yolo Bypass Fisheries Enhancements, please note that this action is not part of the preferred alternative (Alternative 4A, California WaterFix) and is assumed to be part of the NAA in the ELT. See Master Response 1 regarding baselines, Master Response 29 regarding the Endangered Species Act, and Master Response 45 regarding permitting.</p>
2652	125	<p>Plan submitted to NMFS in compliance with the 2009 NMFS OCAP [Operations Criteria and Plan] BO [Biological Opinion] Action 1.7. By December 31, 2011, as part of the plan described in Action 1.6.1, Reclamation and/or DWR shall submit a plan to NMFS to provide for high quality, reliable migratory passage for Sacramento Basin adult and juvenile anadromous fishes through the Yolo Bypass. Since this BO RPA [Reasonable and Prudent Alternative] required implementation of this action by 12/31/11, these plans must have either been available for inclusion in the BDCP EIR/S analysis or Reclamation has failed to comply with the OCAP BO RPA implementation schedule and failed to meet the test of even a good faith effort to develop and implement these actions.</p> <p>Written reports to NMFS on the status of its efforts to complete the 2009 NMFS OCAP BO action 1.7, in cooperation with the [Army] Corps [of Engineers]. By June 30, 2010, including milestones and timelines to complete passage improvements. If Reclamation had complied with this BO RPA, there would have been sufficient detail regarding this action to analyze in the BDCP EIR/S. Note regarding rationale for NMFS BO 1.7, "This action offsets unavoidable project effects on adult migration and minimizes the direct losses from flood management activities associated with operations." Since these actions have not been implemented, they do not offset the ongoing impacts on these species and they continue to be in jeopardy from the SWP and CVP operations.</p>	<p>Reclamation and DWR have initiated the CEQA and NEPA process for Action 1.7 and Action 1.6.1. They are currently in the alternatives screening process in consultation with USFWS, NMFS and CDFW. See Master Response 1 regarding baselines, Master Response 29 regarding the Endangered Species Act, and Master Response 45 regarding permitting.</p>
2652	126	<p>Proposed plans submitted to NMFS in compliance with the 2009 NMFS OCAP [Operations Criteria and Plan] BO [Biological Opinion] Action 11.3. This is a report on the evaluation of physical and structural modifications that may improve temperature management capability which was due from Reclamation by June 30th, 2010. Since this BO RPA [Reasonable and Prudent Alternative] required implementation of this action by 6/30/10, these plans must have either been available for inclusion in the BDCP EIR/S analysis or Reclamation has failed to comply with the OCAP BO RPA implementation schedule.</p>	<p>As indicated in Chapter 3, Description of Alternatives in Figure 3-34 for Scenario H3+, operational criteria to protect fish include bypass flow rules, Fall X2 requirements, OMR flow rules, operation of Head of Old River Barrier and spring outflow requirements. In addition, the proposed project will comply with all other actions included in the NMFS 2009 and USFWS 2008 Biological Opinion (BiOP) RPA's to protect listed salmonids and Delta smelt, subject to adjustments made pursuant to the adaptive management process as already described in the 2008 and 2009 BiOps, as part of the continued operations of the CVP and SWP. See also Master Response 29 regarding the Endangered Species Act and Master Response 45 regarding permitting.</p>
2652	127	<p>Note regarding Eastside CVP operations, NMFS BO [Biological Opinion] pdf pg. 621, "The fundamental operational criteria are sufficiently ill-defined in the CVP/SWP operations BA [Biological Assessment] as to provide limited guidance to the Action Agency on how to operate. This suite of actions provides sufficiently specific operational criteria so that operations will avoid jeopardizing steelhead and will not adversely modify their critical habitat. Operational actions to remove adverse modification of critical habitat include a new flow schedule to minimize effects of flood control operations on functionality of geomorphic</p>	<p>The status of the Eastside CVP operations, specifically related to the Stanislaus River, are provided most recently for 2015 here:  <a href="http://deltacouncil.ca.gov/sites/default/files/2015/10/Item%205%202015%20SOG%20Annual%20Report%20with%20Attachments.pdf">http://deltacouncil.ca.gov/sites/default/files/2015/10/Item%205%202015%20SOG%20Annual%20Report%20with%20Attachments.pdf</a>. Please note that this action would continue under the alternatives, including the preferred alternative (Alternative 4A, California WaterFix), as well as under the NAA . See Master Response 1 regarding baselines, Master Response 29 regarding the Endangered Species Act, and Master Response 45 regarding permitting.</p>

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		flows and access of juvenile steel head to important rearing areas." If Reclamation has not implemented to these actions, then from this BO language, it is clear these ESA species would remain in jeopardy. It is clear from the BOs that just implementing changes to water operations were insufficient to avoid continued jeopardy of the species by CVP/SWP.	
2652	128	<p>Operations plans and implementation reports in compliance with the 2009 NMFS OCAP [Operations Criteria and Plan] BO [Biological Opinion] Action 111.2.2. Reclamation shall submit a proposed plan of operations to achieve this flow regime by June 2011. This plan shall include the minimum flow schedule identified in Action 111.1.2, or shall provide justification for any proposed modification of the minimum flow schedule. Reclamation will implement strategy starting in 2012. If Reclamation had complied with the OCAP BO RPAs [Reasonable and Prudent Alternatives], this information would have been available for inclusion in the BDCP EIR/S impact analysis.</p> <p>List of projects, implementation and monitoring reports submitted to NMFS compliance with the 2009 NMFS OCAP BO Action 111.2.3. Reclamation was due to submit plan to NMFS by June 2010. Reclamation shall begin implementation of NMFS-approved projects by June 2011. Reclamation shall submit a report of project implementation and effectiveness by June 2016. If Reclamation had complied with the OCAP BO RPAs, this information would have been available for inclusion in the BDCP EIR/S impact analysis.</p>	The preparation of the EIR/S has been in process since 2008 when the Notice of Preparation and Notice of Intent were published. That date sets the basis for the Existing Conditions for CEQA. The project analysis was refined on numerous occasions as new models were used or additional information was available. The comment alludes to data under the purview of Reclamation. As the co-lead agency, Reclamation oversaw the analysis and conclusions presented in the EIS. It should be recognized that the OCAP BO is a separate project from this project and Reclamation is responsible for compliance with the OCAP BO. Reader is referred to the Bureau of Reclamation website for additional information. See Master Response 1 regarding baselines, Master Response 29 regarding the Endangered Species Act, and Master Response 45 regarding permitting.
2652	129	<p>Proposed engineering solutions submitted to NMFS in compliance with the 2009 NMFS OCAP [Operations Criteria and Plan] BO [Biological Opinion] Action IV.1.3. Due by March 30, 2012. Reclamation or DWR shall provide a final report on recommended approaches by March 30, 2015. If Reclamation had complied with the OCAP BO RPAs [Reasonable and Prudent Alternatives], this information would have been available for inclusion in the BDCP EIR/S impact analysis.</p> <p>Weekly reports from Reclamation and DWR to the interagency Data Assessment Team (OAT) regarding the results of monitoring and incidental take of winter-run, spring-run, Central Valley steelhead, and Southern DPS [Distinct Population Segment] of green sturgeon associated with operations of project facilities per the 2009 NMFS OCAP BO. This information would have informed Reclamation regarding relationships of operations and ESA species response to operations-influenced behavioral responses. This information is for adaptive management of operations which Reclamation claims it does not have available to include in the BDCP EIR/S.</p> <p>Reclamation and DWR annual written report to NMFS following the salvage season of approximately October to May. This report shall provide the data gathered and summarize the results of winter-run, spring-run, Central Valley steelhead, and Southern DPS of green sturgeon monitoring and incidental take associated with the operation of the Delta pumping plants (including the Rock Slough Pumping) per the 2009 NMFS OCAP BO. This information would have informed Reclamation regarding relationships of operations and ESA species response to operations influenced behavioral responses. This information is for adaptive management of operations which Reclamation claims it does not have available to include in the BDCP EIR/S.</p>	<p>The modeling that has been conducted to support the environmental document is based upon historical water patterns, including assumptions for climate change and then the assumptions associated with the elements specific to each alternative for the effects analysis. See Master Response 1 regarding baselines, Master Response 28 regarding operational criteria, Master Response 29 regarding the Endangered Species Act, Master Response 30 regarding modeling, and Master Response 45 regarding permitting.</p> <p>The biological modeling also reflects historical patterns of listed species salvage at the south Delta export facilities, in order to inform the effects analysis through techniques such as the salvage-density method. It is acknowledged that real-time operational adjustments based on species presence are challenging to simulate from a planning perspective; real-time operational adjustments would occur under the alternatives in order to limit the potential for adverse effects to listed fishes.</p>
2652	130	Reports to NMFS of facility salvage efficiency of 75 percent in compliance with the 2009 NMFS OCAP [Operations Criteria and Plan] BO [Biological Opinion] Action IV.4. Reclamation and DWR shall implement the following actions to reduce losses associated with the salvage process, including: (1) conduct studies to evaluate current operations and salvage criteria to	Comment addresses the OCAP BO. The assumptions related to the No Project Alternative were detailed in the 2013 DEIR/EIS (pages 3-42 through 46). The following is extracted from the 2013 DEIR/EIS describing how the BiOps were integrated into the No Project assumptions:

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		<p>reduce take associated with salvage, (2) develop new procedures and modifications to improve the current operations, and (3) implement changes to the physical infrastructure of the facilities where information indicates such changes need to be made. Reclamation shall continue to fund and implement the CVPIA [Central Valley Project Improvement Act] Tracy Fish Facility Program. In addition, Reclamation and DWR shall fund quality control and quality assurance programs, genetic analysis, louver cleaning loss studies, release site studies and predation studies.</p> <p>Funding shall also include new studies to estimate green sturgeon screening efficiency at both facilities and survival through the trucking and handling process. By January 31 of each year, Reclamation and DWR shall submit to NMFS an annual progress report summarizing progress of the studies, recommendations made and/or implemented, and whole facility salvage efficiency. This is probably the most important missed obligation by Reclamation as the plans to meet these salvage efficiencies would have become an important component of a project alternative that would have had lower environmental impacts than the proposed project. In order to meet these goals, it is likely that full criteria fish screens would have been designed for implementation and should have been included in the BDCP EIR/S. Reclamation cannot both claim it is compliant with the OCAP Bos and that information is not available in sufficient detail to allow analysis in the BDCP EIR/S. Reclamation must provide NMFS with the designs and operations for the CVP/SWP to become compliant with this RPA [Reasonable and Prudent Alternative] and these actions must be included in the BDCP EIR/S No Action/No Project baseline definitions and included in the detailed analysis of an alternative in a revised and recirculated BDCP EIR/S.</p>	<p>“Among the ongoing programs by governmental entities which are included in the No Action Alternative are many of the actions required by the 2008 and 2009 USFWS and NMFS BiOps. The following summarizes which actions are reflected in the No Action Alternative.</p> <ul style="list-style-type: none"> <li>• The anticipated effects of actions required by the 2008 and 2009 BiOps that have already occurred or are expected to be implemented prior to project approval are assumed in the No Action Alternative.</li> <li>• The anticipated effects of actions required by the 2008 and 2009 BiOps that change water operations in the Plan Area or upstream were assumed in the No Action Alternative if they were reasonably certain to occur and enough was known about the effects of the action in early 2010 when the No Action Alternative for hydrodynamic modeling was established) to define modeling assumptions for the change in water operations.15</li> <li>• The anticipated effects of some actions required by the 2008 and 2009 BiOps in the Plan Area are also included in the project conservation strategy. In some cases, these actions are included in the No Action Alternative and in 1 other cases they are not.</li> </ul> <p>A key reason for these assumptions is that the 2008 and 2009 USFWS and NMFS BiOps will be superseded by the proposed project and associated BiOps. As described in Chapter 1, Introduction, the current operation of the CVP/SWP is governed by requirements that include the 2008 and 2009 BiOps. The requirements of these BiOps may be modified in response to a court ordered remand process, depending on the schedule approved by the court. The new operation of proposed project will occur once the new north Delta intakes are constructed. Once the new intakes are operational, the proposed project and any corresponding BiOps will replace the then-current BiOps for long-term operation of the CVP/SWP.”</p> <p>The conclusions presented in the EIR/S examine the incremental effect of the alternatives in relation to baselines. Please also see Master Response 1. See also Master Response 29 regarding the Endangered Species Act and Master Response 45 regarding permitting.</p>
2652	131	<p>Fish salvage facility improvement plans submitted to NMFS in compliance with the 2009 NMFS OCAP [Operations Criteria and Plan] BO [Biological Opinion] Action IV.4.1. Due from Reclamation by December 31, 2012, to improve the whole facility efficiency for the salvage of Chinook salmon, Central Valley steelhead, and Southern DPS [Distinct Population Segment] of green sturgeon so that overall survival is greater than 75 percent for each species. In order to meet these goals, it is likely that full criteria fish screens would have been designed for implementation and should have been included in the BDCP EIR/S. Reclamation cannot both claim it is compliant with the OCAP BOs and that information is not available in sufficient detail to allow analysis in the BDCP EIR/S. Reclamation must provide NMFS with the designs and operations for the CVP/SWP to become compliant with this RPA [Reasonable and Prudent Alternative] and these actions must be included in the BDCP EIR/S No Action/No Project baseline definitions and included in the detailed analysis of an alternative in a revised and recirculated BDCP EIR/S.</p> <p>Studies submitted to NMFS for methods for removal of predators in the primary channel in compliance with the 2009 NMFS OCAP BO Action IV.4.1.1)a. Due from Reclamation by December 31, 2011 + 90 days. Using physical and non-physical removal methods (e.g., electricity, sound, light, CO2), leading to the primary louver screens with the goal of reducing predation loss to ten percent or less. If Reclamation had complied with the OCAP BO RPAs, this information would have been available for inclusion in the BDCP EIR/S alternatives</p>	<p>Actions within Action Suite IV.4 Modification of the Operations and Infrastructure of the CVP and SWP Fish Collection Facilities from the NMFS (2009) BiOp have not been fully completed. They are not part of the preferred alternative (Alternative 4A, California WaterFix). Analyses considering entrainment loss (e.g., salvage-density methods) have included the existing regulatory assumptions for fish facility efficiency (e.g., multipliers for prescreen loss), although as described in the EIR/EIS, it is the relative comparison between scenarios (alternatives and NAA) that is of more importance, as opposed to the absolute estimates. See also Master Response 1 regarding baselines, Master Response 29 regarding the Endangered Species Act, and Master Response 45 regarding permitting.</p>

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		<p>development, impact analysis and adaptive management plan.</p> <p>Implementation completion report to NMFS on measures to reduce pre-screen predation in the primary channel to less than ten percent of exposed salmonids in compliance with the 2009 NMFS OCAP BO Action IV.4.1.1)a. Due by Reclamation by 12/31/12. If Reclamation had complied with the OCAP BO RPAs, this information would have been available for inclusion in the BDCP EIR/S impact analysis, alternatives development and adaptive management plan.</p> <p>Studies submitted to NMFS for the redesign of the secondary channel to enhance the efficiency of screening, fish survival, and reduction of predation within the secondary channel structure in compliance with the 2009 NMFS OCAP BO Action IV.4.1.1)b. Due by Reclamation by 3/31/11. If Reclamation had complied with the OCAP BO RPAs, this information would have been available for inclusion as an alternative component or variant thereof (see Clifton Court criteria compliant fish screen alternative comments and description) in the BDCP EIR/S impact analysis.</p> <p>Communications to NMFS documenting the initiation of the study findings in compliance with the 2009 NMFS OCAP BO Action IV.4.1.1)b. Due by Reclamation by 1/31/12. If Reclamation had complied with the OCAP BO RPAs, this information would have been available for inclusion in the BDCP EIR/S impact analysis.</p> <p>Copies of plans submitted to NMFS for one or more potential solutions to the loss of Chinook salmon and green sturgeon associated with the cleaning and maintenance of the primary louver and secondary louver systems at the TFCF [Tracy Fish Collection Facility] in compliance with the 2009 NMFS OCAP BO Action IV.4.1.1)c. Due by Reclamation no later than June 2, 2010. In the event that a solution acceptable to NMFS is not in place by June 2, 2011, pumping at the Tracy Pumping Plant shall cease during louver cleaning and maintenance operations to avoid loss of fish during these actions. If Reclamation had complied with the OCAP BO RPAs, this information would have been available for inclusion in the BDCP EIR/S impact analysis and as an alternative component or as an adaptive management strategy.</p> <p>Documentation of operational procedures implemented to optimize the simultaneous salvage of juvenile salmonids and Delta smelt at the facility in compliance with the 2009 NMFS OCAP BO Action IV.4.1.2. Due by Reclamation by 12/31/11. If Reclamation had complied with the OCAP BO RPAs, this information would have been available for inclusion in the BDCP EIR/S as an alternative component and utilized in the impact analysis.</p> <p>Documentation of removal of predators in the secondary channel in compliance with the 2009 NMFS OCAP BO Action IV.4.1.3. This is due from Reclamation weekly since the issuance of the OCAP BO. If Reclamation had complied with the OCAP BO RPAs, this information would have been available for inclusion in the BDCP EIR/S impact analysis and adaptive management evaluation.</p> <p>Documentation of equipment installed to monitor for the presence of predators in secondary channel during operations in compliance with the 2009 NMFS OCAP BO Action IV.4.1.3. Due from Reclamation by June 2, 2010. This could include an infrared or low light charged coupled device camera or acoustic beam camera mounted within the secondary channel. If Reclamation had complied with the OCAP BO RPAs, this information would have</p>	

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		<p>been available for inclusion in the BDCP EIR/S adaptive management analysis.</p> <p>Documentation of the Skinner Fish Protection Facility to achieving the minimum 75 percent salvage efficiency for Central Valley salmon, steelhead, and Southern DPS of green sturgeon after fish enter the primary channels in front of the louvers in compliance with the 2009 NMFS OCAP BO Action IV.4.2.1. Due from DWR by December 31, 2012. If DWR had complied with the OCAP BO RPAs, this information would have been available for inclusion in the BDCP EIR/S as a project alternative component in the impact analysis and potentially to inform the adaptive management measures.</p> <p>Report to NMFS on compliance with the 2009 NMFS OCAP BO Action IV.4.2.2)a. DWR is to immediately commence studies to develop predator control methods for Clifton Court Forebay that will reduce salmon and steelhead pre-screen loss in Clifton Court Forebay to no more than 40 percent. Studies complete on or before March 31, 2011. 40% improved predator control shall be achieved by March 31, 2014. Failure to meet this timeline shall result in the cessation of incidental take exemption at SWP facilities unless NMFS agrees to an extended timeline. This OCAP BO RPA compliance information must also be in the BDCP EIR/S. If DWR had complied with the OCAP BO RPAs, this information would have been available for inclusion in the BDCP EIR/S project alternative components, adaptive management evaluation and impact analysis.</p>	
2652	132	<p>Documentation of installation of flow meters in the primary and secondary channels to continuously monitor and record the flow rates in the channel in compliance with the 2009 NMFS OCAP [Operations Criteria and Plan] BO [Biological Opinion] Action IV.4.1.6. Due from Reclamation by 1/2/10. If Reclamation had complied with the OCAP BO RPAs [Reasonable and Prudent Alternatives], this information would have been available for inclusion in the BDCP EIR/S for the development of operational criteria to avoid and minimize fisheries impacts, impact analysis and for adaptive management evaluation.</p>	<p>As indicated in Chapter 3, Description of Alternatives in Figure 3-34 for Scenario H3+, operational criteria to protect fish include bypass flow rules, Fall X2 requirements, OMR flow rules, operation of Head of Old River Barrier and spring outflow requirements. See also Master Response 28 regarding operational criteria, Master Response 29 regarding the Endangered Species Act, and Master Response 45 regarding permitting.</p>
2652	133	<p>Revised draft and final updated plans submitted to NMFS in compliance with the 2009 NMFS OCAP [Operations Criteria and Plan] BO [Biological Opinion] Action V, NF3. Reclamation is to submit a revised draft report by January 15 of each year. Reclamation and partner agencies shall release a final updated Fish Passage Pilot Plan by March 14 of each year. With 7 years of revised and updated fish passage plans submitted to NMFS, Reclamation should have a great deal of information available on fish passage at their facilities and be able to conduct an impact analysis of implementing those actions and plans in the BDCP EIR/S. This and all of the fish passage BO RPA [Reasonable and Prudent Alternative] compliance is critical to the BDCP as when the fish are passed above the CVP/SWP terminal dams, the fish will have access to substantial amounts of additional habitat and improved water temperatures that are no longer solely dictated by CVP/SWP reservoir operations and reservoir cold water pool availability. Much of the adverse effect of the CVP and SWP on listed salmonids is from their exceedance of water temperature objectives downstream of their dams/reservoirs. If the fish passage was completed as required in the OCAP BOs, the CVP/SWP impacts on the listed fish species would be significantly reduced. The BDCP must include fish passage in the No Action baseline and then reanalyze the project and alternative impacts. This comment applies to all fish passage related comments.</p> <p>Documentation of the implementation of the Pilot Reintroduction Program in compliance with the 2009 NMFS OCAP BO Action V, NF4. These are due from Reclamation in January</p>	<p>The full implementation of the 2008 and 2009 BiOps and associated RPAs are assumed as part of the NAA baseline, and any components of the BiOps that have been implemented are assumed in the CEQA baseline (existing conditions). However, some of the components, including upstream passage, cannot be included in the modeling analysis. The preferred alternative, 4A, does not have any adverse effects on upstream operations, including temperatures and flows as evaluated in Chapter 11, and would not affect the ability of Reclamation to implement these components of the NMFS BiOp. The project does not propose any changes to criteria downstream of the dams. See also Master Response 1 regarding baselines, Master Response 28 regarding operational criteria, Master Response 29 regarding the Endangered Species Act, and Master Response 45 regarding permitting.</p>

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		<p>starting 2012 and continuing through 2015. Reclamation should have three years of reintroduction studies to utilize as a basis for analyzing the impacts of upstream fish passage that must be included in the BDCP EIR/S as part of the No Action/No Project baseline.</p>	
2652	134	<p>Documentation of the completion of fish collection facilities in compliance with the 2009 NMFS OCAP [Operations Criteria and Plan] BO [Biological Opinion] Action V, NF4.I. Sacramento River Fish Facility -- Collection facility shall be operational no later than March 2012. American River Fish Facility -- Collection facility shall be operational no later than March 2012. Reclamation should have several years of operational data on the impacts of implementing these actions and this information must be included in the revised and recirculated BDCP EIR/S. Reclamation should also have completed an EIS on this project prior to its permitting and construction so those materials should also be available to use in the BDCP EIR/S and as part of the No Action/No Project baseline definition.</p>	<p>The No Action Alternative assumptions include the basic description of the No Action Alternative, assumptions related to the SWP and CVP, ongoing programs and policies by governmental and nonprofit entities, projections related to climate change, and assumptions related to annual actions that vary every year. Among the ongoing programs by governmental entities which are included in the No Action Alternative are many of the actions required by the 2008 and 2009 USFWS and NMFS BiOps. The following summarizes which actions are reflected in the No Action Alternative.</p> <p>The analysis in the EIR/S incorporated assumptions into the analysis of project not constructed but met the above-referenced criteria. This included reviewing the environmental clearance documents and permits of project not constructed, but authorized to proceed. The EIR/S then was analyzed based upon the conditions and assumptions known at the time of the Notice of Preparation (CEQA) and Notice of Intent (NEPA). It is infeasible to continually update analyses of projects after the assessment has been initiated. The data available from collection facilities would not alter the conclusions presented in the EIR/S, which examine the incremental effect of the alternatives in relation to baselines; the actions cited by the commenter would not differentiate the alternatives from the baselines. Please also see Master Response 1.</p>
2652	135	<p>Documentation of the completion of construction of adult fish release sites above dams and juvenile fish release sites below dams in compliance with the 2009 NMFS OCAP [Operations Criteria and Plan] BO [Biological Opinion] Action V, NF4.2. To be completed by Reclamation by March 2012. Reclamation should have several years of operational data on the impacts of implementing these actions and this information must be included in a revised and recirculated BDCP EIR/S. Reclamation should also have completed an EIS on this project prior to its permitting and construction so those materials should also be available to use in the BDCP EIR/S as part of the No Action/No Project definition and baseline for comparison to the BDCP alternatives.</p> <p>Documentation of the implementation of upstream fish passage for adults via "trap and transport" facilities in compliance with the 2009 NMFS OCAP BO Action V, NF4.3. To be completed by Reclamation by March 2012. Reclamation should have several years of operational data on the impacts of implementing these actions and this information must be included in the revised and recirculated BDCP EIR/S. Reclamation should also have completed an EIS on this project prior to its permitting and construction so those materials should also be available to use in the BDCP EIR/S description of and assumptions related to the No Action/No Project.</p> <p>Documentation of the implementation of interim downstream fish passage through reservoirs and dams in compliance with the 2009 NMFS OCAP BO Action V, NF4.4. Due from Reclamation starting 2012. Reclamation should have several years of operational data on the impacts of implementing these actions and this information must be included in the revised and recirculated BDCP EIR/S. Reclamation should also have completed an EIS on this project prior to its permitting and construction so those materials should also be available to use in the BDCP EIR/S. If Reclamation was in compliance with the OCAP BO RPA implementation schedule as mandated, the description and operational characteristics of all of these fish passage related RPAs [Reasonable and Prudent Alternatives] would be part of the existing conditions/affected environment description and embedded in the No Action/No Project.</p>	<p>The 2015 annual report of the Interagency Fish Passage Steering Committee (formed in response to Action NF 1 of the Fish Passage Program component of the NMFS [2009] BiOp) indicates that the likely timeline for implementation is later than the dates from the NMFS BiOp. The same is true for the other actions that would exist under the NAA and the alternatives, and so would not differentiate the alternatives from the NAA. The same is true for Action I.7 related to Yolo Bypass. Regarding improvements to salvage efficiency, please see response to comment 2652-131. See Master Response 1 regarding baselines and Master Response 4 regarding alternatives development.</p>

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		<p>Plans, designs, documentation of construction completion and evaluations of a prototype head-of-reservoir juvenile collection facility above Shasta Dam in compliance with the 2009 NMFS OCAP BO Action V, NF4.5. Due from Reclamation beginning in January, 2010. Construction shall be complete by September 2013. Reclamation should have several years of operational data on the impacts of implementing these actions and this information must be included in the revised and recirculated BDCP EIR/S. Reclamation should also have completed an EIS on this project prior to its permitting and construction so those materials should also be included in the BDCP EIR/S.</p> <p>Annual reports on, the elements of the pilot program, including adult reintroduction locations, techniques, survival, distribution, spawning, and production; and juvenile rearing, migration, recollection, and survival in compliance with the 2009 NMFS OCAP BO Action V, NF4.6. Due from Reclamation from 2012 to 2015. A final summary report of the 5-year pilot effort shall be completed by Reclamation by December 31, 2015. Reclamation should have several years of reports on these actions and this information must be included in the revised and recirculated BDCP EIR/S.</p> <p>Plans for fish passage on the Stanislaus River above Goodwin, Tulloch and New Melones Dams in compliance with the 2009 NMFS OCAP BO Action V, NF4.7. Due from Reclamation by March 31, 2011. This plan shall identify reconnaissance level assessments that are needed to support a technical evaluation of the potential benefits to Central Valley steelhead that could be achieved with passage above the dams, a general assessment of logistical and engineering information needed, and a schedule for completing those assessments by December 31, 2016. Reclamation should have the 3/31/11 report to include in the BDCP EIR/S.</p> <p>Letter to the USACE [U.S. Army Corps of Engineers] specifically in compliance with the 2009 NMFS OCAP BO RPA 1.7. This letter from Reclamation is to request modification of Fremont Weir and other facilities to accommodate fish passage and was to include a request for an agreement for Reclamation to provide technical assistance and funding. This letter was due to be submitted to USACE by 9/30/09 and should have included detailed design and operational specifications that should have been included in the BDCP EIR/S. The BDCP claims it can only analyze this alternative component at a programmatic level (it was not even as detailed and fully formed as a programmatic description as the flow-related operational rules were not defined) because project-level information was not available. This information should be available if Reclamation was compliant with the ESA as required in the OCAP BO RPAs.</p> <p>Plans submitted to NMFS specifically in compliance with the 2009 NMFS OCAP BO RPA 1.7 reduction of migratory delays and loss for salmon, steelhead and sturgeon. These were due from Reclamation and DWR by 6/30/11 and this information must be included in the BDCP EIR/S. Given that the plans were required more than 4 years ago, the project-level description of these actions must be available and must be included in a revised and recirculated BDCP EIR/S that analyzes these actions at a project-level.</p> <p>Reports to NMFS on specific actions implemented specifically in compliance with the 2009 NMFS OCAP BO RPA 1.7 reduction of migratory delays and loss for salmon, steelhead and sturgeon. These were due to be implemented by Reclamation and DWR by 12/31/11 so there should be 4 years of information on the effects of these implemented actions as well as the project-level EIR/S for implementing them available for inclusion in the BDCP EIR/S.</p>	

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		<p>Plans and designs submitted to NMFS specifically in compliance with the 2009 NMFS OCAP BO RPA IV.4.1. This was due to be completed by Reclamation and delivered to NMFS no later than 3/31/11. This plan from Reclamation for the secondary channel to enhance the efficiency of screening, fish survival and reduction of predation is the basis for another alternative component in the EIR/S that should have been included in the BDCP document.</p> <p>Hatchery Genetics Management Plan (HGMP) submitted to NMFS specifically in compliance with the 2009 NMFS OCAP BO RPA 11.6.1. Was due from Reclamation no later than 6/11. This information and its environmental affects should have been included in the BDCP EIR/S in the No Action/No Project and augmentations of it could have been included as alternative components or under adaptive management. These and all other OCAP BO RPA report and plan omission from the BDCP description of existing conditions/affected environment and the No Action/No Project must be corrected in a revised and recirculated BDCP EIR/S.</p> <p>Reports of fish predation studies submitted to NMFS specifically in compliance with the 2009 NMFS OCAP BO RPA IV.4.1. Reclamation was due to implement this by 12/31/11. This information would have informed the EIS regarding the impacts, feasibility and adaptive management successes and failures. This information must be included in a revised and recirculated BDCP EIR/S.</p>	
2652	136	<p>Planning and implementation documents submitted to NMFS specifically in compliance with the 2009 NMFS OCAP [Operations Criteria and Plan] BO [Biological Opinion] RPA [Reasonable and Prudent Alternative] NF 4.1. Reclamation was due to have completed this by the beginning of 2012. Reclamation to design, construct, install and operate adult fish collection, handling and transport facilities to pass fish above project facilities and reservoirs. This information and the impacts of implementing it should have been included in the BDCP EIR/S as part of the existing condition/affected environment and No Action/No Project. The reason that the inclusion of these OCAP BO compliance-related materials (especially fish passage-related ones) in the BDCP EIR/S is so important is that the impacts of water temperatures downstream of Shasta and Folsom (for the CVP and Oroville for the SWP) represent some of the most significant adverse effects on listed salmonid species. According to the OCAP BO RPA implementation schedule, these fish passage actions to get these salmonid populations above these terminal dams would have occurred prior to the baseline date of the BDCP. Fish populations above these dams would mean that the water temperature management of the tributaries below the dams could be altered to be more water supply efficient instead of being driven by water temperature compliance. Fish passage above the dams would completely alter the baseline water operations related to downstream temperature management and therefore would fundamentally change the impact analysis of the BDCP alternatives in their EIR/S. Fish passage would also substantially alter the impacts of the CVP/SWP on sturgeon spawning and rearing life stages with their access to historical spawning and rearing habitat. Fish passage would also alter the impact analysis of the reservoirs which the passed fish would traverse.</p>	See response to comment 2652-133, above.
2652	137	<p>Planning and implementation documents submitted to NMFS on the implementation specifically in response to 2009 NMFS OCAP [Operations Criteria and Plan] BO [Biological Opinion] RPA [Reasonable and Prudent Alternative] IV.4.1 for the secondary channel to enhance the efficiency of screening, fish survival and reduction of predation. Reclamation was required to implement this no later than 1/31/12 so all of the information required to include this in the BDCP EIR/S should be available and Reclamation should have several</p>	<p>The preparation of the EIR/S has been in process since 2008 when the Notice of Preparation and Notice of Intent were published. That date sets the basis for the Existing Conditions for CEQA. The project analysis was refined on numerous occasions as new models were used or additional information was available. The comment alludes to data under the purview of Reclamation. As the co-lead agency, Reclamation oversaw the analysis and conclusions presented in the EIS.</p> <p>The assumptions related to the No Project Alternative were detailed in the 2013 DEIR/EIS (pages 3-42</p>

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		<p>years of operations and monitoring data to add to the analysis.</p> <p>Planning and implementation documents submitted to NMFS specifically in response to the 2009 NMFS OCAP BO RPA NF 4.2 and 4.3 for Reclamation to design, construct, install and operate adult fish release facilities upstream of their facilities and juvenile salmonid release facilities downstream of project facilities and reservoirs. Reclamation was required to complete implementation of these by 3/12 so all of the information required to include this in the BDCP EIR/S should be available and Reclamation should have several years of operations and monitoring data to add to the analysis.</p> <p>Reports submitted to NMFS specifically on the performance of fish passage operations as required in the 2009 NMFS OCAP BO RPA NF 4.2, 4.3, 4.4 and 4.5. Reclamation was required to complete implementation of these by 3/12 so at least 2 years of operational reports should be available to include in the BDCP EIR/S.</p> <p>Plans and documents submitted to NMFS specifically in response to 2009 NMFS OCAP BO RPA IV.4.1 that Reclamation is to improve the whole facility fish survival efficiency at the Tracy Fish Collection Facility to 75% for Chinook, steelhead and green sturgeon. Reclamation was due to submit this by 12/31/12 so this information should have been included in the BDCP EIR/S as part of the No Action and in other various forms as component to project alternatives. This information would have also informed the adaptive management measures.</p> <p>Monitoring reports submitted to NMFS specifically documenting the achievement of 75% fish survival rates at the Reclamation Tracy Fish Collection Facility in response to 2009 NMFS OCAP BO RPA IV.4.1. Reclamation should have several years of monitoring reports to include in the BDCP EIR/S and 75% survival rates should have been assumed in the impacts assessment for the No Action/No Project.</p> <p>Reports submitted to NMFS on the reduction of fish predation rates to less than 10% in the primary channel in response to 2009 NMFS OCAP BO RPA IV.4.1. Reclamation and DWR were required to implement this no later than 12/31/12 so this information should have been in the BDCP EIR/S and 10% predation loss rates in the primary channel should have been assumed in the impacts assessment for the No Action/No Project. All of these Reclamation and DWR mandatory improvements to predation rates and fish salvage rates must be included in the No Action/No Project and, if DWR and Reclamation were compliant with the OCAP BOR PA implementation schedule, the existing conditions/affected environment description. The BDCP EIR/S must be revised with all of these past implementation deadlines as part of the No Action/No Project definition and integrated into the alternatives comparisons to these baselines. The revised EIR/S must be recirculated for this material new information for public comment and disclosure.</p> <p>Predation reduction method reports submitted to NMFS specifically in compliance with the 2009 NMFS OCAP BO RPA IV.4.3. DWR and Reclamation were required to complete this no later than 6/15/11 so this information should have been in the BDCP EIR/S. This information should have been included in alternatives as a component and as a basis to judge adaptive management success for such programs in the EIR/S.</p> <p>Copy of reports submitted to NMFS documenting the improvements offish salvage monitoring and release survival rates for the south Delta pumps specifically in compliance with the 2009 NMFS OCAP BO RPA IV.4.3. Reclamation and DWR were required to complete</p>	<p>through 46). The following is extracted from the 2013 DEIR/EIS describing how the BiOps were integrated into the No Project assumptions:</p> <p>“Among the ongoing programs by governmental entities which are included in the No Action Alternative are many of the actions required by the 2008 and 2009 USFWS and NMFS BiOps. The following summarizes which actions are reflected in the No Action Alternative.</p> <ul style="list-style-type: none"> <li>• The anticipated effects of actions required by the 2008 and 2009 BiOps that have already occurred or are expected to be implemented prior to BDCP approval are assumed in the No Action Alternative.</li> <li>• The anticipated effects of actions required by the 2008 and 2009 BiOps that change water operations in the Plan Area or upstream were assumed in the No Action Alternative if they were reasonably certain to occur and enough was known about the effects of the action in early 2010 when the No Action Alternative for hydrodynamic modeling was established) to define modeling assumptions for the change in water operations.</li> <li>• The anticipated effects of some actions required by the 2008 and 2009 BiOps in the Plan Area are also included in the project conservation strategy. In some cases, these actions are included in the No Action Alternative and in 1 other case they are not.</li> </ul> <p>A key reason for these assumptions is that the 2008 and 2009 USFWS and NMFS BiOps will be superseded by the proposed project and associated BiOps. As described in Chapter 1, Introduction, the current operation of the CVP/SWP is governed by requirements that include the 2008 and 2009 BiOps. The requirements of these BiOps may be modified in response to a court ordered remand process, depending on the schedule approved by the court. The new operation of BDCP will occur once the new north Delta intakes are constructed. Once the new intakes are operational, the proposed project and any corresponding BiOps will replace the then-current BiOps for long-term operation of the CVP/SWP.”</p> <p>The conclusions presented in the EIR/S examine the incremental effect of the alternatives in relation to baselines. Please also see Master Response 1.</p>

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		<p>this by 10/1/09 and annually thereafter. This information should have been in the BDCP EIR/S.</p> <p>Planning and implementation documents submitted to NMFS specifically in compliance with the 2009 NMFS OCAP BO RPA NF 4.4. Reclamation was required to be initiate this action by the beginning of 2012 (prior to 1/1/12) which was to provide downstream fish passage for project facilities and reservoirs. Since this should have already been completed, the information to evaluate the impacts of this action should have been included in the BDCP EIR/S. NEPA requires that the best available information is utilized in the analysis of a project's impacts. The BDCP EIR/S has declared that it has not evaluated any of these OCAP BO RPAs other than Delta operations because there is insufficient information to analyze. Since so many of these actions were due to have been completed and so many supporting design preparation and post-construction/action implementation results monitoring that it is not possible that (categorically according to the BDCP EIR/S) these materials are not at all available.</p> <p>Correspondence and joint work products with the CVP/SWP Fish Passage Steering Committee in response to the coordination requirements from the 2009 NMFS OCAP BO RPA NF 4.5. These materials should be available from both Reclamation and DWR to inform the BDCP EIR/S analysis.</p> <p>Planning and implementation documents in response to the 2009 NMFS OCAP BO RPA NF 4.5 for Reclamation to design, build and evaluate juvenile fish capture facilities upstream of their facilities. This was required for Reclamation to complete by 9/13 and should have been included in the BDCP EIR/S.</p> <p>Reports submitted to NMFS specifically regarding DWR's Skinner Fish Collection Facility reductions in fish predation rates in response to 2009 NMFS OCAP BO RPA JV.4.2. Compliance was required to be achieved no later than 3/31/14 and should have been included in the BDCP EIR/S.</p> <p>Hatchery Management Plans submitted to NMFS specifically in response to 2009 NMFS OCAP BO RPA 11.6.3. This was to be implemented by Reclamation no later than 6/14, so this information should be in the BDCP EIR/S.</p> <p>DWR reports, plans and correspondence to FWS specifically in response to FWS OCAP BO RPA: "Component 4: Habitat Restoration, to implement a program to create or restore a minimum of 8,000 acres of intertidal and associated sub tidal habitat in the Delta and Suisun Marsh. The restoration efforts shall begin within 12 months of signature of this biological opinion and be completed by DWR (the applicant) within 10 years. The restoration sites and plans shall be reviewed and approved by the Service and be appropriate to improve habitat conditions for Delta smelt. Management plans shall be developed for each restoration site with an endowment or other secure financial assurance and easement in place held by a third-party or DFG and approved by the Service. The endowment or other secure financial assurance shall be sufficient to fund the monitoring effort and operation and maintenance of the restoration site. An overall monitoring program shall be developed to focus on the effectiveness of the restoration actions and provided to the Service for review within six months of signature of this biological opinion. The applicant shall finalize the establishment of the funding for the restoration plan within 120 days of final approval of the restoration program by the Service."</p>	

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		<p>Since there are only 4 years left for this action to be completely implemented and contracting and construction will take at least that long, the plans and supporting detailed environmental documents and permitting must already be completed. This information should have been included in the BDCP EIR/S as part of the No Action and variants of this action should have been included in some of the project alternatives. This omission makes the BDCP EIR/S materially incomplete and deficient. This deficiency must be remedied and a revised EIR/S recirculated for public comment. This information that DWR is required to have completed by this date if it is not in violation of the ESA would allow the analysis of this BDCP action at a project-level of detail that would not require a subsequent environmental document prior to construction as the BDCP has proposed.</p> <p>DWR reports or correspondence to FWS specifically in response to FWS OCAP BO RPA: "Component 5: Monitoring and Reporting, Information on salvage at Banks and Jones is both an essential trigger for some of these actions and an important performance measure of their effectiveness. In addition, information on OMR [Old and Middle River] flows and concurrent measures of Delta smelt distribution and salvage are essential to ensure that actions are implemented effectively. Such information shall be included in an annual report for the Water Year (October 1 to September 30) to the Service, provided no later than October 15 of each year, starting in 2010." This information should have been included in the BDCP EIR/S as it would provide a basis to characterize the No Action/No Project as well as informed potential options in the development of alternatives and adaptive management measures.</p> <p>Reclamation reports to FWS specifically in response to FWS OCAP BO RPA two for annual evaluations of fish screens at the North Bay Aqueduct (NBA) diversion during January through June. Reclamation was due to submit the proposed evaluation study to USFWS within 3 months of the issuance of the biological opinion so this information and subsequent plan details should have been in the BDCP EIR/S.</p> <p>Reclamation reports to FWS specifically in response to FWS OCAP BO RPA three for frequency of Delta smelt monitoring from December through July, when water is being diverted. The creation of the Delta smelt habitat study group, initial habitat conceptual model review, formulation of performance measures, implementation of performance evaluation, and peer review of the performance measures and evaluation that are described in steps (1) through (3) of Attachment B shall be completed before September 2009. This information and subsequent plan details should have been evaluated in the BDCP EIR/S. The methodologies developed by this group would likely represent the best available science with regards to analysis of Delta smelt movements and biological response to changes in hydrologic conditions and CVP/SWP operations. The current BDCP EIR/S is deficient for not including this information and for not utilizing the best available information and science from this study group.</p>	
2652	138	<p>Notifications and reports to FWS for BO [Biological Opinion] RPA [Reasonable and Prudent Alternative] Action 6. Documentation should include the location; plans, designs, evaluations, environmental documents, permit applications, and status updates and reports to FWS. "A program to create or restore a minimum of 8,000 acres of intertidal and associated sub tidal habitat in the Delta and Suisun Marsh shall be implemented. The restoration efforts shall begin within 12 months of signature of this biological opinion and be completed within a 10 year period."</p> <p>Since there are only 4 years left for this action to be completely implemented and</p>	See Master Response 1 regarding baselines and Master Response 46 regarding recirculation.

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		contracting and construction will take at least that long, the project-level description and land modification and water operations plans and supporting detailed environmental documents and permitting must already be completed. The BDCP claims it can only analyze this alternative component at a programmatic level (it was not even as detailed and fully formed as a programmatic description as the flow-related operational rules were not defined) because project-level information was not available. This information should be available if the CVP and SWP were compliant with the ESA as required in the OCAP BO RPAs. This information should have been included in the BDCP EIR/S. This omission makes the BDCP EIR/S materially incomplete and deficient. This deficiency must be remedied and a revised EIS recirculated for public comment.	
2652	139	Reclamation or DWR reports to FWS regarding any information about take or suspected take of federally-listed species not authorized in the 2008 FWS OCAP [Operations Criteria and Plan] BO [Biological Opinion]. Notification must include the date, time, and location of the incident or of the finding of a dead or injured Delta smelt. Prospect Island fish rescue by BOR [Reclamation], Jones emergency levee repair and fish rescue are potential examples of notifications that should have been given. Dissolved Oxygen crashes that result in adverse modification of critical habitat caused by or contributed to by CVP/SWP operations must also be included with this other information in a revised and recirculated BDCP EIR/S.	For discussions of oxygen levels in the Delta and effects to fisheries population, see Chapter 11, Fish and Aquatic Resources, and Chapter 8, Water Quality. See also Master Response 29 regarding the Endangered Species Act and Master Response 45 regarding permitting.
2652	140	The NMFS BO [Biological Opinion] requires addition of salt to water within the tanker trucks to haul salvaged fish to reduce stress of transport (NMFS OCAP [Operations Criteria and Plan] BO pg. 657, #5). The DWR 401 Certification from the water board does not cover this discharge and this impacts of adding salts to water discharged into the Delta must be addressed in the BDCP EIR/S.	See Master Response 1 regarding baselines and Master Response 45 regarding permitting.
2652	141	4.1-6, line 28: "To avoid a reduction in overall abundance for this species, the proposed project includes spring outflow criteria, which are intended to be provided through the acquisition of water from willing sellers. If sufficient water cannot be acquired for this purpose, the spring outflow criteria will be accomplished through operations of the SWP and CVP to the extent an obligation is imposed on either the SWP or CVP under federal or applicable state law. Best available science, including that developed through a collaborative science program, will be used to analyze and make recommendations on the role of such flow in supporting longfin smelt abundance to DFW, who will determine if it is necessary to meet CESA [California Endangered Species Act] permitting criteria." This is entirely too speculative as to how these requirements would affect operations and the resulting environmental conditions that would occur if this project were to be approved. It is clear that the project does not know what volume of operations are required to adequately protect this species, does not know where the water would come from to comply with the requirements or even if the CESA requirements can be met. California [DFW] must not issue CESA permits for longfin smelt on such an undefined potential operation that the project cannot even prove they can deliver on or if in fact it would result in the protection of the species. The BDCP must propose a specific set of operations to protect this species that are incorporated into the operations modeling and impact assessment to determine the environmental impacts of implementing this action and determine the magnitude, duration, frequency and geographic extent of potential operational violations of these proposed species protection actions.	As indicated in the quoted text, Alternative 4A analyses include spring outflow criteria as part of conveyance facility operational scenario H3+. This quoted text is intended to disclose the options for acquiring water to meet spring outflow criteria and adjust outflow, if necessary, to support longfin smelt abundance in coordination with DFW. Because these outflow criteria are incorporated into the hydrodynamic modeling for Alternative 4A, the effects of spring outflow criteria are fully analyzed in all of the resources topics dependent on CALSIM II and DSM2 modeling results. See also Master Response 28 regarding operational criteria and Master Response 45 regarding permitting.
2652	142	Table 4.1-2 - The differences between operations under Alternative 4 vs.4A are indecipherable as they are presented in the table. The BDCP must provide a more	The Final EIR/EIS includes model results for Alternatives 2D, 4A, and 5A as compared to the No Action Alternative and Existing Conditions in Appendix 5A, Section C, in addition to the model results previously

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		comprehensible disclosure of the differences between these two operations. The BDCP has claimed that the operations are basically the same, but it does not look like it based on these tables. The tables are not directly or simply comparable (different locations, time periods and flow ranges) and serves to confuse and obscure instead of informing and disclosing as it should. This table could be simplified with a calendar in the case of temporal changes and a third column that identifies the difference of one alternative vs. the other. What is clear from the table is that there are substantial differences in operations between Alt 4 and Alt 4A and that modeling conducted for one of these operations is not representative of the other alternative and these impacts assessments cannot be used interchangeably due to their significant differences in resulting resource impacts.	provided in the Draft EIR/EIS. The comparative results between Alternatives 2D, 4A, and 5A and the No Action Alternative and the Existing Conditions are generally consistent with the impact analysis results presented in the RDEIR/SDEIS.
2652	143	4.1-11, line 3: "Under the observed hydrologic conditions over the 82-year period (1922-2003), the number of years of each water-year type is included below." The BDCP should use a more complete available hydrologic period to include more recent years up to 2014. This would add over 13% more years to the period of record and most importantly it would augment the critical dry year type to .be a more representative sampling. Also important in adding more recent years to the analytical period is that climate change is accelerating and these most recent years are our best indicator of future climate change-driven challenges the project would face. The analysis must be redone utilizing the full available set of hydrologic period for its analysis to meet the test of using the best available science as required by NEPA and CEQA.	<p>Droughts have occurred throughout California’s history, and are constantly shaping and innovating the ways in which DWR and Reclamation balance both public health standards and urban and agricultural water demands while protecting the Delta ecosystem and its inhabitants. The most notable droughts in recent history are the droughts that occurred in 1976-77, 1987-92, and the ongoing drought. The EIR/EIS evaluates long-term operation of the SWP and CVP over an 82-year long hydrologic period with extended wet periods and dry/critical dry periods. The evaluation is a comparative analysis to determine the incremental differences between conditions under the action alternatives and conditions under the Existing Conditions and the No Action Alternative. The analyses were not conducted to identify specific values or to respond to short-term emergency situations, such as the ongoing drought.</p> <p>The No Action Alternative and all of the action alternatives were analyzed with assumptions for future climate change and compared to Existing Conditions to understand the difference in the conditions that would occur due to the actions and climate change and sea level rise. See also Master Response 1 regarding baselines, Master Response 4 regarding alternatives development, Master Response 19 regarding climate change, and Master Response 47 regarding drought.</p>
2652	144	4.1-11, line 20 - ". . . north Delta diversion bypass flow criteria include regulation of flows to 1) maintain fish screen sweeping velocities . . ." The BDCP has still failed to disclose detailed descriptions and operational modeling and impacts analysis of daily intertidal operations of the north Delta diversions on reduced, slack and reverse flow velocities at the proposed north Delta diversions. The BDCP must complete these analyses and disclosures and recirculate the revised document for public comment for these material omissions.	The project description included in Chapter 3 and Appendix 5A in the EIR/EIS and information developed by the Fish Facilities Team as presented in the Conceptual Engineering Report (included in the EIR/EIS by reference) present the overall assumptions considered in the EIR/EIS analysis. During the design phase, this information along with criteria established under biological opinions issued by USFWS and NMFS and permits issued by State Water Resources Control Board and CDFW will be used to develop more detailed operational criteria. The CALSIM II model assumptions related to the North Delta Bypass Flows were specifically developed to reduce or eliminate diversions at the north Delta intakes during periods that would cause reverse flow patterns along the Sacramento River (see Appendix 5A, Section B). Therefore, tidal flows in the Sacramento River would be similar under the action alternatives and the No Action Alternative. See Master Response 28 regarding operational criteria and Master Response 30 regarding modeling.
2652	145	4.1-11, line 25 - "To ensure that these objectives are met, diversions must be restricted at certain times of the year (mostly from December through June) . . ." 4.1-11, line 17, "Alternative 4A operations include a preference for south Delta pumping in July through September . . ." Between these two statements, the north Delta diversions would only be fully operated in October and November of each year. To have such huge impacts to the Delta ecosystem, residents and businesses for the north Delta intakes to fully operate only 2 months of the year as their primary source of diversion, this project makes no sense at all from an environmental, social or economic perspective. The tunnels have been estimated to cost between \$8 billion and \$64 billion and all they are getting is two months of north Delta operations during a time of year when water operational volumes are at their lowest. Again, given these factors this project makes no sense and should not be approved or permitted.	Chapter 8 deals with cost issues, and cost-benefit analysis information is available on the BDCP website. Please see Master Response 5 for more information on project costs funding.

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2652	146	<p>4.1-15, line 1 - "The RDEIR/SDEIS describes and analyzes Environmental Commitments 3, 4, 6-12, 15, and 16 at a level of detail consistent with that applied to these activities under other alternatives in the Draft EIR/EIS. (See CEQA Guidelines, [Section] 15126.4[a][1][D] [EIRs must discuss significant effects of 3 mitigation measures . . .] We do not dispute the CEQA reference or the case cited, but the level of detail describing the nature of the mitigations in the EIR/S is insufficient to identify or characterize, let alone quantify, the impacts that would occur from their implementation. As an example, without aquatic habitat mitigation locations plans that include the locations and sizes of levee breach locations you cannot determine if the site will be sediment accreting or depleting. Whether the site accumulates and starves sediment or is a net contributor to sediment is a significant factor in determining the mitigation's impacts to water quality (related to other factors such as the rate of methylation of mercury) and fisheries habitat quality (e.g., predation rates of T&amp;E [threatened and endangered] species which rely upon turbidity as cover). It is not that these mitigations are addressed at a lower level of detail, but that their very nature and even generalized impacts and magnitudes of impacts cannot be assessed given the lack of specificity in their design and disclosure in the EIR/S. In this lack of detail and reliable determination of the general types and magnitudes of impacts from mitigation measures, the EIR/S is materially deficient and must be revised to provide this detail and recirculated for public comment.</p>	<p>Addressing some mitigation more programmatically is appropriate when the specifics of certain impacts cannot reasonably be determined because, for example, they are dependent on future actions. Please see Master Response 22 for a discussion on mitigation measures and Master Response 2 for a discussion of the project vs. program level analysis in the EIR/EIS and why this is adequate and allowed under CEQA and NEPA.</p>
2652	147	<p>4.1-15, line 11 - "Where appropriate and necessary, implementation of individual projects associated with an environmental commitment would be subject to additional environmental review." It is a violation of the requirements of NEPA and CEQA to piecemeal a project into separate parts to reduce the incremental environmental impacts into discrete parts that have less than significant impacts in order to avoid significant impacts that would occur if the project were to be evaluated in its totality. All of the elements that are to be included in the project have been identified and the lack of sufficient effort on the part of the BDCP to more fully define these other project components should not be allowed to be utilized as an excuse to perform some subsequent environmental analysis and some undisclosed future date. Aquatic habitat restorations with a tidal component affect the tidal prism volumes and resulting changes in water quality in turn affect CVP/SWP operations. If the habitat restorations are not analyzed until after the conveyance is approved, the agencies will be approving a project conveyance that they do not know what the impacts will be when the other habitat restoration alternative components are implemented. The BDCP project must not be approved, nor permits issued upon this document until the project description is complete to a project-level of detail for all components of the project. Once the project description has been completed and evaluated at a project level of detail, the EIR/S must be recirculated for disclosure of these material omissions.</p>	<p>As a general discussion related to the environmental review process associated with major multi-year phased projects, the environmental review must be conducted at the level of specificity available at the time of the analysis. Both CEQA and NEPA encourage that the environmental review process is to be conducted at the earliest stage of development to allow for effective planning. Thus, this approach was used in the DEIR/S where components of the project to be implemented at later stages were evaluated at programmatic levels with the understanding that at future stages, additional environmental review would be necessary.</p> <p>For more information regarding analysis of the project as a whole, please see Master Response 8.</p> <p>The RDEIR/SDEIS considers potential impacts of the RDEIR/SDEIS alternatives to surface water and water quality in combination with concurrent project effects (Section 5.2.1) including conservation measures for habitat restoration and protection actions and cumulative effects (Section 5.2.2) as required by NEPA and CEQA. See also Master Response 9 regarding cumulative impacts.</p>
2652	148	<p>4.1-16, line 19 - ". . . the maximum ratio applied to tidal wetland mitigation is 3:1, and therefore would not exceed 177 acres for this alternative." There are many similar projects that have had mitigation ratios of 5:1 or even 7:1 so this BDCP EIR/S statement is overly optimistic and the agencies that have indicated lower mitigation ratios at this stage of lack of definition of the actual proposed mitigation design are predecisional. Since this document only covers 59 acres of mitigation habitat for this impact, if additional acres are required, then this EIR/S document must be revised and recirculated for public comment. If the restoration is over 59 acres, the responsible agencies must not issue permits based on this unrevised document as the impacts for acres above this amount are not addressed or disclosed in this document.</p>	<p>Actual mitigation acreage change based on further discussions with NMFS, USFWS, and DFW pertaining to the actual value of the current habitat and/or the appropriate ratio of mitigation or based on footprint changes. Please refer to the California WaterFix BA for updated information on the mitigation acreages for tidal wetland habitat.</p>

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2652	149	<p>4.1-16, line 22 - "... channel margin habitat and would be implemented in the same way as described in Conservation Measure 6 in the Draft BDCP but over less linear distance. For the purposes of Alternative 4A, this action would entail enhancement of approximately 4.6 levee miles. . . ." The BDCP must disclose the specific location and detailed design of this proposed action as there are specific impacts and consequences of the location, design and channel cross section changes of channel margin habitat. As an example, channel margin habitat restoration can increase or decrease channel flow capacity, create fish stranding habitat, create fish predation opportunities, change water quality, and potentially redirect flood risk among other impacts which are location and design specific. The BDCP must provide this level of project detail so these impacts can be determined, mitigated and disclosed. The revised EIR/S must be recirculated to address these material deficiencies.</p> <p>4.1-16, line 27 - same comment as the preceding comment.</p>	Please see Please see Master Response 2 regarding the level of detail sufficient for EIR/EIS documents.
2652	150	<p>4.1-17, line 37 - "EC15 would remove predator refuge habitat and reduce predator abundance in the construction areas. At a minimum, EC15 will target the removal of an amount of predator refuge commensurate with the amount that may be created by construction of water conveyance facilities." Predator refuge is not just a quantity, but also of a quality that the EIR/S fails to take into account. It is clear from the EIR/S statement that they have no idea how much mitigation will need to be done or where it will occur. Until the BDCP has a specific plan, in location .and actual features and modifications to be made to complete this mitigation, the fisheries agencies should not accept these unspecific and unsupported assurances by the BDCP, nor should they issue ITPs [incidental take permits] based on these lack of plans for mitigation of these significant impacts.</p>	Please refer to Master Response 2, regarding project and program level analyses and Master Response 22, related to mitigation measure adequacy.
2652	151	<p>4.1-22, line 16 - "During construction it is assumed that a temporary work area would surround each permanent intake site and would include a fuel station and concrete batch plant." All of these project components must be described and evaluated at a project-level of detail in order to warrant consideration of issuance of construction-related permits. Obviously from this description, the BDCP does not know where or how big these project elements would be and therefore, the responsible agencies must not issue construction-related permits based on this EIR/S document. At the current level of description and analysis, the regulatory agencies could not determine if the proposed fuel station were in the middle of a wetland. If this document is revised to address this material omission, it must be recirculated for public comment and disclosure. This comment applies to all project alternatives that must be analyzed and defined at an equal level of detail as required by NEPA.</p>	Please see Master Response 2 regarding Project-Level Versus Program-Level analysis.
2652	152	<p>4.5.1- line 9 - "... there is no requirement that activities take place within a "Plan Area" under the regulatory approach that would be pursued under these alternatives, it is assumed that activities associated with these alternatives would occur within this same geographical area." Since there is, as the EIR/S states, no need for a planning area (a term that only ever applied to the HCP process, not the EIR/S process), any alternatives that were dismissed from further consideration during the scoping and alternatives development phase of the project because they occurred partially or in whole outside of the predecisional and arbitrarily defined "Plan Area" (there were many; see [Central Delta Water Agency's] previously submitted related comments) must now be reconsidered for full analysis as an alternative or alternative component in a revised BDCP EIR/S. There is no support for the EIR/S "assumption" that these activities would occur only in the "plan area" and there is now absolutely no supporting rationale for the exclusion of consideration of these other</p>	Please refer to Appendix 3A, Identification of Water Conveyance Alternatives, Conservation Measure 1. As explained in Chapter 1, Introduction and Chapter 3, Description of Alternatives, the change in regulatory approach for Alternatives 4A, 2D and 5A resulted in some important changes related to the goals for the project that has affected the approach to habitat restoration, offsets for conveyance facility effects and operational criteria. Please also refer to Master Response 4 addressing development of alternatives. Please also refer to Appendix 3A of this EIR/EIS, Identification of Water Conveyance Alternatives, Conservation Measure 1.

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		geographic area alternative solutions that reasonably meet the purpose and need and project objectives.	
2652	153	4.1-40, line GGS5 - "Create connections from the Coldani Marsh/White Slough subpopulation to other areas in the giant garter snakes historical range in the Stone Lakes vicinity by protecting 255 acres. . . ." These two subpopulations are over 15 miles apart, so the idea that an overarching principal for the location of 255 acres to connect these populations is a fallacy at best and misleading as to what the project might accomplish to regulatory decision makers. At 255 acres, a corridor only 1000' wide would cover only a little over 2 miles in length so it is impossible for the project to make any meaningful or functional contribution to connecting these habitats as the EIR/S would lead the reader to believe. The BDCP must remove these misrepresentations of what the project would accomplish or contribute to and recirculate a revised draft for public comment after these material misrepresentations have been corrected.	This measure would serve as a contribution to other current and future conservation efforts to improve habitat for giant garter snake in this portion of the study area. See also Chapter 12 and Master Response 17 regarding terrestrial biological resources.
2652	154	4.1-41, RBR - The tunnel muck disposal sites on Glanville tract and adjacent to the DWR-owned ponds (and other project footprint locations) are prime riparian brush rabbit habitat. The project will need to mitigate many more acres than the stated 19 acres just to make up 1:1 the number of acres of prime habitat taken from these species.	Glanville Tract is 25 miles north of modeled riparian brush rabbit habitat and 33 miles north of known populations. See also Chapter 12 and Master Response 17 regarding terrestrial biological resources.
2652	155	4.1.6 - The BDCP new alternatives have muddled and conflated the baseline conditions of the project. The OCAP [Operations Criteria and Plan] BO [Biological Opinions] RPAs [Reasonable and Prudent Alternatives] are part of the No Action/No Project definition of the BDCP as these were legal compliance requirements of the project prior to the BDCP baseline date. The previous public draft alternatives were represented as having these actions both in the No Action/No Project as well as in the Proposed Project and alternatives. The revised public draft EIR/S alternatives have dropped inclusion of the mandated OCAP BO RPAs from the description of the new alternatives. It is unclear if the No Action/No Project still have the BO RPAs in them or not. If the OCAP BO RPAs are still in the baseline, but not in the alternatives, then the entire revised public draft BDCP analysis is fundamentally flawed as the comparison would start out with baseline impacts from habitat restoration that do not occur under the alternatives. Using this flawed baseline and analytical approach, the impacts of the BDCP proposed project and alternatives would effectively be subtracted from the impacts which would not occur in the alternative without the OCAP BO RPA as compared to the baseline which did include the OCAP BO RPAs. If the BDCP has revised the No Action/No Project to not include the OCAP BO RPAs then the analysis would correctly show the impact of the proposed project, but the No Action/No Project baseline definitions would be legally incorrect and not reflect the conditions that the project is legally compelled to implement. Either way, the project analysis of a proposed project and alternatives that do not include the OCAP BO RPAs as part of the project description is flawed and leads to a corrupted environmental analysis that is not suitable to support decision making or the consideration of issuance of permits based upon it.	<p>This comment is an opinion related to the definition of existing conditions in the EIR/EIS. The rationale for defining existing conditions as the conditions at the time of the notice of preparation is fully explained in Chapter 4, Approach to the Environmental Analysis, Section 4.2.1.1. The existing conditions discussion states in part:</p> <p>In particular, DWR did not assume full implementation of a particular requirement of the delta smelt BiOp, known as the "Fall X2" salinity standard, which in certain water-year types can require large upstream reservoir releases in fall months of wet and above normal years to maintain the location of "X2" at approximately 74 or 81 river kilometers inland from the Golden Gate Bridge. As of spring 2011, when a lead agency technical team began a new set of complex computer model runs in support of this EIR/EIS, DWR determined that full implementation of the Fall X2 salinity standard as described in the 2008 USFWS BiOp was not certain to occur within a reasonable near-term timeframe because of a recent court decision and reasonably foreseeable near-term hydrological conditions. As of that date, the United States District Court has not yet ruled in litigation filed by various water users over the issue of whether the delta smelt BiOp had failed to sufficiently explain the basis for the specific location requirements of the Fall X2 action, and its implementation was uncertain in the foreseeable future. This uncertainty, together with CEQA's focus on Existing Conditions, led DWR to the decision to use a CEQA baseline without the implementation of the Fall X2 action. However, for the purposes of the NEPA comparison, which uses a different method for assessing environmental effects of the action alternatives, the Fall X2 action is included in the NEPA point of comparison as discussed below in the No Action Alternatives section.</p> <p>Please refer also to Master Response 1 which addresses the environmental baseline presented in this Final EIR/EIS.</p>
2652	156	4.1.6 - The Draft Environmental Impact Statement (EIS) for the Coordinated Long-Term Operation of the Central Valley Project (CVP) and State Water Project (SWP) (ES.3, line 17) acknowledges that many of the provisions of the RPAs [Reasonable and Prudent Alternatives] identified in the biological opinions [BO] require further study and monitoring and further environmental documentation necessary before any future facilities can be constructed or modified. The BDCP EIR/S is inconsistent with the OCAP [Operations Criteria	Please refer to Appendix 5A, for a detailed discussion of the modeling approach and assumptions and Chapter 4, Approach to the Environmental Analysis in this Final EIR/EIS. See also Master Response 30 regarding modeling.

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		and Plan] EIS in that the proposed project and new alternatives no longer include implementation of the OCAP BO RPAs prior to or concurrently with the construction of the proposed new conveyance facilities and modification of existing facilities related to water conveyance. The BDCP EIR/S proposed project must be made consistent with the OCAP BO EIS as these are concurrent documents with the same lead agencies and the OCAP BO is part of the baseline condition of the BDCP EIR/S. Therefore the assumption of RPA implementation prior to CVP/SWP modification and construction must take supremacy over the BDCP proposed project assumption of modifying existing and constructing new facilities prior to implementation of the OCAP BO RPAs.	
2652	157	4.1.6 - The BDCP baselines are corrupted by the exclusion of the OCAP [Operations Criteria and Plan] BO [Biological Opinions] RPAs [Reasonable and Prudent Alternatives] from the new project alternatives and inclusion of the RPAs in the baseline.	Please refer to response to comment 2652-155.
2652	158	4.1.6 - The BDCP NEPA No Action Baseline was at the end of the project lifespan, 2060. The revised PDEIR/S says it is no longer seeking a 50-year HCP permit, so what is the end date of the project lifespan now? Contrary to the EIR/S claim in 4.142, line 18 that the project lifespan is "indefinite," there is a design life of any project (even concrete wears out and reinforcing fails after a design lifespan). The design life of the project must be used as the No Action alternative end date for the EIS analysis. The revised BDCP EIS uses a NEPA future No Action date that is different for the new alternatives than for the previous alternatives. This is unacceptably confusing to the reader and to the decision-makers relying upon this document for an accurate and consistent comparison. Where is the documentation of the engineering/operational lifespan of the proposed BDCP facilities? At what future forecast date of sea level rise would the facilities no longer be functional or viable? The BDCP RPDEIR/S must revise the new alternatives future no action definition to be consistent with the previous analysis (or conduct the analysis based on the project end of serviceable lifespan period) and circulate that revised document for public comment.	<p>The NEPA No Action baseline used for analysis in the 2013 Draft EIR/EIS reflects the proposed 50-year lifespan of the HCP permit. In response to comments received during the 2013-2014 public comment period, the new No Action Alternative baseline examines conditions at 2025 (No Action Alternative Early Long Term) due to the levels of uncertainty regarding both the future effects of climate change and the long-term effectiveness of habitat restoration in recovering fish populations. The revised analysis uses the No Action Alternative Early Long Term as the NEPA point of comparison for the Alternatives 4A, 2D, and 5A. However, to allow comparison with the previously evaluated alternatives, the analysis also qualitatively examines relevant impacts of Alternatives 4A, 2D, and 5A relative to the Late Long-Term (i.e. 2060) timeframe.</p> <p>The EIR/S has indicated an indefinite project life. Once major infrastructure is constructed, the long term use of the facility is not totally predicated on a design life. It is recognized that parts of the facility may require rehabilitation; however, it is likely that the facility would continue to operate for the indefinite future. The effects analysis has conducted analyses at multiple time frames that are well within the timeframe of what would normally be considered a "design life." The EIR/S has disclosed that there are multiple uncertainties at the later stages associated with climate change and the habitat restoration and qualitatively assessed those effects to the extent of the best available science at this time. This is a very conservative approach to disclosing the effects of the project. For more information regarding the permit term please see Master Response 45.</p>
2652	159	4.1.6, line 18 - ". . . the analysis qualitatively examines impacts at the Late Long-Term [LLT] timeframe for Alternatives 4A, 2D, and 5A, but does not make a CEQA or NEPA conclusion based off the No Action Alternative LLT baseline." The BDCP EIR/S commits several procedural violations of NEPA here. First, the No Action must be at the end of the project or at least consistent with the other alternatives so that the comparisons are consistent. In order to understand the project impacts that occur under climate change conditions in 50 years (as the other alternatives were analyzed) these new alternatives must be analyzed with a No Action condition that incorporates significant climate change assumptions. Second, the analysis of the LLT is only qualitative for the new alternatives and is not quantitative for most of the water operations-related impact analyses as the other project alternative analyses were. NEPA requires the use of best available science and a qualitative analysis is an inferior analysis to those quantitative analyses that were successfully utilized on the LLT for the other project alternatives. Third, the EIS must make CEQA impact calls, again, so it is comparable to the other project alternatives which already utilize this baseline and which have utilized the best available science quantitative analytical tools.	Please refer to response to comment 2652-158, above. Please also refer to Master Response 4, which addresses adequacy of the alternatives analysis.

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2652	160	4.1-43, line 28 - "For the purposes of impact analysis under Alternative 4A, applicable analyses evaluate a range of impacts, bounded by the early long-term modeling results generated for Alternative 4, Scenarios H3 and Scenario H4." So the BDCP EIR/S did not even bother to model their Proposed Project/Action operations and instead chose to rely upon some sort of undocumented and subjective interpolation of other modeled scenarios that do not reflect the actual operations of the new proposed project. Alternative 4 includes habitat restoration and water operations (new points of water diversion and water rights use for the Yolo Bypass), which do not occur in Alternative 4A. Scenarios H3 and H4 are also not the same operations as Alternative 4A as they include habitat restoration actions (and water operations) which affect water quality operational constraints that do not occur in Alternative 4A. Interpolating quantitative modeling results instead of modeling the alternative to reflect the operational assumptions that are unique to it certainly does not meet the test of best available science. Doing the modeling for the exact operations and assumptions included in Alternative 4A is the only way to be reasonably certain of the impacts of Alternative 4A. Additionally, using interpolated modeling results rather than actual modeled results is not applying an equal level of effort or analysis to all of the alternatives as NEPA requires. The analysis of Alternative 4A (and the other new alternatives) must be modeled utilizing the exact water operations and assumptions as they propose and a full analysis equal to that given the other alternatives must be developed and released by the BDCP in a revised public draft for comment and disclosure. The regulatory authorities must not rely upon interpolated model results from other operational scenarios to base their decisions upon, must not approve this deficient document that fails to meet NEPA and CEQA requirements, and must not issue permits based on this document.	Modeling for the RDEIR/SDEIS utilized sensitivity analyses as presented in Appendix B. Subsequent to the RDEIR/SDEIS, updated CALSIM and DSM2 modeling was completed to verify and update the results in the RDEIR/SDEIS to confirm impact results and conclusions. Those updated analyses are presented in this Final EIR/EIS. See also Master Response 30 regarding modeling.
2652	161	4.2-9, line 40 - "Cross-Delta Transfer capacity would restrict the actually realized increase in transfer volumes to less than the amounts stated by an unknown degree, but the increase in the frequency of Cross-Delta transfers would likely occur as predicted." Here the BDCP EIR/S is confirming our [Central Delta Water Agency's] concern that water transfer capacity, magnitude and frequency would increase with the implementation of the north Delta diversions because the operational constraints of the south Delta diversions would be eased. This increase in water transfers with the implementation of the Proposed Project (or other north Delta diversion alternatives) would result in an increase of water taken out of the Delta as compared to the No Action/Project condition. The BDCP often has claimed that the project would result in "no new water" being diverted from the system, but here from this BDCP EIR/S statement it is a declared objective of the project to increase these transfers that could not happen without the project. These impacts of increased water transfer capacity trigger growth inducing, water quality and water right impacts that are not evaluated, quantified, mitigated or disclosed in this EIR/S document. The BDCP EIR/S must be revised to include analysis of the impacts of these water transfers that would only be enabled with the implementation of the project and this revised document must be recirculated for public comment and disclosure.	The comment that water transfers may increase through the removal of certain Delta-related impediments is addressed in Master Response 43 (Water Transfers), section A.  Section 4.2.9 of the RDEIR/SDEIS states: "As noted elsewhere, the decreases in project deliveries (and consequential increase in transfer demand) are caused by (1) an increase in demands associated with water rights, the buildout of planned facilities, and greater use of existing CVP and SWP contracts which cumulatively result in about 443 TAF per year additional consumptive use per year north of Delta at the future level of development; (2) climate change and sea level rise; and (3) depending on alternative, assumption of certain added Delta outflows to benefit fish."
2652	162	4.2-10, line 3 - "... the decreases in project deliveries (and consequential increase in transfer demand) are caused by (1) an increase in demands associated with water rights, the build-out of planned facilities, and greater use of existing CVP and SWP contracts which cumulatively result in about 443 TAF [thousand acre-feet] per year additional consumptive use per year north of Delta at the future level of development; (2) climate change and sea level rise ... ." The ELT [Early Long Term] No Action period in which the new project alternatives were evaluated (incorrectly using interpolated modeling results rather than actual modeled results) incorporates little to no climate or sea-level change. The LLT [Late	Please refer to response to comment 2652-161 and Appendix 5A for modeling assumptions related to climate change and sea-level rise for all of the alternatives. See also Master Response 19 regarding climate change and Master Response 30 regarding modeling.

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		<p>Long Term] No Action analysis of the Proposed Project/Action and other new alternatives were only evaluated qualitatively so they had no quantitative analysis of the impacts of climate change and sea level rise so this quantitative statement of reduced deliveries attributed to climate change and sea level rise is not only unsupported by scientific analysis, it is misleading to the reader and decision makers who rely upon the accuracy of the statements in this EIR/S document. The EIR/S must be revised to include an ELT No Action alternative that is specifically modeled for the new alternatives and a quantitative analysis of the LLT No Action so water supply impacts like the one claimed in the EIR/S here can actually be quantified and disclosed. The revised EIR/S must be recirculated for public comment with this material new information.</p>	
2652	163	<p>4.2-10, line 22 - "Under No Action Alternative (ELT [Early Long Term]) average annual total CVP deliveries would be similar with a slight increase of 9 TAF [thousand acre-feet] (0%) and average annual total south of the Delta CVP deliveries would decrease by about 150 TAF (7%) as compared to deliveries under Existing Conditions. Average annual CVP north-of-Delta agricultural deliveries would be reduced by 47 TAF (20%) and exhibit reductions in about 75% of years under the No Action Alternative at Year 2025 (ELT) as compared to Existing Conditions, as shown in Figure 4.3.1-22. Average annual CVP south of Delta agricultural deliveries would be reduced by 120 TAF (12%) and exhibit reductions in about 85% of the years, as shown in Figure 4.3.1-23. Average annual CVP north of Delta M&amp;I [municipal and industrial] deliveries would increase by 181 TAF (86%) due to the increase in urban demand. Deliveries would increase in all years, as shown in Figure 4.3.1- 24. Average annual CVP south of Delta M&amp;I deliveries would be reduced by 6 TAF (5%) in about 75% of the years . . ."</p> <p>These stated quantitative analytical results are all misleading and presented as actual modeling results when the BDCP EIR/S has admitted that the ELT modeling analysis is based on other alternative model results interpolation that include different operational and habitat restoration components than the Proposed Project/ Action and other new alternatives. The BDCP must utilize best available science and model these actual alternatives and not rely upon interpolated results from alternatives that are not the same. Further, by selecting 2025 as the analytical period for the construction and implementation of the Proposed Project/ Action, if the project is not completed and fully operational by 2025, this EIR/S analysis is invalidated and a new EIR/S would have to be completed or this analysis updated to reflect the different implementation period and the change in conditions and impacts that the project would precipitate.</p>	<p>The CALSIM modeling analyses have been updated for this Final EIR/EIS and are generally consistent with the RDEIR/SDEIS results. Please refer to Chapter 5, Water Supply and Appendix 5A, modeling technical appendix. See also Master Response 30 regarding modeling.</p>
2652	164	<p>4.2-10, line 35 - "Shasta Lake storage would decline to dead pool more frequently due to the shift in runoff patterns from climate change . . ." There is no climate change assumption included in the ELT [Early Long Term] in 2025 as compared to the existing condition, so this statement in the EIR/S is incorrect and misleading.</p>	<p>The ELT condition does include climate change assumptions as compared to Existing Conditions as described in Appendix 5A, Section D.3.1 of the EIR/EIS.</p>
2652	165	<p>4.2.5 - There are changes to surface water flows and beneficial uses of water in the No Action that are not identified as changing from the existing conditions. The changes that are missing are actions required by the SWP/CVP to comply with the OCAP [Operations Criteria and Plan] BO [Biological Opinions] RPAs [Reasonable and Prudent Alternatives] to avoid jeopardy of T&amp;E [threatened and endangered] species. Some of these include, but are not limited to: fish passage at the CVP/SWP dams, Yolo Bypass diversions and floodplain restoration, and inundation on intertidal and sub tidal habitat. All of these actions result in differences in locations and types of beneficial uses of water and consumption of water that</p>	<p>Please refer to responses to comments 2652-27, 2652-122, 2652-123, 2652-124, 2652-128 and 2652-129, above.</p>

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		does not occur under the Existing Condition, but does under the ELT [Early Long Term] No Action/No Project. By not including these changes in surface water in this list and the EIR/S analysis, DWR and Reclamation are either deficient in their disclosures in including these actions to be implemented prior to 2025 or they are saying that they will continue to be non-compliant with the OCAP BO RPAs until after 2025. Either scenario is unacceptable as DWR and Reclamation are already in violation of the ESA with their lack of compliance with the OCAP BO RPAs.	
2652	166	4.2-28, line 40 - "The increase in exceedances at Jersey Point would be from 0% under Existing Conditions to 3% under No Action Alternative (ELT [Early Long Term]), which represents a very small increase for this objective." This is incorrectly stated and if the EIR/S is saying that there is 0% violation of this water quality objective under existing conditions and a violation 3% of the time under the No Action/Project, this is a very big change and impact indeed. The comparison must be relative to the Existing Condition, not an absolute change. If there was 0% exceedance at the existing condition and the 3% under the no action then that is an infinite relative increase as compared to the existing condition, not a 3% increase. Even in an absolute sense, this is a significant impact. The salinity standard is based on a two week rolling daily average. A violation 3% of the time would mean that the No Action/Project violated a standard 11 days of the year when under existing conditions it did not violate it at all. Any and all comparisons that have made this procedural error in how analytical comparisons are done must be corrected in a revised and recirculated EIR/S document. As an example, 4.2-29 line 24: "increase from 1% to 3%." This is not a 2% increase in a comparison; correctly stated it is a 200% increase over the frequency of exceedance of the standard in the No Action/Project as compared to the Existing Condition.	This sentence is intending to state that under existing conditions there were no exceedances of the Jersey Point EC objectives (0% of time) and that with the No Action Alternative (ELT), the EC objective would be exceeded 3% of the time it is applicable. Similarly, regarding line 24 on page 4.2-29, the frequency of exceedance of the 1,000 umhos/cm objective applicable at the Banks pumping plant would be 1% under existing conditions and 3% under the No Action Alternative (ELT). There has been no error in presentation of information, because all frequency of exceedance is explained as a percentage. If the frequency of exceedance under existing conditions is 0% and the frequency of exceedance under the No Action Alternative (ELT) is 3%, then the increase in frequency of exceedance of the objective with the alternative would be 3%.
2652	167	4.2-30, line 25 - "Because EC [electrical conductivity] is not bioaccumulative, the increases in long-term average EC levels would not directly cause bioaccumulative problems. . . ." This is an incorrect and misleading statement. First, not all chemical components that contribute to EC are sodium salts. There are positively charged ions that contribute to EC and include sodium, calcium, potassium, and magnesium. Negatively charged ions that contribute to EC include chloride, sulfate, carbonate, and bicarbonate, nitrates, and phosphates. Several of these other non-sodium salts do bioaccumulate in humans and wildlife, e.g., nitrates (that is why there are nitrate standards in drinking water quality). Sodium salts are bioaccumulative in plants and will cause yield loss in commercial crops and mortality and changes in native and wild plant types that will occur based on their salt tolerance. These plant community changes from salt accumulation in turn cause changes in wildlife habitat quality and quantity and species distribution for foraging habitat. These inaccuracies in the BDCP EIR/S must be disclosed in a revised and recirculated public draft.	Electrical conductivity (EC) is a measure of the ability of a solution to conduct an electrical current; thus EC in itself cannot bioaccumulate. As noted in the comment and in Section 8.1.3.7, Salinity and Electrical Conductivity, in Chapter 8, Water Quality, EC is a measure of dissolved salts, which can be made up of a number of cations and anions. Other cations and anions that individually have the potential to be affected by implementation of the project alternatives were addressed through the screening analysis in Appendix 8C or individual constituent assessments in Chapter 8. Nitrate, noted in the comment, was addressed in Impact WQ-15 and WQ-16.
2652	168	4.2-32, line 15: ". . . monthly average waterborne concentrations of total and methyl mercury, over the period of record, are very similar to each other among Alternatives." This incorrect statement seems to forget that the first draft document alternatives all included Yolo Bypass inundation flows which mobilize mercury and that the No Action/Project assumes this action is implemented in the ELT [Early Long Term] by another project for the analysis of the new alternatives.	This sentence was revised to state that concentrations under the No Action Alternative (ELT) would be similar to Existing Conditions, based on the modeling results for operations and maintenance of the alternative.
2652	169	4.2-35, line 26: ". . . in the long-term average DOC [dissolved organic carbon] concentrations at the 11 assessment locations for the modeled 16-year period . . ." Eleven assessment	The EIR/EIS used the best available tools that are used by state and federal agencies. The full set of inputs needed for these tools are limited to 82-year (Water Years 1922 – 2003) at the time the analysis for the

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		<p>locations are not nearly enough to characterize the diversity of conditions in the Delta and to characterize areas that would be affected by flow changes and aquatic habitat restorations from the project. Since the data is coming out of [Delta Simulation Model] DSM2 to support this analysis, the comparison must be done at each output node in which DSM2 data is available. There is no justification to not utilize the full data set available and instead rely upon 11 locations that cannot possibly capture the dynamic complexity of the Delta. In order to meet the test of utilizing the best available science, the EIR/S must utilize the full DSM2 data set available at all of its output nodes. 16 years is too short a period to have the entire range of hydrologic conditions occur under which the project could be approved and permitted. A 16-year analytical period means if the project is approved based on this analysis that there are hydrologic conditions under which the project would be allowed to operate under that the project was never analyzed for and impacts and mitigation measures were never identified or implemented. Additionally, there is no justifiable reason to use an arbitrary truncated analytical period that could clearly bias the analytical results. The proportions of water year types in a truncated period are skewed and biased in their proportional representation as compared to the frequency of occurrence in the entire available hydrologic period of record. This difference in proportion of water year type representation biases the quantification of impacts, the impact calls and the mitigations for the project. The EIR/S must utilize the best available science and incorporate the entire hydrologic period of record available for this analysis. Additionally, the analysis (in order to meet the test of best available science) must utilize the full temporal resolution of data available and not rely upon an arbitrarily aggregated and averaged data set that hides the true variation of conditions that occur.</p> <p>In example, on average you can comply with a water quality standard, but have a brief period in which the standards are exceeded by hundreds of percent in which catastrophic impacts would occur in the real world but the averaged data set analysis would tell you that nothing adverse would occur and no violations would occur. Data averaging, especially when it is not required by specific temporally averaged periods as defined by a water quality standard, can be grossly abused to hide significant impacts. The BDCP analysis has purposely aggregated data to periods and moving averages that are not required by water quality standards and is utilizing this tactic to hide project impacts. Unless the EIR/S analysis is not allowed to aggregate these data sets, decision-makers who rely upon this document will never know if they are approving or permitting impacts that were never disclosed. The regulatory agencies utilizing this document must not approve this EIR/S unless it fully discloses all of the available data in a form of analysis (no data aggregation and averaging) that provides assurances that impacts are not occurring that have just been averaged over by an arbitrary data treatment by the BDCP. Once the revised best science analysis has been done, the document must be recirculated to disclose for public comment the more detailed material that was omitted from this current draft EIR/S. This comment applies to all analyses conducted with this unjustifiably truncated analytical period, limited locations of analysis that do not reflect the full range of locations that data is available and/or analysis which utilized aggregated and averaged data to base their assessments when higher temporal resolution data was available.</p>	<p>EIR/EIS was performed. The DSM2 analysis was limited to a 16-year analysis. Section D.12 of the Appendix 5A in the EIR/EIS discloses potential differences between the 16-year versus 82-year DSM2 simulations. The 16-year simulation period used for the DSM2 modeling is drier than the 82-year period; therefore, the water quality impact analyses would be more conservative, and represent conditions similar to those found over the full 82-year period. The CALSIM II assumptions include compliance with Delta water quality over the long-term operations, and do not reflect changes that could occur during emergency situations such as the recent drought when long-term water quality criteria were modified for the drought conditions. See also Master Response 30 regarding modeling.</p>
2652	170	<p>4.2-36, line 28: "The effects of the No Action Alternative (ELT [Early Long Term]) on DOC [dissolved organic carbon] concentrations in surface waters upstream of the Delta, in the Delta, and in the SWP/CVP Export Service Areas relative to Existing Conditions would be similar, or of lower magnitude, than the effects described for the No Action Alternative (LLT [Late Long Term])." This conclusion statement is in direct contradiction to the impact</p>	<p>The level of change identified in this analysis was judged based on the stated significance criteria to not result in substantial degradation of water for beneficial uses. The analysis states that the identified DOC long term changes would not be expected to be of sufficient magnitude to adversely affect MUN beneficial uses, nor would there be any long-term water quality degradation with respect to DOC. See also Chapter 8 and</p>

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		<p>discussion preceding it. "At the Banks pumping plant, the frequency with which DOC concentration would exceed 3 mg/L 36 would increase from 64% under Existing Conditions to 69% under the No Action Alternative (ELT) for the 16-year period (and increase from 57% to 68% during the drought year period) . . ." (4.2-35 line 36) This change is over a 10% increase in the frequency of exceedance of an important drinking water quality requirement for the water supply for over 22 million Californians. This is obviously a significant impact and this glossing over impact calls is a consistent error and deficiency in this EIR/S. A 10% change in conditions, flows or water quality degradation (regardless of water quality exceedance) is often a threshold utilized for water resource project impact criteria for California environmental EIRs and EISs, e.g., Lower Yuba River Accord, Lower American River Accord, Oroville Facilities Relicensing, which these same lead agencies (DWR and Reclamation) have created. This is impact is significant and DWR and Reclamation must adopt the same significance criteria for impacts analysis as they have used for other similar projects and/or provide rationale for why they have departed from their previous standards, practices and conventions. Any degradation of water quality standards related to a beneficial use is a significant impact.</p>	<p>Master Response 14 regarding water quality.</p>
2652	171	<p>Impact WQ-32 - "Mile after mile, and stop after stop, the team found the bright green particles drifting beneath the boat's hull. It was microcrystal, a type of blue-green algae that in high concentrations can produce toxins deadly to fish and people." "In what researchers suspect is another troubling side effect of the state's epic drought, the Delta is exploding with algae particles that in intensified concentrations could pose a substantial threat to the central hub for California's vast water delivery network." "The algae bloom is not limited to the central Delta. Peter Mayle, a fisheries biologist with UC Davis, said his team also found microcystis in the water during a separate research trip several river miles away in the north Delta." ". . . scientists say this particular microcystis bloom is likely caused through a combination of factors, all related to the unusually warm and languid water flows that have accompanied California's drought." "In non-drought years, large algae blooms typically don't have time to form in the Delta, because the particles are flushed out to sea and diluted. This summer, there's far less water flowing into the Delta from upstream reservoirs, creating warm, slow-moving currents that blue-green algae prefer. The low flows also mean nutrients from sewage, fertilizer and other pollutants released from cities, farms and industrial sites upstream could be more concentrated, contributing to the unusual bloom." "In higher concentrations, some types of blue-green algae can produce neurotoxins and cause skin rashes or stomach sickness." "The fact we're seeing increased prevalence of microcystis blooms should be a cause for concern, because those can be directly toxic to the fish that we're trying so desperately to save," said Brian Bergamaschi, a biogeochemist with the U.S. Geological Survey. . . ."Bergamaschi's team will continue to collect such data, in hopes of preventing a bloom recurrence in future years. He is working in concert with NASA scientists, who are using satellite imagery and other technology to identify patterns in the Delta ecosystem that may be contributing to the algae blooms." (<a href="http://www.waterdeeply.org/articles/2015/08/8333/unusual-Delta-algae-eruption-worries-scientists/">http://www.waterdeeply.org/articles/2015/08/8333/unusual-Delta-algae-eruption-worries-scientists/</a>)</p> <p>The reduction in flows through the Delta from the drought precipitate the same kinds of conditions that will occur to this part of the Delta from the north Delta diversions of the BDCP Proposed Project and alternatives and the resulting reduced flows in these Delta reaches. The BDCP has failed to adequately evaluate this project impact and utilize the best available science that is referenced in this article. The BDCP must conduct a full analysis of this impact of flow changes on the Delta and avoid, minimize and mitigate these</p>	<p>Please see Master Response 14 regarding the adequacy of the Microcystis assessment, and regarding new information supporting the Microcystis assessment for Alternatives 4A, 2D, and 5A. Please also refer to Master Response 4, which addresses the adequacy of the range of alternatives evaluated in the EIR/EIS.</p>

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		<p>unquantified and undisclosed BDCP impacts in a revised and recirculated public draft EIR/S. The BDCP can avoid and minimize this impact by utilizing the "west Delta" intake location project alternative described by Craig Wilson in other [Central Delta Water Agency] comments as well as by south Delta intake criteria compliant fish screens that would improve central and south Delta water quality. The BDCP EIR/S cannot claim that this impact and impacts like these are "significant unavoidable" as the western intake configuration would clearly significantly reduce and avoid this current Proposed Project/Action impact.</p>	
2652	172	<p>4.2-45, line 17: "For the reasons described above, the effects of the No Action Alternative (ELT [Early Long Term]) on Microcystis levels, and thus microcystin concentrations, in surface waters upstream of the Delta, within the Delta, and in the SWP/CVP Export Service Areas relative to Existing Conditions would be similar to or less than those described for the No Action Alternative (LLT [Late Long Term]) . . ." This conclusion is in direct contradiction to the preceding impact discussion. "Elevated ambient water temperatures in the Delta, and thus an increase in Microcystis bloom duration and magnitude, are expected under the No Action Alternative (ELT), relative to Existing Conditions. However, the effects of elevated ambient water temperatures on Microcystis at the ELT are expected to be less than would occur at the LLT [Late Long Term]." (4.2-44, line 36)</p> <p>The discussion is well reasoned and written and then, systematically throughout this document, the impact conclusions are changed and are inconsistent with and often in direct contradiction to (as in this example) the supporting discussion. Calling this a systematic bias in this document is an accurate accusation as this misrepresentation of the analysis in the conclusions occurs frequently and throughout this document and the conclusions always are less severe than the analysis discussion indicates. This EIR/S must be revised so that the impact conclusions are consistent with and supported by the impact discussion. The agency decision makers must not accept these conclusions when they are not supported by the preceding impact discussions. The corrected impact conclusions must be recirculated in a revised document for public comment to redress these biased and misleading conclusions.</p>	<p>The assessment of the No Action Alternative for the ELT timeframe relies, in part, on the assessment conducted for the LLT timeframe. The first sentence cited in the comment is simply summarizing the overall impacts for all three regions—upstream of Delta, Delta, and export service areas. The second sentence cited in the comment is focused on the Delta only. The assessment conclusions are based on the information presented prior to the impact conclusion, including cross-references to other supporting information in the EIR/S. See Master Response 4 regarding alternatives development and Master Response 46 regarding recirculation. See also Master Response 14.</p>
2652	173	<p>4.2-51, Delta Smelt - The 2008 FWS OCAP [Operations Criteria and Plan] BiOp [Biological Opinions] RPAs [Reasonable and Prudent Alternatives] also required implementations of habitat restorations, predation management and physical changes to the south Delta intakes in addition to the changed water operations to avoid jeopardy of the species from extinction from the continued operation of the CVP/SWP facilities. DWR and Reclamation have mostly complied with the altered their water operations, but have failed to plan or implement the habitat restorations, predation rate management and intake modifications for increased salvage survival rates that are also required by the OCAP BiOp RPAs. DWR and Reclamation remain in violation of the ESA as defined by the required RPAs in the OCAP BiOp. Since the BiOp concluded that these restoration actions were required to avoid jeopardy and these actions have not been implemented it is logical to conclude from the BiOp analysis that the species may go extinct instead of the mere 5% population loss the BDCP EIR/S concludes. One of these analyses is wrong and since the OCAP BO carries the force of law, we must conclude that it is the BDCP EIR/S analysis that is wrong and it must be corrected to be consistent with the OCAP BO analysis and conclusions. FWS is a lead agency on the BDCP EIR/S and it must not allow the analysis approach, methodology and conclusions to be so inconsistent with their OCAP BO analysis on this same species for this same time period and assumptions.</p>	<p>Please see Chapter 11 and Master Response 17 for information regarding impacts on Delta Smelt.</p> <p>The Proposed Project would enable DWR to construct and operate new conveyance facilities that improve conditions for endangered and threatened aquatic species in the Delta while at the same time improving water supply reliability, consistent with California law (see, e.g., Cal. Wat. Code, § 85001[c]). Implementing the conveyance facilities would help resolve many of the concerns with the current south Delta conveyance system, and would help reduce threats to endangered and threatened species in the Delta, including entrainment at the south Delta export facilities. For instance, implementing a dual conveyance system would align water operations, and their location, to better reflect natural seasonal flow patterns by creating new water diversions in the north Delta equipped with State-of-the-art fish screens, thus reducing reliance on south Delta exports during times of the year when listed aquatic species are present and most vulnerable. For more information on mitigation measures to minimize contraction and operational-related impacts to fish species, including Delta and longfin smelt, please see Chapter 11, RDEIR/SDEIS.</p>

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2652	174	4.2.14: The recreation section of the BDCP EIR/S addresses changes in reservoir operations impacts on reservoir fisheries, but fisheries and aquatic resources do not address these impacts. The BDCP EIR/S must be revised so that the geographic scope of impacts is logical and consistent. Recreation is correct in acknowledging the operational change impact on the reservoir and the fisheries section is incomplete and deficient for ignoring these impacts. In previously submitted comments we [Central Delta Water Agency] identified rationale for the impacts of operational changes in the reservoirs rippling upstream to the first impassable fish barriers which also must be addressed in a revised EIR/S document.	Please refer to Impact AQUA-217 for each alternative for an analysis of reservoir fish species.
2652	175	4.2-69, line 24: ". . . Habitat restoration projects, would not result in a substantial increase in the public's risk of exposure to vector-borne diseases because of the location of existing vector habitat, restoration design, and consultation with MVCDs [Mosquito Vector Control Districts]. This is because habitat restoration would be located in areas that are already potential sources of vectors, such as existing channels or agricultural areas." This is a fundamentally flawed argument to dismiss the significant increase in public health risk of mosquito vectors of disease on the human and animal population. First, the amount of mosquito population and human health risk is proportional to the amount of habitat for the mosquitoes. If you double the amount of habitat, you double the amount of risk in that geographic area and to some lesser degree as you move farther away from those locations (depending on prevailing wind directions). Saying that there is no increased risk because there is already some habitat in the area is a false and misleading assertion by the BDCP that defies any application of common sense. The BDCP has provided no habitat designs so we cannot just take their word for how the habitat restorations will somehow manage to not" create additional mosquito habitat. The BDCP must disclose these designs and subject them to critical analysis rather than just providing unsupported assurances. Lastly, just consulting with the MVCD does not do anything to actually mitigate impacts of increased mosquito habitat risks to human and animal health. The BDCP must disclose some specific plan of action with the MVCD that would result in a mitigation and this statement by the EIR/S must not be credited with any avoidance, minimization or compensatory mitigation credit without these specific plans and disclosures. This is a significant impact and the BDCP must disclose it and address it in a meaningful and functional way.	<p>The EIR/EIS analyses for Alternative 4A address potential mosquito vector issues related to proposed restoration, enhancement and protection actions. Text for Alternative 4A explains in the following manner why these impacts are not considered adverse.</p> <p>"This potential effect would not be adverse because the total acreage of aquatic habitat restored under Alternative 4A would be substantially less than under Alternative 4, habitat creation would generally not be located near densely populated areas, and management plans under Environmental Commitment 11, Natural Communities Enhancement and Management, would be performed in consultation with the appropriate MVCDs to ensure MMPs are implemented to reduce mosquito breeding. Additionally, BMPs from the guidelines outlined in Appendix 3B, Environmental Commitments, AMMs, and CMs, would be incorporated into Alternative 4A and executed to maintain proper water circulation and flooding during appropriate times of the year (e.g., fall) to prevent stagnant water and habitat for mosquitoes. This consultation would occur when specific restoration and enhancement projects and locations are identified."</p> <p>Therefore, for the purposes of potential public health effects, this impact is considered not adverse and less than significant with the commitment to implement mosquito management plans in coordination with MVCDs.</p>
2652	176	4.3.1, line 7: "Model simulation results for Alternative 4A Early Long-term (ELT), which are represented by the range of Alternative 4 H3 (ELT) and Alternative 4 H4 (ELT), are summarized in Tables B.1-1 through B.1-3 in Appendix B of the RDEIR/SDEIS. Model simulation results for Alternative 4A at Late Long term (LLT) which are similar to the range of Alternative 4 H3 (LLT) and Alternative 4 H4 . . ." The lead, responsible and cooperating agencies must not accept an analysis on the Proposed Project that is only based on the interpolation of other modeled scenarios. Best available science requires that the alternatives that have any differences in assumptions or operations must be modeled and analyzed separately. Further, CEQA requires all alternatives to be analyzed at the same level of detail and level of effort and using other scenario results to analyze another that was not modeled at all clearly fails this requirement.	The modeling approach for the RDEIR/SDEIS used existing model runs to simulate the flow and hydrodynamic effects that could result from Alternative 4A. Since the time of the RDEIR/SDEIS, additional modeling runs for Alternative 4A that represent this potential alternative has been completed. These model runs are compared with the previous model runs to confirm that none of the impact analyses have changed significantly from the approach presented in the RDEIR/SDEIS. See also Master Response 30 regarding modeling.
2652	177	4.3.1-5, line 3: "Under Alternative 4A, average annual total south-of-Delta CVP deliveries as compared to No Action Alternative, would increase by about 5%." So the simple math on the cost/benefit of the project is that the incremental 5% of water to the south-of-Delta deliveries must be worth more than the cost of the construction of the cross-Delta conveyance facilities. [These] cannot possibly be economically feasible costs for agricultural beneficial uses even though that is what the BDCP claims this water would be used for. This	Chapter 30 was revised to evaluate the likely effects of increased CVP/SWP exports in each hydrologic region. Please refer to the Statewide Economic Impact Report and revisions for information about the cost benefit analysis.

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		cost of water can only be justified by M&I [municipal and industrial] applications so this project is not just partially contributing to Growth Inducement, but in fact this additional water delivery is 100% Growth Inducing.	
2652	178	4.1.3-9, line 17: "Under Alternative 4A as compared to the No Action Alternative, the frequency of years in which cross-Delta transfers would occur would decrease." This statement defies common sense, is misleading to the reader and is directly in contradiction to the discussion that follows it. In the next sentence, the EIR/S says that the north Delta diversions increase transfer capacity and increase the period in which transfers could occur and then states that operational constraints on transfers from reverse flows are lessened by the north Delta intakes so that increases transfer capacity as well. The BDCP EIR/S fails to analyze and mitigate the impacts of this increased water transfer capacity and its growth-inducing effects.	<p>See Master Response 43 (Water Transfers), section A. An increase in project water deliveries is expected to reduce the demand for cross-Delta transfers, while the availability of the project facilities would increase the available transfer capacity by removing certain constraints on cross-Delta transfers.</p> <p>The NEPA effects analysis involves comparing the future conditions with the project to the future conditions without the project. In Chapter 5 and Appendix 5D, the estimated increase in project deliveries is forecast to reduce the demand for cross-Delta water transfers.</p> <p>The CEQA analysis involves comparing the future conditions with the project to the existing conditions without the project. In Chapter 5 and Appendix 5D, the estimated decrease in project deliveries due to climate change, sea level rise, and increased consumptive use upstream of the Delta is forecast to increase the demand for cross-Delta water transfers.</p>
2652	179	4.3.1-9, line 34: CEQA Conclusion - The EIR/S omitted the CEQA impact calls that are from the description, "significantly adverse." The EIR/S also failed to identify measures to avoid, minimize and mitigate these significant impacts. This material omission and deficiency in the EIR/S must be rectified and submitted for an additional round of public review and comment.	Changes in water deliveries would result in changes to environmental resources, including groundwater (Chapter 7), water quality (Chapter 8), fish and aquatic resources (Chapter 11), agricultural resources (Chapter 14), recreational resources (Chapter 15), and socioeconomics (Chapter 16). Therefore, the changes in environmental resources which require consideration of significance criteria related to changes in SWP and CVP water supplies are presented in other chapters of the EIR/EIS. See also Master Response 46 regarding recirculation.
2652	180	4.3.2, line 4: "Alternative 4A water conveyance operations would be similar to the range of possible operations for the spring Delta outflow requirements that would occur under Alternative 4 H3 and Alternative 4 H4." See [other Central Delta Water Agency] comments regarding how inappropriate it is for the analysis to rely upon interpretation of other alternative scenario modeling, which are not the same as Alt 4A, to use in determining the Proposed Project impacts.	Please refer to RDEIR/SDEIR Appendix B, Supplemental Modeling for new alternatives. This screening level analysis provided adequate information for the impact analyses and modeling analyses were updated as presented in Final EIR/EIS Appendix 5A.
2652	181	38.2.6 - Erosions and sediment control are integral to managing and minimizing the impacts of the BDCP project. The level of detail in the description of the plan to develop a plan is not even programmatic in detail. It is impossible to determine the amount of impact the project will have with no project-level detail in such a critical plan that will be integral to avoiding and minimizing impacts. The SWRCB, USACE [U.S. Army Corps of Engineers], U.S. EPA, AQCB [Air Quality Control Board], and other agencies must not accept this lack of a plan and lack of ability to quantify impacts, or the level of mitigation that would be achieved. Given this lack of substance on this critical topic, this document does not merit consideration for issuance of construction-related permits for the BDCP.	<p>Chapter 10 of the EIR/EIS addresses the following topics related to erosion and sediment control, as well as mitigation measures where warranted:</p> <p>Impact SOILS-1: Accelerated Erosion Caused by Vegetation Removal and Other Soil Disturbances as a Result of Constructing the Proposed Water Conveyance Facilities</p> <p>Impact SOILS-2: Loss of Topsoil from Excavation, Overcovering, and Inundation as a Result of Constructing the Proposed Water Conveyance Facilities</p> <p>Mitigation Measure SOILS-2b: Salvage, Stockpile, and Replace Topsoil and Prepare a Topsoil Storage and Handling Plan</p> <p>Impact SOILS-3: Property Loss, Personal Injury, or Death from Instability, Failure, and Damage from Construction on or in Soils Subject to Subsidence as a Result of Constructing the Proposed Water Conveyance Facilities</p> <p>Impact SOILS-4: Risk to Life and Property as a Result of Constructing the Proposed Water Conveyance Facilities in Areas of Expansive, Corrosive, and Compressible Soils</p> <p>Impact SOILS-5: Accelerated Bank Erosion from Increased Channel Flow Rates as a Result of Operations</p>

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			<p>Impact SOILS-6: Accelerated Erosion Caused by Clearing, Grubbing, Grading, and Other Disturbances Associated with Implementation of Proposed Conservation Measures CM2– CM11, CM18 and CM19</p> <p>Impact SOILS-7: Loss of Topsoil from Excavation, Overcovering, and Inundation Associated with Restoration Activities as a Result of Implementing the Proposed Conservation Measures CM2–CM11</p> <p>Impact SOILS-8: Property Loss, Personal Injury, or Death from Instability, Failure, and Damage from Construction on Soils Subject to Subsidence as a Result of Implementing the Proposed Conservation Measures CM2–CM11</p> <p>Impact SOILS-9: Risk to Life and Property from Construction in Areas of Expansive, Corrosive, and Compressible Soils as a Result of Implementing the Proposed Conservation Measures CM2–CM11.</p>
2652	182	<p>38.2.21 - The BDCP proposal to do subsequent NEPA and CEQA documents for integral parts of the project is clearly piecemealing the impacts of the project and is in violation of NEPA and CEQA. Alternatives 2A, 4A and 5 are not described or disclosed at a project level of detail and will require additional NEPA and CEQA analysis and disclosure prior to approval and construction. A project-level project description and impacts analysis must be provided by the BDCP prior to the regulatory agencies consideration of issuance of any construction-related permits to the BDCP project. Many essential elements are missing from the BDCP project description that make it less than project-level.</p> <p>Additional plans and definitions are required for at least, but not limited to, the following: volumetrics of tunnel muck coming out of each tunnel portal; statistically valid sampling representation of chemical and physical composition of the tunnel muck materials for each portal; the disposal method, location and management of tunnel muck for each tunnel portal; the make, model, hours of operation, period of operation of all equipment used at each work site; specific runoff and erosion control actions for each site; volume of cement at each batch plant and each construction site; volumetrics and engineering scale site plan for each tunnel muck disposal site; schedule and plan for distribution of tunnel muck during the construction period for each disposal site; specific engineering plans and volumes of tunnel muck reuse; site specific locations and contingency containment vessels for fuel depots; barge routes, schedule, and equipment (including loaded and unloaded draft); north Delta intake operations plan and model (the intakes are the only operational feature in the entire CVP/SWP system that does not have an operations model) that reflect daily inter-tidal operations; the specific length and footprint of each intake facility and screen (currently they are only described as widely varying ranges); calculated volumes of sediment removed at north Delta intakes from water diversions and the disposal and handling plans of that material; correct spatial representations of the project footprint; specific storm water plans for each construction, staging, parking lot and disposal site; plans for restoration of disrupted Reclamation District drainage and water supply facilities; etc.</p>	<p>As a general discussion related to the environmental review process associated with major multi-year phased projects, the environmental review must be conducted at the level of specificity available at the time of the analysis. Both CEQA and NEPA encourage that the environmental review process is to be conducted at the earliest stage of development to allow for effective planning. Thus, this approach was used in the DEIR/S where components of the project to be implemented at later stages were evaluated at programmatic levels with the understanding that at future stages, additional environmental review would be necessary.</p> <p>State and Federal agencies developed the modified proposed project (Alternative 4A/California WaterFix) in response to public and agency input. Alternative 4 remains a viable alternative. Restoration actions that are independent of Proposed Action, such as EcoRestore, are evaluated as part of the cumulative impact analysis. The lead agencies agree that non-conveyance conservation measures including EcoRestore, will be subject to additional environmental analysis prior to implementation. For more information regarding the lead agencies' analysis of the project as a whole, please see Master Response 8.</p> <p>The environmental review process is required to address the order of magnitude and intensity of an effect. If those effects are substantially adverse, mitigation measures are incorporated to minimize those effects. The mitigation measures provide performance standards to minimize the effects. This approach is consistent with CEQA and NEPA, as both encourage the review process to be conducted as early in the process as feasible.</p> <p>Appendix 3A of the Draft EIR/EIS and Sections 3 and 4 in the RDEIR/DSEIS discuss in detail the various alternatives considered. For more information regarding evaluation of aspects of the project at a programmatic level, please see Master Response 2.</p>
2652	183	<p>38.3.1 - The project identifies that it results in significant and unavoidable degradation of water quality in the Delta as a result of the project. The affected and harmed water rights holders in the Delta have senior water rights to the CVP/SWP. The BDCP has no right to degrade the water quality and beneficial uses of water of these senior water rights holders. The fact is that the BDCP water quality impacts are avoidable by operating the CVP/SWP in a manner that does not violate water quality standards. This may result in less water deliveries, but that is what is required in order to avoid significantly impacting the senior water rights of the other Delta water diverters. The BDCP must implement reduced and reconfigured operations so that it avoids this impact as it is not an unavoidable impact as</p>	<p>All of the water quality effects of the California WaterFix (Alternative 4A) are identified as not adverse/less than significant with proposed mitigation, except methylmercury formation related to the tidal wetland restoration which is considered significant and unavoidable because of the uncertainty of implementation of EC 12. The California WaterFix will be operated according to existing Decision 1641 and BiOp requirements as indicated in the EIR/EIS. Legal users of water in the Delta would not be affected by construction or operation of the conveyance facilities as has been presented in the SWRCB's change in point of diversion petition hearings. Please also refer to Master Response 32 regarding water rights.</p>

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		<p>the BDCP characterizes it to be. The financial limit of facilities and infrastructure to make senior water rights holders harmed by the BDCP project must not be left to the discretion of the BDCP. The SWRCB and EPA must not issue permits to the BDCP unless all harm done to the Delta senior water rights holders by the BDCP is remedied before they should even consider issuing construction- and operations-related permits to the BDCP.</p>	
2652	184	<p>38.3.3.1, 38.3.3.2, and 38.3.3.3 - Since the BDCP already knows from the EIR/S impact assessment where and when water quality impacts would affect Delta diverters, the BDCP must define, to a project level of detail, the specific mitigations proposed for each of these impacts. Some of the proposed mitigations are potentially more effective than others so knowing which proposed mitigation applies to which harmed water rights holder and what geographic area and sensitive resources it contains are integral to determining the sufficiency of the proposed mitigations. Several of these mitigations potentially have substantial impacts of their own, e.g., moving water intakes or interties. The BDCP has only identified potential approaches to minimizing the water quality impacts of the project, but they have provided absolutely no assurances of any action or provided any supporting analysis or disclosure of the potential effectiveness of these BDCP proposed remedies. If water treatment facilities are required for a project to mitigate water quality impacts, then water quality permits may not be issued.</p>	<p>Please refer to Master Response 2, related to project and program level analyses. Please see Master Response 22, Mitigation. Also see Master Response 14, Water Quality. Mitigation Measure WQ-11 is provided for Alternative 4A effects on electrical conductivity concentrations. Please refer to Chapter 8, Water Quality for detail on water quality impacts and mitigation measures.</p>
2652	185	<p>38.4.3 - This section misses the entire point of a storm water pollution prevention plan. There are no elements of a stormwater prevention plan included in this section. The section simply declares that project effects on vernal pools and some avian species would be reduced to less than significant levels without providing any information regarding how storm water pollution would be addressed. This section fails to address impacts to the other terrestrial species and aquatic species entirely. This section does not address the quantity and quality of storm water runoff and pump-off from construction sites, facilities, staging areas, vehicle and equipment parking lots, tunnel muck disposal sites or other project features which will result in storm water discharge. The stormwater pollution prevention plan must include: an analysis of the types and risks of transport of all types of contaminants (e.g., sediment load, pesticides, solvents, fuel, oil, etc.); an analysis of the volumes of runoff; the treatment and mitigations proposed for each type of contaminant for each site (settling ponds, water treatment facilities, contingency fuel storage impoundments, etc.) prior to discharge to waters of the U.S.; an analysis of the water quality resulting after the water treatment prior to discharge; and, an analysis of the sensitivity of the receptors (aquatic and terrestrial habitat suitability impacts, plant and animal species effects, compliance with discharge water quality requirements, impacts to beneficial uses of water, etc.).</p> <p>This EIR/S claims to be a project-level analysis but does not provide any project-level information about how water quality requirements for stormwater discharges would be attained. The above described analyses must be completed at a project-level of detail, including the exact stormwater facilities to be constructed and the resulting water quality anticipated for the discharges to waters of the U.S. Once this project-level analysis is completed the new material must be recirculated in a public draft or a subsequent environmental document must be prepared prior to sufficient information being available to warrant consideration by the issuing agencies any construction- or operations-related stormwater discharge permits or Clean Water Act certifications. In a related comment, the BDCP EIR/S does not address the water quality and water treatment requirements of their discharges to waters of the US from the BDCP proposed dewatering activities. All of the</p>	<p>Please see Appendix 3B, Environmental Commitments, Section 3B.2.5, for a detailed discussion of stormwater pollution prevention plan requirements under the Construction General Permit (Order 2010-0014-DWQ or any more recent version). SWPPPs for the project would be site-specific.</p>

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		above comments also apply to this omitted analysis and disclosure of the BDCP EIR/S.	
2652	186	<p>3B.4.4 - This section misses the entire point of an erosion and sediment control plan and there is no reference as to where one could be found in the document. There are no elements of an erosion and sediment control plan included in this section. The section simply declares that project effects on some avian species would be reduced to less than significant levels without providing any information regarding how erosion and sediment would be addressed. This section also failed to address how these mitigations would apply to other terrestrial species, e.g., Giant Garter Snake (GGS) or listed fish species. Sediment deposited by the project into the waters of the U.S. can adversely modify designated critical habitat for listed fish species. This adverse modification from sediment delivery to waters of the U.S. can affect habitat quality from contaminants (e.g., nutrient loading, lead, mercury, petroleum products, pesticides, turbidity, dissolved organic carbon, total dissolved solids, etc.) These BDCP erosion (delivered by stormwater and wind erosion) degradations of water quality and therefore habitat suitability can profoundly affect these listed fish species by affecting their habitat quality, food base composition and availability, sexual maturation processes, spawning and rearing habitat, fecundity, predation and survival rates, etc. The effects of these are different of each listed fish species, so these mitigations must be evaluated separately for each one. Erosion can also cover up and alter the quality of GGS foraging, rearing and home habitat. These omissions and lack of material disclosure must be corrected in a recirculated revised public draft EIR/S. All of these comments also apply to the preceding and following mitigation measures in this appendix (including, but not limited to 3B.4.3, 3B.4.5, 3B.4.6, 3B.4. 7, 3B.4.8, etc.)</p>	<p>Preparation of an erosion and sediment control plan at the current phase of project planning (i.e., the environmental impact assessment phase) would be premature. Many erosion and sediment control plans (and related stormwater pollution prevention plans [SWPPPs]) are expected to be prepared for the project. Such plans are usually prepared at the final design phase, shortly before construction activities commence, when the specific types and areas of soil disturbance are known. Please refer to the discussion under SOILS-1 in Chapter 10.</p> <p>Furthermore, Section 3B.4 is an analysis of the effectiveness of the AMMs and not the actual AMMs themselves. Page 3B-77 of Appendix 3B in Appendix A of the RDEIR/SDEIS states that the full text of the AMMs can be found in Appendix 3.C of the Draft BDCP.</p> <p>The effects of sediment on fish and wildlife are discussed in the respective sections in Sections 4.3.7 and 4.3.8 of the RDEIR/SDEIS, respectively. The intent of Section 3B.4 is to provide an analysis of the overall effectiveness of these measures and not necessarily an in depth analysis of how they would avoid and minimize effects on individual species.</p> <p>Appendix 3B for the final EIR/EIS will include the full text of the AMMs preceding the analysis of effectiveness.</p>
2652	187	<p>38-111, line 34 - There is a significant problem with the proposed mitigation for riparian brush rabbit and Giant Garter Snake (GGS). The BDCP proposes to do habitat restoration after the destruction of the habitat from construction and tunnel muck disposal. The displaced animals will have no habitat to seek refuge in if the mitigation habitat is not implemented prior to the destruction of their habitat by the BDCP. Since the BDCP is converting nearly all the suitable habitat for these species in the Glanville Tract area, these members of these listed species will be predated and extirpated from this whole area.</p> <p>Even if habitat is restored later as the BDCP currently proposes, there may not be any members of these species left to move into and occupy this new habitat. Additionally, the linear connect-the-dots geographic distribution of the existing habitat that will be destroyed by the BDCP project is an important corridor and mechanism to facilitate species movement and connectivity with other genetic population groups. The habitat islands that the BDCP will destroy are in roughly a dozen-mile-long north/south corridor with habitat refuge every couple miles. This current geographic distribution of habitat and refuge is essential to the maintenance of these species. The San Joaquin County [SJC] HCP plans GGS habitat at the south end of the habitat corridor that the BDCP would destroy. The loss of the habitat corridor from the BDCP project significantly diminishes the conservation and species restoration benefits of the planned SJC HCP. The habitat mitigations the BDCP must implement must replace this habitat connectivity component as well or even more importantly than the absolute quantity and quality of habitat lost due to the project. There are distinct population groups documented for the GGS that the loss of this corridor will be a significant loss that threatens not only the population group directly affected by the habitat loss, but also indirectly effects the adjacent population groups which loose the contribution of the genetic integrity of the directly affected population. The BDCP must restore the habitat before it is destroyed and the geographic distribution of the habitat</p>	<p>Glanville Tract is not within the range of the riparian brush rabbit. Glanville Tract is 25 miles north of modeled riparian brush rabbit habitat and 33 miles north of known populations. The Conservation Measures under the BDCP alternatives, the Environmental Commitments under Alternatives 4A, 2D, and 5A, and the avoidance and minimization measures are designed to ensure that species persist and that all impacts to giant garter snake and riparian brush rabbit are avoided or minimized. Connectivity was considered in the conservation planning for the BDCP alternatives and the USFWS and CDFW will have to approve areas selected for protection and restoration prior to impacts from the construction of the water conveyance facilities under all alternatives. See Chapter 12 and Master Response 17 regarding terrestrial biological resources.</p>

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		mitigations must be located and distributed such that habitat and genetic conductivity are maintained in at least its current level of function and value to the species. USFWS and CDFW must not approve incidental take permits for the BDCP unless all aspects of the habitat loss are fully addressed as described above.	
2652	188	Section 3B.4.9-36.4.21 - Some selected special status species are addressed (incompletely) in these sections, but most other listed species are not addressed, e.g., GGS [giant garter snake] and listed fish species. This material omission of information and disclosure must be addressed in a revised and recirculated public draft EIR/S.	<p>The proposed project is going to mitigate for impacts and improve habitat for fish and wildlife listed in Section 4.3.7 and 4.3.8 of the RDEIR/SDEIS. The RDEIR/SDEIS addresses effects on special-status species, including non-listed species. Impacts that are going to potentially occur during the implementation timeline are fully disclosed with their associated mitigation measures to decrease the severity of said impacts to covered species. Please see Appendix 1A, Evaluation of Species Considered for Coverage of the BDCP for additional information on screening criteria of fish and wildlife species that were selected for the other 15 conveyance alternatives.</p> <p>Chapters 11 and 12 of the EIR/EIS include in-depth, comprehensive analyses of potential effects on all endangered fish and wildlife known or expected to occur in the BDCP Plan Area.</p> <p>For more information on the compliance with the Endangered Species Act, please see Master Response 29.</p>
2652	189	3B.4.22 - This section identifies where the plan is discussed. All other sections in this appendix which address a plan must also reference where those plans can be found in the document. If those plans do exist then the BDCP has effectively hidden them in 40,000+ pages of document and has not appropriately disclosed them by making them accessible to the reader with appropriate section references. This section addresses, incompletely, a few of the avian species affected by selenium, but it fails to address any of the other special status and listed species that are affected by selenium, e.g., smelt, salmon, sturgeon, salamanders, GGS [giant garter snake], etc. Even this cursory treatment of the effectiveness of a selenium management program stands in stark contrast to the complete absence of any attempt by the BDCP to address or disclose other project driven contaminant effects on species which also require management plans. The omitted and not disclosed materials in this case would be similar, but more complete discussions of, the effectiveness of a mercury methylation management plan and similar plans for lead, DDT, dissolved oxygen, salinity, bromide, chloride, etc. These material omissions and deficiencies of the BDCP EIR/S must be addressed with new and previously undisclosed information in a revised and recirculated public draft EIR/S. New material information may not just be presented in the final EIR/S. Legally, according to both NEPA and CEQA, material new information must be presented in a revised public draft which allows the public to comment on this new information. This comment applies to all material omitted information and revised material new information from this public draft which triggers the need for recirculation of this document as a public draft.	<p>The text of the referenced avoidance and minimization measures is now included in Appendix 3B and has been moved from the previous Appendix 3K, which is now deleted. These AMM descriptions fully describe the action and are included in the California WaterFix Mitigation Monitoring and Reporting Program (MMR). Please refer to the resource chapters in the EIR/EIS for discussion of the impacts on the resource topics identified in this comment. Where effects are determined to be adverse/significant mitigation measures, environmental commitments and avoidance and minimization measures (as applicable to a specific resources impact) are provided to reduce the potential impacts. Please refer to Chapter 8 Water Quality and its supporting Appendices 8A through 8O for specific changes to water quality constituents.</p>
2652	190	3B.5 - The BDCP must clearly distinguish between actions that mitigate for the impacts of the project and those which result in a net increase in the amount of habitat and species protection. The way the BDCP has presented them here, they have not differentiated these two aspects of mitigation vs. contribution to species protection and recovery. The quantities of these CMs for alternatives 2A, 4A and 5 appear to be inadequate in magnitude to even mitigate for the species impacts from the construction of the BDCP, let alone mitigate the ongoing SWP/CVP facilities and operational impacts or additionally above and beyond these levels to contribute to species protection as this EIR/S section represents these CMs [conservation measures] to be. The BDCP is double counting the habitat created as both compensatory mitigation and as "protection and restoration." The resource agencies	<p>The EIR/EIS checked the proposed Environmental Commitments under Alternatives 2D, 4A, and 5A against typical mitigation ratios used in CEQA and NEPA documents to determine whether their effects were sufficiently being offset. The BDCP and EIR/EIS do not "double count" habitat created as also habitat protected for mitigation purposes. Restored/enhanced habitat will be protected, but the Plan and EIR/EIS do not also then attempt to count this protection as additional mitigation.</p> <p>The water conveyance facilities are presented at sufficient level of detail to conduct a project level analysis for an EIR/EIS. The restoration projects under Alternatives 2D, 4A, and 5A would be subject to separate environmental review and permitting at a project level, which would include obtaining approvals and/or permits from USFWS, CDFW, and USACE. There is no requirement that this level of detail be available for</p>

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		<p>evaluating the merits of the BDCP for potential Incidental Take Permits must not allow this attempted double counting by the BDCP. The agencies must insist on a separate accounting for each category, mitigation for the BDCP construction and operations impacts, mitigation for the ongoing impacts of the CVP/SWP facilities and operations (not adequately addressed in this EIR/S to cover these actions), and contribution to species conservation, protection and restoration. Only once these categories have been separated can any judgment be made as to the final impact of the project on the species and resources and determine if, after mitigation, significant impacts have been mitigated to less than significant.</p> <p>None of these post-mitigation impact calls can be relied upon until the categories have been separated as described and there are project-level designs and analysis for these conservation/mitigation measures. The nature and magnitude of impacts of these conservation/mitigation measures cannot be evaluated without project-level designs and analysis. As an example, for intertidal habitat conservation/mitigation, the fisheries species impacts depend on where the levee breaks are located. If they are located on the upstream side of the restoration area, then Delta smelt may be benefited to the detriment of rearing salmonids while if the levee breaks are on the downstream side of the inundated area then rearing salmonids may benefit with detrimental effects to smelt species. Water depth and water turnover design characteristics (determined again by levee break locations) of habitat restorations will determine the rate of methylation of mercury. Until these project-specific design elements and others are defined it is impossible to say which species are affected (adversely or beneficially) so it is impossible for the BDCP to claim benefit and impact mitigations from them let alone contribution to species protection. The agencies utilizing this document to support decision making must insist that the required level of detail is provided by the BDCP to support analysis so that the real impacts and mitigation values and contributions to species protection can be quantified prior to consideration of issuance of any permits based on this document. The analysis of the species relationships to these conservation measures is also incomplete as it only addresses avian and other species and does not address GGS [giant garter snake] or listed fisheries species.</p>	<p>the EIR/EIS because the exact locations of where these activities will happen is not yet known.</p> <p>Chapter 11 of the EIR/EIS discusses the effects on listed fish species and Chapter 12 addresses effects on giant garter snake in Impacts BIO-49 through BIO-51. Please refer to the Final EIR/EIS.</p> <p>These analyses consider the potential effects of all Conservation Measures/Environmental Commitments. See also Master Response 5 regarding planning efforts, Master Response 9 regarding cumulative impacts analysis, Master Response 17 regarding biological resources, and Master Response 22 regarding mitigation and environmental commitments.</p>
2652	191	<p>3C-1, line 16: "Rather, the EIR/EIS may later be supplemented through additional environmental documentation. . ." The BDCP should add to their list of permits that will require supplemental environmental documentation a 401 certification, a 303, Caltrans right-of-way, a 408, wastewater discharge permit, Section 10 Rivers and Harbors Act, and many others. This BDCP statement of the need for additional environmental documentation refers to just conveyance construction-related environmental analysis and supporting permitting requirements. This putting off of impacts analysis until a later separate document is classic piecemealing of impacts and is in violation of both NEPA and CEQA.</p>	<p>For more information regarding permits please see Master Response 45. For more information regarding analysis of the project as a whole, please see Master Response 8.</p>
2652	192	<p>[One] piecemealing violation is that all the other non-conveyance conservation measures are not developed to or analyzed at a project-level of detail either and definitely will be subject to additional environmental analysis prior to potential implementation. These non-conveyance conservation measures are integral to completing the project purpose and need and project objectives. The BDCP must complete all of the components of the project that it desires permits based upon prior to the issuance of permits that rely upon the project-level impacts and benefits of the project. As an example, the BDCP desires Incidental Take Permits to cover construction-related activities for the conveyance (which is not analyzed at a full project-level of detail) based on compensatory mitigations of other conservation measures which are not fully enough developed to characterize and evaluate at a programmatic let alone a project-level of detail. These types of conservation measures</p>	<p>As a general discussion related to the environmental review process associated with major multi-year phased projects, the environmental review must be conducted at the level of specificity available at the time of the analysis. Both CEQA and NEPA encourage that the environmental review process is to be conducted at the earliest stage of development to allow for effective planning. Thus, this approach was used in the DEIR/S where components of the project to be implemented at later stages were evaluated at programmatic levels with the understanding that at future stages, additional environmental review would be necessary.</p> <p>State and Federal agencies developed the modified proposed project (Alternative 4A/California WaterFix) in response to public and agency input. Alternative 4A reflects the State's proposal to separate the conveyance facility and other non-conveyance habitat restoration measures into two separate efforts: California WaterFix and California EcoRestore. The Proposed Action includes habitat restoration as necessary to</p>

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		and mitigations must be developed to a project level of detail or the impacts and benefits to the species cannot be characterized or quantified. Since the BDCP is relying upon these conservation measures to justify the ITPs for the construction and these conservation measures cannot be truly evaluated without a project-level of detail, the project may not be issued permits until the conservation measures are developed and analyzed at a project-level of detail.	mitigate significant environmental effects and satisfy applicable ESA and CESA standards. The new alternatives, including Alternative 4A, meet the modified project objectives and purpose and need. For more information regarding purpose and need of the proposed project please see Master Response 3.  Restoration actions that are independent of Proposed Action, such as EcoRestore, are evaluated as part of the cumulative impact analysis. The lead agencies agree that non-conveyance conservation measures including EcoRestore, will be subject to additional environmental analysis prior to implementation. See also Master Response 9 regarding cumulative impacts analysis and Master Response 8 regarding the lead agencies' analysis of the project as a whole and Chapter 31 for additional information and checklist for further environmental review.
2652	193	<p>Table 3C-1 - North Delta Intakes: Most of these descriptions are programmatic or less than programmatic in level of detail provided and disclosed. It is not possible to determine from this EIR/S description which intakes go with which alternative. Most descriptions of size are ranges which are represented as averages, e.g., "intake footprints average from 90-160 acres." It is not possible for a range to be an average. In order for the environmental impacts of the analysis to cover the magnitude of the impacts of the construction footprint, the analysis must make the conservative assumption and analyze the largest footprint of disturbance that the project design anticipates. If the analysis assumes a smaller size, e.g., 90 acres, than the actual size of area of the construction footprint, e.g., 160 acres, then a large portion of the impacts from the difference in size of the construction footprint go unquantified, undisclosed and unmitigated. The BDCP EIR/S has clearly failed to take this more conservative and more full disclosure strategy and therefore permits must not be issued for any (and each) area of disturbance that is larger than what was analyzed, disclosed and mitigated in this EIR/S document. If the analysis is for 160 acres of footprint and the construction footprint turns out to be only 90 acres then the permit would cover the impacts. If the analysis and mitigation is for 90 acres, then anything over 90 acres is not covered by the document and must not be covered by any permits issued based upon this document.</p> <p>This same shortfall of the current analysis of the impacts of the BDCP construction also apply to duration of activities. The table says intake construction would take between 3.5 to 4.5 years and last 5 to 7 years and seems to assume some constant level of equipment activity. The air quality impact analysis must take the conservative approach and assume peak equipment activities for the longer duration schedule in order for the environmental analysis not to come up short on quantifying, disclosing and mitigating project impacts and that it does not, during anytime during that period, exceed air quality attainment requirements.</p>	<p>Table 3C-1 in Appendix 3C provides construction assumptions used in the EIR/EIS analyses for the action alternatives. All of the assumptions are presented for various project components and these assumptions have been captured in the GIS footprint and used to estimate the magnitude of impacts for each alternative. Where uncertainty about a footprint magnitude or duration for construction exists the more conservative estimate was used in the impact analysis to ensure all of the effects were adequately addressed. Please see Master Response 2 for a discussion or project-level and program-level analyses. For more information regarding permitting please see Master Response 45.</p> <p>Please refer to the Final EIR/EIS, Chapter 22, Appendix A (Air Quality and Greenhouse Gasses) and Section 4.3.18 evaluates criteria pollutant emissions associated with the construction of each alternative. The proposed project would be implemented in a manner intended to minimize the potential for adverse health effects, such as those mentioned. There are numerous mitigation measures intended to reduce air quality effects to as low a level as possible. As described in Section 22.2.1.1, the United States Environmental Protection Agency (EPA) has established de minimis thresholds to define levels at which pollutants would not impede a region's ability to achieve air pollution goals outlined in their State Implementation Plan (SIP). Construction of the proposed project would exceed the applicable de minimis threshold for nitrogen oxides (NOX). The project will fully offset construction-related NOX emissions to net zero through implementation of Mitigation Measures identified in the EIR/EIS. With respect to human health impacts, the Air Quality and Greenhouse Gasses Chapters and Sections identified above include a health risk assessment (HRA) evaluating health impacts to all sensitive receptors, which include residences, schools, hospitals, places of worship, daycare facilities, parks, or any other facilities where people are susceptible to air pollutants. In addition, as potential impacts to human health are construction-related, construction emissions and exposure of sensitive receptors to construction-related emissions will cease once construction activities have ended.</p>
2652	194	Table 3C-1 - Concrete Intake Structures: Most of the descriptions here have deficiencies in that ranges are insufficient to support a project-level analysis and construction-related permitting, e.g., intakes may be from "700 to 2300 feet long." That is an over 300% range which does not qualify as even a programmatic level of description. There is no disclosure of the volume of concrete to be used or related hauling equipment, trips or distances. The current draft EIR/S project description is even less project-level than the previous draft EIR/S as the schedule component to this activity has been omitted in the revised draft. Unless the EIR/S analysis has always assumed the largest end of the range (it has not) and the construction actually occurs under this footprint and construction duration range, this environmental document has failed to quantify, disclose and mitigate impacts and therefore	Please refer to Chapter 3, Description of Alternatives for descriptions of specific components of the action alternatives, which includes a comprehensive description of all of the action alternatives. Appendix 3C-1 provides construction assumptions used to aid in completing specific impact analyses. Only the detail needed for the impact analyses has been included in these tables. The analyses in the EIR/EIS include the correct footprints for each alternative. Please refer to the resource analysis for discussion of specific resource analyses including the methodology for the impact assessment. Please also see Master Response 2 for a discussion of the project versus program level analysis in the EIR/EIS and why this is adequate and allowed under CEQA and NEPA.

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		cannot be suitable as the basis of justification for issuance of construction-related permits.	
2652	195	Table 3C-1 - Clearing and Grubbing: The description fails to give a timetable, quantify magnitude or maximum levels of effort to be covered by the permit and to identify the type of equipment to be used. None of the information in this tables refers to other sections in which related or supporting detail description or analysis could be found. If this and other project-level information is elsewhere in the document, the BDCP has effectively hidden it in their 40,000 plus pages and therefore, with the lack of references between relevant information, may as well as not been disclosed at all. If this missing and related information does exist in other parts of this document, then the BDCP must add those references and referrals between sections and recirculate the document so the document is more accessible to the reader and decision maker. If this information is not in some other section of the document, a revised EIR/S must be recirculated with this material new information.	Please refer to response to comment 2652-194, above.
2652	196	Table 3C-1 - Construct Detour Roads: How much dewatering will be involved with this activity and where will it be discharged? These activities have undisclosed impacts that are necessary for waste discharge permitting. Without this information these waste water discharge permits must not be issued based on this document. 971,500 cubic yards of compactable material is a very precise number. The BDCP does not show any of the assumptions or design detail that it must have taken to produce such a precise estimate. The BDCP must disclose this information and make it available for analysis or it is not utilizing the best available information to conduct the EIR/S analysis. Project-level site plans must be analyzed to make sure that minimum turn radius bends have been designed for the detours to accommodate the semi-truck traffic along these roads. Signage plans for warning drivers of changed conditions and maximum advisable speeds must also be defined. Caltrans must not issue any state highway road modification permits unless sufficient project-level information is provided by the BDCP environmental document.	Please refer to response to comment 2652-194, above.
2652	197	Table 3C-1 - Perimeter Berm; Levee Widening: Most of these descriptions are programmatic or less level of detail and cover ranges of 200-300%. Some metrics are extremely precise and in direct contradiction to the ranges of assumptions that the disclosed range of dimensions would have the calculations based upon. As an example, the length of the levee modified would "range from 800'-2500'" and the levee, toe-to-toe would "range from 180 to 360.'" The combination of the lower ranges of both of these as compared to the upper range of these construction fill volumes varies by a factor of 6, but the amount of fill estimated for each intake ranges from 1,450,000 cy [cubic yards] to 1,490,000 cy. This is a range of less than 3%. Either the BDCP has a much greater level of detail to support this narrow range of volumetric fill calculation which they have not disclosed (contrary to NEPA and CEQA requirements) or the volumetrics disclosed are based on a false calculation that implies much greater precision than the project level of detail supports. Either way there is a material omission of disclosure or error represented here which must be corrected in a revised and recirculated public draft EIR/S.	Please refer to response to comment 2652-194, above. Please note that the assumptions included in Table 3C-1 are based on conceptual level engineering completed. As described on page 3-1 of Appendix 3C, Appendix A, not all construction assumptions found in this EIR/EIS are intended to include a level of analysis sufficient to support all permit decisions under Section 404 of the Clean Water Act and Sections 10 and 14 of the Rivers and Harbors Act of 1899 for all actions associated with the proposed project. Rather, the EIR/EIS may later be supplemented through additional environmental documentation, if necessary.
2652	198	Table 3C-1 - Construct and Remove Cofferdam Sheetpile: These descriptions are programmatic and lack specific detail to support fish rescue plans and to estimate the amount of take that would occur from this construction. Even the programmatic description of the rate of installation of the sheetpiles has been removed from the document. Without the rate of pile driving, a sound abatement and mitigation plan for fish protection cannot be developed either. Pile driving sounds in water can be lethal to fish and the BDCP makes no reference here as to in-water sound abatement plans. The BDCP plan to have sheetpile at	Please refer to responses to comments 2652-194 and 2652-197, above.

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		<p>"approximately the top of the existing levee crown" shows a reckless disregard of the BOCF for flood safety and the protection of the people, wildlife and businesses that are subject to flooding and are at an increased risk of flooding from the BOCF construction and facilities. The cofferdam sheetpile must extend above the existing levee crown and must take into account wind fetch that the sheetpile is more vulnerable to than the existing levees. Emergency equipment and materials (large rock) must be stockpiled at each in water and levee modification construction location as a contingency to reduce the increased flood risk due to BOCF construction. Emergency contingency plans, such as this one, also are not identified, evaluated or disclosed as avoidance, minimization and mitigation actions. These are material deficiencies of the current EIR/S and must be recirculated in a revised draft that addresses these material issues.</p>	
2652	199	<p>Table 3C-1 - Intake Excavation: Most of these descriptions are programmatic and cover ranges of up to 950% but some are extremely precise and are in direct contradiction to the ranges of assumptions that the disclosed range of dimensions would have the calculations based upon. As an example, the area of the excavation would range from 0.2 to 1.9 acres and the depth would range from 30- 35'. The combination of the lower ranges of both of these as compared to the upper range of these fills varies by a factor of 11, but the volume of excavated material provided by the BDCP is a specific number rather than a range that would be supported by the project description provided in the BDCP EIR/S. Either the BDCP has a much greater level of detail to support this narrow range of volumetric fill calculation which they have not disclosed (contrary to NEPA and CEQA requirements) or the volumetrics disclosed are based on a false calculation that implies much greater precision than the available level of project detail could support. Either way there is a material omission of disclosure or error represented here which must be corrected in a revised and recirculated public draft EIR/S.</p> <p>This section describes dredging upstream and downstream and adjacent to the intake screens, but does not describe any strengthening of the levee toe in these areas that would be required to ensure continued levee integrity (protection from slumping and failure) that would be compromised by the channel dredging. Further, dredging caused changes to channel velocities and impacts to the vector of flows are not discussed in terms of how they affect fish screen performance (sweeping and approach velocities) as well as impacts to levee erosion. This type of channel modification requires 2D and 3D modeling of water velocities that the dredging plan clearly has not included and must be included in order to potentially qualify for a Section 10 Rivers and Harbors Act dredging and in-water construction permits. These permits require a project level of detail. "Prepare a written description of the project that covers the project features and activities and proposed construction methods in detail. The project description typically contains information about the location of the activities, what the project features and activities will consist of, how the activities will be conducted, what equipment and materials will be needed for the activities, how access to the site will be achieved, and the schedule of activities. For the Section 10 permit, other specific information USACE [U.S. Army Corps of Engineers] will require includes information regarding the types of structures to be constructed, the materials the structures will be built from, and the structures' effects on navigability of the waterway."</p> <p>(<a href="http://www.sacriver.org/aboutwatershed/permitguide/permitttype/section-10-permit">http://www.sacriver.org/aboutwatershed/permitguide/permitttype/section-10-permit</a>). The BDCP does not have any of this specificity in the project descriptions for each of the intakes or definitions of the area and extensiveness of the dredging activities for each. This information must be included in the EIR/S in a recirculated public draft for this new material</p>	Please refer to responses to comments 2652-194 and 2652-197, above.

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		disclosure.	
2652	200	Table 3C-1 - Excavation Cell and Retrieval Pit: There is a very high degree of precision represented here with these volumetric estimates. Give the significant digits of these estimates that they must be accurate to less than the nearest 500 and 50 cubic yards respectively. Again, either the BDCP document is representing a far more detailed analysis than they actually can do with the available information or there is more detailed information available that is not being disclosed. Either way, the reader is being misled and misinformed or permitting based on this information must not be issued until the BDCP has reconciled these discrepancies in a revised and recirculated public draft.	Please refer to response to comment 2652-194, above.
2652	201	Table 3C-1 - Foundation Pile Driving: Some of the information that previously described the project in a greater level of detail (still not project-level) has been removed in the revised draft EIR/S so the content is even more programmatic in level of description and analysis than the first public draft EIR/S. This is not a project level of project description or analysis. The document says the number and location of piles may change. That is fine if the impacts assumptions cover the upper end of what the BDCP actually does. If it does not then there will be impacts that are not identified, evaluated, disclosed or mitigated in the EIR/S and construction-related permits must not be issued for this deficient level of detail and completeness of analysis and disclosure contained in this EIR/S.	A new Table 3C-2 was developed for the Final EIR/EIS that shows all the assumptions used to evaluate pile driving impacts in a greater level of detail than was in the Draft EIR/EIS. Please refer to response to comment 2652-194, above.
2652	202	Table 3C-1 - Dewatering: DWR and Reclamation surface water rights do not include diversion of water for use in dust control operations. Discharges back to the river must be treated to a level that comply with discharge permits which are typically drinking water quality standards that will require more water treatment than just a settling pond for suspended solids. Water sprayed on the levee top for dust control can drain back into the river along with contaminants from the exposed soil and from work site contamination, e.g., hydraulic fluid from earthmoving equipment. These impacts to water quality from construction activities were not identified, characterized, quantified, avoided, minimized, mitigated or disclosed in the EIR/S. For this to be a project level disclosure, an upper end estimate of the volume of dewatering must be identified along with the timing, lift required and make and model of pumps to be used. Without these specifics, power, water quality, discharge volumes, soils/geology and air quality impacts to name a few, cannot be determined. The EIR/S does not disclose what volume and characteristic of materials collected at the settling ponds will be or how they will be disposed of.	<p>As described in the EIR/EIS, during construction, slurry walls would be constructed around the construction site at the intakes, tunnel shafts, and forebays to reduce the effect of dewatering wells. No dewatering would be required along the tunnel alignment. The effects on groundwater at locations with slurry wall installations would not result in significant effects as compared to Existing Conditions. It is possible that some impacts may result in significant effects depending upon specific information that would be collected during the design and construction phase. Mitigation measures have been identified in the EIR/EIS to reduce the impacts to less than significant as compared to Existing Conditions. Mitigation Measures AG-1, GW-1, GW-5, and WQ-11 will reduce the severity of significant impacts. The amount of water to be removed within the slurry walls at the construction sites would be determined following detailed geotechnical and groundwater well analyses during the design phase.</p> <p>As described under Impact SW-4 in Chapter 6, Surface Water, Impact WQ-31 in Chapter 8, Water Quality, and Appendix 3B in the EIR/EIS, groundwater removed during construction would be treated as necessary at the dewatering locations. The water may contain elevated levels of sediment, organic carbon, and other constituents. As described in Chapter 8 and Appendix 3B, permits would be obtained from the State Water Resources Control Board that would include Best Management Practices (BMPs) for the discharge of dewatering flows to surface water bodies in accordance with State Water Resources Control Board's NPDES Stormwater General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ/NPDES Permit No. CAS000002). This General Construction NPDES Permit requires the preparation and implementation of Stormwater Pollution Prevention Plans that identify pollution prevention BMPs that would be used to avoid and minimize construction-related contaminant discharges due to direct discharges to surface water bodies or use of the water for dust control. These permits would be completed during design and prior to construction, and would include a monitoring plan, numerical limits for turbidity, pH, and other specific constituents identified during the design phase for the surface water bodies, adjacent drains, and groundwater.</p> <p>The volume of sediment that is projected to be removed at the intakes is presented in Chapter 3, Section 3.6.1.1 of the EIR/EIS.</p>

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2652	203	<p>Table 3C-1 - Pipe/Conduit Construction: The 15,876 cy [cubic yards] of tunnel material indicates an accuracy of plus or minus 1 cy which is either not supported by the variable width of the levee estimated in previous sections or is based on much higher precision project plan designs than have been disclosed by the BDCP. The size and length of the pipe has been deleted from the EIR/S which would be information withheld from the public that are necessary to even start a calculation of the pipeline muck discharge volumes. Permits must not be issued based on these estimates until these inconsistencies and failures to disclose have been corrected and issued in a revised public draft EIR/S.</p>	<p>Under Alternatives 4 and 4A (the proposed project), the revised estimates of Reusable Tunnel Material (RTM) can be found in the recirculated documents in Table 3C-1 "Construction Assumptions for Water Conveyance Facilities" starting on page 3C-40 of Appendix 3C in Appendix A, which details the revised estimates for RTM storage acreage, volume, and potential reuses. Mapbook figures M3-4 and M14-7 show potential RTM storage locations. Final locations for storage of RTM would be selected based on guidelines presented in Appendix 3B Environmental Commitments, section 3B.2.18 "Disposal and Reuse of Spoils, Reusable Tunnel Material (RTM), and Dredged Material" starting on page 3B-50, also in Appendix A. Please also see Master Response 12 which provides additional information on Reusable Tunnel Material.</p>
2652	204	<p>Table 3C-1 - Clean and Demobilize: The BDCP has deleted the schedule that was previously a three-month period and now claims that this work can be accomplished in 5 days. Cleaning equipment can mobilize contaminants like machine oil, but the BDCP does not describe any plan to capture and treat these contaminants. The BDCP also fails to describe sanitation plans for equipment as they move from construction site to construction site. Land-based equipment can transport invasive weed seeds and aquatic invasive species in mud stuck to the equipment if not sanitized properly. Water-based equipment can transport invasive aquatic species, e.g., quaga mussel, zebra clam, egeria, hydrilla, Chinese mitten crabs, etc., from site to site without proper sanitation which the BDCP fails to describe or define. The BDCP must fully adopt the Bureau of Reclamation's Technical Memorandum No. 86-68220-07-05, "Inspection and Cleaning Manual for Equipment and Vehicles to Prevent the Spread of Invasive Species." (<a href="https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=48043&amp;inline">https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=48043&amp;inline</a>)</p> <p>Visual inspection alone as the BDCP describes will not prevent or avoid transport and infestation of invasive species. Early life stage mussel colonization is not readily visible. Early mussel colonization on surfaces is detected by touch from a sandpaper texture change caused by the mussels that visual inspections as proposed by the BDCP would miss. Reclamation is a lead agency on the BDCP project and it must have the BDCP adhere to its best adopted standards for practices and procedures regarding the control of spread of invasive species. The Reclamation inspection protocols require specialized and dedicated facilities at each construction site. This includes high water temperature pressure washing with facilities that provide access to vehicle under carriages and catchment and treatment of wash water. The BDCP has failed to describe any of these facilities or critical operations and has failed to identify, evaluate, quantify, avoid, minimize, mitigate or disclose the impacts associated with these activities and facilities. A revised BDCP EIR/S that includes this information must be prepared and recirculated for public comment.</p>	<p>The timing for Cleanup/Demobilize in Appendix 3C has always been 5 days per intake site. The previous version of Appendix 3C had activity timing, which showed that the five days could occur within a two- to four-month range. Because the construction timeline had been updated in Chapter 22, and was redundant in 3C, it was removed from 3C.</p> <p>Several measures are described in Appendix 3B, Environmental Commitments, that would entail vehicle and construction equipment washing and avoidance measures to prevent the spread of invasive species. CMs/Environmental Commitments 9, 10, and 11 would implement conservation measures to avoid or minimize effects on special-status species, prevent the introduction and spread of invasive species, enhance natural communities, and result in avoiding and minimizing effects on common wildlife and plants. Additionally, 3B.2.8, 3B.2.17, AMM3, AMM4, AMM6, and AMM7 are just some of the other measures included in this appendix.</p>
2652	205	<p>Table 3C-1 - Fish Screens: The document identifies smelt approach velocity and mesh size requirements, but fails to identify the sweeping velocity requirement which is needed to limit the duration of exposure of fish to the screens. Sweeping velocity is required as if there is not any, the fish would be condemned to swim away from the screens in perpetuity (or at least for hours) which their swimming performance duration will not support. If sweeping velocity were not required, the existing south Delta facilities could have criteria screens on them without any other modifications required. The document identifies that the screens will keep some sediment out of the intake facilities. That may be true due to the approach velocities, but that means that sediment will accumulate in front of the screens which will require periodic dredging. The BDCP has failed to identify the need for subsequent dredging to maintain the screens or at what frequency, volume, method and seasonal timing this highly fisheries disruptive activity would occur. This must be part of the analysis to support the Section 10 Rivers and Harbors Act dredging permit. Since the BDCP has not disclosed or</p>	<p>Approach velocity is discussed in Sections 3.3.1.2, 3.6.11 and 3.6.1.2 of Chapter 3, Alternatives. Please refer to those sections for more details. For modeling purposes, it was assumed that sweeping velocity of at least 0.4 fps would be required (i.e., 2 times the approach velocity of 0.2 fps, per Delta Smelt requirements).</p>

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		evaluated this maintenance activity, it must not be included in any permits which are issued based on the analysis and disclosure in this document.	
2652	206	Table 3C-1 - Pumping Plants: The document deleted the schedule information so there is even less information to support a project-level analysis than the first public draft. This document is deficient and it is impossible to do air quality impact analysis without a full list of the make and model and usage hours of the equipment used for each construction component and construction site. If the project is to secure the air quality attainment certification it must provide this information in either a revised public draft or a subsequent environmental document which will also have to include a public draft review.	Please refer to the Final EIR/EIS, Appendix 22A, Air Quality Analysis Assumptions, provides a detailed description of the models, equations, and methods used to quantify emissions. Appendix 22B, Air Quality Assumptions, provides an exhaustive list of the analysis assumptions.
2652	207	Table 3C-1 - Pumping Plant Excavation and Backfill: The first draft EIR/S had this at 442,470 cy [cubic yards] and the revised draft has it at 117,120 cy. That is an impressive reduction in volume, but it is unsupported by any information disclosed regarding the project description. These estimates also convey that they are accurate to the nearest 10 cy so they are either quite precise or the reader is being misled by a false level of accuracy being represented in the document. The changes in the document now would also lead the reader to conclude that none of the fill material is imported as this language has been deleted. If not all of the fill material is from on-site then the BDCP has misrepresented the nature and impacts of the project as imported materials have transportation and air quality impacts which are not identified, evaluated, minimized, mitigated or disclosed in this EIR/S.	Construction assumptions included in Table 3C-1 are summarized from the BDCP/CWF Concept Engineering Reports for Alternatives 4 and 4A by DWR. The amount of fill material needed for the modified pipeline alternative alignment (Alts 4, 4A, 2D and 5A) is reduced because of the consolidation of pumping plants for these alternatives to Clifton Court Forebay. Please refer to Chapter 3, Description of Alternatives, for presentation of construction of various elements of the project. Effects related to construction hauling truck trips and hauling were estimated based on a schedule and estimate of construction equipment provided by DWR engineers. Potential transportation effects from construction equipment are presented in Chapter 19. Potential effects related to air quality and noise are presented in Chapters 22, and 23.  For more information regarding construction assumptions please see Appendix 3C of the FEIR/EIS.
2652	208	Table 3C-1 - General Construction Work Areas: The size description is strictly programmatic and does not provide specific location and size of area of disturbance for analysis, mitigation and disclosure. The BDCP must provide a specific acreage area and location of disturbance for each work location before it can meet the test of project level analysis that could warrant consideration for construction-related permitting. In addition, the types, locations and timing of activities on the work site, along with the specific make, model, timing and duration of operation (among other information) would be required to meet test of specificity and disclosure to warrant consideration of project-level and construction-related permits.	Please refer to response to comment 2652-194, above.  Please refer to Master Response 2 (Project-Level versus Program-Level) for additional information.
2652	209	Table 3C-3 - Excavation: The volumes for the revised Alternative 4 contain a great deal more specificity and detail than the other alternatives. This level of detail still falls far short of a project-level description as the locations and haul distances of each type of earthwork along with equipment and hours of utilization are not specified. The same is also true of the level of detail regarding power supply and grid connections, haul and access road, and barge related sections with regard to the disparity of Alternative 4 level of detail vs. other project alternatives. NEPA requires an equal level of detail in describing and evaluating each alternative which was not provided for any of the other alternatives so the BDCP EIR/S is in violation of NEPA for providing an unequal level of information, detail, effort and analysis between alternatives.	Please refer to response to comment 2652-194, above. Please see Master Response 4 for a discussion of why the tunnel option was optimized. Please refer to the EIR/EIS resource analyses which provide equivalent level of detail analyses for all of the action alternatives. Please also refer to Master Response 2, regarding project versus program level analyses.
2652	210	Appendix 3C - This is a global comment for this entire appendix and the rest of the EIR/S document. Any statement that is prefaced with "may," "could," "might," or "likely" [is] too conditional a terminology to be acceptable as a project-level description, as it leaves the method or action in question as to how it would actually be done which in turn could significantly alter the level of significance of impacts of the project, the mitigations required and change the determination of whether the project warrants issuance of permits. An example of this is in Table 3C-3 - Rock Pile Protection, "Rock protection would likely be	Appendix 3C of the Final EIR/EIS presents construction assumptions for the water conveyance facilities that are used in development of impact analyses. These assumptions are necessary because of the level of engineering detail currently available for water conveyance facilities. In the example provided, the relevant impact analyses assumed rock protection would be placed from a barge with a clamshell. If changes to these assumptions occur as part of more detailed engineering for the preferred alternative, DWR would need to determine whether the changes would warrant additional analyses or environmental review. No changes to the construction assumptions have been made because they are sufficiently described in

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		placed from a barge with a clamshell." The document fails to specify the make, model, time and duration of usage that would be required of a barge clamshell, but it reserves the option that it may be a completely other mode of rock protection delivery that would have different impacts and require different mitigations and may or may not be permissible. All of this conditional use of language must be replaced with definite specificity before this document could be considered project-level and potentially warrant consideration of construction-related permits.	Appendix 3C.
2652	211	Appendix 3C - This is a global comment for this entire appendix and the rest of the EIR/S document. Any values provided that represent a range of over a few percent are indicative of project description that fails to meet the test of being a project-level description. As an example, in Table 3C-3- Rock Pile Protection, "bank protection would be from 100' to 2,200 ft." and "channel reshaping would be from 2.5 to 7 acres". In the first case the range is 2100% and in the second a little less than 300%. Neither of these ranges are meaningful or useful for a project level analysis that would merit consideration of a construction-related permit. Until the BDCP can produce a document that has a range of estimates that are just a few percent and the analysis takes the conservative approach of analyzing and disclosing the worst case scenario utilizing that refined range of assumptions, the BDCP does not merit consideration of issuance of any construction-related permits.	These assumptions in Appendix 3C are used in various ways in the resource analyses. Quoting ranges of assumptions does not imply that impact analyses are only programmatic. The commenter is directed to the specific resources analyses for the methodology and impact analyses results which are described at a project level for Alternative 4A. Please also refer to response to comment 2652-194, above.
2652	212	Table 3C-37. Access and Construction Work Areas - Alternative 4 - The BDCP provides a much greater level of detail on Alternative 4 than for any of the other project alternatives, which is in violation of NEPA which requires equal level of treatment for all alternatives. Even this additional level of information for Alternative 4 falls far short of being a project-level description which would warrant consideration of construction-related permits. As an example of information missing that would preclude issuance of permits, the section does not identify the location, size, drainage area or peak storm events for sizing road culverts. This is just one of many deficiencies and omissions that make this current EIR/S a programmatic document.	Nothing about the lead agencies' efforts to optimize Alternative 4 violates CEQA or NEPA. On the contrary, the lead agencies' efforts to improve that alternative demonstrate the effectiveness of the CEQA and NEPA process, in that through public and agency input, the CEQA Preferred Alternative was modified to lessen its environmental impacts. The fact that Alternative 4 includes optimized features does not render the range of alternatives evaluated in the EIR/EIS inadequate. Rather, the inclusion of the optimized features in Alternative 4 broadens the range of alternatives evaluated in the EIR/EIS by introducing components that may not have otherwise been included in the EIR/EIS, thereby furthering CEQA's and NEPA's informational goals.  For additional detail about why optimization of Alternative 4 does not violate NEPA, please see Master Response 4. For more on how this document meets a project and program level of detail, please see Master Response 2.
2652	213	Table 3C-37 - Concrete Plants - The concrete batch plants are reported by the BDCP EIR/S to range from 1 to 40 acres. Descriptions with a 4000% variance are programmatic, not project level. None of the descriptions of the project that are described in ranges qualify as a project level description. This comment applies to all of the alternatives' project descriptions.	Appendix 3C gives the full variance of size for the batch plants. However, Chapter 3, Description of Alternatives, gives a more detailed and specific list of the number, location and size of the batch plants for each alternative in Section 3.3.1.
2652	214	Table 3C-37 - Thirty pages of construction schedule information [have] been removed from the EIR/S. Construction schedule information is required in order to do project-level air quality attainment and traffic impact studies. Without this (and other) project level information, the BDCP does not meet the test of a project-level document and must not be awarded any construction-related permits. With the removal of this and other information from the original public draft EIR/S, the revised EIR/S is even more programmatic in level of detail than the original EIR/S was. The BDCP must produce a revised project-level project description and analysis for a recirculated public draft review and comment prior to project approval or initiation of project construction.	Please refer to the Final EIR/EIS, Chapter 22, Air Quality and the associated appendices for descriptions of the methodology and construction schedule assumptions used for this and other analyses.
2652	215	3D-32 - Water Supply Contract Extension Program - The BDCP incorrectly assumes that the	The contract renewal program is considered an on-going program that is appropriate to assume would

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		<p>water supply contract renewal will be approved in the same quantities as the existing contracts. This does not meet the criteria of reasonably foreseeable for inclusion in the No Action/No Project or Cumulative as there are no guarantees in the current contract that the contracts will be renewed. The CEQA document for the analysis of the impacts of the proposed contract renewals has not yet even been initiated, let alone approved as would be required to be classified as reasonably foreseeable. It is much more likely that, if the contracts are renewed at all, the contract amounts would be lower than the current amounts as the lower delivery amounts would make the contracts consistent with the requirements of the 2009 Delta Reform Act and of the 2014 California Water Action Plan to reduce reliance on Delta water supplies. The BDCP must remove this assumption of this project being included in the No Action/No Project definition. If the BDCP wants to include continued operations assumptions beyond 2035 when the current contracts expire, the BDCP must adopt a range of scenarios to analyze from contract renewals with some delivery reduction (to be consistent with current plans and policies such as the Delta Reform Act) to scenarios where they are not renewed at all.</p>	<p>continue under the No Action Alternatives. No additional range of analyses are required for this No Action Alternative assumption.</p>
2652	216	<p>31.5 - AES-1c: Develop a Reusable Tunnel Material Management Plan - This is not a mitigation; this is required for the project to be described at a project-level. Without the plan for how the tunnel muck areas will be managed, the types and severity of impacts from the tunnel muck areas cannot be evaluated. The tunnel muck disposal areas make up the largest part of the construction footprint area of disturbance so it make no sense at all that the environmental document would be silent and provide no information at all on how these areas would be managed to avoid, minimize and mitigate their impacts. These tunnel muck areas are integral and required for construction of the project so the additional needed information would not be made available in some subsequent environmental analysis such as the BDCP proposes to do for the habitat restoration actions. The regulatory agencies relying upon this EIR/S document must not accept this lack of even programmatic level of detail on such a large and integral component of the proposed project that would have to be approved based on the information disclosed in this document in order to be constructed.</p>	<p>Project plans have not advanced yet to the point where engineering and design work are complete. Environmental review is typically conducted based on less complete plans, because complete engineering and design work is not required for impact assessment, and most project proponents are reluctant to invest in complete engineering and design work before they know that their projects have received the entitlements and permits needed to proceed towards construction. Please see Master Response 2 for further information regarding the level of detail provided in the EIR/EIS Analysis.</p>
2652	217	<p>Appendix 8C - Table SA-10. Step 5 - The table indicates that there are not "adequate" dissolved oxygen (DO) modeling tools available. This is not true as there are a number of modeling tools which can readily be applied to the Delta. DSM2-QUAL is an existing modeling tool which has been developed and tested for use in dissolved oxygen assessments in the Delta. "The ability of the model to simulate the dissolved oxygen sag on a reach of the San Joaquin River near Stockton was recently demonstrated. DSM2-Qual was capable of capturing diurnal variations of important constituents such as dissolved oxygen, phytoplankton, temperature, and nutrients under the unsteady conditions of the estuary. Variations were realistic, although lack of a large temporal variation in observed data was somewhat of an impediment to testing the model's full capacity to predict field conditions. Tests of the model's capability to distinguish between alternatives in terms of incremental changes in water quality were encouraging (Rajbhandari 1995). The model has great potential for use as a practical tool for analysis of the impacts of water management alternatives."</p> <p>(<a href="http://baydeltaoffice.water.ca.gov/modeling/Deltamodeling/Delta/reports/annrpt/1998/c hpt3.html">http://baydeltaoffice.water.ca.gov/modeling/Deltamodeling/Delta/reports/annrpt/1998/c hpt3.html</a>)</p> <p>Take note that the quote on the utility of this model for analyzing DO in the Delta is from</p>	<p>Please see Master Response 14 regarding use of a qualitative assessment approach for dissolved oxygen and other constituents assessed qualitatively in the Delta.</p>

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		DWR's Bay Delta Office. The conclusion that this tool was useful in distinguishing incremental changes from alternatives was documented in 1995, which was 20 years ago, so the best available science must be well advanced from this fully functional level from 20 years ago. For the EIR/S, the model would not be used to predict field conditions, but in a comparative mode from the baseline environmental conditions as compared to alternatives to quantify the relative change due to the alternatives. This tool, even back in 1995, was well capable of being useful for the BDCP impact assessment. DWM2-QUAL was used for other water quality impact assessments such as for Chlorides, see BDCP EIR/S Appendix 8G and Electrical Conductivity, see BDCP EIR/S Appendix 8H. The table is also incorrect in identifying that modeling is not necessary for the impact analysis. Modeling is an essential tool for evaluating such an important water quality constituent which is an essential criteria for suitable fish habitat in an area that many listed species share as designated critical habitat. The proposed project and alternatives all directly and significantly affect the water circulation patterns in the Delta, the rate of turnover and freshening of water in the Delta and in the accumulation and loading of nutrients that affect DO. The problem of DO is dynamic, complex and is unevenly distributed geographically which makes spatial modeling of DO an essential component of any DO analysis which strives to utilize the best available science as NEPA and CEQA analysis requires. A qualitative and such shallow subjectively applied treatment of such an important object impact is unacceptable as best available science when spatial analytical tools for the analysis are readily available, proven and generally accepted and applied for similar projects.	
2652	218	Appendix 8H, Table EC 4 - The BDCP applied an unequal level of analysis for Alternative 4 as sensitivity analyses were conducted in an attempt to explain away water quality standard violations. This same level of effort to understand the nature and sensitivity of water quality standard exceedances was not applied to any of the other alternatives. This unequal level of effort and detail is a demonstration of the bias of the BDCP toward a favored alternative outcome and the unequal treatment of alternatives is in violation of NEPA requirements.	Additional detailed analyses via the sensitivity analyses presented in Appendix 8H, Attachment 1 were provided to better understand whether the results seen in the modeling were truly associated with the project alternative, or due to modeling artifacts. (Please refer to the Final EIR/EIS). All alternatives were analyzed in a comparable level of detail in that all alternatives were the subject of detailed modeling and detailed discussions on a constituent-by-constituent basis.
2652	219	Appendix 8H, Table EC-15A - There is a dramatic increase in the proportion of time of water quality exceedances of Alternative 4 for the western Delta, interior Delta, southern Delta and San Joaquin River areas during the agricultural irrigation season as compared to the Existing Conditions and No Action alternatives. Note that the Export Area enjoys a considerable increase in water quality and reduction of water quality standard exceedances. This export water quality improvement is at the direct expense of the degradation of water quality in the rest of the Delta. The BDCP claims that this impact is significant, but unavoidable. This is not true. The impact is avoidable if the SWP and CVP bypass enough water in the Sacramento River to push X2 farther out, is avoidable if they use only the south Delta intakes and is avoidable if they do not do the BDCP project. The CVP/SWP are junior water rights holders compared to the more senior water rights holders which would be most of the diverters in the Delta. The BDCP is effectively stealing these water rights from these more senior water rights holders by making the water supply unusable or significantly impaired for the designated beneficial uses of agricultural irrigation and municipal water supplies. The beneficiaries of the BDCP are clearly the SWP/CVP export recipients and this is directly at the expense of the senior water rights holders in the Delta which is an illegal usurping of water rights.	The table referenced in this comment is related only to the comparison of salinity conditions under Alternative 4 H1 as compared to the Existing Conditions and No Action Alternative. It should be noted that Alternative 4 H1 assumes lower Delta outflow criteria than under Alternatives 4 H3 and 4 H4. As described in the Final EIR/EIS, the proposed project would include Delta outflow criteria between the criteria included in Alternatives 4 H3 and 4 H4.  The EIR/EIS includes a range of alternatives with different operational criteria for each alternative that result in different salinity conditions. For example, Alternative 8 would result in salinity conditions that would be similar or less saline than under Existing Conditions and No Action Alternative.
2652	220	Appendix 8H, Table LT 4 SCN H1- H4 - None of the other alternatives were provided this sensitivity analysis so these analyses and tables demonstrate an unequal level of effort between the alternatives which is in violation of NEPA requirements. The sensitivity analysis	Regarding EC impacts under Alternative 4, the Draft EIR/S and RDEIR/SDEIS acknowledged significant impacts to EC under this alternative and provided Mitigation Measure WQ-11 to lessen those impacts. However, the mechanisms that contribute to significant impacts to EC in the Delta are different from the

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		shows that at Emmaton under the Existing Conditions, the sensitivity analysis results in, on average, an 8-14% increase in the number of exceedances of this primary water quality compliance point. It is clear from this that, regardless of the tweaks put into the operational assumptions and modeling, Alternative 4 results in a significant degradation of the compliance with EC [electrical conductivity] water quality standards across the entire Delta. This degradation of EC conditions also provides insights on the impacts of the proposed project operations on dissolved oxygen and toxic algal blooms which also respond in frequency and magnitude of occurrence based on the rate of freshening of water in the Delta. Since the BDCP has not done any quantitative analytical modeling for these impacts, the EC analysis should stand as proxy in representing the nature and magnitude of impacts that can be anticipated on these resources from the Proposed Project operations. As such, these would be significant impacts of the project that must be mitigated and that are currently unaddressed in the BDCP EIR/S.	mechanisms that affect dissolved oxygen concentrations and toxic algal blooms in the Delta. EC of Delta waters is dictated by the various proportions of source waters (e.g., Sacramento River, San Joaquin River, Bay water) at various Delta locations. As explained in Impact WQ-9 in Chapter 8, Water Quality, dissolved oxygen is predominantly affected by physical processes unrelated to source water fractions, including atmospheric reaeration, temperature, and photosynthesis/respiration. Microcystis, addressed in Impacts WQ-32 and WQ-33 in Chapter 8, would be predominantly affected by residence time and temperature changes. Thus, the EC analysis cannot stand in as proxy for dissolved oxygen and algal bloom assessments. Please refer to Master Response 14.
2652	221	Appendix 8H Attachment 1, page 5, last paragraph - "Given that upstream storage in these months under NAA [No Action Alternative], Alt4 H3, or both is available, it is not unreasonable to assume that CVP and SWP operators would adjust the upstream releases to meet the salinity conditions in the Delta . . ." This is an untrue statement. The CalSIM and water quality and operations models are iterative. If a water quality exceedance occurs, the modeling is cycled back to the operations models for modification to avoid the exceedance and then the water quality models are run again to make sure the water quality criteria is no longer violated. This iterative cycle is repeated until the water quality standards are achieved. If there is a violation of water quality standards in the models, it is either because the CVP/SWP system is not able to comply or it is because the operational parameters of the models have been set such that they accept a certain amount of water quality standard violation. This BDCP EIR/S misrepresentation of how the models work and that impacts identified with the modeling would somehow not occur in the real world because actions outside of the project assumptions and disclosures would be implemented must be revised.	For the purpose of the EIR/EIS, the output from the CALSIM II model runs was used directly in the DSM2 model. Although there was a quality assurance/quality control confirmation between the initial modeling effort for the DSM2 model and the CALSIM II model, there was no attempt to modify the CALSIM II model assumptions to optimize water quality conditions. During real-time operations, efforts are undertaken by DWR and Reclamation to optimize water quality conditions required by the regulatory criteria (as described in the 2008 Biological Assessment on the Continued Long-term Operations of the Central Valley Project and State Water Project prepared by Reclamation). See Master Response 28 regarding operational criteria and Master Response 30 regarding modeling.
2652	222	Appendix 8M - Table M9-b - The most alarming results on this table are the increase in selenium concentrations at the Contra Costa pumping plant. The Alternative 4 results show an increase of over 20% to over 35% for the drinking water supply for a major metropolitan area of over 500,000 people. This selenium drinking water quality degradation is a significant impact and a huge human health and safety issue. Also of note is the significant improvement in water quality for the Banks and Jones pumping plants which comes directly at the expense of Contra Costa Water District and its customers.	The modeled average concentrations of selenium for the Delta are less than 0.5 ug/L for all Delta assessment locations (RDEIR/SDEIS Appendix 8M, Table M-9b). By comparison, the drinking water maximum contaminant level is 50 ug/L. Thus, water concentrations of selenium in the Delta are not at levels of concern for drinking water. The primary concern with selenium is bioaccumulation in biota. Hence, the focus of the selenium assessment is on concentrations in biota relative to applicable thresholds.
2652	223	"The projects below, which are also listed in Table 6-4, Interim Implementation Actions: Restoration Projects with Potential to Contribute to Meeting BDCP Requirements, of the Draft BDCP, are consistent with the goals and activities described for CM3-CM11. They have already undergone CEQA/NEPA review independent of this process and received approval, and accordingly provide meaningful examples of the activities that would be credited towards implementation of CM3-CM11." (D.1-1, line 34)  The BDCP is attempting to take credit for other, completely separate, projects towards achieving the mitigations for the conveyance and operations impacts that were formerly addressed (partially) by CM3- CM11. Since the BDCP is relying upon these other projects to mitigate the impacts of the conveyance and operations and it is clearly not allowable under NEPA and CEQA to rely upon other projects for mitigation of project impacts, the BDCP is saying that the conveyance and operations impacts are not mitigated under NEPA and	This is a generalized comment on the Draft BDCP approach, not the contents of the EIR/EIS. Numerous comments were received that focused on various elements of the BDCP. Where the comments focused on elements of the BDCP that overlap with the elements of Alternatives 2D, 4A, or 5A (e.g., CM1 as it comprises of the North Delta Diversions, tunnels, and supporting facilities), specific responses are presented. Where comments raised issues as to whether the BDCP and other HCP/NCCP alternatives in the 2013 Draft EIR/EIS were potentially feasible and could function as an alternative for purposes of meeting CEQA and NEPA's requirements to analyze a reasonable range of alternatives to the proposed project (e.g., issues regarding the BDCP Effects Analysis or financial feasibility), responses are presented generally in Master Response 5. Where comments submitted on the BDCP were focused on elements outside the scope of the environmental analysis or viability of the BDCP and other HCP/NCCP alternatives within the context of CEQA/NEPA (e.g., request of specific revisions to the BDCP related to mapping or references), no specific responses are provided and further consideration will be given to these comments, and any revisions to the Draft BDCP would only be made, if an HCP/NCCP alternative was ultimately approved at the conclusion of the

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		<p>CEQA. Further, the Lower Yolo Ranch Tidal Restoration Project is in response to the Reasonable and Prudent Action requirements of the OCAP [Operations Criteria and Plan] Bos [Biological Opinions]. The BDCP cannot be allowed to claim credit for compensatory mitigation for actions that were existing obligations of the CVP/SWP to implement prior to the initiation of the BDCP project. Only habitat restorations above and beyond the prior obligations of the CVP/SWP can be considered as contributing to the mitigations for the impacts of the BDCP. The lead, responsible and cooperating agencies must not allow the BDCP to take credit for the environmental benefits of these unrelated projects as contributing to mitigation for conveyance and operations impacts. The lead, responsible and cooperating agencies must not allow the BDCP to attempt to take double credit for these restoration efforts as both compliance with the OCAP Bos that address existing CVP/SWP impacts to ESA species and compensatory mitigation for new impacts precipitated by the BDCP. The BDCP must propose its own avoidance, minimization and mitigation actions to reduce the impacts of the conveyance and operations to less than significant and do so in a revised and recirculated EIR/S to address this material deficiency.</p> <p>D.1.1.4 - This project is separate from the BDCP and speculative as to whether it will actually be developed and implemented. Yet the BDCP is attempting to take credit for any benefits to the environment from this project as compensatory mitigation for the conveyance and operations impacts of the BDCP. If the BDCP wants credit from this project as contributing to mitigations for the project, the BDCP needs to make this project a part of the BDCP and fund it. This comment applies to each of the other separate projects the BDCP has listed (D.1.1.1-D.1.1.4) as contributing towards the function of CM3-CM11 and contributing towards the mitigation of the BDCP project impacts.</p>	<p>CEQA/NEPA process.</p> <p>Further, when adverse/significant impacts are identified in the EIR/EIS, mitigation measures, environmental commitments and avoidance and minimization measures are identified to reduce project impacts.</p>
2652	224	D.3.1.2 - Goal DTMS3: The goal is not a plan and has no detail as to how the goal would be achieved. The EIR/S contains none of the information on the plan that would be required to get an Incidental Take Permit to collect or maintain the species specimens. In the attempt to collect a large enough population for genetic integrity, the BDCP project could end up extirpating and creating an extinction event from the specimen collection-related mortality. Additionally, there is no published literature on Delta smelt or conservation effort experience that proves a population of this size can be collected and maintained. The BDCP must develop and disclose a plan, supported by published scientific literature and documentation of successful similar conservation efforts prior to this being considered a viable goal and/or plan. These same comments equally apply to D.3.1.3.	Further detail related to the conservation measure associated with this objective was provided in RDEIR/SEIS, Appendix D, Section D.3.2.9 Section 3.4.18, CM18 Conservation Hatcheries. Please note that the preferred alternative is now Alternative 4A and no longer includes an HCP. Alternative 4A, also known as California WaterFix, has been developed in response to public and agency input and is the new CEQA Preferred Alternative. Alternative 4A is also the NEPA Preferred Alternative, a designation that was not attached to any of the alternatives presented in the 2013 Public Draft BDCP Draft EIR/EIS. Alternative 4 (AKA BDCP) remains a potentially viable alternative and is being carried forward in this RDEIR/SDEIS because it represents the original habitat conservation plan/natural community conservation plan (HCP/NCCP) alternative approach, and because it provides an important reference point from which the Alternative 4A, 2D, and 5A descriptions and analyses were developed. If the Lead Agencies ultimately choose the alternative implementation strategy and select an alternative presented in the RDEIR/SDEIS after completing the CEQA and NEPA processes, elements of the conservation plan contained in the alternatives in the 2013 BDCP Draft EIR/EIS may be utilized by other programs for implementation of the long term conservation efforts. As such, Alternative 4A does not propose CM18.
2652	225	D.3-8, line 16 - D.2-9, line 47 - There are a number of actions described to avoid and minimize the rate of take associated with the existence of and operations of the north Delta intakes. The BDCP has struck these actions from their proposed project and alternatives so all of the predation and species take that were previously reduced by the inclusion of these actions will now occur under the Proposed Project and alternatives. This impact of an increased rate of take associated with the north Delta intakes remains unmitigated by the BDCP project.	Alternatives 4A, 2D and 5A would comply with requirements of the ESA Section 7 process and CESA Section 2081(b) process to reduce take of listed species and avoid adversely affecting critical habitat. This Final EIR/EIS also fully addresses the potential for impacts on listed species from construction and operation of the conveyance facilities in Chapter 11, Fish and Aquatic Resources and Chapter 12, Terrestrial Biological Resources.
2652	226	Table 3.4.1-5 - The BDCP identifies a number of hydraulic modeling studies (rows 4- 10) that are needed to evaluate the impacts of the project and to optimize the design to avoid and	As described in Appendix 3F in the EIR/EIS and the Conceptual Engineering Report referred to in the EIR/EIS, the final design criteria for each intake will be developed during final design phase. During that design

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		<p>minimize take associated with the north Delta intakes. The BDCP mistakenly identifies these studies and models as being required for "final design." These model results are required in order for the BDCP to complete a project-level project description and to conduct a project-level impact analysis. As an example, these models will inform the BDCP on the length, depth, orientation, inset or setback of the intakes from the levees, setback requirements of the levees to maintain channel capacities, the location and depth of dredging and channel shape modifications required to facilitate fish screen criteria compliant operations, design characteristics of the screens themselves (i.e., refugia to reduce predation and fish take from impingement and entrainment) and water operations of the intakes related to tidal tributary flows to ensure compliance with fish screen criteria for approach and sweeping velocities.</p> <p>All of these results from the models will affect the physical and operational characteristics of a project-level project description, including but not limited to: location, size (length and depth) and orientation of each individual intake and fish screen; the location, length and volumetrics of levee modifications required for levee setbacks and the installation of the screens; the location and volumetrics of construction and maintenance dredging (as well as maintenance dredging frequency). The model results are also integral to the ability to evaluate the impacts and rate of take of the intakes and fish screens at a project-level of detail, including, but not limited to: approach and sweeping velocities across the surface area of each fish screen under a range of hydrologic conditions and operations, the rate of take from predation, the rate of take from impingement and entrainment, and the level of criteria screen compliance that results from the daily intertidal operations of the north Delta intakes. Without these model results a project-level description and analysis cannot be completed. The BDCP must complete these sets of modeling it has identified as necessary and utilize that information in a revised and recirculated EIR/S that discloses this material new information.</p>	<p>process, information related to requirements of the final USFWS and NMFS biological opinions and State Water Resources Control Board water right permit will be used with results from detailed topographic, bathymetric, and sediment surveys to evaluate the physical design of the fish screens. This information also will be used during final design to determine design criteria to avoid effects on flood management. As described under Impact SW-7 in Chapter 6, Surface Water, in the EIR/EIS, the USACE, Central Valley Flood Protection Board, and DWR would require that any construction that would disturb existing levees to be designed in a manner that would not adversely affect existing flood protection. As described in Section 3.6.1.1 of Chapter 3, Description of Alternatives, facilities to be constructed along the levees would be designed to provide flood neutrality and to provide continued flood management at the same level of flood protection as the existing levees; or if applicable, to a higher standard for flood management engineering and permitting requirements if the standards are greater than the existing levee design during construction and operations. Additionally, DWR would consult with local reclamation districts to ensure that construction activities would not conflict with reclamation district flood protection measures. Construction within the waterways also would be required to not increase erosion or sedimentation in accordance with Stormwater Pollution Prevention Permits and requirements of the USACE, Central Valley Regional Water Quality Control Board, and Central Valley Flood Protection Board, as described in Chapter 6, Surface Water.</p>
2652	227	<p>Table 3.4.1-5 - "Evaluation of tidal effects and withdrawals on flow conditions at screening locations - Develop site-specific numerical studies (mathematical models) to characterize the tidal and river hydraulics and the interaction with the intakes under all proposed design operating conditions computational fluid dynamics model to provide information on how tidal changes and flow withdrawals affect flow conditions and sweeping velocities at screening locations. Results can be used in ((Site Locations Lab Study" to set boundary conditions and validate physical model results (same as preconstruction study 2, Site Locations Numerical Study [Fish Facilities Technical Working Team 2013]). 8 months depending on model detail and complexity; needed prior to final design."</p> <p>The BDCP is correct that the operations impacts of the north Delta intakes cannot be completed without this model information. The BDCP is admitting here that the north Delta intake operations cannot even be developed until these model studies are done. This analysis as described by the BDCP must be completed and recirculated for public comment in a revised EIR/S to reflect this material new information.</p>	<p>Please refer to response to comment 2652-223, above. Since the publication of the 2013 Draft BDCP, much additional work has been done to address uncertainties. The 2015 RDEIR/SDEIS provided several new modeling appendices. Please refer to Appendices B, C and F of the RDEIR/SDEIS. Please also see Chapter 3 for a description of the operational scenarios and flow criteria included for the action alternatives, including Alternative 4A. More information regarding mitigation is provided in Master Response 22.</p> <p>Please see Master Response 30 for discussion regarding the modeling used for the impact analyses. See also Master Response 46 regarding recirculation.</p>
2652	228	<p>D.3-32, line 1 - " Both fall-run/late fall-run Chinook salmon and Sacramento splittail are covered fish species in BDCP." "Covered species" is a term that only applies within an HCP. The new BDCP alternatives do not include a HCP and do not have covered species. The entire BDCP EIR/S needs to be revised to remove these misleading references to "covered species."</p>	<p>Appendix D of the RDEIR/SDEIS describes revisions made to the Draft BDCP following publication of the Draft EIR/EIS in December 2013. These revisions were included in the RDEIR/SDEIS to aid analyses of Alternative 4 that may be needed for impact analyses. The reference to covered species is therefore correct in the context of the BDCP.</p>

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2652	229	D.3-32, paragraphs 2-4 - The BDCP has made this very unclear as to which project is doing what to comply with the OCAP [Operations Criteria and Plan] BO [Biological Opinion] RPAs [Reasonable and Prudent Alternatives] and what component, if any, of what the BDCP proposes to do is above and beyond this existing obligation of the CVP/SWP and not already being done by a different project. Since the BDCP has attempted to claim mitigation credit for other unrelated projects, the fisheries agencies must do their mitigation accounting carefully and in a transparent manner to determine the exact acreage and qualities of habitat destroyed and mitigated by the BDCP. The BDCP should develop a table to disclose this quantification of habitat lost and habitat mitigated by habitat type and mitigation action to inform the public and fisheries agencies in a revised recirculated EIR/S.	Should the BDCP (Alternative 4) be selected for implementation, the Draft BDCP document could be revised. Please see Master Responses 4 and 5 for additional detail on the BDCP and the alternatives involving an HCP component.
2652	230	D.3-43, paragraph 2 - ". . . the operational parameters in Table 3.4.2-1 for the extent, duration, timing and frequency of flooding events are representative of expected operations, but not binding at the programmatic level of this Conservation Measure." Waters diverted for the Yolo Bypass inundation must be supported with a portion of DWR's surface water rights, otherwise there are no water rights which would support the Yolo Bypass inundation diversions. Since DWR must use part of their surface water rights for these Yolo Bypass diversions, it affects the volumes of diversion that DWR can do at the proposed north Delta intakes when inundation operations are active. The surface water diversions that are done at Yolo Bypass also affect the Sacramento River flows at Freeport which are the basis to determine the quantity of water that DWR can divert at the north Delta intakes, i.e., the North Delta Bypass Flow Criteria. Because BDCP water operations are affected by the Yolo Bypass inundation diversion operations, the project-level descriptions must be provided by the BDCP before the operations level analysis of the BDCP north Delta operations and water delivery volumes of the BDCP determined. The BDCP must define the daily operations of the Yolo Bypass inundation operations and then revise the BDCP water operations impact analysis. The BDCP must then recirculate for public comment the materially revised EIR/S.	<p>The proposed north Delta diversion bypass flow requirements are clearly defined in Chapter 3, Description of Alternatives, and the modeling approach and assumptions are presented in Appendix 5A of this EIR/EIS. Please note that Alternative 4A, the preferred alternative, no longer includes Yolo Bypass improvements. The issue of water rights for the BDCP related to Yolo Bypass could be revisited if the BDCP is chosen during project decision-making.</p> <p>For information regarding the development of improvements and habitat restoration in the Yolo Bypass please refer to DWR's and Reclamations' Yolo Bypass program websites for up to date information.</p>
2652	231	Appendix D - Substantive BDCP Revisions, page D-223 - The noise dB [decibel] contours are a simple GIS distance buffer from the facilities structures. This is not a noise model output or if it is, it does not have the relevant structures and terrain loaded in it. This analysis does not represent the best available science. The analysis does not reflect the locations of point sources of noise (e.g., pumps, transformer stations, loading docks, fueling docks, etc.) that come from within the BDCP facilities footprint. The depiction of noise from the project does not show how noise from the intakes that occurs within the river channel will be carried far up and down the river within the levees. For project noise that occurs within the levees, flat water does not attenuate noise and the sound will bounce back and forth within the levee far upstream and downstream of the noise source. The BDCP analysis fails to address these within channel noise impacts on wildlife and recreation and adjacent residences and businesses. This within levee noise propagation will carry far farther than noise that occurs on the land side which will be attenuated over a distance by trees, levees and other structures. The BDCP discussion is focused on sandhill crane but the discussion of the effects on residents and businesses is omitted. As an example, an 80dB noise is created by the project in the middle of the town of Hood. Here are some things that are in the 80dB noise range: "Garbage disposal, dishwasher, average factory, freight train (at 15 meters). Car wash at 20ft (89 dB); propeller plane flyover at 1000 ft. (88 dB); diesel truck 40 mph at 50 ft. (84 dB); diesel train at 45 mph at 100 ft. (83 dB). Food blender (88 dB); milling machine (85 dB); garbage disposal (80 dB). 80 dB is 2 times as loud as 70 dB." At 80 dB there is "possible (hearing) damage in 8 hour exposure."	<p>This appendix presents substantive revisions to the BDCP that were made subsequent to publication of the public draft (November 2013). These revisions, which were made to address key comments and ongoing coordination with agencies and stakeholders, are reflected in the analysis of Alternative 4 in the RDEIR/SDEIS, and where applicable in Alternatives 4A, 2D, and 5A. This appendix also presents revisions to the BDCP that were made to ensure consistency with the draft Implementation Agreement released in May 2014. This appendix is not intended to provide a complete noise impact analysis.</p> <p>The complete analysis of noise impacts is provided in Chapter 23 of the EIR/EIS. Impacts to aquatic and terrestrial species are provided in chapters 11 and 12. Impacts to recreation are discussed in Chapter 15. Impacts to residential areas are discussed in Chapter 23. For additional information regarding mitigation please refer to Master Response 22.</p>

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		( <a href="http://www.industrialnoisecontrol.com/comparative-noiseexamples.htm">http://www.industrialnoisecontrol.com/comparative-noiseexamples.htm</a> ) The rest of Hood will be subjected to 70 dB noise 24/7 which is comparable to "Passenger car at 65 mph at 25 ft. (77 dB); freeway at 50 ft. from pavement edge 10 a.m. (76 dB). Living room music (76 dB); radio or TV-audio, vacuum cleaner (70 dB)." And, "Upper 70s are annoyingly loud to some people." ( <a href="http://www.industrialnoisecontrol.com/comparative-noise-examples.htm">http://www.industrialnoisecontrol.com/comparative-noise-examples.htm</a> )	
2652	232	<p>[An] important part of assessing noise impacts which the BDCP analysis has omitted is the ambient noise level without the project. From 10:00PM to 6:00AM, the town of Hood is nearly silent. Only some traffic noise from 1-5 comes over 2 levees from a distance of 2.5 miles away. During the day, the noise level is not much different with some traffic noise going through town at the posted 25 MPH (Hood/Franklin Rd) and 35 MPH (River Road). "50 dB is one-fourth as loud as 70 dB. Quiet suburb, conversation at home. Large electrical transformers at 100 feet. 40 dB is one-eighth as loud as 70 dB. Library, bird calls (44 dB); lowest limit of urban ambient sound."  (<a href="http://www.industrialnoisecontrol.com/comparative-noise-examples.htm">http://www.industrialnoisecontrol.com/comparative-noise-examples.htm</a>)</p> <p>Hood is a rural community, so it is even quieter than the 40 dB level at night. Comparing the quiet ambient noise level of the existing condition town of Hood at 40 dB to the 80 dB of the proposed project in the middle of Hood is a sixteen time increase in ambient noise level. The other areas affected by the BDCP noise are quite rural areas at 30dB noise, which is 16 times quieter than 70 dB and 32 times quieter than 80 dB from the project. The BDCP must present a full analysis of noise impacts on the community, residents and businesses of Hood and other areas the project noise impacts. The BDCP must avoid and minimize these significant project impacts. If there are still 70-60 dB noise impacts on communities, residences and businesses after the avoidance and minimization measures then the BDCP must purchase the affected properties at fair market value to compensate the current owners for the unreasonable take of the use and enjoyment of their properties. The lack of this impact analysis of the communities, residences and businesses and the lack of use of the best available science is a material deficiency of the draft EIR/S and it must be recirculated for public comment after these omissions and deficiencies have been addressed</p>	<p>For a detailed analysis of noise and vibration impacts on the communities and receptors affected by the project, see Chapter 23 of the EIR/EIS. The analysis in the EIR/EIS acknowledges that impacts from noise during construction under worst-case conditions are potentially significant and unavoidable. The analysis also acknowledges that increases in ambient noise levels during construction and operation will be perceptible and readily noticeable in some areas. Mitigation measures NOI-1a and NOI-1b are available to reduce the effects of noise during construction. Mitigation NOI-3 is available to reduce the effects of noise during operation.</p> <p>The 40 dBA existing ambient is used to characterize the rural setting for many locations within the project area. Ambient noise levels vary widely by time of day and location, and ambient levels may be higher or lower in different areas at different times. The goal of mitigation is to reduce levels to below the thresholds of 60 dBA daytime/50 dBA nighttime. Note that although noise levels of up to 60 dBA would still be higher than the assumed existing level of 40 dBA (or a number less than 40 dBA), a noise level of 60 dBA Ldn (equivalent to threshold of 60 dBA daytime/50 dBA nighttime) would be considered "normally acceptable" under State General Plan guidelines.</p>
2652	233	There are many numbered labels or transects on the map -- thick black lines and bold black numbers -- which are not explained in the text. The noise areas depicted on the maps claim they address truck noise but they only show the facilities footprint and tunnel muck disposal work areas. The maps do not show the transit routes of trucks that transport the tunnel muck from the tunnel outlets to the disposal areas nor does it show the barge routes that transport materials to the facilities. Loaded diesel semi-trucks for TBM [tunnel boring machine] hauling and tugboats for barge hauling are loud and are missing from this analysis entirely. Diesel trucks at 50 feet at 40 MPH are 84 dB. Tugboats are much louder, i.e., 100+ dB. These haul routes go directly adjacent to and through greater sandhill crane habitat as well as communities and residential areas. These are material omissions of the noise impact analysis must be addressed in a recirculated public draft EIR/S.	The black lines and bold numbers are referring to the roosting sites listed in D-219. Eight sites are shown but only 6 are affected based on the 50 dBA traffic noise contour. Please refer to Chapter 23, Noise, for complete analyses of noise effects, including noise from construction traffic.
2652	234	The noise maps claim that the loudest sound from the project is 80 dB and the BDCP claims this covers pile driving activity. Caltrans has a series of tables for noise levels for pile driving at <a href="http://www.dot.ca.gov/hq/env/bio/files/pile_driving_snd_comp9_27_07.pdf">http://www.dot.ca.gov/hq/env/bio/files/pile_driving_snd_comp9_27_07.pdf</a> . The most applicable rating for a vibratory hammer and sheet pile is in excess of 160 dB. As a reference, ear drums rupture at around half as loud at 150 dB. This pile driving noise at 160+ dB is one hundred twenty-eight times louder than the 80 dB level represented in the BDCP	The comment addresses concern about pile driving noise levels. However, the commenter cites a source level of 160 dB from the 2007 Caltrans guidance document, "Compendium of Pile Driving Sound Data." The pile driving levels presented in this document are in-water source levels which characterize impulse noise levels for various types of piles and driving methods. These characterize impulse noise (e.g. dB RMS, SEL), primarily for the purpose of assessing impacts to aquatic species. The analysis of pile driving impacts to aquatic species is analyzed in Chapter 11, Fish and Aquatic Resources. The assessment of noise propagation

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		<p>analysis. This eardrum-bursting noise level sheet pile driving will occur within the river and slough channels, which carries sound far upstream and downstream of the source of noise much farther and with much less noise attenuation than over land. The barge loading location in Snodgrass Slough west of Glanville Tract is in greater sandhill crane roosting habitat and is within 2 miles of core permanent roosting habitat in the Stone Lakes Wildlife Refuge. Although we do not have noise models at our disposal, given the close proximity of the source of the noise to the sensitive receptor of the National Refuge and the characteristic carrying of noise over water that well over 100-120 dB of noise would occur at the southwestern corner of the refuge from barge unloading dock and other pile driving construction in this area. The sheet pile driving at the north intake junction of intake pipes and the main tunnels is less than a quarter mile from the National Refuge. There is just one levee between this facility and the wildlife refuge so there will not be very much noise attenuation between this pile driving and the sensitive receptors at the National Refuge. This construction site will require extensive and deep pile driving activities as this facility will have a large gallery constructed which merges the intake pipes to the tunnel. The number of sheet piles and cumulative depth of sheet piles may be as much as twice as much for this location as all three of the intakes combined. The sheet piles will likely need to be at least 120' deep (although we [Central Delta Water Agency] could not find this disclosed in the BDCP project description) to accommodate the gallery that would have to be deeper than the tunnels themselves (at least 80'), but we could not find this construction depth description for the project either. Without this depth, number and type of sheet pile information, hours and dates of operations, a project-level noise impact analysis cannot be conducted. The revised EIR/S is deficient in this level of detail of analysis and must not be awarded construction-related permits until a project-level description and analysis have been completed in a subsequent environmental document.</p>	<p>through air above ground is quite different from the assessment of in-water noise. The analysis of noise and effects on land use is presented in Chapter 23, Noise. Effects on birds are presented in Chapter 12, Terrestrial Biological Resources.</p> <p>As shown in Table 23-12, a typical noise level for an impact pile driver is 101 dBA at 50 feet. For impact pile driving at intake sites, the predicted noise level from construction may be up to 80 dBA Leq (1 hour) at a distance of 375 feet from pile driving activity, as shown in Table 23-17 and depicted in Appendix 23A. Based on this information, noise levels at Stone Lakes Wildlife refuge would be far less than the 100-120 dB value.</p> <p>As stated in Chapter 23, construction noise impacts are considered to be "Significant and unavoidable." This is based on an analysis that considers worst-case conditions. For example, six pieces of construction equipment operating simultaneously and continuously in one location (including pile drivers). These conditions would not necessarily occur on a routine basis. However, there may still be effects on wildlife, which are discussed in Chapter 12, Terrestrial Biological Resources.</p> <p>As stated in Environmental Commitments (Appendix 3B), DWR and contractors hired to construct any conveyance components of the project will implement a site-specific noise abatement plan to avoid or reduce potential construction-, maintenance-, and operation-related noise impacts. This section also includes environmental commitments to reduce noise levels where exceedances are anticipated to occur.</p>
2652	235	<p>G-1, line 15 - "The revised proposed project, identified in the Partially Recirculated Draft EIR/Supplemental Draft EIS (RDEIR/SDEIS), no longer includes an HCP/NCCP (see Section 1, Introduction, of the RDEIR/SDEIS for more information); therefore Alternative 4A will not be incorporated into the Delta Plan and will follow a different process to demonstrate consistency with the Delta Plan. That process is discussed below with references to relevant information in the RDEIR/SDEIS and the Delta Plan." The Delta Reform Act (SBX7 1) specifies that the BDCP must be an HCP/NCCP, so the current BDCP plan is in violation of the act. "85053. 'Bay Delta Conservation Plan' or 'BDCP' means a multispecies conservation plan." The act also defines coequal goals for the BDCP, "85054. 'Coequal goals' means the two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place." From the quote from the BDCP EIR/S, the BDCP is not a multispecies conservation plan as required by the act. The BDCP also does not meet the co-equal goals as specified by the act as it is now only a water conveyance project that does not even reasonably meet that project need as it does not improve water delivery reliability.</p>	<p>See response to comment 2562-1 and Master Response 5 regarding BDCP. See Master Response 31 and Appendix 31 of this Final EIR/EIS for more information about compliance with the Delta Reform Act.</p>
2652	236	<p>SBX7 1 - "The economic sustainability plan adopted pursuant to Section 29759 shall be the basis for the program. Funds provided to the conservancy to implement ecosystem restoration projects pursuant to the Bay Delta Conservation Plan shall only be used for ecosystem restoration purposes." Since the BDCP does not meet the criteria for being included in the Delta Plan because it does not include an approved NCCP/HCP, the state funds identified in the Delta Reform Act may not be made available to support BDCP</p>	<p>See Master Response 31 regarding compliance with the Delta Reform Act. Also see Appendix 3J of this Final EIR/EIS for a discussion of how Alternative 4A is compatible with the Delta Plan. See Master Response 5 regarding how BDCP was proposed to be funded and how the new proposed action will be funded. No funds from Proposition 1 are proposed to be used to fund Alternative 4A.</p>

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		ecosystem restoration (or any other) costs. California WaterFix is not identified in SBX7 1, so it does not qualify for funding by the terms of SBX7 1 under any circumstance.	
2652	237	G-2, line 22 - "4. Will have a significant impact on the 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 BDCP directly conflicts with the achievement of the Delta Plan and must not be awarded a Certification of Consistency. The first public draft BDCP EIR/S analysis of the proposed project and alternatives has clearly determined that the implementation of the conveyance with the habitat restoration actions results in unacceptable environmental impacts. The revised public draft EIR/S with conveyance alternatives without habitat restoration still had unacceptable significant and unavoidable environmental impacts. Further, the revised draft included a "sensitivity analysis" of the conveyance with and without selected habitat restorations. All of these sensitivity analysis results indicated that the environmental impacts of the conveyance were even worse if they were combined with any of or combination of habitat restoration actions. As a result, the BDCP new alternatives are proposed with minimal habitat actions designed to just mitigate the footprint impacts of the conveyance. What the first draft analysis and the sensitivity analysis in the second draft inform us of is that if the conveyance is implemented that it will preclude the opportunity to implement these habitat restorations at a later date as they will precipitate the same unacceptable adverse environmental impacts as the first public draft and second public draft sensitivity analyses (H1- H4) concluded. Since the BDCP conveyance-only alternatives preclude the opportunity to implement Delta habitat restorations, the BDCP cannot be consistent with the co-equal goal of habitat restoration and ecosystem protection required by the Delta Plan. Further, the BDCP does not reasonably meet the other co-equal goal of increasing water supply deliveries.	Please note that Appendix G in the RDEIR/SDEIS has been updated in this Final EIR/EIS in Appendix 3J to address Alternative 4A, the preferred alternative. See also response to comment 2652-236, above. Please see Master Response 31.
2652	238	G-4, line 6 - "Mitigation is presented to meet CEQA's specific requirement that whenever possible, agency decision makers adopt feasible mitigation available to reduce a project's significant impacts to a less-than-significant level." The BDCP fails to mitigate impacts to a less than significant level when it is feasible to do so. The project could reduce significant (and unavoidable according the BDCP) water quality impacts (e.g., salinity, DO [dissolved oxygen], blue-green algae, Se [selenium], Pb [lead], Hg [mercury], chloride, bromide, etc.) to less than significant if they increase upstream releases and bypass more water from the north Delta intakes, use the south Delta intakes more or exclusively or don't do the project at all.	Please refer to Appendix 3J in this Final EIR/EIS for updates to RDEIR/SDEIS Appendix G. Please see Master Response 31. Please refer to Chapter 8, Water Quality of this Final EIR/EIS which presents the updated analyses from the RDEIR/SDEIS related to water quality effects of Alternatives 4A, 2d and 5A. These analyses show that electrical conductivity effects of these alternatives would be greatly reduced. Where electrical conductivity effects are determined to still be significant, Mitigation Measure WQ-11 is provided to reduce these effects. One significant unavoidable effect related to methylmercury formation in tidal wetlands created under Environmental Commitment 4 has been identified for Alternatives 4A, 2D and 5A. No other significant impacts related to water quality constituent effects on beneficial uses has been identified for these alternatives.
2652	239	G-4, line 9 - "DWR is preparing a Mitigation, Monitoring and Reporting Program (MMRP) that will be available with the Final EIR/EIS." This is material new information withheld from the public review and comment. These mitigation programs will have their own impacts and consequences to the natural environment and residents and communities of the Delta that must be afforded the opportunity to comment on these BDCP proposed, but not as yet developed, mitigation plans. Once this material new information is developed, the BDCP must recirculate the EIR/S for public comment or it will be in violation of NEPA and CEQA requirements to disclose material information for public participation, review and comment.	Section 21081.6 of the California Public Resources Code only requires that an MMRP is adopted by lead agencies when making findings—not that it be included in a draft (or even a final EIR). The court in Christward Ministry v. County of San Diego (13 Cal. App. 4th 31, 49) states, "[t]he law clearly contemplates otherwise, for the mitigation monitoring program is required to be adopted 'when making the findings required' (§ 21081.6), and those findings are made after considering the final EIR. (See § 21081; Guidelines, § 15091.) Nothing in CEQA or the Guidelines requires the mitigation monitoring plan to be in the EIR. (See § 21100; Guidelines §§ 15120-15132.)"
2652	240	G-4, line 29 - "Appendix 3F, Intake Locations Analysis, of the Draft EIR/EIS and the fish screen analysis (Appendix 5B, Entrainment, of the Draft BDCP) identified potential intake locations through an iterative process involving engineers and resource experts most familiar with existing facility operations, river hydrology, and the biological resources in the	Please see Appendix 3F, Intake Location Analysis, of the 2013 Public Draft EIR/EIS, regarding the process for selecting intake locations. As shown in Figure 3F-1, and described in the appendix, several sites north of the Sacramento Regional Wastewater Outfall were considered in earlier stages of review (Locations A, B, and C). Locations upstream of the town of Freeport were eliminated from consideration due to public scoping

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		Delta." The intake locations for the BDCP are not the same locations as are supported in the documents referenced by the BDCP. Not only are the locations different and the rationale for the changes not disclosed or supported, but the new locations are in direct contradiction to the principles of intake site selection documented in those supporting technical reports. As an example, the Fisheries Facilities Technical Team had a principal tenet that the intakes should not be located just before, after or on bends in the river as hydraulic complexity is increased and compliance with approach and sweeping velocity criteria of the screens is unreliable and inconsistent. The current locations of the intakes for the BDCP alternatives have been moved from the locations recommended by the studies and now are located on or just above or just below bends in the river. The Fisheries Facilities Technical Team did represent a best available science approach, but the BDCP then proceeded to ignore this guidance and not even provide any supporting rationale for this deviation in intake site location from the best available science principles.	comments received in March 2009 citing construction impacts in an overly constrained conveyance corridor, historic building conflicts, and the precedent set by the Freeport Regional Water Project EIR, indicating that intakes in the Pocket area neighborhood would produce significant impacts. However, the Fish Facilities Technical Team also recommended that the furthest upstream intake be located downstream of where complete mixing is reported to occur with effluent discharge from the Sacramento Regional Wastewater Treatment Facility. For this reason, potential intake locations upstream of Scribner's bend were also eliminated.
2652	241	G-5, line 22 - ". . .the design of fish facilities including the intake fish screens . . ." Since the BDCP has proposed to adaptively manage the design of their fish screens, this means that if better designs are developed and accepted in the future, that the BDCP must adaptively redesign and construct their fish screens.	The positive-barrier fish screens for the proposed north Delta intakes would be designed to established protection standards for salmonids and delta smelt, and would comply with CDFW, NMFS, and USFWS fish screening criteria. Appendix 3F of the PD EIR/S provides details on the development of intakes and fish screening technology, as well as the Conceptual Engineering Reports (CERs). It is proposed that monitoring and research would be conducted to inform the fish screen design, construction, and operation in order to maximize their effectiveness. Dual operations provides for flexibility that will better protect the fish based on real time data.
2652	242	G-6, line 10 - ". . . the DMMs (Demand Management Measures) are not proposed as part of any alternative. . ." Correct, so the BDCP may not claim this unrelated activity as evidence of the BDCP conformity to the Delta Plan for reduced reliance on Delta water supplies. The BDCP must delete this misleading content that implies to the reader that this unrelated effort somehow makes the BDCP compliant with the Delta Plan. The content that does belong in this section and is missing from the EIR/S is that the BDCP does increase reliance upon the Delta water supplies by diverting capital and human resources to the planning process for the BDCP. The BDCP has expended more planning dollars at over \$250 million than the rest of the state water agencies planning efforts on alternative, supplemental and conservation of water supplies that would actually result in a reduction in their reliance on the Delta for their water supplies. By making the Delta water supplies more reliable (a purpose of the project that the BDCP fails to accomplish) the BDCP is taking away the incentive of water agencies to reduce their water supply reliance upon the Delta. Further, the BDCP increases reliance upon the Delta for water supplies by increasing the available capacity to support water transfers from northern California to south-of-the-Delta water users. The BDCP has failed to disclose this and the additional transfer capacity is in direct conflict with the requirement to reduce dependency upon the Delta for water supplies.	Appendices 3I and 3J of this Final EIR/EIS have been updated since the time of the RDEIR/SDEIS and replace Appendix G. These appendices outline how the EIR/EIS has addressed Delta Plan consistency for informational purposes. DWR has been consulting with the Delta Stewardship Council staff regarding the Delta Plan consistency review process and requirements. Additional information is provided in Master Response 31. Demand management is addressed in Appendix 1C of this Final EIR/EIS and is largely carried out under state and local programs separate from the proposed project.
2652	243	G.4.5 - DWR initiated a process to extend the SWP Water Supply Contracts starting in April 16, 2014. Several public meetings were held involving initial negotiations and culminated in the submittal of public scoping comments ending October 14, 2014. The DWR Contract Extension Project website says, "An environmental review process, under the California Environmental Quality Act, will follow with opportunity for additional public participation. A final CEQA document analyzing possible environmental impacts is expected in early 2015." ( <a href="http://www.water.ca.gov/swpao/watercontractextension/">http://www.water.ca.gov/swpao/watercontractextension/</a> ) Since the scoping comments were submitted in October 2014, there have been no actions, updates or public meetings on this DWR water contract project even though the website says a final EIR is anticipated in early 2015. No action is more fundamental to water contracting than the renewal of the	The contract renewal program is considered an on-going program that is appropriate to assume would continue under the No Action Alternatives. No additional range of analyses are required for this No Action Alternative assumption. Regarding consistency with the Delta Plan, see response to comment 2652-242, above.

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		water supply delivery contracts themselves. DWR has shut the public out of the process and has not given any updates on the status of the contract extensions even though published timelines for the project have passed. This water supply contract extension is definitely not a transparent process for the public as required by the Delta Plan and therefore, DWR, and the BDCP project which is dependent upon these contract renewals to establish any justification for water supply deliveries of the SWP extending beyond 2037 are not compliant with the Delta Plan. Further, the BDCP project would create available capacity for water transfers which is not disclosed, and therefore not transparent, in the EIR/S.	
2652	244	G.4.6 - The Delta Reform Act requires the SWRCB to update and revise the Delta flow standards and these revised flow standards were to be utilized to inform the BDCP process and alternatives development. To date, the SWRCB has failed to comply the Delta Reform Act with the issuance of updated flow standards for the Delta. The SWRCB must issue the revised Delta flow standards and the BDCP must develop alternatives which are compliant with these standards. The BDCP cannot be in compliance with this aspect of the Delta Plan because the proposed project and alternatives are being evaluated against a set of criteria which are statutorily obsolete. Once the SWRCB has issued the revised Delta flow standards in conformity with the requirements of the Delta Reform Act, then and only then, can it be determined if the BDCP is compliant with this aspect of the Delta Plan or not.	As described in Section 6.3.4 of Chapter 6, Surface Water, of the EIR/EIS, the State Water Resources Control Board is conducting a current program to update the Bay-Delta Water Quality Control Plan. Since this program is still under development and the potential outcomes are not known at this time, this program is not included in the analysis. Following completion of the updated Bay-Delta Water Quality Control Plan, SWP and CVP operations would need to be reviewed to determine if the operations continued to comply with the new regulations. This Final EIR/EIS also includes Appendix 5E, which provides supplemental modeling information for the SWRCB related to a range of Delta outflow scenarios. See Master Response 28 regarding operational criteria and Master Response 30 regarding modeling.
2652	245	G.4.7 - The BDCP EIR/S does not refer to the Delta Plan regulation's Appendix 4 elevation restoration map as a guide nor does it provide any supporting analysis of its compliance. The BDCP does not include any site-specific restoration plans with earthmoving and land contour plans so it cannot be determined at this time with the information available if the BDCP plan will be compliant with this requirement or not. The BDCP does have available to it LIDAR-based elevation data for the entire Delta that is accurate in elevation to just several centimeters. This data collection was funded by DWR so they were aware of and had access to this data which could have been used to demonstrate habitat restoration compliance with this Delta Plan requirement. In the absence of supporting site-specific restoration plans by the BDCP that demonstrate compliance, the Delta Stewardship Council must assume that the plans are not compliant and therefore are not consistent with the Delta Plan and do not merit certification of compliance.	Site specific restoration plans that will be used as compensatory mitigation will be finalized after an alternative is selected and permit coordination with the Corps, State Fish and Wildlife and other natural resources agencies is concluded. The mitigation identified in the EIR/S establishes performance standards for the mitigation. This information can be reviewed by the decision makers and the public to ascertain the adequacy of the mitigation for the impacts. The RDEIR/SDEIS followed NEPA guidelines (40 CFR §15022) by describing the incomplete and unavailable information. As a general discussion related to the environmental review process associated with major infrastructure projects, the environmental review must be conducted at the level of specificity available at the time of the analysis. Both CEQA and NEPA encourage that the environmental review process is to be conducted at the earliest stage of development to allow for effective planning. Thus, this approach was used in the DEIR/S where components of the project are to be finalized later. This level of detail is adequate to evaluate the magnitude of effects. The final designs will be required to meet applicable design standards.
2652	246	G.4.8 - The implementation of the BDCP proposed project and other project alternatives conveyance facilities and operations precludes the opportunity to implement habitat restorations due to conflicts created in water quality impacts [see other Central Water Agency comments]. This is perhaps the worst conflict of the BDCP with the co-equal objectives of the Delta plan. Not only does the BDCP no longer contribute at all to the accomplishment of the goal to restore habitat and protect ecosystems, but it actively precludes it.	See Master Response 4 regarding alternatives development, Master Response 5 regarding BDCP, and Master Response 22 regarding the adequacy of mitigation measures. As stated in earlier responses, habitat restoration projects will continue under programs like EcoRestore.
2652	247	G.4.9 - The BDCP increases the habitat and transport of potential invasive and nonnative species. The tunnels and habitat mitigations of the BDCP increase the amount of area and opportunity for the colonization of invasive species. The BDCP has not proposed any sanitation practices of equipment, e.g., weed seeds, mollusks, etc., on equipment utilized on land or in water from construction site to construction site. The BDCP equipment, lacking in sanitation procedures as they currently are, are a significant vector for transporting and propagating invasive species. As an example, there is earthwork and other land modification work proposed in the Yolo Bypass which is thoroughly colonized by star thistle, an exotic and invasive weed species. BDCP has proposed no sanitation procedure to prevent star	Please see Appendix 3B in the FEIR/EIS for information on minimizing the spread of invasive species during construction of the proposed project. In addition, several conservation measures/environmental commitments include measures to minimize the occurrence and/or spread of invasive species  With respect to the work on the Yolo Bypass, the preferred alternative (4A, California WaterFix) does not propose work in the Yolo Bypass, as restoration would be limited to mitigating project effects on existing habitat. The main currently existing invasive species of concern that could be transmissible from the north to south Delta, Corbicula fluminea and Potamocorbula amurensis, are already well established, with the former occurring more in the freshwater portions, and presumably already having early, motile life stages

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		<p>thisistle and other invasive weed species from being transported to the next BDCP worksite, perhaps to the Glanville Tract construction areas which have low rates of star thistle colonization.</p> <p>Similar but even more significant risks occur with the lack of sanitation protocol for in-water equipment that can transport invasive mussel or clam species from site to site. Another serious invasive species vector risk undisclosed by the BDCP is the transport of floating juvenile specimens of invasive mussels or clams from the north Delta intakes through the tunnels directly to the south Delta at the discharge in Clifton Court Forebay. The BDCP conveyance tunnels and canals create an express lane for invasive species vector movement from the north Delta to the south Delta in a form and magnitude of risk that will not exist without the BDCP. Once the tunnels are colonized by these species, a contingency the BDCP has not disclosed any plans to manage, the population would introduce a huge colonization pressure from their free floating progeny to the south Delta and the CVP/SWP facilities and conveyance system in the south Delta and south of Delta. Even if south Delta efforts to control the colonization were effective, the constant colonization pressure delivered from the tunnels would predictably eventually overwhelm any south Delta management effort applied against it. Dual water operations of water diversions from the north and the south Delta effectively double the risks of colonization of these invasive mollusks in the CVP/SWP system south of the Delta. Given these significant contributing factors, the BDCP fails to comply with the objectives of the Delta Plan to avoid introductions of invasive nonnative species.</p>	<p>being entrained into the south Delta export facilities.</p>
2652	248	<p>G.4.9.3 - The visual inspection plan is insufficient to reduce or protect the Delta from the barge equipment from becoming a significant vector for delivering and spreading invasive aquatic species. First, aquatic weeds can become entangled with equipment and lines in the water as the equipment is being transported. Periodic inspections and even cleaning (not specified by the BDCP protocol) will not reduce the transport of aquatic weeds with the movement of equipment. The in-water construction activities the BDCP plans will physically disrupt (i.e., pull up and chop up) and mobilize invasive aquatic species (e.g., weeds, mussels, clams) and once mobilized will colonize areas that were not colonized without the disturbance of BDCP project. Similarly, the propellers of the tugboats which will push the barges around will mechanically chop invasive weed species which will then become free floating to vegetatively propagate to colonize new areas. Early life stage mussel colonization is not readily visible. Early mussel colonization on surfaces is detected by touch from a sandpaper texture change caused by the mussels that visual inspections as proposed by the BDCP would miss. The BDCP proposed inspection plan does nothing to address these significant contributions by the BDCP to the spread and population levels of invasive species. The barges and other in-water equipment will often be working in water with zero visibility, i.e., disturbed high turbidity water in Snodgrass Slough. The visual inspections proposed by the BDCP will be completely ineffectual in even detecting an infestation on equipment in these conditions. The BDCP protocol does not even call for periodic (weekly) disinfection of hulls of boats and barges utilized in the project. In order for any control effort at mussels or clams colonizing and being spread by this equipment, they must remove the equipment from the water for inspection and sanitization. The BDCP protocol does not include any such control or management measures. Given the significant increase in risks of spread of invasive species and the ineffectual visual inspections proposed by the BDCP, it is certain that the BDCP does not conform to this important Delta Plan requirement.</p>	<p>There are a number of environmental commitments outlined in the Final EIR/EIS, Appendix 3B, Environmental Commitments, AMMs, and CMs of the FEIR/FEIS, to address issues with various invasive aquatic species. Among the measures being committed to are: Develop and Implement a Barge Operations Plan (which in part will involve monitoring during construction which will include observation of barge landing, loading, unloading, and departure of one or more barges at each active barge landing site, the condition of both river banks at each landing site, and visual inspection for invasive aquatic species on in-water equipment such as barges and small work boats); Funding the California Department of Boating and Waterways' Programs for Aquatic Weed Control; and Construction Best Management Practices (AMM2). The MMRP for the BDCP/California WaterFix includes additional details.</p>

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2652	249	G.4.9.4 - The new BDCP alternatives do not include the action described here so these alternatives do not provide any aspect of management or reduction of invasive species to credit towards compliance with this important Delta Plan requirement. Given the magnitude of aquatic weed mobilization and colonization from the BDCP construction activities [described in Central Delta Water Agency's comment about G.4.9.3], even if they were adding funding to this existing program it would not mitigate the full extent and impacts of the project and therefore the BDCP project is not compliant with this Delta Plan requirement either.	Please note that RDEIR/SDEIS Appendix G has been revised. Please see Master Response 31. Please refer to responses to comments 2652-247 and 2652-248, above regarding invasive species.
2652	250	G.4.10 - The BDCP facilities and tunnel muck disposal sites do not respect local land use as it results in a permanent conversion and loss of prime farmland and Williamson Act Farmlands which is in direct contradiction to this 23 CCR Section 5011 requirement. The BDCP does not protect floodways as the facilities encroach upon the channel cross sections which reduce flow capacity, engages in habitat restoration and vegetation plans within floodways which reduce flood capacity and redirects flood risk with impairments to levee structural integrity and structures that would redirect flows to new areas in the event of a flood which is in direct contradiction to this 23 CCR Section 5015 requirement.	As discussed in Section 13.3.2, Determination of Effects, to the extent that alternatives are incompatible with such land use designations, goals, and policies, any related environmental effects are discussed in other chapters.  The project would permanently convert land under Williamson Act farmlands and other prime farmland. As described in detail under Impact AG-1, this would be a significant and adverse impact. However, the project would not result in adverse impacts related to flooding. As discussed in Impact SW-2 in Chapter 6, Surface Water, with mitigation implemented, the project would not substantially alter the existing drainage pattern or substantially increase the rate or amount of surface runoff in a manner that would result in flooding during construction of conveyance facilities.
2652	251	Summary of Delta Plan Requirement Compliance by the BDCP - Of the 24 or so criteria identified by the BDCP for certification of compliance with the Delta Plan, the BDCP complies with exactly none of them. The Delta Stewardship Council [DSC] must not certify the BDCP as being compliant with the Delta Plan.  G-9, line 38 - "If the covered action is found to be inconsistent, the project may not proceed until it is revised so that it is consistent with the Delta Plan." The BDCP is inconsistent with the Delta Plan so the DSC must not certify it and the BDCP alternatives must be modified such that they do comply with the plan.	Regarding consistency with the Delta Plan, see response to comment 2652-242, above.
2652	252	Dr. Jeff Michael, University of the Pacific: "The upfront price tag allocated to farmers is about \$10 billion, so simple division shows about \$160,000 per acre would be the cost. That's multiples above the value of farmland in the San Joaquin Valley -- even great almond orchard with reliable water supply doesn't trade for anywhere near that amount." ( <a href="http://mavensnotebook.com/2015/08/26/legislativehearing-are-the-Delta-tunnels-good-for-california-part-2-of-2/">http://mavensnotebook.com/2015/08/26/legislativehearing-are-the-Delta-tunnels-good-for-california-part-2-of-2/</a> ) The former UOP economist is eminently well-qualified to make this comment on the BDCP. Now this comment is part of the official project record and this comment must be responded to in a revised EIR/S or in the FEIR/S. The cost of this water is so high that it is uneconomic to use for agricultural irrigation so the real question that is unanswered by the BDCP is, since the water is too expensive to be used for agriculture, who is really going to pay for it, what will the water really be used for and what are the impacts of this other, undisclosed, water use? This water must be used for something other than agriculture as it is too expensive so what is it going to be used for and what is the real impact of the project that the BDCP EIR/S did not disclose or mitigate?	DWR has prepared a standalone assessment of the economic impacts of Water Fix. Please see Master response 5 for more information on project costs and funding.
2652	253	The BDCP EIR/S claimed that the water rights impacts did not change from the original draft EIR/S. Based on DWR and Reclamation's petition to the State Water Board for "additional points of diversion" ( <a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf">http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf</a> ), this claim of no change to water rights impacts	The RDEIR/SDEIS states the following regarding water rights:  " 5.3.1 Methods for Analysis  The water supply analysis addresses changes to water supply to SWP and CVP water users in the Delta region, upstream of the Delta Region, and Export Service Areas due to implementation of BDCP conveyance

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		<p>from the original public draft is incorrect and misleading to the reader and decision makers who rely upon this document to accurately portray the project. The diversion locations of the petition are different locations than were previously analyzed and disclosed in the original public draft EIR/S. The diversion locations do not include water rights to implement conservation measures in the Yolo Bypass so the BDCP has predecisionally determined that the alternatives which contain this conservation measure will never be approved by DWR and Reclamation because they are not their preferred alternative.</p> <p>". . . authorization to add three additional points of diversion to the water rights for both the State Water Project (SWP) and Central Valley Project (CVP) is necessary for the construction and operation of new water conveyance facilities that will be part of the SWP and operated in coordination with Reclamation and its operation of the CVP."</p> <p>(<a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf">http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf</a>, page 1, p1) This decision by DWR and Reclamation to petition for water rights changes to the SWRCB is predecisional in that the BDCP is not approved yet and the petition only covers the description of the Proposed Project/ Action and does not cover all of the other alternatives equally. DWR and Reclamation demonstrate their clear bias in taking these steps before the project is even approved and to take steps that preclude any other outcome in the alternatives analysis other than then single alternative that they want. As a consequence of DWR and Reclamation's consistent predecisional and biased behavior with regards to the conductance of what is required to be an unbiased and impartial assessment and disclosure of the environmental impacts of the project, DWR and Reclamation must resign their roles as lead agencies for the BDCP EIR/S.</p> <p>Other state and federal agencies that would be responsible for issuing permits for the project, if approved, are equally well qualified to be lead agencies for the BDCP. For the equally qualified federal lead agencies for the BDCP would include: the EPA, USACE [U.S. Army Corps of Engineers], USFWS, and NOAA [National Oceanic and Atmospheric Administration] or alternatively, the Department of Interior or Department of Commerce. Since Reclamation will not own or operate the facility it has less qualification as lead agency than these other agencies which must rely upon the EIR/S to support their decision making for issuing permits for the project. For the State lead agency, the agencies that have permitting authority and decision support needs on the BDCP EIR could include Department of Fish and Wildlife, State Water Resources Control Board or Caltrans. Cal Fish and Wildlife would be issuing the 303 and the NCCPA [Natural Community Conservation Planning Act] and the SWRCB would be issuing revised water rights and a 401 Certification so both of these state agencies are well qualified and in a better position for state lead agency than DWR that would just own the facility that would be operated by a Joint Powers Authority.</p>	<p>facilities (CM1) and other conservation measures, specifically tidal marsh habitat restoration (CM4). Consistent with previous modeling analyses conducted by DWR and Reclamation, including the 2008 Biological Assessment on the Continued Long-Term Operations of the Central Valley Project and State Water Project, the modeling analyses presented in this section assumed that the SWP and CVP were solely responsible for providing any needed water for BDCP implementation. The alternatives would not modify water deliveries to non-SWP and non-CVP water rights holders, including in-Delta water rights holders modify the operations of the SWP and CVP facilities but would not modify the operations of water resources facilities owned and/or operated by other water rights holders. Therefore, the water supply analysis addresses impacts to DWR, Reclamation, and SWP water users and CVP water service contractors, as opposed to other water rights holders, as the BDCP does not include any regulatory actions that would affect water availability to any such water rights holders. Please see Master Responses 26 (Area of Origin) and 32 (Water Rights) for additional information on changes in water exports and water rights. Consistent with previous modeling analyses conducted by DWR and Reclamation, including the 2008 Biological Assessment on the Continued Long-Term Operations of the Central Valley Project and State Water Project, the modeling analyses presented in this section assumed that the SWP and CVP were solely responsible for providing any needed water for BDCP implementation. However, water quality of the available water, particularly for in-Delta water rights holders, could vary with different alternatives; and therefore, affect beneficial use of the water rights, as described in Chapter 8, Water Quality."</p> <p>The requests made by DWR and Reclamation to SWRCB are not predecisional. Requests for other regulatory actions to evaluate applications concurrently with the environmental process are often conducted so that issues of concern can be incorporated into the process. Receiving information during the review process allows supplemental information to be provided prior to finalizing the NEPA and CEQA documents. Please see Master Response 4 (Alternatives Development), which explains why the proposed project is not pre-decisional.</p> <p>The qualifications of the other NEPA agencies are not in question. NEPA and CEQA provide guidance in the identification of the lead agencies. The lead agencies listed as well as other potential regulatory agencies have been actively engaged during the NEPA and CEQA process. Table 1.2 of the Public Draft BDCP EIR/EIS identified the roles and responsibilities for each agency. Each agency must make a finding during the implementation of its regulatory review process that the EIR/EIS adequately meets its requirements. See also Master Response 32 regarding water rights and Master Response 45 regarding permitting.</p>
2652	254	<p>". . . State effort to meet the goals of providing for a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem." (<a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf">http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf</a>, page 1, p1) This request is not part of a broader effort for these goals or DWR and Reclamation would have also applied at this time for the water rights changes for additional points of diversion and water consumptive use to support the ecosystem restoration that is part of "California EcoRestore," or for the habitat conservation measures that are part of all of the BDCP alternatives, except the Proposed Project/Action and the other new alternative that do not contribute to habitat restoration or species conservation that were introduced in the revised public draft EIR/S. This petition</p>	<p>The referenced petition accurately states the goals of the California WaterFix. This approach is also included in Chapter 2, Project Objectives and Purpose and Need in this Final EIR/EIS. DWR and Reclamation are actively considering all of the alternatives presented in this Final EIR/EIS and are intending to complete the NOD and ROD processes prior to completion of the SWRCB California WaterFix petition hearings. No decision about any alternative has been made at the time of the writing of this Final EIR/EIS. Please also refer to Master Response 4, regarding alternatives development and Master Response 45 regarding permitting.</p>

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		is misleading in that it is not part of the effort for "protecting, restoring and enhancing the Delta Ecosystem." This petition must be retracted to remove these misrepresentations of the project and the purpose of the petition. The petition should not be submitted until the final EIR/S has been certified and a NOD [Notice of Decision] and ROD [Record of Decision] issued. If a petition is submitted prior to the final EIR/S, then it must be a broad enough request to encompass all of the project alternatives otherwise the request is predecisional on the outcome of the EIR/S.	
2652	255	"The actions proposed by DWR and Reclamation in this petition would facilitate fundamental, systemic change to the current system, putting the State on a course to '[a]chieve the two coequal goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem.'" ( <a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf">http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf</a> ) The stated Purpose and Need and Project Objectives of the BDCP is to achieve these two co-equal goals, not to achieve one of them at the expense of the other which the current BDCP plan has proposed by implementing the water conveyance project first and then discovering later when the habitat restoration project creates unacceptable environmental impacts with the already implemented BDCP conveyance.	See Master Response 3 regarding purpose and need, Master Response 4 regarding development of alternatives, Master Response 8 regarding analysis of the project as a whole, Master Response 9 regarding cumulative impacts analysis, and Master Response 31 regarding compliance with the Delta Reform Act. Regarding consistency with the Delta Plan, see response to comment 2652-242, above.
2652	256	(California Public Resources Code Section 29702, subd. [a]). ( <a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf">http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf</a> , page 2, p1)  What DWR and Reclamation have proposed in the BDCP is not systemic for the CVP/SWP. The scope of the BDCP project was artificially constrained to be within the statutory Delta. To be systemic to the CVP/SWP, the scope would have to include the upstream tributaries and storage to the Delta as well as the downstream of Delta conveyance and storage. The BDCP has declined to include these other parts of the CVP/SWP in the scope of the project even after repeated requests in the comments in public scoping and in the first public draft EIR/S. This claim in the petition of it being in support of a system-wide project is false and purposely misleading to the SWRCB. The petition must be revised to remove this misrepresentation before the SWRCB should give this petition any consideration. More importantly, SWRCB must consider project alternatives that truly are systemic to the CVP/SWP and that include upstream and downstream of Delta conveyance, operations and storage alternatives as they consider this petition. As an example, the BDCP must include an alternative that includes repair of the current south-of-Delta delivery conveyance so that 30-50% of the water diverted from the Delta is not lost to canal leaks prior to delivery. If the CVP/SWP were more efficient in delivering the water it diverted, it would not need to divert nearly as much water from the Delta and their operational impacts would be significantly reduced without any need for modification to other parts of the CVP/SWP system. The SWRCB must consider these other less environmentally damaging options to the BDCP prior to any potential approval of this petition.	Please refer to Master Response 4, regarding the adequacy of Alternatives development for the EIR/EIS and Appendix 3A, which addresses the many alternatives considered in the screening process. The California WaterFix intends to improve Delta SWP facilities to meet the stated objectives and purpose and need statement in Chapter 2 of the EIR/EIS. See also Master Response 45 regarding permitting.
2652	257	"Water would be diverted through one of three new fish-screened intakes located on the east bank of the Sacramento River between Clarksburg and Courtland." ( <a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf">http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf</a> , page 2, p2) The SWRCB must not issue a change in water right based on this petition as DWR and Reclamation have failed to provide	Please refer to the FFTT report, Appendix 3A and Appendix 3F in the Final EIR/EIS for information related to intake locations considered . See also Master Response 45 regarding permitting.

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		supporting information on the impacts of the proposed change as compared to their existing water rights points of diversion. DWR has water rights for points of diversion at Hood and Clifton Court. DWR has proposed three new diversion locations for their water rights, but they have not provided a comparison of the impacts to fisheries and water quality that compare directly their current right vs. the right they are petitioning for. Specifically, DWR did not quantify the differences of this petition to those conditions that would occur if they were to utilize their current water right point of diversion at Hood. DWR must provide an analysis of this difference in impact that would occur from granting this petition or the SWRCB must conduct their own analysis and disclose it as part of their hearing and consideration process.	
2652	258	"The California WaterFix would result in substantially improved conditions in the Delta for endangered and threatened species. . . ."  ( <a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf">http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf</a> , page 2, p3) This is a false and misleading claim from DWR and Reclamation in this petition. The revised public draft BDCP EIR/S does not conclude that there are substantially improved conditions for endangered and threatened fisheries species resulting from the Proposed Project/Action or any of the other alternatives currently considered. In fact, the PDEIR concluded exactly the opposite, that the project and alternatives resulted in significant and unavoidable impacts to some of the T & E [threatened and endangered] species and that they failed to substantially benefit the species and contribute to overall conservation and protection of the covered species. This claim by DWR and Reclamation from their incomplete and still draft EIR/S document is meant to mislead the SWRCB in their evaluation of this petition. These false and misleading claims must be removed from this petition before the SWRCB should give this petition any consideration and any similar claims in the BDCP EIR/S must be removed.	Please refer to Chapter 11 in the Final EIR/EIS, Fish and Aquatic Resource for more information on potential effects to special status fish species.
2652	259	If the SWRCB grants [the California WaterFix] petition, they will be endorsing a project that results in a degradation [of] beneficial uses of water, including cold water fisheries, warm water fisheries, agriculture irrigation, municipal water supply, and recreation (contact and non-contact).	See Master Response 34 regarding beneficial uses of water.
2652	260	". . . system that allows water managers to shift between intakes to avoid entrainment of at-risk fish species. . . ."  ( <a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf">http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf</a> , page 2, first bullet) This is a misleading statement in the petition. DWR and Reclamation have no means to monitor the presence of and impacts to fish present at the north Delta intakes so they cannot "shift between intakes to avoid entrainment." They have demonstrated no means to do what they are claiming here they will do in order to reduce impacts so this claim is false and the benefits to the species will not be realized. The BDCP has not described or evaluated north Delta or dual water operations that include this intake switching. This claim must not be included in considerations for justification for issuing the permit. These false claims must be removed before the SWRCB should consider this petition and any similar claims in the BDCP EIR/S must be removed.	See Master Response 22 regarding mitigation and Master Response 28 regarding operational criteria.
2652	261	"Siting of new diversions in areas outside of the primary habitat for Delta Smelt and Longfin Smelt"	As discussed in the EIR/EIS, the north Delta intakes are upstream of the main habitat occupied by delta smelt and longfin smelt; note that there is no designated critical habitat for longfin smelt, as federal listing of that

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		<p>(<a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf">http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf</a>, page 3, first bullet) This is a false and misleading claim in the petition. The north Delta intake locations are in designated critical habitat for both of these species and both of these species have been documented to occur consistently in these reaches and above and below these reaches proving that these species utilize this habitat and transit through this habitat and would therefore be exposed to these intakes. There is no such thing as "primary" designated habitat so this claim in the petition is clearly intended to deceive the board with a made-up designation and a claimed benefit of avoidance that is patently untrue. Any similar claims in the BDCP EIR/S must be removed.</p>	<p>species has not occurred. See Chapter 11, Fish and Aquatic Resources, and Master Response 17 regarding effects on Delta smelt and longfin smelt.</p>
2652	262	<p>"Integration of state-of-the-art fish screens at each intake to minimize entrainment"</p> <p>(<a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf">http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf</a>, page 3, second bullet) This claim is untrue. The BDCP has not proposed to modify the existing south Delta intakes to state-of-the-art screens even though these were repeatedly suggested at public scoping and in draft EIR/S comments. The Proposed Project/Action and most of the project alternatives are dual conveyance operations which would have the south Delta intakes still operational and not "each modified to state-of-the-art screens" as the petition claims. These false and misleading claims in the petition must be removed before the SWRCB can consider the petition and DWR and Reclamation must fully evaluate an alternative that includes implementing state of the art fish screens at the south Delta intakes. Any similar claims in the BDCP EIR/S must be removed.</p>	<p>Please refer to Appendix 3A in the Final EIR/EIS regarding fish screens and Clifton Court Forebay. North Delta intakes would include state of the art fish screens as described in Chapter 3, Description of Alternatives in this Final EIR/EIS.</p>
2652	263	<p>"Upgrading the SWP/CVP water conveyance system in a manner that improves the ability to capture water during wet years and store it for use during dry years"</p> <p>(<a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf">http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf</a>, page 3, third bullet) The same could be said of building additional upstream or downstream of Delta storage which the BDCP has repeatedly rejected consideration of even with this being recommended in public scoping and previously submitted comments. The SWRCB must consider an alternative for upstream and downstream storage in their evaluation of the merits and impacts to beneficial uses of water in consideration of this water right petition.</p>	<p>Please see Master Response 37 regarding water storage. Although conservation components such as recycled water have merit from a statewide water policy standpoint, and are being implemented or considered independently through the state, they are beyond the scope of the proposed project. For more information regarding purpose and need please see Master Response 3.</p>
2652	264	<p>"Protecting against water supply disruptions associated with catastrophic system failures caused by earthquakes. . ."</p> <p>(<a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf">http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf</a>, page 3, fourth bullet) This is a misleading claim in the petition. The Proposed Project/Action and alternatives do not "protect" the water supply system from earthquakes. The project may reduce some sources of risk to the water conveyance system, while it creates new risks (vulnerability to levee failures in other parts of the Delta, e.g., Merritt Island, RD [Reclamation District] 999, and new vulnerabilities of tunnel failures) and while ignoring other water system vulnerabilities such as the aqueduct which is in much closer proximity to seismically active faults. At the very least, this claim must be reworded to reflect that the project may have reduced and shifted some types of risks while creating new risks before this claim should be given any credit by the SWRCB as a partial justification for the consideration of the petition. Any similar claims in the BDCP EIR/S must be removed.</p>	<p>Please see Master Response 16 and Appendix 3E regarding potential seismic and climate change risks to water supply and Master Response 19 regarding climate change.</p>

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2652	265	<p>"Protecting against water supply disruptions associated with sea level rise caused by climate change"</p> <p>The project does not protect from this risk, it just reduces some sources of risk in exchange for other sources of risk. An alternative not considered by the BDCP, but [that] should be considered by the SWRCB, is the construction of upstream and downstream of Delta water storage which would provide more protection from sea level rise than the BDCP proposed project and would have lower environmental and water quality/beneficial uses of water impacts than the petitioned project. Any similar claims in the BDCP EIR/S must be removed.</p>	<p>Please refer to response to comment 2652-264, above. The proposed project is not intended to serve as a state-wide solution to all of California's water problems, and it is not an attempt to address directly the need for continued investment by the State and other public agencies in water storage projects as well as agricultural and municipal/industrial water conservation, recycling, desalination, treatment of contaminated aquifers, or other measures to expand supply and storage (as described in Section 1.C.3 of Appendix 1C, Demand Management Measures). Please see Master Response 3 regarding the project objectives and purpose and need statement.</p>
2652	266	<p>"DWR and Reclamation look forward to providing additional documentation to support this petition. . . ."</p> <p>(<a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf">http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf</a>, page 3, p3) Additional information must be provided in order for adequately complete and comprehensive information to be available to consider this petition. Additional information required prior to conservation of this petition should include, but necessarily be limited to: a complete and certified EIR/S document, full consideration of other alternatives that equally or better meet the benefits claimed in the petition, consideration of alternatives that better protect all beneficial uses of water, and full and direct comparison of the impacts of DWR and Reclamation exercising their current water rights (locations of points of diversion vs. proposed points of diversion) as is as compared to what they are proposing.</p>	<p>The State Water Resources Control Board is charged with the comprehensive planning and allocation of water resources in California through a process independent of the proposed project. Please refer to Master Response 4 for additional details on the selection of alternatives. Also, please see Master Response 34 regarding beneficial uses, Master Response 26 regarding area of origin protections, and Master Response 32 regarding water rights.</p>
2652	267	<p>(<a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf">http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf</a>, page 4) We [Central Delta Water Agency] disagree with the stated purpose of use. The proposed change in diversion location will result in a stream flow reduction in the reaches downstream of the new diversion locations all the way to the south Delta where the water is currently diverted, not an enhancement as claimed in the petition. The proposed change in diversion location will result in a reduction of salinity control in the reaches downstream of the new diversion locations all the way to the south Delta where the water is currently diverted, not an enhancement as claimed in the petition. The proposed change in diversion location will result in additional energy consumption by the project, not an enhancement as claimed in the petition. Each of these purposes of use result in degradation of beneficial uses of water if the petition is granted. The SWRCB must not violate the Central Valley</p> <p>Regional Water Quality Plan by approving this petition and degrading beneficial uses of water.</p>	<p>Please see Master Response 14 for further discussion of water quality issues. Please see Master Response 45, Permitting, for further discussion of other permitting processes and requirements.</p>
2652	268	<p>(<a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf">http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf</a>, page 5) The petition should have disclosed that the proposed project would result in a significant increase in discharge waste water from their project. The project will operate, during construction as well as continued operations, a number of dewatering wells. These discharge waters will require treatment to meet Clean Water Act water quality standards prior to discharge to waters of the US. The lack of this information in the petition is a material deficiency and the SWRCB should reject this petition from further consideration until this information is provided in a quantitative form (quantity of water and quality of water (before and after treatment) as well as locations of discharges and timing of discharges).</p>	<p>The SWRCB's consideration of DWR and Reclamation's petition to change their points of diversion is a regulatory compliance proceeding separate from the CEQA/NEPA process. The assessment of potential water quality effects of the project alternatives fulfills a primary public disclosure purpose of the CEQA and NEPA process and will be utilized by the SWRCB, EPA and the U.S. Army Corps of Engineers in fulfilling their regulatory obligations with respect to the project under state and federal law. Clean Water Act regulatory compliance processes, including under section 404, are separate from the CEQA/NEPA process, and involve their own procedures and policies. Please see Master Response 14 for further discussion of water quality issues. Please see Master Response 45, Permitting, for further discussion of other permitting processes and requirements.</p>

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2652	269	( <a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf">http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf</a> , page 5) General Information on the form indicates that DWR has ownership of the proposed points of diversion. This is an incorrect assertion in the petition as the points of diversion proposed by DWR and Reclamation are privately owned. This is materially misleading information in the petition as public condemnation proceedings will be required and would be included in the implications of any potential approval of this petition by the SWRCB. The fact that there is no box on the form indicating that the proposed point of diversion is privately owned and planned to be publicly condemned indicates that DWR and Reclamation's petition is premature and should not be resubmitted until they do have ownership or written agreements in place for the proposed diversion locations.	The SWRCB's consideration of DWR and Reclamation's petition to change their points of diversion is a regulatory compliance proceeding separate from the CEQA/NEPA process. Please see Master Response 45, Permitting, for further discussion of permitting processes and requirements.
2652	270	"Before the State Water Resources Control Board (State Water Board) can approve a petition, the State Water Board must consider the information contained in an environmental document prepared in compliance with the California Environmental Quality Act (CEQA)." ( <a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf">http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf</a> , page 6) The BDCP EIR is not CEQA compliant as it is only in a public draft form and has not been certified with a Record of Decision. Until it is a certified document by the state lead agency (and all of the CEQA deficiencies of the current draft EIR have been corrected), the document is not CEQA compliant and must not be utilized in consideration of this petition.	The SWRCB's consideration of DWR and Reclamation's petition to change their points of diversion and this CEQA/NEPA process are progressing separately and concurrently. Please see Master Response 45, Permitting, for further discussion of permitting processes and requirements.
2652	271	"If a CEQA document has not yet been prepared, a determination must be made of who is responsible for its preparation." ( <a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf">http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf</a> , page 6) A CEQA document has not yet been prepared and the current public draft EIR does not contain sufficient information to specifically support the consideration of this petition. The EIR does not contain a direct comparison of the project being implemented under the current water rights and does not have a specific section dedicated to the analysis of beneficial uses of water that are affected by the project and by this petition for the changes in points of use. Further, this petition only supports the current Proposed Project (different now from the first public draft) and specifically does not support the other alternatives in the EIR that would also require other changes in location of points of diversion as well as other uses of water that are not covered under the current DWR and Reclamation water right, e.g., consumptive use of water in the Yolo Bypass for wildlife habitat creation. Since the current BDCP EIR/S draft is deficient to support the SWRCB's evaluation of this petition, the SWRCB should consider hiring an independent contractor to create a CEQA document that is specifically developed to meet SWRCB decision support needs in consideration of this petition as well as the 401 Certification.	The State Board will ultimately decide, as a responsible agency, whether this Final EIR/EIS provides sufficient information to support its decision-making process for the change petition and Section 401 Water Quality Certification. Please see Master Response 45, Permitting, for further discussion of permitting processes and requirements.
2652	272	( <a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf">http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf</a> , page 6) The SWRCB must not accept draft documents to rely upon for permitting decisions. The petition is only for Alternative 4A, but the EIR is not final so the petition is predecisional by DWR and Reclamation and if the SWRCB were to grant the petition based on this draft document, it too would be guilty of being predecisional.	Please refer to Master Response 4 regarding alternatives development.

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2652	273	( <a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf">http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf</a> , page 10, p1) DWR and Reclamation have stated a number of times (although the information in the Public Draft EIR/S is inconsistent with this) that Reclamation will not own or operate the proposed facilities and DWR may only be wheeling water for Reclamation. It would seem, given the difference in nature of DWR and Reclamation's roles in the project and the implications to the petition, that their petitions must be distinct and separate and the analysis of these water rights changes addressed in the BDCP EIR/S.	The water rights change petition was submitted jointly by DWR and Reclamation because water would be diverted in the proposed conveyance facilities under existing water rights that have been allocated to both DWR and Reclamation; and DWR and Reclamation operate SWP and CVP in a coordinated manner in accordance with State Water Resources Control Board Decision 1641 and in accordance with the Coordinated Operations Agreement approved by the State Legislature and Federal Congress.
2652	274	"It proposes only to add points of diversion and redirection within the Sacramento/San Joaquin Delta Estuary (Delta) of the permits listed above. This Petition does not propose to change any other aspect of the existing SWP/CVP permits." ( <a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf">http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf</a> , page 10, p1) Then this petition does not cover any of the other new water discharge locations required for dewatering and other construction and operations-related activities, nor does it cover any habitat restoration or mitigation water diversions or consumptive uses of water in new locations and for new purposes.	The SWRCB's consideration of the DWR and Reclamation's petition to change their points of diversion is separate from the CEQA/NEPA process. Please see Master Response 45, Permitting, for further discussion of other permitting processes and requirements. The change of point of diversion proceeding is not intended to nor is required to result in issuance of permits to discharge water from construction dewatering. Neither of the CEQA Lead Agencies is applying for permits for water diversion for habitat restoration or mitigation, or for a change in place of use or purpose of use of their current water rights.
2652	275	"The legislature further finds and declares that the basic goals of the state for the Delta are the following: (a) Achieve the two coequal goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. --Delta Protection Act of 1992" ( <a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf">http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf</a> , page 11, p4) The BDCP proposed project and other new alternatives do not "protect," "enhance" or "restore" the Delta ecosystem. The proposed project only mitigates, partially, significant impacts which it precipitates on the Delta environment and species from implementing the BDCP project. Some of the impacts on these species and designated critical habitat are significant and unavoidable and therefore are unmitigated impacts of the project. Less than significant impacts, although detrimental to the environment and species, are not mitigated by the project. If you consider that the significant impacts are not fully mitigated to levels that have no adverse impact and that the less than significant impacts are not mitigated at all, you can see that the projects claim that it still (without the HCP) achieves the co-equal goal of protecting and restoring and enhancing the Delta Ecosystem is false and purposefully misleading to the agencies that would rely upon the EIR/S as a decision support document. The project does nothing to contribute to protecting, restoring and conserving species and habitat beyond the bare minimum mitigation allowed by law (and perhaps not even that as there is insufficient information in the EIR/S document to make that determination).  Other current BDCP project alternatives have less impact, e.g., the 3,000 cfs [cubic feet per seconde] conveyance, or other proposed alternatives not currently included in the BDCP EIR/S, e.g., Western Delta Intake alternative, than the Proposed Project represented in the water rights petition. Other alternatives other than the new ones in the revised public draft EIR/S do include contributions to habitat restoration and species conservation so only these alternatives would represent DWR's water rights petition claim truly. The Proposed Project/Action in the petition is not consistent with the Delta Protection Act of 1992. The rest of the petitions references to the act only focus on the water supply aspects of the act and omit the other, co-equal requirement for habitat restoration and species conservation.	For additional information regarding the formulation and selection of alternatives for evaluation in the EIR/EIS, please see Master Response 4. For additional information regarding ecosystem restoration, refinements to the project objectives/purpose and need, and consistency with the co-equal goals, please see Master Responses 3 and 5. Please refer to Chapter 8, Water Quality, Chapter 11, Fish and Aquatic Resources, and Chapter 12, Terrestrial Biological Resources, for a comprehensive analysis of the potential effects of the action alternatives on Delta resources.

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2652	276	<p>"...DWR and USBR should continue their efforts to develop alternative water conveyance and storage facilities in the Delta, and should evaluate these alternatives and their feasibility and take action as necessary to minimize impacts to fish."</p> <p>(<a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf">http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/california_waterfix/docs/ca_waterfix_petition.pdf</a>, page 13, p2) The BDCP failed to consider storage as the SWRCB suggested and eliminated from consideration alternatives which would have minimized project affects to fish, e.g., south Delta intake criteria fish screens and western Delta intake locations, just to name [two] of many.</p>	<p>For information regarding why water storage was not included in the proposed project, refer to Master Response 37 (Water Storage) and Appendix 1B, Water Storage, EIR/EIS. Please refer to Master Response 4 for additional details on the selection of alternatives and Appendix 3A regarding why improving screens at the South Delta intakes were not included in the proposed project. Also, please see Master Response 6 for additional details on demand management.</p>
2652	277	<p>Craig Wilson, former SWRCB Delta Water Master: "One of the main points to make about that is that most of the benefits and pros of the tunnels accrue to the exporters to the south and don't accrue to other parts of the state, the Delta and others. There's no question that by building an isolated facility to the north and having the ability to send good quality Sacramento River water directly to the export pumps, there will be better water quality for the exporters, but not for the Delta, because as you take that water out of the system, it means the Delta has less water in it."</p> <p>(<a href="http://mavensnotebook.com/2015/08/26/legislative-hearing-are-the-Delta-tunnels-good-f-or-california-part-2-of-2/">http://mavensnotebook.com/2015/08/26/legislative-hearing-are-the-Delta-tunnels-good-f-or-california-part-2-of-2/</a>) The former Delta Water Master for the SWRCB is eminently well-qualified to make this comment on the BDCP. Now this comment is part of the project record and this comment must be responded to in a revised EIR/S or in the FEIR/S. The improvement in export water quality and degradation of Delta water quality is shown on some graphs in an appendix buried deep at the back of the RPDEIR/S document. The main body of the analysis fails to disclose, discuss, provide impact calls for or propose actions to avoid, minimize or mitigate this significant water quality impact.</p>	<p>Constituents of concern have been identified through an ongoing regulatory monitoring, and environmental planning processes. The water quality analysis in the RDIER/RDEIS covering the new subalternatives, including the new preferred alternative 4A, and Appendix A provide a thorough analysis of important water quality constituents of concern at multiple locations throughout the Delta to present the potential water quality effects that could result from implementing the proposed project alternative. Appropriate mitigation measures and environmental commitments have been developed to mitigate the alternatives' contributions to Delta water quality conditions (see Master Response 22). Please see Master Response 14 for further discussion of water quality issues and Master Response 46 regarding recirculation.</p>
2652	278	<p>Craig Wilson, former SWRCB Delta Water Master: "There's reliability for the export water by having this isolated facility, but there's no reliability for the Delta, for either the fisheries protection or the agricultural community," he said. "In fact, if there is some type of levee failure or catastrophic event, there will probably be less incentive on the part of a lot of people to jump in and try and fix that immediately since there's this isolated facility that protects the export water."</p> <p>(<a href="http://mavensnotebook.com/2015/08/26/legislative-hearing-are-the-Delta-tunnels-good-f-or-california-part-2-of-2/">http://mavensnotebook.com/2015/08/26/legislative-hearing-are-the-Delta-tunnels-good-f-or-california-part-2-of-2/</a>) The former Delta Water Master for the SWRCB is eminently well qualified to make this comment on the BDCP. Now this comment is part of the official project record and this comment must be responded to in a revised EIR/S or in the FEIR/S. This reduction in the potential public will and motivation to provide funding and resources to protect and restore the levees in the Delta is a real impact of the project that the BDCP EIR/S did not disclose or mitigate.</p>	<p>The No Action Alternative and all of the action alternatives assume that the state and federal agencies would continue to consider restoration of levees following levee failures in the future as historically to protect many users of the Delta, including land uses, transportation and utility locations, and water supplies. See also response to comment 2652-277, above.</p>
2652	279	<p>Section 6 - List of Preparers - There is not a single person identified in the list of preparers from the BDCP EIR/S prime contractor, HDR Engineering. From the list, there has obviously been a shift in control and execution of the preparation of the BDCP EIR/S from the originally selected consultant to the BDCP HCP contract team. This change in the contractor responsible for developing the EIR/S was done without following the federal contracting guidelines that would require federal agency representatives to participate in the selection of the consultant. The federal agencies were not part of the process to select the BDCP HCP consultant and they were not part of the process for the HCP contractor to take over preparation of the EIR/S. The BDCP EIR/S has been prepared by a consultant who has been</p>	<p>The list of preparers was prepared appropriately in the EIR/EIS. The comment does not present issues related to the adequacy of the EIR/S analysis.</p>

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		<p>put in charge of the EIR/S document in a violation of federal contracting standards.</p> <p>Out of the list of Consultant Team preparers, only members from AECOM, RBI and CH2MHill were part of the HDR Engineering consultant team that were selected to prepare the BDCP EIR/S. All other preparers, about 3/4 of those identified, are from firms that were not part of the team selected by the federal lead agencies to prepare the document. Since these other, non-selected, firms were not part of the contracting and interview process to select the BDCP EIR/S consultant team that the federal agencies participated in, all sections of the document prepared by the non-selected consultants must be disregarded in the decision-making process by the federal agencies and must be re-prepared by authorized contractors that were selected in conformance with federal contracting standards.</p>	
2652	280	<p>Section 6 - List of Preparers - The Section 6 document, <a href="http://baydeltaconservationplan.com/RDEIRS/6_LoP.pdf">http://baydeltaconservationplan.com/RDEIRS/6_LoP.pdf</a>, downloaded from the BDCP website, was supposed to provide red-line-strike-out versions, but this section was not. The red-line-strike-out version must be posted as so that the public can easily see how much the source of the authorship has changed since the original public draft BDCP EIR/S. This is especially important for the principal authors for each section as it appears that very few of the principle authors from the first PDEIR/S have even been recognized as contributing authors in the revised PDEIR/S. The lead and responsible agencies must explain and justify this drastic turnover in lead authorship of the document. It is of great concern that the original consultant team may have been replaced because the project advocates did not like the outcome of the science in the first public draft and that original team was replaced with another, unselected set of consultants that were more amenable to conducting an outcome-driven process and document. This outcome-driven document over an independent and objective science-driven process is illustrated in the EIR/S by the fact that the discussions of the project effects on resources often identify impacts that are then ignored in the impact conclusions, and rarely is any coherent supporting synthesis provided as rationale for the impact call conclusions. Often discussion of potential impacts is short and unsupported and then a subjective and unsupported impact call is made. A good example of this incomplete discussion of the project effects on a resource and an unsupported subjective conclusion is the treatment that dissolved oxygen received in the water quality section.</p> <p>6.2 - The list of preparers by resource must identify who these principal authors work for. With some difficult and unnecessary cross referencing between the preparer sections, it is becoming obvious that this is a 100% consultant prepared document. What we must learn from the addition of the names of the entities that the authors work for is how much of the document was prepared by people that were not authorized to prepare the document, i.e., how much was prepared by people that were not lead or responsible agencies or by the selected BDCP EIR/S consultant team.</p>	<p>Red line-strikeout versions were not prepared for any section or chapter of the RDEIR/SDEIS because red line-strikeout would have only created confusion. Instead, the RDEIR/SDEIS was presented as a stand-alone document that references the Draft EIR/EIS where necessary.</p> <p>The List of Preparers in the RDEIR/SDEIS clearly identifies public agency and consulting company staff members who prepared the document. Although much of the EIR/EIS has been prepared by consultants, the Lead Agencies have reviewed the entire contents and are fully responsible for the EIR/EIS. No attempt has been made to deceive readers or shift responsibilities.</p>
2652	281	<p>Dr. Christina Swanson, Natural Resources Defense Council: ". . . the California WaterFix actually suggests that they could increase compared to what the BDCP was doing, the way the result of this will be further reductions in freshwater flows to the system which cannot be beneficial; they can only be harmful to fish." "In fact, the north Delta is literally the only place in the Delta where we have very many native species remaining," she said. "It's a bit of a refuge; therefore proposals to add a new diversion point into that habitat will in fact be affecting the last refuge region within the Delta that currently supports, albeit low levels of native species. There are virtually no native fish left in the south Delta." "Further reductions</p>	<p>A process for immediate, real-time adjustments based on fish presence is included in the project, and the Collaborative Science and Adaptive Management Program will allow for further adjustments over time based on new information. Using the tools and methods available at this time, the EIR/EIS discloses the potential effects on fish species as a result of the proposed operations and does not find that any impacts on listed fish would be significant or adverse. Critical habitat is evaluated as part of the ESA consultation. See Chapter 11, Fish and Aquatic Resources, for more information.</p>

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		<p>in fresh water flows from the project will exacerbate some of the other causes of problems, including invasives which thrive under these low flow conditions, as well as potentially toxics by further reducing the dilution or the assimilative capacity of the Delta, she said. "In fact, many of the analyses of both the BDCP and I'm less familiar with the details on the California WaterFix suggests that overall water quality conditions in the Delta will be degraded by this facility and by its operations." "So this is a pretty good example from my scientific perspective of a project which has missed the mark in regard to identifying what are the real causes of the problems here," she said. "They've come up with a plan which does not address them and therefore it is unlikely to be successful at least in regards to improving conditions for fishes and the ecosystems."  <a href="http://mavensnotebook.com/2015/08/25/legislative-hearing-are-the-Delta-tunnels-good-for-california-part-1-of-2/">(http://mavensnotebook.com/2015/08/25/legislative-hearing-are-the-Delta-tunnels-good-for-california-part-1-of-2/)</a></p> <p>Dr. Swanson is correct; since the project is proposing to divert more water on average than the No Action/No Project and the quantity of water flows in the Delta is a limiting factor to fish habitat quality and fish population health, it is inescapable to conclude that the Proposed Project/Action would have significant adverse impacts to listed fish species and adversely modify their critical designated habitat.</p>	
2652	282	The overpass on Highway 12 on Bouldin Island to allow access to the BDCP proposed project tunnel muck disposal site on the southern tip of the island is already, as of July 2015, under construction. There is no other purpose for this overpass construction other than to ready infrastructure to facilitate a BDCP project that has not been approved yet. This construction is an unacceptable and illegal commitment of resources on a project that has not yet been approved. Work on this Highway 12 overpass project must cease and desist immediately and the contracting, authorizations and funding of the project must be investigated for legal and policy violations.	Please see response to Comment 2652-15, above.
2653	1	EWC [Environmental Water Caucus] continues to object to the Tunnels Project: it should be neither approved, financed, built, nor operated. The Tunnels Project will accelerate deterioration of the Bay-Delta Estuary by starving it of freshwater flow badly needed for the health of both the Delta and the Bay. It will starve California cities, counties and local water agencies of badly needed tax base that could fund local and regional water self-reliance projects including investments in water use efficiency, water recycling, advanced water technologies, local and regional water supply projects, and improved regional coordination of local and regional supply efforts and decades of detrimental aquatic ecosystem impacts. It will unwisely encourage continued mismanagement of California's state and federal water systems that have already failed to steward its water resources through four years of drought. The RDEIR/SDEIS violates the California Environmental Quality Act and the National Environmental Policy Act by failing to disclose impacts and evaluate a reasonable range of alternatives, and for promoting "myth-information" on behalf of project advocacy, rather than provide a science-driven analysis of Tunnels Project effects.	<p>The issue raised by the commenter addresses the merits of the project and does not raise any issues with the environmental analysis provided in the EIR/EIS. The proposed project was developed to meet the rigorous standards of the Clean Water Act and federal and state Endangered Species Acts, the proposed project is intended to be environmentally beneficial, not detrimental. By establishing a point of water diversion in the north Delta and new operating criteria to improve water operations timing the proposed project is designed to improve native fish migratory patterns and allow for greater operational flexibility.</p> <p>The commenter infers that the EIR/EIS does not disclose impacts and questions the accuracy; however, there are no specifics that can be responded to. Please see Master Response 4 concerning the alternatives development and the reasonable range of alternatives within the document.</p>
2653	2	<p>Myth: California WaterFix tries to sell itself as a sustainable water project that will improve the water supply reliability of the state and federal water export systems.</p> <p>Fact: The Tunnels Project will achieve this by taking more water from Delta and Sacramento Valley water users and ecosystems, replacing this fresher water with more polluted and saline flows from the San Joaquin River. Sustainability for whom?</p>	The proposed project would decrease total exports of SWP and CVP water as compared to Existing Conditions and No Action Alternative in the summer and early fall months; and increase flows in the wet winter months when the river flows are high to improve conditions for aquatic resources. The water would be stored at locations south of the Delta during the high flow periods to allow reductions in deliveries in drier periods. The north Delta and south Delta intakes would only be used to divert water under existing water rights that were issued to DWR and Reclamation by the State Water Board with consideration for

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			<p>senior water rights and Area of Origin laws and requirements.</p> <p>Please refer to Master Response 3 for the Purpose and Need and Master Response 28 for a discussion of the proposed project's Operational Criteria. The proposed project does not increase the amount of water to which DWR holds water rights or for use as allowed under its contracts. Water deliveries from the federal and state water projects under a fully-implemented Alternative 4A are projected to be about the same as the average annual amount diverted in the last 20 years. Although the proposed project would not increase the overall volume of Delta water exported, it would make the deliveries more predictable and reliable, while restoring an ecosystem in steep decline. Refer to Master Response 26 (Area of Origin).</p> <p>Please see Chapter 8, Water Quality, and Master Response 14, which address water quality issues.</p>
2653	3	<p>Myth: California WaterFix will improve flows through the Delta so they reflect a more natural east-to-west flow direction rather than the current north-to-south direction of flow under the influence of the south Delta export pumps.</p> <p>Fact: The Tunnels will reduce Sacramento River flows by 20 to 24 percent, making permanent drought-like conditions throughout the Bay-Delta Estuary. Delta waters will stagnate, accumulating pollutants and toxins from harmful algal blooms.</p>	<p>This comment is consistent with conditions in the Sacramento River immediately downstream of the North Delta Diversions, as shown in Appendix 5A, Section C. However, in accordance with the Project Objectives and Purpose and Need (see Chapter 2 of the EIR/EIS), all of the action alternatives would continue the operation of the SWP and CVP in accordance with the existing water rights and regulatory criteria adopted by the State Water Resources Control Board, U.S. Fish and Wildlife Service, National Marine Fisheries Service, and California Department of Fish and Wildlife. All of the alternatives evaluated in the EIR/EIS would divert water only under existing water rights issued to DWR and Reclamation by the State Water Board with consideration for senior water rights and Area of Origin laws and requirements. The proposed project does not seek any new water rights nor reduction in total water rights issued to DWR and Reclamation. Operations for the proposed project would still be consistent with the criteria set by the U.S. Fish and Wildlife Service and National Marine Fisheries Service biological opinions and State Water Resources Control Board, as described in Chapter 5, Water Supply of the EIR/EIS. The potential for facilities operations to affect water quality and result in harmful algal blooms is addressed in Chapter 8, Water Quality, in Impacts WQ-1 through WQ-34. The operations of facilities under preferred Alternative 4A (California WaterFix) would result in less-than-significant impacts to all constituent assessed, except EC, for which mitigation has been provided to reduce impacts to less than significant.</p>
2653	4	<p>Myth: California WaterFix will mitigate the seismic and sea level rise risks in the Delta.</p> <p>Fact: The Tunnels project does nothing to protect the Delta; it will only protect state and federal water exports from seismic and sea level rise risks to unsustainable farming in the San Joaquin Valley and suburban development in Southern California.</p>	<p>The Plan does not purport to mitigate the hazards of seismic shaking and sea level rise in the Delta in general. As the commenter indicates, the Plan is intended only to protect state and federal water exports from such hazards. Please see Master Response 3 regarding the purpose and need for the project.</p>
2653	5	<p>Myth: The California WaterFix will be affordable to Californians because beneficiaries will pay for it.</p> <p>Fact: Funding and financing plans for the Tunnels Project are stalled. Farmers balk at the high cost of Tunnels water, while urban ratepayers balk at the prospect of much higher water bills, urban property tax bills climbing to cover agriculture's water costs, and fear that other more drought-proof water supply investments would be foregone, having been spoken for by the Tunnels Project. Just because there may be a beneficiary to pay for the project is no reason to undertake it. Regarding this fact we [Environmental Water Caucus] note that Mark Cowin, director of the California Department of Water Resources, stated at a recent event:</p> <p>"It really comes down to how we are going to pay for it. What's the most equitable way to invest in the projects and the strategies that we know we need? We've seen less federal investment in California water projects and that has left us in a lurch. Should we continue to press Congress? Hope Congress is going to provide money through the Corps of Engineers or</p>	<p>No issues related to the adequacy of the environmental impact analysis in the EIR/EIS were raised. The proposed project was developed to meet the rigorous standards of the federal and state Endangered Species Acts; as such, the proposed project is intended to be environmentally beneficial.</p>

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		<p>the Bureau of Reclamation? Or other agencies? Or are we ready to take the bull by the horns and Find different funding sources? Obviously every project comes down to a different equation, but trying to solve that riddle I think is probably one of the biggest linchpins in moving California water forward."</p>	
2653	6	<p>Did 18 months make a difference that matters in the Tunnels Project?</p> <p>No, not really. The Environmental Water Caucus (EWC) objects to approval of the Bay Delta Conservation Plan [Footnote 2: BDCP, the Bay Delta Conservation Plan, here describes all 22 measures (CMs) of the habitat conservation plan. That plan consisted of what we referred to in last year's comment letter as "the Twin Tunnels" (CM1) and measures 2 through 22, consisting of the Yolo Bypass Fish Facilities Improvement Project of CM 2, habitat restoration measures 3 through 11, measures addressing several ecosystem "stressors" (like methylmercury, invasive aquatic vegetation, dissolved oxygen, predation hotspots) in measures 12 through 17, a smelt refuge in measure 18, and human behavior management measures (including urban stormwater management, boating imports of invasive species, non-project in-Delta diversions, and avoidance and minimization measures for construction activity) 19 through 22.] (BDCP)/California WaterFix project including the Tunnels Project. [Footnote 3: "California WaterFix" is a misnomer; it will not fix California water issues. The EWC calls the project what it appears to be, a Tunnels Project. We think it best not to dignify the Project's self-consciously transparent "branding" effort since it rhetorically applies ideological lipstick to a metaphorical pig.]</p> <p>We also object to approval of a Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the Tunnels Project. The definite lead agencies for the project continue to be the U.S. Bureau of Reclamation and the California Department of Water Resources (DWR), although there may be doubts in the minds of other Tunnels Applicants. [Footnote 4: Last year, according to Bay Delta Conservation Plan, Chapter 1, Introduction, p. 1-1, the "authorized entities" for the Bay Delta Conservation Plan included:</p> <ul style="list-style-type: none"> <li>-California Department of Water Resources, which would own the Tunnels Project described in Conservation Measure 1</li> <li>-US Bureau of Reclamation (whose authorization for take is sought under Section 7 of the ESA)</li> <li>-Kern County Water Agency</li> <li>-Metropolitan Water Agency of Southern California</li> <li>-San Luis [and] Delta Mendota Water Authority</li> <li>- Santa Clara Valley Water District</li> <li>-State and Federal Contractors Water Agency</li> <li>-Westlands Water District</li> <li>-Alameda County Flood Control and Water Conservation District (Zone 7 Water Agency)</li> </ul> <p>This year, EWC will continue to refer to the "Authorized Entities" as simply "the Applicants," "the BDCP Applicants," "Tunnels Applicants," or "Tunnels Project proponents." However, we</p>	<p>The RDEIR/SDEIS lists Kern County Water Agency; Metropolitan Water District of Southern California; San Luis &amp; Delta-Mendota Water Authority; Santa Clara Valley Water District; state and federal contractors water agency; Westlands Water District; and Alameda County Flood Control, and Water Conservation District (Zone 7 Water Agency) as "certain federal and state water contractors" (Section 1.1.5.2, page 1-15).</p> <p>The EIR/EIS has noted the regulatory approvals necessary for project implementation (often referred to as responsible agencies under CEQA). Under the NEPA, several agencies are listed as cooperating agencies. These agencies intend to use the EIR/EIS to inform them of the environmental issues associated with implementing their regulatory oversight.</p>

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		<p>cannot with confidence say we know any longer which entities constitute the Tunnels Applicants. None except DWR and the Bureau are identified in the 2015 RDEIR/SDEIS. Assuming the absence of the others' names from the RDEIR/SDEIS is significant it suggests, first, that they did not wish to be associated with the recirculated documents in 2015, and second, that they may be conflicted about continuing overt support for a project with such difficulties as the Tunnels Project. Not identifying all applicants associated with the project is, however, contrary to CEQA Guidelines [Section] 15051. The existing BDCP financing plan of Chapter 8, November 2013, assumes that the above "authorized entities" would be paying for most Tunnels capital facilities investments. This role contributes to their being lead agencies, yet their names are not disclosed in sections of the RDEIR/SDEIS involving agency review processes.]</p>	
2653	7	<p>Last year, the Bay Delta Conservation Plan was certainly challenging to grasp. It contained both a strategic plan for habitat restoration and a quasi-project description of the proposed Tunnels Project export facility. The Tunnels project was considered as a "conservation measure," due to hyped reduction of harm to listed species at the federal and state South Delta export pumps. Its "conservation strategy" contained 21 other specific "conservation measures." The strategy also puts forward detailed biological goals and objectives, yet states that none of these goals and objectives would be used to measure compliance of the Plan with respect to the Endangered Species Act. [Footnote 6: Environmental Water Caucus, Comments on the Draft BDCP and Draft BDCP EIR/EIS, June 11, 2014, addressed to Ryan Wulff, National Marine Fisheries Service, Sacramento, pp. 37-38. Hereafter cited EWC Comments, June 11, 2014. Accessible online at <a href="http://ewccalifornia.org/reports/bdcpcomments6-11-2014-3.pdf">http://ewccalifornia.org/reports/bdcpcomments6-11-2014-3.pdf</a>, (and <a href="http://ewccalifornia.org/reports/ewcbdcpcomments7-30-2014.pdf">http://ewccalifornia.org/reports/ewcbdcpcomments7-30-2014.pdf</a>). Among the Plan's other conservation measures was a "reserve system" containing dispersed "restoration opportunity areas" in the legal Delta region and Suisun Marsh. Also among its conservation measures were actions aiming to address "other stressors" to covered aquatic species. Unfortunately, some stressors, like selenium toxicity and nonnative invasive clams like <i>Potamocorbula amurensis</i>, are ignored altogether.</p> <p>This year, the 2015 Tunnels Project is shorn of its restoration trappings, revealing its essence as a water conveyance scheme. The RDEIR/SDEIS details specific changes to Tunnels Project facilities and operations, and proposes retaining "environmental commitments" to be drawn from last year's conservation strategy through Section 7 consultation. These environmental commitments could consist of "portions of actions previously contemplated" under Conservation Measures 3 (natural communities protection and restoration), 4 (tidal natural communities), 6 (channel margin enhancement), 7 (riparian natural community), 8 (grassland natural community), 9 (vernal pool and alkali seasonal wetlands), 10 (nontidal marsh restoration), 11 (natural communities enhancement and management), 12 (methylmercury management), 15 (localized predatory fish reduction), and 16 (non-physical fish barriers). Instead of nearly 165,000 acres of habitat restoration under BDCP, there would be at most up to 13,300 acres of natural communities protection and restoration, just 59 acres of tidal natural community restoration, and up to 2,300 acres of restoration work in environmental commitments 6 through 11 under Alternative 4A, the preferred California WaterFix alternative. [Footnote 7: Bay Delta Conservation Plan/California WaterFix, Recirculated Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement, Executive Summary, 2015, p. ES-18, and Table ES.2.2-2, p. ES-19. Hereafter cited as RDEIR/SDEIS. Accessible online at <a href="http://baydeltaconservationplan.com/Home.aspx">http://baydeltaconservationplan.com/Home.aspx</a>.] This is barely one-tenth (1/10) the area of restoration effort contemplated 18 months ago</p>	<p>The lead agencies believe that the BDCP and EIR/EIS are complete in their evaluation of impacts, direct and cumulative, that project description is complete and satisfies the requirements of NEPA, that the project objectives are also precise and complete and satisfy the requirements of CEQA. The lead agencies agree that the 2013 Public Draft EIR/EIS and 2015 RDEIR/SDEIS provided the public and decision-makers with sufficient information on which to make informed comments which have been considered and incorporated into the Final EIR/EIS.</p> <p>Several issues raised by the commenter address the merits of the project and do not raise any specific issues related to the environmental analysis provided in the EIR/EIS. Please see Master Response 3 regarding the purpose and need for the project.</p>

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		<p>by the Bay Delta Conservation Plan.</p> <p>Last year we [Environmental Water Caucus] provided several broad reasons why BDCP was a bad deal for California. The Tunnels Project is worse. BDCP relied on a scientifically flawed hypothesis that habitat restoration can substitute for river flows as the chief strategy for "fixing the Delta," and its implementation would be catastrophic for the Delta's aquatic ecosystems, because it used science to market the Tunnels Project, not to solve Delta problems. The habitat restoration hypothesis for BDCP could be saved by providing more freshwater flows to and through the Delta and restoring additional habitats of various types. This year's Tunnels Project sheds the pretense of restoration and opts openly for constructing and operating conveyance pipelines that would divert excessive fresh water from the lower Sacramento River in the north Delta. This contradicts scientists and regulators' views that more fresh water flows into and through the Delta, not less, are essential to recovery of Delta ecosystems and listed fish species. [Footnote 8: Ellen Hanak, Caitrin Phillips, Jay Lund, John Durand, Jeffrey Mount, Peter Moyle, Scientist and Stakeholder Views on the Delta Ecosystem, Public Policy Institute of California, April 2013, Figure 1, p. 13. "A majority of scientists believe that all five stressors have had at least a moderate impact on the decline of the Delta's native fishes, with flow regime changes especially harmful ("high impact") in the case of pelagics (76%) and anadromous fish [e.g., salmonids and sturgeon] (72%), and physical habitat loss especially harmful for all three types of fish (73% for anadromous fish, 70% for resident natives, and 57% for pelagics)."]</p>	
2653	8	<p>The Tunnels Project would divert more of the Delta common pool to benefit state and federal water contractors at a time when the state has over-promised, wasted, and inequitably distributed scarce water resources; when the Delta is deteriorating from State Water Project and federal Central Valley Project mismanagement during the current four-year (and perhaps counting) drought; listed fish species are even closer to the brink of extinction; and low-income communities of color who rely on the Delta for subsistence fishing, jobs, and recreation continue to struggle to survive and thrive.</p> <p>Historically, the Bay-Delta Estuary has been enormously productive, a magnet for many aquatic species to reproduce in and migrate through. Its native species evolved to take advantage of the Estuary's annual and seasonal variations in water quality and flow. As the seasons change, the Bay-Delta Estuary cycles through such ecological roles as aquatic nursery, restaurant, and crossroads. The Delta's communities and economy were built on this ecological foundation. The health of this diverse ecosystem depends on having variable and good water quality that benefits each of these roles.</p>	<p>Since 2006, the proposed project has been developed based on sound science, data gathered from various agencies and experts over many years, input from agencies, stakeholders and independent scientists, and more than 600 public meetings, working group meetings and stakeholder briefings.</p> <p>DWR's fundamental purpose of the proposed project is to make physical and operational improvements to the SWP system in the Delta necessary to restore and protect ecosystem health, water supplies of the SWP and CVP south of the Delta, and water quality within a stable regulatory framework, consistent with statutory and contractual obligations. By establishing a point of water diversion in the north Delta and new operating criteria with the goal of improving water operations timings designed to establish a more natural east-west flow for migratory fish, improve habitat conditions, and allow for greater operational flexibility. Please see Master Response 3 for additional information regarding the purpose and need for the proposed project.</p>
2653	9	<p>After nine years, the Bay Delta Conservation Plan applicants have delivered a Tunnels Project even more flawed than its expensive and monstrous predecessor.</p> <p>The Tunnels project would be a new facility providing the State Water Project (SWP) with three new diversion points (or "north Delta intakes") for water along the lower Sacramento River. These new intakes would divert the river into two gigantic tunnels that would isolate river water from salty tidal flows in the Bay-Delta Estuary for direct delivery to Harvey O. Banks Pumping Plant for export to the California Aqueduct of the SWP. The Tunnels Project would expand California's cross-Delta water transfers market, and enable the US Bureau of Reclamation to receive Sacramento River flow diversions not only via the intertie between the state's California Aqueduct and the Bureau's Delta Mendota Canal or via the intermingling of stored water at San Luis Reservoir south of the Delta, but also through new</p>	<p>In accordance with the Project Objectives and Purpose and Need (see Chapter 2 of the EIR/EIS), all action alternatives would continue the operation of the SWP and CVP in accordance with the existing water rights and regulatory criteria adopted by the State Water Resources Control Board, U.S. Fish and Wildlife Service, National Marine Fisheries Service, and California Department of Fish and Wildlife. All of the alternatives evaluated in the EIR/EIS would only divert water under existing water rights which were issued to DWR and Reclamation by the State Water Board with consideration for senior water rights and Area of Origin laws and requirements. The proposed project does not seek any new water rights nor reduction in total water rights issued to DWR and Reclamation. Operations for the proposed project would still be consistent with the criteria set by the U.S. Fish and Wildlife Service and National Marine Fisheries Service biological opinions and State Water Resources Control Board, as described in Chapter 5, Water Supply of the EIR/EIS.</p> <p>As described in Chapter 3, Description of Alternatives, the alternatives considered in the EIR/EIS do not</p>

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		connectors among the new north cell of Clifton Court Forebay and Banks (State Water Project) and Jones (Central Valley Project) pumping plants. [Footnote 9: This is possible in part under State Water Resources Control Board approval in March 2000 of "joint points of diversion" in Water Rights Decision 1641. See also RDEIR/SDEIS, July 2015, Section 3.2, p. 3-5; see also RDEIR/SDEIS, Appendix A, Section 3.6.1.4, Forebays, p. 3-51, "Expanded Clifton Court Forebay," lines 21-29; and Section 3.6.1.5, "Connections to Banks and Jones Pumping Plants," p. 3-52, lines 23-27.]	<p>include specific water transfers. The EIR/EIS acknowledges that water transfers would continue in a similar manner as historic transfers and in accordance with state and federal laws and regulations. Because specific agreements have not been identified for water transfers and other non-project voluntary water market transactions, project-level analysis of impacts upstream of the Delta is highly speculative and this EIR/EIS does not constitute the CEQA/NEPA coverage required for any specific transaction. Any future water transfers will require separate approvals. The analysis of any potential upstream impacts is not a part of this EIR/EIS and must be covered pursuant to separate laws and regulations once the specific transfer has been proposed.</p> <p>As shown in Appendix 5A, Section C, of the Final EIR/EIS, total deliveries to CVP water contractors located south of the Delta (not including San Joaquin River Exchange Contractors or Refuges) would be less under the proposed project (Alternative 4A/California WaterFix) as compared to the Existing Conditions, and similar to or less under Alternative 4A as compared to the No Action Alternative. Deliveries of CVP water to San Joaquin River Exchange Contractors or Refuges would be similar under Alternative 4A, Existing Conditions, and No Action Alternative.</p>
2653	10	Last year we [Environmental Water Caucus] asked of the BDCP: Why should BDCP Applicants be granted such legal privilege from the federal Endangered Species Act as the "regulatory stability" of the "No Surprises Rule" that would favor their conveyance investments over the "regulatory stability" of senior water right holders and a huge array of human and non-human beneficial users of water and land in the Central Valley and the Delta? This year we ask: what makes the Tunnels Project proponents this year worthy of special treatment in the form of a massive Tunnels system, just because they already divert water from the Delta? Why should their desire to export water more reliably from the Delta trump the prior water rights and protected beneficial uses in the Bay Delta Estuary to have a waterscape of improved conditions for all Delta residents and ecosystems, and all people of California choosing to visit the Delta now and in the future?	<p>Please note that the BDCP is no longer the preferred alternative. The preferred alternative is now Alternative 4A and no longer includes an HCP. Alternative 4A has been developed in response to public and agency input. The EIR/EIS analyzes all alternatives, including Alternative 4A.</p> <p>Comment infers that the proposed action is being granted a special privilege from requirements of the ESA. The project will be required to obtain a Section 7 take authorization from the USFWS and NMFS, and also from CDFW under CESA. Please refer to Master Response 45 (Permitting) and Master Response 5 (Compliance with ESA) for additional information.</p> <p>No issues related to the adequacy of the environmental impact analysis in the CEQA and NEPA documents were raised.</p>
2653	11	Development and implementation of the Tunnels Project must be accountable to the federal Clean Water Act (CWA). Sound planning dictates that implementation of the CWA's requirements should begin now, to prevent violations by the Tunnels Project. One CWA requirement that will arise during Tunnels Project implementation is CWA Section 401 certification, which is necessary for any "[f]ederal license or permit to conduct any activity . . . [that] may result in any discharge into navigable waters." [Footnote 10: 33 U.S.C. [Section] 1341(a)(1).]	<p>This comment is not directed to the adequacy of the RDEIR/SDEIS or the Final EIR/EIS as informational documents under CEQA or NEPA.</p> <p>The CWA regulatory compliance processes, including under Sections 401 and 404, are separate from the CEQA/NEPA process, and involve their own procedures and policies. Please see Master Response 45 for further discussion of other permitting processes and requirements.</p>
2653	12	This year as well as last year, our [Environmental Water Caucus's] comments focus on two hydrodynamic nightmares the Tunnels Project will create and worsen in the Delta: First, the massive disruption of the flow regime of the lower Sacramento River used seasonally and inter-annually by several distinct salmonid populations, two of which are highly vulnerable to the threat of extinction; and second, further reduction of Delta outflows and the eastward-moving position of X2 worsening the risks of entrainment, this time in the north Delta to go along with continuing drier year entrainment risks in the south Delta. This second nightmare threatens longfin smelt, Delta smelt, and migrating juvenile salmonids with entrainment and extinction.	The proposed project does not reduce outflow. For detailed analysis, please review the final EIR/EIS, Chapter 5, Appendix 5A and Chapter 11.
2653	13	Four million people in the five Delta counties depend on good water quality in the Delta for their livelihoods and quality of life. Nearly one million Delta residents depend on the Delta as their primary drinking water supply. To improve the Delta as a fishable, swimmable, drinkable, and farmable region will require protecting and enhancing the Estuary's water	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 Draft EIR/EIS. Also refer to Master Response 24, Delta as a Place

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		<p>quality, pure and simple. If we are to leave generations to come an Estuary with sustained and diverse ecological fertility, the Estuary deserves and needs more flowing water, cleansed of the pollutants that now plague it. State and federal rejection of the Tunnels Project will only help in realizing this goal.</p>	
2653	14	<p>Apply the precautionary principle to water policy.</p> <p>The uncertainties facing the Bay Delta Estuary match up well with reliance on the precautionary principle. The precautionary principle has the following characteristics applicable to evaluating risk and uncertainty in environmental (and other kinds of) decision making. Environmental writer Peter Montague describes the essence of the precautionary principle this way: "In all formulations of the precautionary principle, we find three elements: 1) When we have a reasonable suspicion of harm, and 2) scientific uncertainty about cause and effect, then 3) we have a duty to take action to prevent harm. The precautionary principle does not tell us what action to take. However, proponents of a precautionary approach have suggested a series of actions: (1) Set goals; (2) Examine all reasonable ways of achieving the goals, intending to adopt the least-harmful way; (3) Assume that all projects or activities will be harmful, and therefore seek the least-harmful alternative. Shift the burden of proof -- when consequences are uncertain, give the benefit of the doubt to nature, public health and community well-being. Expect responsible parties (not governments or the public) to bear the burden of producing needed information. Expect reasonable assurances of safety for products before they can be marketed -- just as the Food and Drug Administration expects reasonable assurances of safety before new pharmaceutical products can be marketed. (4) Throughout the decision-making process, honor the knowledge of those who will be affected by the decisions, and give them a real "say" in the outcome. This approach naturally allows issues of ethics, right-and-wrong, history, cultural appropriateness, and justice to become important in the decision. 5) Assume that humans will make mistakes and that decisions will sometimes turn out badly. Therefore, monitor results, heed early warnings, and be prepared to make mid-course corrections as needed; this implies that we will avoid irreversible decisions and irretrievable commitments. Instead of asking the basic risk-assessment question -- 'How much harm is allowable?' --the precautionary approach asks, 'How little harm is possible?' In sum: Faced with reasonable suspicion of harm, the precautionary approach urges a full evaluation of available alternatives for the purpose of preventing or minimizing harm." [Footnote 11: Peter Montague, accessed online 11 September 2015 at <a href="http://www.precaution.org/lib/pp_def.htm">http://www.precaution.org/lib/pp_def.htm</a>.]</p> <p>Last year, we [Environmental Water Caucus] commented critically that the BDCP sought to apply adaptive management and real-time operations as sure-fire solutions to the profound biological, geochemical, toxicological, and public health uncertainties involved with constructing and operating such a complex project in such a complex environment as the San Francisco Bay-Delta Estuary. [Footnote 12: Environmental Water Caucus, Comments on the Draft BDCP and Draft BDCP EIR/EIS, June 11, 2014, addressed to Ryan Wulff, National Marine Fisheries Service, Sacramento, pp. 89-92.] As with last year's overly optimistic BDCP, the Tunnels Project described and evaluated in the RDEIR/SDEIS overflows with over-confidence in adaptive management and real-time monitoring as providing timely and real solutions to Tunnels Project uncertainties. We are not alone in detecting excessive optimism throughout last year's and this year's Tunnels Project environmental documentation; the Delta Independent Science Board (DISB) commented on this pervasive characteristic in 2014 and again this fall. "Many of the impact assessments hinge on overly</p>	<p>The lead agencies believe that the 2013 Draft EIR/EIS and 2015 RDEIR/SDEIS are complete in their evaluation of impacts, direct and cumulative, that project description is complete and satisfies the requirements of NEPA, that the project objectives are also precise and complete and satisfy the requirements of CEQA. The lead agencies agree that the 2013 Public Draft EIR/EIS and 2015 RDEIR/SDEIS provided the public and decision-makers with sufficient information on which to make informed comments which have been considered and incorporated into the Final EIR/EIS.</p> <p>The lead agencies acknowledge that uncertainty is inherent in any planning effort of this geographic and temporal scale. However, DWR and project proponents strived to use the best available science throughout the effects analysis, consistent with the requirements of the ESA. Additionally, the official public review process for the Draft BDCP and EIR/EIS and the RDEIR/SDEIS provided an opportunity for formal public comment on the proposed project and project alternatives. Public and agency comments on the public draft have led to further refinement of the proposed project, as evidenced in the RDEIR/SDEIS.</p> <p>For more information regarding adaptive management, please see Master Response 33. Also, please see Master Response 41 for information related to transparency of the planning process, public involvement, and stakeholder engagement, and Master Response 42 treatment of public comments.</p> <p>Please see comment letters #1448 and #2546 to see responses to the Delta Independent Science Board's comments.</p>

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		<p>optimistic expectations about the feasibility, effectiveness, or timing of the proposed conservation actions. . . ." And: "In essence, it is often argued that Conservation Measures (CM) 2-22 will have sufficient positive benefits for covered species to counterbalance any negative impacts of water diversions and changes in flow caused by proposed alternatives (CM 1). This is an implausible standard of perfection for such a complex problem and plan, as noted in our reviews of Chapters 11 and 12. . . . It would be better to begin with more realistic expectations that include contingency or back-up plans." [Footnote 13: Delta Independent Science Board, Review of the Draft EIR/EIS for the Bay Delta Conservation Plan, May 15, 2014, pp. 3, 5.] This year, time was much shorter for reviewing 8,000 pages of the RDEIR/SDEIS, but the DISB still found that "the [RDEIR/SDEIS] retains unwarranted optimism. . ." and that "uncertainties and their consequences remain inadequately addressed, improvements notwithstanding. Uncertainties will be dealt with by establishing "a robust program of collaborative science, monitoring, and adaptive management. No details about this program are provided, so there is no way to assess how (or whether uncertainties will be dealt with effectively," they conclude. [Footnote 14: RDEIR/SDEIS, Executive Summary, Section ES.4.2, "Collaborative Science and Adaptive management Program," p. ES-37 to ES-39.] DISB also notes that Tunnels Project modeling efforts did not adequately conduct "modeling that would help to bracket the ranges of uncertainties or (more importantly) assess propagation of uncertainties." [Footnote 15: Delta Independent Science Board, Review of environmental documents for California WaterFix, September 30, 2015, pp. 10-11.]</p> <p>Substantive BDCP Revisions (Appendix D) contained in this year's recirculated documents indicate increasing grasp of the number, kind, and degree of uncertainties to be faced with construction and operation of the Tunnels Project. [Footnote 16: RDEIR/SDEIS, 2015, Appendix D, Substantive BDCP Revisions, Table 3.4.1-5, p. D.3-24 through D.3-28.] One table reveals 17 "key uncertainties and potential research actions relevant" to Conservation Measure 1 -- and hence to the Tunnels Project of 2015 -- of which six (6) are new and eight (8) are significantly revised from the first public draft of the BDCP conservation strategy. The status and utility of these and a vast number of other substantive BDCP revisions is in considerable doubt since Section 7 consultation with the federal fisheries agencies is still in process, and the exact content of environmental commitments, incidental take statements, and reasonable and prudent alternatives are also highly uncertain.</p>	
2653	15	<p>In late 2013, the Bay Delta Conservation Plan web site was reorganized and redesigned. The site's "Correspondence" page contains the statement: "The BDCP encourages public participation. Below is a list of correspondence and public comments that have been received in regards to the BDCP from 2007-2013." In the EWC [Environmental Water Caucus]'s June 11, 2014, letter on BDCP, we criticized the BDCP web site for clamping down on the free flow of information and opinion about the Tunnels Project. We remain concerned, with these new documents, about how public comments about the Project will be handled. In the RDEIR/SDEIS, Tunnels Project proponents explain they chose "not to republish complete revisions to the original Draft EIR/EIS, but rather to prepare materials focusing on new contents of the Draft EIR/EIS." [Footnote 17: RDEIR/SDEIS, Section 1.2, p. 1-30, lines 4-7.] These "new contents" appear to include changes to Alternative 4, describing and analyzing "changes to conveyance facility design; revisions to proposed operations; changes to the proposed conservation strategy and habitat mitigation approach; and revisions and corrections to the analysis of certain impacts." [Footnote 18: RDEIR/SDEIS, Section 1.2, p. 1-29, lines 8-10.] Alternative 4A, a new alternative, would have "the same conveyance facility design changes, but it would not include the same kinds of changes to</p>	<p>Responses to comments received on the 2013 Draft EIR/EIS and 2015 RDEIR/EIS are provided in the Final EIR/EIS in compliance with CEQA and NEPA requirements.</p> <p>The proposed project is a joint RDEIR/SDEIS prepared in compliance with the requirements of CEQA and NEPA. Before the selection and approval of an alternative considered, the lead agencies must comply with the necessary state and federal environmental review requirements. The Final EIR/EIS is intended to provide sufficient CEQA and NEPA support for approval of the proposed project or any of the action alternatives for either compliance strategy. As implementation of the proposed project or any of the action alternatives will require permits and approvals from public agencies other than the lead agencies, the CEQA and NEPA documents are prepared to support the various public agency permit approvals and other discretionary decisions. These other public agencies are referred to as responsible agencies and 20 trustee agencies under CEQA (State CEQA Guidelines Sections 15381 and 15386) and cooperating agencies under NEPA (e.g., USACE and EPA).</p> <p>For more information, please see 1.1.5 of Section 1 Introduction of the RDEIR/SDEIS.</p> <p>The obligations of California public agencies under Article 1, section 3(b)(1), of the California Constitution</p>

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		<p>Alternative 4 related to" all the other conservation measures of BDCP; it would not include a habitat conservation plan. [Footnote 19: RDEIR/SDEIS, Section 1.2, p 1-29, line 10; and p. 1-30, lines 1-2.]</p> <p>Given these changes in light of CEQA Guidelines, the Tunnels Project proponents "direct that public comments be restricted to the newly circulated information contained in the RDEIR/SDEIS. In other words," they continue, "the partial recirculation is not an opportunity to resubmit comments on the previously published topics, or to add additional comments on previously published topics. The comments previously submitted on the Draft EIR/EIS remain a part of the record and will be responded to in the Final EIR/EIS." [Footnote 20: RDEIR/SDEIS/, Section 1.2, p. 1-30, lines 24-29.] The Tunnels Project proponents cite CEQA Guidelines Section 15088.5(f)(2) in support of their "directive" to the public. We are deeply concerned this seeks illogically, arbitrarily, capriciously, and unnecessarily to restrain the scope of public comment when it comes to the obvious matter of drawing comparisons between analyses and alternatives of the RDEIR/SDEIS with alternatives and analyses found in the Draft EIR/EIS. To make sense of the relative merits of one alternative to others across the two massive sets of documents, the public, governmental and other reviewers must be able to compare and analyze them. EWC finds the Tunnels Project proponents' "directive" untenable.</p> <p>CEQA Guidelines section 15088.5(f)(2) states in full: "When the EIR is revised only in part and the lead agency is recirculating only the revised chapters or portions of the EIR, the lead agency may request that reviewers limit their comments to the revised chapters or portions of the recirculated EIR. The lead agency need only respond to (i) comments received during the initial circulation period that relate to chapters or portions of the document that were not revised and recirculated, and (ii) comments received during the recirculation period that relate to the chapters or portions of the earlier EIR that were revised and recirculated. The lead agency's request that reviewers limit the scope of their comments shall be included either within the text of the revised EIR or by an attachment to the revised EIR."</p> <p>The Tunnels Project proponents' "directive" in the RDEIR/SDEIS improperly exceeds the standard for comments under CEQA Guidelines. The plain language of 15988.5(f)(2) does not support the directive precluding "comments on previously published topics." The Guidelines' restriction is for "comments received . . . that relate to chapters or portions" of the recirculated document. This limitation does not extend to the level of detail implied by the Tunnels Project proponents' use of the word "topics" in the RDEIR/SDEIS. So long as our comments relate to material in chapters or portions of the RDEIR/SDEIS -- even if they compare or contrast or contextualize with material from the Draft EIR/EIS -- the Tunnels Project proponents must, under CEQA Guidelines, respond to such comments.</p>	<p>and under the Public Records Act, do not include any obligation to post comments on draft environmental documents on agency websites as such comments come in from the public and interested agencies. Rather, those statutes deal with the obligation for public agencies to hold certain kinds of meetings of public bodies and public officials in public, and to make non-privileged documents of various kinds available to members of the public in response to formal requests. To date, neither the California Legislature nor Congress has required lead agencies for CEQA and NEPA documents to post comments on draft environmental documents on their websites during the public review periods for those draft documents.</p> <p>Consistent with the requirements of CEQA (CEQA Guidelines §15088) and NEPA (Council on Environmental Quality § 1503.4) and policies held by all lead agencies governing the implementation of CEQA and NEPA, all comments received on the Draft EIR/EIS and RDEIR/SDEIS are included with the Final EIR/EIS. Please see Master Response 42 regarding treatment of public comments.</p>
2653	16	<p>The Bay-Delta Estuary is an over-appropriated common pool plagued by California's abject failure to protect all beneficial uses of water -- human and non-human alike -- according to the needs of its most sensitive beneficial uses. [Footnote 22: State Water Resources Control Board, Water Rights Within the Bay-Delta Watershed, September 26, 2008, presented to Delta Vision Blue Ribbon Task Force, October 17, 2008. Accessible at <a href="http://deltavision.ca.gov/BlueRibbonTaskForce/Oct2008/Response_from_SWRCB.pdf">http://deltavision.ca.gov/BlueRibbonTaskForce/Oct2008/Response_from_SWRCB.pdf</a>; California Water Impact Network, California Sportfishing Protection Alliance, and AquaAlliance, Testimony on Water Availability Analysis for Trinity, Sacramento, and San Joaquin River Basins Tributary to the Bay-Delta Estuary, submitted by Tim Strohane, October 26, 2012, accessible at</p>	<p>The proposed project was developed to meet the rigorous standards of the Clean Water Act and federal and state Endangered Species Acts; as such, the proposed project is intended to be environmentally beneficial, not detrimental. By establishing a point of water diversion in the north Delta and new operating criteria to improve water operations timing designed to improve native fish migratory patterns and allow for greater operational flexibility.</p> <p>In April 2015 state and federal agencies announced a new sub-alternative—Alternative 4A (California WaterFix)—which replaced Alternative 4 (the proposed BDCP) as the state’s proposed project. Alternative 4A has been developed in response to public and agency input, and does not include an HCP or Conservation Measures. The EIR/EIS analyzes all alternatives, including Alternative 4A.</p>

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		<p><a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/docs/comments111312/tim_stroshane.pdf">http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/docs/comments111312/tim_stroshane.pdf</a>; and Theodore E. Grantham and Joshua H. Viers, "100 Years of California's water rights system: patterns, trends and uncertainty," Environmental Research Letters, 9(2014), accessible at <a href="https://watershed.ucdavis.edu/ciles/biblio/WaterRights_UCDavis_study.pdf">https://watershed.ucdavis.edu/ciles/biblio/WaterRights_UCDavis_study.pdf</a>.] This failure violates the state's public trust obligations, and the Tunnels Project would continue this record of failure. It fails to plan for "improved conveyance" through and in the Delta (and called for in the Delta Reform Act) by ignoring the over-arching framework of state water policy:</p> <ul style="list-style-type: none"> <li>-Achieving the coequal goals of Water Code Section 85054 of enhanced ecosystem health and water supply reliability.</li> <li>-Water Code Section 85023, stating: "The longstanding constitutional principle of reasonable use and the public trust doctrine shall be the foundation of state water management policy and are particularly important and applicable to the Delta."</li> <li>-Water Code Section 85021 requiring reduced reliance on the Delta in meeting California's future water supply needs (and whose strategy specifies "investing in improved regional supplies, conservation, and water use efficiency").</li> <li>-Water Code Section 12200 et seq., (the Delta Protection Act of 1959) requiring that neither state nor federal water projects should divert water from the Delta to which Delta users are entitled.</li> <li>-Achieving the fish and specifically salmonid abundance goals of California Fish and Game Code Sections 5937, 5946, and 6902(a); and the Central Valley Project Improvement Act of 1992, Section 3406(b)(1.)</li> <li>-The federal Clean Water Act requiring protection of the chemical, physical and biological integrity of the nation's waters (including those of the Bay-Delta Estuary), that the navigable waters of the United States (including those of the Estuary) not be degraded, and that the regulation of water quality standards for the Estuary be based on the "most sensitive" beneficial use among those occurring in a particular water body.</li> </ul> <p>And the RDEIR/SDEIS fails to evaluate the Tunnels Project in light of this policy framework. Listed fish species are the most sensitive beneficial uses in the Bay-Delta Estuary. The most sensitive human beneficial uses are subsistence fishers taking nutrition directly from Delta waters. The EWC [Environmental Water Caucus] is deeply concerned that the Tunnels Project's switch to reliance on a Section 7 ESA standard of preventing mere "jeopardy" rather than the overall ESA goal of "recovery" will lead to continued deterioration of the Bay-Delta Estuary, made all the easier by construction and operation of the Tunnels Project.</p>	<p>Alternative 4A reflects the state's proposal to separate the conveyance facility and habitat restoration measures into two separate efforts: California WaterFix and California EcoRestore. These two efforts are a direct reflection of public comments and fulfill the requirement of the 2009 Delta Reform Act to meet co-equal goals.</p> <p>The EIR/EIS addresses the physical impacts and mitigation for impacts to fish in the Aquatics chapter (Chapter 11). Please see the chapters on socioeconomic (Chapter 16), recreation (Chapter 15), and environmental justice (Chapter 28). See section 28.2.1.7, Subsistence and Recreational Activities, for more details on potential impacts of the proposed project to subsistence fishermen.</p> <p>Please see Master Response 13 concerning compliance with the Public Trust Doctrine.</p> <p>Please refer to Master Response 31, Appendix 3I of the 2013 Public Draft BDCP EIR/EIS and Appendix 3J of the Final EIR/EIS concerning compliance with the Delta Reform Act.</p>
2653	17	<p>The Tunnels Project RDEIR/SDEIS fails to consider fully project impacts, including and not limited to public health, water quality, subsistence fishing, land use, flood risk, affordable housing, public participation, and language accessibility for environmental justice communities. The lead agencies violate civil rights and environmental laws and fail to meet Environmental Justice legal standards. For the reasons listed above, the BDCP/Tunnels Project presents an environmental injustice and should not proceed as proposed.</p>	<p>Chapter 28, Environmental Justice, carries forward significant effects from other resource chapters and analyzes them in terms of impacts to environmental justice communities, as described in Section 28.5.1.2. As such, public health and subsistence fishing are discussed under Impact PH-3 for Alternative 4A, the preferred alternative. Water Quality and surface water and flood risk were not carried forward for analysis in this chapter, as described in Section 28.5.3.1. Affordable housing is not a requirement for CEQA or NEPA. Efforts related to public participation and language accessibility are described in Section 28.3. For more information on Environmental Justice, please see Master Response 27.</p>

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2653	18	<p>The Tunnels Project must be excluded from the Delta Plan.</p> <p>Last year, when the Bay Delta Conservation Plan was considered and presented as a habitat conservation plan under federal ESA Section 10 and a natural community conservation plan under the California ESA, it could qualify for eventual incorporation as such into the Delta Plan, originally prepared by the Delta Stewardship Council, provided the BDCP met specific criteria stated in the Delta Reform Act of 2009. EWC [Environmental Water Caucus] members commented that BDCP could not meet those criteria, specifically that:</p> <p>"BDCP cannot demonstrate compliance with, and the Department of Fish and Wildlife will be unable to sustain, this required finding [of Water Code Section 85320(b)(2)] without abusing its discretion to interpret this law. BDCP modeling results show decreased salmonid survival rates, increased Delta smelt entrainment risk (including at the North Delta intakes), eastward migration of X2, reduced Delta outflow, and longer residence times of water passing through the Delta. The trend of each of these indicators is away from the criterion in Water Code Section 85320(b)(2)(A), which calls for flows necessary for recovering the Delta ecosystem and restoring fisheries under a reasonable range of hydrologic conditions." [Footnote 23: EWC Comments, June 11, 2014, pp. 119-120.]</p> <p>The legal trigger for whether BDCP may be incorporated by the Delta Stewardship Council on recommendation of the California Department of Fish and Wildlife is whether the Tunnels Project is part of an HCP/NCCP. This year, it is not. Therefore the Tunnels Project must be considered as a "covered action" in which the Delta Stewardship Council (DSC) is asked to confirm the Project's proponents' assertion that the proposed project is consistent with the Delta Plan. The Delta Plan is itself currently the subject of litigation about whether the Plan is consistent with the policies of the Delta Reform Act of 2009. [Footnote 24: There were numerous complaints filed by both water contractor, community, municipal, and environmental water parties. They are sometimes described as "the Delta Plan cases." A trial court decision is not expected until perhaps mid-2016.] This complicates the covered action status of the Tunnels Project. If the Court vacates the DSC's approval of the Delta Plan as non-compliant with Delta Reform Act policies, then there would be no Delta Plan to which the Tunnels Project can legally be found to conform, until such time as the DSC approves a plan that complies with the Act.</p> <p>The causes of action in the Delta Plan litigation are entirely relevant to the prospect of Tunnels Project operation. In formulating Delta Plan policies and recommendations, plaintiffs argue that the Council:</p> <ul style="list-style-type: none"> <li>-Formulated a "reduced reliance on the Delta" policy that does not actually reduce reliance.</li> <li>-Failed to observe the Act's mandate to rely on "best available science" in formulating the Plan.</li> <li>-Promoted BDCP in violation of the Act, since the Tunnels Project conflicts with the coequal goals, and misinterpreted the meaning of "improving conveyance."</li> <li>-Failed to perform its duties to protect public trust resources in formulating the Delta Plan.</li> </ul> <p>[Footnote 25: Petitioners Central Delta Water Agency et al and California Water Impact Network et al's joint opening brief on the merits in support of first amended verified petitions for Writ of Mandate and Complaints for Declaratory and Injunctive Relief, October</p>	<p>See Master Response 31 for more information about the Delta Reform Act.</p>

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2653	19	This year, we [Environmental Water Caucus] find that through-Delta salmonid survival rates, Delta smelt entrainment risk at the North Delta intakes, eastward migration X2, longer residence times and reduced Delta outflow are all endemic to the preferred alternative of the RDEIR/SDEIS.	The comment does not raise a specific comment to address. For possible impacts to the fish species mentioned in the comment, please refer to Chapter 11.
2653	20	<p>EWC [Environmental Water Caucus] was pleased to learn that the DSC [Delta Stewardship Council] recognizes that the new preferred alternative, the Tunnels Project, cannot be incorporated into the Delta Plan and must be considered as a "covered action."</p> <p>"Although WaterFix is shown as a new alternative in the environmental documents for the BDCP, for practical purposes the BDCP as it has been envisioned for the past eight years no longer exists. Unlike BDCP, the new WaterFix project is not a conservation plan aiming to improve species recovery in exchange for a long-term operational permit. Rather, the objectives of WaterFix are much more narrow -- 'to make physical and operational improvements to the State Water Project (SWP)/Central Valley Project (CVP) systems in the Delta necessary to restore and protect ecosystem health, water supplies of the SWP and CVP south of the Delta, and water quality within a stable regulatory framework, consistent with statutory and contractual obligation'. . . Because WaterFix will not be a NCCP, nor a habitat conservation plan . . . the Council is not required to incorporate the WaterFix alternative into the Delta Plan. WaterFix instead will be subject to the Council's authority over covered actions, meaning that it must be consistent with the regulatory portions of the Delta Plan." [Footnote 26: See Bay Delta Conservation Plan Draft EIR Review Check--in, August 27-28, 2015, Delta Stewardship Council staff report, pp. 1-2. <a href="http://deltacouncil.ca.gov/docs/delta-stewardship-council-august-27-28-2015-meeting-agenda-item-17-bay-delta-conservation-plan.">http://deltacouncil.ca.gov/docs/delta-stewardship-council-august-27-28-2015-meeting-agenda-item-17-bay-delta-conservation-plan.</a>]</p> <p>It appears that DWR and the Tunnels Project proponents more or less accept this interpretation of the Tunnels Project status with respect to the Delta Plan. Section 1 of the RDEIR/SDEIS contains no description of the Department of Fish and Wildlife's role in making the findings specified in Water Code Section 85320(b)(2). [Footnote 27: RDEIR/SDEIS, Section 1.1.5.5, California Department of Fish and Wildlife, p. 1-18 to 1-20.] But Tunnels Project proponents actually see two other possibilities: Section 1 of the RDEIR/SDEIS states later that "Delta Reform Act compliance" for its alternatives (including the Tunnels Project) "would be achieved through either the Delta Plan Consistency certification process or through a possible future amendment to the Delta Plan." This "future amendment" option reflects the Tunnels Project proponents' belief that the inclusion/incorporation pathway for HCP-type facilities has no limitation in time.</p> <p>This ambiguity is confusing. The ambiguity goes to the heart of what is meant by a "preferred alternative." The RDEIR/SDEIS states that the Tunnels Project is the preferred alternative. And none of the other RDEIR/SDEIS alternatives put forward in July 2015 have HCP/NCCP organization and substance associated with them. It follows logically the RDEIR/SDEIS errs in stating that the Delta Reform Act still provides a pathway for one of these specific alternatives to be incorporated into the Delta Plan. This error needs to be corrected. [Footnote 28: But in committing the error, EWC recognizes that the Tunnels Project proponents pine for that degree of policy certainty on behalf of their project and find it psychologically difficult to let go of such a legal and policy advantage for the project.]</p>	<p>Alternative 4A/California WaterFix has been developed in response to public and agency input.</p> <p>For more information regarding the proposed project's compliance with the Delta Reform Act, please see Master Response 31. Also see Appendix 3I, BDCP Compliance with the 2009 Delta Reform Act and Appendix 3J, Alternative 4A (proposed project) Compliance with the 2009 Delta Reform Act.</p> <p>For more information regarding purpose, and need, please see Master Response 3.</p>

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2653	21	<p>The RDEIR/SDEIS contains Appendix G, which is "intended to discuss an approach that may be considered for Alternative 4A . . . to meet the Delta Plan consistency requirements." The Appendix represents the Tunnels Project proponents' view of the Delta Reform Act, the Delta Stewardship Council, and the Delta Plan.</p> <p>Appendix G contains no listing of Delta Plan policies and recommendations that it believes would be the policy framework against which it would be evaluated for consistency. This seems deferred to a listing of "consistency requirements" contained in the Plan's implementing regulations. This list includes mitigation measures, best available science, adaptive management, "reduce reliance on the Delta through Improved Regional Water Self-Reliance," Delta flow objectives, and a number of other regulations. The listing omits the regulation's definition describing "coequal goals," something we [Environmental Water Caucus] are certain the Tunnels Project proponents find challenging to address. We note too that the Delta Plan implementing regulations contain no definition of what "consistency" with Delta Plan policies and recommendations means. The RDEIR/SDEIS Appendix G avoids this topic, too.</p> <p>When it comes to reducing reliance on the Delta, RDEIR/SDEIS Appendix G relies on analysis of "Demand Management Measures" described in Appendix 1C of last year's Draft EIR/EIS. [Footnote 29: Here is just one of many instances where the Section 1 directive concerning topics makes no sense. When the RDEIR/SDEIS refers to or even incorporates the content of the Draft EIR/EIS from last year, then it becomes necessary and logical for reviewers to review, verify, and analyze both documents.] As we stated last year, the reduced-reliance-on-the-Delta policy of the Act goes to the heart of whether the Tunnels Project's purpose and need is valid or capable of being found consistent with Delta Reform Act policies and the Delta Plan. We contend that the RDEIR/SDEIS fails completely to demonstrate need for the proposed project in light of analysis of other water supply options for importers of Delta water (such as those specified in Water Code Section 85021) and the potential for increased water conservation throughout California. Appendix 1C, we commented last year (since the RDEIR/SDEIS brings it up again), "fails to consider cost and price issues associated with water usage. And its characterization of the limitations of conservation is an argument employing a straw man: no one seriously believes that we can conserve our way out of the state's future water demand issues, just as no one seriously believes that we can build enough storage and conveyance to eliminate those same issues." [Footnote 30: EWC Comments, June 11, 2014, p. 147. Since the RDEIR/SDEIS applies this appendix from last year's Draft EIR/EIS now, we reiterate our comments about it from last year, with some additional commentary.]</p> <p>Instead, the point is that we have remaining potential to achieve greater conservation savings by changing how California culture views its water supplies. California would be seriously remiss in failing to tap this potential regardless of whether it solves the entire future water demand problem; it is simply a no-regrets step that needs to be taken, and the RDEIR/SDEIS ignores this step in developing and stating the purpose and need for the Tunnels Project. The Tunnels Project seeks to protect a status quo of water behavior and assumptions that cannot be sustained, regardless.</p> <p>The Demand Management Measures of Appendix 1C are not part of any of the alternative descriptions, whether associated with the Draft EIR/EIS last year or this year's RDEIR/SDEIS. In last year's BDCP, there is no conservation measure devoted to demand reduction in the service of reducing reliance on the Delta. This year's purpose and need statement in the</p>	<p>DWR's fundamental purpose of the proposed project is to make physical and operational improvements to the SWP system in the Delta necessary to restore and protect ecosystem health, water supplies of the SWP and CVP south of the Delta, and water quality within a stable regulatory framework, consistent with statutory and contractual obligations. By establishing a point of water diversion in the north Delta and new operating criteria to improve water volume, timing, and salinity, the proposed project is designed to improve native fish migratory patterns and allow for greater operational flexibility. Please see Master Response 3 for additional information regarding the purpose and need behind the proposed project.</p> <p>The proposed project is one part of a diverse portfolio of strategies needed to meet California's overall water management needs. It is not a substitute for increased commitments to other water supply solutions, including recycling, desalination, water conservation and storage. Please see Master Response 4 for additional details on the selection of alternatives. Also, please see Master Response 6 for additional details on demand management.</p> <p>For more information regarding the proposed project's compliance with the Delta Reform Act, please see Master Response 31.</p>

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		<p>RDEIR/SDEIS reiterates the Tunnels Project's intention (like last year) to (as much as possible) increase water supply reliability to maximize contractual deliveries using the Tunnel Project. Demand management measures are not only not included as part of the alternatives' purpose and need, they divert reader attention from the Tunnels Project and its inability to comply with Water Code Section 85021. The Tunnels Project must be able to certify consistency with Delta Reform Act policies reflected in a lawful Delta Plan. It cannot.</p> <p>The essential point of the mandate in Water Code Section 85021 is to reduce reliance on the Delta. This is not just a water conservation issue; it is also a coequal goals issue. The Delta Plan litigation addresses as one of its central points of argument whether the Delta Stewardship Council formulated a Plan and implementing regulations that achieve what the Legislature required of it. The RDEIR/SDEIS fails to demonstrate that the project contributes to reduced reliance on the Delta, and fails to demonstrate that it can achieve the co-equal goals of the Act for the Delta, whether the Delta Plan can be said to achieve them or not.</p>	
2653	22	<p>A large but wholly implicit assumption through the Tunnels Project and its EIR/EIS is that any one of these alternatives would require wholesale revision to how water quality is regulated in the Bay Delta estuary, in order for the Tunnels Project to move forward. This year, the RDEIR/SDEIS announces "proposed new flow criteria" for north and south Delta SWP and CVP export facilities, and the proposed new head of Old River operable barrier. [Footnote 31: RDEIR/SDEIS, Section 4.1, pp. 4.1-11 through 4.1-13.]</p> <p>Such changes to Delta flows and hydrodynamics must be evaluated through public review before the State Water Resources Control Board, the only state body authorized to change water quality standards. We are concerned that the Tunnels Project proponents hope to circumvent the process by making Tunnels operational criteria seem inevitable and necessary; they are neither, and must be the subject of careful and critical review in the Board's Bay-Delta Plan update process, before the Tunnels Project receives permit approvals for new diversions. Put simply: water quality policy must come before plumbing decisions are made. What is best for the Bay-Delta Estuary, and the Delta's economy and communities comes first. [Footnote 32: This stance is also consistent with the Delta Protection Act of 1959.]</p>	<p>As described in Chapter 1 of the EIR/EIS, the State Water Resources Control Board would need to modify the water rights permits issued to DWR and Reclamation for operations of the SWP and CVP, respectively, to provide for three additional intakes.</p> <p>The State Water Board is in the process of developing and implementing updates to 2006 WQCP that protect beneficial uses in the Bay-Delta watershed. This update is broken into four phases, some of which are proceeding concurrently. Please see chapter 3.1.4.4 of the Biological Assessment for California WaterFix for more information.</p>
2653	23	<p>California's constitution recognizes water rights only to the extent they are reasonable. (California Constitution, Article X, Section 2.) Moreover, the state constitution also states that "such right does not and shall not extend to the waste or unreasonable use or unreasonable method of use or unreasonable method of diversion of water." No one has a right in California to use or divert water unreasonably, not even the state and federal governments. The EWC [Environmental Water Caucus] believes that because lack of water availability and the precarious conditions of listed fish species go unaddressed, the Tunnels Project would be an unreasonable method of diversion of water, and that continued provision of a supposedly more reliable irrigation water supply to the drainage impaired lands of the western San Joaquin Valley, as is implied but not disclosed in the Bay Delta Conservation Plan and its EIS/EIR, would continue to be a wasteful and unreasonable use of water.</p> <p>The Tunnels Project would violate the California Constitution's ban on wasteful and unreasonable use of water and method of diversion of water because it:</p> <p>-Fails to demonstrate and disclose its purpose and need,</p>	<p>One of the fundamental purposes of the proposed project is to make physical and operational improvements to the SWP and CVP system in the Delta to provide water supplies of the SWP and CVP for users located south of the Delta and Delta water quality consistent with statutory and contractual obligations of the SWP and CVP, as described in Section 2.3 of Chapter 2, Project Objectives and Purpose and Need, of the EIR/EIS. Alternative 4A, the proposed project, will maintain compliance with Delta outflow regulatory requirements for all water years with the use of the North Delta intakes, as described in Chapter 5, Water Supplies, and Chapter 6, Surface Water. A detailed discussion of the specific Delta outflows under a range of seasons and water year types is contained in Appendix 5A. The action alternatives would only export water allocated to the SWP and CVP under existing water rights, as limited by hydrologic conditions and regulatory requirements issued by the State and federal agencies, as described in Chapter 5, Water Supply, of the Final EIR/EIS. In accordance with the Project Objectives and Purpose and Need (see Chapter 2 of the EIR/EIS), all of the action alternatives would continue the operation of the SWP and CVP in accordance with the existing water rights and regulatory criteria adopted by the State Water Resources Control Board, U.S. Fish and Wildlife Service, National Marine Fisheries Service, and California Department of Fish and Wildlife. All of the alternatives evaluated in the EIR/EIS would only divert water under existing water rights which were issued to DWR and Reclamation by the State Water Board with consideration for senior water rights and Area of Origin laws and requirements. The proposed project does not seek any new water rights</p>

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		<p>-Reduces Delta outflow by increasing exports contrary to a mandate to reduce reliance on Delta exports,</p> <p>-Reduces rather than increases the likelihood that listed species can survive and recover in the Delta under operating conditions of the Tunnels Project in violation of the public trust doctrine.</p> <p>-Degrades rather than protects and enhances water quality in Delta channels including violation of water quality pollutant criteria and beneficial uses, degradation of a public water source without mitigation of treatment costs.</p>	<p>nor a reduction in total water rights issued to DWR and Reclamation.</p> <p>Please see Master Response 31 regarding compliance with the Delta Reform Act.</p> <p>Chapter 11 describes the effects on fish and aquatic resources resulting from the alternatives, including the preferred alternative, 4A. The analysis demonstrates that the change in point of diversion allowed by the implementation of the NDD will reduce adverse effects on fish in the south Delta. The project does not propose to change outflows in spring or fall and the NDD operations are based on hydrology and fish presence so that higher flows allow for higher exports, and less exports under lower flow conditions and/or fish presence. The upgrade of the export and conveyance system allows greater flexibility and opportunities for fish and water supply protection than under the current system.</p> <p>The project's infrastructure will protect and improve the reliability of public water supplies obtained from the Delta, relative to the system's current levee-based configuration. Water quality at Banks and Jones pumping plants with the project in place will be similar to existing conditions or improved, depending upon constituent. The project would not cause violations of water quality objectives/criteria in the Delta. Water quality degradation throughout the Delta was assessed in detail in the Draft EIR/EIS and RDEIR/SDEIS. The RDEIR/SDEIS identified a significant impact for electrical conductivity (EC) at Emmatton based on modeling output that showed the potential for D-1641 EC objectives exceedances and EC degradation at this location. However, real-time operations would prevent such impacts from occurring. Please see Chapter 8 and Appendix 8A of the RDEIR/SDEIS. The only other water quality impact identified for Alt 4A was for mercury, associated with the creation of additional wetland habitat that could result in additional methylation of mercury in the created wetlands. Please see Chapter 8 and Appendix 8I of the RDEIR/SDEIS. Environmental Commitment 12 (Methylmercury Management Plan) is put forward to address this issue. No other constituent was found to cause degradation of water quality upstream of the Delta, in the Delta, or in the SWP/CVP service area under Alt 4A by frequency, magnitude, or geographic extent that would adversely affect beneficial uses.</p>
2653	24	<p>A reasonable range of alternatives still are not considered. Development of alternatives increasing flows through the Delta has always been a direct and obvious first step to complying with California's public trust doctrine protecting Delta water quantity and quality. Instead of complying with the Delta Reform Act, the ESA, the Clean Water Act and applying the public trust doctrine, all of the so-called BDCP alternatives involve new conveyance as opposed to consideration of any through-Delta conveyance alternatives reducing exports.</p> <p>Our [Environmental Water Caucus's] organizations have already communicated several times over the years with BDCP officials about the failure to develop a reasonable range of alternatives in the process. [Footnote 33: See also previously submitted Friends of the River comment letter of May 21, 2014, joint May 28, 2014 and September 4, 2014 comment letters focused on the failure of BDCP Draft plan and Draft EIR/EIS to identify and evaluate a reasonable range of alternatives as the declared "heart" of both the NEPA and CEQA required EISs and EIRs. A detailed evaluation of the Draft EIR/EIS's inadequate alternatives analysis was provided by the EWC in its comment letter of June 11, 2014, accessible online at <a href="http://ewccalifornia.org/reports/bdcpcomments6-11-2014-3.pdf">http://ewccalifornia.org/reports/bdcpcomments6-11-2014-3.pdf</a>, followed by a letter of July 22, 2015, regarding the continuing lack of a reasonable range of alternatives in the RDEIR/SDEIS. Accessible at <a href="http://restoredthedelta.org/wp-content/uploads/2015/09/7-22-15-BDCP-alts-ltr-pdf.pdf">http://restoredthedelta.org/wp-content/uploads/2015/09/7-22-15-BDCP-alts-ltr-pdf.pdf</a>.]</p> <p>The direct and obvious way to increase flows through the Delta is to take less water out. The broad policy alternatives that should be highlighted in the BDCP NEPA and CEQA documents are to: 1) reduce existing export levels and thereby increase Delta flows; 2) maintain existing</p>	<p>The project proposes to stabilize water supplies, and exports could only increase under certain circumstances. Water deliveries from the federal and state water projects under a fully-implemented Alternative 4A are projected to be about the same to average annual amount diverted in the last 20 years. Although the proposed project would not increase the overall volume of Delta water exported, it would make the deliveries more predictable and reliable, while restoring an ecosystem in steep decline.</p> <p>Regarding alternatives development, please see Master Response 4. Regarding the compliance with the Delta Reform Act, please see Master Response 31.</p> <p>For information on compliance with the Endangered Species Act, please see Master Response 29. Please see Master Response 13 regarding the Public Trust Doctrine.</p> <p>The State Water Resources Control Board (the Board) is charged with the comprehensive planning and allocation of water resources in California. Any change in purpose, place of use, or point of diversion requires approval by the Board. DWR will seek to obtain the Board's approval for the proposed project through the permit process. Water rights permits carefully spell out the amounts, conditions, and construction timetables for proposed water projects. Before the Board issues a permit, it must take into account all prior rights and the availability of water in the basin. The Board considers, too, the flows needed to preserve in-stream uses such as recreation and fish and wildlife habitat. DWR, as the permit applicant, will follow the process set forth in the Board's regulations, which includes environmental review, public notice, and a hearing process to address objections. A key finding the Board must make before a permit can be issued is that the applicant's use is in the public interest, which is an overriding concern in all Board decisions. The difficulty comes in balancing the potential value of a proposed or existing water</p>

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		<p>export levels and Delta flows; and 3) further reduce Delta flows by establishing a massive new diversion, the Tunnels Project, upstream from the Delta. [Footnote 34: The Tunnels Project alternative is infeasible because it is not lawful under the ESA, Clean Water Act, Delta Reform Act and the public trust doctrine. It is puzzling at this Draft EIR/EIS stage of the NEPA and CEQA process that the BDCP agencies would refuse to consider lawful alternatives increasing Delta flows while both considering and giving preferred alternative status to unlawful alternatives. As the RDEIR/SDEIS admits, "Many commenters argued that because the proposed project would lead to significant, unavoidable water quality effects, DWR could not obtain various approvals needed for the project to succeed (e.g., approval by the State Water Resources Control Board of new points of diversion for North Delta intakes)." RDEIR/SDEIS, Executive Summary, p. ES-2.]</p> <p>The BDCP agencies and the new RDEIR/SDEIS continue to ignore the direct and obvious broad policy alternative of reducing existing export levels to thereby increase Delta flows -- which is mandated by section 85021 of the California Water Code.</p>	<p>diversion with the impact it may have on the public trust. The courts also have concurrent jurisdiction in this area.</p> <p>The proposed project provides a way to improve ecosystem health while also protecting water supply reliability. The proposed project is grounded in concepts of efficiency and public benefit, and utilizes best available science for design and implementation. The Water Resources Control Board will have a chance to evaluate these efforts of public trust compliance when an application is made under the proposed project to change the point of diversion.</p> <p>Also see Master Response 32, Water Rights and Master Response 14, Water Quality.</p>
2653	25	<p>The Endangered Species Act continues to be violated. The Tunnels Project is not a permissible project under the Endangered Species Act (ESA) because it would adversely modify critical habitat for at least five endangered and threatened fish species. We [Environmental Water Caucus] previously addressed the failure of the BDCP agencies to develop and consider a reasonable range of alternatives increasing Delta flows by reducing exports in our July 22, 2015, letter to you.</p> <p>First, the Sacramento River winter-run Chinook salmon is listed as an endangered species under the Endangered Species Act, 16 U.S.C. [Section] 1531 et seq. Likewise, the Central Valley spring-run Chinook salmon, Central Valley steelhead, Southern Distinct Population Segment of North American green sturgeon, and Delta smelt, are listed as threatened species under the ESA. [Footnote 35: Each of these species is listed under the California Endangered Species Act as well, with most of them considered threatened. Bay Delta Conservation Plan, Section 1.4.3, Covered Species, Table 1-3, p. 1-24. This table shows that under the California Endangered Species Act, Delta smelt is listed as threatened; however, the BDCP species account for Delta smelt states that the California Fish and Game Commission elevated Delta smelt to the status of endangered on March 4, 2009. (BDCP, Appendix 2A, section 2A.1.2, p. 2A.1-2, lines 21-24.) Longfin smelt is considered threatened, winter-run Chinook salmon is considered endangered, spring-run Chinook salmon threatened, fall- and late fall-run Chinook salmon are considered species of special concern; and green sturgeon (southern DPS) is also considered a species of special concern. Longfin smelt is at this time a candidate species for listing under the federal Endangered Species Act.</p> <p>Second, reaches of the Sacramento River, sloughs, and the Delta that would lose significant quantities of freshwater flows through operation of the proposed Tunnels Project are designated critical habitats for each of these five listed endangered and threatened fish species. Third, no Biological Assessment has been prepared and transmitted to the U.S. Fish and Service (USFWS) or National Marine Fisheries Service (NMFS) by Reclamation with respect to the Tunnels Project. Fourth, ESA Section 7 consultations are not completed and no Biological Opinion has been released by either USFWS or NMFS with respect to the effects of the operation of the Tunnels Project on the five federally listed species of fish or their designated critical habitats. Fifth, no "reasonable and prudent alternatives" (RPAs) have been developed or suggested by the USFWS or NMFS to avoid species jeopardy or</p>	<p>A reasonable range of alternatives is presented in the Final EIR/EIS. Please see Chapter 3, Description of Alternatives and Appendix 3A which addresses alternatives screening. Please also see Master Response 4 regarding alternatives development. Alternatives are included in this Final EIR/EIS that increase Delta outflow to benefit fish, including Alternative 4, 4A and 8. Please see Chapter 2, Project Objectives and Purpose and Need for full text of the project objectives and purpose and need statement.</p> <p>The commenter's account of listed and other species is correct. Regarding effects on critical habitat, any effects are reduce by proposed mitigation to offset these effects. A biological assessment for ESA compliance and CESA incidental take application have also been prepared for Alternative 4A. Please also see Master Response 29 related to timing of preparation of ESA compliance documents.</p> <p>Please note that the preferred alternative is now Alternative 4A and no longer includes an HCP/NCCP. Alternative 4A, also known as California WaterFix, has been developed in response to public and agency input and is the new CEQA and NEPA Preferred Alternative. Alternative 4 (a BDCP alternative) remains a potentially viable alternative and is being carried forward in this RDEIR/SDEIS because it represents the original habitat conservation plan/natural community conservation plan (HCP/NCCP) alternative approach, and because it provides an important reference point from which the Alternative 4A, 2D, and 5A descriptions and analyses were developed. If the lead agencies ultimately choose the alternative implementation strategy and select an alternative presented in the RDEIR/SDEIS after completing the CEQA and NEPA processes, elements of the conservation plan contained in the alternatives in the 2013 BDCP Draft EIR/EIS may be utilized by other programs for implementation of the long-term conservation efforts. Alternative 4A (California WaterFix) is subject to consultation under Section 7 of the ESA.</p>

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		adverse modification of designated critical habitat for inclusion in either the RDEIR/SDEIS or the Draft EIR/EIS last year.	
2653	26	<p>Approval of the Tunnels Project in the form of preferred Alternative 4A or otherwise would violate the substantive prohibitions of Section 7 of the ESA by adversely modifying designated critical habitat as well as by jeopardizing the continued existence of the endangered and threatened fish species.</p> <p>Approval of the Tunnels Project would violate the procedural requirements of the ESA because Reclamation has not evaluated its proposed action "at the earliest possible time" to determine whether its action may affect listed species or critical habitat and has not entered into formal consultation with USFWS and NMFS.</p> <p>Approval of the Tunnels Project would violate the procedural requirements of NEPA because the Draft EIR/EIS and RDEIR/SDEIS have not been prepared "concurrently with and integrated with" Biological Assessments and Biological Opinions required by the ESA. Again, the Biological Assessments and Biological Opinions, though required, remain unavailable.</p> <p>These are not deficiencies that can be "fixed" by responses to comments in a Final EIR/EIS. Instead, the RDEIR/SDEIS must be circulated for public review and comment. The new document must include a reasonable range of alternatives including alternatives increasing flows by reducing exports. The new public Draft NEPA document must also be prepared concurrently with and integrated with the ESA required Biological Assessments, Biological Opinions, and include reasonable and prudent alternatives, developed by the USFWS and NMFS. The required reasonable and prudent alternatives would include alternatives increasing flows through the Delta to San Francisco Bay by reducing exports.</p>	<p>The proposed project has been developed with the goals of minimizing and avoiding incidental take of listed species to the maximum extent practicable. Chapter 11, Fish and Aquatic Resources, and Chapter 12, Terrestrial Biological Resources, FEIR/FEIS, describe effects of the proposed project and several alternatives on fish and wildlife species in the Plan Area.</p> <p>ESA Section 7 requires that federal agencies, in consultation with the federal fish and wildlife agencies, ensure that their actions are not likely to jeopardize the continued existence of species or result in modification or destruction of critical habitat.</p> <p>Where the alternative does not include preparation of an HCP, ESA compliance for construction and operation of water intakes in the north Delta and associated conveyance facilities would be achieved solely through Section 7. For these alternatives, USFWS and NMFS would not issue a permit and would not act as a lead agency for NEPA compliance. Where Section 7 is the ESA compliance strategy, USFWS and NMFS will assume roles as cooperating agencies for purposes of the NEPA review.</p> <p>Reclamation would be the lead federal action agency for Section 7 compliance where a non-HCP alternative is selected. Reclamation's Section 7 compliance would be expected to also address the Section 7 compliance needs for the USACE permit actions. In cooperation with DWR, Reclamation would prepare a biological assessment (BA) for submission to USFWS and NMFS requesting formal consultation under ESA Section 7.</p> <p>A biological opinion is not required prior to the release of the Draft BDCP/CWF EIR/EIS. For the Proposed Action, the USFWS and NMFS will conduct an internal ESA section 7 consultation prior to issuance of an Section 10(a)(1)(B) permit for the Proposed Action. These federal agencies will coordinate the ESA consultation process and other environmental review processes, such as the National Environmental Policy Act (NEPA), consistent with federal regulations. In addition, the USFWS and NMFS will consult with the United States Bureau of Reclamation (Reclamation) to complete biological opinions or a joint biological opinion prior to federal action to carry out the BDCP.</p> <p>For more information, please see 1.1.5.2 of Section 1 Introduction of the RDEIR/SDEIS and Master Response 29.</p>
2653	27	<p>The project is not permissible under the Clean Water Act. The Tunnels Project would reduce flows to and through and degrade water quality in the San Francisco Bay-Delta Estuary. This in turn will adversely impact numerous recognized beneficial uses and public health.</p> <p>First, the Tunnels Project will violate water quality standards. Second, because the state cannot issue a 401 certification to a Tunnels Project that does not meet water quality standards and objectives, the Corps of Engineers cannot legally issue a 404 permit regulating dredge and fill in waters of the United States. Third, the Tunnels Project has antidegradation analysis in either the Draft EIR/EIS or the Recirculated Draft EIR/Supplemental Draft EIS (RDEIR/SDEIS), which is required for compliance with the Clean Water Act. And the lack of an adequate antidegradation analysis is yet another reason the state will be unable to issue the 401 certification. Fourth, the Tunnels Project threatens to dictate water quality objectives and prejudice ongoing State Water Resources Control Board's Bay-Delta Water Quality Control Plan Phase 1 and 2 processes, in violation of the Clean Water Act. [Footnote 36: The project may, on one hand, receive conditional permits for the north Delta intakes of the Tunnels Project, including gaping exemptions from water quality standards (masquerading as permit conditions) that undermine beneficial that</p>	<p>The commenter claims that the project would reduce freshwater flows to the Delta, thus impacting beneficial uses, degrading water quality, affecting compliance with water quality standards, and preventing certification under CWA Section 401. As discussed in the RDEIR/SDEIS and confirmed in the Final EIR/EIS, the preferred project would result in only one water quality impact that cannot be mitigated to less than significant levels: effects on methylmercury, which is due to habitat restoration components of project. The assessment of potential water quality effects of the project alternatives fulfills a primary public disclosure purpose of the CEQA and NEPA process and will be utilized by the SWRCB and the U.S. Army Corps of Engineers in fulfilling their regulatory obligations with respect to the project under state and federal law. However, the Clean Water Act regulatory compliance processes, including under Sections 401 and 404, are separate from the CEQA/NEPA process, and involve their own procedures and policies. "Least Environmentally Damaging Alternative" analysis is considered as part of the CWA compliance process for issuance of a Section 404 permit. Effects on beneficial uses will be assessed by the SWRCB under its separate proceeding on applications from DWR and Reclamation to change points of diversions. Please see Master Response 14 for further discussion of water quality issues, including the relevance of state and federal anti-degradation policy. Please see Master Response 45 for further discussion of other permitting processes and requirements.</p>

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		<p>should be protected by the water quality control plan. On the other hand, the Tunnels project will prejudice the Phase 1 and 2 processes with premature diversion and 404 permit requests, potential Delta island purchases by the Metropolitan Water District of Southern California, as well as the inadequate Tunnels environmental review process. Under both of these circumstances, the Tunnels Project tail threatens to wag State Water Board and Army Corps dog.] Finally, the proposed project fails to meet the Clean Water Act's requirement for the Least Environmentally Damaging Practicable Alternative (LEDPA).</p>	<p>Although not a comment on the adequacy of the RDEIR/SDEIS or Final EIR/EIS for CEQA or NEPA purposes, there is no substantial evidence that the State Board cannot fulfill its responsibilities if it has already granted the change of point of diversion petition for the California WaterFix or if MWD owns land in the Delta. The State Water Resources Control Board must revisit the Bay-Delta Plan to set appropriate water quality objectives for the Bay Delta, then engage in a quasi-adjudicatory proceeding to allocate responsibility for meeting the objectives among water rights holders in the Delta and Delta watershed.</p>
2653	28	<p>The Tunnels Project's framework for policy evaluation must be broadened. To Tunnels Project proponents, the reasonable range of alternatives consists of variations among engineering solutions to the problems of how to stabilize reliable exports (defined to maximize contractual amounts from annual allocations) from the Delta and improve the quality of those water exports at the same time. This is far too narrow a definition and helps account for why Californians turned against the Peripheral Canal in 1982, and why they should reject the Tunnels Project now.</p> <p>The state faces a policy crossroads, of which the narrower engineering solution of the Tunnels Project must be seen as just one part. The policy problems were defined and addressed directly by key policies of the Delta Reform Act of 2009: protecting, enhancing, and restoring the Delta's ecosystem, economy, and value as a unique place in California; improving water supply reliability generally; and reducing reliance on the Delta as part of achieving such goals. The RDEIR/SDEIS fails to demonstrate California's need for the Tunnels Project in the grand sweep of this policy framework.</p> <p>To achieve reliable water supplies for the Tunnels Project we must recognize that both supply and demand should be balanced at some level that does not prejudice or undermine California's water policy framework. The failure of the umpteen alternatives (of the Draft EIR/EIS last year and the RDEIR/SDEIS this year) is that they assume that the need for water from the Delta is accurately and reasonably represented by state and federal water contract amounts. The Tunnels Project proponents fail to demonstrate the reasonableness of this assumption. We [Environmental Water Caucus (EWC)] have previously called into question the contracts for and uses of water. [Footnote 37: For example, Environmental Water Caucus, Response Letter to the US Bureau of Reclamation for the Shasta Lake Water Resources Investigation DEIS, September 30, 2013, pp. 6-8. Accessible at <a href="http://ewccalifornia.org/reports/shastadeiscomments.pdf">http://ewccalifornia.org/reports/shastadeiscomments.pdf</a>.]</p> <p>Last year, we presented analysis of many urban water agencies in southern California that are increasingly investing in local and regional self-sufficiency of their water supplies, becoming more efficient users of water through re-use, recycling, stormwater capture, groundwater remediation, and other means. [Footnote 38: EWC Comments, June 11, 2014, pp. 104-105.]</p> <p>The EWC has presented clear alternatives for achieving water supply reliability and Delta ecosystem restoration (Responsible Exports Plan, 2015 Sustainable Water for California Plan [Footnote 39: EWC's Responsible Exports Plan accessible at <a href="http://ewccalifornia.org/reports/responsibleexportsplanmay2013.pdf">http://ewccalifornia.org/reports/responsibleexportsplanmay2013.pdf</a> and our Sustainable Water Plan for California, accessible at <a href="http://ewccalifornia.org/reports/ewcwaterplan9-1-2015.pdf">http://ewccalifornia.org/reports/ewcwaterplan9-1-2015.pdf</a>]) but our alternative was not considered in the Draft EIS/EIR, nor is it considered in the RDEIR/SDEIS. The EWC alternatives rely on strict enforcement of water quality laws, adoption of the State Water Resources Control Board and Fish and Game (now Wildlife) flow and biological</p>	<p>Since 2006, the proposed project has been developed based on sound science, data gathered from various agencies and experts over many years, input from agencies, stakeholders and independent scientists, and more than 600 public meetings, working group meetings and stakeholder briefings.</p> <p>Please see Master Response 4 for additional details on the selection of alternatives.</p> <p>Regarding water contract amounts, The State Water Resources Control Board, not DWR, is responsible for decisions relating to water rights. DWR holds water rights approved by the State Water Resources Control Board but does not have the power or authority to issue water rights to others. Additionally, the proposed project does not seek any new water rights nor include any regulatory actions that would affect water rights holders other than DWR, Reclamation, and SWP and CVP contractors.</p> <p>Importantly, all water exported by the SWP and CVP is the subject of the existing water rights of those two agencies. Exports do not come at the expense of other water rights holders. The proposed project and its alternatives analyzed in the EIR/EIS only include the use of water from existing SWP and CVP water rights or voluntary water transfers from other water rights holders. The proposed project and its alternatives do not reduce the protections for other water right holders.</p> <p>It is important to note that the proposed project is not intended to serve as a state-wide solution to all of California's water problems.</p> <p>Also, see Master Response 6 for additional details on demand management. For more information regarding purpose and need, and alternatives development and screening, please see Master Responses 3 and 4, respectively.</p>

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		<p>recommendations, shoring up existing levees, ceasing unreasonable use of water to irrigate toxic soils (primarily in the western San Joaquin Valley) that return pollution to the estuary, while also providing for modest Delta export water supply with statewide water conservation, efficiency, and recycling measures to ensure existing supplies are extended to meet demand.</p>	
2653	29	<p>Need for the Tunnels Project must be analyzed directly against water conservation potential. This year, Californians have responded to a fourth year of drought by surpassing water conservation goals established by Governor Brown for the third straight month this summer. "For June, July, and August the cumulative statewide savings rate was 28.7 percent," the State Water Resources Control Board said in an October 2015 press release. "That equates to 611,566 acre-feet of water saved -- 51 percent of the overall goal of saving 1.2 million acre-feet from June 2015 to February 2016," as the governor had sought in his April 1 executive order. While this is a statewide figure, many of the largest conserving jurisdictions were located within the hydrologic regions where major state and federal water contractors have seen substantial decreases in residential water use. [Footnote 40: While statewide average residential gallons per capita per day (R-GPCD) for August 2015 rose slightly from July (102 versus 98 R-GPCD), it was 17 percent lower than August 2014, San Joaquin River basin R-GPCD has fallen from 173.9 to 135.0 R-GPCD this August over last, a 22 percent decline; Tulare Lake basin's fell from 189.9 to 164.2 R-GPCD, a 13 percent decrease; and South Coast basin levels fell from 112.7 to 94.8 R-GPCD, a decline of nearly 16 percent, according to State Water Board conservation reporting data. Accessible at <a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/docs/fs100115_conservation.pdf">http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/docs/fs100115_conservation.pdf</a>.]</p> <p>Making water conservation a way of life will be increasingly important as drought recurs throughout California under rising greenhouse gas emissions and climate change conditions. None of this is disclosed or analyzed in determining the need for the Tunnels Project.</p>	<p>The California Water Action Plan recognizes that all Californians have a stake in the future of our state's water resources, and that a series of actions are needed to comprehensively address the water issues before us. The five-year agenda spells out a suite of actions in California to improve the reliability and resiliency of water resources amid the uncertainty of drought and climate change. Please also see Master Responses 4 (Alternatives Development), 6 (Demand Management), and 3 (Project Objectives and Purpose and Need).</p>
2653	30	<p>The need for the Tunnels Project is poorly specified. A new paragraph in the Objective section of the RDEIR/SDEIS states that:</p> <p>"The ecological health of the Delta continues to be at risk, the conflicts between species protection and Delta water exports have become more pronounced, as amply evidenced by the continuing court decisions regarding the intersection of the ESA, the CESA [California Endangered Species Act], and the operations criteria of the SWP and the CVP. Other factors, such as the continuing subsidence of lands within the Delta, increasing seismic risks and levee failures, and sea level rise associated with climate change, serve to further exacerbate these conflicts. Simply put, the overall system as it is currently designed and operated does not appear to be sustainable from an environmental perspective, and so a proposal to implement a fundamental, systemic change to the current system is necessary. This change is necessary if California is to '[a]chieve the two coequal goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem.'" (California Public Resources Code Section 29702 subd.[a]). [Footnote 41: RDEIR/SDEIS, Section 1.1.4, Project Objectives and Purpose and Need, p. 1-7, lines 31-35, and p. 1-8, lines 1-6.]</p> <p>This passage uses lawsuit defeats for DWR and the Bureau combined with climate change, earthquake risk, sea level rise, and worsening conditions for Delta exports south of the Delta to justify "systemic change" apparently in the form of the Tunnels Project. While arguing for</p>	<p>DWR's fundamental purpose of the proposed project is to make physical and operational improvements to the SWP system in the Delta necessary to restore and protect ecosystem health, water supplies of the SWP and CVP south of the Delta, and water quality within a stable regulatory framework, consistent with statutory and contractual obligations, including the co-equal goals of the Delta Reform Act. The proposed project is designed to establish a more natural east-west flow for migratory fish, improve habitat conditions, and allow for greater operational flexibility. Please see Master Response 3 for additional information regarding the purpose and need behind the proposed project.</p> <p>Please also see Master Response 13 (Public Trust) and 19 (Climate Change and Greenhouse Gas Emissions). Both responses address how the proposed project is in compliance with the Delta Reform Act and is consistent with the coequal goals set forth by the Delta Reform Act. See also Appendix 3J, for information on the proposed project's compliance with the Delta Plan. Please see Master Response 31, Compliance with the Delta Reform Act.</p> <p>Regarding the suggestion that the proposed project is a water grab, please see Master response 26 (Area of Origin).</p>

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		<p>"fundamental, systemic change" to achieve the two coequal goals of the Delta Reform Act, the Tunnels Project ("the change" offered) would do nothing of the sort. The Tunnels Project is simply a water grab, intended to boost "water supply reliability" and water quality for south of Delta exports and no other user or the environment. The Tunnels Project proponents engage in a truncated misreading of the Delta Reform Act and its coequal goals. But the Delta Reform Act has a far broader, more encompassing policy framework with which the Tunnels Project falls far short of consistency.</p>	
2653	31	<p>The Bay-Delta Estuary is an over-appropriated common pool plagued by California's abject failure to rein in water rights and contractual commitments that exceed the capacity of Central Valley watershed to supply them. The Tunnels Project includes no adjustments to contractual service area commitments of either the State Water Project or the Central Valley Project in order to align supply with demand and prevent jeopardy to listed Delta fish species and enhance Delta ecosystems for the long term. No analysis of need and alternative sources of supply for south of Delta water contractors is provided in the RDEIR/SDEIS to demonstrate and justify need for the proposed Tunnels Project. This is contrary to CEQA and NEPA and defeats the purpose of full disclosure documents to reveal why a project is truly needed beyond the usual DWR, Bureau and contractor talking points concerning their own "water supply reliability," their own "improved water quality," and supposed "ecosystem health and productivity benefits" of additional huge diversion and redirection points.</p> <p>The failure to adequately define and quantify "increased water supply reliability" renders these documents legally inadequate. The RDEIR/SDEIS fails to inform the public and decision-makers about adverse consequences of the Tunnels Project. Absent a thorough documentation of the purpose and need for the Tunnels Project with respect to water supply reliability including reasonable alternative sources of supply for state and federal water contractors, decision makers cannot understand what type and level of reliability might be achieved and by what means. The National Environmental Policy Act and the California Environmental Quality Act are both violated as a result.</p>	<p>This comment is an opinion about California Water rights and waters supply commitments of the State Water Project. The project objectives, as required by CEQA and the purpose and need statement, required under NEPA are presented in Chapter 2 of this Final EIR/EIS. The EIR/EIS presents an extensive analysis of the potential environmental effects of the action alternatives, including the preferred CEQA/NEPA alternative, Alternative 4A/California WaterFix.</p> <p>Please note that Alternative 4A/California WaterFix has replaced BDCP as the preferred alternative. Alternative 4A/California WaterFix has been developed in response to public and agency input. The FEIR/FEIS analyzes all alternatives, including Alternative 4A.</p> <p>No additional analysis of the need for the project or to define water supply reliability is required under CEQA and NEPA. Discussion of a wide range of alternatives considered for the environmental analysis and the screening process for the action alternatives is included in Appendix 3A. Although alternative sources of water supply are not included as part of the California WaterFix project description, water storage and other State water supply management priorities are identified in the California Water Action Plan. As these projects advance, the appropriate level of environmental analysis will occur to help inform decision-makers about the potential environmental effects of implementing those separate actions.</p> <p>For more information, please see Master Response 3 (Project Objectives and Purpose and Need) and Master Response 4 (Alternatives Development).</p>
2653	32	<p>Cross-Delta Water Transfers inhere in the Tunnels Project purpose, but are ignored in the RDEIR/SDEIS statements of Objective, Purpose and Need. Last year, we [Environmental Water Caucus] commented that the Tunnels Project will function to increase the Central Valley Project and State Water Project's ability to arrange and facilitate cross-Delta water market transfers in drier and drought years. The RDEIR/ SDEIS argues that the Project will increase the reliability of contractual deliveries relative to the present time. [Footnote 42: RDEIR/SDEIS, Section 4.3.1, p. 4.3.1-9, lines 9-11 for Alternative 4A. This reasoning is also applied to Alternative 2D at Section 4.4.1, p. 4.4.1-9, lines 20-33; and to Alternative 5A at Section 4.5.1, p. 4.5.1-9, lines 20-33.]</p> <p>This finding is at best arguable since climate change may neutralize gains in contractual reliability with reductions in precipitation, snowpack and runoff that otherwise would support such a finding. However, the Tunnels Project proponents view the Project as a hedge against climate change impacts on contractual allocation deliveries.</p>	<p>Cross-Delta water transfers are not included in the project purpose and need or project objectives (see Chapter 2 in the Final EIR/EIS). The water transfers analysis (see Chapter 5 in the Final EIR/EIS) is based on historical trends, the assumption that cross-Delta transfers are sensitive to the allocations of the SWP and CVP, and that the lower the allocations below some trigger threshold, the greater the demand for such transfers. In no way does this analysis forecast actual future water transfers. Future water transfer agreements will be subject to separate environmental review processes independent of the California WaterFix. For information on how climate change was incorporated into the water transfer analysis, please see Appendix 5D. Please see Master Response 41, Water Transfers.</p> <p>Adding an additional point of diversion in the north Delta will improve water supply reliability by reducing CVP and SWP risk to export disruptions from seismic events and/or levee failures in the Delta, mitigating effects of future sea level rise and saltwater intrusion by diverting water further upstream, and increasing CVP and SWP operational flexibility and Delta management options in the future.</p>
2653	33	<p>The RDEIR/SDEIS attempts to provide some perspective given the different CEQA and NEPA baselines, but appears to suffer from poor, confused editing. As we [Environmental Water Caucus] understand the concept, the Tunnels Project would increase overall reliability of</p>	<p>Comments noted. Please see Master Response 43, Water Transfers.</p>

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		<p>contractual deliveries relative to current conditions and relative to the No Action Alternative (the future condition without the Tunnels Project in place). To accomplish this, it would increase overall conveyance capacity crossing the Delta (due to its vaunted opportunities for flexible dual diversion operations), which in the view of Tunnels Project proponents, is presently a limiting factor on consummating water transfers (understood regardless of their contractual or market basis). [Footnote 43: The RDEIR/SDEIS does a poor job of clarifying the difference between contractual allocation-based water transfers across the Delta -- the normal, preferred course of exportation from the Delta -- and market-based, extra-contractual acquisitions of temporary supplies of water that are moved across the Delta primarily when project allocations reach as low as 50 percent for the SWP and 40 percent for the CVP. See EWC's comments on water transfers in EWC Comment Letter, June 11, 2014, pp. 192-200.]</p> <p>Contrary to the NEPA conclusion of the RDEIR/SDEIS for Alternative 4A, Alternative 4A would still increase (not decrease, as is stated therein, which does not make sense, since what are the Tunnels but additional conveyance capacity?) conveyance capacity overall, enabling cross-Delta water transfers that could lead to increases in Delta exports when compared to the No Action Alternative.</p> <p>The CEQA conclusion appears logically stated to us (though we disagree with its objective): "Alternative 4A would increase water transfer demand compared to existing conditions. Alternative 4A would increase conveyance capacity, enabling additional cross-Delta water transfers that could lead to increases in Delta exports when compared to existing conditions." [Footnote 44: RDEIR/SDEIS, Section 4.3.1, p. 4.3.1-9, lines 34-36.] These conclusions make clear that increased conveyance capacity boosts not just contractual water supply reliability, but also market-based water supply reliability, the latter of which is not disclosed in the RDEIR/SDEIS's statement of objectives, purpose and need in Section 1.</p> <p>Plus, the very existence of the water transfer market is due to this lack of water available to fulfill SWP and CVP water right claims, and the contractual demands of their south of Delta customer agencies. The Tunnels Project is intended to facilitate both more reliable contractual deliveries and a water transfer market that moves senior water right holders' supplies through the Delta for compensation. The Tunnels Project assumes that contractual allocations are the Delta's primary purpose, but this improperly places market-based water transfers in the background and causes the RDEIR/SDEIS to fail as a full disclosure document under CEQA and NEPA. In both cases, water is conveyed under the Delta through the Tunnels. The only question in the long-term with a Tunnels Project in place (from the standpoint of objectives, purpose and need) is when the water moves -- under contract terms, or under market-based terms?</p> <p>The purpose of the Tunnels' water transfer role is to gain access to north of Delta exported supplies for south of Delta importers in the State and Federal water project service areas. The RDEIR/SDEIS also fails to evaluate the water transfer purposes of the Tunnels Project with respect to the source(s) of market-based transfer water. Last year, we commented that BDCP Draft EIR/EIS claimed that the Sacramento Valley is the main source of supplies for the water transfer market and that it is "full" in most areas and many years. [Footnote 45: Draft EIR/EIS, November 2013, Chapter 7, p. 7-13, line 10-16. "Applied annual agricultural water irrigation totals approximately 7.7 MAF in the Sacramento Valley Groundwater Basin [citation]. A portion of this applied water, and the remaining 13.9 MAF of runoff, is potentially available to recharge the basin and replenish groundwater storage depleted by</p>	

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		<p>groundwater pumping. Therefore, except during drought, the Sacramento Valley groundwater basin is 'full,' and groundwater levels recover to pre-irrigation season levels each spring. Historical groundwater level hydrographs suggest that even after extended droughts, groundwater levels in this basin recovered to pre-drought levels within 1 or 2 years following the return of normal rainfall quantities."]</p> <p>We noted too that groundwater substitution water sales would be likely to increase in a future with the Tunnels Project in place, which we further argued, would likely be catastrophic for the Sacramento Valley's comparatively healthy connection of groundwater resources to extant rivers, streams and sloughs there. In remarks to the Delta Stewardship Council on September 24, 2015, State Water Resources Control Board Executive Director Tom Howard said of groundwater substitution water transfers:</p> <p>"I think we need to do some work on this issue. I have a hard time understanding quite how the stream depletion factors [applied by DWR and the Bureau of Reclamation to water transfer proposals] were established and I think there is ongoing work associated with them. Right now there's a streamflow depletion factor of 12 to 13%. I keep advising people to read USGS [U.S. Geological Survey] Publication Number 1376 as the basic thesis of that USGS publication is that groundwater pumping is just another way to divert surface water. It's just another method of diversion of surface water that essentially, except in very limited circumstances, any groundwater pumping eventually becomes a depletion upon the nearest surface water body." [Footnote 46: Maven's Notebook, "Water Transfers and the Delta Plan, part 2: The agency view," October 13, 2015, accessible online at <a href="http://mavensnotebook.com/2015/10/13/water-transfers-and-the-delta-plan-part-2-the-agency-view/">http://mavensnotebook.com/2015/10/13/water-transfers-and-the-delta-plan-part-2-the-agency-view/</a> See also Paul M. Barlow and Stanley A. Leake, Streamflow Depletion by Wells -- Understanding and Managing the Effects of Groundwater Pumping on Streamflow, U.S. Geological Survey Circular 1376, 84 p. (Also available at <a href="http://pubs.usgs.gov/circ/1376/">http://pubs.usgs.gov/circ/1376/</a>.)</p> <p>We concluded last year that BDCP has failed to identify, disclose, and analyze the potential impacts of cross-Delta groundwater substitution water transfers on the Sacramento Valley and its groundwater resources, and that this is a serious deficiency of the Draft EIR/EIS. This year we conclude that the Tunnels Project proponents provide no analysis of these impacts, and it remains a serious deficiency of the RDEIR/SDEIS.</p> <p>This year, the RDEIR/SDEIS continues to ignore water transfers as a crucial purpose of the Tunnels Project. They fail to describe it as a purpose in violation of CEQA and NEPA. In sum, the project would increase reliance on the Delta in flagrant defiance of the Delta Reform Act, and fails utterly to justify why the Tunnels Project is needed, a violation of NEPA and CEQA.</p>	
2653	34	<p>Rationales for Modifications to the Tunnels Project: The Bay Delta Conservation Plan and its accompanying Draft EIR/EIS in 2014 drew 12,204 comment letters with 1,518 unique letters from individuals and another 432 from public agencies, organizations, and stakeholder groups. [Footnote 47: RDEIR/SDEIS, Section 1, p. 1-3, lines 40-42.] This is an overwhelming response to such an important set of documents. We [Environmental Water Caucus (EWC)] can glean from RDEIR/SDEIS narrative some reasons its proponents had for modifying Alternative 4 and coming up with three new "sub-alternatives" 4A, 2D, and 5A, and why 4A</p>	<p>The lead agencies for the California WaterFix are DWR and Reclamation. The RDEIR/SDEIS was circulated for public review because of changes to the conveyance facility alignment and facilities to improve the project and reduce Delta effects and to provide public review for Alternatives 4A, 2D, and 5A which are being pursued under a modified ESA regulatory approach that does not include preparation of an HCP/NCCP. No additional explanation about the challenges related to ESA Section 10 and the NCCPA, beyond the explanation provided in the EIR/EIS is necessary for the purpose of disclosing the environmental impacts of the action alternatives.</p>

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		<p>is now the "preferred alternative."</p> <p>The Lead Agencies [Footnote 48: The Lead Agencies appear to be the California Department of Water Resources and the US Bureau of Reclamation for RDEIR/SDEIS purposes. It is not clear whether the other Tunnels Project proponents mentioned above are engaged in this process as lead agencies, responsible agencies or merely subordinate investors.] list "four examples of disclosure" from CEQA Guidelines Section 15088.5 that list instances by which significant new information dictates the need to recirculate a Draft EIR. The Lead Agencies coyly decline to state which example or examples was the basis for their decision to recirculate.</p> <p>But of these, the EWC notes that the reason supplied in example 4 in the CEQA Guidelines seems the most germane: Last year's draft EIR on BDCP was so fundamentally inadequate and conclusory in nature that meaningful public review and comment were precluded and full disclosure of project attributes and impacts were defeated. A key reason for this was the sheer size and complexity of the documents involved. What commenters could glean from the enormous mass of verbiage last year nonetheless revealed a project so flawed by boosterism and magical thinking that the Lead Agencies must have felt that only new alternatives could help salvage an effort in the making since 2006.</p> <p>The Lead Agencies claim that project revisions were needed because it became clear from agencies' comments that they could not meet the requirements needed for issuance from the fisheries agencies of "long-term assurances associated with Section 10 of the ESA [and comparable sections of the state's Natural Communities Conservation Planning Act]." They fail to disclose what specific requirements could not be met. The public is entitled to know, but these are not summarized in the RDEIR/SDEIS. We certainly hope they will be stated in the Final EIR/EIS prominently. All that is provided in this regard is a vague acknowledgement that:</p> <p>"These challenges related to the difficulties in assessing species status and issuing assurances over a 50 year period, in light of climate change, and accurately factoring in the benefits of long term conservation in contributing to the recovery of the species. There were also questions raised as to the ability to implement large-scale habitat restoration and an interest in exploring multiple regulatory approaches that could facilitate expeditious progress on Delta solutions." [Footnote 49: RDEIR/SDEIS, Section 1, p. 1-2. Lines 37-42.]</p> <p>Suffice to say, perhaps, that the public's and agencies' comments on the massive modeling effort revealed to the Lead Agencies that their grasp of future conditions with and without the proposed alternatives of BDCP were not up to meeting Section 10 HCP requirements that are normally applied to smaller, simpler development projects than BDCP and its habitat restoration proposals.</p> <p>The second sentence of this passage also suggests strongly that "multiple regulatory approaches" meant jettisoning the habitat restoration components altogether in favor of just making the Tunnels Project a Tunnels Project. Given the now 14-year time period for Tunnels Project construction (increased from 10 years last year), can you please explain what is meant by Alternative 4A and its other sub-alternatives offering supposed "expeditious progress on Delta solutions"? After all, a year has elapsed since the last opportunity to comment on the Tunnels Project concluded. What does "expeditious" mean then? What constitutes a "solution"? And what was the problem the Tunnels is intended to</p>	<p>The commenter requests an explanation of the meaning behind the statement that the new regulatory approach offers "expeditious progress on Delta solutions." By separating California WaterFix and California EcoRestore into two efforts, EcoRestore projects can move forward independently, and in many cases in advance, of California WaterFix. The proposed project would enable DWR to construct and operate new conveyance facilities that improve conditions for endangered and threatened aquatic species in the Delta while at the same time improving water supply reliability, consistent with California law (see, e.g., Cal.Wat. Code, § 85001[c]). Implementing the conveyance facilities would help resolve many of the concerns with the current south Delta conveyance system, and would help reduce threats to endangered and threatened species in the Delta, including entrainment at the south Delta export facilities. For instance, implementing a dual conveyance system would align water operations, and their location, to better reflect natural seasonal flow patterns by creating new water diversions in the north Delta equipped with State-of-the-art fish screens, thus reducing reliance on south Delta exports during times of the year when listed aquatic species are present and most vulnerable. For more information on mitigation measures to minimize construction and operational-related impacts to fish species, including Delta and longfin smelt, please see Chapter 11, RDEIR/SDEIS.</p> <p>Regarding the comment on "water grab", please see Master Comment 26, Area or Origin.</p>

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		<p>solve again?</p> <p>The Lead Agencies settle on two "allowance" rationales: First, to avoid their failure to meet the regulatory requirements to obtain 50-year assurances from the fishery agencies "and due to the desire to explore alternative regulatory approaches that could facilitate expeditious progress on Delta solutions" they revised the project to "allow for an alternative implementation strategy for the new alternatives in the RDEIR/SDEIS," related to achieving project goals and objectives. The second "allowance" in the implementation strategy "allows for other state and federal programs to address the long term conservation efforts for species recovery in programs separate from the proposed project." [Footnote 50: RDEIR/SDEIS, Section 1, p. 1-3, lines 1-14.]</p> <p>Simply put, the Lead Agencies wanted to consider a new water project shorn of the vast majority of its habitat restoration pretenses, and to try to meet Section 7 consultation process standards rather than Section 10 standards. It is a naked water grab and they are externalizing the habitat restoration program of BDCP (which was in part an attempt to mitigating past damage from water exports without actually doing so) onto society the way they had always intended anyway. This kind of vague, euphemistic, and tortured reasoning reflects the general atmosphere of bureaucratic cluelessness, and desire by the Tunnels Project proponents to escape responsibility for the destructive character of the Tunnels Project. At a minimum, their obfuscating discussion of the reasoning behind new alternatives and recirculating the EIR/EIS obscures much and fails to meet the full disclosure purposes of both the California Environmental Quality Act and the National Environmental Policy Act.</p> <p>It appears to the EWC that key rationales were developed to modify the Tunnels Project from the volume and content of critical comments received by the Tunnels Project proponents last summer.</p> <p>-Modify Alternative 4 to reduce its on-the-ground impacts.</p> <p>-Develop a wholly new alternative without much habitat restoration.</p> <p>-Develop among the Tunnels Project proponents a rationale for employing the Section 7 consultation process over the Section 10 habitat conservation planning process for complying with the federal and state endangered species acts.</p>	
2653	35	<p>Modifying Alternative 4: The RDEIR/SDEIS states that in December 2014, Governor Jerry Brown's administration and "its federal partners" (we [Environmental Water Caucus] presume that means in California WaterFix-speak "the US Bureau of Reclamation") "announced several substantial changes to the proposed water conveyance portion of the proposed Bay Delta Conservation Plan . . ." (Is it so difficult to be clear in disclosing who participated in reformulating Conservation Measure 1 of BDCP? This kind of language is for hortatory press releases and triumphal web sites, not environmental full-disclosure documents like the RDEIR/SDEIS.)</p> <p>The changes included: fish screens for each of three north Delta intake structures, access roads, fencing, security gates, control buildings, a single-bore tunnel between Intakes 2 and 3 (28-foot diameter) and the intermediate forebay, various vertical shafts at intervals, a single-bore tunnel from Intake 5 to the intermediate forebay (28-foot diameter), the intermediate forebay with outlets to the two 40-foot diameter tunnels enabling gravity flow</p>	<p>The physical changes made to the project in later 2014, while not focused on fish, represent meaningful reductions in environmental effects to other important resources, specifically terrestrial wildlife species. Removal of proposed transmission lines near Stone Lakes National Wildlife Refuge, relocation of tunnel launch facilities, and removal of reusable tunnel material storage areas from crane habitat on Staten Island. This resulted in reduced impacts to Greater Sandhill Cranes. Many of these same changes reduced the visual impacts to the community of Hood. Moving the pumping facility and allowing for gravity fed conveyance reduces emissions over the life of the project which also reduces the overall impact of the proposed project.</p> <p>Furthermore, the commenter suggests that refinements to projects should only be made to specifically reduced impacts. There is nothing that precludes an agency from refining a project to improve operational efficiency or construction costs.</p>

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		<p>to the area of expanded Clifton Court Forebay where a pumping plant would be constructed to lift water from the tunnels into Clifton Court for delivery to the south Delta state and federal pumping plants.</p> <p>These changes to Alternative 4 are claimed to have the following benefits: eliminating three pumping plants (one from each north Delta intake); minimizing construction on Staten Island where sandhill crane critical habitat exists; relocating project features to DWR-owned property to reduce acquisitions from private land owners; eliminating permanent power lines through Stone Lakes National Wildlife Refuge; removing an underground siphon that would have affected Italian Slough, reducing overall electricity requirements of the Tunnels Project by enabling tunnel water to flow almost entirely by gravity except for the final hoist from beneath Clifton Court Forebay; and overall, "reduc[ing] tunnel operation and maintenance costs." [Footnote 51: RDEIR/SDEIS, Section 3, p. 3-1, lines 14-33.]</p> <p>EWC [Environmental Water Caucus] notes that nowhere in this list of benefits do the Lead Agencies claim that the changes in the Tunnels Project (Alternative 4) were made to benefit fish species, water quality, or public health. The changes mainly appear to reduce Tunnels' operation and maintenance costs, and in a secondary fashion reduce impacts to Delta human residents (such as through elimination of certain visual impacts of transmission lines and power plant buildings from intake sites). Even the fish screens at the north Delta intakes are not claimed to provide fish benefits in this context. Instead, the rationale is justified for reducing "the amount of construction activity required at each intake site and would eliminate the temporary relocation of State Route (SR) 160 by realigning the highway over widened levee sections prior to commencing construction of the intake structures." [Footnote 52: RDEIR/SDEIS, Section 3, p. 3-2, lines 9-11.]</p> <p>Construction related impacts to fish would be the same for modified Alternative 4 as for Alternative 4A because "the proposed physical water conveyance facilities are the same for both alternatives." [Footnote 53: RDEIR/SDEIS, Section 3, p. 3-7, lines 31-32.] In this sense, the changes represent distinctions without important policy or environmental differences.</p>	
2653	36	<p>Developing new alternatives with little habitat restoration: The RDEIR/SDEIS states that the "desire to explore alternative regulatory approaches that could facilitate expeditious progress on Delta solutions" is the main reason for developing the new "sub-alternatives." [Footnote 54: RDEIR/SDEIS, Section 1, p. 1-4, lines 15-17.] It is not disclosed what "Delta solutions" means and what expeditious progress toward them entails. Moreover, it fails to address broader statewide water policy goals enacted in the Delta Reform Act of 2009. This statement should be clarified with respect to the stated objectives, purposes and needs the Lead Agencies employ (discussed below) to justify the Tunnels Project. They vaguely focus on the "conveyance facilities necessary for the SWP and CVP to address more immediate water supply reliability needs in conjunction with ecosystem improvements to reduce reverse flows and direct fish species impacts associated with the existing south Delta intakes." We [Environmental Water Caucus] take this to mean that since ecosystem improvements are externalized to other agencies, Alternative 4A is free to be a Tunnels Project, a water pipeline, pure and simple.</p> <p>Our conclusion is confirmed in Section 3 of the RDEIR/SDEIS. The only tangible environmental benefits of the "alternative implementation strategy" is reducing reverse flows in Old and Middle River and direct fish impacts from continued exclusive operation of the south Delta pumping plants and fish facilities. The RDEIR/SDEIS supposes that the "alternative implementation strategy allows for other state and federal programs to address</p>	<p>This text referenced at the beginning of this comment is introductory text intended to inform the reader of the reasons for introducing new alternatives in the RDEIR/SDEIS. The phrase "Delta solutions" simply refers to improvements in the Delta ecosystem and SWP/CVP water supply reliability as explained in Chapter 2, Project Objectives and Purpose and Need of this Final EIR/EIS. The phrase expeditious progress refers to proposed improvements to modernize the SWP for purposes stated in Chapter 2. The remaining portions of this comment are generalized opinions about the adequacy of the proposed alternatives, the analysis of these alternatives and the motivations of the lead agencies. As such, detailed response to this comment is not possible. Please see Chapter 11, Fish and Aquatic Resources for discussion about benefits of reducing reverse flows and the benefit of improved diversion flexibility on listed species.</p> <p>As described in Appendix 5A of the EIR/EIS, the numerical models cannot be used in a predictive manner to define absolute values. Rather, they must be used in a comparative manner to indicate overall changes between alternatives as compared to the Existing Conditions and the No Action Alternative. As shown in Appendix 5A, Section C, the Old and Middle River flows under Alternative 4A would be more positive than under the No Action Alternative and Existing Conditions except in April and May except in wet years. The model results indicate that in these months, the increased reverse Old and Middle River flows would range from approximately -119 to -427 cfs under Alternative 4A as compared to the No Action Alternative, and from approximately -72 to -748 cfs as compared to the Existing Conditions which includes the effects due to climate change and sea level rise. The purpose and need of the proposed project was to minimize the effects</p>

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		<p>the long term conservation efforts for species recovery in programs separate from the proposed project." [Footnote 55: RDEIR/SDEIS, Section 1, p. 1-3, lines 7-8.]</p> <p>In plain terms, the Lead Agencies continue to believe that adding north Delta intakes with tunnels to the south Delta pumps represents an improvement over existing conditions because the north Delta intakes supposedly provide operational flexibility for avoiding impacts to fish using and residing in north Delta waters. Removal of pumps from the north Delta intakes, they argue later, is alleged to reduce potential problems with the north Delta intakes, and ballyhooed fish screens at these intakes will keep small fish like Delta smelt, longfin smelt, and juvenile salmon from harm. In reality, flexible operations through dual conveyance means that at any given moment reverse flows and fish entrainment and water quality problems can continue to occur somewhere in the Delta. This does not in any way mean there are net aquatic benefits from the Tunnels Project; dual conveyance simply doubles the number of places such effects would occur.</p> <p>"These changes are necessary," claims the description of the new alternatives, "for the SWP and CVP to address more immediate water supply reliability needs while reducing the severity of existing ongoing environmental impacts. The strategy would achieve the latter objective and purpose in part by reducing reverse flows and direct fish impacts associated with the existing south Delta intakes." [Footnote 56: RDEIR/SDEIS, Section 4.1, p. 4.1-1, lines 18-21.] This formulation is intended to stop readers from thinking about whether reverse flows might happen in the north Delta as long as those pesky reverse flows in Old and Middle Rivers are reduced. It is a framing exercise, a linguistic shell game through which the Lead Agencies peddle the Tunnels Project to the public.</p> <p>Thus the RDEIR/SDEIS grandly exaggerates: "Implementing the conveyance facilities alone, as now proposed under Alternatives 4A, 2D, and 5A, would help resolve many of the concerns with the current south Delta conveyance system, and would help reduce threats to endangered and threatened species in the Delta. For instance, implementing a dual conveyance system would align water operations to better reflect natural seasonal flow patterns by creating new water diversions in the north Delta equipped with state-of-the-art fish screens, thus reducing reliance on south Delta exports. The existing operation of the SWP and CVP pumps in the south Delta can cause reversals in river flows, potentially altering salmon migratory patterns and contributing to the decline of sensitive species such as Delta smelt. The new system would reduce the ongoing physical impacts associated with sole reliance on the southern diversion facilities and allow for greater operational flexibility to better protect fish. Minimizing south Delta pumping would provide more natural east-west flow patterns. The new diversions would also help protect critical water supplies against the threats of sea level rise and earthquakes." [Footnote 57: RDEIR/SDEIS, Section 4.1, p. 4.1-1, lines 38-41 and p. 4.1-2, lines 1-9.]</p> <p>These two passages are about stopping thought, not informing it. You cannot have the improvements in potential downstream flow on Old and Middle Rivers without the likely reverse flows and flow reductions inherent in operating the north Delta intakes. You cannot operate the north Delta intakes without threats to migrating juvenile salmon smolts and Delta smelt at key times of year. If real-time operations are invoked to return operations flexibly to the south Delta pumping plants to protect fish in the north Delta, the projects will resume creating reverse flows in Old and Middle rivers with attendant threats and stresses to fish there. It is a zero-sum hydrodynamic Delta in the absence of clogging most key channels with barriers and gates. For now, at least, the Delta remains primarily a common</p>	<p>of the action alternatives as compared to the No Action Alternative, and not to eliminate reverse flows.</p> <p>The CALSIM II model assumptions related to the North Delta Bypass Flows were specifically developed to reduce or eliminate diversions at the north Delta intakes during periods that would cause reverse flow patterns along the Sacramento River and adjacent tributaries, including Sutter and Steamboat sloughs (see Appendix 5A, Section B, of the EIR/EIS). Therefore, tidal flows in the Sacramento River would be similar under the action alternatives and the No Action Alternative and adjacent tributaries, including Sutter and Steamboat sloughs.</p> <p>Alternative 4A does not include an HCP or Conservation Measures. However, DWR and Reclamation maintain that the new preferred alternative continues to meet the co-equal goals of a reliable water supply and a restored Delta ecosystem to benefit all water users. The EIR/EIS analyzes all alternatives, including Alternative 4A.</p>

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		<p>water pool, and no amount of happy talk from the RDEIR/SDEIS or "California WaterFix" publicity can wish it away. [Footnote 58: We are aware of the annual installation of temporary barriers at interior south Delta locations to help with water levels and at the head of Old River to steer migrating salmonids away from entrainment to Jones Pumping Plant in the San Joaquin River mainstem.]</p> <p>"However," the Lead Agencies state, in an effort to keep at least a fig leaf of green over their naked Tunnels Project, "habitat restoration is still recognized as a critical component of the State's long- term plans for the Delta, and such endeavors will likely be implemented over time under actions separate and apart from the chosen."</p> <p>At this writing, no additional documentation of the likelihood California EcoRestore (CER) will be funded let alone implemented has been provided at the California WaterFix web site. At this juncture, CER is described as being less than one-fifth the size of the natural reserve planned originally under BDCP as Conservation Measure 3. [Footnote 59: "California EcoRestore's initial goal is to advance (i.e., complete or break ground on) 30,000 acres of Delta habitat restoration:</p> <p>-25,000 acres associated with existing mandates for habitat restoration, pursuant to federal biological opinions. These projects will be funded exclusively by the state and federal water contractors that benefit from the State Water Project and the Central Valley Project systems.</p> <p>-5,000 acres of habitat enhancements. Proposition 1 grants to local governments, non-profit organizations, and other entities will support these habitat enhancements throughout the Delta. Funding will come primarily from the Delta Conservancy, the California Department of Fish and Wildlife, and the California Department of Water Resources.</p> <p>California EcoRestore is unassociated with any habitat restoration that may be required as part of the construction and operation of new Delta water conveyance (California WaterFix)." Accessed 14 September 2015 at <a href="http://resources.ca.gov/ecorestore/">http://resources.ca.gov/ecorestore/</a>.</p> <p>There is no timeline, schedule of phasing or planning document for California EcoRestore. California EcoRestore represents DWR's cherry-picking of restoration projects it likes from BDCP, especially those with "existing mandates" and which could be funded from the recently passed 2014 Water Bond.]</p> <p>If one of the new alternatives is selected, then "restoration of habitat in the Delta . . . Will instead occur through California EcoRestore, and these activities will be further developed and evaluated independent of the water conveyance facilities." [Footnote 60: RDEIR/SDEIS, Section 4.1, p. 4.1-2, lines 15-17.]</p>	
2653	37	<p>The RDEIR/SDEIS fails to make detailed comparisons among alternatives. Table 1 [ATT1] provides a direct comparison of the three BDCP and California WaterFix preferred alternatives. This direct comparison shows, first, that there are only minor differences between these versions of the preferred alternative, and second, that to make this direct comparison, it was necessary use three different documents: the Bay Delta Conservation Plan, the RDEIR/SDEIS, and the Conceptual Engineering Report (dated July 2015), which was obtained only through a Public Record Act request. No such comparison was provided that we could find readily in the RDEIR/SDEIS, as is shown in Table 1.</p>	<p>The EIR/EIS provides detailed information regarding the components, characteristics, impacts, and mitigation for a range of alternatives. The type and format of information provided is consistent with the requirements of CEQA and NEPA to provide sufficient information regarding the relative merits of the proposed project and alternatives to permit a reasoned choice. For additional information regarding the selection and analysis of alternatives, please see Master Response 4.</p>

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		<p>Last year, we [Environmental Water Caucus] noted that even BDCP's Draft EIR/EIS observed there were just "slight differences" among alternatives when it came to operational attributes. [Footnote 61: EWC June 11th Letter, pp. 150-152.] The RDEIR/SDEIS fails to provide comparisons of Delta outflow and exports with all other alternatives, defeating readers' ability to easily and directly gauge for themselves the relative differences among the alternatives. We present a comparison drawn from both the Draft EIR/EIS and the RDEIR/SDEIS, in Table 2 [ATT2]. This table helps illustrate the cumbersome complexity even of summarizing the "slight differences" in operational complexities associated with analyzing and grasping the BDCP's and TP [Tunnel Project]'s alternatives. But it also points up the continuing deficiency of the RDEIR/SDEIS in fostering useful and meaningful comparisons among its too-numerous alternatives. All that is really provided are comparisons between the modified Alternative 4 and each of the three other sub-alternatives incrementally shorn of the BDCP conservation strategy. [Footnote 62: RDEIR/SDEIS, Section 4.1, Tables 4.1-1, 4.1-4, and 4.1-6.]</p>	
2653	38	<p>[ATT1: Table 1. Summary Comparing BDCP and California WaterFix Alternatives 2013 through 2015.]</p>	<p>This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS.</p>
2653	39	<p>EWC [Environmental Water Caucus]'s Plan Alternatives are reasonable alternatives. We repeat the EWC's demand for consideration of the Responsible Exports Plan and the Sustainable Water Plan for California as alternatives and reasonable variants. EWC's similar requests started back on April 16, 2012 but have to date been ignored in the BDCP and "California WaterFix" process.;</p>	<p>Please see Master Response 4 for additional details on the selection of alternatives. Also, please see Master Response 3 for additional details on the project purpose and need.</p>
2653	40	<p>[ATT2: Table 2. Operational Criteria Scenarios.]</p>	<p>This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS.</p>
2653	41	<p>Deliberate BDCP Refusal to Consider Alternatives Increasing Delta Flows:</p> <p>The BDCP's omission of alternatives reducing exports and increasing flows has been deliberate. A claimed purpose of the BDCP is "Reducing the adverse effects on certain listed [fish] species due to diverting water." [Footnote 63: BDCP Draft EIR/EIS, Executive Summary, p. ES-10.] "[H]igher water exports" are among the factors the RDEIR/SDEIS admits "have stressed the natural system and led to a decline in ecological productivity." [Footnote 64: RDEIR/SDEIS, Section 1, p. 1-10.] "There is an urgent need to improve the conditions for threatened and endangered fish species within the Delta." [Footnote 65: Draft EIR/EIS, Executive Summary, p. ES-10; RDEIR/SDEIS, Executive Summary, p. ES-6.] The new RDEIR/SDEIS admits that "the Delta is in a state of crisis" and that "Several threatened and endangered fish species . . . Have recently experienced the lowest population numbers in their recorded history." [Footnote 66: RDEIR/SDEIS, Executive Summary, p. ES-1.] Alternatives reducing exports are the obvious direct response to claimed BDCP purposes of "reducing the adverse effects on certain listed [fish] species due to diverting water" and "to improve the conditions for threatened and endangered fish species within the Delta." The way to increase Delta flows is to take less water out.</p> <p>Reclamation and DWR must develop and consider an alternative that would increase flows by reducing exports in order to satisfy federal and California law. The Delta Reform Act establishes that "The policy of the State of California is to reduce reliance on the Delta in</p>	<p>Please see Master Response 4 regarding the range of alternatives selected.</p> <p>The alternatives included in the Draft EIR/EIS represent a legally adequate reasonable range of alternatives and the scope of the analysis of alternatives fully complies with both CEQA and NEPA. The lead agencies carefully considered all potential alternatives that were proposed during the scoping process and during time of preparation of the Draft EIR/EIS. In response to public input, several new alternatives have been studied in the Recirculated Draft EIR/EIS and a new Preferred Alternative (4A) identified.</p> <p>The specific proposals that were considered but ultimately rejected by the lead agencies are discussed in Appendix 3A of the Draft EIR/EIS, Identification of Water Conveyance Alternatives, Conservation Measure 1. Appendix 3A explains why various proposals were not analyzed in the EIR/EIS, including the NRDC Portfolio-Based Proposal, Congressman Garamendi's Water Plan, and other similar concepts that would require actions that are beyond the scope of the proposed project.</p> <p>Please also see Master Response 3 for information on the purpose and need for the proposed project. The project proposes to stabilize water supplies, and exports could only increase under certain circumstances. Although the proposed project would not increase the overall volume of Delta water exported, it would make the deliveries more predictable and reliable, while restoring an ecosystem in steep decline.</p>

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		<p>meeting California’s future water supply needs through a statewide strategy of investing in improved regional supplies, conservation, and water use efficiency." [Footnote 67: Cal. Water Code [Section] 85021.] The Act also mandates that the BDCP include a comprehensive review and analysis of "A reasonable range of flow criteria, rates of diversion, and other operational criteria . . . Necessary for recovering the Delta ecosystem and restoring fisheries under a reasonable range of hydrologic conditions, which will identify the remaining water available for export and other beneficial uses." [Footnote 68: Cal. Water Code [Section] 85320(b)(2)(A).] And, the Act requires: "A reasonable range of Delta conveyance alternatives, including through-Delta," as well as new dual or isolated conveyance alternatives. [Footnote 69: Cal. Water Code [Section] 85320(b)(2)(B).] In addition, the Act mandates that "The long-standing constitutional principle of reasonable use and the public trust doctrine shall be the foundation of state water management policy and are particularly important and applicable to the Delta." [Footnote 70: Cal. Water Code [Section] 85023.]</p> <p>Reclamation and DWR have now marched along for over four years in the face of "red flags flying" deliberately refusing to develop and evaluate a reasonable range of alternatives, or indeed, any real alternatives at all, that would increase flows by reducing exports. Four years ago, the National Academy of Sciences declared in reviewing the then-current version of the draft BDCP that: "[c]hoosing the alternative project before evaluating alternative ways to reach a preferred outcome would be post hoc rationalization -- in other words, putting the cart before the horse. Scientific reasons for not considering alternative actions are not presented in the plan." [Footnote 71: National Academy of Sciences, Report in Brief at p. 2, May 5, 2011.]</p> <p>More than three years ago, on April 16, 2012, the Co-Facilitators of the EWC [Environmental Water Caucus] transmitted a letter to then-Deputy Secretary of the California Natural Resources Agency Gerald Meral. The letter stated EWC’s concerns with BDCP’s current approach and direction of the [BDCP] project, particularly its treatment of alternatives. [Footnote 72: Letter, p. 1.] The letter specifically states: "The absence of a full range of alternatives, including an alternative which would reduce exports from the Delta. It is understandable that the exporters, who are driving the project, are not interested in this kind of alternative; however, in order to be a truly permissible project, an examination of a full range of alternatives, including ones that would reduce exports, needs to be included and needs to incorporate a public trust balancing of alternatives." [Footnote 73: Letter, p. 2.]</p> <p>The EWC provided its "Reduced Exports Plan" to BDCP agency officers back in December 2012 and again in person on February 20, 2013. Then-EWC Co-Facilitator Nick Di Croce stated in his December 2012 message to Deputy Secretary Meral that: "Now that the project is nearing its EIR/EIS stage, we feel it is important to formally present it [Reduced Exports Plan] to you and request that you get it on the record as an alternative to be evaluated. . . . As you know, CEQA and NEPA both require a full range of reasonable alternatives to be evaluated. (December 15, 2012 email Di Croce to Meral)."</p> <p>On November 18, 2013, FOR [Friends of the River] submitted a comment letter in the BDCP process urging those carrying out the BDCP to review the "Responsible Exports Plan," an update of the previous "Reduced Exports Plan" proposed by the EWC: as an alternative to the preferred Tunnels Project. This Plan calls for reducing exports from the Delta, implementing stringent conservation measures but no new upstream conveyance. This Plan</p>	

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		<p>additionally prioritizes the need for a water availability analysis and protection of public trust resources rather than a mere continuation of the status quo that has led the Delta into these dire circumstances. Only that alternative is consistent with the EPA statements indicating that more outflow is needed to protect aquatic resources and fish populations. The EWC Responsible Exports Plan is feasible and accomplishes project objectives and therefore should be fully analyzed in a Draft EIS/EIR. [Footnote 74: FOR November 18, 2013 comment letter at p. 3, Attachment 4 to FOR January 14, 2014 comment letter.]</p> <p>All of the so-called project alternatives set forth in the Draft Plan, Draft EIR/EIS, and new RDEIR/ SDEIS create a capacity to divert more water from the Delta far upstream from the present diversion, which will undoubtedly decimate Delta-reliant species already on the brink of extinction, including the Delta smelt, Chinook salmon, steelhead, San Joaquin kit fox, and tricolored blackbird, among dozens of others. The Draft EIR/EIS itself describes differences among the alternatives as "slight." Should the Tunnels Project be completed, this critical aquatic habitat would instead be exported through the north Delta intakes along the lower Sacramento River. And they would do so contrary to ESA Section 10 (prohibiting reduction of the likelihood of survival and recovery of listed species), ESA Section 7 (prohibiting federal agency actions that are likely to jeopardize the continued existence of any endangered species or that "result in the destruction or adverse modification of [critical] habitat of [listed] species" 16 U.S.C. [Section] 1536 (a)(2)), and California Water Code Section 85021 (requiring that exporters reduce reliance on the Delta for water supply).</p>	
2653	42	<p>BDCP Agencies Must Consider Alternatives That Will Increase Delta Flows As Proposed Under the Responsible Exports Plan:</p> <p>We [Environmental Water Caucus (EWC)] yet again request development of a reasonable range of alternatives that increasing Delta flows while reducing exports. Tunnels Project proponents must prepare a new, legally sufficient, Draft EIR/EIS that incorporates actions called for by the Responsible Exports Plan (attached to our previous comment letters and also posted at <a href="http://www.ewccalifornia.org/reports/responsibleexportsplanmay2013.pdf">http://www.ewccalifornia.org/reports/responsibleexportsplanmay2013.pdf</a>). [Footnote 75: We attach for the BDCPComments@icfi.com addressee a copy of EWC's new A Sustainable Water Plan for California (May 2015) as an updated EWC alternative to the BDCP California WaterFix Delta Tunnels. The features of the new plan are similar in pertinent part to the previous Responsible Exports Plan recommendations and features set forth above. We also attach a letter sent by EWC member groups to state and federal officials about alternatives issues this past summer.]</p> <p>EWC-type alternatives could vary by how much time is allotted to phase in export reductions over time. For instance, they could range from 10 to 40 years, which would comparatively span the same range of timelines provided for Tunnels construction.</p> <p>The RDEIR/SDEIS admits the existence of paper water, "quantities totaling several times the average annual unimpaired flows in the Delta watershed could be available to users based on the face value of water permits already issued." [Footnote 76: RDEIR/SDEIS, Section 1, p. 1-11. The RDEIR/SDEIS refers to the State Water Resources Control Board's memorandum we cited earlier on Delta watershed water rights, and tries to downplay its findings by stating, "However, the hydrology, the SWP and CVP water contracts, and environmental regulations control actual quantities that could be made available for use and diversion."]</p> <p>The BDCP agencies misuse the Delta Reform Act's definition of the coequal goals: "'Coequal goals' means the two goals of providing a more reliable water supply for California and</p>	<p>Supplemental modeling that increases Delta outflow by reducing exports at the request of the SWRCB is included in Appendix 5E of the Final EIR/EIS.</p> <p>Please see Master Response 4 regarding the selection of alternatives used in the EIR/EIS. The alternatives included in the Draft EIR/EIS represent a legally adequate reasonable range of alternatives and the scope of the analysis of alternatives fully complies with both CEQA and NEPA. The specific proposals that were considered but ultimately rejected by the lead agencies are discussed in Appendix 3A, Identification of Water Conveyance Alternatives, Conservation Measure 1.</p> <p>For more information regarding compliance with the Delta Reform Act, please see Master Response 31.</p>

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		<p>protecting, restoring, and enhancing the Delta ecosystem . . ." [Footnote 77: Cal. Water Code [Section] 85054.] Providing "a more reliable water supply" means real water actually available, not paper water, and reflecting water available for export while meeting the needs for Delta water quantity, quality, freshwater flows, fisheries, public trust obligations, the ESA, the Clean Water Act, and senior water rights holders. It does not mean moving the exporters who are junior water rights holders -- including 1.3 million acres of drainage impaired lands -- to the front of the line ahead of everyone and everything else. It also does not mean putting the exporters in the front of the line during a lengthy extreme drought, crashing fish populations, and reductions in water use being made by millions of Californians.</p>	
2653	43	<p>The estimated \$15 billion cost of the Tunnels Project -- which will amount to as much as \$60 billion or more including debt service and inevitable cost over-runs represents an "opportunity cost." The only true benefit cost study prepared on the Tunnels Project concluded that the costs are 2 to 3 times higher than the benefits. [Footnote 78: Dr. Jeffrey Michael, Benefit-Cost Analysis of Delta Water Conveyance Tunnels, Eberhardt School of Business, University of the Pacific, July 12, 2012.] Now that the project has dropped the features of habitat conservation, the exporters would not have the benefit of 50-year permits and virtually guaranteed water deliveries. That change, in addition to worsening the adverse environmental impacts of the Tunnels Project, also worsens the already negative cost-benefit ratio. The change also leaves the taxpayer public to be stuck with all costs to mitigate the adverse impacts of the Tunnels Project.</p>	<p>Numerous comments were received that focused on various elements of the BDCP. Where the comments focused on elements of the BDCP that overlap with the elements of Alternatives 2D, 4A, or 5A (e.g., CM1 as it comprises of the North Delta Diversions, tunnels, and supporting facilities), specific responses are presented. Where comments raised issues as to whether the BDCP and other HCP/NCCP alternatives in the 2013 Draft EIR/EIS were potentially feasible and could function as an alternative for purposes of meeting CEQA and NEPA's requirements to analyze a reasonable range of alternatives to the proposed project (e.g., issues regarding the BDCP Effects Analysis or financial feasibility), responses are presented generally in Master Response 5. Where comments submitted on the BDCP were focused on elements outside the scope of the environmental analysis or viability of the BDCP and other HCP/NCCP alternatives within the context of CEQA/NEPA (e.g., request of specific revisions to the BDCP related to mapping or references), no specific responses are provided and further consideration will be given to these comments, and any revisions to the Draft BDCP would only be made, if an HCP/NCCP alternative was ultimately approved at the conclusion of the CEQA/NEPA process.</p>
2653	44	<p><b>BDCP Agencies Should Examine an Instream Water Rights Program:</b></p> <p>An important, yet unexamined, path forward lies in use of a comprehensive, instream water rights program that protects ecosystems and species as a reasonable alternative. If water rights continue to be the legal system by which water is allocated, then a reasonable alternative should reflect the science and ethics of our integration with our environment: legal water rights for waterways must be developed, allocated, and enforced to support water needs for healthy aquatic ecosystems and a healthy California. The alternatives analysis of the Draft EIR/EIS and the new RDEIR/SDEIS should include consideration of this important legal and policy avenue. Alternatives describing "all appropriate methods of accomplishing the aim of the action" [Footnote 79: Environmental Defense Fund v. Corps of Engineers of United States Army, 492 F.2d 1123, 1135 (5th Cir. 1974); 40 C.F.R. [Section] 1502.14(c).] -- which includes restoration of Delta habitats and species and a reliable water supply for California -- must be considered, "including those without the area of the agency's expertise and regulatory control as well as those within it." [Footnote 80: Id.; 40 C.F.R. [Section] 1502.14(c). Again, "legislative action" (such as that which may be needed to establish a program of instream water rights) "does not automatically justify excluding [the alternative] from an EIS." City of Sausalito v. O'Neill, 386 F.3d 1186, 1208 (9th Cir. 2004) (citing Methow Valley Citizens Council v. Regional Forester, 833 F.2d 810, 815 (9th Cir. 1987), overruled on other grounds by Robertson v. Methow Valley Citizens Council, 490 U.S. 332 (1989) (quoting City of Angoon, 803 F.2d at 1021); see also Kilroy v. Ruckelshaus, 738 F.2d 1448, 1454 (9th Cir.1984) ("In some cases an alternative may be reasonable, and therefore required by NEPA to be discussed in the EIS, even though it requires legislative action to put it into effect").]</p>	<p>The comprehensive overhaul of California's water rights law suggested is not a reasonable alternative to the BDCP or California WaterFix. Both projects are within the reasonable range of potentially feasible alternatives aimed at providing a more reliable supply of water from the coordinated operations of the SWP and CVP. Overhauling California's water rights laws is not within a range of reasonable alternatives that would achieve the more modest objectives and purpose and need identified by the lead agencies for the project.</p> <p>For more information regarding the objectives and purpose and need, see Master Response 3, Purpose and Need. For more information on alternatives to the proposed project, please see Master Response 4.</p>

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		<p>Formalizing and effectuating water rights for ecosystems will ensure that waterway and fish needs are considered up front, that planning is effective, and that expectations of implementation and enforcement are clear. California is undertaking various processes now that could set state water policy for decades. These must include consideration of water rights for waterways, to ensure the mutual well-being of the state's people and environment.</p> <p>Strategies for "finding" water in such an alternative could include: (1) applying the waste and unreasonable use provisions of the state Constitution and California Water Code [Footnote 81: See CA Water Code Water Code [Section] 100; see also Article X, Section 2 of the California Constitution.]; (2) increasing fees on diversions to encourage voluntary release of unneeded rights; (3) determining and acting on public trust violations; (4) conducting initiatives to convince existing water rights holders to donate all or a portion of their water rights voluntarily; (5) adjudicating surface and/or groundwater water rights; and (6) other specific approaches to acquiring water rights as appropriate for reassignment to instream flows. [Footnote 82: Oregon's Instream Water Rights Act (IWRA) recognizes a broad array of instream uses as beneficial uses (O.R.S. [Sections] 537.332 - 537.334 (recognizing that public uses that are valid instream uses include "conservation, maintenance and enhancement of aquatic and fish life, wildlife, fish and wildlife habitat and any other ecological values")). The IWRA converted minimum flow requirements to instream rights under the 1955 Minimum Perennial Streamflow Act to instream water rights. O.R.S. [Section] 537.346. It also established a stream system to convert water rights to instream uses (O.R.S. [Section] 537.348). Not only did the IWRA create instream water rights for waterways throughout Oregon, but it also began to create a "'culture' of flow restoration" in which conservation groups, regional land trusts, state agencies and other became partners for waterway health. See Janet Neuman et al., Sometimes a Great Notion: Oregon's Instream Flow Experiments, 36 ENVTL. LAW 1125 (2006).]</p> <p>If successful, an instream water rights program in California would better ensure that we can meet the water needs of both humans and the environment both now and in the long term.</p>	
2653	45	<p>The RDEIR/SDEIS must meaningfully present and evaluate alternatives that will increase Delta flows in order to comply with NEPA and CEQA. Under NEPA Regulations, "This [alternatives] section is the heart of the environmental impact statement." The alternatives section should "sharply" define the issues and provide a clear basis for choice among options by the decision-maker and the public. [Footnote 83: 40 C.F.R. [Section] 1502.14.] Moreover, if "a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion. The agency shall make every effort to disclose and discuss at appropriate points in the draft statement all major points of view on the environmental impacts of the alternatives including the proposed action." [Footnote 84: [Section] 1502.9(a).] The EWC [Environmental Water Caucus]'s plans and an instream flow variant must be among those alternatives in a recirculated EIR/EIS that helps to disclose, sharpen and clarify the issues. [Footnote 85: The EIS alternatives section is to "Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated." [Section] 1502.14(a).]</p>	<p>The broad range of alternatives included in the EIR/EIS, with varying degrees of impacts, reflects a commonly used type of "bookend" analysis, referring to a range of decision-making options (alternatives) consisting of a continuum of choices. For example, under the "bookend" approach utilized by the lead agencies for the operational alternatives, the EIR/EIS evaluated alternatives that ranged from higher export deliveries at one end, and reduced exports and higher outflows to protect fish species at the lower end. (See Final EIR/EIS Appendix 3A, Section 3A.9 and Chapter 3, Section 3.2.1.4.) By analyzing various alternatives covering the entire spectrum of impacts, the alternatives included in the Draft EIR/EIS, RDEIR/SDEIS and Final EIR/EIS represent an appropriate range of alternatives and will permit the lead agencies to make a reasoned choice among alternatives. Thus, the range of alternatives included in the EIR/EIS fully complies with CEQA and NEPA.</p> <p>For additional information regarding the formulation and selection of alternatives for evaluation in the EIR/EIS, please see Master Response 4.</p>

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		<p>Reclamation and DWR have failed to produce an alternatives analysis that "sharply" defines the issues and provides a clear basis for choice among options as required by the NEPA Regulations, 40 C.F.R. [Section] 1502.14. The choice presented must include increasing flows by reducing exports, not just reducing flows by increasing the capacity for exports as is called for by all of the so-called "alternatives" presented in the BDCP Draft Plan, Draft EIR/EIS, and RDEIR/SDEIS. [Footnote 86: In California v. Block, 690 F.2 753, 765-769 (9th Cir. 1982), the project at issue involved allocating to wilderness, non-wilderness or future planning, remaining roadless areas in national forests throughout the United States. The court held that the EIS failed to pass muster under NEPA because of failure to consider the alternative of increasing timber production on federally owned lands currently open to development; and also because of failure to allocate to wilderness a share of the subject acreage "at an intermediate percentage between 34% and 100%." 690 F.2d at 766. Like the situation here where the BDCP agencies claim a trade-off involved between water exports and Delta restoration (RDEIR/SDEIS ES 4-6), the Forest Service program involved "a trade-off between wilderness use and development. This trade-off, however, cannot be intelligently made without examining whether it can be softened or eliminated by increasing resource extraction and use from already developed areas." 690 F.2d at 767. Here, likewise, trade-offs cannot be intelligently analyzed without examining whether the impacts of alternatives reducing exports can be softened or eliminated by increasing water conservation, recycling, and eventually retiring drainage-impaired agricultural lands in the areas of the exporters from production. Accord, Oregon Natural Desert Assn. v. Bureau of Land Management, 625 F.3d 1092, 1122-1124 (9th Cir. 2010) (EIS uncritical alternatives analysis privileging of one form of use over another violated NEPA). Here, the BDCP alternatives analysis has unlawfully privileged water exports over protection of Delta water quality, water quantity, public trust values, and ESA values.]</p> <p>The failure to include a reasonable range of alternatives also violates CEQA. An EIR must "describe a reasonable range of alternatives to the project . . . which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." [Footnote 87: 14 Code Cal. Regs (CEQA Guidelines) [Section] 15126.6(a).] "[T]he discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly." [Footnote 88: [Section] 15126.6(b).] Recirculation of a new Draft EIR/EIS will be required by CEQA Guidelines section 15088.5(a)(3) because the Responsible Exports Plan alternative and other alternatives that would reduce rather than increase exports have not been previously analyzed but must be analyzed as part of a reasonable range of alternatives.</p> <p>In short, the fundamental flaws in the alternatives sections in the BDCP Draft EIR/EIS, Chapter 9 of the BDCP plan and the RDEIR/SDEIS have led to NEPA and CEQA documents "so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded." [Footnote 89: 40 C.F.R. [Section] 1502.9(a).]</p>	
2653	46	<p>Expert Federal and California Agencies Have Also Found the Current BDCP Alternatives Analysis Deficient:</p> <p>On August 26, 2014, the U.S. Environmental Protection Agency (EPA) issued its 40-page</p>	<p>To review responses to comments submitted by the U.S. Environmental Protection Agency, the U.S. Army Corps of Engineers, and the California State Water Resources Control Board during the 2013 or 2015 comment periods, please refer to the index of commenter's to find the appropriate letter number(s). DWR</p>

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		<p>review of the Draft BDCP EIS finding in BDCP's case that: "operating any of the proposed conveyance facilities . . . would contribute to increased and persistent violations of water quality standards in the Delta, set under the Clean Water Act, measured by electrical conductivity (EC) and chloride concentrations. We recommend that the Supplemental Draft EIS include one or more alternatives that would, instead, facilitate attainment of all water quality standards in the Delta. Specifically, we recommend that an alternative be developed that would, at minimum, not contribute to an increase in the magnitude or frequency of exceedances of water quality objectives, and that would address the need for water availability and greater freshwater flow through the Delta. Such an alternative should result in a decrease in the state and federal water projects' contributions to the exceedance of any water quality objectives in the Delta." [Footnote 90: Letter of Jared R. Blumenfeld, Regional Administrator, Region IX, USEPA, to Will Stelle, Regional Administrator, West Coast Region, National Marine Fisheries Service, Draft Environmental Impact Statement for Bay Delta Conservation Plan, San Francisco Bay-Delta, California (CEQ# 20130365), p. 2.]</p> <p>EPA further stated that "Data and other information provided in the Draft EIS indicate that all CM1 [Tunnels project] alternatives may contribute to declining populations of Delta smelt, longfin smelt, green sturgeon, and winter-run, spring-run, fall-run and late-fall run Chinook salmon." [Footnote 91: Id., p. 10.] "We recommend that the Supplemental Draft EIS [now the RDEIR/SDEIS] consider measures to ensure freshwater flow that can meet the needs of those [declining fish] populations and ecosystem as a whole, and is supported by the best available science. We recommend that this analysis recognize the demonstrated significant correlations between freshwater flow and fish species abundance." [Footnote 92: Id.] "Other reasonable alternatives could be developed by incorporating a suite of measures, including Integrated Water Management, water conservation, levee maintenance, and decreased reliance on the Delta." [Footnote 93: Id. p. 3.] In addition, EPA concluded that "The Draft EIS does not address how changes in the Delta can affect resources in downstream waters, such as San Francisco Bay, and require changes in upstream operations, which may result in indirect environmental impacts that must also be evaluated. We recommend that the Supplemental Draft EIS include an analysis of upstream and downstream impacts." [Footnote 94: Id.]</p> <p>On July 29, 2014, the State Water Resources Control Board (SWRCB) issued its review of the Draft BDCP EIS/EIR. The SWRCB declared that the "environmental documentation prepared for the project must disclose the significant effects of the proposed project and identify a reasonable range of interim and long-term alternatives that would reduce or avoid the potential significant environmental effects." [Footnote 95: Letter of Diane Riddle, Environmental Program Manager, State Water Resources Control Board, to Ryan Wulff, National Marine Fisheries Service, Comments on the Draft Bay Delta Conservation Plan, Draft Environmental Impact Report/Environmental Impact Statement for the Bay Delta Conservation Plan, and the Implementing Agreement for the Bay Delta Conservation Plan, July 29, 2014, comment 9, pp. 11-12.] Further, "The justification for this limited range of Delta outflow scenarios is not clear given that there is significant information supporting the need for more Delta outflow for the protection of aquatic resources and the substantial uncertainty that other conservation measures will be effective in reducing the need for Delta outflow. For this reason a broader range of Delta outflows should be considered for the preferred project." [Footnote 96: Id. comment 10 p. 12.]</p> <p>On July 16, 2014, the U.S. Army Corps of Engineers found that: "the EIS/EIR is not sufficient at this time in meeting the Corps' needs under the National Environmental Policy Act (NEPA)</p>	<p>and project proponents strived to use the best available science throughout the effects analysis, consistent with the requirements of the ESA. Additionally, the official public review process for the Draft BDCP and EIR/EIS and the RDEIR/SDEIS provided an opportunity for formal public comment on the proposed project and project alternatives. Public and agency comments on the public draft have led to further refinement of the proposed project, as evidenced in the RDEIR/SDEIS.</p>

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		<p>. . . in particular with regard to the incomplete description of the proposed actions, alternatives analysis . . . and impacts to waters of the United States and navigable waters, as well as the avoidance and minimization of, and compensatory mitigation for, impacts to waters of the United States." [Footnote 97: Letter of Colonel Michael J. Farrell, District Commander, US Army Corps of Engineers, to Ryan Wulff, National Marine Fisheries Service, July 16, 2014, p. 1.] Additional Corps comments include the absence in the EIR/EIS of "an acceptable alternatives analysis" [Footnote 98: Id., comment 4.], no showing on which alternative may contain the Least Environmentally Damaging Practicable Alternative (LEDPA) for section 404, Clean Water Act purposes [Footnote 99: Id., comment 5.], "the document needs a clear explanation of a reasonable range of alternatives and a comparison of such, including a concise description of the environmental consequences of each" [Footnote 100: Id., comment 19.], and "new conveyance was not a part of the preferred alternative for CalFed. Does this EIS/EIR describe why the reasons for rejecting new conveyance in CalFed are no longer valid?" [Footnote 101: Id., comment 22.]</p> <p>Reclamation and DWR had to drop the attempt to deceive the public that the Tunnels Project is part of a habitat conservation plan because of the refusal of U.S Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) scientists to falsely find that the Tunnels Project would not be harmful to endangered species of fish and their habitat. The RDEIR/SDEIS refers to their rejection as "difficulties in assessing species status and issuing assurances over a 50 year period . . ." [Footnote 102: RDEIR/SDEIS, Section 1, p. 1-2.] In fact, federal scientists issued "red flag" warnings that the Tunnels Project threaten the "potential extirpation of mainstem Sacramento River populations of winter-run and spring-run Chinook salmon over the term of the permit" for more than three years.</p> <p>Reclamation and DWR in their RDEIR/SDEIS have ignored what the EPA, SWRCB, Army Corps, USFWS and NMFS had to say, just as they have ignored the National Academy of Sciences and the EWC [Environmental Water Caucus] for the past four years.</p>	
2653	47	<p>The Tunnels Project is not permissible under the Endangered Species Act. Section 9 of the Federal Endangered Species Act (ESA) prohibits the take of any listed species. [Footnote 103: Section 9(a)((1)(B) prohibits anyone subject to the jurisdiction of the United States to "take . . . any such species within the United States or the territorial sea of the United States." "Take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or to attempt to engage in any such conduct, according to Section 3 of the Endangered Species Act, subsection (19). The act is accessible online at <a href="http://www.nmfs.noaa.gov/pr/pdfs/laws/esa.pdf">http://www.nmfs.noaa.gov/pr/pdfs/laws/esa.pdf</a>.] The alternatives considered in the RDEIR/SDEIS do not involve a habitat conservation plan under Section 10, but instead assume the Bureau will lead Section 7 consultation on behalf of DWR and other Tunnels Project proponents in seeking a new biological opinion from the fisheries agencies (NMFS and USFWS). It is our [Environmental Water Caucus's] understanding that consultation is already under way, but it is unclear what the Bureau has submitted to qualify as a biological assessment for this process, or at what stage the process is now. [Footnote 104: US Fish and Wildlife Service and National Marine Fisheries Service, Endangered Species Consultation Handbook: Procedures for Conducting Consultation and Conference Activities Under Section 7 of the Endangered Species Act, March 1998, Final. Accessible online at <a href="http://www.nmfs.noaa.gov/pr/pdfs/laws/esa_section7_handbook.pdf">http://www.nmfs.noaa.gov/pr/pdfs/laws/esa_section7_handbook.pdf</a>.]</p> <p>The California Endangered Species Act (CESA) contains similar take prohibitions followed by a path for permitted incidental take of listed species. [Footnote 105: California Fish and</p>	<p>The proposed project has been developed with the goals of minimizing and avoiding incidental take of listed species to the maximum extent practicable. Chapter 11, Fish and Aquatic Resources, and Chapter 12, Terrestrial Biological Resources, EIR/EIS, describe effects of the proposed project and several alternatives on fish and wildlife species in the Plan Area.</p> <p>Section 7 requires that federal agencies, in consultation with the federal fish and wildlife agencies, ensure that their actions are not likely to jeopardize the continued existence of species or result in modification or destruction of critical habitat.</p> <p>Where the alternative does not include preparation of an HCP, ESA compliance for construction and operation of water intakes in the north Delta and associated conveyance facilities would be achieved solely through Section 7. For these alternatives, USFWS and NMFS would not issue a permit and would not act as a lead agency for NEPA compliance. Where Section 7 is the ESA compliance strategy, USFWS and NMFS will assume roles as cooperating agencies for purposes of the NEPA review.</p> <p>Reclamation would be the lead federal action agency for Section 7 compliance where a non-HCP alternative is selected. Reclamation's Section 7 compliance would be expected to also address the Section 7 compliance needs for the USACE permit actions. In cooperation with DWR, Reclamation would prepare a biological assessment (BA) for submission to USFWS and NMFS requesting formal consultation under ESA Section 7.</p> <p>A biological opinion is not required prior to the release of the Draft BDCP/CWF EIR/EIS. For the Proposed Action, the USFWS and NMFS will conduct an internal ESA section 7 consultation prior to issuance of an</p>

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		<p>Game Code Section 86 defines "take" to mean "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" a listed species. Section 2080 of the Fish and Game Code prohibits take of listed species, Section 2081(b) authorizes the California Department of Fish and Wildlife to authorize incidental take permits under which incidental take of a listed species is "minimized and fully mitigated," and 2081(c) specifies that no incidental take permit may be issued if its issuance would "jeopardize the continued existence of the species." The California equivalent of a habitat conservation plan is called a "natural community conservation plan" or NCCP. NCCPs are authorized under the state's Natural Community Conservation Planning Act (NCCPA) in California Fish and Game Code Section 2800 et seq., provided they meet the statutory standards provided in Section 2820 of the act.] Regarding state endangered species laws, the RDEIR/SDEIS states only that CDFW would be a responsible agency for determining CESA compliance for the project. The RDEIR/SDEIS fails to state which of the Tunnels Project proponents would apply for this incidental take permit.</p> <p>EWC [Environmental Water Caucus] objects to the adverse modification of critical habitat for five threatened and endangered fish species [Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, Central Valley steelhead, Southern Distinct Population Segment of North American green sturgeon, and Delta smelt], which would occur under the Bay Delta Conservation Plan (BDCP)/California WaterFix/Tunnels Project. [Footnote 106: The lead agencies for the project are the federal Bureau of Reclamation and the California Department of Water Resources.]</p>	<p>Section 10(a)(1)(B) permit for the Proposed Action. These federal agencies will coordinate the ESA consultation process and other environmental review processes, such as NEPA, consistent with federal regulations. In addition, the USFWS and NMFS will consult with the U.S. Bureau of Reclamation to complete biological opinions or a joint biological opinion prior to federal action to carry out the BDCP.</p> <p>For more information, please see 1.1.5.2 of Section 1, Introduction, of the RDEIR/SDEIS.</p> <p>Please see Master Response 29, Endangered Species Act and Master Response 45, Permitting.</p>
2653	48	<p>The Tunnels Project is not a permissible project under the ESA because it would adversely modify critical habitat for at least five endangered and threatened fish species. We [Environmental Water Caucus] previously addressed the failure of the BDCP agencies to develop and consider a reasonable range of alternatives increasing Delta flows by reducing exports in our July 22, 2015 letter to you.</p> <p>First, the Sacramento River winter-run Chinook salmon is listed as an endangered species under the Endangered Species Act, 16 U.S.C. [Section] 1531 et seq. Likewise, the Central Valley spring-run Chinook salmon, Central Valley steelhead, Southern Distinct Population Segment of North American green sturgeon, and Delta smelt, are listed as threatened species under the ESA. [Footnote 107: Each of these species is listed under the California Endangered Species Act as well, with most of them considered threatened. Bay Delta Conservation Plan, Section 1.4.3, Covered Species, Table 1-3, p. 1-24. This table shows that under the California Endangered Species Act, Delta smelt is listed as threatened; however, the BDCP species account for Delta smelt states that the California Fish and Game Commission elevated Delta smelt to the status of endangered on March 4, 2009. (BDCP, Appendix 2A, section 2A.1.2, p. 2A.1-2, lines 21-24.) Longfin smelt is considered threatened, winter-run Chinook salmon is considered endangered, spring-run Chinook salmon threatened, fall- and late fall-run Chinook salmon are considered species of special concern; and green sturgeon (southern DPS) is also considered a species of special concern. Longfin smelt is at this time a candidate species for listing under the federal Endangered Species Act.]</p> <p>Second, the reaches of the Sacramento River, sloughs, and the Delta that would lose significant quantities of freshwater flows through operation of the Tunnels Project are designated critical habitats for each of these five listed endangered and threatened fish species. Third, no Biological Assessment has been prepared and transmitted to the U.S. Fish</p>	<p>Please see response to Comment 2633-25.</p>

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		<p>and Service (USFWS) or National Marine Fisheries Service (NMFS) by Reclamation with respect to the Tunnels Project. Fourth, ESA Section 7 consultations have begun but no Biological Opinion has been completed by the USFWS or NMFS with respect to the effects of the operation of the Tunnels Project on the five federally listed species of fish or their designated critical habitats. Fifth, because of Reclamation's failure to prepare Biological Assessments and failure to initiate ESA consultation, no "reasonable and prudent alternatives" (RPAs) have been developed or suggested by the USFWS or NMFS to avoid species jeopardy or adverse modification of designated critical habitat.</p> <p>Approval of the Tunnels Project would violate the substantive prohibitions of Section 7 of the ESA by adversely modifying designated critical habitat as well as by jeopardizing the continued existence of the endangered and threatened fish species.</p> <p>Approval of the Tunnels Project would violate the procedural requirements of the ESA because Reclamation has not evaluated its proposed action "at the earliest possible time" to determine whether its action may affect listed species or critical habitat and has not entered into formal consultation with USFWS and NMFS.</p> <p>Approval of the Tunnels Project would violate the procedural requirements of NEPA because the Draft EIR/EIS and RDEIR/SDEIS have not been prepared "concurrently with and integrated with" Biological Assessments and Biological Opinions required by the ESA. Again, the Biological Assessments and Biological Opinions, though required, do not yet exist. These are not deficiencies that can be "fixed" by responses to comments in a Final EIR/EIS. Instead, Reclamation and the Department of Water Resources (DWR) must recirculate another Draft EIR/EIS for public review and comment. The new public Draft NEPA document must also be prepared concurrently with and integrated with the ESA required Biological Assessments, Biological Opinions, and include reasonable and prudent alternatives, developed by the USFWS and NMFS. The required reasonable and prudent alternatives would include alternatives increasing flows through the Delta to San Francisco Bay by reducing exports.</p>	
2653	49	<p>No Quantified Incidental Take Estimates:</p> <p>This year, the Tunnels Project alternatives (2D, 4A and 5A) fail to provide clear, direct analysis and findings of effects on take of listed species, as a result of the Tunnels Project' effects on population abundance, distribution, and critical habitat and whether those effects could result in jeopardy to listed species.</p> <p>What are the sizes of the population of each covered species involved? What are the locations, status, and alternative effects on their critical habitats in the Bay-Delta Estuary? What are the permissible levels of take for each covered species for each life stage that occurs in the Delta that can be managed by actions organized under BDCP and its conservation strategy? Which alternatives would not appreciably reduce the likelihood and recovery of any of the listed species among those that are covered by BDCP? We [Environmental Water Caucus] were unable to locate this vital information in the Bay Delta Conservation Plan.</p>	<p>The information requested is developed as part of the ESA Section 7 consultation process. That consultation has been occurring concurrent with the development of the EIR/EIS. Incidental take limits will be included in the BiOp, which will be issued prior to the issuance of the ROD. The FEIR/FEIS identifies the significant and/or adverse effects of each of the alternatives.</p> <p>Please see Master Response 45, Permitting.</p>
2653	50	<p>The Sacramento River winter-run Chinook salmon is listed as an endangered species under the ESA. [Footnote 108: 50 C.F.R. [Section] 17.11.] Critical habitat for the species was designated to include the Sacramento River extending from River Mile 0 near the Delta to River Mile 302, which is far north of the proposed BDCP diversion near Clarksburg. [Footnote 109: 50 C.F.R. [Section] 226.204.] The Tunnels Project would divert enormous</p>	<p>The analyses presented in the RDEIR/SDEIS took into account the various factors that the commenter describes, with the various conclusions provided as stated in the documents. Environmental commitments and real-time operation adjustments are applied to avoid significant effects. The list of potential effects that the commenter provides from p. 2-13 in section 5.2 of the draft BDCP EIR/EIS are the types of effects that could result from the project-covered activities, as opposed to a list of significant adverse effects as the</p>

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		<p>quantities of freshwater from the winter-run Chinook salmon's designated critical habitat. The four threatened fish species mentioned [below in Footnote 110] would likewise lose enormous quantities of freshwater from their designated critical habitats because of diversion of water resulting from the project. [Footnote 110: The Central Valley Spring-Run Chinook Salmon is listed as a threatened species under the ESA. 50 CFR [Section] 17.11. Critical habitat for the species was designated to include the Sacramento River from Lat 38.0612, Long -121.7948, near Mile 0, upstream to Elk Slough (38.4140, -121.5212) in Clarksburg, California. 50 C.F.R. [Section] 226.211(k)(5)(i). The Central Valley Steelhead is listed as threatened under the ESA. 50 CFR [Section] 17.11. Critical habitat for the species was designated to include the Sacramento River from Lat 38.0653, Long -121.8418, near Mile 0, upstream to Elk Slough in Clarksburg. 50 CFR [Section] 226.211(l)(5). The Southern Distinct Population Segment of North American Green Sturgeon is listed as threatened under the ESA. 50 CFR [Section] 17.11. Critical habitat for this species is designated to include the Sacramento-San Joaquin Delta including all waterways up to the elevation of mean higher high water within the area defined in California Water Code Section 12220. 50 CFR [Section] 226.219(a)(3). The National Marine Fisheries Service's website provides a map displaying Green Sturgeon critical habitat: &lt;<a href="http://www.nmfs.noaa.gov/pr/pdfs/criticalhabitat/greensturgeon.pdf">http://www.nmfs.noaa.gov/pr/pdfs/criticalhabitat/greensturgeon.pdf</a>&gt;. The map indicates that the critical habitat includes the Sacramento River from Mile 0 near the Delta to upstream beyond the proposed intake site near Clarksburg. The Delta Smelt is listed as threatened under the ESA. 50 CFR [Section] 17.11. Critical habitat for the species was designated to include "all contiguous waters of the legal Delta." 50 CFR [Section] 17.95-e-Fishes-Part 2. The US Fish and Wildlife Service's website provided a map displaying some of the Delta Smelt's critical habitat: &lt;<a href="http://www.fws.gov/scbayDelta/maps/Delta_smelt_critical_habitat_map.pdf">http://www.fws.gov/scbayDelta/maps/Delta_smelt_critical_habitat_map.pdf</a>&gt;. The map indicates that the Delta Smelt's critical habitat includes the Sacramento River near Mile 0 upstream to the proposed BDCP intake site near Clarksburg.]</p> <p>"The ESA provides 'both substantive and procedural provisions designed to protect endangered species and their habitat.'" [Footnote 111: San Luis &amp; Delta-Mendota Water Auth. v. Jewell (Jewell), 747 F.3d 581, 596 (9th Cir. 2014), cert. denied, 135 S.Ct. 948 and 950 (2015).] Pursuant to the commands of Section 7 of the ESA, each Federal agency "shall . . . ensure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of [critical] habitat of such species. . . ." [Footnote 112: 16 U.S.C. [Section] 1536(a)(2). "Actions" include "actions directly or indirectly causing modification to the land, water, or air." 50 C.F.R. [Section] 402.02.] "ESA section 7 prohibits a federal agency from taking any action that is 'likely to jeopardize the continued existence' of any listed or threatened species or 'result in the destruction or adverse modification' of those species' critical habitat." [Footnote 113: San Luis &amp; Delta-Mendota Water Auth. v. Locke (Locke), 776 F.3d 971, 987 (9th Cir. 2015).]</p> <p>The BDCP itself identifies stressors and threats to each of the five species. Common threats and stressors to the five species include habitat loss due to the operation of water conveyance systems, increasing water temperatures and predation hotspots. By installing gigantic diversion intakes in at least three locations between Clarksburg and Courtland, and by diverting massive amounts of water from the Sacramento River, the Tunnels Project will literally and directly reduce the amount of aquatic habitat available to these five species in their critical habitats. Additionally, the massive diversion will reduce flow in the critical habitat and contribute to a further increase in water temperature. The Effects Analysis</p>	<p>commenter states.</p>

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		<p>chapter (Chapter 5) of the Draft BDCP Plan (November 2013) admits that significant adverse effects could result from the Tunnels Project on the covered fish and their habitat including: "Change in entrainment of fish in water diversions. Change in predation as a result of new structures. Modification of river flow. Change in habitat. Change in food and foraging. Permanent indirect and other indirect losses. Disturbances related to construction and maintenance." [Footnote 114: Bay Delta Conservation Plan, Chapter 5, pp. 2-13.]</p> <p>The BDCP identifies key hydrologic and hydrodynamic changes that reduce or adversely modify habitat of these listed fish species. These changes will exacerbate threats and stressors already known to affect these fish. Modeling results in the RDEIR/SDEIS reveal that through-Delta survival rates of winter-run, spring-run, and fall-run Chinook salmon all decrease relative to the No Action Alternative from Tunnels Project operation. [Footnote 115: RDEIR/SDEIS, Chapter 11, Tables 11-4A-23, -51, and -74.]</p>	
2653	51	<p>The BDCP identifies reduced habitat due to water storage and water conveyance systems as a stressor and threat to winter-run Chinook salmon. [Footnote 116: BDCP EIR-EIS Administrative Draft, p. 11A-47 (March 2013).] There will be adverse effects on juvenile winter-run Chinook salmon including near-field (contact with screens and aggregation of predators) and far-field (reduced downstream flows [Footnote 117: Bay Delta Conservation Plan, Chapter 5, p. 5.3-23; RDEIR/SDEIS p. 4.3.7-48.], reduced Sacramento River attraction flows for migrating adult winter-run Chinook salmon [Footnote 118: Bay Delta Conservation Plan, Chapter 5, p. 5.3-29.], possible reduction of survival of juvenile winter-run Chinook salmon during downstream migration and possible negative effect on upstream migration of adult winter-run Chinook salmon by changing attraction flows/olfactory cues. [Footnote 119: Bay Delta Conservation Plan, Chapter 5, p. 5.3-32.]</p> <p>The BDCP also admits that "A potential adverse effect of the BDCP on adult winter-run Chinook salmon will be the reduction in flow downstream of the north Delta diversions on the Sacramento River, reducing river flow below the north Delta intakes." [Footnote 120: Bay Delta Conservation Plan, Chapter 5, p. 5. 3-45; BDCP Appendix 5C, Tables C.A-41 and C.A-42; RDEIR/ SDEIS, Section 4.3, Figures 4.3.2-7 and 4.3.2-8.] The reduced outflow along with the possible change in olfactory signals due to change in the flow mixture "could affect upstream migration." [Footnote 121: Id.] The RDEIR/SDEIS states: "when compared to the CEQA baseline, [Alternative 4A], including climate change, would substantially reduce the quantity and quality of spawning and egg incubation habitat for winter-run Chinook salmon relative to existing conditions." [Footnote 122: RDEIR/SDEIS, Section 4.3, p. 4.3.7-58.] The BDCP likewise identifies similar threats and stressors to the spring-run Chinook salmon, steelhead, green sturgeon, and Delta smelt that would result from the Tunnels Project.</p>	<p>The commenter provides examples of potential effects on covered anadromous fishes of the preferred alternative. The RDEIR/SDEIS concluded that none of the effects highlighted by the commenter would be significant for the preferred alternative, with environmental commitments applied in some cases, for the reasons described in the analyses.</p>
2653	52	<p>The BDCP identifies several threats and stressors to the Central Valley spring-run Chinook salmon, which include flow reductions causing increased water temperature and habitat elimination or degradation due to water conveyance systems. [Footnote 123: BDCP EIR-EIS Administrative Draft, p. 11A-83, 11A-76 (March 2013).] The BDCP Plan admits that adverse effects of the proposed north Delta diversions on juvenile spring-run Chinook salmon include near-field (physical contact with the screens and aggregation of predators) and far-field (reduced downstream flows). [Footnote 124: Bay Delta Conservation Plan, Chapter 5, p. 5. 4-16; see also RDEIR/SDEIS, Section 4.3, p. 4.3.7-79, lines 15-17.] "Plan Area flows have considerable importance for downstream migrating juvenile salmonids and will be affected by the proposed north Delta diversions . . . Because of the north Delta diversions, salmonids migrating down the Sacramento River generally will experience lower migration</p>	<p>Chapter 11, Fish and Aquatic Species, of the Final EIR/EIS describes the projected effects of the new preferred alternative, Alternative 4A, to fish species. The analysis finds that there would be no adverse effects to salmonids.</p> <p>The text included in the comment describes only part of the CEQA conclusions. The rest of the conclusions indicate that these findings do not consider future climate change. In doing so, it allows a fair comparison of future conditions with and without the effect of the project. As a result of this, the analysis indicates that the effects to salmonids would be less than significant.</p>

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		<p>flows compared to existing conditions. . . As with winter-run Chinook salmon, it was assumed with high certainty that Plan Area flows have critical importance for migrating juvenile spring-run Chinook salmon." [Footnote 125: Bay Delta Conservation Plan, Chapter 5, p. 5. 4-17; BDCP Appendix 5C, Tables C.A-41 and C.A-42; see also RDEIR/SDEIS, Section 4.3, Figures 4.3.2-7 and 4.3.2-8.]</p> <p>Other admitted adverse effects caused by operations of the north Delta diversions include reduced attraction flows in the Sacramento River for migrating adult spring-run Chinook salmon. [Footnote 126: Bay Delta Conservation Plan, Chapter 5, p. 5. 4-19.] "Lower river flow downstream of the north Delta intakes under the BDCP may reduce survival of juvenile spring-run Chinook salmon during downstream migration along the Sacramento River and also could negatively affect upstream migration of adult spring-run Chinook salmon by changing attraction flows/olfactory cues." [Footnote 127: Bay Delta Conservation Plan, Chapter 5, p. 5. 4-20.] The RDEIR/SDEIS again delivers bleak prospects for the survival of this federally-protected species: "Under Alternative 4A (including climate change effects), there are flow and storage reductions, as well as temperature increases in the Sacramento River that would lead to biologically meaningful increases in egg mortality rates and overall reduced habitat conditions for spawning spring-run and egg incubation." [Footnote 128: RDEIR/SDEIS, Section 4.3, p. 4.3.7-98.]</p>	
2653	53	<p>The BDCP states that threats and stressors to the steelhead include water storage and conveyance systems as well as flow reductions contributing to increased water temperatures. [Footnote 129: BDCP EIR-EIS Administrative Draft, p. 11A-129, 11A-133 (March 2013).] The Plan admits near-field (physical contact with the screens and aggregation of predators) and far-field (reduced downstream flows leading to greater probability of predation) effects of the north Delta diversions on juvenile Sacramento River region steelhead. [Footnote 130: Plan, Chapter 5, 5. 6-11; see also RDEIR/SDEIS, p. 4.3.7-199, lines 1-6.] The plan also admits that "Sacramento River attraction flows for migrating adult Sacramento River region steelhead will be lower from operations of the north Delta diversions under the BDCP." [Footnote 131: Plan, Chapter 5, 5. 6-13; BDCP Appendix 5C, Tables C.A-41 and C.A-42; see also RDEIR/SDEIS, Section 4.3, Figures 4.3.2-7 and 4.3.2-8.] The Plan admits that respect to the Feather River, "the reduction in flows in the high-flow channel due to BDCP would reduce conditions in an already unsuitable habitat." [Footnote 132: Plan, Chapter 5, pp. 6-16.] The RDEIR/SDEIS states: "In general, Alternative 4A would degrade the quantity and quality of rearing habitat for steelhead relative to Existing Conditions." [Footnote 133: RDEIR/SDEIS, Section 4.3, p. 4.3.7-22.]</p>	<p>The determination regarding adverse modification of critical habitat and jeopardy is reserved for NMFS and FWS in their BiOp. According to the Biological Assessment, minimal effects on designated critical habitat are expected and other effects of Alternative 4A are avoided, minimized, or compensated. A ROD for this EIR/EIS will not be issued until the BiOp is issued.</p>
2653	54	<p>The BDCP identifies increased water temperatures and habitat loss as threats and stressors to the green sturgeon. [Footnote 134: BDCP EIR-EIS Administrative Draft, 11A-162-165 (March 2013).] With respect to admitted adverse effects, the Plan admits that flow changes will reduce transport and migration flows in the Feather River and Plan area. [Footnote 135: Plan, Chapter 5, pp. 8-17 through 8-24.] "As such [reduction in early fall releases], average in stream flows during some months of the three periods identified above (June-September, August-October, August-June) are expected to substantially decline in the Feather River at Thermalito and moderately decline in the Sacramento River at Verona under the BDCP, especially for the LOS [low-outflow scenario] (Appendix 5.C, flow, passage, salinity, and turbidity, section 5.C.5.3.3, High Outflow and Low Outflow Scenarios)." [Footnote 136: Plan, Chapter 5. 5. p. 8-18.] Also, the plan admits that "there is [on the Feather River] the potential for appreciable change in the Feather River as a result of operational differences between the BDCP scenarios and future conditions without the BDCP (EBC2_LLTT)."</p>	<p>Please see the response to Comment 53.</p>

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		[Footnote 137: Plan, Chapter 5, 5. p. 8-24.] The RDEIR/SDEIS states: "In general, Alternative 4A would reduce the quantity and quality of rearing habitat for larval and juvenile green sturgeon relative to Existing Conditions." [Footnote 138: RDEIR/SDEIS, Section 4.3, p. 4.3.7-296.]	
2653	55	The BDCP identifies several threats and stressors to the Delta smelt, including water exports and increased water temperature. [Footnote 139: BDCP EIR-EIS Administrative Draft, p. 11A-8-11 (March 2013).] Admitted adverse effects caused by the BDCP north Delta intakes include reducing the quantity of sediment entering the Plan Area thus increasing water clarity and negatively affecting Delta smelt. [Footnote 140: Plan, Chapter 5, p. 5. 1-30; see also RDEIR/SDEIS, Section 4.3, p. 4.3.7-26, 4.3.7-29.] Greater water residence time from changes in water operations will likely increase the toxic blue-green alga <i>Microcystis</i> having both direct and indirect effects on the smelt. [Footnote 141: Plan, Chapter 5, p. 5. 1-32; BDCP, Appendix 5C, p. 5.4-14; RDEIR/SDEIS, Chapter 8, Table 8-60a.] North Delta intakes' operations will introduce and increase entrainment and impingement of Delta smelt as well as introduce and increase predation hotspots in and around the new intakes. [Footnote 142: RDEIR/SDEIS, Section 4.3, p. 4.3.7-24, lines 4-7.]	The commenter is correct in the potential effects that are listed, although for delta smelt entrainment and predation is likely to decrease overall because of dual conveyance allowing water diversion from the north Delta intakes (where delta smelt are less common) as opposed to the south Delta export facilities. Please refer to Master Response 14.
2653	56	<p>In 2013, NMFS reiterated its previous "Red Flag" comment that the Tunnels Project threatens the "potential extirpation of mainstem Sacramento River Populations of winter-run and spring-run Chinook salmon over the term of the permit . . ." [Footnote 143: NMFS Progress Assessment and Remaining Issues Regarding the Administrative Draft BDCP Document, Section 1.17, 12, April 4, 2013.] The U.S. Environmental Protection Agency (EPA) has called for alternatives addressing "the need for water availability and greater freshwater flow through the Delta." [Footnote 144: EPA Letter, August 26, 2014, p. 2.] Likewise, the Army Corps of Engineers, State Water Resources Control Board, and USFWS scientists also raised concerns regarding the BDCP's impacts on water quality and impacts to endangered and threatened species. [Footnote 145: We [Environmental Water Caucus (EWC)] briefly summarized some of these agencies comments in our July 22, 2015 letter (at pp. 8-10) to you.]</p> <p>However, comments from other federal agencies were ignored. In April 2015, the claimed habitat conservation elements of the BDCP have been dropped or drastically pared back in the switch from the BDCP to the "California WaterFix." As just one example, the plan to provide "65,000 acres of tidal wetland restoration" has been eviscerated to merely "59 acres of tidal wetland restoration." [Footnote 146: RDEIR/SDEIS, Executive Summary, p. ES-17.] Consequently, the current Tunnels Project is even more of a threat to fish species and their habitat compared to the previous version that resulted in the concerns raised then by the EPA, Army Corps of Engineers, State Water Resources Control Board, and NMFS and USFWS scientists.</p> <p>"The goal of the ESA is not just to ensure survival but to ensure that the species recover to the point it can be delisted." [Footnote 147: <i>Alaska v. Lubchenko</i>, 723 F.3d 1043, 1054 (9th Cir. 2013), citing <i>Gifford Pinchot Task Force v. U.S. Fish and Wildlife Service</i>, 378 F.3d 1059, 1070 (9th Cir. 2004).] Pursuant to the commands of the ESA, each Federal agency "shall . . . insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of [critical] habitat of such species . . ." [Footnote 148: 16 U.S.C. [Section] 1536(a)(2).] "[T]he purpose of establishing 'critical habitat' is for the government to carve out territory that is not only necessary to the species' survival but also</p>	<p>Comments from the federal agencies were one of the reasons for the change of the project from an HCP to a Section 7 consultation. Habitat restoration is part of California EcoRestore (<a href="http://resources.ca.gov/ecorestore/">http://resources.ca.gov/ecorestore/</a>), and both WaterFix and EcoRestore are components of the larger California Water Action Plan (<a href="http://resources.ca.gov/california_water_action_plan/">http://resources.ca.gov/california_water_action_plan/</a>). Chapter 11, Fish and Aquatic Species, of the Final EIR/EIS describes the projected effects of the new preferred alternative, Alternative 4A to fish species. The analysis finds that there would be no adverse effects to listed fish species. NMFS and USFWS will determine whether there the project will jeopardize the continued existence of all listed species and their critical habitat in their Biological Opinions as part of the ESA Section 7 consultation. The project cannot proceed without incidental take authorization from NMFS and USFWS.</p> <p>Please see Master Response 29, Endangered Species Act and Master Response 45, Permitting.</p>

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		<p>essential for the species' recovery." [Footnote 149: Gifford Pinchot, 378 F.3d 1059, 1070.] Also, "existing or potential conservation measures outside of the critical habitat cannot properly be a substitute for the maintenance of critical habitat that is required by Section 7 [of the ESA, 16 U.S.C [Section] 1536]." [Footnote 150: Gifford Pinchot, 378 F.3d 1059, 1076.]</p> <p>Taking the fresh water flows and safe refuge away from endangered and threatened fish species would neither ensure their survival nor ensure their recovery and delisting. On-the-ground habitat restoration is not a lawful substitute under the ESA for maintaining existing critical habitat of and in the waters of the Sacramento River, sloughs, and Delta. The reduction of water and flows, increased residence times of water, and increased water temperature are adverse modifications of their critical habitat. Approval of the BDCP would violate the ESA. The Tunnels Project is thus not permissible under the ESA. [Footnote 151: We have brought the impermissibility of the Tunnels Project given the substantive prohibitions of the ESA and the related procedural ESA and NEPA violations to the attention of Reclamation and DWR on numerous occasions for more than two years now. These prior communications include the FOR [Friends of the River] letters of June 4, September 25 and November 18, 2013, January 14, March 6, May 21, and July 29 (including pp. 10-11), 2014, EWC letter of June 11, 2014 (including pp. 29-30) and our recent joint letters of July 16 (requesting an extension of time to comment), and July 22 (alternatives), 2015. We also addressed these issues in our meeting with federal agency representatives in Sacramento on November 7, 2013.]</p>	
2653	57	<p>Reclamation is Presently Violating both NEPA and ESA Procedure by Failing to Issue a Draft EIR/EIS Concurrently with and Integrated with ESA Required Biological Assessments and Biological Opinions:</p> <p>Fortunately, the ESA obligates federal agencies "to afford first priority to the declared national policy of saving endangered species." [Footnote 152: Tennessee Valley Authority v. Hill, 437 U.S. 153, 185 (1978).] Despite that, Reclamation has failed to prepare a Biological Assessment pertaining to its action and has failed to initiate consultation with USFWS and NMFS even though Biological Assessment preparation and initiation of consultation are required by the ESA. [Footnote 153: See RDEIR/SDEIS, Chapter 1, p. 1-15 (under "Section 7 of the Endangered Species Act").] The RDEIR/SDEIS concedes that "formal consultation under ESA Section 7" will be necessary. [Footnote 154: Id.]</p> <p>Section 7 of the ESA (16 U.S.C. [Section] 1536(a)(4) requires that "Should the agency find that its proposed action may affect a listed species or critical habitat, it must formally or informally consult with the Secretary of the Interior, or his or her delegee [USFWS and/or NMFS]." [Footnote 155: Jewell, 747 F.3d 581, 596.] "Formal consultation is required when the acting agency or consulting agency determines that the proposed action is likely to adversely affect a listed species or critical habitat. [Footnote 156: 50 C.F.R. [Sections] 402.13, 402.14.] Formal consultation requires the consulting agency . . . to issue a biological opinion stating whether the proposed action is likely to jeopardize such species or habitat." [Footnote 157: 16 U.S.C. [Section] 1536(b); 50 C.F.R. [Section] 402.14.]</p> <p>ESA Regulations (50 C.F.R. [Section] 402.14(a)) require that "Each Federal agency shall review its actions at the earliest possible time to determine whether any action may affect listed species or critical habitat. If such a determination is made, formal consultation is required. . . ." [Footnote 158: Karuk Tribe of California v. U.S. Forest Service, 681 F.3d 1006, 1020 (9th Cir. 2012) (en banc), cert. denied, 133 S.Ct. 1579 (2013).] The Ninth Circuit Court of Appeals has repeatedly held that: "Any possible effect, whether beneficial, benign,</p>	<p>The proposed project has been developed with the goals of minimizing and avoiding incidental take of listed species to the maximum extent practicable. Chapter 11, Fish and Aquatic Resources, and Chapter 12, Terrestrial Biological Resources, EIR/EIS, describe effects of the proposed project and several alternatives on fish and wildlife species in the Plan Area.</p> <p>Section 7 requires that federal agencies, in consultation with the federal fish and wildlife agencies, ensure that their actions are not likely to jeopardize the continued existence of species or result in modification or destruction of critical habitat.</p> <p>Where the alternative does not include preparation of an HCP, ESA compliance for construction and operation of water intakes in the north Delta and associated conveyance facilities would be achieved solely through Section 7. For these alternatives, USFWS and NMFS would not issue a permit and would not act as a lead agency for NEPA compliance. Where Section 7 is the ESA compliance strategy, USFWS and NMFS will assume roles as cooperating agencies for purposes of the NEPA review.</p> <p>Reclamation would be the lead federal action agency for Section 7 compliance where a non-HCP alternative is selected. Reclamation's Section 7 compliance would be expected to also address the Section 7 compliance needs for the USACE permit actions. In cooperation with DWR, Reclamation would prepare a biological assessment (BA) for submission to USFWS and NMFS requesting formal consultation under ESA Section 7.</p> <p>A draft biological assessment was prepared and posted for public review in early 2016 at <a href="http://www.californiawaterfix.com">www.californiawaterfix.com</a>. A biological opinion is not required prior to the release of the Draft BDCP/CWF EIR/EIS. For the Proposed Action, the USFWS and NMFS will conduct an internal ESA section 7 consultation prior to issuance of an Section 10(a)(1)(B) permit for the Proposed Action. These federal agencies will coordinate the ESA consultation process and other environmental review processes, such as NEPA, consistent with federal regulations. In addition, the USFWS and NMFS will consult with the United States Bureau of Reclamation (Reclamation) to complete biological opinions or a joint biological opinion prior to federal action to carry out the BDCP.</p>

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		<p>adverse or of an undetermined character, triggers the formal consultation requirement." [Footnote 159: Western Watersheds Project v. Kraayenbrink, 620 F.3d 1187, 1210 (9th Cir. 2010). Accord, Karuk Tribe, 681 F.3d 1006, 1027; Cal. ex rel. Lockyer v. U.S. Dep't of Agric., 575 F.3d 999, 1018 (9th Cir. 2009).]</p> <p>Even ardent advocates for the Tunnels Project who prepared the 48,000 pages of BDCP and Tunnels Project documents do not contend that taking large quantities of water away from the Sacramento River, sloughs, and Delta will not have "any possible effect, whether beneficial, benign, adverse or of an undetermined character" on the endangered and threatened fish species or their habitat. Not surprisingly, no preposterous claim of "no possible effect" is made in the Draft EIR/EIS or RDEIR/ SDEIS. But instead of reviewing the proposed Tunnels Project at the earliest possible time, Reclamation delays ESA review until some unspecified and unacknowledged future time.</p> <p>NEPA regulations require that "To the fullest extent possible, agencies shall prepare draft environmental impact statements concurrently with and integrated with environmental impact analyses and related surveys and studies required by the . . . Endangered Species Act. . . ." [Footnote 160: 40 C.F.R. [Section] 1502.25(a).] "The [ESA] regulations also acknowledge that the agencies are expected to concurrently comply with both Section 7 of the ESA and NEPA." [Footnote 161: See 50 C.F.R. [Section] 402.06 ("Consultation, conference, and biological assessment procedures under section 7 may be consolidated with interagency cooperation procedures required by other statutes, such as the National Environmental Policy Act (NEPA)."); Jewell, 747 F.3d 581, 648. "ESA compliance is not optional," and "an agency may not take actions that will tip a species from a state of precarious survival into a state of likely extinction." Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv., 524 F.3d 917, 929-30 (9th Cir. 2008).]</p> <p>Consequently, against this threat of extinction, conducting the draft EIS public review and comment stage without Biological Assessments or Biological Opinions leaves the public in the dark and violates both the ESA and NEPA. In the absence of the ESA required analyses, the draft EIS/EIR is "so inadequate as to preclude meaningful analysis" in violation of NEPA. [Footnote 162: 40 C.F.R. [Section] 1502.9(a). The CEQA rule is the same. Recirculation is required where feasible project alternatives were not included in the Draft EIR. CEQA Guidelines, 14 Cal. Code Regs., [Section] 15088.5(a), or when "The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded." CEQA Guidelines, [Section] 15088.5(a)(4).]</p> <p>Reclamation has violated the "at the earliest possible time" ESA mandate and the "concurrently with and integrated with" NEPA mandate by prematurely issuing the Draft EIR/EIS and now the REDIR/ SDEIS attempting to hide from the reviewing public the critical pertinent information and analyses that would be supplied by the missing Biological Assessments and Biological Opinions. New upstream diversions of large quantities of water from the Sacramento River will undeniably "affect" the listed fish species and their critical habitats.</p>	<p>For more information, please see 1.1.5.2 of Section 1, Introduction, of the RDEIR/SDEIS.</p> <p>Please see Master Response 29, Endangered Species Act and Master Response 45, Permitting.</p>
2653	58	<p>The public now has what it does not need: unsupported advocacy from the consultants speculating that the adverse effects will be offset or that the effects will not really be all that adverse. The public does not have what it does need: the federal agency Biological Assessments and Biological Opinions [BiOps] required by the ESA and NEPA. [Footnote 163: "The ESA requires an agency to use 'the best scientific and commercial data available' when formulating a BiOp." Locke, 776 F.3d 971, 995. "The purpose of the best available science</p>	<p>The proposed project has been developed with the goals of minimizing and avoiding incidental take of listed species to the maximum extent practicable. Chapter 11, Fish and Aquatic Resources, and Chapter 12, Terrestrial Biological Resources, EIR/EIS, describe effects of the proposed project and several alternatives on fish and wildlife species in the Plan Area.</p> <p>Section 7 requires that federal agencies, in consultation with the federal fish and wildlife agencies, ensure</p>

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		<p>standard is to prevent an agency from basing its action on speculation and surmise." Locke, 776 F.3d at 995.]</p> <p>Evasion of ESA obligations by Reclamation is both extreme and deliberate. Reclamation has on August 26, 2015, joined with DWR in submitting a change petition to the State Water Resources Control Board to add three new points of diversion and redirection to state and federal water right permits for the Tunnels Project. The change petition recites that "The proposed project reflects the culmination of a multiyear planning process that began in 2006 . . ." [Footnote 164: Petition cover letter, p. 1.] The passage of nine years without a biological opinion for the Tunnels Project makes a mockery of the ESA requirement to commence ESA review "at the earliest possible time." Because of the absence of the ESA-required Biological Assessments and Biological Opinions, Reclamation feels free to make the demonstrably false representation in the petition that "The California WaterFix would result in substantially improved conditions in the Delta for endangered and threatened species and afford greater water supply reliability for the state." [Footnote 165: Petition cover letter, p. 2.]</p> <p>Red flag comments and the Record so far have made it clear that there is at minimum significant uncertainty about whether the Tunnels Project is even permissible under the ESA. This critical issue cannot be resolved until the Biological Assessments and Opinions have been completed. Reclamation has not obtained the determination pursuant to ESA-required consultation whether the RDEIR/SDEIS "preferred alternative" -- the Tunnels Project -- is even lawful or feasible.</p> <p>Against this threat of extinction from known stressors and negative effects on the critical habitat, conducting the NEPA environmental draft process prior to and in a vacuum from the ESA consultation process violates the ESA command to carry out the ESA process "at the earliest possible time" and violates the NEPA command to conduct the NEPA and ESA processes "concurrently" and in an "integrated" manner. This also constitutes unlawful piecemealing or segmenting of the NEPA process from the ESA required analyses of the jeopardy and habitat threats posed by the proposed Tunnels Project.</p>	<p>that their actions are not likely to jeopardize the continued existence of species or result in modification or destruction of critical habitat.</p> <p>Where the alternative does not include preparation of an HCP, ESA compliance for construction and operation of water intakes in the north Delta and associated conveyance facilities would be achieved solely through Section 7. For these alternatives, USFWS and NMFS would not issue a permit and would not act as a lead agency for NEPA compliance. Where Section 7 is the ESA compliance strategy, USFWS and NMFS will assume roles as cooperating agencies for purposes of the NEPA review.</p> <p>Reclamation would be the lead federal action agency for Section 7 compliance where a non-HCP alternative is selected. Reclamation's Section 7 compliance would be expected to also address the Section 7 compliance needs for the USACE permit actions. In cooperation with DWR, Reclamation would prepare a biological assessment (BA) for submission to USFWS and NMFS requesting formal consultation under ESA Section 7.</p> <p>A biological opinion is not required prior to the release of the Draft BDCP/CWF EIR/EIS. For the Proposed Action, the USFWS and NMFS will conduct an internal ESA section 7 consultation prior to issuance of an Section 10(a)(1)(B) permit for the Proposed Action. These federal agencies will coordinate the ESA consultation process and other environmental review processes, such as NEPA, consistent with federal regulations. In addition, the USFWS and NMFS will consult with the United States Bureau of Reclamation (Reclamation) to complete biological opinions or a joint biological opinion prior to federal action to carry out the BDCP.</p> <p>For more information, please see 1.1.5.2 of Section 1, Introduction, of the RDEIR/SDEIS.</p> <p>Please see Master Response 29, Endangered Species Act and Master Response 45, Permitting.</p>
2653	59	<p>Reclamation is Proceeding in the Absence of the "Reasonable and Prudent Alternatives" [RPAs] that Must be Developed and Identified pursuant to the ESA:</p> <p>Reclamation and DWR have ignored repeated warnings and suggestions made to them over the years by public agencies including the EPA, U.S. Army Corps of Engineers, and State Water Resources Control Board, by the National Academy of Sciences and by the Environmental Water Caucus (EWC) of the failure of the BDCP documents including the Draft EIR/EIS and the new RDEIR/SDEIS to include a reasonable range of alternatives increasing freshwater flows through the Delta by reducing exports and not including new upstream conveyance. [Footnote 166: Letter of EWC member groups to state and federal officials, July 22, 2015. Accessible at <a href="http://restoretheDelta.org/wp-content/uploads/2015/09/7-22-15-BDCP-alt-ltr-pdf.pdf">http://restoretheDelta.org/wp-content/uploads/2015/09/7-22-15-BDCP-alt-ltr-pdf.pdf</a>.]</p> <p>Beyond ignoring the NEPA alternatives mandate, expert government agencies, the Academy and the EWC, Reclamation is also ignoring the crystal clear prohibitions and mandates of the ESA and NEPA. The previous section set forth the procedural ESA requirements for consultation "at the earliest possible time" and the procedural NEPA requirements for the NEPA Draft EIS to be prepared "concurrently with and integrated with" the analyses</p>	<p>The alternatives included in the Final EIR/EIS represent a legally adequate reasonable range of alternatives and the scope of the analysis of alternatives fully complies with both CEQA and NEPA.</p> <p>Since 2006, the proposed project has been developed based on sound science, data gathered from various agencies and experts over many years, input from agencies, stakeholders and independent scientists, and more than 600 public meetings, working group meetings and stakeholder briefings. Please see Master Response 4 for additional details on the selection of alternatives.</p> <p>The proposed project has been developed with the goals of minimizing and avoiding incidental take of listed species to the maximum extent practicable. Chapter 11, Fish and Aquatic Resources, and Chapter 12, Terrestrial Biological Resources, EIR/EIS, describe effects of the proposed project and several alternatives on fish and wildlife species in the Plan Area.</p> <p>Section 7 requires that federal agencies, in consultation with the federal fish and wildlife agencies, ensure that their actions are not likely to jeopardize the continued existence of species or result in modification or destruction of critical habitat.</p> <p>Where the alternative does not include preparation of an HCP, ESA compliance for construction and operation of water intakes in the north Delta and associated conveyance facilities would be achieved solely</p>

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		<p>required by the ESA.</p> <p>There is more. Under Section 7 of the ESA, 16 U.S.C. [Section] 1536(b)(3)(A), after consultation "If it appears that an action may affect an endangered or threatened species, the consulting agency must provide a biological opinion to the action agency explaining how the action 'affects the species or its critical habitat.' Id. [Section] 1536(b)(3)(A). When a biological opinion concludes that the action is likely to jeopardize an endangered or threatened species, or adversely modify its habitat, then the consulting agency must suggest 'reasonable and prudent alternatives [RPA].' Id." [Footnote 167: Cottonwood Emtl. Law Ctr. v. U.S. Forest Serv., 789 F.3d 1075, 1085 (9th Cir. 2015). Accord, Jewell, 747 F.3d 581, 596; Locke, 776 F.3d 971, 988.] The consulting agency "in the course of proposing an RPA, must insure that the RPA does not jeopardize the species or its habitat." [Footnote 168: Jewell, 747 F.3d 581, 636.]</p> <p>EWC member groups wrote to state and federal officials that Reclamation and DWR had to drop the attempt to sell the Tunnels Project as part of a habitat conservation plan. [Footnote 169: Id., p. 10.] The USFWS and NMFS scientists were unwilling to find falsely that the Tunnels Project would not be harmful to endangered species of fish and their habitat. The RDEIR/SDEIS euphemizes this as "difficulties in assessing species status and issuing assurances over a 50 year period . . ." [Footnote 170: RDEIR/SDEIS, Section 1, pp. 1-2.] In fact, for more than three years, federal scientists have issued "Red Flag" warnings that the Tunnels Project threaten the "potential extirpation of mainstem Sacramento River populations of winter-run and spring-run Chinook salmon over the term of the permit," contrary to publicity claims made for the project.</p> <p>At this time, the Draft EIR/EIS and RDEIR/SDEIS alternatives and alternatives analyses are of no value whatsoever to either decision-makers or the public. This appears to be a deliberate effort on the part of Reclamation and DWR to evade the solemn legal obligation to develop in a Draft EIR/EIS for public review and comment a reasonable range of alternatives including ones that would increase freshwater flows through the Delta by reducing exports and that would not include new upstream conveyance. A central feature of this intentional violation of procedural requirements is premature issuance by Reclamation of the Draft EIR/EIS and RDEIR/SDEIS on the one hand, while with the other hand, Reclamation has deliberately failed to prepare a timely Biological Assessment and initiate formal ESA consultation with USFWS and NMFS. [Footnote 171: The same is true for DWR and Bureau of Reclamation filing applications for 401 certification and changes to points of diversion of state and federal water project water right permits with the State Water Resources Control Board, and for dredge and fill permit (Section 404) with the US Army Corps of Engineers.]</p>	<p>through Section 7. For these alternatives, USFWS and NMFS would not issue a permit and would not act as a lead agency for NEPA compliance. Where Section 7 is the ESA compliance strategy, USFWS and NMFS will assume roles as cooperating agencies for purposes of the NEPA review.</p> <p>Reclamation would be the lead federal action agency for Section 7 compliance where a non-HCP alternative is selected. Reclamation's Section 7 compliance would be expected to also address the Section 7 compliance needs for the USACE permit actions. In cooperation with DWR, Reclamation would prepare a biological assessment (BA) for submission to USFWS and NMFS requesting formal consultation under ESA Section 7.</p> <p>A biological opinion is not required prior to the release of the Draft EIR/EIS. For the Proposed Action, the USFWS and NMFS will conduct an internal ESA section 7 consultation prior to issuance of an Section 10(a)(1)(B) permit for the Proposed Action. These federal agencies will coordinate the ESA consultation process and other environmental review processes, such as the National Environmental Policy Act (NEPA), consistent with federal regulations. In addition, the USFWS and NMFS will consult with the United States Bureau of Reclamation (Reclamation) to complete biological opinions or a joint biological opinion prior to federal action to carry out the BDCP.</p> <p>Please see Master Response 29, Endangered Species Act and Master Response 45, Permitting.</p> <p>For more information regarding supplemental modeling conducted by the SWRCB related to increased Delta outflows, please see Appendix 5E of the Final EIR/EIS.</p>
2653	60	<p>Other Ecological Issues:</p> <p>The Bay Delta Conservation Plan fails to provide adequate assurances that its biological goals and objectives will be implemented and used to hold the Applicants accountable for making progress towards recovery of listed species and minimizing incidental take, as well as compliance with the terms of the implementing agreement and incidental take permit terms.</p> <p>Last year, the BDCP failed to provide adequate assurances that its Section 10-based biological goals and objectives will be implemented. [Footnote 172: EWC [Environmental Water Caucus] Comment Letter, June 11, 2014, pp. 38-44.] This year, the Tunnels Project alternatives of the RDEIR/ SDEIS, having removed Section 10 habitat conservation plan</p>	<p>The comment notes the absence of permitting documents (e.g., biological opinions). The permitting process requires completion of the CEQA and NEPA processes prior to commencement. As part of the permitting process, additional measures designed to protect the environment and species are expected. Please see Master Response 9 for information regarding the cumulative impact analysis.</p> <p>Although Alternatives 4A, 2D, and 5A include only those habitat restoration measures needed to provide mitigation for specific regulatory compliance purposes, habitat restoration is still recognized as a critical component of the state's long-term plans for the Delta. Such larger endeavors, however, will likely be implemented over time under actions separate and apart from these alternatives. The primary parallel habitat restoration program is called California EcoRestore (EcoRestore), which will be overseen by the California Resources Agency and implemented under the California Water Action Plan.</p>

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		<p>obligations, will leave the biological ecological issues we [Environmental Water Caucus] identified completely unaddressed.</p> <p>In the absence of any biological opinions for listed species for both the Bay Delta Conservation Plan and the 2015 Tunnels Project alternatives the full scope of the alternatives and their necessary mitigations are unknown, and therefore the description of alternatives is incomplete. This renders the RDEIR/SDEIS inadequate, and must be recirculated once the biological opinions as to both jeopardy of listed species and reasonable and prudent alternatives are known.</p> <p>Also, California EcoRestore is supposed to take up some of the ecological and habitat restoration functions from BDCP relative to the 2015 Tunnels Project alternatives. But this too goes unaddressed in the RDEIR/SDEIS. It should be addressed in Cumulative Impacts, but is not. California EcoRestore's role in the RDEIR/SDEIS is highly ambiguous. As a cumulative project (that is, one that is reasonably foreseeable), then omission of its analysis from the RDEIR/SDEIS renders the latter document premature and inadequate to the task assigned it under CEQA and NEPA.</p> <p>There is also gaping ambiguity on the relationship of California EcoRestore to the eventual content of Section 7 biological opinions for listed Delta smelt and salmonids. In BDCP, this ambiguity was at least partially addressed by the Decision Tree hypotheses last year. This year, vastly reduced restoration is expected, and limited to requirements already imposed by the existing 2008 and 2009 biological opinions, according to the RDEIR/SDEIS.</p>	<p>Proposition 1 funds and other state and public dollars will be directed exclusively for public benefits unassociated with any regulatory compliance responsibilities.</p> <p>Additional priority restoration projects will be identified through regional and locally led planning processes facilitated by the Delta Conservancy. Plans will be completed for the Cache Slough, West Delta, Cosumnes, and South Delta. Planning for the Suisun Marsh region is already complete and a process for integrated planning in the Yolo Bypass is underway. The Delta Conservancy will lead the implementation of identified restoration projects, in collaboration with local governments and with a priority on using public lands in the Delta.</p> <p>Please see Master Response 29, Endangered Species Act and Master Response 45, Permitting.</p>
2653	61	<p>Flawed Habitat Restoration Hypothesis for Increasing Food Web Productivity:</p> <p>The Tunnels Project alternatives this year withdraw from any pretense of additional habitat restoration beyond that already required of the DWR and Bureau. What becomes of actions, such as increased flow and other possible management strategies, to address nonnative invasive clams (particularly <i>Potamocorbula</i>), as we [Environmental Water Caucus] discussed last year, is gapingly ambiguous. Hopefully, it will at least be addressed in the new Section 7 biological opinions, but these are as yet unavailable. The extent to which the biological opinions will address last year's "habitat for flow" hypothesis (which we characterized then as "magical thinking") remains unknown at this time, another omission rendering the RDEIR/SDEIS inadequate. Without the biological opinions, the supposed "environmental commitments" are wishes and prayers at this time, since vettings by the NMFS and USFWS and California Department of Fish and Wildlife are not completed.</p> <p>Freshwater flow expands native fishes' critical habitat in and through the Delta. And it pushes the nonnative <i>Potamocorbula</i> westward, putting greater distance between its range and the presence of pelagic food webs and nutrients in Suisun Bay and the western Delta used by native estuarine species and juvenile and smolting salmon migrating to sea. [Footnote 173: Id., pp. 41-42.]</p> <p>The Tunnels Project alternatives continue to fail to prevent jeopardy to listed fish species under the Endangered Species Acts. Tunnels Project incidental take permissions should be rejected by the state and federal fishery agencies.</p>	<p>Environmental analyses are focused on impacts of construction and operating conveyance facilities and implementing Environmental Commitments to offset effects of the conveyance facilities. Alternative 4A has been developed to benefit fish and wildlife species and improve water supply reliability. Under ESA Section 7, the project has been developed to ensure it would not jeopardize the continued existence of ESA listed species. In addition, the project cannot proceed without incidental take authorization from NMFS and USFWS as part of the ESA Section 7 consultation. Other actions that are included in the BDCP alternatives such as large-scale habitat restoration are not part of California WaterFix but are instead being implemented separately under the California EcoRestore program and the California Water Action Plan. However, Alternative 4A does include fall X2 requirements consistent with the existing Biological Opinions to improve delta smelt rearing habitat conditions in the fall, and spring outflow criteria designed to minimize and avoid impacts to the longfin smelt population.</p> <p>Please see Master Response 29, Endangered Species Act and Master Response 45, Permitting.</p>
2653	62	<p>The Tunnels Project will violate water quality standards for flow and other parameters, preventing necessary Clean Water Act [CWA] Section 401 certification. The California Department of Water Resources [Department] and the United States Bureau of Reclamation</p>	<p>The assessment of potential water quality effects of the project alternatives fulfills a primary public disclosure purpose of the CEQA and NEPA process. The Clean Water Act Sections 404 and 401 regulatory compliance processes are separate from the CEQA/NEPA process, and involve their own procedures and</p>

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		<p>[Bureau] filed an application for a CWA Section 404 dredge and fill permit with the US Army Corps of Engineers on August 24, 2015, and they filed an application for a 401 certification on September 23, 2015 with the State Water Resources Control Board (SWRCB). [Footnote 174: Accessed September 15, 2015, at <a href="http://www.spk.usace.army.mil/Media/RegulatoryPublicNotices/tabid/1035/Article/616568/spk-2008-00861-california-watercix-project.aspx">http://www.spk.usace.army.mil/Media/RegulatoryPublicNotices/tabid/1035/Article/616568/spk-2008-00861-california-watercix-project.aspx</a>.] The 404 permit will be needed from the Army Corps of Engineers because construction of the Tunnels Project will result in discharges of dredge or fill material into waters of the United States. [Footnote 175: "Many of the actions that will be implemented under the Tunnels Project will result in the discharge of dredged or fill materials into waters of the United States and will need to be authorized by USACE." Public Draft Plan [Section] 1.3.7.1 (Nov. 2013), available at: <a href="http://bayDeltaconservationplan.com/Libraries/Dynamic_Document_Library/Public_Draft_BDCP_Chapter_1_-_Introduction.sclb.ashx">http://bayDeltaconservationplan.com/Libraries/Dynamic_Document_Library/Public_Draft_BDCP_Chapter_1_-_Introduction.sclb.ashx</a>. This is no less true of intake construction of the "California WaterFix" version (Alternative 4A) of the Tunnels Project.] Section 401 requires that the SWRCB certify that the Corps' Section 404 permit meets CWA requirements before the permit may be legally issued. [Footnote 176: "No license or permit shall be granted until the certification required by this section has been obtained or has been waived as provided in the preceding sentence. No license or permit shall be granted if certification has been denied by the State, interstate agency, or the Administrator, as the case may be." 33 U.S.C. [Section] 1341(a) (1).]</p> <p>State and federal agencies have long recognized the importance of this requirement, meeting several times to discuss it in the context of the preparation of the Tunnels Project EIR/EIS. [Footnote 177: As reflected by U.S. EPA in its comments on these discussions: "[a]lthough there is no statutory requirement that the NEPA document prepared for an HCP under the Endangered Species Act be used as the basis for permits and certifications required under CWA [Section] 404 to authorize and implement the project, EPA recognizes the importance of coordination in federal review. Toward this end, EPA and the Corps have met with the project proponent on numerous occasions over the past several years in the interest of using the BDCP EIS/EIR to inform the Corps' 404 regulatory decisions. Despite these efforts, significant unresolved issues remain about the scope of analysis for the proposed project, the level of detail required to trigger the consultation process and federal permitting, and the structure of a comprehensive permitting framework for the proposed project." U.S. EPA, "EPA's Comments on BDCP ADEIS," p. 6 (July 03, 2013), available at: <a href="http://www2.epa.gov/sites/production/files/documents/july3-2013-epa-comments-bdcp-adeis.pdf">www2.epa.gov/sites/production/files/documents/july3-2013-epa-comments-bdcp-adeis.pdf</a>.]</p> <p>In the Administrative Draft of the Bay Delta Conservation Plan issued in March 2013, the conservation strategy announced: "The BDCP will fundamentally alter the hydrodynamics of the Delta." [Footnote 178: Administrative Draft of the Bay Delta Conservation Plan, March 2013, Chapter 5, Effects Analysis, p. 5.3-2, line 23.] This sentence has since been toned down to read, "The BDCP will modify the hydrodynamics (i.e., tidal flows) in the Delta channels," but the original formulation is truer. [Footnote 179: Bay Delta Conservation Plan, November 2013, Chapter 5, Effects Analysis, p. 5.3-2, line 23.] Overall, says BDCP, east to west flows will increase; the frequency and magnitude of reverse flows in Old and Middle River will decrease because of reduced south Delta pumping in most water year types. In the north Delta, flow patterns will "change" from increased diversions to Yolo Bypass with the proposed modifications to Fremont Weir.</p> <p>BDCP states: "These changes in flow patterns in the north Delta present ecosystem-level</p>	<p>policies. The remainder of this comment addresses the merits of the project and does not raise any issues with the environmental analysis provided in the EIR/EIS.</p> <p>As discussed in the RDEIR/SDEIS and confirmed in the Final EIR/EIS, the preferred project would result in only one water quality impact that cannot be mitigated to less-than -significant levels: effects on methylmercury, which is due to habitat restoration components of project. The assessment of potential water quality effects of the project alternatives fulfills a primary public disclosure purpose of the CEQA and NEPA process and will be utilized by the SWRCB and the U.S. Army Corps of Engineers in fulfilling their regulatory obligations with respect to the project under state and federal law. The Clean Water Act regulatory compliance processes, including under Sections 401 and 404, are separate from the CEQA/NEPA process, and involve their own procedures and policies. Effects on beneficial uses will be assessed by the SWRCB under its separate proceeding on applications from DWR and Reclamation to change points of diversions. Please see Master Response 14 for further discussion of water quality issues, including the relevance of state and federal anti-degradation policy. Please see Master Response 45 for further discussion of other permitting processes and requirements.</p> <p>Based on the extensive analysis in the RDEIR/SDEIS as confirmed in the Final EIR/EIS, the lead agencies submit that the California WaterFix or BDCP would not have any significant adverse impact on fish species due to reduced outflow in wet and above normal years. DWR and the U.S. Bureau of Reclamation do not "typically" file temporary urgency change petitions with the State Water Resources Control Board in drought years. They have submitted such requests in the most recent prolonged and extreme drought, which prompted the governor to declare a drought emergency, to mitigate the impacts of the drought emergency on sensitive fish species and human health and safety. Those temporary urgency change petitions do not indicate that the RDEIR/SDEIS or Final EIR/EIS are deficient as informational documents under CEQA or NEPA.</p>

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		<p>tradeoffs between habitat in the Yolo Bypass and the Sacramento River during the winter-spring migration period, resulting in both positive and negative effects on the migration and passage of fish through and within the Delta . . ." [Footnote 180: Ibid., p. 5.3-2, lines 34-37.]</p> <p>This year, the Tunnels Project, freed from habitat and ecosystem restoration encumbrances, is touted to accomplish what BDCP apparently could not: "The ecological problems with the current system could be greatly reduced by the construction and use of new north Delta intake structures with state-of-the-art fish screens. [Footnote 181: RDEIR/SDEIS, Executive Summary, p. ES-2, lines 1-2.] Although Alternatives 4A, 2D, and 5A comprise only the conveyance facilities and operations that formerly constituted [Conservation Measure 1] under BDCP alternatives, and no longer include habitat restoration beyond what is needed to provide full mitigation under CEQA and NEPA, habitat restoration is still recognized as a critical component of the state's long-term plans for the Delta. Habitat restoration in the Delta beyond these alternatives' mitigation requirements will occur separately through implementation of California EcoRestore, and these activities will be further developed and evaluated independent of the water conveyance facilities." [Footnote 182: RDEIR/SDEIS, Executive Summary, p. ES-8.]</p> <p>These stated rationales attributing ecological and biological benefits to fish from the Tunnels Project are, like last year's BDCP Conservation Measure 1, still claptrap. On one hand, the Tunnels Project will increase exports and the Delta's loss of outflow at the same time, both wet and above normal years. Moreover, in drought years, the Bureau and the Department typically petition the State Water Board to have Delta water quality objectives waived, and the Board grants this request. There is little reason to believe the Tunnels Project would change the outcome.)</p>	
2653	63	<p>The project reduces Delta freshwater flow conditions in violation of CWA [Clean Water Act] requirements to fully protect the most sensitive beneficial uses. The inadequate flow proposals of the Tunnels Project EIR/EIS alternatives will ensure that its implementation trips over mandatory compliance with the CWA. Flow regimes that fully protect Delta ecosystems and aquatic species are necessary to avoid this result.</p> <p>CWA regulations dictate that adopted criteria must protect the "most sensitive" beneficial use. [Footnote 184: 40 CFR [Section] 131.11 ("For waters with multiple use designations, the criteria shall support the most sensitive use"); see also 40 CFR [Section] 131.6.] The SWRCB's August 2010 flow criteria report used science to identify the minimum amount of unimpaired flow that would protect Delta fish species and habitats. That report thus reflects flows needed to comply with CWA mandates. A new Bay-Delta Plan adopting the Tunnels Project's proposed flow regimes would fall significantly short of this benchmark, and thereby would fail to protect the most sensitive beneficial uses as required by the CWA.</p> <p>Instead of improving flow conditions in the Delta, the Tunnels Project will actually increase average exports [Footnote 185: See Public Draft Plan, App. 5B, Fig. 5.B.4-4, available at: <a href="http://bayDeltaconservationplan.com/Libraries/Dynamic_Document_Library/Public_Draft_BDCP_EIREIS_Appendix_5B_-_Responses_to_Reduced_South_of_Delta_Water_Supplies.scl">http://bayDeltaconservationplan.com/Libraries/Dynamic_Document_Library/Public_Draft_BDCP_EIREIS_Appendix_5B_-_Responses_to_Reduced_South_of_Delta_Water_Supplies.scl</a> b.ashx. See also BDCP/California WaterFix, RDEIR/ SDEIS, 2015, Section 4.3.1, Figures 4.3.1-15, -16, -18, -19, -20, and -21.] and reduce already inadequate Delta outflow in many months. Specifically, on average for February through June, the Tunnels Project would decrease Delta outflow by about 1,000 cubic feet per second [cfs] and also decrease the median Delta outflow by about 2,000 cfs. [Footnote 186: See Public Draft Plan, App. 5C,</p>	<p>As described in Appendix 3A, Identification of Water Conveyance Alternatives Conservation Measure 1, of the EIR/EIS, one of the potential alternatives considered was based upon the State Water Resources Control Board 2010 Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem, which described providing up to 75 percent of unimpaired flow into the Delta to improve aquatic resources habitat conditions. This potential alternative was not evaluated in detail because the flow recommendations in the 2010 report could not be achieved without adverse impacts to cold water management for fisheries in the Sacramento, Feather, and American Rivers without reductions in non-SWP and non-CVP water rights diversions. The purpose and need of this EIR/EIS would not allow changes to non-SWP and non-CVP water rights. However, Alternatives 7 and 8 in the EIR/EIS reflect similar flow criteria in a manner that would only affect SWP and CVP water rights. Additionally, Appendix 5E evaluates scenarios with year-round increases in outflow.</p> <p>The Final EIR/EIS includes model results for Alternative 4A as compared to the No Action Alternative and Existing Conditions in Appendix 5A, Section C, in addition to the model results previously provided in the Draft EIR/EIS. The comparative results between Alternative 4A and the No Action Alternative and the Existing Conditions are generally consistent with the impact analysis results presented in the RDEIR/SDEIS.</p> <p>One of the fundamental purposes of the proposed project is to make physical and operational improvements to the SWP and CVP system in the Delta to provide water supplies of the SWP and CVP for users located south of the Delta and Delta water quality consistent with statutory and contractual obligations of the SWP and CVP, as described in Section 2.3 of Chapter 2, Project Objectives and Purpose and Need, of the EIR/EIS. Alternative 4A, the proposed project, will maintain compliance with Delta outflow regulatory requirements for all water years with the use of the North Delta intakes, as described in Chapter 5, Water Supplies, and Chapter 6, Surface Water. A detailed discussion of the specific Delta outflows under a</p>

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		<p>Attachment 5.C.A, Table C.A-41, available at: <a href="http://baydeltaconservationplan.com/Libraries/Dynamic_Document_Library/Public_Draft_BDCP_Appendix_5C_-_Part_5_-_Flow_Passage_Salinity_and_Turbidity.sclb.ashx">http://baydeltaconservationplan.com/Libraries/Dynamic_Document_Library/Public_Draft_BDCP_Appendix_5C_-_Part_5_-_Flow_Passage_Salinity_and_Turbidity.sclb.ashx</a>.] For the period of January through June (the time period during which the August 2010 Flow Criteria from the SWRCB called for an increase of outflow to 75 percent of unimpaired Delta outflow), the BDCP decreases outflow. Tunnels Project modeling (Figure 1 [ATT3]) shows that long-term monthly average Sacramento River flows below the north Delta intake diversions would decrease between 6 to 38 percent from current and future flows without the Tunnels project, and in wet years river flows would decrease between 7 and 42 percent (Tables 3 [ATT4] and 4 [ATT5]). Overall, monthly lower Sacramento River flows are projected by "California WaterFix" to decrease between 20 and 24 percent, and flows in the Sacramento River at Rio Vista are expected to decrease significantly (Figures 2 [ATT6] and 3 [ATT7]). [Footnote 187: Estimates derived by Restore the Delta from graphical analysis interpolating data in Figures 4.3.2-7 and 4.3.2-8 from the Recirculated Draft EIR/EIS, Section 4.3.]</p> <p>These tables and figures show that most changes are colored in red enabling the eye to see the preponderance of decreases in flow of 5 percent or more compared with Existing Conditions and the No Action Alternative (especially along the Sacramento River downstream of the north Delta intakes). [Footnote 188: See also Appendix B, Tables B.7-28 (downstream of north Delta intakes), B.7-30 (Sacramento River at Rio Vista), B.7-32 (Delta outflow), and B.7-34 (San Joaquin River at Vernalis), pp. B-357 to B-370.] The vast majority of differences reported in these two tables are decreases in average flows across all water year types. Most of the decreases are of 10 percent or more and many of these are of 20 to 30 percent or more. Only slight improvements occur in just a handful of months and water year types. (Most San Joaquin River flows at Vernalis between February and September in most water year types decrease greater than 5 percent relative to existing conditions as well.)</p> <p>Reducing flows in the Sacramento River is not a "water fix," certainly not for the Bay-Delta Estuary. This will increase residence time of water in the Bay-Delta Estuary relative to existing conditions and to a future without the Tunnels; salinity violations and will increase with the Tunnels Project as well (Figure 4 [ATT8]). [Footnote 189: RDEIR/SDEIS, Section 4.3.4, p. 4.3.4-67, lines 4-12.] DWR and its partners opted not to model residence time behavior for Alternative 4A and the other RDEIR/SDEIS alternatives (2D and 5A). However, the water source "fingerprinting" analyses in interior and western Delta water ways in both last year's and this year's modeling appendices show replacement of good quality Sacramento River water with lower-flow and poorer quality San Joaquin River water, so it is reasonable, in the absence of more definitive modeling, that relative to existing conditions residence times will increase with the Tunnels Project under both Alternatives 4 and 4A (Figures 4 and 5 [ATT9]).</p> <p>The lower-flowing and more polluted San Joaquin River will make up greater fractions of water flowing into the western Delta, Franks Tract, and at Contra Costa Water District's Rock Slough intakes. [Footnote 190: This reasoning is confirmed by source-water fingerprint modeling provided in both the 2013 Draft EIR/ EIS and the 2015 RDEIR/SDEIS. The source water fingerprint modeling results are found in Bay Delta Conservation Plan, Draft EIR/EIS/ November 2013, Appendix 3D, pp. 147-168, 8D-171 to 8D-192; and in Bay Delta Conservation Plan, Recirculated Draft EIR/Supplemental Draft EIS, Appendix B, pp. B-191 to B-256.] Meanwhile, better quality Sacramento River water diverted into the Tunnels will</p>	<p>range of seasons and water year types is contained in Appendix 5A.</p> <p>Please also see response to Comment 2372-63 regarding effects on fish and the EPA comment letter on the Administrative Draft EIR/EIS. Comment responses to EPA can be reviewed by locating that comment letter in the index of this Chapter.</p> <p>Please also see response to Comment 23 regarding water quality effects.</p> <p>Please see Master Response 14, Water Quality.</p>

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		<p>improve state and federal export water quality, making Delta water quality elsewhere the poorer. [Footnote 191: Bay Delta Conservation Plan Draft EIR/EIS, November 2013, Appendix 8D (figures for Alternative 4, Scenarios H3 and H4), 2013; BDCP/California WaterFix, Recirculated Draft EIR/Supplemental Draft EIS, Appendix B, Section B.4.2 (figures for No Action Alternative, Alternative 4A, Scenarios H3 and H4), 2015; analyzed by Restore the Delta.]</p> <p>Decreased flows and increased residence times will cause the designated beneficial uses of migratory and rare fish species to decline, according to Tunnels Project RDEIR/SDEIS modeling results. Through-Delta survival rates of the juvenile and smolt life stages of winter-run, spring-run, fall-run and late-fall-run Chinook salmon are all expected to decrease relative to both existing conditions and the No Action Alternative (Figure 6 [ATT10]). These fish species are "rare and endangered species" beneficial uses as well as "migration of aquatic organisms" beneficial uses. These reduced flows will decrease the size of critical open water estuarine habitat beneficial uses for state and federally-listed species like Delta smelt and longfin smelt, both of which count also as rare and endangered beneficial uses under the current Bay-Delta Water Quality Control Plan. [Footnote 192: State Water Resources Control Board, Water Quality Control Plan for the San Francisco Bay/Sacramento- San Joaquin Delta Estuary, December 13, 2006, p. 9.]</p> <p>The U.S. EPA expressed serious concerns about the EIR/EIS Administrative Draft's (ADEIS) proposed decrease in outflow "despite the fact that several key scientific evaluations by the federal and State agencies indicate that more outflow is necessary to protect aquatic resources and fish populations." [Footnote 193: U.S. EPA, "EPA Comments on Administrative Draft EIR/EIS, III Aquatic Species and Scientific Uncertainty, Federal Agency Release," p. 4 (July 18, 2013) (emphasis added), available at: <a href="http://www2.epa.gov/sites/production/files/documents/july3-2013-epa-comments-bdcp-a-deis.pdf">http://www2.epa.gov/sites/production/files/documents/july3-2013-epa-comments-bdcp-a-deis.pdf</a>.] The Tunnels Project's flow regime will violate the beneficial uses of affected waterways and therefore violate water quality objectives. In order to receive the Section 404 permit, DWR and the Bureau of Reclamation must revise the Tunnels Project to ensure that it fully protects all designated beneficial uses.</p>	
2653	64	[ATT3: Figure 1. Sacramento River Flow Downstream of North Delta Intakes for Alternative 4A, Long-Term and Wet Year Averages.]	This comment describes an attachment to the comment letter which was considered in addressing any relevant comments.
2653	65	[ATT4: Table 3. Monthly Long-Term Average Estimates of Flow for Lower Sacramento River Downstream of North Delta Intakes Interpolated from Figure 4.3.2-8.]	Similar to response 64 above the attachments were considered in the relevant response.
2653	66	[ATT5: Table 4. Monthly Wet Year Average Estimates of Flow for Lower Sacramento River Downstream of North Delta Intakes Interpolated from Figure 4.3.2-7.]	Please refer to the response above.
2653	67	[ATT6: Figure 2. Flow Differences in the Sacramento River Below the North Delta Diversion Facilities - by Water Year Type and Monthly Averages.]	This comment describes an attachment to the comment letter that provide information related to text comments addressed above.
2653	68	[ATT7: Figure 3. Flow Differences in the Sacramento River at Rio Vista by Water Year Type and Monthly Averages.]	Similarly see Responses above.
2653	69	[ATT8: Figure 4. Average Residence Time of Water in Delta Regions, Alternative 4 (and 4A) and No Action Alternative, 2015 Analysis.]	This comment describes an attachment to the comment letter that was considered in the responses.

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2653	70	[ATT9: Figure 5. Share of Delta Location River Sources from "Fingerprint" Modeling Results, No Action Alternative, 2013 BDCP Conservation Measure 1 and 2015 Tunnels Project.]	This comment describes an attachment to the comment letter considered in comments raised in the letter and responded to above.
2653	71	[ATT10: Figure 6. Through-Delta Survival Rates of Emigrating Juvenile Salmon Races Under Alternative 4A (California WaterFix).]	This comment describes an attachment to the comment that is best addressed in Chapter 11 of the final EIR/EIS.
2653	72	The project increases Delta several pollutant concentrations, resulting in violations of pollutant criteria. Reduced through-Delta flows will stagnate water conditions and cause Delta water quality to deteriorate badly. RDEIR/SDEIS modeling results reveal that the project will degrade water quality for boron, bromide, chloride, electrical conductivity, dissolved organic carbon, nitrate, mercury, pesticides, and selenium. [Footnote 194: RDEIR/SDEIS, Appendix B.] Harmful algal blooms are expected to worsen under Tunnels Project operational regimes relative to the No Action Alternative as well as existing conditions. While these constituents' concentrations will increase in western and central Delta locations, as well as Contra Costa Water District's Pumping Plant No. 1, their concentrations are expected to decrease in export waters of the North Bay Aqueduct in Barker Slough, and Jones Pumping Plant and Banks Pumping Plant in the south Delta. These results hold for both changes compared with existing conditions as well as the No Action Alternative, the latter of which factors out most sea level rise and climate change impacts.	The water quality assessment in Chapter 8, Water Quality, and modeling results find that the project (Alternative 4A) would result in less-than-significant impacts to water quality for all parameters assessed except for mercury and electrical conductivity (EC). Impacts to EC would be less than significant with implementation of the proposed mitigation. The specific constituents raised in this comment, and detailed further in the comment letter, are addressed in responses to Comments 73 through 93.  Please see Master Response 14, Water Quality.
2653	73	Boron:  Although period average concentrations decrease with Tunnels operations (except for Sacramento River at Emmaton and Contra Costa Water District's Pumping Plant No. 1), agricultural (that is, crop sensitivity) threshold of 500 micrograms per liter (µg/L) would see exceedances a substantial percentage of the time at San Joaquin River at Antioch and Sacramento River at Mallard Island. [Footnote 195: RDEIR/SDEIS, Appendix B, Table Bo-3, p. B-71.] The Tunnels Project will increase boron concentrations throughout the year at the south fork of the Mokelumne River, as well as at Franks Tract and Old River at Rock Slough, relative to both existing conditions and No Action Alternative. [Footnote 196: RDEIR/SDEIS, Appendix B, Table Bo-4 and Bo-5, pp. B-73 and B-74.] In the western Delta, boron concentrations increase with Tunnels operation relative to existing conditions and No Action Alternative between February and September, most months of the year. Finally, boron concentrations increase at the Contra Costa Water District's Pumping Plant No. 1, while boron concentrations decrease the North Bay Aqueduct intakes at Barker Slough and at Banks and Jones pumping plants of the state and federal water projects.	As noted by the commenter, modeling results show that the only two assessed Delta locations that show exceedances of the 500 µg/L threshold used to evaluate effects to agricultural uses are the San Joaquin River at Antioch and the Sacramento River at Mallard Island. These locations also show exceedances under Existing Conditions. With Alternative 4A, the frequency of exceedance of the threshold would decline at both locations relative to Existing Conditions. Further, the 500 µg/L threshold is a literature value from which agricultural effects were evaluated, but it is not a federal or state adopted water quality criterion/objective. There would be no exceedance of the 2,000 µ/L human health threshold utilized for the assessment. Thus, for the reasons described in Chapter 8, Water Quality, Impact WQ-3, Alternative 4A (and 2D, and 5A) would have less-than-significant impacts to boron.  Please see Master Response 14, Water Quality.
2653	74	[ATT11: Figure 7. Period Average Boron Concentrations of Various Delta Locations.]	This comment describes an attachment related to the comment/response above.
2653	75	Bromide:  For both human health and aquatic life criteria, the Tunnels Project would increase the frequency of criteria violations in the interior and western Delta, but would decrease bromide violations 25 to 30 percent of the time at Banks and Jones pumping plants. Western Delta bromide concentrations are a problem for Antioch diversions as well. One method of evaluating the Tunnels Project's bromide concentrations suggests that wet years may see increases rather than decreases. (Figures 8 [ATT12], 9 [ATT13], and 10 [ATT14].) [Footnote 197: RDEIR/SDEIS, Appendix B, Table Br-1 and Table Br-2, pp. B-84, and Tables Br-5 and Br-6, p. B-87.]	As described in the Bromide subsection of Section 8.3.1.7, Constituent-Specific Considerations Used in the Assessment, in Chapter 8, Water Quality, there are no federal or state regulatory criteria/objectives for the bromide for surface waters. This section states that source water with bromide between 100 µg/L and 300 µg/L is believed sufficient to meet currently established drinking water criteria for disinfection byproducts, depending on the amount of Giardia inactivation required. This section also acknowledges the CALFED Drinking Water Program goal of 50 µg/L. The finding of less-than-significant impacts of Alternative 4A for bromide in Impact WQ-5 is based on the quantified small changes in bromide concentration identified in the modeling relative to these thresholds.  Please see Master Response 14, Water Quality.

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2653	76	[ATT12: Figure 8. Frequency Percentage of Exceedances of Bromide Human Health Criterion.]	This comment describes an attachment to the comment letter as addressed with the related comment.
2653	77	[ATT13: Figure 9. Frequency Percentage of Exceedances of Bromide Aquatic Life Criterion.]	Again please refer to Chapter 8 of the Final EIR/EIS.
2653	78	[ATT14: Figure 10. Estimated Concentrations of Bromide in Wet and Above Normal Water Year Types (Periods of Normally Acceptable Water Quality for Withdrawal).]	Please refer to the response above.
2653	79	Chloride:  The Mokelumne River south fork at Staten Island sees significant increases in chloride concentrations all year, every year. This is closely influenced by reduced flow through Georgiana Slough downstream of the north Delta intakes. Other interior and western Delta areas will see increased chloride concentrations relative to both existing conditions and No Action Alternative by the Tunnels during March through June (for interior locations) and March through August for Sacramento River at Emmaton, San Joaquin River at Antioch and Sacramento River at Mallard Island. [Footnote 198: RDEIR/SDEIS, Appendix B, Tables CI-6 through CI-9 for two estimation methods and the two operational scenarios (H3 and H4), pp. B-93 and B-96.]	While the modeling shows that Mokelumne River chloride concentrations at Staten Island would increase, Tables CI-2 and CI-3 in Appendix B of the RDEIR/SDEIS show that those concentrations would be relatively small and long-term average concentrations would be 20 mg/L, well below the 250 mg/L drinking water MCL. Regarding the Sacramento River at Emmaton, San Joaquin River at Antioch, and Sacramento River at Mallard Island, changing chloride concentrations is just one component of the chloride assessment to make impact determinations. As described in Impact WQ-7 in Chapter 8, Water Quality, the combined considerations of changes in chloride concentrations, frequency of exceedance of applicable water quality objectives, and degradation relative to the No Action Alternative condition (the comparison of which isolates the effects of the alternative from those due to climate change), relative to beneficial uses lead to the less-than-significant impact conclusion.  Please see Master Response 14, Water Quality.
2653	80	Salinity:  The Tunnels Project will more than triple the number of spikes in excess of salinity objectives along the Sacramento River downstream of the Tunnels, and along the San Joaquin River at Prisoners Point. Outright violations of salinity objectives are expected to more than double with the Tunnels in place. [Footnote 199: RDEIR/SDEIS, Appendix B, Table EC-1, p. B-129. "Spikes" here means daily exceedances of a salinity objective, while compliance with objectives is determined by comparing multi-day running averages with an objective. When the running average is exceeded, a violation is then deemed to occur by regulators.] These violations will degrade water quality for Delta agriculture and for fish and wildlife beneficial uses. This means that the State Water Resources Control Board cannot issue a 401 certification regardless of whether it has adequately assessed the project's propensity to degrade water quality.  Along the lower Sacramento River, salinity violations will more than double, and will occur about a quarter of the time that salinity objectives are in effect, up from about 11 percent of the time now and with the Tunnels Project in place. These conditions will worsen relative to current and future conditions between May and September, especially in drought years (which are expected to increase in frequency). Interior Delta salinity will also worsen between March and September (such as along the South Mokelumne River and at San Andreas Landing on the San Joaquin), as well as between February and June at Prisoners Point along the San Joaquin. (Figure 11 [ATT15]) [Footnote 200: RDEIR/SDEIS, Appendix B, Tables EC-8A and EC-8B, pp. B-134 to B-135.]  The Tunnels will be the opposite of a "WaterFix" for Suisun Marsh. "California WaterFix" modeling results show that every month's average salinity will increase about 56 percent over present conditions and about 60 percent over future conditions in the Beldon Landing area, 28 percent over present conditions and 27 percent over future conditions near Sunrise Duck Club, and 27 percent over present conditions and 26 percent over future conditions along Suisun Slough near Volanti Slough. [Footnote 201: RDEIR/SDEIS, Appendix B, Tables	Impacts to electrical conductivity in the Sacramento River at Emmaton and San Joaquin River at Prisoners Point due to Alternative 4A have been acknowledged and identified as significant in Chapter 8, Water Quality, Impact WQ-11. Mitigation has been proposed that would reduce this impact to less than significant. EC changes at other Delta locations would not result in objective exceedances or degradation that would result in adverse effects to beneficial uses, as described further in Impact WQ-11.  Regarding Suisun Marsh, the modeling results provided in the RDEIR/SDEIS and cited in the comment are based on modeling that assumed no operation of the Montezuma Slough Salinity Control Gates. As explained in the RDEIR/SDEIS, Appendix A, Chapter 8, Water Quality, Impact WQ-11, the project description includes continued operation of the gates and modeling conducted for the Final EIR/EIS included the gate operation. The modeling results for EC in the Final EIR/EIS in Chapter 8, Water Quality, Impact WQ-11 confirm that EC levels in Suisun Marsh would not be substantially different from Existing Conditions or the No Action Alternative.  Please see Master Response 14, Water Quality.

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		EC-5, EC-6, and EC-7, pp. B-131 to B-132.] This altered salinity regime will result in less habitat for fish and other aquatic species native to the Bay-Delta Estuary, as well as affect agricultural soils and vegetation in Suisun Marsh.	
2653	81	[ATT15: Figure 11. Projected Salinity Effects by 2060 of the Tunnels Project/Bay Delta Conservation Plan Percentage of Time Salinity Exceedances and Violations Would Occur.]	This attachment was considered when addressing specific comments.
2653	82	[ATT16: Figure 12. Interior Suisun Marsh Waterways to See Salinity Increase from Tunnels Operations.]	Please see response 81 above.
2653	83	Pesticides:  The San Joaquin River is an impaired water body for chlorpyrifos, diazinon, diuron, DDT, and Group A pesticides (human carcinogens) under the Clean Water Act. [Footnote 202: US EPA, 2010 California California 303(d) List of Water Quality Limited Segments. Accessible online at <a href="http://gispublic.waterboards.ca.gov/pub/303d/2010_USEPA_approv_303d_List_Final_122311wsrscs.xls">http://gispublic.waterboards.ca.gov/pub/303d/2010_USEPA_approv_303d_List_Final_122311wsrscs.xls</a> . Increasing that river's fraction of water contributed to the Delta will result in more concentrated pesticides reaching central and western Delta water ways from the San Joaquin, and with longer residence times, its pesticide burdens stay longer. The Bay-Delta Estuary will be left with a worsening pesticide "cocktail" supplied by the San Joaquin River's agricultural effluent.	The changing source water fractions, including the higher fraction of San Joaquin River, were a consideration in the determination that Alternative 4A would have a less-than-significant impact to pesticides at the Delta assessment locations, as described in Chapter 8, Water Quality, Impact WQ-21. The assessment concluded the relatively higher proportion of San Joaquin River water would not increase the risk of toxicity to aquatic life.  Please see Master Response 14, Water Quality.
2653	84	Nitrates:  Tunnels Project modeling results indicate increases of nitrates relative to the No Action Alternative of 19 to 34 percent for interior Delta locations in all years (except for San Joaquin River at Buckley Cove near Stockton). Similar modeling results are shown for the western Delta as well, 16 to 30 percent increases in salinity (Figure 13 [ATT17]). And Contra Costa Water District's Pumping Plant No. 1 is projected to see a 25 percent increase in nitrates. This would likely result in significant increases in water treatment costs for the District. In all of these locations the monthly period average changes were almost all increases in the range of 10 to 30 percent. As with other pollutants, nitrate concentrations are expected in Tunnels modeling results to decrease significantly at Barker Slough, Jones and Banks. [Footnote 203: RDEIR/SDEIS, Appendix B, Tables N-4 and N-5, pp. B-162 and B-163.]	This comment identifies how nitrate is projected to increase at certain Delta locations, but the resulting long-term average concentrations and degradation relative to applicable water quality objectives must be considered, along with the non-conservative nature of nitrate in ambient surface waters. As explained in Chapter 8, Water Quality, Impact WQ-15, long-term average nitrate concentrations would change little on an absolute concentration basis, and would remain well below adopted state water quality objectives at all Delta assessment locations. These considerations lead to the less-than-significant impact determination for nitrate.  Please see Master Response 14, Water Quality.
2653	85	[ATT17: Figure 13. Period Average Nitrate-N Concentrations.]	This attachment to the comment letter was consider in the response.
2653	86	[ATT18: Figure 14. Period Average Dissolved Organic Carbon Concentration.]	Please refer to the analysis in Chapter 8 of the Final EIR/EIS.
2653	87	Methyl Mercury:  As shown in Figure 15 [ATT19], the ratio of mercury concentrations in largemouth bass tissue was for Alternative 4 Tunnels scenarios well over 1.5 to twice or more the toxicity threshold. [Footnote 204: Environmental Water Caucus, Comment Letter on Bay Delta Conservation Plan and Draft Environmental Impact Report/Statement, June 11, 2014, Figure 9, pp. 85-86. Accessible online at <a href="http://ewccalifornia.org/reports/bdcpcomments6-11-2014-3.pdf">http://ewccalifornia.org/reports/bdcpcomments6-11-2014-3.pdf</a> .] (DWR and its partners try to divert attention from the toxicity threshold by comparing these levels to continuation	Please see Master Response 14 regarding mercury.

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		<p>of the status quo No Action Alternative [Footnote 205: Bay Delta Conservation Plan/California WaterFix, Recirculated Draft EIR/Supplemental EIS, 2015, Section 4.3.4, p. 4.3.4-33, lines 15-45.], but the important comparison is to the toxicity threshold for ecological and public health protection.) Alternative 4A modeling in 2015 shows that the Tunnels project despite having less habitat restoration and no Yolo Bypass improvements would have only slightly less effect on fish tissue concentrations of mercury. Moreover, fish tissue concentrations at several Estuary locations would still be more than 1.5 to 2 times the U.S. EPA's mercury guidance concentration.</p> <p>This analysis, however does not reflect "California EcoRestore's" habitat restoration efforts, which cumulatively can be expected to have impacts similar to the Tunnels and the Bay Conservation Plan last year. [Footnote 206: Based on Equation 1 calculations according to Appendix 8I of the Bay Delta Conservation Plan Draft EIR/ EIS in 2013-2014 and Appendix B (Tables Hg-5 and Hg-7) and Appendix 8I of the Recirculated Draft EIR/ Supplemental EIS in 2015. See also Environmental Water Caucus, Comment Letter, June 11, 2014, above.] The Bay Delta Conservation Plan states that "at this time" there is no proven method to mitigate methylation and mobilization of mercury into the aquatic system resulting from inundation of restoration areas. The mitigation measures . . . are meant to provide a list of current research that has indicated potential to mitigate mercury methylation." [Footnote 207: Charles N. Alpers, et al, Sacramento-San Joaquin Delta Regional Ecosystem Restoration Implementation Plan, Ecosystem Conceptual Model: Mercury, prepared January 24, 2008, pp. 12-13. Accessible online at <a href="https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=6413">https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=6413</a>.]</p>	
2653	88	[ATT19: Figure 15. Mercury Concentrations in Largemouth Bass (350 mm) Tissue Exceed Toxicity Thresholds in Future Condition with and without Tunnels Project.]	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS.
2653	89	<p>Selenium:</p> <p>The RDEIR/SDEIS errs in assuming decreasing selenium tissue loads. Selenium concentrations in water are expected to change only slightly under the Tunnels Project's flow regimes, annual average selenium concentrations in whole-body sturgeon are expected to increase substantially, according to Tunnels Project modeling results in the RDEIR/SDEIS. These results are summarized in Figures 16 [ATT19], 17 [ATT20], and 18 [ATT21]. In addition, the RDEIR/SDEIS reports that protective toxicity thresholds recommended by Presser and Luoma will be exceeded under Tunnels Project flow regimes relative to No Action Alternative conditions. In particular, their "low" threshold of 5 mg/kg, dry weight would see an exceedance quotient of 1.1 for both operational scenarios of the Tunnel Project, relative to the No Action Alternative condition of 0.95 for the San Joaquin River at Antioch. Under the higher protective threshold they recommend, the exceedance quotient would not rise above 1.0, but would nonetheless increase from 0.59 to about 0.7. For Sacramento River at Mallard Island, average annual exceedance quotients under Tunnels Project flow conditions would increase over the No Action Alternative from 0.88 to 0.99, very close to exceedance. Modeling results do not report the error rate for the modeling here performed, so these results could represent exceedance, since they are so close to 1.0. [Footnote 208: RDEIR/SDEIS, Appendix B, Table Se-7, p. B-186.]</p> <p>The Tunnels Project provides no mitigation method at all, just a list of "adaptive management" research issues to be handled later. [Footnote 209: These research approaches include: Characterize soil mercury concentrations and loads on a project-by-</p>	Please see Master Response 14 regarding selenium and mercury.

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		<p>project basis; sequester MeHg [methyl mercury] using low-intensity chemical dosing techniques using metal-based coagulants like ferric sulfide or poly-aluminum chloride. These flocculants bind with dissolved organic carbon and MeHg to flocculate and deposit mercury out of solution; minimize microbial methylation activity in restored wetlands; design restored wetland habitat to enhance photodegradation of MeHg; remediate sulfur-rich sediments with iron to prevent the biogeochemical reactions that methylate mercury; cap mercury-laden sediments (essentially entomb and bury them permanently to keep from mobilizing and methylating mercury). The research "measures" that BDCP proposes do not include basic toxicological research into mercury's effects on these and other fish and aquatic species found in the Delta.]</p> <p>Calling the Tunnels project "California WaterFix" plus DWR's premature application to the Corps of Engineers are not real adaptive management, but political prejudging of scientific outcomes. For both tunnels construction and habitat restoration work in and around the Bay-Delta Estuary, DWR and its partners would have to handle MeHg on a case by case basis. [Footnote 210: Bay Delta Conservation Plan Environmental Impact Report/Environmental Impact Statement, Chapter 8, Water Quality, p. 8-260, lines 30-35; p. 8-446, lines 39-42, and p. 8-447, lines 1-2. "Because of the uncertainties associated with site-specific estimates of methylmercury concentrations and the uncertainties in source modeling and tissue modeling, the effectiveness of methylmercury management...would need to be evaluated separately for each restoration effort, as part of design and Because of this uncertainty and the known potential for methylmercury creation in the Delta this potential effect. . .is considered adverse."]</p> <p>Retirement of the drainage impaired lands of the western San Joaquin Valley has been found time and again to be the most cost-effective solution to the problem of selenium-tainted irrigation drainage. [Footnote 211: Presser, T.S. and S.E. Schwarzbach. 2008. Technical Analysis of In-Valley Drainage Management Strategies for the Western San Joaquin Valley, US Geological Survey Open File Report 2008-1210. Accessible online at <a href="http://pubs.usgs.gov/of/2008/1210/">http://pubs.usgs.gov/of/2008/1210/</a>.] Land retirement is the best and cheapest option for slowing the rate at which selenium loads and concentrations reach the Delta, and for sequestering selenium in its source rock and soils longer into the future. The natural reservoir of selenium has been documented to hold up to at least another 300 years' worth of tainted drainage at current rates. [Footnote 212: T.S. Presser and S.N. Luoma, 2006. Forecasting Selenium Discharges to the San Francisco Bay-Delta Estuary: Ecological Effects of a Proposed San Luis Drain Extension, United States Geological Survey Professional Paper 1646, cited in: T. Strohane, Testimony on Recent Salinity and Selenium Science and Modeling for the Bay-Delta Estuary, plus appendices, prepared for the California Water Impact Network, August 17, 2012, for Workshop #1, Ecosystem Changes and the Low Salinity Zone, before the State Water Resources Control Board.]</p> <p>The National Research Council's 2012 report on Bay-Delta sustainable water management cited this selenium reservoir as well, stating in part: "Irrigation drainage, contaminated by selenium from those soils, is also accumulating in western San Joaquin Valley groundwaters. The problem is exacerbated by the recycling of the San Joaquin River when water is exported from the Delta. While control of selenium releases has improved, how long those controls will be effective is not clear because of the selenium reservoir in groundwater. . . . Other aspects of water management also could affect selenium contamination. For example, infrastructure changes in the Delta such as construction of an isolated facility could result in the export of more Sacramento River water to the south, which would allow</p>	

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		<p>more selenium-rich San Joaquin River water to enter the bay. The solutions to selenium contamination must be found within the Central Valley and the risks from selenium to the bay are an important consideration in any infrastructure changes that affect how San Joaquin River water gets to the bay." [Footnote 213: National Research Council, Committee on Sustainable Water and Environmental management in the California Bay-Delta, Sustainable Water and Environmental Management in the California Bay-Delta, Washington, DC: The National Academies Press, 2012, p. 94. Accessible online 8 May 2014, at <a href="http://www.nap.edu/catalog.php?record_id=13394">http://www.nap.edu/catalog.php?record_id=13394</a>.</p> <p>Of course, ending application of Delta waters to irrigate western San Joaquin Valley drainage impaired lands could reduce the need for deliveries to the San Luis Unit of the Central Valley Project by up to a million acre-feet per year. This reduction could provide by itself dramatically improved reliability for all other CVP contractors' allocations, without the investment of billions for the Tunnels project.</p>	
2653	90	[ATT20: Figure 16. Period Average Whole-Body Sturgeon Selenium Concentration.]	This attachment is considered in responses related to aquatic impacts. Please see Chapter 11 of the Final EIR/EIS.
2653	91	[ATT21: Figure 17. Average Annual Increase of Selenium in Whole-Body Sturgeon due to Tunnels Project.]	See response 90 above.
2653	92	[ATT22: Figure 18. Comparison of Annual Average of Selenium Concentrations in Whole-Body Sturgeon with Toxicity Thresholds.]	Again the analysis is available in Chapter 11 of the Final EIR/EIS.
2653	93	<p>Harmful Algal Blooms:</p> <p>Algae occur naturally in all fresh and marine water environments. Most species are harmless under normal circumstances, but some "cyanobacteria" (also known as "blue-green algae") which use photosynthesis can "bloom" or undergo a rapid population boom during periods of slack flow, nutrient pollution conditions (such as from nitrates, nitrogen and phosphorus), and rising temperatures. Their sheer biomass can cause, according to the USEPA, a dramatic reduction or complete consumption of all dissolved oxygen in the water, suffocating oxygen-respiring organisms like fish, and can produce "cyanotoxins" that pose a significant potential threat to human and ecological health and affect taste, odor and safety of drinking water. They can degrade water ways used for recreation and as drinking water supplies. [Footnote 214: USEPA Region 9, Frequently Asked Question and Resources for Harmful Algal Blooms and Cyanobacterial Toxins, Version 1, July 2015. Accessible at <a href="http://www2.epa.gov/sites/production/files/2015-07/documents/habs_faqs-and-resources_v1-july2015.pdf">http://www2.epa.gov/sites/production/files/2015-07/documents/habs_faqs-and-resources_v1-july2015.pdf</a>.]</p> <p>When these conditions combine, harmful algal blooms can result. These conditions are ripest in August and September in the Estuary, but drought can increase harmful algal bloom activity. The most common blue-green algae species in the Bay-Delta Estuary is called Microcystis. In 2014, Microcystis algal blooms lasted beyond October into December due to low flows and warm temperatures -- water residence time was that long. [Footnote 215: Peggy Lehman, Staff Environmental Scientist, California Department of Water Resources, presentation to IEP 2015 Workshop, Folsom, California, "Response of Microcystis to Drought," , March 20, 2015.] Its toxin is deadly to wildlife, dogs, and human beings, and exposure can cause liver cancer in humans. It is a dangerous ecological and public health threat.</p>	<p>The environmental review process for both NEPA and CEQA is intended to inform the decision makers of the environmental effects associated with implementation. Goals and objectives were identified for the project. A range of alternatives were evaluated in the environmental process. Some alternatives performed better for some objectives, and less for other objectives. The analysis for the range of alternatives allows the decision makers to decide if the project should go forward considering the environmental effects and if the project goes forward which alternative is preferred in consideration of all the objectives. The conclusion that a project has significant and unmitigated impacts does not preclude that project from being implemented. Please see Master Response 4 for additional information on how the proposed project's alternatives were developed. Please also refer to Master Response 14.</p>

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		<p>The Tunnels are likely to increase residence times and slow flows in the western and central Delta. The recirculated Draft EIR/S this year acknowledges that "it is possible that increases in the frequency, magnitude, and geographic extent of Microcystis blooms in the Delta would occur relative to Existing Conditions" [Footnote 216: RDEIR/SDEIS, Section 4.3, p. 4.3.4-67.] as well as compared with the "no action alternative" (or the future condition of the Delta without "California WaterFix" Tunnels).</p>	
2653	94	<p>Because it cannot meet water quality standards, the Tunnels Project cannot obtain the required Clean Water Act [CWA] 401 Certification it needs for a 404 permit to build the project. To obtain CWA Section 401 certification, the project at issue must meet several CWA requirements, including the requirement to meet water quality standards under CWA Section 303. [Footnote 217: 33 U.S.C. [Section] 1341(a)(1), (d). A state agency may also condition, deny or waive certification under certain circumstances. See also 33 U.S.C. [Section] 1341(a)(1)-(2), and 33 U.S.C. [Section] 1341(d). According to [Section] 401(d) certification "shall set forth any effluent limitations and other limitations . . . necessary to assure that any applicant" complies with certain provisions of the CWA. The Supreme Court in PUD No. 1 of Jefferson County v. Washington Department of Ecology held that this includes CWA [Section] 303, since [Section] 301 incorporates it by reference. PUD No. 1 of Jefferson County v. Washington Department of Ecology, 511 U.S. 700, at 713-715 (1994) (PUD No. 1).]</p> <p>If these requirements are met, then either the Regional Water Quality Control Boards (RWQCB) or the SWRCB may grant Section 401 certification. [Footnote 218: In California, the Regional Water Quality Control Boards are responsible for granting water quality certification, unless the project occurs in two or more regions, in which case the SWRCB is responsible. See SWRCB, "Instructions for Completing the Clean Water Act Section 401 Water Quality Certification Application" (Jan. 2005), available at: <a href="http://www.swrcb.ca.gov/centralcoast/water_issues/programs/401wqcert/docs/instruct_401_wq_cert_app.pdf">www.swrcb.ca.gov/centralcoast/water_issues/programs/401wqcert/docs/instruct_401_wq_cert_app.pdf</a>.]</p> <p>As implementing U.S. EPA regulations assert [Footnote 219: The Supreme Court held that the EPA's interpretation is consistent with the CWA in PUD No. 1.], Section 401 certification "shall" include "a statement that there is a reasonable assurance that the activity will be conducted in a manner which will not violate applicable water quality standards." [Footnote 220: 40 CFR [Section] 121.2(a)(3); PUD No. 1 at 712.] In other words, the state cannot grant Section 401 certification to a project if there is no reasonable assurance that it will meet water quality standards. The examination of whether a project violates water quality standards does not include "balancing" factors such as economic considerations -- a project either meets water quality standards, or it does not. [Footnote 221: 40 CFR [Section] 131.11 ("For waters with multiple use designations, the criteria shall support the most sensitive use"); see also 40 CFR [Section] 131.6. As noted by the state Supreme Court, Porter-Cologne "cannot authorize what federal law forbids"; that is, California cannot allow for the "balancing away" of the most sensitive beneficial uses in a reliance on Porter-Cologne rather than the Clean Water Act. City of Burbank v. State Water Resources Control Bd., 35 Cal.4th 613, 626, 108 P.3d 862 (2005).] Furthermore, as confirmed by the 1994 U.S. Supreme Court decision in PUD No. 1 of Jefferson County v. Washington Department of Ecology (PUD No. 1), CWA Section 401 certification considers the impacts of the entire activity -- not just impacts of any particular discharge that triggers Section 401. [Footnote 222: PUD No. 1, 511 U.S. 700 (1994). PUD No. 1 established that so long as there is a discharge, the state can regulate an activity as a whole under [Section] 401. PUD No. 1 at 711-712.] For the Tunnels</p>	<p>Regarding the applicability of Section 401 certification, the comment is incorrect in stating that a project cannot change water quality conditions and obtain authorization under Section 401. Section 401 is a permit process that may (and typically does) include terms and conditions for the project in question to promote or require avoidance, reduction, and minimization of potential adverse water quality effects.</p> <p>RDEIR/SDESIS Section 4.3.4 (4A) describes whether concentrations of various water quality constituents are expected to increase or decrease with the project, relative to existing conditions and the No Action Alternative. To the extent that concentrations of various water quality constituents are expected to increase, Section 4.3.4 describes whether these increases are expected to result in impacts to beneficial uses of water in the Delta. For constituents for which adverse impacts were expected, mitigation and other commitments, such as additional evaluation and modeling and consultation with water purveyors to identify additional measures to avoid and minimize or offset these impacts, were introduced to address those impacts.</p> <p>The incremental changes in Delta outflow under Alternative 4A compared to baseline conditions are a function of both the facility and operations assumptions, including north Delta intakes capacity of 9,000 cfs, OMR flow requirements, Fall X2 requirements, and the reduction in water supply availability due to increased north of Delta urban demands, sea level rise, and climate change (the last three assumptions, plus Fall X2 requirements, are included in both the No Action Alternative (ELT) and Alternative 4A, but not in Existing Conditions). Results for the range of changes in Delta outflow under Alternative 4A are presented in more detail in Appendix 5A, BDCP/California WaterFix EIR/S Modeling Technical Appendix. Changes in long-term average Delta outflow under Alternative 4A (ELT) as compared to the No Action Alternative (ELT) and Existing Conditions are shown in Figures 5-37 through 5-39 and Tables 5-10 through 5-12 in Chapter 5.</p> <p>To summarize changes in Delta outflow under Alternative 4A, late-fall and winter outflows remain similar or show minor reductions in Alternative 4A (ELT) compared to No Action Alternative (ELT) and are slightly higher relative to Existing Conditions. In the spring months, outflow would remain similar under Alternative 4A (ELT) as compared to No Action Alternative (ELT), and would be slightly reduced compared to Existing Conditions. In the fall months, outflow under Alternative 4A would increase relative to Existing Conditions, and as compared to the No Action Alternative (ELT), would be similar because of Fall X2 requirements in wet and above-normal years.</p> <p>For more information regarding water quality, please see Master Response 14. Multiple comments stated that additional data should have been compiled for the affected environment/environmental setting (setting) and to support the assessment of water quality presented in Chapter 8 of the EIR/EIS. The data sets compiled for the setting and assessment were selected based on availability, scope of analyses addressed, locations addressed, and period of record. The setting is not deficient in its characterization of current water quality conditions, presenting a comprehensive description of existing conditions complete with citations to current literature and data summaries. Additional data would not contribute to an appreciably altered characterization of existing conditions. The data that were compiled were of sufficient quantity and quality to characterize conditions for all constituents of concern to all beneficial uses that would be affected by the project alternatives throughout the study area and support the qualitative and quantitative assessments. Collection of additional field data is not part of the scope of the setting nor was</p>

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		<p>Project to receive Section 401 certification, the entire project must show it can be built and operated so as to meet all water quality standards. This it will not do, as we [Environmental Water Caucus] show in this letter and its attachments, because water quality standards cannot be met under the currently-proposed Tunnels Project flow regimes and related effects on estuarine water quality and beneficial uses.</p> <p>The CWA states that water quality standards "shall consist of the designated uses of the navigable waters involved and the water quality criteria for such waters based upon such uses." [Footnote 223: 33 U.S.C. 1313(c)(2)(A); PUD No. 1 at 704. In addition to the uses to be protected and the criteria to protect those uses, water quality standards include an antidegradation policy to ensure that the standards are "sufficient to maintain existing beneficial uses of navigable waters, preventing their further degradation." PUD No. 1 at 705; 33 U.S.C. 1313(d)(4)(B); 40 CFR [Section] 131.6. EPA regulations add that "[e]xisting instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected." 40 CFR [Section] 131.12.] In other words, "a project that does not comply with a designated [i.e., beneficial] use of the water does not comply with the applicable water quality standards." [Footnote 224: PUD No. 1, 511 U.S. at 715. See also 40 CFR [Section] 131.3(b) (U.S. EPA stating that "[w]hen criteria are met, water quality will generally protect the designated use," indicating that numerical criteria do not always by themselves protect a designated use). Recognized beneficial uses in the Bay-Delta Estuary include, but are not limited to, agricultural supply (AGR), groundwater recharge (GWR), Water Contact Recreation (REC-1), Non-Contact Water Recreation (REC-2), Migration of Aquatic Organisms (MIGR), Spawning, Reproduction, and/or Early Development (SPWN), Estuarine Habitat (EST), and Rare, Threatened, or Endangered Species (RARE).] This fundamental CWA mandate does not change when the impact on beneficial uses arises from altered flow. The CWA was established specifically to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters" -- not solely to regulate "pollutants." [Footnote 225: 33 U.S.C. [Section] 1251(a).]</p> <p>The U.S. Supreme Court addressed this issue directly in PUD No. 1, stating that: "Petitioners also assert more generally that the Clean Water Act is only concerned with water 'quality,' and does not allow the regulation of water 'quantity.' This is an artificial distinction." [Footnote 226: PUD No. 1, 511 U.S. at 719. In PUD No. 1, the U.S. Supreme Court took up the question of whether Washington state had properly issued a CWA Section 401 certification imposing a minimum stream flow requirement to protect fish populations. The Supreme Court held that conditioning the certification on minimum stream flows was proper, as the condition was needed to enforce a designated use contained in a state water quality standard. Id. at 723. In reaching this decision, the court noted that the project as proposed did not comply with the designated use of "[s]almonid [and other fish] migration, rearing, spawning, and harvesting," and so did not comply with the applicable water quality standards. Id. at 714.]</p> <p>The Court specifically took note of CWA Sections 101(g) and 510(2), which address state authority over the allocation of water as between users. The Court found that these provisions "do not limit the scope of water pollution controls that may be imposed on users who have obtained, pursuant to state law, a water allocation." [Footnote 227: Id. at 720.] This conclusion is supported by the "except as expressly provided in this Act" language of Section 510(2), which conditions state water authority; and by the legislative history of Section 101(g), which allows for impacts to individual water rights as a result of state action under the CWA when "prompted by legitimate and necessary water quality considerations."</p>	<p>it necessary given the extent of data that was available.</p> <p>Master Response 14 addresses comments regarding the assessment methodology and water quality data sources. Please also refer to Master Response 13 regarding the public trust doctrine and water quality impacts.</p> <p>Please see Master Response 1 regarding the baselines used for comparative analysis and the X2 criteria.</p> <p>As described in Appendix 3A, Section 3A.9.3, of the 2013 Draft EIR/EIS the State Water Resources Control Board prepared a Delta Flow Criteria Report in accordance with the requirements of the Sacramento-San Joaquin Delta Reform Act of 2009. Information from that report included "determinations of flow criteria for the Delta ecosystem to protect public trust resources. The report makes clear, however, that the flow criteria do not consider the balancing of public trust resource protection with public interest needs for water. The flow criteria also did not consider other public trust resource needs such as the need to manage cold-water resources in reservoirs tributary to the Delta. Nonetheless, the flow determinations contained in the Delta Flow Criteria Report, together with recent scientific conclusions of other State and federal agencies, including the Department of Fish and Wildlife, National Marine Fisheries Service, and the Interagency Ecological Program provide a useful guide to establish one side of a reasonable range of alternatives" (State Water Resources Board letter dated April 19, 2011). The information in the flow criteria report was used to inform the development of the proposed project.</p> <p>Please also see Appendix C of the RDEIR/SDEIS Supplemental Modeling Requested by State Water Resources Control Board Related to Increased Delta Outflows.</p>

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		<p>[Footnote 228: Id. "See 3 Legislative History of the Clean Water Act of 1977 (Committee Print compiled for the Committee on Environment and Public Works by the Library of Congress), Ser. No. 95-14, p. 532 (1978) ("The requirements [of the Act] may incidentally affect individual water rights. . . .It is not the purpose of this amendment to prohibit those incidental effects. It is the purpose of this amendment to insure that State allocation systems are not subverted and that effects on individual rights, if any, are prompted by legitimate and necessary water quality considerations')." See also Memorandum from U.S. EPA Water and Waste Management and General Counsel to U.S. EPA Regional Administrators, "State Authority to Allocate Water Quantities - Section 101(g) of the Clean Water Act" (Nov. 7, 1978), available at: <a href="http://water.epa.gov/scitech/swguidance/standards/upload/1999_11_03_standards_water_quantities.pdf">http://water.epa.gov/scitech/swguidance/standards/upload/1999_11_03_standards_water_quantities.pdf</a>.] Accordingly, these CWA provisions are not impediments to California's implementation of its CWA mandate to ensure compliance with water quality standards, including within the context of flows.</p> <p>As noted above, in its August 2010 flow criteria report, the Water Board found that "[t]he best available science suggests that current flows are insufficient to protect public trust resources," and that "[r]ecent Delta flows are insufficient to support native Delta fishes for today's habitats." [Footnote 229: SWRCB, 2010 Delta Flow Criteria Report, pp. 2, 5. Accessible at <a href="http://www.swrcb.ca.gov/waterrights/water_issues/programs/bay_Delta/Deltaflow/docs/final_rpt080310.pdf">http://www.swrcb.ca.gov/waterrights/water_issues/programs/bay_Delta/Deltaflow/docs/final_rpt080310.pdf</a>.] However, flow regimes proposed by the current Tunnels Project rely on water quality (including flow) objectives that have been failing to protect Delta ecosystem and aquatic species beneficial uses for the last 15 years or more. These include: Water Right Decision 1641 (D-1641) [Footnote 230: D-1641 requires the SWP and CVP to meet flow and water quality objectives, including specific outflow requirements, an export/import ratio, spring export reductions, salinity requirements, and, in the absence of other controlling restrictions, a limit to Delta exports of 35 percent total inflow from February through June and 65 percent inflow from July through January.]; the 2006 San Francisco Bay/Sacramento-San Joaquin Delta Estuary Water Quality Control Plan; the 2009 NMFS Biological Opinion (BiOp); and the 2008 USFWS BiOp.</p> <p>Further, the Tunnels Project notably incorporates "bypass flows" that ostensibly establish the minimum amount of water that must flow downstream of the planned north Delta intake. Rather than protecting Delta flow, the Tunnels Project reduces average annual Sacramento River flow downstream of the North Delta intakes. [Footnote 231: See Attachment 1 in this letter, above, and Public Draft Plan [Section] 5.3.1.1, available at: <a href="http://bayDeltaconservationplan.com/Libraries/Dynamic_Document_Library/Public_Draft_BDCP_Chapter_5_-_Effects_Analysis.sclb.ashx">http://bayDeltaconservationplan.com/Libraries/Dynamic_Document_Library/Public_Draft_BDCP_Chapter_5_-_Effects_Analysis.sclb.ashx</a>. See Also BDCP Draft EIR/EIS Chapter 3, Description of Alternatives, Table 3-17, p. 3-186.] Reduced flows downstream of the north Delta intakes extend all the way past Rio Vista as well. [Footnote 232: See RDEIR/SDEIS, 2015, Appendix B, Table B.7-30, pp. B-361 to B-362.]</p> <p>Because it fails to put needed flows back into failing waterways, the Tunnels Project will violate water quality standards by failing to protect sensitive beneficial uses. These include "rare, threatened or endangered species habitat," "estuarine habitat," "spawning, reproduction, and/or early development," and other sensitive beneficial uses. [Footnote 233: State Water Resources Control Board, Water Quality Control Plan for the San Francisco Bay/Sacramento- San Joaquin Delta, December 13, 2006, p. 9.] Chinook salmon, Central Valley steelhead, sturgeon and lamprey all migrate and spawn in this area, with Delta smelt</p>	

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		<p>and longfin smelt likely spawning in the lower Sacramento River, or in hydraulically connected adjacent channels. Factoring out climate change effects, juvenile and salmon smolt survival rates through the Delta to Chipps Island decrease for each run of salmon under the flow regimes put forward by proponents of the Tunnels Project. [Footnote 234: By "factoring out climate change effects," we refer to the Tunnels Project proponents' preference for environmental impact comparisons between the No Action Alternative and Alternative 4A (either Scenarios H3 or H4). This comparison reflects the future migration prospects of these fish with and without the proposed Tunnels Project. Even by their preferred comparison of the Tunnels Project with the No Action Alternative, juveniles and smolts have lower survival rates through the Delta to Chipps Island.] The Tunnels Project will thus fail as a set of flow regimes that could support Section 401 certification for necessary Section 404 permits.</p> <p>Actions that "reasonably protect" [Footnote 235: SWRCB, "Comments on the Second Administrative Draft Environmental Impact Report/Environmental Impact Statement for the Bay Delta Conservation Plan," p. 1 (July 05, 2013), available at: <a href="http://baydeltaconservationplan.com/Libraries/Dynamic_Document_Library/State_Water_Resources_Control_Board_Comments_on_BDCP_EIR-EIS_7-5-2013.sclb.ashx">baydeltaconservationplan.com/Libraries/Dynamic_Document_Library/State_Water_Resources_Control_Board_Comments_on_BDCP_EIR-EIS_7-5-2013.sclb.ashx</a>.] rather than "protect" the beneficial use are insufficient. If multiple beneficial uses are at stake, adopted flow criteria must protect the most sensitive beneficial use (i.e., they cannot "balance" away uses) and must be based on science. [Footnote 236: EPA regulations state that "criteria must be based on sound scientific rationale and must contain sufficient parameters or constituents to protect the designated use. For waters with multiple use designations, the criteria shall support the most sensitive use." See 40 CFR [Section] 131.11; see also 40 CFR [Section] 131.6.] As the state Supreme Court found, Porter-Cologne balancing provisions [Footnote 237: Calif. Water Code [Section] 13000.] that provide only "reasonable" protection "cannot authorize what federal law forbids." [Footnote 238: City of Burbank v. State Water Resources Control Bd., 35 Cal.4th 613, 626, 108 P.3d 862 (2005) (citing the Supremacy Clause).] The more protective CWA water quality standard requirements take precedence over weaker Porter-Cologne language; ecosystem and species needs cannot -- and must not -- be balanced away.</p> <p>U.S. EPA commented last year on the Bay Delta Conservation Plan and its draft EIR/EIS that "[b]ecause the location of X2 [the estuarine habitat water quality objective] is closely tied to freshwater flow through the Delta, the proposed project would have a strong influence on this parameter, yet the Draft EIS does not analyze each alternative's impacts on aquatic life in the context of this relationship." [Footnote 239: USEPA, "Draft Environmental Impact Statement for the Bay Delta Conservation Plan, San Francisco Bay Delta, California (CEQ# 20130365), August 26, 2014, p. 5. Accessible at <a href="http://www.friendsoftheriver.org/site/DocServer/8-26-14_EPA_Cmmnt_on_BDCP.pdf?docID=9539">http://www.friendsoftheriver.org/site/DocServer/8-26-14_EPA_Cmmnt_on_BDCP.pdf?docID=9539</a>.] The Bay-Delta Water Quality Control Plan's estuarine habitat water quality objective will likely be violated by the Tunnels Project as well. In the RDEIR/SDEIS nor the Draft EIR/EIS there is no modeling of how changes in X2, the Delta's estuarine habitat water quality objective may affect a variety of estuarine species. X2, which measures the approximate center of the estuary's low salinity zone relative to the Golden Gate, was shown last year in BDCP modeling to migrate upstream under the Tunnels' influence relative to existing conditions and the No Action Alternative. [Footnote 240: See Figure 7, p., 66 of Environmental Water Caucus comments on Bay Delta Conservation Plan, June 11, 2014; accessible online at <a href="http://ewccalifornia.org/reports/bdcpcomments6-11-2014-3.pdf">http://ewccalifornia.org/reports/bdcpcomments6-11-2014-3.pdf</a>.]</p>	

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		The modeled upstream migration of X2 means that critical habitat for estuarine species will shrink, especially relative to the No Action Alternative (Figure 19 [ATT23]). Species abundance and X2 are negatively correlated: when X2 moves further from the Golden Gate, species abundances typically decrease as the size of the Low Salinity Zone decrease (with lower flows), with few exceptions. [Footnote 241: Panel Summary Report on Workshop on Delta Outflows and Related Stressors, May 5, 2014. Accessible online at <a href="http://Deltacouncil.ca.gov/sites/default/files/documents/files/Delta-Outflows-Report-Final-2014-05-05.pdf">http://Deltacouncil.ca.gov/sites/default/files/documents/files/Delta-Outflows-Report-Final-2014-05-05.pdf</a> . This report identifies "key papers" in which the relationships of X2, Delta outflow, and species abundances are anchored.] This apparently remains true of the RDEIR/SDEIS, in which no new modeling is conducted.	
2653	95	The State Water Board has indicated tentative interest in designating subsistence fishing as a beneficial use statewide, including in the Delta. [Footnote 242: Email from Esther Tracy of State Water Resources Control Board, Office of Public Participation, to Andria Ventura, Clean Water Action, "State Water Resources Control Board Beneficial Uses," May 6, 2014, forwarded to Colin Bailey of Environmental Justice Coalition for Water, thence to Tim Stroshane, Environmental Water Caucus consultant. Tracy's message primarily concerns subsistence fishing by California Indian Tribes.] Our organization [Environmental Water Caucus] and others would certainly welcome such a beneficial use designation in the Delta as elsewhere because protection of the most sensitive ecological and estuarine beneficial uses will also protect subsistence fishing as a beneficial use. Humans are connected to these other beneficial uses, no less so in the Bay-Delta Estuary.	Comment noted. Comment does not relate to the FEIR/FEIS.
2653	96	The Tunnels Project will violate numerous pollutant criteria with drastic consequences for public health and vitality of the region's ecosystems and water-dependent economic sectors like tourism, recreation, agriculture, and subsistence fishing. On this score, the Tunnels Project will further violate water quality standards, precluding the State Water Resources Control Board from certifying the project under Clean Water Act Section 401.	As discussed in the RDEIR/SDEIS and confirmed in the Final EIR/EIS, the preferred project would result in only one water quality impact that cannot be mitigated to less-than-significant levels: effects on methylmercury, which is due to habitat restoration components of project. The assessment of potential water quality effects of the project alternatives fulfills a primary public disclosure purpose of the CEQA and NEPA process and will be utilized by SWRCB and the U.S. Army Corps of Engineers in fulfilling their regulatory obligations with respect to the project under state and federal law. The Clean Water Act regulatory compliance processes, including under Sections 401 and 404, are separate from the CEQA/NEPA process, and involve their own procedures and policies. Please see Master Response 14 for further discussion of water quality issues, including the relevance of state and federal anti-degradation policy. Please see Master Response 45 for further discussion of other permitting processes and requirements.
2653	97	Implementation of the Tunnels Project will require a CWA [Clean Water Act] Section 404 permit from the Army Corps of Engineers, which it cannot receive unless the state issues a CWA Section 401 certification. The certification in turn cannot be legally issued unless the project as a whole (i.e., rather than the individual discharge mandating the 404 permit) meets water quality standards, which includes meeting beneficial uses designed to protect Delta species and ecosystems. The Tunnels Project will fail across the board.	The Clean Water Act regulatory compliance processes, including under Sections 401 and 404, are separate from the CEQA/NEPA process, and involve their own procedures and policies. Assessment of potential water quality effects of the project alternatives in the RDEIR/SDEIS and Final EIR/EIS fulfills a primary public disclosure purpose of the CEQA and NEPA process and will be utilized by SWRCB and the U.S. Army Corps of Engineers in fulfilling their regulatory obligations with respect to the project under state and federal law. Please see Master Response 45, for further discussion of other permitting processes and requirements and Master Response 14, Water Quality.
2653	98	[ATT23: Figure 19. Delta Outflow to Decrease in Future Scenarios with Tunnels Project, Average X2 Position to Move Eastward with Tunnels Project.]	Please refer to Master Response, Operational Scenarios and Chapter 5 of the Final EIR/EIS.
2653	99	There is no defensible anti-degradation analysis. A cornerstone of the State Water Board and Regional Water Board's regulatory authority is the Antidegradation Policy (Resolution 68-16), which is included in the Basin Plans as an appendix. However, the Tunnels Project Draft EIR/EIS and RDEIR/SDEIS fail to discuss or analyze constituents which will "degrade" water quality. These documents do not evaluate whether the designated beneficial use is	Please see Master Response 14 regarding assessment of water quality degradation in the EIR/EIS, and the relevance of federal and state antidegradation policy considerations in the CEQA/NEPA process.  The water quality assessment in Chapter 8, Water Quality, and modeling results find that the project (Alternative 4A) would result in less-than-significant impacts to water quality for all parameters assessed

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		<p>degraded and what it means for Clean Water Act compliance.</p> <p>Section 101(a) of the Clean Water Act (CWA), the basis for the antidegradation policy, states that the objective of the Act is to "restore and maintain the chemical, biological and physical integrity of the nation's waters." Section 303(d)(4) of the CWA carries this further, referring explicitly to the need for states to satisfy the antidegradation regulations at 40 CFR [Section] 131.12 before taking action to lower water quality. These regulations (40 CFR [Section] 131.12(a)) describe the federal antidegradation policy and dictate that states must adopt both a policy at least as stringent as the federal policy and implementing procedures.</p> <p>The CWA requires the full protection of identified beneficial uses. The Federal Antidegradation Policy, as required in 40 CFR 131.12 states, "The antidegradation policy and implementation methods shall, at a minimum, be consistent with the following: (1) Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected." The Delta is classified as a Tier II, "high quality," waterbody by US EPA and the SWRCB. EPA Region 9's guidance on implementing antidegradation policy states, "All actions that could lower water quality in Tier II waters require a determination that existing uses will be fully maintained and protected." [Footnote 243: EPA, Region 9, Guidance on Implementing the Antidegradation Provisions of 40 CFR 131.12, page 7.]</p> <p>California's antidegradation policy is described in the State Antidegradation Guidance, SWRCB Administrative Procedures Update 90-004, 2 July 1990 ("APU 90-004") and USEPA Region IX, ("Region IX Guidance"), as well as Water Quality Order 86-17. [Footnote 244: "Guidance on Implementing the Antidegradation Provisions of 40 CFR 131.12" (3 June 1987).]</p> <p>California's Antidegradation Policy (Resolution 68-16) requires that:</p> <ol style="list-style-type: none"> <li>a. Existing high quality water will be maintained until it has been demonstrated that any change will be with the maximum benefit to the people of the State.</li> <li>b. The change will not unreasonably affect present and anticipated beneficial uses.</li> <li>c. The change will not result in water quality less than prescribed in the policies.</li> <li>d. Any activity which produces a waste or increased volume or concentration will be required to meet waste discharge requirements using the best practicable treatment or control of the discharge necessary to assure that neither pollution nor nuisance will occur and the highest water quality with maximum benefit to the people of the state will be maintained.</li> </ol> <p>While California's Antidegradation Policy requires that, "[t]he change will not unreasonably affect present and anticipated beneficial uses and the change will not result in water quality less than prescribed in the policies," the Federal Antidegradation Policy requires a "determination that existing uses will be fully maintained and protected." [Footnote 245: Draft BDCP EIR/EIS, 2013, page 8-408.]</p> <p>The Tunnels Project will reduce flows and result in poorer water quality for a number of constituents, including boron, bromide, chloride, electrical conductivity, nitrate, organic carbon, some pesticides, mercury and selenium. The Delta is currently impaired for many of</p>	<p>except for mercury and electrical conductivity (EC). Impacts to EC would be less than significant with implementation of the proposed mitigation.</p> <p>The Clean Water Act Section 401 regulatory compliance process is separate from the CEQA/NEPA process, and involves its own procedures and policies. Please see Master Response 45, Permitting.</p>

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		<p>the constituents that will increase under the proposed alternative.</p> <p>Even if DWR and the Bureau of Reclamation provide an adequate antidegradation analysis of the Tunnels Project, the point remains that they cannot move forward on a 401 certification from the State Water Resources Control Board if any water quality standards are not met. The antidegradation analysis is supposed to ensure they comply with any and all water quality standards, but there is clear evidence that cannot and will not.</p>	
2653	100	<p>Tunnels Project operational modeling criteria scenarios could prejudice water quality objectives for the Bay-Delta Estuary from the State Water Resources Control Board. A large but wholly implicit assumption through the RDEIR/SDEIS is that any one of these alternatives would require wholesale revision to how water quality is regulated in the Bay Delta estuary, in order for the Tunnels Project to move forward. The setting sections of Chapter 5, 6, 7, and 8 (comprising water supply, surface water, groundwater, and water quality) contain no descriptions of the existing water quality objectives as they apply to flow and operational actions by the state and federal water facilities in the Delta. The Draft EIR/EIS Executive Summary last year only hints at this matter, titling one section "New Rules for North Delta Diversions," but does not address this matter, making no mention of the regulatory regime change that would apparently be required of the State Water Board. [Footnote 246: Bay Delta Conservation Plan, Draft EIR/EIS, November 2013, Executive Summary, Section ES.9.1.4, "New Rules for North Delta Diversions," pp. ES-52 to ES-53.] This year, the RDEIR/SDEIS announces "proposed new flow criteria" for north and south Delta SWP and CVP export facilities, and the proposed new head of Old River operable barrier. [Footnote 247: RDEIR/SDEIS, Section 4.1, pp. 4.1-11 through 4.1-13.]</p> <p>Such changes to Delta flows and hydrodynamics must be evaluated through public review before the State Water Resources Control Board, the only state body authorized to change water quality standards. We [Environmental Water Caucus] are concerned that the Tunnels Project proponents hope to circumvent the process by making Tunnels operational criteria seem inevitable and necessary; they are neither, and must be the subject of careful and critical review in the Board's Bay-Delta Plan update process, before the Tunnels Project receives permit approvals for new diversions. Put simply: water quality policy must come before plumbing decisions are made. What is best for the Bay-Delta Estuary, and the Delta's economy and communities comes first. [Footnote 248: This stance is also consistent with the Delta Protection Act of 1959.]</p> <p>Further complicating this picture is the role and regulation by SWRCB of Real-Time Operations [RTOs]. Real-time operational decisions: "are expected to be needed during at least some part of the year at the Head of Old River gate and the north and south Delta diversion facilities." [Footnote 249: RDEIR/SDEIS, p. 4.1-13, lines 17-18.]</p> <p>Table 5 [ATT24] provides a comparison of operational criteria used in the modeling of both the tunnels project of Conservation Measure 1 last year and the Tunnels Project of the RDEIR/SDEIS. This table shows the complex range and number of operational criteria that must be taken into account as indicators or parameters that would govern real-time operations of the Tunnels Project. As indicated in Table 5, there are a number of changes made to Alternative 4A (the Tunnels Project, 2015, the RDEIR/SDEIS) relative to the parameters and operational criteria anticipated for the Conservation Measure 1 tunnels project. For every change and increase to the number and array of criteria that must be tracked for operating tunnels there is a corresponding increase of complex interactions that must be accurately accounted for in real-time in order to make adjustments that provide</p>	<p>The proposed project does not require "wholesale revision to how water quality is regulated in the Bay Delta estuary." The operating criteria under the proposed project (Alternative 4A) considers and incorporates existing Delta water quality criteria and will be required to comply with all applicable water quality standards and regulations, including D-1641. Please see response to Comment 2502-92 for information on compliance with the Water Quality Control Plan Update. The proposed project will comply will all SWRCB requirements to protect beneficial uses of water in the Delta.</p> <p>Detailed information on operations at the north Delta diversions, south Delta export facilities, and Head of Old River Gate under the proposed project can be found in Chapter 3 in the Final EIR/EIS. Hydrological modeling assumptions (including those based on existing CVP and SWP operating criteria) and results can be found in Appendix 5A. Also, see the regulatory setting for Chapters 5, 6, 7, 8 for information on existing environmental regulations, including NMFS 2009 and USFWS 2008 Biological Opinions and D-1641.</p> <p>As it relates to real-time operations (RTO), adjustments to operations will be based on real-time monitoring of hydrological conditions and fish presence/movement in the Delta (see Chapter 3, Section 3.4.6.2 for more details on RTO). Table 3-34 in Chapter 3 provides RTO parameters incorporated into the modeling, including pumping ranges based on flow conditions. As mentioned above, actual operational adjustments will be made based on a combination fish presence and hydrological conditions at the time of operations. RTO decisions will be based on the best available information at the time and supported by sound science and recommendations from various operations groups with expertise in hydrology and biology. Chapter 5 and associated appendices include information on exports and deliveries from both the north Delta intakes and south Delta export facilities. Adjustments to RTO criteria could be made through the Collaborative Science and Adaptive Management Program (CSAMP), if monitoring and research indicates such changes are needed. Section 3.4.6.2 includes an updated description of the CSAMP to be implemented under the proposed project, including the structure, decision-making processes, and agencies and groups involved.</p> <p>RTO and other operating criteria were not developed solely to maximize water supply. The proposed project is intended to increase water supply reliability, while improving the Delta ecosystem. The project's proposed dual conveyance facilities would allow water to be moved through the Delta when conditions permit, and allow water to be diverted from the Sacramento River in the northern Delta when conditions in the south Delta do not permit diversions from the existing State Water Project and Central Valley Project facilities. The location of the north Delta diversion facility is less vulnerable to salinity intrusion, a potential impact of sea level rise, or levee failure, in the future. By establishing an alternative diversion point for exports, a great deal of water management flexibility is added. This added flexibility would provide more options for adaptively managing the Delta so that conditions can be optimized to provide the greatest benefits across all Delta water uses and habitat conditions.</p> <p>The CWA regulatory compliance processes, including under Sections 401 and 404, are separate from the CEQA/NEPA process, and involve their own procedures and policies. Please see Master Response 45 for further discussion of other permitting processes and requirements.</p> <p>The Lead Agencies point out that "[t]he description of the project ... should not supply extensive detail beyond that needed for evaluation and review of the environmental impact[.]" (State CEQA Guidelines, §</p>

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		<p>accurate and appropriate feedback within the system of water project and ecosystem interactions. The efficacy of real-time operations depends entirely on the belief or assumption that real-time operators have an accurate and complete grasp of the systems they work with and the interactions among the varied components of that system. This accurate and complete grasp extends not only to the conceptual and mathematical models with which they work but to basic needs for accurate and timely data from reliable instrumentation in appropriate locations.</p> <p>Real-time operations are defined in Conservation Measure 1 of the Bay Delta Conservation Plan: "[R]eal-time operational decision-making process (real-time operations [RTOs]) allows for short-term adjustments in operations within the range of CM1 [that is, Tunnels Project operating] criteria . . . in order to maximize water supply for SWP and CVP relative to the [BDCP] Annual Operating Plan and its quarterly updates subject to providing the necessary protections for covered species." [Footnote 250: BDCP, November 2013, Section 3.4.1.4.5, Real-Time Operational Decision-Making Process, p. 3.4-26, lines 14-18.]</p> <p>The Tunnels Project's documents expect retention of BDCP's use of RTO teams focused on each Delta facility and coordinating with each other. We note that the RDEIR/SDEIS does not specify that post hoc descriptions of RTOs would be made public through such an Annual Operating Plan. Our organizations are not opposed to RTOs in principle. Tunnels Project proponents acknowledge that RTOs cannot be modeled. [Footnote 251: This is most explicitly noted in BDCP Appendix 5.C, Attachment 5C.A, CALSIM II and DSM2 Modeling Results for the Evaluated Starting Operations Scenarios, pp. 5C.A-157 to 162. Old and Middle River flow real-time operations are an example, p. 5C.A-157, lines 31-44. "The magnitude of the export restrictions [relating to Old and Middle River [OMR] flows] cannot be simulated accurately with CalSIM because the limits will be adaptively specified by the USFWS smelt working group, based on real-time monitoring of fish and turbidity and temperature conditions. The assumed restrictions provide a representative simulation compared to D-1641 conditions without any OMR restrictions." Moreover, real-time operations pose dramatic uncertainties for South Delta export operations with real-time adaptive operations in place. "If the least restrictive OMR flow of -5,000 cfs [cubic feet per second] were allowed for 6 months (January-June), a maximum of 1,800 taf [thousand acre-feet] per year could be pumped (assuming the San Joaquin River diversion to Old River satisfied the 35% of the net Delta depletion that is south of the OMR flow stations. But because of the 1,500 cfs limit on exports in April and May (2009 NMFS BiOp), the maximum exports would be 1,400 taf per year. If the OMR restriction was reduced to -2,500 cfs for the 6 months (with 1,500 cfs in April and May), a total of 780 taf could be pumped from the South Delta. This is a very dramatic reduction for the CVP and SWP exports which historically have exported about half (45%) of the total exports during these months. This uncertainty in the potential south Delta exports is a consequence of the adaptive management framework for the 2008 USFWS BiOp and 2009 NMFS BiOp actions regarding OMR flow." Since BDCP contemplates real-time operations in several other Delta and Yolo Bypass locations, uncertainties will compound for planning operations, exports, and outflows.]</p> <p>Not only can they not be modeled, RTOs themselves will be difficult (if not impossible) to regulate and monitor by state authorities when the most sensitive beneficial uses have admittedly uncertain threshold conditions that should not be exceeded.</p> <p>Tunnels Project proponents push use of RTOs as "silver bullets" for gaps in mitigation that</p>	<p>15124.) "A general description of a project element can be provided earlier in the process than a detailed engineering plan and is more amenable to modification to reflect environmental concerns." (Dry Creek Citizens Coalition v. County of Tulare (1999) 70 Cal.App.4th 20, 28.) "The 'general description' requirement for the technical attributes of a project is consistent with the other CEQA mandates to make the EIR a user-friendly document." (Ibid.) "The EIR must achieve a balance between technical accuracy and public understanding." (Ibid.)</p> <p>The mandatory components of a Project Description in an EIR are the following:</p> <p>(a) The precise location and boundaries of the proposed project shall be shown on a detailed map, preferably topographic. The location of the project shall also appear on a regional map.</p> <p>b) A statement of the objectives sought by the proposed project. A clearly written statement of objectives will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision makers in preparing findings or a statement of overriding considerations, if necessary. The statement of objectives should include the underlying purpose of the project.</p> <p>(c) A general description of the project's technical, economic, and environmental characteristics, considering the principal engineering proposals if any and supporting public service facilities.</p> <p>(d) A statement briefly describing the intended uses of the EIR.</p> <p>(1) This statement shall include, to the extent that the information is known to the Lead Agency,</p> <p>(A) A list of the agencies that are expected to use the EIR in their decision making, and</p> <p>(B) A list of permits and other approvals required to implement the project.</p> <p>(C) A list of related environmental review and consultation requirements required by federal, state, or local laws, regulations, or policies. To the fullest extent possible, the lead agency should integrate CEQA review with these related environmental review and consultation requirements.</p>

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		<p>ought to protect listed fish species but which come up short. This implies that individual experts will be given broad discretion over project operations to make "short-term adjustments" -- possibly to the usurpation of established laws and regulations in the name of optimizing or maximizing Delta exports relative to Delta inflows, water quality objectives, and Delta outflow, and potentially contrary to the SWRCB's role as the sole body with authority to change and enforce water quality objectives.</p> <p>Given that the adaptive management research agenda of Appendix D to the RDEIR/SDEIS is replete with large numbers of studies to increase understanding of the water project and ecosystem interrelationships, EWC lacks confidence that RTO's silver bullet role would succeed. Moreover, this is not the kind of "experiment" that is called for in the literature of adaptive management of natural resources. Even more important it is unlawful as a basis for mitigating significant, unavoidable impacts under CEQA and NEPA. For example, real-time operations and modeling were employed in 2014 and 2015 along the upper Sacramento River by the Bureau of Reclamation to manage and control temperature conditions, but failed to prevent large scale losses of winter-run and spring-run Chinook salmon while SWRCB staff and officials could only stand by helplessly. Real-time operations can create situations in which project operators can behave as they see fit, and apologize later. That is unacceptable now that listed fish species are so close to extinction. We doubt that real-time operations can be permitted sufficient margins of error to prevent catastrophe. This is why we advocate application of the precautionary principle for enforcing and complying with water quality objectives.</p> <p>Adjustments to water quality flow objectives and beneficial uses should err on the side of precaution. Designated beneficial uses should be protected as required under the CWA and its implementing regulations. The most sensitive of them will be endangered further by Tunnels Project operating criteria that reduce and reverse Sacramento River flows, and bring more polluted San Joaquin River water to Delta channels. The precautionary principle must come to the fore in state and federal fisheries and water project operations management. [Footnote 252: Peter Montague, accessed online 11 September 2015 at <a href="http://www.precaution.org/lib/pp_def.htm">http://www.precaution.org/lib/pp_def.htm</a>.] Sound policy preventing extinction and restoring and enhancing the integrity of Bay-Delta Estuary waters must come before new plumbing and south of Delta export deliveries.</p> <p>This is not a call to end south of Delta exports, but an appeal to state and federal officials that they realistically assess how to protect fully all beneficial uses by protecting the most sensitive among them fully under the CWA before reasonable quantities of Delta exports can be determined and permitted. The Tunnels Project as proposed would put plumbing and exports first, which is neither an acceptable, lawful nor reasonable prioritization.</p> <p>Last year, we noted that the essential purpose of real-time operations (or "RTOs"), as described in BDCP, is to "maximize water supply for SWP and CVP relative to the Annual Operating Plan and its quarterly updates subject to providing the necessary protections for covered species. RTOs would be implemented on a timescale practicable for each affected facility and are part of the water operating criteria for CM1, which will be periodically evaluated and possibly modified through the adaptive management program [citation]. The RTOs will satisfy Water Code Section 85321: "The BDCP shall include a transparent, real-time operational decision-making process in which fishery agencies ensure that applicable biological performance measures are achieved in a timely manner with respect to water system operations."</p>	

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		<p>When developing adjustments to Tunnels Project operations in real-time, the RTO team [Footnote 253: The Real-Time Operations Team would comprise one representative each from the three state and federal fishery agencies and from DWR and the Bureau of Reclamation] would consider covered species risks, actions needed to avoid adverse effects on covered fish species, water allocations currently or in future years, "end of year [reservoir] storage," the San Luis Reservoir low point [Footnote 254: San Luis Reservoir has a "low point" of about 300,000 acre-feet of storage below which the intakes for San Felipe Project contractors (Santa Clara Valley Water District and San Benito County Water District) are unable to withdraw water due to the potential for algal bloom contamination and other water quality concerns, due to the fact that when San Luis Reservoir gets that low, temperature and water quality conditions make it economically infeasible for San Felipe Project contractors to treat the water to an acceptable level for beneficial use.], delivery schedules for any SWP or CVP contractor, and "actions that could be implemented throughout the year to recover any water supplies reduced by actions taken by the RTO team." [Footnote 255: Bay Delta Conservation Plan, Chapter 3, p. 3.4-26, lines 34-39, and p. 3.4-27, lines 1-4.] These criteria for consideration place a great deal of pressure on the RTO team to minimize water costs to North Delta Intake diversions, lest they be compensated later. It would be wise to assume for CEQA and NEPA purposes that some fraction of the time RTO team personnel will make errors.</p> <p>RTO team activities would be needed under BDCP not only at the North Delta Intakes, but at the Delta Cross Channel gates, Head of Old River gate, the Fremont Weir operable gate, and the "nonphysical barriers" intended to shoo fish away from certain channels without actually blocking river flows.</p> <p>The RTO team would attempt to plan RTOs as part of BDCP's "Annual Delta Water Operations Plan," by anticipating periods when RTOs may be employed, alternative responses to be considered, the intended benefits to covered species, any expected effects on water supply, and the monitoring and analysis procedures used to track adjustments. RTOs would necessitate an elaborate range of accounting procedures since the state and federal water projects will not tolerate net losses of water exports just because covered fish show up unannounced and uninvited at the North Delta Intakes or the South Delta pumping plants.</p> <p>This section of Chapter 3 in BDCP states some "salvage density triggers" for Old and Middle River flow adjustments between January 1 and June 15 affecting the South Delta export facilities. [Footnote 256: Ibid., p. 3.4-28 to 3.4-29, Table 3.4.1-3.] At the North Delta Intakes, RTO monitoring will manage bypass flow operations from December through June, but the "exact triggers and responses for RTO at the north Delta diversions are still under development." Generally they are intended to manage north Delta diversion bypass flows:</p> <ul style="list-style-type: none"> <li>-within a preset range when juvenile salmonids are emigrating downstream past the intakes.</li> <li>-within a preset range when adult sturgeon are migrating upstream.</li> <li>-within a preset range to avoid an increase in frequency and magnitude of reverse flows (and entrainment) at Georgiana Slough compared to baseline (Real-time adjustments to avoid reverse flows are primarily the responsibility of DWR operators with occasional input from RTO team as appropriate.)</li> </ul>	

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		<p>-and to manage the distribution of pumping activities among the three north Delta and two south Delta intake facilities to maximize survival of covered fish species in the Delta and water supply. [Footnote 257: Ibid., lines 13-22.]</p> <p>But the fact these ranges and pumping activities are undisclosed means the project descriptions are incomplete in both the Draft EIR/EIS and the RDEIR/SDEIS.</p>	
2653	101	[ATT24: Table 5: Comparison of Alternatives' Operational Criteria.]	This comment describes an attachment that does not raise a specific comment not otherwise addressed above.
2653	102	<p>Undue, Improper and Excessive Reliance on Adaptive Management:</p> <p>Table 6 [ATT25] identifies threats and stressors for Delta smelt, winter-run and spring-run Chinook salmon, and Central Valley steelhead, and identifies sections of the RDEIR/SDEIS and Draft EIR/EIS sections where effects of the Tunnels Project exacerbate the threats and stressors, and cites to passages, data tables and charts that document the impact and the reliance on real-time operations and adaptive management as supposed mitigations. Such alleged mitigations are metaphorical birds in the bush, not mitigations in the hand. CEQA requires that mitigations actually reduce or avoid significant impacts. RTOs [real-time operations] and adaptive management research tasks are not recognized as CEQA or NEPA mitigation "wild cards." You either mitigate to a level less than significant or adverse, or you have not. RTOs and adaptive management are not "enforceable," and cannot be modeled. Mitigations must be measurable and enforceable. Deteriorating through-Delta survival rates of the various runs of Chinook salmon disclosed in the RDEIR/SDEIS belie the RDEIR/SDEIS's claims for the Tunnels Project that supposed mitigations will be effective. Thus, the RDEIR/SDEIS is inadequate for proposing mitigations based on real-time operations and adaptive management, and then claiming that significant, adverse impacts are reduced to levels that are less than significant or not adverse.</p> <p>The National Research Council [NRC]'s committee on Sustainable Water and Environmental Management of the Bay Delta Estuary suggested using a technique to determine whether adaptive management is an appropriate strategy before it is undertaken. The technique probes three direct criteria:</p> <ul style="list-style-type: none"> <li>-the existence of information gaps</li> <li>-good prospects for learning at an appropriate time scale compared to management decisions, and</li> <li>-the presence of opportunities for adjustment. [Footnote 258: National Research Council, Panel to Review California's Bay Delta Conservation Plan, A Review of the Use of Science and Adaptive Management in California's Draft Bay Delta Conservation Plan, Washington, DC: National Academies Press, 2011 p. 39. Accessible online 7 April 2014 at <a href="http://www.nap.edu/catalog.php?record_id=13148">http://www.nap.edu/catalog.php?record_id=13148</a>.]</li> </ul> <p>In the case of BDCP, the NRC committee concluded that adaptive management is appropriate for use in BDCP, but further concluded that "BDCP needs to address...difficult problems and integrate conservation measures into the adaptive management strategy before there can be confidence in the adaptive management program." The NRC committee also stressed that it is critical that the results of adaptive management efforts management</p>	<p>Please see Master Response 33 and Chapter 3 in the Final EIR/EIS for a description of the Collaborative Science and Adaptive Management Program (CSAMP) that will be implemented under the proposed project, Alternative 4A.</p> <p>As it relates to real-time operations (RTO), the proposed project includes specific North Delta Diversion (NDD) operating criteria to minimize and avoid impacts to listed fish species moving through the Delta and past the north Delta intakes. RTO will be a key component of NDD operations, and will likely govern operations for the majority of the winter and spring periods. Adjustments in operations at the NDD will consider risk to fish species near the intakes, hydrological conditions, water supply, and other Delta conditions. Biological monitoring both upstream and downstream of the NDD will help inform and improve operations to further minimize effects to migrating fish species. For more information on real-time operations and NDD operating criteria, please see Chapter 3.</p> <p>The project proponents do not find that the CSAMP is primarily a tool to maximize water export deliveries and water quality. The CSAMP will have an extensive biological component focused on avoiding potential project impacts and maximizing benefits to listed species (e.g. reducing entrainment effects, improved interior Delta flow conditions and routing of fish species, successful habitat restoration, improving overall Delta habitat conditions...etc.). The CSAMP will support the proposed project by helping to address scientific uncertainty where it exists, and as it relates to the benefits and impacts of the construction and operations of the new water conveyance facility and existing CVP and SWP facilities. The collaborative science effort (which will also coordinate/collaborate with existing science programs such as the Interagency Ecological Program) will build on the progress being made by the existing CSAMP that was established to make recommendations on the science needed to inform implementation of or potential changes to the existing BiOps for the SWP and CVP operations, and proposed alternative management actions. The CSAMP process and its Collaborative Adaptive Management Team (CAMT) rely on the Delta Science Program to provide independent peer review of both science proposals and products. New information gained under the CSAMP can be applied to management decisions and actions in the future. See Chapter 3 for more information on the CSAMP structure and decision making process.</p> <p>As described in Chapter 2 of the Final EIR/EIS, the proposed project is being developed to improve the ecosystem of the Delta by reducing the adverse effects to certain listed species, and improving water supply reliability of the CVP and SWP. Construction and operations of the proposed project will be consistent with applicable environmental standards and regulations, including the USFWS 2008 and NMFS 20098 Biological Opinions, and D1641 standards to protect Bay-Delta water quality.</p> <p>For potential economic impacts of the proposed project, please see Chapter 16, FEIS/FEIS.</p>

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		<p>decision making.</p> <p>We [Environmental Water Caucus] are more circumspect than the National Research Council about the applicability of adaptive management to the politics of the Tunnels Project and the Delta's future. For one thing, state regulatory and operational agencies fail repeatedly to apply existing statewide water policy goals to their actions, plans, and programs. The Tunnels Project's (and BDCP's) adaptive management program is co-opted by the narrow engineering objectives we described earlier that same statewide policy goals, focused as they are on better export water quality and more reliable, larger export deliveries.</p> <p>Researchers Craig R. Allen and Lance H. Gunderson have identified more circumscribed conditions under which adaptive management may be applied with success. They argue that adaptive management is probably most appropriate when the degree of scientific uncertainty over environmental systems is high and the governance capacity of the system is also high. Among the "pathologies" or challenges they identify about political and organizational situations that readily undermine the efficacy of adaptive management are: lack of stakeholder engagement, surprises getting suppressed rather than learned from, procrastination on protective action toward the resource (e.g., "paralysis by analysis" or a focus on planning, not action), and "learning not used to justify changing policy and management." [Footnote 259: Craig R. Allen and Lance H. Gunderson, "Pathology and Failure in the design and implementation of adaptive management," Nebraska Cooperative Fish &amp; Wildlife Research Unit--Staff Publications. Paper 79. <a href="http://digitalcommons.unl.edu/ncfwrustaff/79">http://digitalcommons.unl.edu/ncfwrustaff/79</a>. Also published in Journal of Environmental Management 92 (2011): 13279-1384.]</p> <p>"Controllability" of outcomes for the Delta is indeed low at this time: Many, many governmental, private, and non-profit entities compete to govern some or another aspect of the region's natural resources and economic development, immediately creating adaptive management challenges to social learning and effective resource management. It is often remarked that Delta governance is fragmented, given the sheer number of state, local and federal governmental jurisdictions that exist. Is adaptive management really possible when the state of California through its Department of Water Resources tends to regard the Delta as an internal colony to be plundered for its water wealth, and regulatory agencies frequently defer to the Department's activities there? The Tunnels Project is the pinnacle moment for state government's and export service area contractors' colonial impulses toward the Delta.</p> <p>There are no guarantees that scientific findings can successfully and meaningfully inform intensely political water decisions by mostly bureaucratic water managers. We are concerned that Tunnels Project proponents place too much faith in the water and environmental managers who will govern the Tunnels Project and/or implement BDCP. There is no reason, after 48,000 pages of BDCP and "California WaterFix", to think that the Tunnels Project will be operated with any more environmental sensitivity or patience for social learning from scientific adaptive management experiments on Delta endangered species and other beneficial uses over the last six decades.</p> <p>An alternative is to regulate the Delta on the basis of the precautionary principle: First, do no harm. If you aren't sure what you're doing, you should proceed slowly and carefully, or perhaps not at all. Better safe than sorry. [Footnote 260: Peter Montague, "The Uses of Scientific Uncertainty," Rachel's Environment and Health Weekly #657, July 1, 1999.] If you</p>	

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		<p>must, export water from the Delta responsibly, not at the expense of the Delta's ecological and economic needs, and not profligately. [Footnote 261: See Environmental Water Caucus, A Sustainable Water Plan For California, 2015. Accessible online 20 October 2015 at <a href="http://ewccalifornia.org/reports/ewcwaterplan9-1-2015.pdf">http://ewccalifornia.org/reports/ewcwaterplan9-1-2015.pdf</a> .]</p>	
2653	103	<p>[ATT25: Table 6. Sources of Threat and Stressor Acknowledgements for Listed Species Bay Delta Conservation Plan/Alternatives 4 and 4A.]</p>	<p>This comment describes an attachment to the comment letter, please refer to Master Response, Other Stressors.</p>
2653	104	<p>The Proposed Project is not the Least Environmentally Damaging Practicable Alternative (LEDPA). The Tunnels Project fails to meet another Section 404 requirement, "[t]he requirement [under CWA [Section] 404(b)(1). . .that the project proponent must demonstrate that the project is the [Least Environmentally Damaging Practicable Alternative] LEDPA." [Footnote 262: USEPA, Preliminary Administrative Draft Comments for the Bay Delta Conservation Plan DEIR/S p. 2, April 26, 2012.] "A proposed action is not the LEDPA simply because a federal agency is a partner and chooses that proposed action as its preferred alternative." [Footnote 263: EPA, BDCP DEIS Corrections and Additional Editorial Recommendations, p. 1, August 27, 2014.] The Tunnels Project appears to be the most environmentally damaging alternative possible. It most definitely is not the least damaging, and therefore, it is not the LEDPA.</p> <p>Over two years ago, EPA pointed out that "Chapter 8 of the [Administrative Draft EIS] ADEIS indicates that, as proposed, all project alternatives of the BDCP would result in adverse effects to one or more beneficial uses within the affected water bodies." [Footnote 264: EPA's Comments on BDCP ADEIS, p. 3, July 3, 2013.] EPA also explained that "The DEIS should sharply distinguish between alternatives and evaluate their comparative merits, consistent with 40 CFR 1502.14(b)." [Footnote 265: Id. p. 2.] Over one year ago, EPA explained to state agencies that: "Other reasonable alternatives could be developed by incorporating a suite of measures, including water conservation, levee maintenance, and decreased reliance on the Delta. Such alternatives would be consistent with the purpose and need for the project, as well as with the California Bay-Delta Memorandum of Understanding among Federal Agencies and the Delta Reform Act of 2009." [Footnote 266: EPA Detailed Comments on the Draft Environmental Impact Statement for the Bay Delta Conservation Plan; August 26, 2014, p. 13.]</p> <p>The "alternatives" of the Tunnels Project presented in the Draft EIR/EIS and the RDEIR/SDEIS are nothing more than peas out of the same pod. [Footnote 267: <a href="http://restoretheDelta.org/wp-content/uploads/2015/09/7-22-15-BDCP-alts-ltr-pdf.pdf">http://restoretheDelta.org/wp-content/uploads/2015/09/7-22-15-BDCP-alts-ltr-pdf.pdf</a>.] There has also been a complete failure on the part of Tunnels Project proponents to obtain and present the Reasonable and Prudent Alternatives (RPA) required under the Endangered Species Act in the RDEIR/SDEIS. [Footnote 268: <a href="http://restoretheDelta.org/wp-content/uploads/2015/09/9-9-15-BDCP-final-ltr-pdf.pdf">http://restoretheDelta.org/wp-content/uploads/2015/09/9-9-15-BDCP-final-ltr-pdf.pdf</a>.]</p> <p>Under the NEPA Regulations, "This [alternatives] section is the heart of the environmental impact statement." The alternatives section should "sharply" define issues and provide a clear basis for choice among options by the decision-maker and the public. 40 C.F.R. [Section] 1502.14. Moreover, if "a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion." [Footnote 269: 40 C.F.R. [Section] 1502.9(a).]</p> <p>Operation of the Tunnels Project would have enormous adverse environmental impacts causing and worsening violations of water quality standards. We [Environmental Water</p>	<p>Per Section 404(b)(1), the LEDPA must be identified from among those alternatives considered in detail in the EIR/EIS documentation.</p> <p>Since 2006, the proposed project has been developed based on sound science, data gathered from various agencies and experts over many years, input from agencies, stakeholders and independent scientists, and more than 600 public meetings, working group meetings and stakeholder briefings.</p> <p>The commenter is reminded that 15 alternatives and three new sub-alternatives were thoroughly analyzed in the Draft EIR/EIS and in the RDEIR/SDEIS, respectively. Four major alignments were included in the Draft EIR/EIS: Through-Delta, East of the Sacramento River, West of the Sacramento River, and a Tunnel under the Delta. Many additional proposals by public and private individuals and organizations were also evaluated and described in Chapter 3 of the Draft EIR/EIS and Appendix 3A (Identification of Water Conveyance Alternatives, Conservation Measure 1). Regarding the overall development of alternatives for the EIR/EIS documentation, a description of the process the lead agencies relied on to arrive at feasible alternatives for analysis is provided in Master Response 4.</p> <p>In addition, the LEDPA determination is made as part of a separate permitting process. DWR will submit to USACE information regarding practicable alternatives for the entirety of the conveyance project, pursuant to the Section 404(b)(1) Guidelines. USACE will make a preliminary determination regarding the LEDPA that meets the overall project purpose of the conveyance project. In its preliminary determination, USACE will acknowledge the project phases and the related timing of the issuance of Section 404 and Section 14 of the Rivers and Harbors Act of 1899, codified in 33 U.S.C. § 408. For further information, please see Appendix E (Supplemental Information for the U.S. Army Corps of Engineers Permitting Requirements) found in the RDEIR/SDEIS, and Master Response 45. The lead agencies do not hold that an additional recirculation of CEQA/NEPA documentation is necessary prior to certification of the Final EIR/EIS. As discussed in the RDEIR/SDEIS and confirmed in the Final EIR/EIS, the preferred project would result in only one water quality impact that cannot be mitigated to less than significant levels: effects on methylmercury, which is due to habitat restoration components of project. This impact alone does not violate the Clean Water Act, Porter-Cologne, or any of the corresponding implementing regulations or policies.</p> <p>Please see Master Response 29, Endangered Species Act and Master Response 45, Permitting.</p>

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		<p>Caucus] understand that the exporters and their supporters wish to take enormous quantities of water away from the lower Sacramento River. But we have a government of laws, not of men and women. It is time either to drop this horrendously damaging and expensive project or follow the law whether certain interests want to do so or not. If the project is not dropped, it will be necessary to recirculate another Draft EIR/EIS for public and decision-maker review that presents a reasonable range of alternatives that would not include the Tunnels Project and that would finally began to increase flows through the Delta. The range of reasonable alternatives required by NEPA must include the Reasonable and Prudent Alternatives (RPA) produced pursuant to the Endangered Species Act and the Least Environmentally Damaging Practicable Alternative (LEDPA) pursuant to the Clean Water Act.</p>	
2653	105	<p>Because there is no new financial and economic analysis of the Tunnels Project alternatives in the RDEIR/SDEIS, our [Environmental Water Caucus's] comments last year about the Tunnels Project apply equally this year:</p> <p>"There is great instability and uncertainty in the future of water exports from the Delta. Taking account of the range of reasonably foreseeable future of Delta exports shows dramatic effects on the Twin Tunnels' incremental water cost and financial performance. This instability fatally undermines BDCP's capacity to provide credible funding assurances.</p> <p>"Compared to other sources of potential new water supply in California, the Twin Tunnels project ranges from the high end of these alternative sources to being infeasible altogether, depending on financing assumptions used in the BDCP analysis.</p> <p>"The BDCP analysis of water affordability from the Twin Tunnels project is deeply flawed and fails to support the demand-side basis of financial assurances needed to make statutory findings for issuance of incidental take permits. The fishery agencies should reject BDCP incidental take application for lack of adequate funding assurances.</p> <p>"The Twin Tunnels financing plan remains highly uncertain and fails to meet the requirements of funding assurances needed to make statutory findings for issuance of incidental take permits."</p> <p>Lack of a financing plan means the Tunnels Project and its RDEIR/SDEIS are incomplete, and cannot fulfill disclosure requirements of the California Environmental Quality Act and National Environmental Policy Act.</p> <p>Economist Jeffrey Michael, director of the Center for Business and Policy Research at the University of the Pacific in Stockton, revisited his analysis of benefits and costs of the Tunnels Project, and found that the Tunnel Project's economics were worsened by three key modifications made to it:</p> <p>-The new plan drops the 50-year permit, and any notion of regulatory assurances about future water deliveries. This change has already been revealed and discussed, but its importance to the economics cannot be understated. According to the State's BDCP consultants, the regulatory assurance was the basis for over half of the economic value of the Tunnels to the water exporters' who would finance them. The already flimsy economic case for the Tunnels completely falls apart without the regulatory assurance. It drops the estimated benefits by nearly \$10 billion. [Footnote 270: Jeffrey Michael, Valley Economy Blog, "Is BDCP a good deal for water agencies? Jason Peltier and David Sunding disagree,"</p>	<p>The EIR/EIS is not required to provide a financial or economic analysis of a proposed action, only the effects on the human environment of that proposed action. DWR is preparing an updated economic analysis of the proposed project (Alternative 4A), including a comparison of the project's economic costs and benefits. The ability of the CVP or SWP contractors to pay for their share of water facility construction is described in the public draft BDCP EIR/EIS, Chapter 8. No new information is available in the RDEIR/SDEIS regarding project financing and this information is not relevant to the environmental impact analysis.</p> <p>The proposed project (Alternative 4A) does include compensation to the five Delta counties (Yolo, Solano, San Joaquin, Sacramento, and Contra Costa), Delta cities and towns, and applicable reclamation districts to offset the property taxes that would be lost as a result of public acquisition of land within these jurisdictions. Currently, more than \$48 million will be set aside for this purpose (see Exhibit E of Design and Construction Enterprise Draft Agreement released by DWR on January 15, 2016, "2081/Section 7 Mitigation Cost Estimate" Table).</p> <p>Please see Master Response 29, Endangered Species Act and Master Response 45, Permitting.</p>

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		<p>June 23, 2012, accessible at <a href="http://valleyecon.blogspot.com/2012/06/is-bdcp-good-deal-for-water-agencies.html">http://valleyecon.blogspot.com/2012/06/is-bdcp-good-deal-for-water-agencies.html</a>; see also "Comparing Benefit Cost Estimates of the Tunnels," September 3, 2013, <a href="http://valleyecon.blogspot.com/2013/09/comparing-benefit-cost-estimates-of.html">http://valleyecon.blogspot.com/2013/09/comparing-benefit-cost-estimates-of.html</a>; and "Quick Take on LA Times' Report on Restructuring the Delta Tunnel Plan," <a href="http://valleyecon.blogspot.com/2015/04/quick-take-on-la-times-report-on.html">http://valleyecon.blogspot.com/2015/04/quick-take-on-la-times-report-on.html</a>.]</p> <p>-The average annual incremental water yield with the tunnels compared to "No Action" has dropped by 135,000 acre feet (af). The 2013 EIR (table 5-9) had four scenarios with an incremental yield that ranged from a loss of 27,000 af to a gain of 821,000 af, and an average gain of 392,000 af across all four scenarios. The new EIR has 2 scenarios with an incremental yield ranging between a loss of 23,000 af to a gain of 537,000 af which is an average gain of 257,000 af. Thus, the best case scenario for water exporters dropped by 284,000 af, and the average dropped by 135,000 af. Michael reports that loss of water yield would drop benefits by about \$1 billion. [Footnote 271: See BDCP, Draft EIR, November 2013, Chapter 5, Water Supply, Table 5-9, accessible at <a href="http://bayDeltaconservationplan.com/Libraries/Dynamic_Document_Library/Public_Draft_BDCP_EIR-EIS_Chapter_5_-_Water_Supply.sclb.ashx">http://bayDeltaconservationplan.com/Libraries/Dynamic_Document_Library/Public_Draft_BDCP_EIR-EIS_Chapter_5_-_Water_Supply.sclb.ashx</a>; and <a href="http://bayDeltaconservationplan.com/RDEIRS508/Recirc_Figures/Fig_4.3.1.15_NS%20Delta%20LT%20Avg_Alt4A-508.pdf">http://bayDeltaconservationplan.com/RDEIRS508/Recirc_Figures/Fig_4.3.1.15_NS%20Delta%20LT%20Avg_Alt4A-508.pdf</a>.]</p> <p>-The new plan shows the estimated construction period has grown from 10 to 14 years.</p> <p>The construction period is now described as 2016 to 2029, compared to 2015 to 2024 in the 2013 plan. An extra 4 years of waiting to receive any economic benefits (while accumulating financing costs) will further reduce the benefit-cost ratio. [Footnote 272: See <a href="http://bayDeltaconservationplan.com/RDEIRS/Appendix_A/Rev_DEIR-S/App_22B_Air_Assumptions.pdf">http://bayDeltaconservationplan.com/RDEIRS/Appendix_A/Rev_DEIR-S/App_22B_Air_Assumptions.pdf</a> and <a href="http://bayDeltaconservationplan.com/RDEIRS/Appendix_A/Rev_DEIR-S/App_16A_Regional_Impdf">http://bayDeltaconservationplan.com/RDEIRS/Appendix_A/Rev_DEIR-S/App_16A_Regional_Impdf</a>.]</p> <p>Inaction on financing is underscored by indefinite postponement of public negotiations among the State Water Contractors and the California Department of Water Resources early this year. [Footnote 273: "Negotiation Meeting #2 originally scheduled for Tuesday, February 17, 2015 at the Resources Building has been postponed. It will be rescheduled for a later date. Details will be posted to this website when the new date is available." This is the most current announcement as of this writing at the web site of the negotiations, accessible October 25, 2015, at <a href="http://www.water.ca.gov/swpao/swpcontractamendmentforbdcp/announcements.cfm">http://www.water.ca.gov/swpao/swpcontractamendmentforbdcp/announcements.cfm</a>.]</p> <p>The problem of repayment arrangements remains unresolved. How would the state or the bond-issuing entity make state water contractors and their member agencies commit to "take-or-pay" financing given the Tunnels Project's exorbitant cost and the relative cost competitiveness of other local supply alternatives? How would federal water contractors of the Central Valley Project finance their fair share as beneficiaries of the Tunnels Project? Can congressional approval be mustered?</p> <p>Kern County Water Agency, in its draft comment letter on the Tunnels Project earlier this month, stated bluntly: "The alternatives in the RDEIR/SDEIS serve as an important initial step in developing a workable solution to the challenges facing California's water resources and the Delta. The alternatives, however, do not currently provide [public water agencies] with a Project that is economically feasible. As described in further detail below, additional</p>	

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		<p>efforts need to be taken to reduce the cost of the Project, protect the Project's yield, and improve the likelihood that the Project will be constructed and implemented in a manner that improves water supplies at an affordable cost." [Footnote 274: Draft letter of James M. Beck, General Manager, Kern County Water Agency, to Mark Cowin, Director, DWR, and David Murillo, Regional Director, US Bureau of Reclamation, Partially Recirculated Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement, October 30, 2015, p. 2.]</p> <p>The step-up provisions that are missing from existing contractual relationships between Metropolitan Water District and its member agencies continues to be a problem without resolution. [Footnote 275: EWC [Environmental Water Caucus] Comments, June 11, 2014, pp. 103-107.]</p> <p>The ability and willingness to pay of Central Valley Project (CVP) water contractors is a continuing question mark. As we noted last year, agricultural water agencies make up about 90+ percent of both cost allocations and water deliveries within the CVP. A 2008 study for the Delta Vision Blue Ribbon Task Force found that nearly \$1.3 billion is owed by CVP contractors for the capital facilities of the CVP, while San Joaquin Valley and Sacramento region CVP contractors have together repaid about 21.5 percent of this cost. [Footnote 276: EWC Comments, June 11, 2014, pp. 107-109.] Enormous and intractable drainage challenges plague the San Luis Unit on the west side of the San Joaquin Valley, with large repayment obligations currently on the books, including for BDCP Applicant agency Westlands Water District. Westlands and the US Department of the Interior recently announced a proposed settlement concerning drainage service obligations that, if Congress approves, would relieve Interior and the Bureau of Reclamation of the obligation to provide drainage service to the San Luis Unit, and forgive Westlands' debt obligations to the CVP (including for drainage service repayment), while more cost-effective solutions are available. [Footnote 277: Congressional Research Service, Westlands Drainage Settlement: A Primer, June 25, 2015, pp. 1-2. Accessible at <a href="http://pennyhill.com/jmsfileseller/docs/IF10245.pdf">http://pennyhill.com/jmsfileseller/docs/IF10245.pdf</a>; US Bureau of Reclamation, Mid-Pacific Region Public Affairs, Westlands v. United States Settlement, September 2015, accessible at <a href="http://www.ca.gov/resource-management/drainage/drainage-settlement-documents/">http://www.ca.gov/resource-management/drainage/drainage-settlement-documents/</a> and <a href="http://www.ca.gov/wp-content/uploads/2015/10/westlands-vs-united-states-settlement.pdf">http://www.ca.gov/wp-content/uploads/2015/10/westlands-vs-united-states-settlement.pdf</a>. Westlands' web site contains documents of the draft settlement, a list of permanently retired lands, transfer of facilities' titles, and draft legislation to implement the settlement. See also California Water Impact Network, Food &amp; Water Watch, and Restore the Delta, Special Report: Retiring Toxic Farmland in Western San Joaquin Valley Would Save Water, Environment, and Taxpayer Money, July 14, 2015, accessible at <a href="https://www.c-win.org/content/c-win-special-report-retiring-toxic-farmland-western-san-joaquin-valley-would-save-water-env">https://www.c-win.org/content/c-win-special-report-retiring-toxic-farmland-western-san-joaquin-valley-would-save-water-env</a>. The ECONorthwest study of land retirement is accessible at <a href="http://www.econw.com/media/ap_files/San_Luis_Unit_Land_Retirement_Final_Report_071415.pdf">http://www.econw.com/media/ap_files/San_Luis_Unit_Land_Retirement_Final_Report_071415.pdf</a>.]</p> <p>Should the settlement go through, this would remove existing CVP debt obligations and increase the debt capacity of Westlands Water District to afford taking on the financial burdens of the Tunnels Project -- all at exorbitant cost to US taxpayers and the environment.</p> <p>On the State Water Project side of the picture, a San Francisco Superior Court judge decided on October 9, 2015, that the Metropolitan Water District of Southern California [MWD] owes</p>	

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		<p>the San Diego County Water Authority a cumulative total of \$231.7 million due to MWD over-charging water rates to the Authority. The judge is expected to finalize his judgment in the case later this year. [Footnote 278: San Diego County Water Authority, News Release, MWD Owes Water Authority \$232 Million, Judge Declares, October 10, 2015, accessible at <a href="http://www.sdcwa.org/mwd-owes-water-authority-232-million-judge-declares">http://www.sdcwa.org/mwd-owes-water-authority-232-million-judge-declares</a>. Additional background and source documents on the case are accessible from SDCWA at <a href="http://www.sdcwa.org/mwdrate-challenge">http://www.sdcwa.org/mwdrate-challenge</a>.] Should MWD lose as this case makes its way through appeals, what would be the effect of this case's outcome on MWD's ability to support the financial requirements of the Tunnels Project? Until the case is resolved, how could Tunnels Project funding negotiations resume with such lingering financial uncertainty?</p> <p>An additional financing issue not disclosed in the RDEIR/SDEIS is the degree to which local and regional water contractors of the State Water Project and Central Valley Project will rely on water rates versus increases in their property tax bases to finance the Tunnels Project. The RDEIR/SDEIS contains no analysis of this possibility nor what economic impacts a property tax-oriented revenue strategy would have on water demand and local water conservation efforts to comply with Water Code Section 85021. Using property taxes rather than water rates to finance the Tunnels Project would disconnect water consumption from the real cost of water, a dysfunctional price signal. The SDEIS is deficient and inadequate for omitting an economic and financial analysis of the proposed project, and for omitting discussion of this particular impact on the human economic environment.</p> <p>Finally, the BDCP Tunnels Project plan, RDEIR/RDEIS does not contain a description of adequate compensation for the five Delta counties (Yolo, Solano, San Joaquin, Sacramento, and Contra Costa), Delta cities and towns, and dozens of reclamation districts to offset the property tax and revenue declines resulting from construction and operation of the project. Without adequate analysis for full economic mitigation for the greater Delta region, the plan fails to protect the Delta as place under the Delta Reform Act. This compensation is required by Water Code Section 85089. [Footnote 279: "Construction of a new Delta conveyance facility shall not be initiated until the persons or entities that contract to receive water from the State Water Project and the federal Central Valley Project or a joint powers authority representing those entities have made arrangements or entered into contractors to pay for. . . (b) Full mitigation of property tax or assessments levied by local governments or special districts for land used in the construction, location, mitigation, or operation of new Delta conveyance facilities." California Water Code Section 85089(b).] So many questions remain for the RDEIR/SDEIS; answers continue to be deferred until some later time. Meanwhile, the RDEIR/SDEIS fails to disclose the problems, let alone their resolution.</p>	
2653	106	<p>Worsening Failure to Provide Governance and Implementation Support:</p> <p>Failure to coordinate timely Section 7 consultation with NMFS and USFWS means that not only are crucial elements of the NEPA and CEQA environmental reviews incomplete, the details of organization and administration of Tunnels Project construction and operation are also incomplete. Key products of the needed biological opinions -- the matter of whether there is jeopardy to listed species, and the formulation and implementation of reasonable and prudent alternatives to prevent jeopardy and encourage survival and recovery of listed species -- are the basis for organizing and administering avoidance and minimization of impacts, identifying opportunities and parameters for real-time operations [RTOs], and for setting an agenda for adaptive management research tasks. These critical elements help define Tunnels Project governance. In the rush to acquire water rights, water quality</p>	<p>Comments noted. Please see Master Responses 45 (Permitting). Comments not directed toward CEQA or NEPA compliance of the RDEIR/SDEIS or the FEIR/FEIS do not require responses.</p>

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		<p>certification and dredge/fill approvals from the State Water Resources Control Board and the US Army Corps of Engineers, perhaps there is no greater evidence of this baby having been born prematurely than the absence of these critical elements from the description of the alternatives: How will these administrative, scientific, and resource management tasks be organized and governed?</p> <p>At least in last year's Bay Delta Conservation Plan there were gestures in these directions, even though in our comments last year we [Environmental Water Caucus (EWC)] felt there were egregious problems with how BDCP thought through these matters. [Footnote 280: EWC Comments, June 11, 2014, Section V, pp. 110-117.] This year, however, it appears no thought is given by Tunnels Project proponents to these problems; they seem implicitly to regard their new "preferred alternative" as primarily a water project that would be owned and operated by DWR through its State Water Project to help benefit the Bureau's Central Valley Project -- though even this simple matter of ownership is not even stated unequivocally that we could find in the RDEIR/SDEIS.</p> <p>Other questions continue to abound about this project that originated with last year's BDCP: How will the financial assurances be obtained by Tunnels Project proponents to ensure implementation of the reasonable and prudent alternatives, once they emerge from the tardy Section 7 consultation? How will environmental justice and water quality concerns of the public be represented and incorporated into Tunnels Project operational decision-making? Will there be the equivalent of a Permit Oversight Group? An Authorized Entities Group? Will there even be a "California WaterFix" Office to implement the Tunnels Project and oversee operational (including RTOs), restoration, annual planning, and adaptive management agendas and actions? If there are to be any public entities governing operation and management of the Tunnels Project, will their activities and meetings comply with Bagley-Keene and Brown Act governance requirements of the California Government Code? The RDEIR/SDEIS is silent on such crucial matters.</p>	
2653	107	<p>This Year's Tunnels Project is Contrary to Law:</p> <p>BDCP's draft July 2013 Implementing Agreement says (twice) that "all activities undertaken pursuant to this Agreement, the BDCP, or the Permits must be in compliance with all applicable local, state and federal laws and regulations." [Footnote 281: Draft 2013 Implementing Agreement, Sections 23.6 and 23.22.] The May 2014 Implementing Agreement contains this identical provision. [Footnote 282: Draft 2014 Implementing Agreement, Section 24.5, p. 89. Section 24.20, p. 92, also states "This Agreement will be governed by and construed in accordance with the laws of the United States and the State of California."] This section of EWC [Environmental Water Caucus]'s comments describes the many ways that BDCP fails to comply with many applicable laws and regulations.</p> <p>The Bay Delta Conservation Plan, the Tunnels Project, and its Project Objectives and Purpose and Need do not comply with existing state or federal law. The EWC documents these failures to comply with established law in this section and the following section where compliance deficiencies are itemized with respect to the National Environmental Policy Act and the California Environmental Quality Act.</p> <p>We have already commented on unlawful omissions from the RDEIR/SDEIS's statements of objectives, purpose and need for the project, and on its violations of NEPA/CEQA, ESA and the Clean Water Act.</p>	<p>Since 2006, the proposed project has been developed based on sound science, data gathered from various agencies and experts over many years, input from agencies, stakeholders and independent scientists, and more than 600 public meetings, working group meetings and stakeholder briefings.</p> <p>DWR's fundamental purpose of the proposed project is to make physical and operational improvements to the SWP system in the Delta necessary to restore and protect ecosystem health, water supplies of the SWP and CVP south of the Delta, and water quality within a stable regulatory framework, consistent with statutory and contractual obligations. By establishing a point of water diversion in the north Delta and new operating criteria with the goal of improving water operations designed to establish a more natural east-west flow for migratory fish, improve habitat conditions, and allow for greater operational flexibility. Please see Master Response 3 for additional information regarding the purpose and need behind the proposed project.</p> <p>As a plan prepared to meet the standards of the federal and state Endangered Species Acts, the proposed project is intended to be environmentally beneficial, not detrimental.</p> <p>The project proposes to stabilize water supplies, and exports could only increase under certain circumstances. Water deliveries from the federal and state water projects under a fully implemented Alternative 4A are projected to be about the same as the average annual amount diverted in the last 20 years. Although the proposed project would not increase the overall volume of Delta water exported, it would make the deliveries more predictable and reliable, while restoring an ecosystem in steep decline.</p>

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		<p>The Tunnels Project violates the Delta Reform Act of 2009, the California Water Code, the California Constitution's ban on waste and unreasonable use and unreasonable method of diversion of water, and the Public Trust Doctrine. We make a case for finding the Tunnels Project inconsistent as a covered action under the Delta Reform Act.</p>	<p>More than two-thirds of the residents of the state and more than 2 million acres of highly productive farm land receive water exported from the Delta watershed. The proposed project aims to provide a more reliable water supply, in a way more protective of fish. However, the project proponents have no authority to designate what water is used for.</p> <p>One of the State Water Resources Control Board's (State Water Board's) charges is to ensure that the State's water is put to the best possible use and that this use is in the best interest of the California public. This charge is reflected in part by the designation of beneficial uses established through the State Water Board's planning process. These beneficial uses are identified in each Water Quality Control Plan (Basin Plan) issued by the State Water Board.</p> <p>Comment included here that are general, unsubstantiated claims of illegality where no issues related to the adequacy of the environmental impact analysis in the CEQA and NEPA documents were raised further response is not required. Claims of environmental impact analysis deficiencies will be addressed in the sections of the comment letter that offer specific allegations thereof.</p>
2653	108	<p>The RDEIR/SDEIS omits key federal legislation from its regulatory baseline. The RDEIR/SDEIS fails to include Coordinated Operations Act (Public Law 99-546), the San Luis Act (Public Law 86-488) and the Central Valley Project Improvement Act (Public Law 102-575).</p>	<p>Section 1.4.1 of the Draft EIR/DEIS describes some of the major state and federal regulatory actions that influence operations of the SWP and CVP. That section describes the Coordinated Operations Agreement; the Act the commenter cites implements that agreement.</p> <p>Section 1.4.1 also describes the Central Valley Project Improvement Act. The San Luis Act authorizes construction of the San Luis unit of the Central Valley project which is not connected with this project.</p>
2653	109	<p>RDEIR/SDEIS does not meet Environmental Justice legal standards. The State of California defines environmental justice as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies. [Footnote 283: California Government Code [Section] 65040.12(c).] Federal and state laws require agencies to consider environmental justice and to prohibit discrimination in their decision-making processes. The Presidential Memorandum accompanying the Federal Executive Order (EO) 12898 (1994) singles out NEPA and states that "[e]ach Federal agency must provide opportunities for effective community participation in the NEPA process, including identifying potential effects and mitigation measures in consultation with affected communities and improving the accessibility of public meetings, crucial documents, and notices. The Tunnels Project fails to meet these legal requirements, including:</p> <p>CEQA participation requirements -- CEQA requires a process that provides an opportunity for meaningful participation of the public. According to Public Resources Code Section 21061: "The purpose of an environmental impact report is to provide public agencies and the public in general with detailed information about the effect which a proposed project is likely to have on the environment; to list ways in which the significant effects of such a project can be minimized; and to indicate alternatives to such a project." Public Resources Code section 21003(b) provides: "Documents prepared pursuant to [CEQA] should be organized and written in such a manner that will be meaningful and useful to decision makers and to the public." CEQA Guidelines section 15201 explains that "Public participation is an essential part of the CEQA process. Each public agency should include provisions in its CEQA procedures for wide public involvement . . . In order to receive and evaluate public reactions to environmental issues relating to the agency's activities." RDEIR/ SDEIS fail to meet the purpose of CEQA and has obstructed meaningful and useful means to public participation. Lead agencies fail to translate critical documents and conduct sufficient</p>	<p>The comment suggests that the project has excluded limited-English speakers from participation by not providing sufficient documents for them.</p> <p>Chapter 32 of the Draft EIR/DEIS summarizes the public involvement and outreach activities conducted for the project, including outreach to environmental justice communities (Section 32.1.2.4). Chapter 28 of the Draft EIR/DEIS (section 28.3) describes public outreach to environmental justice communities. The BDCP website provides information materials in six languages in addition to English. For more information on how the project has addressed environmental justice, please see Master Response 27. For information on the efforts made to communicate with and gain input from all sectors of the public, please see Master Responses 40 and 41.</p>

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		outreach to affected communities to facilitate their meaningful participation.	
2653	110	<p>RDEIR/SDEIS does not meet Environmental Justice legal standards. The State of California defines environmental justice as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies. [Footnote 283: California Government Code [Section] 65040.12(c).] Federal and state laws require agencies to consider environmental justice and to prohibit discrimination in their decision-making processes. The Presidential Memorandum accompanying the Federal Executive Order (EO) 12898 (1994) singles out NEPA and states that "[e]ach Federal agency must provide opportunities for effective community participation in the NEPA process, including identifying potential effects and mitigation measures in consultation with affected communities and improving the accessibility of public meetings, crucial documents, and notices. The Tunnels Project fails to meet these legal requirements, including:</p> <p>NEPA participation requirements and Equal Justice Executive Order 12898: Federal Executive Order (EO) 12898 (1994), Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, requires Federal agencies to make environmental justice part of their mission and to develop environmental justice strategies. The Presidential Memorandum accompanying the Executive Order specifically singles out NEPA, and states that "[e]ach Federal agency must provide opportunities for effective community participation in the NEPA process, including identifying potential effects and mitigation measures in consultation with affected communities and improving the accessibility of public meetings, crucial documents, and notices." [Footnote 284: Memorandum from President Clinton, March 1994, available at <a href="http://www.epa.gov/fedfac/documents/executive_order_12898.htm">http://www.epa.gov/fedfac/documents/executive_order_12898.htm</a>.] RDEIR/SDEIS fail to meet NEPA participation requirements and the Presidential Memorandum for effective community participation in consultation with affected communities and improving the accessibility of public meetings, crucial documents, and notices.</p>	<p>The comment suggests that the project has excluded limited-English speakers from participation by not providing sufficient documents for them.</p> <p>Chapter 32 of the DEIR/DEIS summarizes the public involvement and outreach activities conducted for the project. Chapter 28 of the DEIR/DEIS (section 28.3) describes public outreach to environmental justice communities. The BDCP website provides Information materials in six languages other than English. For more information on how the project has addressed environmental justice and efforts made to communicate with and gain input from all sectors of the public, please see Master Response 27.</p>
2653	111	<p>RDEIR/SDEIS does not meet Environmental Justice legal standards. The State of California defines environmental justice as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies. [Footnote 283: California Government Code [Section] 65040.12(c).] Federal and state laws require agencies to consider environmental justice and to prohibit discrimination in their decision-making processes. The Presidential Memorandum accompanying the Federal Executive Order (EO) 12898 (1994) singles out NEPA and states that "[e]ach Federal agency must provide opportunities for effective community participation in the NEPA process, including identifying potential effects and mitigation measures in consultation with affected communities and improving the accessibility of public meetings, crucial documents, and notices. The Tunnels Project fails to meet these legal requirements, including:</p> <p>Title VI of the Civil Rights Act of 1964 provides: "No Person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." [Footnote 285: Executive Order 13166 "Improving Access to Services for Persons with Limited English Proficiency," See 65 Fed. Reg. 50,121 (Aug. 16, 2000). EPA "Guidance to Environmental Protection Agency Financial Assistance Recipients Regarding Title VI Prohibition Against National Origin Discrimination Affecting Limited</p>	<p>The comment suggests that the project has excluded limited-English speakers from participation by not providing sufficient documents for them.</p> <p>Chapter 32 of the DEIR/DEIS summarizes the public involvement and outreach activities conducted for the project. Chapter 28 of the DEIR/DEIS (section 28.3) describes public outreach to environmental justice communities. The BDCP website provides Information materials in six languages other than English. For more information on how the project has addressed environmental justice and efforts made to communicate with and gain input from all sectors of the public, please see Master Response 27.</p>

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		<p>English Proficient Persons," 69 Fed. Reg. 39602. (June 25, 2004). Lau v. Nichols, 414 U.S. 563 (1974) providing that National Origin Discrimination to Limited English Speakers. See also Executive Order 13166, 65 Fed. Reg. 50,121 121 (Aug. 16, 200), and 69 Fed. Reg. 39602 (June 25, 2004).] RDEIR/SDEIS fails to meet Title VI of the Civil Rights Act of 1964, by failing to provide sufficient documents for information affecting limited English speaking communities, thus excluding them from participation.</p>	
2653	112	<p>RDEIR/SDEIS does not meet Environmental Justice legal standards. The State of California defines environmental justice as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies. [Footnote 283: California Government Code [Section] 65040.12(c).] Federal and state laws require agencies to consider environmental justice and to prohibit discrimination in their decision-making processes. The Presidential Memorandum accompanying the Federal Executive Order (EO) 12898 (1994) singles out NEPA and states that "[e]ach Federal agency must provide opportunities for effective community participation in the NEPA process, including identifying potential effects and mitigation measures in consultation with affected communities and improving the accessibility of public meetings, crucial documents, and notices. The Tunnels Project fails to meet these legal requirements, including:</p> <p>California Government Code section 11135 (a) and implementing regulations in the California Code of Regulations Title 22 Sections 98211 (c) and 98100. Government Code 11135(a) provides: 'No person in the State of California shall, on the basis of race, national origin, ethnic group identification, religion, age, sex, sexual orientation, color, genetic information, or disability, be unlawfully denied full and equal access to the benefits of, or be unlawfully subjected to discrimination under, any program or activity that is conducted, operated, or administered by the state or by any state agency, is funded directly by the state, or receives any financial assistance from the state.'" RDEIR/SDEIS fails to meet California Government Code section 11135 (a) and California Code of Regulations Title 22 Sections 98211 (c) and 98100 by unlawfully denying full and equal access to documents for EJ communities.</p>	<p>The comment suggests that the project has excluded limited-English speakers from participation by not providing sufficient documents for them.</p> <p>Chapter 32 of the DEIR/DEIS summarizes the public involvement and outreach activities conducted for the project. Chapter 28 of the DEIR/DEIS (section 28.3) describes public outreach to environmental justice communities. The BDCP website provides Information materials in six languages other than English. For more information on how the project has addressed environmental justice and efforts made to communicate with and gain input from all sectors of the public, please see Master Response 27.</p>
2653	113	<p>RDEIR/SDEIS does not meet Environmental Justice legal standards. The State of California defines environmental justice as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies. [Footnote 283: California Government Code [Section] 65040.12(c).] Federal and state laws require agencies to consider environmental justice and to prohibit discrimination in their decision-making processes. The Presidential Memorandum accompanying the Federal Executive Order (EO) 12898 (1994) singles out NEPA and states that "[e]ach Federal agency must provide opportunities for effective community participation in the NEPA process, including identifying potential effects and mitigation measures in consultation with affected communities and improving the accessibility of public meetings, crucial documents, and notices. The Tunnels Project fails to meet these legal requirements, including:</p> <p>The Dymally-Alatorre Bilingual Services Act -- Government Code Sections 7290-7299.8 requires that, when state and local agencies serve a "substantial number of non-English speaking people," they must (among other things) translate documents explaining available services into their clients' languages. RDEIR/SDEIS fails to meet the Dymally-Alatorre Bilingual Services Act by not providing at minimum the Executive Summary in languages</p>	<p>The comment suggests that the project has not met Environmental Justice standards by not providing more project documents in languages other than English.</p> <p>Chapter 32 of the DEIR/DEIS summarizes the public involvement and outreach activities conducted for the project, including outreach to environmental justice communities (section 32.1.2.4). Chapter 28 of the DEIR/DEIS (section 28.3) describes public outreach to environmental justice communities. The BDCP website provides Information materials in six languages other than English. For more information on how the project has addressed environmental justice and efforts made to communicate with and gain input from all sectors of the public, please see Master Response 27.</p>

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		other than English. [Footnote 286: California Government Code Sections 7290-7299.8.]	
2653	114	<p>Language Accessibility and Public Participation:</p> <p>Tunnels Project proponents have still failed to respond adequately to requests for materials and outreach in Spanish and other languages. Currently, only some documents (e.g., Fast Facts) are available in five languages other than English, but they only present promotional information that is too limited in scope for use by the target audience to engage meaningfully in the decision-making process. Moreover, the promotional narrative is misleading about impacts of the Tunnels Project.</p> <p>The Fast Facts documents issued this summer at the July open house events claim to address certain issues raised in comments received on last year's Draft EIR/EIS. However, nowhere in this four-page document are negative impacts of the tunnels mentioned -- on public health, health of communities, water quality and subsistence fishing, impact on small communities, air quality, etc. RDEIR/SDEIS documents are still not available in other languages, thus making them inaccessible not just to individuals, but to many communities as a whole which have a high percentage of limited English speakers.</p> <p>In addition, when environmental justice [EJ] community members and partners have called the contact number for more information in Spanish, they are prompted to leave a message. After leaving a message, our [Environmental Water Caucus's] colleagues reported that the messages were returned only after a week had passed. Immediate questions or concerns were left unanswered or referred to the Fast Fact sheet for answers that do not exist on those sheets.</p> <p>As noted in a joint May 28, 2014, letter regarding the lack of access for limited English speakers, the environmental justice survey completed to support Chapter 28 of the EIS/EIR (Environmental Justice) excluded non-English speakers within the Delta. Since then, no efforts by Tunnels Project proponents. Thus, EJ legal standards concerning language accessibility are ignored have been made to publish even the Executive Summary in languages other than in English.</p> <p>Last year, we also commented that the closing of the BDCP forum to critical comment is contrary to the promise of encouraging public participation. This year, the two open house sessions held on July 28, 2015, in Sacramento and the second on July 29, 2015, in Walnut Grove were ostensibly conducted for the purpose of collecting public feedback on the then-current status of the BDCP and Tunnels Project. The open house process once again avoided meaningful public participation and a traditional public hearing process by presenting a "science fair" style open house. In addition, the open house was hosted during typical working hours, which, while convenient for the agencies which staffed the event, did not allow many community members to participate (and contrary to the open house's very purpose: to elicit and capture public comments on the BDCP and Tunnels Project). Attendees of these open house meetings conveyed to us that no interpretive services were advertised at these meetings for hearing impaired persons.</p>	<p>For more information regarding environmental justice and outreach to non-English speakers, please see Master Response 27.</p> <p>As state agencies, the Department of Water Resources and the California Natural Resources Agencies have an obligation to provide the public with educational information that is rooted in fact, based on reasonable assumptions supported by facts and expert opinions substantiated by facts. Doing so for a project of large scale and complexity can be a challenge. The BDCP website, blog, Your Questions Answered, and social media platforms have been the primary vehicle for communicating important project information and correcting misinformation. Brochures, factsheets, webinars and videos are other tools the State has employed to educate the public about the proposed BDCP and the EIR/EIS process. Representatives from the State have also held numerous meetings and briefings around the state to educate stakeholders and provide them with critical information about project developments and the EIR/EIS process. Brochures, factsheets, webinars, reports and other information is kept on the project website, <a href="http://www.BayDeltaConservationPlan.com">www.BayDeltaConservationPlan.com</a> and is available for review. Historical materials remain available for review and are labeled as achieved or superseded. For more information on the public outreach efforts made during the BDCP and EIR/EIS process, please see Master Response 40.</p> <p>More information on how DWR has developed the project in an open and transparent manner is provided in Master Response 41.</p>
2653	115	<p>Land Use, Flood Risk, and Affordable Housing:</p> <p>As we [Environmental Water Caucus] mentioned last year, the Tunnel Project still fails to consider how to maintain affordable housing opportunities in the Delta region as land use changes are implemented. Impacts on low-income home owners, such as threats to public</p>	<p>When required, the project proponents would provide compensation to property owners for losses due to implementation of the alternative, which would reduce the severity of economic effects related to this physical impact, but would not reduce the severity of the physical impact itself. The project would not result in adverse impacts related to flooding. As discussed in Impact SW-2 in Chapter 6, Surface Water, with mitigation implemented, the project would not substantially alter the existing drainage pattern or</p>

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		<p>safety and lowered home value must be addressed as part of any proposed land use changes for which the RDEIR/SDEIS call.</p> <p>Disproportionate impacts of flooding on renters must be mitigated for all residents of the Delta. The impacts on existing communities of alterations in land use plans must be evaluated, particularly the potential for increased vulnerability to flooding.</p> <p>A sustainable Delta will require dramatic changes in land use decisions. The Delta is already over- developed, thereby limiting choices for flood attenuation and increasing the potential for catastrophic damage associated with a seismic event. As those choices are made, the potential exists to provide equitable benefits in planning for EJ [environmental justice] communities, but there is also the threat of disproportionate impacts on those same communities. For this reason, a sustainable vision for the Delta must identify and account for the particular impacts on EJ communities.</p> <p>We are deeply concerned that the Tunnel Project facilities and alignments may foreclose otherwise viable options for improving land use and affordable housing for the Delta’s poorest residents. A disproportionate number of the developments the Tunnels Project would put at risk are populated by low-income, predominantly Latino residents. Changes in flood mapping and zoning will have a profound effect on these developments, while their ability to recover from a flood event is limited.</p>	<p>substantially increase the rate or amount of surface runoff in a manner that would result in flooding during construction of conveyance facilities.</p> <p>As described in Section 28.5.1.2 of Chapter 28, Environmental Justice, this environmental justice assessment is limited to effects that have been identified as adverse even with mitigation. These effects were then carried forward and screened for their potential to result in disproportionate adverse effects on environmental justice populations. For effects that were determined not adverse, no additional evaluation is needed because those effects would not result in disproportionate effects on minority and low-income populations. This method of screening effects is consistent with the CEQ guidance (Council on Environmental Quality 1997:25). Because Impact SW-2 is less than significant/adverse after mitigation, this impact was no longer considered for environmental justice populations.</p> <p>For more information regarding environmental justice, please see Master Response 27.</p>
2653	116	<p>Existing [environmental justice] communities may be detrimentally impacted by the advent of upper scale developments protected by new "super levees," which have the potential to re-route flood waters in ways that may negatively impact lower income communities. The following figures taken from Draft EIR/EIS (Appendix: Figure 6-5 SPFC and Non-SPFC Levees, 6-6 Reported Delta Levee Problem Areas, 6-7 Effective Federal Emergency Management Agency Flood Zones, 28-1 Minority Populations in the Plan Area, and 28-2 Low-Income Populations in the Plan Area) demonstrate that FEMA flood zone encompasses much of the central, south, and western Delta as well as Suisun Marsh where many low-income and minority Delta residents live. RDEIR/SDEIS fail to analyze the impacts to communities whose transportation routes could be disrupted due to flood impacts.</p> <p>At an even greater disadvantage are communities that reside in, but don’t own property in, floodplains -- including tenants and farmworkers. These communities receive less assistance than property owners after a flood event and are more likely to be permanently displaced and suffer a total or near total loss of their movable property. Any emergency plan must target the special needs and vulnerabilities of these residents as well as their capacity to lead their own recovery effort, if it is, in fact, supported with resources.</p> <p>As development becomes limited and/or more expensive in floodplains, the supply of low-income housing will be curtailed. Any land use changes must include a plan for provision of affordable housing for the current and expected population in the Delta Region. No such plan appears in the RDEIS/DEIR.</p>	<p>The new proposed project, Alternative 4A, substantially reduces the habitat restoration footprint and does not include Conservation Measure 2 (Yolo Bypass Enhancements) and Conservation Measure 5 (Seasonally Inundated Floodplain Restoration). Instead, the proposed project includes habitat restoration necessary to mitigate significant environmental effects under CEQA and meet the regulatory standards of ESA Section 7 and California Endangered Species Act (CESA) Section 2081(b). Yolo Bypass Enhancements would be assumed to occur as part of the No Action Alternative because they are required by the existing BiOps.</p> <p>Please see Appendix 6A, Section 6A.6.2.1.3, Final EIR/EIS, for a discussion on DWR consistency with the State Plan of Flood Control (SPFC), and Section 6A.6.1.2 for information on project consistency with USACE, CVFPB, and DWR flood standards and regulations. Overall, construction and operations of the proposed project would not increase flood risk to people or structures in the Delta.</p> <p>The proposed project does not include the creation of “super levees” in the Delta. Also, see Chapter 13, Land Uses, Chapter 16, Socioeconomic, and Chapter 28, Environmental Justice, for impacts to land use, socioeconomics, and minority and low-income populations, respectively. Also, for more information regarding environmental justice, please see Master Response 27.</p>
2653	117	<p>Public Health [and] Water Quality:</p> <p>The Tunnels Project degrades rather than protects or enhances the water quality in the Delta. In addition, water quality and other assessments in Chapter 25 Public Health are based on many decisions/papers published prior to our drought conditions and do not</p>	<p>The comment raises concerns regarding degradation of water quality in the Delta due to implementation of the proposed project. The constituents identified in the comment were assessed in detail in Chapter 8, Water Quality, of the FEIR/FEIS relative to thresholds of significance that included address of degradation and impacts to beneficial uses. Of the constituents noted in the comment, only electrical conductivity (a salinity-related parameter) was identified as significant for the preferred alternative, Alternative 4A, due to degradation (Impact WQ-11), and mitigation was provided to reduce that impact to less than significant level</p>

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		<p>effectively consider public health impacts for environmental justice communities.</p> <p>The Tunnels Project creates an overall pattern of inequitable and discriminatory water quality impacts, several of which would have public health implications. By diverting the Sacramento River right as it enters the Delta, the Tunnels diversions reduce flows and slows down water, which increases residence time, which, in turn, concentrates salinity and pollutants in the western and central Delta, while privileging export water quality south of the Delta over in-Delta beneficial uses. Over and over again in the RDEIR/SDEIS, modeling results for boron, bromide, chloride, salinity, nitrate, pesticides, mercury, selenium, and dissolved organic carbon show the maldistribution of water quality impacts from the Tunnels Project. It also contributes to why harmful algal blooms will be significant and adverse impacts of the project down the road. These and other water quality constituents, which were not modeled for the RDEIR/SDEIS, all worsen for south and west Delta water ways and the Suisun Marsh and improve for the export pumps. This is a conscious decision to sacrifice in-Delta water quality and the environmental justice communities that rely on it; it is an integral part of the Project design and purpose and the water quality modeling, however incompletely done, bears that out. [Footnote 287: See Project Objectives at 1-8, Section 1.1.4.1, lines 18-21, stating "DWR's fundamental purpose in proposing the proposed project is to make physical and operational improvements to the SWP system in the Delta necessary to restore and protect . . . Water quality within a stable regulatory framework, consistent with statutory and contractual obligations" and Project Objectives at 1-8, Section 1.1.4.1, lines 34-37, stating project objectives include to "[r]estore and protect the ability of the SWP and CVP to deliver up to full contract amounts. . ."]</p>	<p>(Mitigation Measure WQ-11).</p> <p>Please see Master Response 27, Environmental Justice.</p>
2653	118	<p>As noted in RDEIR/SDEIS Chapter 25-66, there are significant bromide effects on drinking water quality, which relate to precursors for carcinogenic disinfectant byproducts -- a significant water supply treatment cost issue for both municipal exporters and in-Delta municipal drinking water suppliers, such as Stockton, Walnut Grove, Isleton, Rio Vista, etc. Treatment plant upgrades would further increase the burden of water accessibility on small and low-income communities.</p>	<p>Please refer to the Public Health section under Alternative 4A of Chapter 28, Environmental Justice, for a description of effects regarding bromide on environmental justice communities. See also, Master Comment 27, Environmental Justice.</p>
2653	119	<p>As noted in the RDEIR/SDEIS, public health impacts from Microcystis blooms have yet to be fully assessed. [Footnote 288: RDEIR/SDEIS, Appendix A, Chapter 25.3.3.2.] As RDEIR/SDEIS state, public health impact would be significant and unavoidable. In addition, RDEIR/SDEIS still fails to comprehensively evaluate the public health impacts on small communities on fish consumption and exposure to methylmercury. Species of fish affected by the Tunnels project are pursued during subsistence fishing by populations already burdened with environmental injustice. Despite the RDEIR/SDEIS stating the adverse effects and negative health impacts of the Tunnels Project, more investigation and analysis needs to be completed. [Footnote 289: RDEIR/SDEIS, Appendix A, Chapter 28.5.8.7.]</p> <p>As noted in EWC [Environmental Water Caucus]'s letter, Interior Suisun Marsh salinity is expected to increase substantially from operation of the Tunnels, according to data in the RDEIR/SDEIS. Reverse flows on the lower Sacramento River will increase, which may injure neighboring water right holders. Numerous water quality pollutant criteria and beneficial uses will be violated and conditions degraded. And subsistence fishers may be harmed by worsening mercury and selenium concentrations contaminating fish tissues in the long term, resulting from Tunnels operations.</p>	<p>Under Alternative 4A, the preferred alternative, project implementation would result in less-than-significant impacts on public health related to Microcystis. Implementation of Alternative 4A would not be expected to increase levels of mercury by frequency, magnitude, and geographic extent such that the affected environment would be expected to have measurably higher body burdens of mercury in aquatic organisms. As such, a substantial increased risk to health of people consuming fish in the study area is not expected as a result of implementing the preferred alternative.</p> <p>In the Delta, the toxins of primary concern to human health are mercury, pesticides and polychlorinated biphenyls (PCBs). Selenium can also biomagnify through the food chain under certain conditions, but selenium is a metal required in human diets and does not pose a high level of risk to humans at low concentrations. Changes in selenium as a result of implementing the action alternatives are identified in Chapter 8, Water Quality.</p> <p>Please see Master Response 14, Water Quality and Master Response 27, Environmental Justice for more information.</p>
2653	120	<p>BDCP's analysis of selenium as a water quality stressor is inadequate for failing to</p>	<p>Please see Master Responses 14 regarding selenium.</p>

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		acknowledge or address uncertainties about the regulatory and technological setting of the Grassland Bypass Project and long-term management and mitigation of selenium loading to the San Joaquin River in the western San Joaquin Valley. These projects indicate the ecological and public health risks of various scenarios of selenium loading to the Bay Delta Estuary. BDCP irresponsibly downplays the risks and foreseeable costs and circumstances involved. [Footnote 290: California Water Impact Network testified to the State Water Resources Control Board about limitations of the Grassland Bypass Project and the challenges Grassland area farmers face in developing and implementing a cost-effective treatment technology for concentrating, isolating, managing and sequestering selenium. See: C-WIN, Testimony on Recent Salinity and Selenium Science and Modeling for the Bay-Delta Estuary, prepared by T. Stroshane and submitted to the State Water Resources Control Board Workshop #1, Ecosystem Changes and the Low Salinity Zone, September 5, 2012, 44 pages plus appendices. Accessible at <a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/docs/cmnt081712/tim_stroshane.pdf">http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/docs/cmnt081712/tim_stroshane.pdf</a> .]	
2653	121	The RDEIR/SDEIS have conducted no analysis of in-Delta water demand and subsistence fishing patterns represented by these beneficial uses when it conducts its operational studies of the Tunnels Project. These uses are protected by, among other statutes, the Delta Protection Act of 1959. Additional evaluation must be conducted and allow for proper public participation to apply the precautionary principle, rather than allowing real-time operational decisions to exacerbate environmental injustices for Delta-dependent communities.	Subsistence fishing has been included in Chapter 28, Environmental Justice. Please see Master Response 26 regarding changes in Delta exports. The alternatives would not modify water deliveries to non-SWP and non-CVP water rights holders, including in-Delta water rights holders. Therefore, the water supply analysis addresses impacts to DWR, Reclamation, and SWP water users and CVP water service contractors, as opposed to other water rights holders, as the proposed project does not include any regulatory actions that would affect water availability to any such water rights holders.
2653	122	To ensure that community and public health and the environment are protected by the Tunnels Project, we [Environmental Water Caucus] recommend that decisions on changes in conveyance and operation of Delta water infrastructure be incremental and reversible, dependent upon the measured impact on the ecosystem, essentially incorporated into the proposed Collaborative Science and Adaptive Management Program agenda. This can only be done by having habitat restoration proceed first, so that the public knows it will succeed. Success for the Delta common pool resources should be assured before any Tunnels Project is deemed safe to develop. Agricultural and storm water discharges must be limited to protect water quality. Remediation of mine sites and stream beds must be prioritized and ecosystem restoration projects must be prioritized, sited, and designed so as to limit the potential for additional methylation of mercury and the related health impacts to wildlife and human health.	Please review Chapter 3 of the final EIR/EIS and the Master Response, Adaptive Management.
2653	123	Violations of Civil Rights and Environmental Law:  The lack of consideration for environmental justice communities, lack of proper assessment of public health impacts and mitigation efforts, lack of access to information regarding the project, lack of provision of adequate oral and written bilingual information, failure to notice meetings in various languages, and limited public access to the document through required computer access, exorbitant fees violate the principles of environmental justice and constitutes violations of CEQA and NEPA, as well as federal and state civil rights of a significant population of the five Delta counties.	A detailed description of the methodology used in Chapter 28 is provided in Section 28.5.1.2 of Chapter 28, Environmental Justice. This environmental justice assessment is limited to effects that have been identified as adverse even with mitigation. These effects were then carried forward and screened for their potential to result in disproportionate adverse effects on environmental justice populations. For effects that were determined not adverse, no additional evaluation is needed because those effects would not result in disproportionate effects on minority and low-income populations. This method of screening effects is consistent with the CEQ guidance (Council on Environmental Quality 1997:25). Please see Section 28.3 in Chapter 28, and Chapter 32, Public Involvement, regarding public outreach.  For more information on environmental justice, please see Master Response 27.  For more information on public outreach, please see Master Response 64.

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2653	124	<p>The Tunnels Project is contrary to the Delta Reform Act. Tunnels Project proponents continue to construe their responsibilities under the Delta Reform Act of 2009 far too narrowly. That analysis focuses almost entirely on Water Code Section 85320, which sets out special findings the California Department of Fish and Wildlife must make, and briefly describes an appeal process to the Delta Stewardship Council. [Footnote 291: This narrow treatment is exemplified in EIR/EIS, Appendix 3A, Identification of Water Conveyance Alternatives, Conservation Measure 1, Table 3A-15, p. 3A-149. It erroneously assumes that hydrologic conditions, flow criteria, diversion rates, and conveyance designs are the universe of appropriate selection criteria for "a reasonable range of alternatives" for BDCP.] There are numerous other sections with which the Tunnels Project must also comply, and which are ignored in the limited policy analysis provided in the RDEIR/SDEIS.</p> <p>A new section in "Project Objectives" introduces a Tunnels Project talking point as an objective: "Improve the ecosystem of the Delta by reducing the adverse effects to certain listed species of diverting water by siting additional intakes of the SWP and coordinated operations with the CVP." [Footnote 292: RDEIR/SDEIS, Section 1.1.4.1, Project Objectives, p. 1-8, lines 32-33.] The objective alleges as fact something that is demonstrably false using RDEIR/SDEIS modeling results and information: Adding north Delta intakes on the lower Sacramento River increases the number of places where adverse impacts of State Water Project diversions will occur, such as reduced critical aquatic habitat, and increased pollutant loads and concentrations, contrary to state and federal endangered species acts and the Delta Reform Act of 2009.</p> <p>The Act declares that "the Sacramento-San Joaquin Delta watershed and California's water infrastructure are in crisis and existing Delta policies are not sustainable." [Footnote 293: Wat. Code [Section] 85001 subd. (a).] The Delta is a critically important natural resource for California and the nation. It serves Californians concurrently as both the hub of the California water system and the most valuable estuary and wetland ecosystem on the west coast of North and South America. [Footnote 294: Wat. Code [Section] 85002.] Populations of many ecologically and commercially important species (which are also public trust resources) declined substantially over the past 15 years. These declines are related, among other factors, to increased diversions of water since 1985.</p> <p>Under the Act, departments of the State of California have the duty to protect public trust resources in the Delta. This includes the California Department of Water Resources. [Footnote 295: California Water Code Sections 85210 and 85023.] The Act's "coequal goals" have a holistic purpose beyond water and ecology: "'Coequal goals' means the two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place." [Footnote 296: California Water Code Section 85054.]</p> <p>The Act states that the public trust doctrine is at the heart of achieving these two coequal goals: "The longstanding constitutional principle of reasonable use and the public trust doctrine shall be the foundation of state water management policy and are particularly important and applicable to the Delta." [Footnote 297: California Water Code Section 85023.] Objectives in the Act also inhere in and flesh out what the coequal goals mean and how water supply reliability is to be understood:</p> <p>"The policy of the State of California is to achieve the following objectives that the Act</p>	<p>Since 2006, the proposed project has been developed based on sound science, data gathered from various agencies and experts over many years, input from agencies, stakeholders and independent scientists, and more than 600 public meetings, working group meetings and stakeholder briefings.</p> <p>DWR's fundamental purpose of the proposed project is to make physical and operational improvements to the SWP system in the Delta necessary to restore and protect ecosystem health, water supplies of the SWP and CVP south of the Delta, and water quality within a stable regulatory framework, consistent with statutory and contractual obligations. By establishing a point of water diversion in the north Delta and new operating criteria to improve water volume, timing, and salinity, the proposed project is designed to improve native fish migratory patterns and allow for greater operational flexibility. Please see Master Response 3 for additional information regarding the purpose and need behind the proposed project.</p> <p>State and Federal agencies developed the modified proposed project (Alternative 4A/California WaterFix) in response to public and agency input. Alternative 4 remains a viable alternative. Alternative 4A reflects the State's proposal to separate the conveyance facility and habitat restoration measures into two separate efforts: California WaterFix and California EcoRestore. The Proposed Action includes habitat restoration as necessary to mitigate significant environmental effects and satisfy applicable ESA and CESA standards.</p> <p>As related to the issue of reducing reliance upon the Delta for water supply, from a Statewide perspective, the water agencies throughout the state have developed portfolios to provide the necessary water for their region. The solution to the State's water problem is multi-faceted and will include multiple actions throughout the state. Ways to reduce demand are in process at this time. Various programs for storage, reuse and added reliability are being evaluated and implemented. Those actions do not provide the entire solution; therefore, the project is being proposed as one of the pieces of the overall program.</p> <p>See Master Response 31 for more information about the Delta Reform Act. The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.</p>

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		<p>declares are inherent in the coequal goals for management of the Delta:</p> <p>(a) Manage the Delta’s water and environmental resources and the water resources of the state over the long term.</p> <p>(b) Protect and enhance the unique cultural, recreational, and agricultural values of the California Delta as an evolving place.</p> <p>(c) Restore the Delta ecosystem, including its fisheries and wildlife, as the heart of a healthy estuary and wetland ecosystem.</p> <p>(d) Promote statewide water conservation, water use efficiency, and sustainable water use.</p> <p>(e) Improve water quality to protect human health and the environment consistent with achieving water quality objectives in the Delta.</p> <p>(f) Improve the water conveyance system and expand statewide water storage.</p> <p>(g) Reduce risks to people, property, and state interests in the Delta by effective emergency preparedness, appropriate land uses, and investments in flood protection.</p> <p>(h) Establish a new governance structure with the authority, responsibility, accountability, scientific support, and adequate and secure funding to achieve these objectives." [Footnote 298: California Water Code Section 85020.]</p> <p>To implement objectives to restore Delta ecosystems and promote statewide water conservation, water use efficiency, and sustainable water use inhering in the coequal goals [Footnote 299: California Water Code Sections 85020 subs. (c-d).], the Act calls for reduced reliance on the Delta for the state’s future water supply needs: "The policy of the State of California is to reduce reliance on the Delta in meeting California’s future water supply needs through a statewide strategy of investing in improved regional supplies, conservation, and water use efficiency. Each region that depends on water from the Delta watershed shall improve its regional self-reliance for water through investment in water use efficiency, water recycling, advanced water technologies, local and regional water supply projects, and improved regional coordination of local and regional water supply efforts." [Footnote 300: California Water Code Section 85021.]</p> <p>The Act finds and declares that the coequal goal of "water supply reliability" in the Act "involves implementation of water use efficiency and conservation projects, wastewater reclamation projects, desalination, and new and improved infrastructure. . . ." [Footnote 301: California Water Code Sections 85054, 85004 subd. (b).] The inherent objective, to which the Tunnels Project proponents refer often to "[i]mprove the water conveyance system" in Water Code [Section] 85020 subd. (f) therefore must conform to achieving the coequal goals, including all of the considerations that the Act says inhere in those goals as well as meet the defining declarations of the Act. [Footnote 302: Ibid.]</p> <p>When the Act’s objectives ("inherent in the coequal goals") and policy declarations for the state and the Delta are taken as a whole (which is how legislation should be read and interpreted), it is evident the Act intends active protection of the Delta’s water, cultural, and environmental resources -- cumulatively, they are about stewardship. To steward, according to the American Heritage Dictionary of the English Language, is to manage, guide, administer, or supervise, often in the care of real property, passengers on a ship or airliner.</p>	

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		<p>More recent meanings of "steward" connote care for the landscape and the environment. The plain meaning of "stewardship" provided by the Act "for the sustainable management of the Sacramento-San Joaquin Delta ecosystem, to provide for a more reliable water supply for the state, to protect and enhance the quality of water supply from the Delta, and to establish a governance structure that will direct efforts across state agencies to develop a legally enforceable Delta Plan." [Footnote 303: California Water Code Section 85001 subd. (c).]</p> <p>While the Tunnels Project aspires to "fundamental, systemic change" for the Delta, it takes no responsibility for and even evinces open hostility to statewide water policy goals that intend that the Delta be protected and sustainably managed as "the most valuable estuary resource" on the west coast of North America. The Tunnels Project severs the coequal goals of the Delta Reform Act and to concentrate state agency effort on water supply reliability at the expense of ecosystem enhancement in the Delta.</p> <p>Merely achieving prevention of "jeopardy" for listed fish species under a new Section 7 biological opinion will not protect and enhance the Delta ecosystem. Jeopardy will be difficult enough to avoid since one purpose of the Tunnels project is "restor[ing] and protect[ing] the ability of the SWP and CVP to deliver up to full contract amounts, when hydrologic conditions result in the availability of sufficient water, consistent with the requirements of state and federal law and the terms and conditions of water delivery contracts held by SWP contractors and certain members of San Luis Delta Mendota Water Authority and other existing applicable agreements." [Footnote 304: RDEIR/SDEIS, Section 1.1.4.2, Purpose and Need, p. 1-9, lines 33-37.]</p> <p>While the RDEIR/SDEIS protests that this purpose of meeting contractual amounts is "not a target," and "not intended to imply that increased quantities of water will be delivered" by the Tunnels Project, this purpose is directly contrary to the Delta Reform Act's mandate for water importers to reduce their reliance on Delta supplies. [Footnote 305: 305 California Water Code Section 85021.]</p>	
2653	125	<p>Last year, the Draft EIR/EIS failed to properly consider what it will take to recover Delta ecosystems and restore fisheries. California Water Code Section 85320 lays out a process through which BDCP would go before the California Department of Fish and Wildlife prior to receiving approval of its natural communities conservation plan and incidental take permit application package and issuance of incidental take permits. Section 85320(b)(2) lists among the special findings CDFW must make: "(A) A reasonable range of flow criteria, rates of diversion, and other operational criteria required to satisfy the criteria for approval of a natural community conservation plan as provided in subdivision (a) of Section 2820 of the Fish and Game Code, and other operational requirements and flows necessary for recovering the Delta ecosystem and restoring fisheries under a reasonable range of hydrologic conditions, which will identify the remaining water available for export and other beneficial uses."</p> <p>The Tunnels Project is no longer eligible for this special process in the Delta Reform Act. It will instead be handled as a covered action by the Delta Stewardship Council, which will evaluate its consistency with the Delta Plan. We [Environmental Water Caucus] believe this will be hard for the Council, since the Delta Plan is currently in litigation over whether the Delta Plan itself complies with the Act. It will also be challenging to determine whether a covered action such as the Tunnels Project could truly be found consistent with the Delta</p>	<p>State and Federal agencies developed the modified proposed project (Alternative 4A/California WaterFix) in response to public and agency input. Alternative 4 remains a viable alternative. Alternative 4A reflects the State's proposal to separate the conveyance facility and habitat restoration measures into two separate efforts: California WaterFix and California EcoRestore. The Proposed Action includes habitat restoration as necessary to mitigate significant environmental effects and satisfy applicable ESA and CESA standards.</p> <p>See Master Response 31 for more information about the Delta Reform Act. No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised.</p>

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		Plan without having to revise the Plan first.	
2653	126	<p>Last year's Draft EIR/EIS failed to properly comply with the Act's co-equal goals. The "co-equal goals" are defined as: "the two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place." [Footnote 307: California Water Code Section 85054.]</p> <p>The Tunnels Project thoroughly unbalances application of the co-equal goals of the Delta Reform Act. It fails to "improve the water conveyance system," as required by Water Code Sections 85020(f). While this section of the Act does not set forth criteria by which "improvements" to the conveyance system of the Delta are to be judged, the Tunnels Project fails to protect, restore and enhance the Delta ecosystem; as we have already pointed out in these comments, it will actively reduce critical habitat for listed fish species, and it will degrade water quality conditions resulting in violations of pollutant criteria or degradations to sensitive beneficial uses of the Bay Delta Estuary. Thus, it cannot be found to "improve the water conveyance system" over what exists in the Delta now or at the future time without the project in the RDEIR/SDEIS's No Action Alternative, since "improvement" must be evaluated under the coequal goals framework of the Act.</p> <p>The Tunnels Project also fails to comply with Water Code Section 85020(g) because it does not consider any Delta levee improvements in its project purpose/objectives. [Footnote 308: Water Code Section 85020(g) which states: "The policy of the State of California is to achieve the following objectives that the Legislature declares are inherent in the coequal goals for management of the Delta: . . . (g) Reduce risks to people, property, and state interests in the Delta by effective emergency preparedness, appropriate land uses, and investments in flood protection."] The RDEIR/SDEIS only considers the Tunnels Project as a means of reducing future impacts to water deliveries from sea level rise and seismic or other levee failure. It does not consider Delta levee improvements as a means of reducing flood risk not only to water conveyance, but also to the people, places and infrastructure of the Delta.</p> <p>Omission of Delta levee improvements flies in the face of the Delta Protection Commission's Economic Sustainability Plan that states that levees can be brought up to PL 84-99 standard to reduce the probability of catastrophic levee failure for \$2 to \$4 billion. To be consistent with Water Code Section 85020(g), BDCP would have to include a goal (and implementing conservation measures and funding assurances) to improve critical Delta levees for both ecosystem restoration and water supply reliability.</p>	<p>For more information regarding the proposed project's compliance with the Delta Reform Act, please see Master Response 31. The proposed project is one part of a diverse portfolio of strategies needed to meet California's overall water management needs. It is not a substitute for increased commitments to other water supply solutions, including recycling, desalination, water conservation and storage. Please see Master Response 4 for additional details on the selection of alternatives. Also, please see Master Response 3 for additional information regarding the purpose and need behind the proposed project.</p> <p>The California Department of Water Resources' Levee Repairs and Floodplain Management Office is responsible for administering levee programs through evaluation and direct rehabilitation of structural deficiencies in California's levee system. Overall levee repairs and improvement programs administered by DWR will continue with available funding.</p>
2653	127	<p>Last year's Draft EIR/EIS failed to comply with Water Code Section 85021. It is state policy to reduce reliance on diversions from the Delta (Water Code Section 85021). However, the project objectives and purpose call for "full contract deliveries" to CVP and SWP contractors. According to U.S. EPA [Footnote 310: See June 2010 letter from USEPA to USBR, NMFS and USFWS. Accessed at <a href="http://www.c-win.org/webfm_send/150">http://www.c-win.org/webfm_send/150</a>.], that volume of water is 7.43 million acre-feet, nearly a million acre-feet more than the maximum amount of water ever diverted from the Delta in a single year. This BDCP outcome would increase, not reduce, reliance on the Delta for imported water. While the federal purpose clarifies that alternatives providing less than full contract deliveries is acceptable, the objective/purpose to work toward meeting full CVP</p>	<p>The Delta Plan is currently the subject of litigation which has arisen since the issuance of the 2015 RDEIR/SDEIR and which could affect the legal requirements and/or implementation of the Delta Plan.</p> <p>Please refer to Master Response 31, Appendix 3I of the 2013 Public Draft BDCP EIR/EIS and Appendix 3J of the Final EIR/EIS for more information regarding compliance with the Delta Reform Act which includes the mandate to reduce reliance on the Delta.</p> <p>More than two-thirds of the residents of the state and more than two million acres of highly productive farm land receive water exported from the Delta watershed. The proposed project aims to provide a more reliable water supply, in a way more protective of fish. However, the lead agencies have no authority to</p>

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		<p>and SWP contract deliveries is clearly an attempt to increase Delta diversions, not reduce them. This fundamental flaw continues in the RDEIR/SDEIS.</p> <p>It should also be noted that in drought years, the Bureau and DWR habitually petition the State Water Resources Control Board to have Delta water quality standards waived on vague grounds of protecting "health and safety" for their contractors. The Board has yet to refuse these requests, in defiance of legal due process of all other interested parties, and there is no reason to think that the operational criteria modeled in the Draft EIR/EIS and for the RDEIR/SDEIS [Footnote 311: RDEIR/SDEIS, Section 4.1, Table 4.1.1-2.] would change this propensity to request temporary urgency changes that the Board grants with impunity. In any event, BDCP modeling and expected reliance on "real-time operations" will continue and expand reliance on the Delta for exports.</p> <p>By definition of the project's purpose, need, and design of each of the alternatives, the Tunnels Project violates California Water Code Section 85021, which requires reduced reliance on the Delta for future water supplies among those already depending on Delta imports. The project's operational goals focus on increasing reliance on the Delta for North Delta Intake diversions during wet and above normal years, while continuing emphasis on South Delta diversions for export in all other water years. [Footnote 312: Bay Delta Conservation Plan EIR/EIS, Chapter 5, Water Supply, Figures 5-22 (wet years) and 5-23 (dry years).] Moreover, the Tunnels Project's unacknowledged purpose of increasing the reliability of market-based cross-Delta water transfers is also contrary to Water Code Section 85021.</p> <p>Tunnels Project proponents fail to demonstrate in the RDEIR/SDEIS what they have done locally and regionally to decrease their reliance on Delta imports/exports and to justify each of their needs for the Tunnels Project. The Tunnels Project proponents' obsessive focus on full contract deliveries and north Delta diversions to the Tunnels Project come at exclusion of other potential actions. The coequal goals of the 2009 Delta Reform Act can be met by other activities less disruptive to the Delta such as levee improvements, increased Delta outflows and regional self-reliance for water through investment in water use efficiency, water recycling, advanced water technologies, local and regional water supply projects, and improved regional coordination of local and regional water supply efforts. But no such actions are analyzed as reasonable alternatives in the RDEIR/SDEIS.</p> <p>The Tunnels Project RDEIR/SDEIS fails to specify how the preferred alternative would comply with Water Code Section 85086(c)(2) of the Delta Reform Act. This section requires the State Water Resources Control Board to include "appropriate flow criteria" in its order on the Tunnels Project's change petition. These criteria "shall be informed by the analysis conducted pursuant to [Water Code Section 85086(c)(1)]" -- meaning the Board's Delta Flow Criteria report of August 2010. The RDEIR/SDEIS also fails to mention and analyze the need to incorporate continued compliance with this requirement over time through an adaptive management-based program integrating science and monitoring results into ongoing Delta water management.</p>	<p>designate what water is used for.</p> <p>One of the State Water Resources Control Board's (State Water Board's) charges is to ensure that the State's water is put to the best possible use and that this use is in the best interest of the California public. This charge is reflected in part by the designation of beneficial uses established through the State Water Board's planning process. These beneficial uses are identified in each Water Quality Control Plan (Basin Plan) issued by the State Water Board.</p> <p>The Lead Agencies have no power to impose penalties on individual water users. DWR and Reclamation have contracts with various entities, some of which sell water to water retailers, who have individual policies and programs to motivate ratepayers to conserve water. Different districts have the right to take different approaches depending on their individual circumstances.</p> <p>For additional information regarding beneficial use of water, please see master response 34.</p> <p>The project does not increase the amount of water to which DWR holds water rights or for use as allowed under its contracts. See Master Response 3 (Purpose and Need), Master Response 26 (Area of Origin), and Master Response 35 (MWD Water Supply).</p>
2653	128	<p>The RDEIR/SDEIS fails to demonstrate how the Tunnels Project complies with the Reasonable Use and Public Trust Doctrines, mentioned in Water Code Section 85023, which states that these doctrines are "particularly important and applicable in the Delta." The EWC [Environmental Water Caucus] has located no analysis in the RDEIR/SDEIS that evaluate the proposed/preferred alternative from the standpoint of its compliance with Article X, Section 2 of the California Constitution, or of its compliance with the Public Trust doctrine.</p>	<p>For information on public trust, please see Master Response 13.</p>

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		Evaluation of this action is required by Water Code Section 85023 (which merely states existing law applicable throughout California) to demonstrate this compliance.	
2653	129	<p>The RDEIR/SDEIS fails to demonstrate compliance with Water Code Section 85031(a), specifically area of origin laws and doctrines that apply to the Delta. This section of the California Water Code requires that actions contemplated under the Delta Reform Act comply with area of origins water rights statutes. The RDEIR/SDEIS fails to demonstrate through its modeling results or any other analysis that it complies with Water Code Sections 12200-12205 (the Delta Protection Act of 1959). Delta outflow is reported by the RDEIR/SDEIS to decrease while residence times of water in the Delta increase. In-Delta salinity levels are projected by the RDEIR/SDEIS to increase which will reduce the quality of water for in-Delta agricultural uses for irrigation and the beneficial uses enjoyed by environmental justice communities whose members rely on subsistence fishing in the Delta for a significant portion of their diet and nutrition. Interior Suisun Marsh salinity is expected to increase substantially from Tunnels operation, according to data in the RDEIR/SDEIS (Figure 12 [ATT16]).</p> <p>Reverse flows on the lower Sacramento River will increase, which may injure neighboring water right holders and put vulnerable listed and other fish at risk of entrainment and death at the north Delta intakes. Numerous water quality pollutant criteria and beneficial uses will be violated and degraded. And subsistence fishers may be harmed by worsening mercury and selenium concentrations contaminating fish tissues in the long term, resulting from Tunnels operations. The RDEIR/SDEIS has conducted no analysis of in-Delta water demand and subsistence fishing patterns represented by these beneficial uses when it conducts its operational studies of the Tunnels Project. These uses are protected by, among other statutes, the Delta Protection Act of 1959.</p>	<p>Please refer to Master Response 14. Additional detail related to microcystis (due to longer residence times of water) and mercury and selenium related to subsistence fishing has been added to Chapter 28, Environmental Justice. Please also see Master Response 11 regarding local jurisdiction plans and policies, such as the Delta Protection Act. As described under each alternative in Chapter 28 for Impact PH-3, the associated increase in human consumption of mercury caused by the action alternatives would depend upon the selection of the fishing location (and associated local fish body burdens), and the relative proportion of different Delta fish consumed. Different fish species would suffer bioaccumulation at different rates associated with the specific species, therefore the specific spectrum of fish consumed by a population would determine the effect of increased mercury body burdens in individual fish species. These confounding factors make demonstration of precise impacts on human populations infeasible. However, because minority populations are known to practice subsistence fishing and consume fish exceeding US EPA reference doses, any increase in the fish body burden of mercury may contribute to an existing adverse effect. Because subsistence fishing may specifically associated with minority populations in the Delta compared to the population at large this effect would be disproportionate on those populations. This effect may be adverse.</p>
2653	130	<p>The RDEIR/SDEIS fails to identify the role of the Delta common pool in shaping the experiences of environmental justice communities and the informal ways in which they make use of Delta habitat, fish, and other resources for their subsistence and recreation. They are beneficial users of water via the common pool and its public trust resources. The California Department of Water Resources recognizes the Delta common pool for purposes of analyzing and regulating water transfers. [Footnote 313: California Department of Water Resources, op. cit., footnote 27, above, p. 3.]</p> <p>The EWC [Environmental Water Caucus] described the relevance of the 1959 Delta Protection Act to the water policy framework that governs projects like the Tunnels Project. [Footnote 314: EWC Comment Letter, June 11, 2014, pp. 124-125.] We further linked Delta Protection Act concerns to environmental justice by virtue of the fact that the Act treats protection of Delta "users" which includes, in our view, not just lawful water diverters residing in the Delta, but all beneficial users of water, human and non-human.</p>	<p>Additional detail related to microcystis and mercury related to subsistence fishing has been added to Chapter 28, Environmental Justice. Please see Master Response 11 regarding local jurisdiction plans and policies, such as the Delta Protection Act. Please also refer to Master Response 14.</p>
2653	131	<p>The RDEIR/SDEIS fails to comply with Water Code Section 1700, et seq. Last year, we [Environmental Water Caucus (EWC)] commented on Conservation Measure 21 (addressing non-project in-Delta diversions through "remediation" or removal of land owners' diversions. This was partly about fish screen installation, but it was also about eliminating competing diversions about which the Bureau and DWR complained to the State Water Resources Control Board last summer. [Footnote 315: Letter of Mark Cowin, Director, California Department of Water Resources and David Murillo, Regional Director, US Bureau of Reclamation, to Barbara Evoy, Chief, Division of Water Rights, State Water Resources</p>	<p>Numerous comments were received that focused on various elements of the BDCP. Where the comments focused on elements of the BDCP that overlap with the elements of Alternatives 2D, 4A, or 5A (e.g., CM1 as it comprises of the North Delta Diversions, tunnels, and supporting facilities), specific responses are presented. Where comments raised issues as to whether the BDCP and other HCP/NCCP alternatives in the 2013 Draft EIR/EIS were potentially feasible and could function as an alternative for purposes of meeting CEQA and NEPA's requirements to analyze a reasonable range of alternatives to the proposed project (e.g., issues regarding the BDCP Effects Analysis or financial feasibility), responses are presented generally in Master Response 5.</p>

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		<p>Control Board, July 23, 2014. Accessible online at <a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/complaints/docs/072314_dwr_reclam_s_and_c_Deltadiversions.pdf">http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/complaints/docs/072314_dwr_reclam_s_and_c_Deltadiversions.pdf</a>.]</p> <p>This led to a sequence of water rights complaints, charges, counter-charges, and counter-complaints from interested parties who use or divert water in and from the Bay-Delta Estuary. [Footnote 316: Various respondents' letters accessible online at <a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/complaints/index.shtml">http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/complaints/index.shtml</a>.] Subsequent to these letters, SWRCB issued notices seeking additional information about water rights and how better to enforce the state's priority system of allocating water during drought conditions in the Delta, the Sacramento Valley and the San Joaquin Valley. [Footnote 317: The Board issued its notice of public workshop on September 5, 2014, its notice of solicitation on September 10, 2014, and its final order on February 4, 2015. Accessible online at <a href="http://www.swrcb.ca.gov/waterrights/board_decisions/adopted_orders/orders/2015/wro2015_0002.pdf">http://www.swrcb.ca.gov/waterrights/board_decisions/adopted_orders/orders/2015/wro2015_0002.pdf</a>.] SWRCB issued an order requiring all water right claimants in the Central Valley watershed of the Delta to disclose and document water right claims and report their claims and usage plans during 2015. The Board subsequently prepared a database of all the information they received from the solicitation. Using the database, the Board prepared and released demand curves from which it determined water availability for the Central Valley during 2015. On April 23 and May 1, 2015, the Board issued curtailment notices to all post-1914 appropriative water rights in the Sacramento and San Joaquin River watersheds, inclusive of the Delta, due to insufficient projected water supplies. On June 12, 2015, the Board updated its curtailments of diversion activity, based on updated water supply projections from the Department of Water Resources in early May, to include water right claimants with a priority date back to 1903 and later.</p> <p>The Board failed to act timely on CSPA [California Sportfishing Protection Alliance]'s complaint, which alleged "unauthorized and illegal diversions of water by DWR and USBR at their Delta pumping facilities, a complaint against USBR and others for unauthorized and illegal diversion of San Joaquin River riparian flow and a petition to the State Water Board to initiate on its own motion, an adjudication of Central Valley water rights." [Footnote 318: Accessible online at <a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/complaints/docs/081314_cspa_evoy.pdf">http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_Delta/complaints/docs/081314_cspa_evoy.pdf</a>.] In responding to the Board's notice requesting information for its September 24, 2014, public workshop, CSPA set forth several analytic and evidentiary tasks that EWC agrees are also important for full documentation and feasibility determinations for the Tunnels Project. These tasks include measuring:</p> <ul style="list-style-type: none"> <li>-Actual Delta outflow as opposed to the Net Delta Outflow Index (NDOI) relied upon by the Board. The NDOI is a calculated guesstimate and seriously over states Delta outflow during drier periods as compared to the tidally filtered flow data collected by the U.S. Geological Survey (USGS) stream flow gages at Rio Vista, Three Mile Slough, Jersey Point and Dutch Slough. The USGS data correlates with salinity changes and the NDOI doesn't. For example, while the NDOI reported average Delta outflow as 3,805 cubic feet-per-second (cfs) during May 2014, the USGS gages reported that actual Delta outflow was a negative 45 cfs.</li> <li>-Actual natural inflow as opposed to the calculated guesstimates of "Full Natural Flow" at rim dams the Board has historically relied upon. The Board has never required the comprehensive "gaging" of natural flows. Natural springs in the Sacramento and Feather</li> </ul>	<p>Please see Master Response 47 for information on drought operations and the proposed project.</p> <p>The proposed project would not affect upstream water rights. It aims to allow the federal and state water projects to deliver more reliable water supplies, in a way less harmful to fish. The project does not increase the amount of water to which DWR holds water rights or for use as allowed under its contracts. The CALSIM II modeling performed for conveyance facility operations takes into account projected future demand for water supply in areas upstream of the Delta (as part of the future No Action baseline) prior to calculating Proposed Project diversion estimates to ensure that no area-of-origin protections or upstream water rights are affected by project conveyance facilities. Please see Appendix 5A of the FEIR/FEIS for additional modeling details. Please see Master Response 26 regarding water resources in northern California.</p> <p>The State Water Resources Control Board, not DWR, is responsible for decisions relating to water rights. DWR holds water rights approved by the State Water Resources Control Board but does not have the power or authority to issue water rights to others. Additionally, the proposed project does not seek any new water rights nor include any regulatory actions that would affect water rights holders other than DWR, Reclamation, and SWP and CVP contractors.</p> <p>Please refer to Master Response re: Water Rights.</p> <p>Importantly, all water exported by the SWP and CVP is the subject of the existing water rights of those two agencies. Exports do not come at the expense of other water rights holders. The proposed project and its alternatives analyzed in the EIR/EIS only include the use of water from existing SWP and CVP water rights or voluntary water transfers from other water rights holders. The proposed project and its alternatives do not reduce the protections for other water right holders.</p> <p>Please see Master Response 1 regarding baselines and Master Response 14 regarding the water quality.</p> <p>Operations of the conveyance facilities are not expected to result in a substantial decrease or increase in Delta surface water levels. See Appendix 5A, Section C, CALSIM II and DSM2 Modeling Results, EIR/EIS and RDEIR/SDEIS, for more information. Section C reports changes in the monthly averaged daily minimum elevation of the Sacramento River at Freeport (see Section C tables). Results for each alternative are presented by month, probability of exceedance, and by water year type. Results are also presented in comparison to Existing Conditions and the No Action Alternative. The modeling results for the future No Action Alternative indicate that water levels may continue to change as climate change occurs within the Delta.</p> <p>The Lead Agencies have done their best to make the EIR/EIS for the proposed project as fair, objective, and complete as possible. The Lead Agencies are following the appropriate legal process and are complying with CEQA and NEPA in preparing the EIR/EIS for the proposed project. The lead agencies believe that the modeling conducted for the EIR/EIS analysis is sufficient for assessing potential impacts and has disclosed those impacts in the 2013 Draft EIR/EIS and 2014 RDEIR/SDEIS as required by CEQA and NEPA. These agencies readily acknowledge, however, that the document addresses a number of topics for which some scientific uncertainty exists. Such uncertainty can give rise to differing opinions as to what conclusions may be reached.</p>

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		<p>River watersheds provide millions of acre-feet (AF) of flow throughout the year, even in summer. DWR/USBR have no storage rights for these artesian flows that are commingled in upstream reservoirs when downstream riparian and appropriate demands exist.</p> <p>-Actual accretions of water to the Delta and reaches of streams tributary to the Delta, including return flows, discharges and other inputs, as opposed to the calculated guesstimates of accretions the Board has historically relied upon. For example, return flows from the Colusa Basin Drain at Knights Landing, Butte Creek/Butte Slough/Sacramento Slough and the Natomas Basin Cross Canal are unknown because of an absence of flow gages. All accretions, whether from return flows, discharges from wastewater treatment facilities, groundwater, etc. are subject to the water rights priority system.</p> <p>-Actual channel losses in the Delta and reaches of streams tributary to the Delta, as opposed to the calculated guesstimates historically relied upon by the Board. For example, the Board must identify and quantify losing reaches of streams tributary to the Delta and make an effort to identify the causes. Are losing reaches of streams the result of illegal diversions or adjacent pumping of groundwater for local use or substitution for water transferred via project facilities?</p> <p>-The "abandoned water" in the Delta and the legal rights to it in accordance to the priority system. Riparian and return flows, accretions and compliance flows that reach the Delta are considered "abandoned" flow when the Delta is in balance. The rights to abandoned water by DWR/USBR must be in accordance with the rights of senior appropriators.</p> <p>-Commingled water from all sources that are drawn from the Sacramento watershed into the San Joaquin watershed, as the result of export pumping by the state and federal projects. By statute and precedent, it is the responsibility of the party causing a commingling of water from one watershed to another to ensure that the water rights of existing parties is not diminished or impaired. The Board must determine whether in-Delta diverters are actually taking stored Project water, whether the Projects are storing water they're not entitled to store and whether the Projects commingling of water is adversely impacting the right of Delta water users from exercising their legal entitlements.</p> <p>In sum, CSPA concluded, the Board must determine, among other things: whether DWR and USBR have legal rights to all of the water they claim or have stored; whether the flows Delta diverters are accused of improperly taking actually reach the Delta; whether the Project's operations and commingling of water have deprived Delta water users of entitled water supplies; whether Delta diverters are entitled to tidal flows in a common Delta Pool and whether DWR and USBR are claiming abandoned water that is instead subject to the priority system. The Board cannot credibly make the necessary findings based solely on information regarding Delta water rights and diversions requested in the Draft Order.</p> <p>The issues of commingled waters in a Delta common pool and the legal problems it poses for the Board is also critical to the future of the Bay-Delta Estuary region. Once acted upon, the common pool concept would provide meaningful definition of Delta common pool rights and uses. It would have the added benefit of supplementing establishment of the legal Delta in 1959 as a territorial definition of the Estuary's region. In the absence of defining, legalizing and governing a Delta common pool as a sustainable commons, Delta exports will themselves come under greater, not less suspicion of illegal diversions.</p> <p>The RDEIR/SDEIS presents modeling results that indicate changes in the source water that</p>	

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		<p>would be obtained for export pumping by the Tunnels Project from the Delta common pool. We have shown the expected negative water quality effects this pattern of Tunnels diversion and rediversion will cause. Source fingerprint modeling in the RDEIR/SDEIS shows that Banks and Jones pumping plants will continue exporting some San Joaquin River water. Unfortunately, the RDEIR/SDEIS fails to present modeling results in a sufficient level of detail to evaluate CSPA's August 13, 2014, allegations concerning the Mokelumne, Calaveras, and Cosumnes River fractions that Tunnels Project operations may involve. [Footnote 319: RDEIR/SDEIS, Appendix B, Figures B.4-19 through -22, B.4-41 through -44, and B.4-63 through -66.]</p> <p>These water rights issues are not addressed in the RDEIR/SDEIS and their omission from baseline and setting analyses means the impacts of the project on in-Delta and export service area water supplies are not adequately disclosed and analyzed.</p>	
2653	132	<p>The Tunnels Project would violate the federal Clean Water Act: First, flow effects would violate existing inadequate flow objectives. Second, increases in concentrations of criteria pollutants would degrade water quality and violate existing bromide, selenium dissolved organic carbon, and mercury criteria. Third, RDEIR/SDEIS modeling results indicate reduced survival rates for juvenile salmon under conditions of Tunnel Project operations, which demonstrates failure to protect at least three key beneficial uses (rare and threatened species, migratory uses, and estuarine habitat). These uses are the most sensitive in the Bay-Delta Estuary. Degradation of these beneficial uses threaten further impacts to in-Delta drinking water quality and environmental injustices associated with recreational beneficial uses.</p> <p>There are no designated beneficial uses or criteria set to benefit export water quality in the Bay-Delta Estuary. The privileging of Delta export water quality and water usage over in-Delta beneficial uses and pollutant criteria compliance parallels the Tunnels Project's efforts to boost junior water rights over senior water diverters in the Delta. We [Environmental Water Caucus] find improved export water quality promised by the Tunnels Project to south-of-Delta importers coming at the expense of legal beneficial uses, environmental justice communities, and public health as a result of the proposed Tunnels Project. The RDEIR/SDEIS fails utterly to disclose these failures and unlawful outcomes.</p>	<p>The commenter raises concerns regarding degradation of water quality in the Delta due to implementation of the proposed project. The constituents identified in the comment were assessed in detail in Chapter 8, Water Quality, of the EIR/EIS relative to thresholds of significance that included address of degradation and impacts to beneficial uses. Of the constituents noted in the comment, only electrical conductivity (a salinity-related parameter) was identified as significant for the preferred alternative, Alternative 4A, due to degradation (Impact WQ-11), and mitigation was provided to reduce that impact to less than significant level (Mitigation Measure WQ-11).</p> <p>The proposed project relies on obtaining authorization from the SWRCB for new SWP points of diversion in the north Delta. The changes being sought do not include any changes to increase existing water rights or seek out new water rights. Importantly, all water exported by the SWP and CVP is subject of the exiting water rights of those two agencies. Exports do not come at the expense of other water rights holders. Please see Master Response 26 and 32 for more information on changes in Delta exports and existing water rights.</p>
2653	133	<p>The Tunnels Project would be contrary to Article X, Section 2 of the California Constitution and California Water Code Section 100 because it violates:</p> <ul style="list-style-type: none"> <li>-Various sections of the Delta Reform Act of 2009.</li> <li>-State and federal clean water legislation and regulation.</li> <li>-California Water Code's no injury rule and unlawful diversion rules.</li> <li>-Ecological and funding assurance requirements of the state and federal ESAs and state NCCPA [Natural Communities Conservation Planning Act].</li> <li>-The Delta Protection Act of 1959 -- the Delta's area-of-origin water rights.</li> </ul>	<p>The proposed project was developed to meet the rigorous standards of the Clean Water Act and federal and state Endangered Species Acts, the proposed project is intended to be environmentally beneficial, not detrimental.</p> <p>Alternative 4A reflects the State's proposal to separate the conveyance facility and habitat restoration measures into two separate efforts: California WaterFix and California EcoRestore. The Proposed Action includes habitat restoration as necessary to mitigate significant environmental effects and satisfy applicable ESA and CESA standards.</p> <p>See Appendix G of the RDEIR/SEIS and Master Response 31 related to consistency with the Delta Reform Act.</p> <p>The project will be required to obtain all required permitting prior to implementation; therefore, the project must be found consistent with those regulations.</p> <p>The project is not proposing an HCP or NCCPA; therefore, the funding comment is not relevant.</p>

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			The commenter has made unsubstantiated claims of illegality.
2653	134	The Tunnels Project violates the Public Trust Doctrine. The Tunnels Project would further divert and degrade the Delta common pool thereby violating the rights of environmental justice communities to continue fishing in locations that would be altered and enclosed by BDCP facilities and restoration projects. The presence of the common water and estuary pool in the Delta makes it subject to regulation under the Public Trust Doctrine. The state of California has a fiduciary responsibility to protect such common pool resources in common for the people of California.	<p>The comment refers to the Public Trust Doctrine and fishing by environmental justice communities. Under preferred Alternative 4A, construction of the water conveyance facilities would not result in a long-term adverse effect on fishing opportunities because the effects would be limited to construction sites and would not limit fishing opportunities occurring in other parts of the Delta. Several mitigation measures (listed in Section 4.3.11 of the RDEIR/SEIS) would help reduce or avoid impacts on recreational fishing occurring at construction sites.</p> <p>The proposed project was developed to meet the rigorous standards of the Clean Water Act and federal and state Endangered Species Acts; as such it is intended to be environmentally beneficial. By establishing a point of water diversion in the north Delta and new operating criteria to improve water volume, timing, and salinity, the proposed project is designed to improve native fish migratory patterns and allow for greater operational flexibility.</p> <p>The overall recreation experience for boaters or fishermen in the vicinity of intake construction areas would be reduced during construction activities because of the elevated noise levels as well as visual setting disruptions. These temporary construction-related effects would last for up to 5 years in the vicinity of intake and barge unloading facilities and could alter fish populations such that recreational fishing opportunities in the study area would be affected. Weekday construction would reduce the amount of fish and other wildlife in recreation areas in the vicinity of the intakes, resulting in decreased recreation opportunities related to wildlife and fish, causing recreationists to experience a changed recreation setting. Chapter 15 describes potential impacts on on-water recreation and fishing. Mitigation Measures would reduce impacts on marine navigation by developing and implementing site-specific construction traffic management plans; installing visual barriers between construction work areas and sensitive receptors; applying aesthetic design treatments to all structures; and employing noise-reducing construction practices. The potential impact on covered and non-covered sport fish species from construction activities would be considered less than significant because the proposed project would include environmental commitments (Appendix 3B). Mitigation Measures would also be available to reduce construction-related underwater noise and pile driving effects, to initiate a complaint/response program, and to provide alternative bank fishing access sites.</p>
2653	135	<p>Cumulative impacts are not adequately analyzed in the RDEIR/SDEIS. Last year, EWC [Environmental Water Caucus] commented that the Draft EIR/EIS improperly excluded many programs and well-known storage projects from its list of projects considered for cumulative impact analysis of the Bay Delta Conservation Plan. We provided a list of projects, programs and other actions omitted from the Draft EIR/EIS cumulative impact analysis. (That is, they were included in the report's list of cumulative projects, but were excluded from modeling and narrative analysis of cumulative impacts.) No explanations were provided for their exclusion. We found it implausible that BDCP's justification of itself as a "stand-alone project" extended to storage projects, restoration plan and recent levee studies. We concluded that the Draft EIR/EIS was deficient in fully disclosing reasonably expected cumulative projects and their cumulative impacts in relation to BDCP and that the Draft EIR/EIS needed revision and recirculation. [Footnote 320: EWC Comments, June 11, 2014, pp. 220-225.]</p> <p>This year, with the severing of the habitat conservation plan from the Tunnels Project, the question arises of the relationship of California EcoRestore to baseline and cumulative impact considerations under CEQA and NEPA. The RDEIR/SDEIS does not confront these problems. The problems are:</p>	<p>Section 5 of the RDEIR/SDEIS presents the cumulative effects analysis for 23 resource topics in one succinct section. This analysis also included updating and expanding the list of cumulative projects considered in this analysis. The California EcoRestore Program is analyzed in RDEIR/SDEIS revised analyses. For comments related to the method and level of detail for the RDEIR/SDEIS, please see Section 5 of the RDEIR/SDEIS, which describes the approach to cumulative analyses and the cumulative impact analyses contained in Chapters 5 -27 in this Final EIR/EIS. For additional discussion of cumulative impacts, please see Master Response 9.</p> <p>For information regarding the No Action Alternative and CEQA baseline, please see Master Responses 1, regarding the environmental baseline.</p> <p>Please also see Master Response 8, Analysis of the Project as a Whole.</p>

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		<p>-There continues to be no single, unified section in the RDEIR/SDEIS that addresses cumulative impacts adequately and clearly.</p> <p>-The CEQA baseline does not contain BDCP-scaled habitat restoration measures, and therefore there needs to be a CEQA cumulative impacts analysis that includes California EcoRestore as part of the reasonably foreseeable cumulative projects that get analyzed.</p> <p>-The NEPA baseline (the No Action Alternative) is claimed by the RDEIR/SDEIS to contain California EcoRestore projects spun off from BDCP like the Yolo Bypass Salmonid Habitat Restoration and Fish Passage Implementation Plan, which was originally part of the 2009 NMFS salmon biological opinion. There is no quantified demonstration of this. The No Action Alternative's modeling is a black box in the RDEIR/SDEIS. Yet this project is not separately identified in the RDEIR/SDEIS's Appendix 3D in which projects are listed and indication is given as to where in the existing conditions, no action alternative, and cumulative impacts analysis the project was analyzed.</p> <p>Such problems of presentation and analysis contribute greatly to our feeling that the RDEIR/SDEIS relies on obfuscation and confusion to create an elaborate shell game about the impacts of the Tunnels Project. There is no attempt to clearly and succinctly sort out and distinguish among the various assumptions that have gone into the RDEIR/SDEIS's changes to baseline, No Action Alternative, and cumulative impacts analysis. Discussion of baseline and no action alternative assumptions are analyzed mainly in Sections 4.1 and 4.2 and no analysis of cumulative impacts is provided anywhere in Sections 1 through 5 of the RDEIR/SDEIS, while Appendix A contains just the extensive, revised compendium of Attachment 3D-A in Appendix 3D. No explanation or clarification is provided to guide readers through the underlying array of projects. This is an inadequate treatment of cumulative impacts and the RDEIR/SDEIS should be revised to correct this deficiency and then recirculated.</p> <p>This year, we also find that the Tunnels Project must not be considered a stand-alone project. DWR and the Bureau recently concluded public review and comment period on its latest Draft EIS for Coordinated Long-Term Operations of the Central Valley Project and the State Water Project. [Footnote 321: US Bureau of Reclamation and California Department of Water Resources, Draft Environmental Impact Statement/Draft Environmental Impact Report, Coordinated Long-Term Operation of the Central Valley Project and the State Water Project, released July 31, 2015 Accessible online at <a href="http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=21883">http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=21883</a>. See comments on this document by Friends of the River, September 29, 2015; AquAlliance, September 29, 2015, and by California Water Impact Network and California Sportfishing Protection Alliance, September 29, 2015; and Environmental Water Caucus, accessible online at <a href="http://calsport.org/news/wp-content/uploads/Final-Draft-Comments-on-OCAP-Remand-DEI-S-9-18-15.pdf">http://calsport.org/news/wp-content/uploads/Final-Draft-Comments-on-OCAP-Remand-DEI-S-9-18-15.pdf</a>.] Earlier in 2015, the San Luis Delta Mendota Water Authority (SLDMWA) and the U.S. Bureau of Reclamation ran a public review process on a long-term 10-year water transfer program for cross-Delta water transfers. [Footnote 322: U.S. Bureau of Reclamation and San Luis Delta Mendota Water Authority, Long-term Water Transfers, Environmental Impact Statement/Environmental Impact Report, Public Draft, released May 1, 2015, accessible at <a href="http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=18361">http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=18361</a>. See AquAlliance media release on its decision to litigate this document, accessible at <a 273="" 42="" 920="" 953"="" data-label="Page-Footer" href="http://www.aqualliance.net/ground-water-&lt;/a&gt;&lt;/p&gt; &lt;/td&gt; &lt;td&gt;&lt;/td&gt; &lt;/tr&gt; &lt;/tbody&gt; &lt;/table&gt; &lt;/div&gt; &lt;div data-bbox="> <p>Bay Delta Conservation Plan/California WaterFix Final EIR/EIS—Comments and Responses to Comments</p> </a></p>	

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		<p>issues/lawsuit-filed-against-10-year-water-transfer-program/.]</p> <p>Neither of these other review processes were referenced in the Tunnels Project RDEIR/SDEIS, even though both of them bear on the presumed need for and impacts of the Tunnels Project in both practical and cumulative ways. The OCAP [Operations Criteria and Plan] is integral to review and evaluation of the Tunnels Project because there would not be a Tunnels Project without the state and federal water systems into which it would be integrated. And, as we have argued, a key but unacknowledged purpose of the Tunnels Project is to facilitate the very water transfers program that was evaluated earlier this year by SLDMWA and the Bureau. OCAP and the long-term water transfer program are reasonable and foreseeable, and neither is analyzed in the Tunnels Project RDEIR/SDEIS. Each were reasonable and foreseeable projects in February 2009 as well, since coordinated long-term operation of the state and federal water systems had been in the works since at least 1986 (with passage of the Coordinated Operations Act mentioned above) or 2000 (when the CalFED Record of Decision was signed), and the water transfer program since at least 1991 when the first Drought Water Bank was organized to address drought conditions in California through use of water transfers. The RDEIR/SDEIS is inadequate in its treatment of these projects for cumulative impact analysis, and should be revised to correct this deficiency and then recirculated.</p>	
2653	136	<p>Army Corps Permitting:</p> <p>The Tunnels Project must obtain 404 permits concerning discharge and disposal of dredged or fill material into the navigable waters of the United States. In addition, the Tunnels Project must obtain permits under the Rivers and Harbors Act Sections 10 and 14 concerning potential alterations in, under or over navigable waters, and to flood control projects and other federal engineered water ways -- in the Tunnels Project case, the Sacramento and San Joaquin River flood control projects' levee systems and the Stockton Deep Water Ship Channel.</p> <p>The EWC [Environmental Water Caucus] objects strenuously to the Tunnels Project receiving a 404 permit. In order to obtain a 404 permit, the project in its entirety must receive a 401 water quality certification from the State Water Resources Control Board. We argue from modeling results in the RDEIR/SDEIS that the Tunnels Project will degrade Delta water ways with a variety of pollutants, reduce fresh water flows further than they already have been through the western and central Delta, increase residence times, increase the overall share of polluted water in the Delta, and violate existing water quality objectives and criteria for still other pollutants. Migratory and rare and endangered fish beneficial uses, as well as estuarine habitat beneficial uses will be degraded as a result, a further violation of the federal Clean Water Act. We believe it would be arbitrary and capricious -- an abuse of agency discretion -- for the State Water Board to issue a 401 certification for the Tunnels Project.</p> <p>But should the Board make that determination anyway, we feel compelled to object to issuance of the 404 permit on other environmental grounds. We note that data provided on Tunnels Project impacts to waters of the United States in Appendix E of the RDEIR/SDEIS is anticipated to involve</p> <p>595.3 acres of "impact acreages" facing permanent impacts, another 179 acres of temporarily impacted acreage to be treated as permanent (and therefore compensated through No Net Loss policy) and a total of 1,931 acres of temporary impact acreage. Total</p>	<p>The California WaterFix is in the process of seeking both Section 401 certification and Section 404 permit. The State Water Resources Control Board and U.S. Army Corps of Engineers (USACE), respectively, will decide whether to grant them to the project. If the USACE requests additional information regarding impacts acreages, the lead agencies will provide it. Please see Master Response 45, Permitting.</p>

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		<p>permanently impacted acreage is reported by the Corps of Engineers' description at its web site concerning the Tunnels Project proponents' 404 permit application as 284.03 acres and 490.98 acres of non-wetland waters. It is unclear how these two methods of accounting for permanent versus temporary impacts with wetland and non-wetland water bodies given what is found in Appendix E.</p>	
2653	137	<p>The RDEIR/SDEIS fails to disclose the location or resource description of those water bodies in relation to project features. The Clean Water Act 404 program requires that the Least Environmental Damaging Project Alternative (LEDPA) be identified. The RDEIR/SDEIS fails to disclose which, if any, of the alternatives (or any of those from the Draft EIR/EIS last year) is or should be considered the LEDPA.</p> <p>The RDEIR/SDEIS, as we [Environmental Water Caucus (EWC)] pointed out earlier in these comments, incorporates no findings of jeopardy/no jeopardy to listed species, reasonable and prudent alternatives, or incidental take statement and so is incomplete and therefore inadequate for evaluating dredge and fill permit application information and water quality certification needs.</p> <p>EWC incorporates by reference in these comments and supports the contentions of Local Agencies of the North Delta (LAND)'s recent letter to the Corps of Engineers:</p> <ul style="list-style-type: none"> <li>-The Tunnels Project would at a minimum result in changes to water levels, flow patterns and associated tides in relation to levee elevations;</li> <li>-Increase salinity in the north Delta;</li> <li>-Impair flood management operations of local reclamation districts;</li> <li>-Interfere with water and land-based recreation along Delta water ways intersected by the Tunnels Project's alignment and surface facility element;</li> <li>-Destroy cultural resources, and imperil state and federally listed plant and wildlife species. [Footnote 323: Letter of Osha R. Meserve, representing Local Agencies of the North Delta, to Michael S. Jewell, Chief, Regulatory Branch, US Army Corps of Engineers, Sacramento District, Comments on Department of Water Resources' 2015 California WaterFix Project Section 404/10 Application, September 24, 2015, p. 2.]</li> </ul> <p>Moreover, LAND notes that the application was incomplete and had not received benefit of an officially authorized signature. In addition, wetland delineations included in the application were apparently mapped remotely and figures included in the application were completed without authorization for entry by landowners that would be affected by these delineations.</p> <p>According to the Delta Independent Science Board's September 30, 2015, final review, the RDEIR/ SDEIS fails to clearly state the sequence and provide detail of wetlands delineation for a 404 permit application: avoid wetland loss, because it is easier to protect existing wetlands than it is to produce successful new ones; if loss cannot be avoided, the minimize its loss through project siting and design; and finally, if loss cannot be minimized sufficiently, then plan for and provide compensation of wetlands (the No Net Loss policy). [Footnote 324: Delta Independent Science Board, Review of environmental documents for California WaterFix, September 30, 2015, p. 6. Accessible online at</p>	<p>The identification of the Least Environmental Damaging Project Alternative will be determined by USACE following submittal by DWR to USACE information regarding practicable alternatives for the entirety of the conveyance project, pursuant to Section 404(b)(1) Guidelines, as described in Appendix E of the RDEIR/SDEIS.</p> <p>The determination of jeopardy or consistence of the project with the Endangered Species Act (ESA) will be determined by the USFWS and NMFS following submittal by Reclamation of a Biological Assessment under Section 7 of ESA, and a submittal for an Incidental Take Permit under Section 10 of ESA, as described in Chapter 1 of the EIR/EIS.</p> <p>USACE determined the application was complete for the purpose of publishing the public notice and beginning its review of the project. The delineation was submitted to and verified by USACE.</p> <p>The proposed project has been designed with consideration given to existing resources to minimize impacts to the greatest extent practicable. As is required by the Clean Water Act, the proposed project must first avoid all waters of the United States possible, then minimize impacts to waters, and finally compensate for unavoidable impacts. A mitigation plan that fully compensates for all impacts to waters of the United States associated with the construction of the proposed project will be submitted to the USACE for review and approval prior to any permit decision being made. Discussion of impacts to waters of the United States is provided in Chapter 12 and Appendix 1F of the Final EIR/EIS.</p> <p>Please see Master Response 45, Permitting.</p>

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		<p><a href="http://Deltacouncil.ca.gov/docs/final-delta-isb-comments-partially-recirculated-draft-environmental-impact-reportsupplemental.">http://Deltacouncil.ca.gov/docs/final-delta-isb-comments-partially-recirculated-draft-environmental-impact-reportsupplemental.</a>] A logical place to have provide a full and complete analysis of the status of waters of the United States in relation to Tunnels Project facilities in the Delta would have been the "Surface Waters" sections of the RDEIR/SDEIS. They are located in the legal Delta and the Plan Area of the proposed Tunnels Project. Alternative descriptions of the location of intakes, intermediate forebay, vertical shafts, control buildings, power facilities, levee work, and other aspects of wetland delineation are not found in this section. The current RDEIR/SDEIS surface waters sections cover only state and federal water project reservoir operations, river flows, and reverse flows in relation to flood potential and south Delta pumping operations. There is no discussion of impacts of project construction, and dredge and fill management and disposal on wetlands of the Delta. Appendix E of the RDEIR/SDEIS fails to provide this information as well, and is therefore inadequate. The RDEIR/SDEIS should be recirculated with updated and accurate information concerning efforts by the Tunnels Project proponents to avoid, minimize and, if necessary, compensate for wetlands impacts.</p>	
2653	138	<p>In addition to the 404 permit application, the Tunnels Project must seek and obtain permission to affect navigable waters of the United States, either in, under or over the water. Neither Appendix E nor Chapter 19 of Appendix A of the RDEIR/SDEIS lack sufficient information showing locations, sizes and uses of these waters and where and how Tunnels Project design, construction and operation would affect navigable waters of the United States. The RDEIR/SDEIS is therefore inadequate. It should be updated with information that is understandable by the public and that conforms to law, and another draft EIR/EIS should be recirculated.</p> <p>Section 4.3.2 of the RDEIR/SDEIS addresses "surface waters." Its subjects include flood potential of CVP-SWP reservoir flood storage capacity, highest monthly river flows on the Sacramento and San Joaquin Rivers related to flood potential, and reverse flows in Old and Middle Rivers (including construction activity impacts on runoff and flooding potential in this corridor of the Delta. No baseline or existing conditions information about flood control facilities in the Plan Area of the Delta and Tunnels Project is provided in this section, nor is there a reference to baseline information provided to Chapter 6 of the Draft EIR/EIS last year where some of this information is provided. The RDEIR/SDEIS in Section 4.3.2 does not state that this analysis is somehow relevant to the 404 permit, nor does it attempt to provide any analysis or findings from the alternative description that would support the Tunnels Project application to the [Army] Corps [of Engineers] for a 404 permit. No attempt is made to relate the change in reverse flow conditions, changes to or increases in runoff patterns from Tunnels Project construction or implementation of Environmental Commitments 3, 4, and 6-11, the potential to create or contribute polluted runoff water or exceed stormwater facilities' capacity, or expose people or structures to significant risks of loss, injury or death from flooding due to construction of the Tunnels Project to specific affected levee systems or deep water ship channels or navigable streams or dredge/fill disposal sites in this Section. The impact discussion is unconnected to the concerns of the Corps of Engineers in evaluating the potential impacts of the proposed Tunnels Project on Delta levees (levees that comprise state, federal and locally maintained operated levees that make up flood protection throughout the Delta), navigable waterways, and dredge/fill disposal options for the project.</p> <p>Moreover, Mitigation Measure SW-4, "Implement Measures to Reduce Runoff and Sedimentation," states that "proponents will implement measures to prevent an increase in</p>	<p>Alternative 4A significantly reduces the amount of planned habitat restoration, compared to the originally preferred BDCP HCP alternative, Alternative 4. Instead, the proposed project includes habitat restoration necessary to mitigate significant environmental effects under CEQA and meet the regulatory standards of ESA Section 7 and California Endangered Species Act (CESA) Section 2081(b). Information related to compliance with the USACE requirements for Clean Water Act Sections 404 and 408 permits are discussed in Chapter 6 and Appendix 3B of the EIR/EIS and Appendix E of the RDEIR/SDEIS.</p> <p>As described in Appendix E, there will be a future submittal of information to the USACE which will include an analysis that will show that there will be no increased flood potential due to construction or operations of the conveyance facilities, including installation of cofferdams, barge docks, Head of Old River Barrier, discharge of water from construction sites, or changes in drainage from constructed facilities locations. This future submittal will include the latest bathymetric information and modeling results, and methods included in the design criteria to meet the USACE requirements.</p> <p>As described in Appendix 3B, there will be future submittals of information to the Central Valley Regional Water Quality Control Board and/or State Water Resources Control Board and USACE which will include an analysis that will show that there will be no adverse effects in channel conditions in the Sacramento River and adjacent water bodies due to increased sediment due to construction or operations of the conveyance facilities, including installation of cofferdams, barge docks, Head of Old River Barrier, discharge of water from construction sites, or changes in drainage from constructed facilities locations. This future submittal will include the latest bathymetric information and sediment modeling results, and methods included in the design criteria to meet the Central Valley Regional Water Quality Control Board/State Water Resources Control Board and USACE requirements.</p> <p>For more information about environmental baselines, please see Master Response 1.</p> <p>Please see Master Response 45, Permitting.</p>

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		<p>runoff volume and rate from land-side construction areas and to prevent an increase in sedimentation in the runoff from the construction area as compared to Existing Conditions." There is no project-level disclosure in the RDEIR/SDEIS as to where, when, and how such mitigations will be handled. Such information should already be in-hand for the RDEIR/SDEIS since such mitigations are necessary for project-level review by permitting agencies (for Section 401 water quality certification, 404 dredge/fill permitting, navigable waters and federal facilities impacts review). Project level analysis is deferred to "drainage studies" to be prepared for each construction site later.</p> <p>There is no connection of this mitigation to the actual construction schedule described elsewhere in the Draft EIR/EIS or the RDEIR/SDEIS. [Footnote 325: Draft EIR/EIS, Chapter 6, p. 6-59 to 6-60.] Moreover, it is clear that while project-level information is needed by the Corps of Engineers to process the 404 permit, Tunnels Project proponents fail to provide it in this RDEIR/SDEIS. The RDEIR/SDEIS is thus inadequate as a CEQA and NEPA document, and inadequate for the purpose of fully disclosing project-level impacts and mitigation measures at specific locations, at specific times, and under specific conditions of runoff and flood control capacity.</p> <p>The handling of these matters strongly suggests that the Tunnels Project proponents want on one hand to have the RDEIR/SDEIS represent a project-level review for permitting purposes (so it can "jumpstart" construction and still try to comply with Delta Reform Act limitations on construction); and on the other hand, they have only program-levels of description and analysis (where available) implying that, as much as possible as, they hope to comply with CEQA and NEPA using a "program" level of evaluation and review rather than a project-level document with its necessarily greater level of detail, and hoping that such level of analysis and mitigation will be legally sufficient. This approach is as hasty as it seems to be wasteful.</p>	
2653	139	<p>The ambiguity between project-level and program-level review in the RDEIR/SDEIS is also seen in the analysis of "wind fetch." Mitigation Measure SW-8 addresses "wind fetch" mitigation to reduce potential damage from wind-driven waves across expanded open water areas at habitat restoration locations. Once again, no project-level specifics are provided in the Draft EIR/EIS. Instead, the Draft EIR/EIS states that "these measures will be designed based upon wind fetch studies that will be completed prior to construction of habitat restoration areas with increased open water in the Delta." [Footnote 326: Draft EIR/EIS, Chapter 6, p. 6-63.] This mitigation applied to last year's preferred alternative, the conservation strategy of Bay Delta Conservation Plan and its Alternative 4 configuration at that time. The RDEIR/SDEIS continues to rely on this mitigation measure as mitigation for the Tunnels Project this year, without acknowledging the nearly entire deletion of BDCP related habitat restoration work. Will that create more or less need for wind fetch studies? Whatever the case, it is another instance of an unlawful approach to CEQA mitigation. It should be corrected and a new EIR/EIS recirculated.</p> <p>These same comments apply to Sections 4.4.2, addressing Alternative 2D, and 4.5.2, addressing Alternative 5A since the same project-level/program-level impact analysis and mitigation problems exist there. [Footnote 327: RDEIR/SDEIS, Section 4.4.2, pp. 4.4.2-6 to 4.4.2-10 for Alternative 2D; and Section 4.5.2, pp. 4.5.2-6 to 4.5.2-10 for Alternative 5A.]</p> <p>In addition, these sections refer at Impact SW-7 in Sections 4.3.2, 4.4.2, and 4.5.2 to a Mitigation Measure SW-7 in Alternative 1A that is supposed to be described under Alternative 1A in the Draft EIR/EIS. We [Environmental Water Caucus] referred back to</p>	<p>Alternative 4A reflects the State's proposal to separate the conveyance facility and other non-conveyance habitat restoration measures into two separate efforts: California WaterFix and California EcoRestore. The Proposed Action includes habitat restoration as necessary to mitigate significant environmental effects and satisfy applicable ESA and CESA standards.</p> <p>As described in Chapter 6 and Chapter 3 of the EIR/EIS, the extent of increased open water habitat for tidal natural communities' restoration due to mitigation measures under Alternative 4A would be minimal as compared to habitat restoration under other action alternatives. During design of these open water tidal habitat areas, wind fetch studies will be completed during the design phase. If adjacent levees are identified as being subjected to increased wind fetch, those levees would be strengthened and possibly raised to avoid levee damage from waves or water entering the landside of the levee due to high waves.</p>

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		Impact SW-7 and find no such Mitigation Measure SW-7 narrative provided there. [Footnote 328: Draft EIR/EIS, Chapter 6, p.6-62.] The RDEIR/SDEIS and the Draft EIR/EIS are both deficient for reliance on a phantom flood control-related mitigation measure, and are therefore inadequate. The Tunnels Project RDEIR/SDEIS must be revised, corrected, and recirculated again.	
2653	140	The Section 14 review by the [Army] Corps [of Engineers] need only focus on Tunnels Project's effects on the Sacramento and San Joaquin River flood control projects and the Stockton Deep Water Ship Channel, but the RDEIR/SDEIS is thoroughly deficient for purposes of understanding the Tunnels Project's [effects] on the entire spectrum of flood control facilities in the Delta. A logical place to provide a full and complete analysis of the status flood control facilities in relation to Tunnels Project facilities in the Delta would have been the "Surface Waters" sections of the RDEIR/SDEIS. There is no mention in Appendix E of the Delta Stewardship Council's current process of evaluating and developing its Delta Levee Investment Strategy. There is no data provided in the RDEIR/SDEIS or Appendix E on levee mileage operation and maintenance responsibilities for state, federal and local agencies with levee responsibilities. There is no effort in the RDEIR/SDEIS or its Appendix E to analyze which entities' levees would be directly affected by Tunnels Project design, construction, and operational activities. These omissions render the RDEIR/SDEIS incomplete and therefore inadequate. It should be updated with information that is understandable by the public and that conforms to law, and another draft EIR/EIS should be recirculated.	The Existing Conditions/Affected Environment section of Chapter 6 of the EIR/EIS discusses existing flood management in the Delta. As described in Comment 138, a future submittal of information to the USACE will include an analysis that will show that there will be no increased flood potential due to construction or operations of the conveyance facilities, including installation of cofferdams, barge docks, Head of Old River Barrier, discharge of water from construction sites, or changes in drainage from constructed facilities locations. This future submittal will include more detail on flood management facilities adjacent to the construction locations of the proposed project and methods included in the proposed project to protect those facilities.
2653	141	Appendix E acknowledges that additional historic preservation and flood risk analysis must be performed under National Historic Preservation Act Section 106 (including programmatic agreement execution and Native American tribal consultation) and Executive order 11988 concerning floodplain modification and development. None of these sections of Appendix E provide substantive analysis and evidence of compliance with these important federal environmental review requirements. What is provided is little more than a glorified checklist: "yes, we need to do these things." These things must be done in public and they are required to be done through established public processes that must be completed in draft environmental documents circulated to the public prior to issuance of the Final EIR/EIS on the Tunnels Project. Chapter 19 merely states that no Tunnels Project facilities intersect at the surface with any transport or navigation-related facilities in the Delta, without demonstrating it. Absence of evidence that these processes have been completed and their analysis and findings put to use means the current RDEIR/SDEIS is inadequate. It should be updated with evidence that these two processes have been complied, and another draft EIR/EIS should be recirculated.	<p>Please see Master Response 20. USACE, as the federal lead agency for CWA Section 404 permitting the water conveyance facility, is responsible for Section 106 compliance. When a project is complex, such that the normal Section 106 review process is not appropriate, the Section 106 implementing regulations (36 CFR 800.14[b]) allow for the development of a programmatic agreement (PA) to ensure Section 106 compliance. Relative to the currently proposed conveyance facility, preparation of a PA is applicable when effects on historic properties cannot be fully determined prior to approval of an undertaking (36 CFR 800.14[b][1][iii]), or when nonfederal parties are delegated major decision-making responsibilities (36 CFR 800.14[b][1][iii]).</p> <p>USACE, in collaboration with DWR, is developing a draft Section 106 PA for the conveyance facility. The PA provides for the identification of historic properties within the Area of Potential Effect (APE) of the selected project alternative prior to construction initiation, and the development of avoidance, protection, or mitigation measures for those historic properties that could be adversely affected by the project. Treatment plans will be prepared to address impacts on NRHP-eligible archaeological, built environment, and Traditional Cultural Property (TCP) resources within the APE. The PA details how many of the day-to-day responsibilities for Section 106 compliance are delegated to DWR by USACE.</p> <p>Please see Master Comment 20, Cultural Resources Assessment.</p>
2653	142	The Tunnels Project is not the Least Environmentally Damaging Practicable Alternative (LEDPA). Finally, the Tunnels Project also fails to meet another Section 404 requirement, "[t]he requirement [under CWA [Clean Water Act] [Section] 404(b)(1). . . that the project proponent must demonstrate that the project is the [Least Environmentally Damaging Practicable Alternative] LEDPA." [Footnote 329: USEPA, Preliminary Administrative Draft Comments for the Bay Delta Conservation Plan DEIR/S p. 2, April 26, 2012.] "A proposed action is not the LEDPA simply because a federal agency is a partner and chooses that proposed action as its preferred alternative." [Footnote 330: EPA, BDCP DEIS Corrections and Additional Editorial Recommendations, p. 1, August 27, 2014.] The Tunnels Project	<p>The identification of the Least Environmental Damaging Project Alternative will be determined by USACE following submittal by DWR to USACE information regarding practicable alternatives for the entirety of the conveyance project, pursuant to Section 404(b)(1) Guidelines, as described in Appendix E of the RDEIR/SDEIS.</p> <p>The proposed project has been designed with consideration given to existing resources to minimize impacts to the greatest extent practicable. As is required by the Clean Water Act, the proposed project must first avoid all waters of the United States possible, then minimize impacts to waters, and finally compensate for unavoidable impacts. A mitigation plan that fully compensates for all impacts to waters of the United States associated with the construction of the proposed project will be submitted to the USACE for review</p>

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		<p>appears to be the most environmentally damaging alternative possible. It most definitely is not the least damaging, and therefore, it is not the LEDPA.</p> <p>The [Army] Corps [of Engineers] in its March 2013 paper states that once DWR submits information to the Corps on "practicable alternatives," the Corps "intends to make a preliminary determination regarding the Least Environmentally Damaging Practicable Alternative (LEDPA) under the 404(b)(1) for CM1 that meets its overall project purpose. Project phases and related timing of the 404/10 and Section 408 authorizations will be acknowledged in this step." [Footnote 331: Ibid. p. 3.] We [Environmental Water Caucus] respectfully request detailed clarification of the LEDPA process in the next recirculated Draft EIR/EIS. What is to be the scope of these alternatives aiming to arrive at a LEDPA? How do they relate, if at all, to CEQA and NEPA alternatives analysis and the need for the range of alternatives to be reasonable? What avenues are available to the public for participating in the review, analysis and evaluation of the LEDPA?</p>	<p>and approval prior to any permit decision being made. Discussion of impacts to waters of the United States is provided in Chapter 12 and Appendix 1F of the Final EIR/EIS.</p> <p>For information on public involvement, please see Master Responses 39 and 41.</p> <p>Please see Master Response 45, Permitting.</p>
2653	143	<p>We [Environmental Water Caucus] recall that the Army Corps of Engineers stated in March 2013, when the Tunnels Project was still expected to be a habitat conservation plan, that the Tunnels Project proponents "intend for the BDCP EIR/EIS to be a project level document for the purpose of supporting the issuance of state and federal fish and wildlife agencies of take authorizations. . . . It will also serve as a programmatic document for the actions set out in the BDCP and provide project-level detail for the proposed construction of a new SWP north-of-Delta intake facilities and conveyance and the operations of new intakes and existing SWP facilities, known as Conservation Measure 1 . . ." [Footnote 332: U.S. Army Corps of Engineers, "BDCP: Permit Application Approach for Conservation Measure 1," March 2013, p. 1.] The Corps then provided a proposed schedule that one year later had already slipped substantially from its anticipated issuance of Corps issuing Section 408 (RHA Section 14) permissions and 404/10 permits for all CM1 phases in "late 2015 through 2018." It is now late 2015 and the Tunnels Project still does not have project-level information needed by the Corps of Engineers in the RDEIR/SDEIS.</p> <p>We understand that the Corps, as a cooperating agency, "will provide input" to the Tunnels Project proponents so that the EIR/EIS can be used by the Corps "to the maximum extent possible to make future permit decisions." We observe there is much work left to do in that regard, because the Tunnels Project is so fundamentally unlawful, flawed, and poorly organized that it will be a monumental task to take this sow's ear and render it a silk purse.</p>	<p>Alternative 4A reflects the state's proposal to separate the conveyance facility and habitat restoration measures into two separate efforts: California WaterFix and California EcoRestore. These two efforts are a direct reflection of public comments and fulfill the requirement of the 2009 Delta Reform Act to meet co-equal goals. Please see Master Response 3 for additional information regarding compliance with the Delta Reform Act.</p> <p>The proposed project was developed to meet the rigorous standards of the Clean Water Act and federal and state Endangered Species Acts, the proposed project is intended to be environmentally beneficial, not detrimental. By establishing a point of water diversion in the north Delta and new operating criteria to improve water volume, timing, and salinity, the proposed project is designed to improve native fish migratory patterns and allow for greater operational flexibility. The U.S. Army Corps of Engineers is a co-operating agency and their regulatory authority was discussed in the EIR/EIS.</p> <p>For more information, please see Master Response 45 (Permitting), Master Response 5 (Compliance with ESA), and Master Response 29 (BAs and BiOps not included in EIR/EIS).</p>
2653	144	<p>Supplemental Modeling for SWRCB (Increased Delta Outflows):</p> <p>The 2010 Delta Flow Criteria Report [Footnote 333: State Water Resources Control Board, Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem, prepared pursuant to the Sacramento-San Joaquin Delta Reform Act of 2009, August 2010. Accessible online at <a href="http://www.swrcb.ca.gov/waterrights/water_issues/programs/bay_Delta/Deltaflow/docs/final_rpt080310.pdf">http://www.swrcb.ca.gov/waterrights/water_issues/programs/bay_Delta/Deltaflow/docs/final_rpt080310.pdf</a>] was rejected as an alternative by BDCP Applicants on grounds that modeling showed that the State Water Board's flow criteria would allegedly result in widespread dead pools in and depleted deliveries from upstream reservoirs, which would violate BDCP EIR/EIS alternative screening criteria. The Board included DWR's analysis as an appendix to the Draft Delta Flow Criteria report in July 2010. Once out for public review, the modeling results (Appendix B "Water Supply Modeling" of the draft report) were roundly criticized from many quarters, because it exceeded the charge of Water Code Section</p>	<p>As described in Appendix 3A, Identification of Water Conveyance Alternatives Conservation Measure 1, of the EIR/EIS, one of the potential alternatives considered was based upon the State Water Resources Control Board 2010 Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem, which described providing up to 75 percent of unimpaired flow into the Delta to improve aquatic resources habitat conditions. This potential alternative was not evaluated in detail because the flow recommendations in the 2010 report could not be achieved without adverse impacts to cold water management for fisheries in the Sacramento, Feather, and American Rivers without reductions in non-SWP and non-CVP water rights diversions. The primary reason for not including the recommendations of the State Water Resources Control Board 2010 Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem in the alternatives considered for detailed analyses in this EIR/EIS is because the 2010 Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem report reduced deliveries to non-SWP and non-CVP water rights holders and groundwater users in the Sacramento Valley. This type of operation would not be consistent with the project objectives and purpose and need of this EIR/EIS for which the EIR/EIS action alternatives were developed. However, Alternatives 7 and 8 in the EIR/EIS reflect similar flow criteria in a</p>

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		<p>85086, had not been included for expert and public review in the informational proceedings, and had not been peer-reviewed prior to its release. In putting the water supply impact appendix forward, DWR tried hard to reframe the agenda of the Delta Flow Criteria process after the proceeding yielded results they did not like.</p> <p>]</p> <p>The primary reason reservoirs would go to dead pool in their analysis was that the modeling criteria simultaneously maximized Delta inflows, outflows, and south of Delta deliveries at the expense of prudent carry-over for dry year or drought conditions. CVP and SWP operators made a related point to consulting engineer and modeler Walter Bourez when interviewed about BDCP modeling in 2013 that they would not operate the reservoirs that way; they would definitely try to optimize reservoir releases for meeting Delta water quality objectives, manage cold-water pools, while meeting senior water rights and making releases available for deliveries as best they could. [Footnote 334: Of the assumptions disclosed for the impact analysis in the 2010 modeling effort by DWR, the analysis assumes "full entitlements for CVP and SWP contractors." This was and is still not a reasonable assumption, given the constraints placed on CVP and SWP Delta operations to keep their uses and diversions reasonable under the law. "Full entitlements" is also an ambiguous term; it could be interpreted as full contractual entitlements regardless of water year type, or according to water year type. It could also mean "no net loss to exports," as well. These ambiguities are neither identified nor clarified in DWR's 2010 modeling of impacts in 2010. The California Water Impact Network and the California Sportfishing Protection Alliance pointed out to the State Water Board that it was application of "full entitlements" to Delta exports and water project operations in the Delta that led to the Legislature's passage of Water Code Section 85086 and to preparation of the Delta Flow Criteria Report in the first place. Letter of Carolee Krieger and Bill Jennings to Charles Hoppin, Chair, State Water Resources Control Board, "Comment Letter - Draft Delta Flow Criteria Report," July 28, 2010, 2 pages. Accessible online 12 May 2014 at <a href="http://www.swrcb.ca.gov/waterrights/water_issues/programs/bay_Delta/Deltaflow/docs/comments072910/carolee_krieger.pdf">http://www.swrcb.ca.gov/waterrights/water_issues/programs/bay_Delta/Deltaflow/docs/comments072910/carolee_krieger.pdf</a>] The approved report in August 2010 does not include DWR's suspect modeling appendix.</p> <p>The point of the Delta flow criteria proceeding was to answer the question of "what flows do fish need?" This is needed to determine the public trust instream flow needs for the Delta. Under the public trust doctrine and Water Code Section 85086(c)(2), only what flows remain after such analysis should be allocated to SWP and CVP contractors. Deletion of the DFC [Delta Flow Criteria] report as an alternative removed a scientifically informed and reasonable option from consideration, yet another disservice to the public of this RDEIR/SDEIS. [Footnote 335: Appendix 3A, p. 3A-67, lines 40-48 to p. 3A-68, lines 1-14; and Draft Delta Flow Criteria report accessible online 4 May 2014 at <a href="http://www.swrcb.ca.gov/waterrights/water_issues/programs/bay_Delta/Deltaflow/">http://www.swrcb.ca.gov/waterrights/water_issues/programs/bay_Delta/Deltaflow/</a>]</p>	<p>manner that would only affect SWP and CVP water rights.</p> <p>Please see Master Responses 30 (Modeling) and 13 (Public Trust Doctrine).</p>
2653	145	<p>Reading a bit between the lines, it appears to us [Environmental Water Caucus] that inclusion of Appendix C to the RDEIR/SDEIS was done under protest. The barely-contained hostility to this set of CalSIM II modeling results does bleed through. Grudgingly, the Tunnels Project proponents acknowledge that as a cooperating agency, the State Water Board's "consideration of the proposed project is not limited to the scope of the CEQA analysis and the State Water Board water right approval process may require consideration of issues beyond that required in CEQA."</p>	<p>During preparation of the EIR/EIS, the State Water Resources Control Board requested specific assumptions be included in one of the alternatives. The response to this request became Alternative 8. Based on the effects shown for Alternative 8 in the DEIR/EIS, the State Water Board staff asked for a revised scenario that would address the effects shown for Alternative 8. In response, DWR and Reclamation developed and analyzed this scenario in Appendix C of the REIR/SEIS. During preparation for submittal of information to the State Water Resources Control Board for the Change in Point of Diversion request for the DWR and Reclamation water rights, the lead agencies desired to request consideration of operations of the new</p>

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		<p>(This passage from Section C.1 of the RDEIR/SDEIS misconstrues CEQA. That Act's primary purpose is to ensure that information is fully disclosed about the nature and scope of a proposed project, its merits in comparison to a reasonable range of alternatives, disclosure of an accurate baseline set of conditions into which the project would be introduced, the impacts (including cumulative impacts) of the project on the physical environment, and whether those impacts can be avoided or mitigated. The scope of the CEQA alternatives analysis in the RDEIR/SDEIS is fundamentally flawed for narrowly exhibiting only "slight differences" in design and operational scenarios, and not utilizing the viewpoint of statewide water policies rooted in the voter-approved Article X, Section 2 of California's Constitution, the Public Trust Doctrine, and the 2009 Delta Reform Act.)</p> <p>Appendix C continues: "This evaluation was conducted primarily to consider increases in outflow, without consideration of water supply benefits, and as such, an alternative that included this operational scenario would likely not meet the project objectives or purpose and need statement. Therefore, the purpose of this evaluation was to provide a broader range of Delta outflows and other operational parameters to consider during the State Water Board's anticipated water rights hearing on the petition for changes in . . . [the state and federal projects'] authorized points of diversion necessary to implement the proposed project." [Footnote 336: RDEIR/SDEIS, Appendix C, Section C.1, p. C-1, lines 22-29.]</p> <p>The hostility is evident in the failure to include water supply impacts (benefits or costs). The provision of these modeling results buttresses our argument in these comments that the Tunnels Project proponents construe the purpose and need for their project far too narrowly. As a state agency, the California Department of Water Resources is failing mightily to comply with state policies set forth by the Legislature in the Delta Reform Act.</p> <p>One can sense the clenched teeth of the Tunnels Project proponents at having to supply cold water pools in reservoirs for later temperature-controlled releases benefiting upstream spawning fish, and Delta inflows and outflows from exports in this sentence from Appendix C: "In order to provide Delta outflow similar to what was included in Alternative 8 without impacting instream flows and storage, additional Delta outflows (beyond those presented for Alternative 4 in the BCP Draft EIR/EIS or Alternative 4A in this RDEIR/SDEIS) were achieved by reducing SWP and CVP exports." [Footnote 337: RDEIR/SDEIS, Appendix C, Section C.1, p. C-1, lines 29-32.]</p> <p>It is ironic that it appears the RDEIR/SDEIS discloses the modeling results but failed to incorporate this as an alternative (even if it is one that DWR and the Bureau [of Reclamation] would likely have rejected). Had they incorporated it as a more fully-fledged alternative, it would moot one of EWC [Environmental Water Caucus]'s most damning comments on the RDEIR/SDEIS and the Draft EIR/EIS; it would have provided a truly reasonable and genuine alternative to the parade of only "slightly different" tunnels options, one that would address in a meaningful way the restoration and flow needs of fish species that have been harmed up and down the Central Valley by state and federal water project operations.</p> <p>The assumptions built into the modeling results provided in Appendix C do appear to represent an alternative that addresses many, though not all of our concerns for water quality and flow concerns, as well as endangered species concerns.</p> <p>"In general, the intent behind the additional modeling was to evaluate the water supply effects of a high- Delta outflow scenario (beyond that modeled for Alternative 4 in the BDCP</p>	<p>conveyance facilities over a range of alternatives that would account for potential future adaptive management actions.</p> <p>The Appendix C analysis described the effects on fish, water supply, and all other resources evaluated for the alternatives. In the Final EIR/EIS, this appendix is Appendix 5E, with evaluation of Boundaries 1 and 2 (the scenarios presented to the SWRCB during the CPOD hearings) as well as a SWP staff scenario that represents further refinements to the scenario evaluated in the REIR/SEIS Appendix C. Appendix 5E supplements the reasonable range of alternatives evaluated in the EIR/EIS.</p> <p>Please also see Master Response 4 regarding the range of alternatives evaluated in the EIR/EIS.</p> <p>Please see Master Response 31, Delta Reform Act.</p>

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		<p>Draft EIR/EIS or Alternative 4A in this RDEIR/SDEIS) that provides both general and specific benefits to fish and their habitat related to increases in outflow during the fall (September through November), winter/spring (January through June), and summer (July and August) hydrological periods beyond those specified by the U.S. Fish and Wildlife Service and National Marine Fisheries Service in the 2008 and 2009 Biological Opinions, existing California Department of Fish [and] Wildlife California Endangered Species Act determinations, and the State Water Board's current WQCP [Water Quality Control Plan]. Increased fall Delta outflow will shift the low salinity zone further downstream in the Delta, likely resulting, based on current understanding of the science, in more favorable conditions for Delta smelt habitat in the western Delta and Suisun region. Similarly, increased winter/spring Delta outflow will shift the low salinity zone further downstream into the Suisun region likely resulting in more favorable conditions for longfin smelt and Delta smelt habitat. Higher Delta outflow during this period could also shift pelagic fish further from the export pumps and assist out- migrating salmonids. Additionally, the increased winter/spring Delta outflow would push fresh water through the Delta, past the Suisun region, and out into the San Francisco Bay likely benefiting native estuarine species that have evolved under conditions of seasonally fluctuating salinity. The increase in Delta outflow during the summer over the amount specified in Alternative 4A may provide general habitat benefits and a quantity of flow that can be adaptively managed to benefit Delta smelt when conditions during the previous winter and spring are likely to produce a strong cohort. The relationships between the survival and abundance of various species and habitat conditions and outflows are currently under active investigation by the Collaborative Adaptive Management Team, an interagency group of scientists investigating outflow and other issues pertinent to CVP and SWP Delta operations. These issues will also be central to the State Water Board's current water quality control planning and other decision making processes." [Footnote 338: RDEIR/SDEIS, Appendix C, Section C.1, p. C-2, lines 1-25.]</p> <p>Missing from this description of a positive feedback loop or "virtuous circle" is conceptual reasoning on how increased Delta through-flow would benefit migratory fish species like Chinook salmon, Central Valley steelhead, green and white sturgeon, and lamprey species throughout the mainstem Sacramento, San Joaquin Rivers, the Delta. We would like to see the Delta Passage Model applied to this alternative to see what effects these alternatives would have on through-Delta salmon survival rates to Chipps Island. As we pointed out elsewhere in these comments, there are viable models that could estimate what effects these increased flows could potentially have on Delta smelt, longfin smelt, the various runs of Chinook salmon, and water quality constituents -- the list would be a long one.</p> <p>Moreover, since Appendix C's intent was to evaluate water supply effects -- as the passage above initially claims -- then Appendix C is itself incomplete. Appendix C's modeling results contain charts illustrating impacts to monthly flows of the State Water Board's modeling assumptions for Delta outflow and total Delta exports. Unsurprisingly, Delta outflows increase, while Delta exports decrease. But the sequence of Tables showing modeling results by waterway and water year type along the various nodes of CalSIM II omits disclosure of numerical results for Delta exports.</p> <p>So Appendix C is a missed opportunity. Failure to include it as an alternative makes clear the abject failure of both purpose and CEQA and NEPA process associated with the Tunnels Project. The RDEIR/SDEIS should be revised to include new reasonable alternatives that increase Delta outflow and provide cold water pool protection for upstream spawning needs of migratory salmonids, and should be recirculated. [Footnote 339: This is urgent. The</p>	

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		National Marine Fisheries Service announced this week that the winter-run Chinook salmon spawning activity suffered 95 percent mortality of fry eggs this summer and early fall. Peter Fimrite, "Heavy drought toll on salmon: 95% death rate measured for young winter chinook," San Francisco Chronicle, October 29, 2015, p. 1.]	
2653	146	<p>Delta outflows are Bay inflows. The San Francisco estuary receives 90 percent of its freshwater inflow from the Sacramento-San Joaquin River watershed, which passes through the Delta before it reaches the lower estuary as San Francisco Bay. The San Francisco Estuary Partnership finds that: "Freshwater inflows to the San Francisco Estuary have been highly altered. Both the amounts and variability of inflows have been reduced, with the result of creating persistent, man-made, low inflow 'drought' conditions in the Estuary. Large scale alteration of freshwater inflow to the Estuary began in the 1950s and 1960s when most [of] the large dams and water diversion facilities were developed, but flow conditions have deteriorated further in the last decade." [Footnote 340: The State of the Estuary 2015, San Francisco Estuary Partnership, p. 23.]</p> <p>Improving the alternatives analysis of the RDEIR/SDEIS must include reorienting the objectives, purpose and need statement of the Tunnels Project. This means interpreting the meaning of "improving conveyance" in a broader, balanced context of the coequal goals, not the nuances of narrow engineering alternatives that entail slight operational differences about how best to provoke reverse flows in the lower Sacramento River, degrade water quality and push listed fish species closer to extinction.</p>	<p>Impacts on Delta outflows (fresh water flowing to the Bay) are not significant. Model simulation results for Alternative 4A indicate that long-term average and wet year peak outflows would increase in winter months with a corresponding decrease in spring months because of the shift in system inflows caused by climate change and increased Delta exports as compared to Existing Conditions. In other year types, Alternative 4A would result in higher or similar outflow because of the spring outflow requirements. In summer and fall months, Alternative 4A would result in similar or higher outflow because of changes in export patterns and OMR flow requirements and export reductions in fall months, and also because of the Fall X2 requirements in wet and above normal years. The incremental changes in Delta outflow between Alternative 4A and Existing Conditions would be a function of both the facility and operations assumptions (including north Delta intakes capacity of 9,000 cfs, less negative OMR flow requirements, enhanced spring outflow and/or Fall X2 requirements) and the reduction in water supply availability due to increased north of Delta urban demands, sea level rise and climate change. Results for the range of changes in Delta Outflow under Alternative 4A are presented in more detail in Appendix 5A, BDCP EIR/EIS Modeling Technical Appendix, of the Draft EIR/EIS. For a more detailed response regarding impacts beneficial uses of water, please see Master Response 34.</p> <p>The alternatives included in the Final EIR/EIS represent a legally adequate reasonable range of alternatives and the scope of the analysis of alternatives fully complies with both CEQA and NEPA. The specific proposals that were considered but ultimately rejected by the lead agencies are discussed in Appendix 3A, Identification of Water Conveyance Alternatives, Conservation Measure 1. Appendix 3A thoroughly explains why various proposals were not analyzed in the EIR/EIS, including the NRDC Portfolio-Based Proposal, Congressman Garamendi's Water Plan, and other similar concepts that would require actions that are beyond the scope of the BDCP/CWF. Please see Master Response 4 for additional details on the selection of alternatives.</p>
2653	147	<p>Key to the talking points and mitigation approach of the Tunnels Project for addressing direct, in- river impacts of the three north Delta intakes between Courtland and Clarksburg along the lower Sacramento River is the placement and operation of fish screens before the aperture of each intake structure that do not yet exist. Tunnels Project promotional descriptions (like the one in Figure 20 [ATT26]) include this conceptual illustration of north Delta intake fish screens. The sketch here acknowledges risks of both flow velocities and predation risk to fish as they would prepare to pass the screens of the north Delta intakes. It is conceptual and not to scale because juvenile salmonids (4 to 8 inches) and small Delta and longfin smelt (2 to 4 inches) would be tiny compared with fish screens at least 10 to 20 feet high.</p> <p>However, neither conceptual, scaled illustrations nor engineered drawings of north Delta intake fish screens are provided in the Draft EIR/EIS or the RDEIR/SDEIS.</p> <p>The RDEIR/SDEIS describes water conveyance from the north Delta to the south Delta through the Tunnels Project. "Water would be diverted from the Sacramento River through three fish-screened intakes on the east bank of the Sacramento River between Clarksburg and Courtland." [Footnote 341: RDEIR/SDEIS, Section 3, "Conveyance Facility Modifications to Alternative 4, p. 3-2.] For the new sub-alternatives, the RDEIR/SDEIS states: ". . . implementing a dual conveyance system would align water operations to better reflect</p>	<p>With respect to fish screen descriptions not including mention of entrainment of smaller life stages, this issue was analyzed in the effects analysis; see, for example, Impact AQUA-3 in Chapter 11 of the DEIR/EIS. The potential for phasing was discussed in Appendix 3.F of the DEIR/EIS. The process of design has been and will continue to be subject to extensive collaborative discussions with the fish agencies, and as such will include sweeping and approach velocity criteria that are protective of covered fishes, i.e., 0.2 foot per second approach velocity coupled with greater or equal sweeping velocity. A variety of reconstruction studies are proposed to aid in refinement of the fish screen design, based on the studies recommended by the Fish Facilities Technical Team in 2011.</p>

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		<p>natural seasonal flow patterns by creating new water diversions in the north Delta equipped with state-of-the-art fish screens, thus reducing reliance on south Delta exports." [Footnote 342: RDEIR/SDEIS, Section 4.1, p. 4.1-1 to 4.1-2.]</p> <p>The 2011 BDCP Fish Facilities Technical Team Technical Memorandum observed that, "There is a high level of uncertainty as to the type and magnitude of impacts that these new diversions will have on covered fish species that occur within the proposed diversion reach." [Footnote 343: BDCP Fish Facilities Technical Team, Technical Memorandum, July 15, 2015, p. 33, accessible at <a href="http://bayDeltaconservationplan.com/Libraries/Dynamic_Document_Library/Fish_Facilities_Team_Technical_Memo_Final_7_15_2011.sclb.ashx">http://bayDeltaconservationplan.com/Libraries/Dynamic_Document_Library/Fish_Facilities_Team_Technical_Memo_Final_7_15_2011.sclb.ashx</a>] The proposed screens are experimental and have never been employed anywhere else. Their size (multiple, very large and in close proximity), type (on-bank flat plate) and tidally influenced location make it almost impossible to conform to existing screening criteria. [Footnote 344: Ibid., pp. 22, 23.] Even with a required variance from existing DFW and NMFS fish screening criteria, enormous uncertainties will remain, which is why the technical team suggested phased construction to see if the first one works before constructing the rest. [Footnote 345: Ibid., pp. 35, 36.] Part of the problem is that Delta smelt are present at the diversion points during the months of February through June, and no screens can prevent entrainment of larval Delta smelt, longfin smelt, Sacramento splittail and smaller lamprey ammocoetes. [Footnote 346: Administrative Draft Bay Delta Conservation Plan, March 2012, Chapter 5, Effects Analysis, Appendix 5.B, Entrainment, p. B.0-12.]</p> <p>Fish screen descriptions indicate they would exclude fish greater than 20 millimeters (mm) in length from being scooped up by diversions, but there is no mention in any of the intake descriptions of BDCP, the Draft EIR/EIS or the RDEIR/SDEIS what happens to fish, larvae and eggs that are 20 mm in size or smaller. When EWC [Environmental Water Caucus] consultant Tim Strohane discussed fish screens with a DWR representative at the Walnut Grove Open House in late July, he was informed that the fish screen at the Bureau's Red Bluff diversion to the Tehama Colusa Canal on the upper Sacramento River represented a "prototype" of what would be used at the north Delta intakes of the Tunnels Project. A February 2015 DWR engineering study provided three fish screen examples whose design features had potential for use in the Delta: The aforementioned Red Bluff screen, and screens at the Glenn-Colusa Irrigation District's Hamilton City diversion and the City of Stockton pumping facility. [Footnote 347: California Department of Water Resources, Engineering Solutions to Further Reduce Diversion of Emigrating Juvenile Salmonids to the Interior and Southern Delta and Reduce Exposure to CVP and SWP Export Facilities, Draft Phase II - Recommended Solutions Report, prepared in response to the National Marine Fisheries Service 2009 Biological Opinion and Conference Opinion on the Long-Term Operations of the Central Valley Project and State Water Project, Reasonable and Prudent Alternative IV.1.3, February 2015, pp. 2-27 to 2-32. Hereafter, DWR, Engineering Solutions.]</p> <p>The fish screens are assumed to be in place as part of applying north Delta bypass flows in Tunnels Project operational criteria for each of Alternatives 4A (the preferred alternative), 2D, and 5A: "The objectives of the north Delta diversion bypass flow criteria include regulation of flows to 1) maintain fish screen sweeping velocities; 2) reduce upstream transport from downstream channels in the channels downstream of the intakes [that is, reduce 'reverse flows' in the lower Sacramento and its various distributaries]; 3) support salmonid and pelagic fish transport and migration to regions of suitable habitat; 4) reduce</p>	

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		<p>losses to predation downstream of the diversions; and 5) maintain or improve rearing habitat conditions in the north Delta." [Footnote 348: RDEIR/SDEIS, Section 4.1, p. 4.1-11.]</p> <p>Both the NMFS and the California Department of Fish and Wildlife have put forward basic design criteria for fish screens. [Footnote 349: CDFW's fish screening criteria are found online at <a href="http://www.dfg.ca.gov/fish/Resources/Projects/Engin/Engin_ScreenCriteria.asp">http://www.dfg.ca.gov/fish/Resources/Projects/Engin/Engin_ScreenCriteria.asp</a>. The states' fish screening policy is found online at <a href="http://www.dfg.ca.gov/fish/Resources/Projects/Engin/Engin_ScreenPolicy.asp">http://www.dfg.ca.gov/fish/Resources/Projects/Engin/Engin_ScreenPolicy.asp</a>. NMFS' fish screening criteria are found online at <a href="http://www.westcoast.fisheries.noaa.gov/publications/hydropower/southwest_region_1997_fish_screen_design_criteria.pdf">http://www.westcoast.fisheries.noaa.gov/publications/hydropower/southwest_region_1997_fish_screen_design_criteria.pdf</a>] There are two vectors of flow that shape their criteria: approach, and sweeping velocity. Table 7 [ATT27] compares these agencies' fish screen design criteria with BDCP/Tunnels Project approach to fish screen design criteria. DWR's Conceptual Engineering Report (CER) summarizes current Tunnels Project thinking about fish screens.</p>	
2653	148	[ATT26: Figure 20. Conceptual Illustration of North Delta Intake Fish Screen from Tunnels Project Promotional Brochure.]	This comment describes an attachment to the comment letter from a brochure but does not raise a comment.
2653	149	<p>The proposed fish screens for the north Delta intakes are intended to be "self-cleaning." According to the CER [DWR's Conceptual Engineering Report], they will consist of gear motors with variable speed control; one cleaning system per screen bay group. The capacity of a screen-bay group is 500 cfs [cubic feet per second], so there are six such screen bay groups per 3000 cfs intake. Therefore there will be six motorized cleaning systems per intake. Each cleaning system will traverse its screen bay at a rate of 0.5 to 2 feet per second (120 feet per minute or 1.4 miles per hour). Each cleaning cycle is estimated to take 5 minutes, maximum. [Footnote 350: California Department of Water Resources, Conceptual Engineering Report: Dual Conveyance Facility, Modified Pipeline/Tunnel Option - Clifton Court Forebay Pumping Plant, July 1, 2015, Table 6-2, pp. 6-4 through 6-6.]</p> <p>Debris removal and "biofouling" can create difficulties for the fish screens, however. "Cleaning frequency depends on the debris load," states the CER. Daily checks of intake screen clean functionality must be performed." [Footnote 351: Ibid., p. 6-17.] Biofouling has troubling aspects as well, according to the CER: "Biofouling, the accumulation of algae, freshwater sponge, Asian clams, mussels, and other biological organisms, can occlude the screens and jeopardize function. A key design provision for intake facilities is that all mechanical elements can be moved to the top surface for inspection, cleaning, and repairs. The intake facilities have top-side gantry crane systems for removal and insertion of screen panels, tuning baffle assemblies, and bulkheads. All panels will require removal for pressure washing. Additionally, screen bay groups will require dewatering for inspection and assessment of biofoul growth rates. With the invasion of Quagga and Zebra mussels into inland waters, screen and bay washing will increase. Coatings and other deterrents will be more thoroughly investigated during preliminary and final design." [Footnote 352: Ibid., p. 6-17.]</p> <p>The CER anticipates that a "log boom system will be aligned within the river alongside the intake structure to protect the fish screens and their cleaning systems from damage by large floating debris. Spare parts for vulnerable portions of the intake structure should be available to minimize downtime should repairs be needed. With the majority of working</p>	Maintenance requirements for various conveyance facility components will be refined as part of future engineering phases. Proposed north Delta intake facilities will not be in operation at 9,000 cfs full diversion capacity at all times. Routine maintenance activities will be scheduled during times when the intakes are not operated at full diversion capacity. After removal of fish screens for maintenance, the screen-bays would either be screened with spare screens or closed using solid panels.

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		<p>components being submerged and with security provisions in place, vandalism damage is not expected to be significant." [Footnote 353: Ibid., p. 6-18.]</p> <p>No estimate is provided in the CER for how often and how long individual screens must be hoisted from the river for cleaning. Such maintenance would force temporary shutdown of at least that portion of the screened intake. This could cause either loss of screening capability while diversions continued, or interrupt diversions while screen was cleaned. In either case, it imposes costs either on risks to fish or to water diversions. Neither the CER nor the RDEIR/SDEIS propose any guidance, assurance or mitigation measure to avoid impacts to fish during fish screen maintenance activities at each north Delta intake. Promotional materials for the Tunnels Project do not mention such problems with the fish screens.</p> <p>None of this information is incorporated into the RDEIR/SDEIS's descriptions of any of the alternatives. Alternative descriptions for the north Delta intakes are therefore deficient and the RDEIR/SDEIS should be revised, improved, corrected, and recirculated to repair this deficiency.</p>	
2653	150	[ATT27: Table 7. Comparison of Fish Screen Design Criteria.]	This comment describes an attachment to the comment letter that was considered as part of Chapter 3, please refer to the Final EIR/EIS.
2653	151	<p>Critical omissions from alternative descriptions do not prevent Tunnels Project proponents from claiming and applying alleged benefits of fish screens to offset significant impacts as mitigations to listed fish species and non-covered fish species that would be expected to encounter the north Delta intakes and their screened entrances. The alleged mitigation offset begins with the Tunnels Project's approach to adaptive management: "Specifically, collaborative science and adaptive management will, as appropriate, develop and use new information and insight gained during the course of project construction and operation to inform and improve: . . . the design of fish facilities including the intake fish screens." [Footnote 354: RDEIR/SDEIS, Section 4.1.2.4, Collaborative Science and Adaptive Management Program, p. 4.1-18, lines 28-31; see also Section 4.1.3.1, p. 4.1-29 for Alternative 2D and Section 4.1.4.1, p. 4.1-36 for Alternative 5A.]</p> <p>As forward-looking as this passage tries to be, it reflects an absence of confirmed and effective mitigation on behalf of fish protection in the design of intake fish screens. Tunnels Project proponents want to build the intakes with screens, and then improve the screens as a matter of adaptive management. "As appropriate" is a notoriously meaningless phrase when it comes to establishing a definite course of action; it means "whatever we think is best for the project."</p> <p>"The collaborative science process will also inform the design and construction of the fish screens on the new intakes. This requires active study to maximize water supply, ensure flexibility in their design and operation, and minimize effects to covered species." [Footnote 355: RDEIR/SDEIS, p. 4.1-21, lines 4-6.]</p> <p>The collaborative science process of course assumes the intakes and some version of the fish screens are built first, then subjected to study. It is not a mitigation program because it allows the fish screens to go forward without demonstrating that the impact is avoided, minimized or mitigated. It employs adaptive management in the service of building and operating massive intake structures in the presence of listed fish species and asking California and decision makers to trust the Tunnels Project proponents that they will solve</p>	<p>With respect to the commenter's claim that the conclusion related to delta smelt entrainment/impingement is speculative, the analysis cross-referenced the more detailed analysis presented in the public draft BDCP EIR/EIS Appendix 5.B, which supports the conclusion. Additional analysis supporting this conclusion has been undertaken as part of the Biological Assessment of Alternative 4A (California WaterFix) for ESA-listed fishes.</p> <p>The DEIS proposal for fish screen design optimization has been revised, as shown in the RDEIR/SDEIS, to incorporate the design and performance studies recommended by the Fish Facilities Technical Team. As such, adaptive management and collaborative science now plays a rather minor role in fish screen design. Instead, the proposed methodology includes studies prior to final facility design to optimize fish screen design based on observed and modeled hydrodynamics and fish use of the intakes reach of the river, as well as in response to design review by the fish agencies. Then there are start-up studies during which fish screen performance is optimized based on data collected during actual intake operations at various river flows and tidal stages. Finally there are post-project studies to validate screen performance relative to design parameters. Only the last of these studies may be further modified by adaptive management using information from the prior studies. Obviously the role of adaptive management at that point cannot be specified, since the prior studies have not yet occurred.</p>

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		<p>the problems of proper vector velocities, and routinized screen cleaning and maintenance while ignoring consideration of whether the project achieves the Delta Reform Act's coequal goals and reduced Delta reliance policy, and complies with the state's reasonable use and public trust doctrines.</p> <p>But even more -- what is this "Collaborative Science and Adaptive Management Program (AMMP)"? The RDEIR/SDEIS says only that "it is assumed that the [AMMP] developed for Alternative 4A would not, by itself, create nor contribute to any new significant environmental effects; instead the AMMP would influence the operation and maintenance of facilities and protected or restore habitat associated with Alternative 4A." [Footnote 356: RDEIR/SDEIS, Section 4.1.2.4, p. 4.1-18, lines 20-24; and repeated in Section 4.1.3.3, pp. 4.1-28 to 4.1-29, and Section 4.1.4.3, pp. 4.1-36.]</p> <p>The RDEIR/SDEIS fails to disclose whether the AMMP replaces BDCP's Implementation Office or clarify that this is the Tunnels Project's analog to last year's Implementation Office with its adaptive management program, research agenda, and governance processes. This is arm-waving, gesturing to maintain a modicum of adaptive management-as-wild-card, while having rejected all of the Section 10 habitat conservation plan approach.</p> <p>This "wild card" application of the fish screens is applied throughout the RDEIR/SDEIS's treatment of impacts to Delta smelt, longfin smelt, winter-run Chinook salmon, spring-run Chinook salmon, and Central Valley steelhead. The "wild card" fish screens are also applied to non-covered native and non-native species as well that would be vulnerable to impingement, entrainment, injury and death from the north Delta intakes. For winter-run Chinook salmon: "State-of-the art [footnote] fish screens operated with an adaptive management plan would be expected to eliminate entrainment and impingement risk for juvenile winter-run Chinook salmon. [Footnote] The fish screens would be state of the art by incorporating the best available technology and operating to fishery agency standards of protection for fishes. The features of the fish screens are described in more detail in Section 3.6.1.1 of Chapter 3, Description of Alternatives." [Footnote 357: RDEIR/SDEIS, Section 4.3.7, p. 4.3.7-48, lines 13-15.]</p> <p>The footnote to this passage does not say whether that Section 3.6.1.1 is in the 2015 RDEIR/SDEIS, the 2013 Bay Delta Conservation Plan or the 2013 Draft EIR/EIS. It turns out the reference is to the Draft EIR/EIS last year. This oversight should be corrected. The that it is referenced in the RDEIR/ SDEIS means it is permissible and appropriate to verify and compare that description with what we have available to us in 2015. There, the Draft EIR/EIS acknowledges: "For the purposes of this EIR/EIS, it is assumed that the fish screens would be designed to meet Delta smelt criteria, which requires 5 square feet per cfs [cubic feet per second or 5 feet per second]. The fish screen sizes, like the individual intake sizes, would vary depending on intake location and would range from 10 to 22 feet in height and from 915 to 1,935 feet in length. It is anticipated that the screen cleaning system would include several traveling brush cleaning systems installed on the waterside of the intake. As an alternative to the fixed screen panel and brushing system, a traveling screen system with a screen belt and stationary brush/water jet system could be used." [Footnote 358: Draft EIR/EIS, November 2013, p. 3-87, lines 16-22.]</p> <p>This Draft EIR/EIS passage also juxtaposes Delta smelt criteria with the cleaning system for the screens. We [Environmental Water Caucus] note that last year's passage assuming Delta smelt criteria cites to no supporting authority or documentation for such criteria. These criteria involve an average velocity of flow that is two and a half (2.5) times faster than the</p>	

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		<p>cleaning rate of the fish screens (2 feet per second, fps) and 15 to 25 times faster than the approach velocity criteria in BDCP, CDFW, and NMFS criteria summarized in Table 7 [ATT27]. (0.2 fps to 0.33 fps). The Tunnels Project proponents need to get their stories straight on fish screen design criteria performance and whether a cleaning system faster than the approach and sweeping velocities really works to prevent mishaps with fish in their vicinity. Could the cleaning system itself cause impingement, injury and death to fish as an alternative pathway to fish demise beyond the passive screen/approach velocity interaction? Put another way, would self-cleaning operations occur while the intakes are operating, or would they have to be shut down to allow cleaning to proceed and avoid harming fish? Are Tunnels Project engineers and biologists considering this possibility?</p> <p>These passages indicate, despite their technological and scientific optimism, that the screens continue to be unproven, experimental, and very much a work in progress. A recent DWR staff email (sent on the date the RDEIR/SDEIS was released) concerning the CER [DWR's Conceptual Engineering Report] indicates that construction details are very much still in the planning and design stage, including basic details of the fish screens. [Footnote 359: Email from Cassandra Enos of DWR to Dawn Bertolani, HGCPM, et al, "CER and Construction Activities Details Meeting," July 10, 2015. Enos writes: "I think the consensus was that it would be helpful to have another meeting in a couple of weeks to discuss the intake construction in more detail." Among the questions she had left from a previous meeting: "What size are the baffles on the fish screens? What is the size/design of the refugia? How will the sweeping velocity past the screens be measured? . . . What's the depth of the fish screens?"] As with any scientific effort, outcomes of properly designed research experiments are never known in advance. The RDEIR/SDEIS's brand of optimism is therefore speculative at best, boosterish at worst.</p> <p>The RDEIR/SDEIS also concludes that "Potential entrainment and impingement risks at the proposed north Delta facilities would be limited because it is outside the main range of Delta smelt. . . . The intakes would be screened and would exclude Delta smelt of around 22 mm and larger." [Footnote 360: RDEIR/SDEIS, p. 4.3.7-24, lines 4-7.] This conclusion is speculative. As with last year's Draft EIR/EIS, BDCP did not model and disclose results estimating entrainment and impingement risks for Delta smelt at the north Delta intakes to buttress this claim. Table 11-4A-1 presents modeling results of "proportional entrainment . . . of Delta Smelt at SWP/CVP South Delta Facilities for Alternative 4A." No other such table is presented for entrainment risk at north Delta intakes. [Footnote 361: This is also true of Alternatives 2D and 5A. See RDEIR/SDEIS, Section 4.4.7, Table 11-2D-1, p. 4.4.7-3, and Section 4.5.7, Table 11-5A-1, p. 4.5.7-4.]</p> <p>These comments help document concerns expressed by the Delta Independent Science Board (DISB). In its comments to the Delta Stewardship Council about the RDEIR/SDEIS, the DISB stated: "It is unclear how (and how well) the fish screens would work. The description of fish screens indicates that fish &gt;20 mm are excluded, but what about fish and larvae that are &lt;20 mm, as well as eggs? . . . some fish screens appear to have been installed, but data on their effects are not given. Despite the lack of specific data on how well screens function, the conclusion that there will be no significant impact is stated as certain (e.g., page 1-100 line 38). Here, as in many other places, measures are assumed to function as planned, with no evidence to support the assumptions. The level of certainty seems optimistic, and it is unclear whether there are any contingency plans in case things don't work out as planned. This problem persists from the Previous Draft." [Footnote 362: Delta Independent Science Board, Review of environmental documents for California WaterFix, September 30, 2015, p.</p>	

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		<p>17.]</p> <p>Assuming Delta smelt-friendly design parameters does not mean those parameters are known or have been incorporated into a specific design that would perform as assumed; at least, it was not disclosed as part of alternative descriptions in the Draft EIR/EIS or the RDEIR/SDEIS. This passage does not explain where the Delta smelt fish screen criterion comes from. Nor is it consistent with NMFS or CDFW criteria shown in Table 7. This raises our concern that north Delta intake fish screen designs are in error relative to fish designs, and that North Delta bypass flow operational criteria may not be correct. The Tunnels Project proponents should clarify and correct where necessary the fish screen criteria and designs, and recirculate the RDEIR/SDEIS.</p> <p>In sum, there are distinct disadvantages associated with even the most current fish screen technology applied along the Sacramento River. Fish screens "do affect or impact river flow," states a recent DWR engineering report drafted for compliance with the NMFS salmonid biological opinion. "A large amount of system structure would be placed into the water, thus potentially affecting local and regional hydraulic patterns. Another disadvantage . . . is the potential for debris accumulation. Debris may obstruct or damage parts of the screen, which potentially could lead to minimizing the effectiveness of the system. Therefore, CDFW and NMFS screening criteria may not always be met. Debris issues would require constant monitoring and maintenance to assure that the system is working properly."</p> <p>The study adds:</p> <ul style="list-style-type: none"> <li>-Boat navigation may also be affected. Some type of boat lock may be necessary to accommodate recreational boat passage.</li> <li>-In waterways where there are dynamic hydraulics such as reversing flow, there would be potential for fish impingement. [Footnote 363: DWR, Engineering Solutions, pp. 2-31 to 2-32.]</li> </ul> <p>DWR's study rejected fish screen technology for natural diversion situations where a portion of the Sacramento River splits off at either Georgiana Slough or Three Mile Slough. [Footnote 364: Ibid. p. 4-1. "The use of fish screens as a deterrence option was evaluated and discussed for each site. Typically, maximum flow diversions are used to size fish screens and meet CDFW and NMFS screening requirements. Given the range of high maximum flows over the Delta daily tidal cycles at the five sites, fish screens would be unreasonably large to meet these requirements. Average flow diversions were also used but resulted in screen sizes that were still large and exceptionally long. These results were presented to the TWG [technical working group] at its January 28, 2014 meeting (see Appendix A). The TWG decided to remove fish screens from further consideration based on the required large structure sizes and concerns over the ability to meet CDFW and NMFS screening criteria."]</p> <p>Given the fact that fish screen options were considered at sites just a few miles downstream of the north Delta intakes, why were fish screens rejected for natural diversions from the Sacramento River, while they are deemed acceptable or even necessary for the north Delta intakes associated with the Tunnels Project?</p>	
2653	152	Absence of Baseline Information to Measure Predation Significance of North Delta Intakes:	With respect to delta smelt occurrence farther upstream with sea level rise that is a possibility (which is acknowledged in the analyses); however, the modeling indicated that X2 would be well downstream of the

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		<p>The RDEIR/SDEIS's conclusions on the effects of the north Delta intakes on predation loss are speculative: "Predation loss at the north Delta intakes may occur but would be limited because few Delta smelt are anticipated to occur that far upstream." This conclusion ignores BDCP modeling results concerning upstream migration of X2 (the estuarine habitat indicator that is a key component of Delta smelt habitat index measurement) due to Tunnels Project operations, described in EWC [Environmental Water Caucus]'s comments [this year and] last year. [Footnote 365: EWC Comments, June 11, 2014, p. 65 and Figure 7 [ATT11].] As X2 migrates upstream, estuarine habitat grows smaller and migrates eastward, and the Delta smelt's favored fresh, open water habitat grows smaller and migrates eastward (upstream) as well. By the time north Delta intakes with fish screens were completed and begin operation, and under changing climatic conditions, X2 and Delta smelt could frequent this reach more than anticipated originally, assuming they survive that long.</p> <p>Also related to the proposed introduction of north Delta intakes into the lower Sacramento River is the matter of predation of listed species. Last year's BDCP states the conceptual framework of fish predation this way: "The likelihood of a predation event is a function of three factors: rates of encounter between predator and prey; a decision by the predator to attack the prey; and capture or feeding efficiency of the predator(s). Encounter frequencies between predators and covered fish are related to their overlap in habitat use spatially and temporally, the vulnerability of prey, which is typically linked to environmental conditions like river flows and turbidity . . . and their abundance relative to alternative prey. . . ." [Footnote 366: BDCP, November 2013, p. 3.4-299, lines 4-9.]</p> <p>"Predation hotspots" were mapped in last year's Bay Delta Conservation Plan. [Footnote 367: BDCP, November 2013, Figure 3.4-32, "Predation Hotspots in the Plan Area."] BDCP did not define what a predation hotspot is, but they appear to have a few recognizable characteristics: most, if not all, are associated with artificial (human-built) in-channel hydraulic structures like temporary rock barriers, failed levees, submerged bridge abutments, and Jones Pumping Plant. They also include artificial open water areas like Clifton Court Forebay and Franks Tract where waters lack refuges for prey fish, and prey visibility is high due to relatively shallow conditions. Predators have also learned to wait patiently for deliveries of salvaged fish from Banks and Jones pumping plants at regular locations along the lower Sacramento River. "Total consumption rates," says BDCP, "relate to predator number, predator size, water temperature, prey density, and sometimes prey vulnerability (i.e., microhabitat use of predator and prey and whether the prey has a refuge at low density)." [Footnote 368: BDCP, November 2013, p. 3.4-299, lines 12-14.] Currently known predation hotspots are listed and briefly described. [Footnote 369: BDCP, November 2013, p. 3.4-299, lines 15-39, and p. 3.4-300, lines 1-11.] Salvage release sites are areas where microhabitat use coincides with predator frequency.</p> <p>Last year's Draft EIR/EIS acknowledges that both the north Delta water diversion facilities and nonphysical fish barriers are expected to create new predation hotspots. [Footnote 370: BDCP, November 2013, p. 3.4-300, line 12.]</p> <p>The baseline of predation in the lower Sacramento River between Clarksburg and Courtland for each of the listed fish species is unknown and not disclosed in the RDEIR/SDEIS for its three sub- alternatives. Predation losses for winter-run Chinook salmon at the north Delta intakes are acknowledged by the RDEIR/SDEIS: "Potential predation effects at the north Delta intakes for juvenile salmonids remaining in the Sacramento River (as opposed to entering the Yolo Bypass) could occur if predatory fish aggregated along the screens as has</p>	<p>reach with the north Delta intakes (see Appendix 5.A, Figures C-8-1 to C-8-8 in the DEIR/EIS). The principal comment in this section is related to the lack of baseline predation/predator information of the north Delta intake reach of the Sacramento River. Studies to provide this information are included in CM1 (see Chapter 3, Section 3.4.1.5.1, of the public draft BDCP EIR/EIS); these studies were derived from the Fish Facilities Technical Team (2011) efforts, and also are included in the project description for Alternative 4A.</p>

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		<p>been observed at other long screens in the Central Valley [citation]. Baseline levels of predation are uncertain, however."</p> <p>This section's lengthy description of a "bioenergetics model" to estimate potential fish predation in the Sacramento River exemplifies the Tunnels Project Proponents' willingness to speculate when it serves Tunnels Project talking points. The fact remains that the RDEIR/SDEIS still has no baseline of comparison for fish predation in the river reach between Clarksburg and Courtland on the Sacramento River needed to arrive at a reasonable CEQA and NEPA conclusion about the significance of predation effects in this area. [Footnote 371: See RDEIR/SDEIS, footnote 5, p. 4.3.7-66, indicating methodological problems with another fish predation study at the GCID fish screen in the Sacramento River near Hamilton City. Moreover, the potential for north Delta-located intakes has been expected since at least the CalFED Record of Decision in 2000. Yet no baseline studies were conducted in anticipation apparently.] The RDEIR/SDEIS has neither adequately nor persuasively demonstrated its claim that listed fish would not be present.</p> <p>No lawful mitigation plan for predation hotspot mitigation or avoidance has been included in descriptions of the RDEIR/SDEIS's alternative descriptions. Therefore, the RDEIR/SDEIS's impact conclusions concerning predation loss for Delta smelt and other listed fish species are speculative and therefore inadequate. The RDEIR/SDEIS should be revised to incorporate baseline information on predation in this reach of the river and then recirculated the RDEIR/ SDEIS for additional public review.</p>	
2653	153	<p>The RDEIR/SDEIS is incomplete for lack of other critical baseline data.</p> <p>Last year, EWC [Environmental Water Caucus] commented that the Draft EIR/EIS and BDCP documents are incomplete because DWR has been unable to collect necessary environmental, cultural resource and geotechnical survey and field data from Delta lands along the Tunnels Project alignment related to habitat restoration and Conservation Measure 1 facilities. [Footnote 372: EWC Comments, June 11, 2014, pp. 133-135.] Last year, we also noted that the Draft EIR/EIS failed to disclose adequately the cultural resource setting of the Delta Plan Area, and that the County of Sacramento's comments on the incomplete discussion of Chapter 18's regulatory setting section was inadequate for omitting special planning and neighborhood preservation areas of the County's zoning code.</p> <p>This year, we note that the RDEIR/SDEIS fails to incorporate Sacramento County's comment as part of its RDEIR/SDEIS. [Footnote 373: RDEIR/SDEIS, Sections 4.3.14, 4.4.14, and 4.5.14.] This year, the habitat restoration activities are now omitted from the preferred alternative and the other two sub-alternatives addressed in the RDEIR/SDEIS. This year, we find, however, that the same broad issues exist for the Tunnels Project: The inability of the California Department of Water Resources to gain access to Delta lands along the alignment of the Tunnels Project means that data necessary for cultural and biological resources, soils, and geotechnical matters is unavailable to adequately describe the Tunnels Project's environmental baseline.</p> <p>The lack of available data is acknowledged in the RDEIR/SDEIS. "Although the majority of the footprint of the water conveyance facility has not been surveyed, sensitive resources have been located with and near the portions of the alignment that have been surveyed. For this reason, additional archaeological resources are likely to be found in the portion of the footprint where surveys have not yet been conducted." [Footnote 374: RDEIR/SDEIS,</p>	<p>The EIR/EIS followed the requirements of NEPA and CEQA in its approach to analyzing the potential impacts to cultural resources. The EIR/EIS also sets forth the framework under which the project will comply with Section 106 of the National Historic Preservation Act (NHPA).</p> <p>Under NEPA, a federal agency must determine whether the proposed project will have a significant impact on cultural resources by analyzing both the context of the impact and its intensity. CEQA requires a State agency to determine whether a project may cause a substantial adverse change to the significance of an historical resource. A substantial adverse change to the significance of a historical resource means the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that those physical characteristics that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources are impaired.</p> <p>As explained in the EIR/EIS, every alternative examined the project footprint to the extent feasible. Efforts included archival map research, archeological and field surveys of legally accessible properties, record searches to identify recorded cultural resources, sensitivity analyses for unidentified resources, and correspondence with Native American contacts. The construction of the conveyance facilities would affect identified, as well as yet to be identified, archeological resources in the project footprint. In compliance with NEPA and CEQA, prior to ground-disturbing activities, the project proponents will implement a treatment plan for identified resources. The treatment plan will include data recovery by qualified archeologists when necessary. In addition, each alternative calls for additional mitigation measures to reduce project impacts to the extent practicable, including avoidance, facility redesign where feasible, complete documentation in accordance with applicable programs, and other appropriate treatment methods that are identified in relation to the particular resources being affected.</p> <p>NHPA Section 106 review and compliance will be carried out pursuant to a programmatic agreement (PA) which will set forth federal agency responsibilities under the NHPA. The PA will require USACE to complete the management steps for all future undertakings necessary to implement the proposed project. The agencies will, in consultation with the State Historic Preservation Officer, Indian Tribes and other interested</p>

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		<p>Section 4.3.14, Impact CUL-2, p. 4.3.14-2, lines 15-19.]</p> <p>The RDEIR/SDEIS further acknowledges that there remain "unidentified and unevaluated historic architectural and built environment resources that could be affected by construction activities associated with the Tunnels Project. "As described in detail for Alternative 4 [sic], although DWR does not have legal access to the majority of the footprint for the water conveyance, historical documentation suggests numerous additional resources occur in the footprint of the water conveyance facilities that have not been identified or which cannot currently be accessed and evaluated. Construction may result in direct demolition of these resources, damage through vibration, or indirect effects such as changes to the setting." [Footnote 375: RDEIR/SDEIS, Section 4.3.14, Impact CUL-6, p. 4.3.14-5, lines 25-30. The same is true for Impact CUL-6 in Section 4.4.14, pp. 4.4.14-5 to 4.4.14-6; and Section 4.5.14, pp. 4.5.14-5 to 4.5.14-6.]</p> <p>Impact CUL-6 is not so much an impact discussion, but an admission that the RDEIR/SDEIS is incomplete. An adequate and complete CEQA/NEPA document is required to have benefited from full due diligence by the document preparers, and acknowledging its incompleteness does not resolve the RDEIR/SDEIS's defects in this area, nor does Mitigation Measure CUL-6 ("Conduct a survey of inaccessible properties to assess eligibility, determine if these properties will be adversely impacted by the Project and Develop treatment to resolve or mitigate adverse impacts.") provide mitigation for the incomplete "impact"; these are research agenda and methodology items for the next recirculated draft CEQA/NEPA document, not adequate treatments of these issues under CEQA and NEPA. They are a speculative to-do list, not analysis in and of themselves.</p>	<p>parties: identify the area in which historic properties may be affected, complete an inventory of the historic properties, evaluate identified resources to determine if they are historic properties, determine whether the undertaking will adversely affect those properties, and resolve any adverse effects.</p> <p>Please see Master Responses 1 (Environmental Baselines) and 20 (Cultural Resources Assessment).</p>
2653	154	<p>In the area of geotechnical and soils matters, the Draft EIR/EIS and RDEIR/SDEIS attempt to evaluate the Tunnels Project's vulnerability to earthquake and ground-shaking risk, de-watering of groundwater from construction activities, ground settlement, potential slope failure, vibrations, fault rupture, liquefaction, and canal seepage. Each impact and mitigation is discussed as a matter of "could," rather than "would" or "will." This is because neither document's analyses of these various geotechnical issues is based on data from actual conditions along the Project's alignment. This is acknowledged implicitly when the RDEIR/SDEIS states:</p> <p>"NEPA Effects: This potential effect could be substantial because settlement or collapse during dewatering could cause injury of workers at the construction sites as a result of collapse of excavations. The hazard of settlement and subsequent collapse of excavations would be evaluated by assessing site- specific geotechnical and hydrological conditions at intake locations, as well as where intake and forebay pipelines cross waterways and major irrigation canals. A California-registered civil engineer or California- certified engineering geologist would recommend measures in a geotechnical report to address these hazards, such as seepage cutoff walls and barriers, shoring, grouting of the bottom of the excavation, and strengthening of nearby structures, existing utilities, or buried structures." [Footnote 376: RDEIR/SDEIS, Section 4.3.5, p. 4.3.5-2, lines 16-22. Similar narrative problems exist in Sections 4.4.5 and 4.5.5 as well.]</p> <p>Such prospective statements are due to the fact that DWR has not obtained entry to Delta</p>	<p>The EIR/EIS addresses the potential for geologic hazards associated with conveyance facility construction based on the best available information available at the time of the analysis. Because access to portions of the project are has been restricted the analysis is based on the geotechnical information available and the known site conditions in the conveyance facility alignment. These potential impacts are determined to be less than significant because facilities will be designed to withstand geologic hazards. Please see Chapter 9, Geology and Seismicity, for additional information. Also, see Chapter 9 and Appendix 3B in the Final EIR/EIS for discussion on potential future geotechnical investigations work to be completed prior to and during construction of the water conveyance facilities.</p> <p>See Master Response 16, Seismic Issues.</p>

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		<p>lands along the alignment of the Tunnels Project or any of its potential sub-alternatives to conduct the drilling, boring, and petrologic and soils analyses needed to define the impacts of the Tunnels Project on geological and soils conditions. The passage in this NEPA conclusion is not a valid NEPA conclusion, but a research design and methodology description for recirculating the next Draft EIR/EIS. It does not even accurately represent the extent, location or magnitude of project impacts. This kind of narrative is rife in the RDEIR/SDEIS's treatment of geology/seismicity issues, and is inadequate to the full disclosure purposes of CEQA and NEPA.</p>	
2653	155	<p>DWR's difficulties obtaining entry [to Delta project site lands] continue. [Footnote 377: EWC [Environmental Water Caucus] is grateful to member group Restore the Delta and Thomas Keeling, Freeman Firm, Stockton, California, for this summary description of temporary and permanent entry litigation between the California Department of Water Resources and Delta land owners.] In December of 2013, after five years of litigation, oral argument in the consolidated appeals in the Delta "access wars" finally took place at the Court of Appeal for the Third Appellate District in Sacramento. This was a milestone event in the legal battle spawned by the State's multi-billion dollar twin-tunnel project inappropriately named the Bay Delta Conservation Plan. Counsel for the State urged the court to reverse rulings that have prevented the Department of Water Resources from gaining access to Delta lands to conduct investigations they insisted were essential to complete planning for the BDCP. Counsel for the Delta landowners sought to affirm and strengthen the favorable rulings that had thus far stymied DWR's ambitious plans.</p> <p>The argument before the Court of Appeal focused on whether DWR could lawfully acquire such access rights by proceeding under the "pre-condemnation entry" statute (Code Civ. Proc. [Section] 1245.010, et seq.). The entries DWR requested were prolonged and invasive. DWR claimed that the pre- condemnation entry statute allows it to obtain those entry rights without affording landowners the many rights and safeguards DWR would be required to give them if it proceeded under the more time-consuming procedure known as "eminent domain."</p> <p>The landowners, on the other hand, argued that the requested "entries" were so prolonged and intrusive that they amounted to easements that could be lawfully obtained only by eminent domain. They contended that DWR's entry requests were not brief and innocuous "entries" contemplated by the pre-condemnation entry statute. By attempting to obtain these interests by way of an abbreviated pre-condemnation entry procedure, DWR tried to do an end-run around eminent domain laws and, in fact, sought an unconstitutional taking of private property.</p> <p>In March, 2014 the Court of Appeal issued its Decision. The Majority ruled in favor of the Delta landowners, holding that DWR could not proceed with "geotechnical" entries it sought by way of the pre-condemnation entry statute because that would effectuate an unconstitutional taking. On that point, the appellate court affirmed the Superior Court's ruling. The appellate court also ruled in favor of Delta landowners with respect to DWR's requested "environmental" entries, holding that they, too, amounted to unconstitutional takings. On this issue, the Court of Appeal reversed the trial court's ruling.</p> <p>DWR petitioned the California Supreme Court for review of that decision, and that petition was granted. Briefing on the merits is now complete, and we expect oral argument in the Supreme Court sometime in 2016. We think that well-established case law, the statutory framework, and sound principles of judicial and public policy favor the Delta landowners in</p>	<p>The comment summarizes entry litigation between the DWR and Delta land owners. The comment does not offer specific evidence of gaps in setting/baseline, impact, and mitigation information and how these gaps render the RDEIR/SDEIS incomplete. The EIR/EIS has disclosed that site-specific data were unavailable for parts of the project footprint due to the lack of access; however, data from the region were reviewed by subject matter experts to access and disclose the types of effects that would occur and the requirements of mitigation in the event that the effects were significant. This approach discloses the reasonably available information. The courts have found that if data are not able to be obtained in a reasonable manner, the environmental analysis should disclose those uncertainties.</p>

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		<p>this proceeding.</p> <p>However, regardless of the outcome in the Supreme Court, Delta landowner resistance has already successfully blocked DWR's effort to invoke a procedural "shortcut" to conduct prolonged and invasive "surveys" in the Delta to advance the pernicious twin tunnel scheme.</p> <p>DWR's Eminent Domain Attempts: Frustrated by its failed effort to access Delta properties by way of the pre-condemnation entry statute, in mid-2011 -- even as the appeals from the Coordination Trial Judge's rulings were being perfected -- DWR commenced eminent domain proceedings in four counties in order to condemn temporary easements to access its proposed drilling sites and stage its drilling operations. DWR also tried to condemn permanent easements, each approximately 4 feet by 4 feet, for each boring it intended to drill.</p> <p>However, DWR made several serious missteps in its zeal to obtain the temporary and permanent easements it insisted it needed for BDCP-related geotechnical research. Over a two-year period, the landowners' counsel successfully resisted DWR's eminent domain efforts. As a result, DWR has since dismissed its eminent domain actions in San Joaquin, Yolo, Sacramento and Contra Costa Counties.</p> <p>The gaps in setting/baseline, impact, and mitigation information render necessary analyses in the RDEIR/SDEIS of these issues incomplete. As a consequence, the RDEIR/SDEIS is inadequate. It should be revised, updated with site-specific data on these matters, and recirculated for public review.</p>	
2653	156	<p>Clifton Court Pump Failure, Water Hammer and Back-flow Effects:</p> <p>The RDEIR/SDEIS states that a key modification to Alternative 4 in the Draft EIR/EIS was the removal of three north Delta intake pumps to be replaced with two pumping plants lifting water from the southern end of the Tunnels into Clifton Court Forebay [CCF]. [Footnote 378: RDEIR/SDEIS, Section 3.1, pp. 3-1 to 3-2. ". . . after extensive engineering analysis, DWR has determined that it is not necessary to build pumping plants adjacent to each intake to move the water from the river and into tunnels. Instead, water could be moved from the river into tunnels by two new pumping plants constructed 40 miles away on DWR property at the southern end of the tunnels near Clifton Court Forebay."] This conceptual design is now assumed for modified Alternative 4 and the new preferred Alternative 4A of the Tunnels Project.</p> <p>This new conceptual design has a potential hazard issue that is neither identified nor described in the RDEIR/SDEIS. Power failure at Clifton Court Pumping System coinciding with high Tunnels Project diversion rates are acknowledged to be capable of causing a water hammer effect that would send water rushing back up through the tunnels and surge towers back through surge and vent shafts, the intermediate forebay, and potentially out through the intakes and fish screens between Hood and Courtland.</p> <p>According to an appendix to the CER [DWR's Conceptual Engineering Report], sudden power failure to the south Delta pumping plants for the Tunnels Project could cause an "adverse hydraulic transient condition" that would result from a "sudden flow change resulting from rapid closure of a valve or from loss of power to pumps." The CER states that "for the vast majority of these transients [sic], the impacts are not significant and specific control</p>	<p>This potential issue is addressed in Chapter 3, Description of Alternatives in Section 3.6.1.6 and will be addressed as part of the future engineering design process. No substantial effects from system backflow that may result from an emergency power failure are expected based on the current level of system design.</p>

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		<p>facilities are not necessary for protection. However, in extreme cases, pressure transients can result in damage to the conveyance system, and/or flooding damage." [Footnote 379: California Department of Water Resources, Conceptual Engineering Report: Dual Conveyance Facility, Modified Pipeline/Tunnel Option - Clifton Court Forebay Pumping Plant, July 1, 2015, Appendix D, AECOM Surge Analysis Technical Memorandum No. 3, December 3, 2014, p. 1. Hereafter cited as AECOM Appendix D.] The CER evaluates "one of the more critical conditions . . . associated with a total power failure during peak delivery rates."</p> <p>The "critical condition" of this "water hammer" event is described this way:</p> <p>". . . when the pumps at the Clifton Court Pump Station (CCPS) suddenly lose power and have no provision for overflow in a closed system, the water within the CCPS shaft is rapidly brought to rest by the impulse of the higher pressure developed at the face of the pump impellers. As soon as the first, adjacent volume of water is brought to rest, the same action is applied to the next upstream segment of fluid bringing it also to rest. In this manner, a pulse wave of high pressure travels upstream at some sonic wave speed . . . and at a sufficient pressure to bring the fluid to rest. With the pressure increase, the tunnel expands slightly and the kinetic energy is converted to elastic energy in the pipe.</p> <p>"When this pressure wave reaches the [intermediate forebay, IF] the boundary condition, the fluid in the tunnel is under the extra head required to stop the flow. At this point the elastic energy in the pipe is lost as the pressure is suddenly released to the IF. With the lost pressure, the tunnel contracts, release[s] the stored energy and reversing the flow. This reflection process is repeated until the action of friction, the imperfect elasticity of fluid, and the tunnel wall dampens out the pressure waves -- eventually bringing the fluid to rest at the constant river elevation.</p> <p>". . . While the above represents a theoretical condition, in actuality [for the Tunnels Project], the compression (i.e., pressure) wave traveling upstream does not bring the fluid to rest because there is an overflow relief at the surge shaft weirs and as a result, the magnitude of the potential surge is lessened." [Footnote 380: AECOM Appendix D, pp.1-2.]</p> <p>It is unclear from this description how violent or potentially damaging to the tunnels and related such an event would be. The CER Appendix conducts multiple modeling analyses to gauge the sensitivity and realism of the analysis and significance of the threat of water hammer causing back flow and potential flooding. The appendix finds that the surge shafts incorporated into the conceptual Tunnels Project design do help reduce the impact, but "While this [i.e., surge shaft weirs underground allow some forward moving flow to continue] results in overflow to [Clifton Court Forebay] it will be less than the delivery demand from the pumps of 9,000 cfs [cubic feet per second] and actually limits the typical head build-up that would otherwise be required to stop the flow. In effect, the surge shaft weirs act as a large shock absorber to the system . . ." [Footnote 381: AECOM Appendix D, p. 13.] But in the time it takes to reduce the full effect of the rapid back-flow in the Tunnels Project and the intermediate forebay, "the timing is such that the IF level rises slightly above the river elevation for a brief period of time (on the order of 10-20 minutes). This results in a small reverse flow to the river at intakes 5 and 3" which are located close to Hood and Courtland.</p> <p>The CER Appendix further found that:</p>	

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		<p>"The characteristic response observed does suggest that reverse flows into the Sacramento River are a possibility during conditions when a head imbalance occurs. A head imbalance will occur when the water level at the surge shaft weirs (EL 14.6) is equal to or higher than the Sacramento River water elevation.</p> <p>"During conditions where the Sacramento River water elevations are much higher than EL 14.6 little, or no, reverse flow will occur. However, in conditions where the Sacramento River water surface elevations are lower than EL 14.6 measurable reverse flow will occur. This creates a scenario that as flow stoppage occurs at the CCPS, the water level quickly rises to an elevation somewhat greater than EL 14.6. When the compression wave returns, a head imbalance has developed and flows will reverses back up the system towards the Sacramento River. While this condition does not pose a surge related risk to the CCPS or CCF, it does potentially create back flow through the intake screens into the river during periods of river levels below EL 14.6 unless checking gates or other control measures are used to prevent the backflow." [Footnote 382: AECOM Appendix D, p. 13.]</p> <p>The CER Appendix estimates backflows at the intakes as being quite low (on the order of 37 to 217 cfs with the current intermediate forebay design used in the modeling). The CER appendix also charts head elevations of Tunnels backflow showing the magnitude and attenuation of the pulse waves and the backflows anticipated in the modeling. But the CER appendix does not show or describe potential impacts of surge and vent shaft impacts from such back flow events and the extent to which they would reach the surface, either in water ways or on island lands in the Delta.</p> <p>This water hammer/backflow problem -- an apparent consequence of modifying the "preferred alternative" by relocating pumps from the north Delta intakes to Clifton Court Forebay -- is unmentioned as a possible hazard in the hazard and hazardous materials impact discussions of Sections 4.3, 4.4, and 4.5 of the RDEIR/SDEIS. No attempt is made to evaluate the likelihood of varying combinations of circumstances that could cause blackouts in the grid involving the CCPS that would cause such hazardous events. What is the design strength of tunnels, and is that sufficient to avoid failure of tunnel walls in such events? What is Plan B in the event of catastrophic damage from water hammer and backflow to tunnel walls, the intermediate forebay, surge and vent shafts, and intakes?</p> <p>While the effects of such an event are acknowledged in the CER, they are not disclosed or evaluated in the RDEIR/SDEIS. An independent expert panel should be convened to examine this problem. This is yet another example of the deficiencies of the RDEIR/SDEIS, which is inadequate, should be revised and recirculated.</p>	
2654	1	<p>ATT 1:Exhibit A:</p> <p>Dan Steiner and MBK Engineers, Review of Bay Delta Conservation Program Modeling (June 20, 2014)</p>	<p>This comment describes an attachment to the comment letter. As with response to comment 2654-2, it references an MBK modeling document. Please refer to Master Response 30 for additional information regarding this attachment.</p>
2654	2	<p>ATT 2:Exhibit B:</p> <p>MBK Engineers, Technical Comments on Bay-Delta Conservation Plan Modeling (July 29, 2014)</p>	<p>This comment describes an attachment to the comment letter about MBK modeling. Please refer to the Modeling Master Response 30.</p>

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2654	3	[ATT 3] The description of the proposed project is insufficient for analysis; (b) the project description is inconsistent with the RDEIR/SDEIS's analysis; and (c) issues regarding the analysis that MBK previously identified remain unaddressed. Assumptions, errors, and outdated tools used in the analysis for the BDCP Draft EIR/EIS remain in the RDEIR/SDEIS and result in impractical or unrealistic CVP and SWP operations. The use of the analyses from the BDCP Draft EIR/EIS therefore provides limited useful information about the effects of the proposed California Water Fix project.	Please see Master Response 30 regarding the FEIR/EIS and MBK modeling. Also, see Chapter 3 of the FEIR/EIS for a project description on all project alternatives.
2654	4	ATT 4:Exhibit D: Delta Independent Science Board, Review by the Delta Independent Science Board of the Bay Delta Conservation Plan/California WaterFix Partially Recirculated Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement (September 30, 2015)[ Attachment 4- Exhibit D was not included in the initial letter sent to the BDCP email, however attachment can be found iwith RECIRC Letter #2546]	This comment describes an attachment to the comment letter, please refer to Comment Letter 2546.
2654	5	Key issues of concern California Central Valley Flood Control Agency has with BDCP/CA WaterFix project alternatives and associated EIR/EIS are:  Indecipherable - Document organization and relationships between BDCP analysis and CA WaterFix alternatives is confusing at best, and sometimes incomprehensible.	For more information regarding the document's length and complexity please see Master Response 38.
2654	6	Key issues of concern California Central Valley Flood Control Agency has with BDCP/CA WaterFix project alternatives and associated EIR/EIS are:  Conceptual – The project design/description is preliminary and subject to change, so the impact analysis conclusions are mostly conjecture based on limited facts or actual assessment.	Although final project design is subject to change from the proposed plans described in the Final EIR/EIS, the lead agencies anticipate that the changes will not be such that the impacts will not have been fully disclosed by the Final EIR/EIS. However, should the project be altered in a way that new or different impacts would occur, subsequent CEQA/NEPA compliance would be required.
2654	7	Key issues of concern California Central Valley Flood Control Agency has with BDCP/CA WaterFix project alternatives and associated EIR/EIS are:  Incomplete – Project operations rely on levee corridor through the Delta for conveyance to south Delta pumps, but comprehensive levee and flood protection analysis is deferred, and cost-sharing of levee maintenance is absent	Please see Section 6A.6 in Appendix 6A, FEIR/EIS, for potential effects to flood protection and levees in the Delta, including measures to minimize and avoid impacts to surface water and river flow. Also, see Section 6A.6 for a discussion on potential future hydraulic analyses during the Section 408 permitting process.  Section 6A.6 includes a discussion on levees modified by construction of the California WaterFix (CWF/Alternative 4A), including responsibilities of the project proponents.  Before and/or during construction of the CWF water conveyance facilities, project proponents will explore opportunities with local reclamation districts and the Central Valley Flood Protection Board (CVFPB) to address potential conflicts regarding levee maintenance, inspection, and flood fighting activities on project and non-project levees. DWR will look to enter into agreements with local reclamation districts with jurisdiction in the Delta to ensure levee management activities by both government and local agencies are not interrupted during construction of the water conveyance facilities. In addition, DWR will comply with all applicable flood protection requirements and regulations to ensure flood neutrality during construction and operations of the CWF.
2654	8	Key issues of concern California Central Valley Flood Control Agency has with BDCP/CA WaterFix project alternatives and associated EIR/EIS are:  Pre-Determined – Submission of 404 permit to U.S. Army Corps of Engineers and change of diversion petition to State Water Resource Control Board appear to have already determined the outcome of the ongoing CEQA/NEPA environmental review process.	The Lead Agencies evaluated and considered all alternatives to the proposed project extensively. Please see Master Response 4 for further discussion of the range of alternatives analyzed, how the alternatives were evaluated at an equal level of detail, the preferred alternative, and modeling used for alternatives 4A, 2D and 5A. Neither Lead Agency has pre-determined the outcome of the CEQA or NEPA process by submitting permit applications to other regulatory agencies pending the completion of the CEQA and NEPA processes. All responsible agencies (under CEQA) and cooperating agencies (under NEPA) will rely on the Final EIR/EIS, and any supplemental analysis they may require, before they issue state or federal permits

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			needed for the California WaterFix, as required under CEQA and NEPA.
2654	9	There is acknowledgment throughout the new CA WaterFix documents that the facilities construction under Alt. 4A would be identical to that of Alt. 4, with similar operations. (e.g., Water Supply chapter, page 4.3.1-1, lines 3-6, 2015 DREIR/DSEIS). Because the construction, operation, and impacts of the new CA WaterFix preferred alternative (Alt. 4A) is substantially similar to the prior preferred alternative (Alt. 4), most of the significant adverse impacts identified in the 2014 BDCP Alt. 4 still apply to CA WaterFix Alt. 4A.	<p>The preferred alternative, Alternative 4A, will mitigate for project impacts. Habitat restoration under the 3 additional sub-alternatives are reduced, but the proposed project's parallel, California EcoRestore, will move forward with large-scale restoration in the Delta.. For further information on the various alternatives, refer to Final EIR/EIS Chapter 3, "Description of Alternatives" and Appendix 3A, "Identification of Water Conveyance Alternatives, Conservation Measure 1". Furthermore, according to CEQA case law, where the alternatives analyzed in the EIR allow for a wide range of choices with varying degrees of environmental impacts, the document may support the ultimate approval not only of the fully developed alternatives, but also what might be called "hybrid" alternatives whose features and impacts occur within the analytical continuum between the "bookends" created by the least-impacting and most-impacting alternatives, respectively (See, e.g., Village Laguna of Laguna Beach, Inc. v. Board of Supervisors (1982) 134 Cal.App.3d 1022, 1028-1029; California Oak Foundation v. Regents of University of California (2010) 188 Cal.App.4th 227, 274-277; Cherry Valley Pass Acres and Neighbors et al. v. City of Beaumont (2010) 190 Cal.App.4th 316, 353-356).</p> <p>Please refer to Master Response 4 (Alternatives) for additional information regarding the development and selection of the preferred alternative.</p>
2654	10	<p>In California Central Valley Flood Control Association view, the CA WaterFix project description and environmental analysis is a jumbled mess, resulting in a complex labyrinth that is hard to navigate, and even harder to decipher. The degree of difficulty is heightened by the fact that the new alternatives rely on modeling done for BDCP and continually refer back to BDCP alternatives for project description and environmental impact analysis.</p> <p>For example, throughout the CA WaterFix chapters, the impact analysis and conclusions for Alt. 4A refer to BDCP Alt. 4, which then often refer readers to BDCP Alt. 1A for a description of how CEQA/NEPA conclusions and mitigation measures were determined.</p>	<p>The size and complexity of these drafts reflect an unprecedented effort to analyze a proposed project under both state and federal laws for endangered species along with 18 action alternatives.</p> <p>For more information regarding the document's length and complexity please see Master Response 38.</p> <p>Also, additional modeling for the additional sub-alternatives is included in the FEIR/EIS. Please see Chapter 5 for updated hydrological modeling of Alternatives, 4A, 5A, and 2D.</p>
2654	11	The California Central Valley Flood Control Association finds that the description of CA Waterfix construction and operation is often internally inconsistent, preventing a full and meaningful disclosure of the scope, purpose, intensity, duration, and true effects in the RDEIR/SDEIS. This is not unexpected since the design is still at a very preliminary conceptual level according to the July 1, 2015 Conceptual Engineering Report by the Delta Habitat Conservation & Conveyance Program (DHCCP).	For more information regarding construction and operational components of the proposed project please see Chapter 3 of the FEIR/EIS. Also, see response to comment 2654-6 regarding the level of project design.
2654	12	<p>The California Central Valley Flood Control Association joins in the Delta Independent Science Board's (ISB) recent assessment of CA WaterFix that the interdependence of water conveyance, levee maintenance, and habitat restoration in the Delta warrant an environmental impact assessment that is more complete, comprehensive, and comprehensible than the current RDEIR/SDEIS." Their following observations additionally capture additional inherent deficiencies:</p> <p>-“The Current Draft contains a wealth of information but lacks completeness and clarity in applying science to far-reaching policy decisions.” (09-30-15 cover letter)</p> <p>-“It defers essential material to the Final EIR/EIS and retains a number of deficiencies from the Bay Delta Conservation Plan Draft EIR/EIS.” (09-30-15 cover letter)</p>	Please refer to comment letters #1448 and #2546 to see responses to the Delta Independent Science Board's comments.

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		<p>-“The missing content is needed for evaluation of the science that underpins the proposed project. Accordingly, the Current Draft fails to adequately inform weighty decisions about public policy.” (Pg 4)</p> <p>-“Far-reaching decisions should not hinge on environmental documents that few can grasp.” (Pg 9)</p>	
2654	13	<p>V. RISKS TO FLOOD CONTROL PURPOSE, FUNCTION, EFFECTIVENESS</p> <p>In 1953, the State Plan Flood Control works were transferred to California with a memorandum of understanding (MOU) confirming the State’s obligation to operate and maintain all completed works/facilities and to hold the federal government harmless [Footnote 3: 1953 Memorandum of Understanding (USACE and The Reclamation Board, 1953) and Supplements. Available at <a href="ftp://ftp.water.ca.gov/mailout/CVFPB%20Outgoing/Orientation%20Materials/Item%203C%20-%20LM%20Assurance%20Agreements/Example%201%20-%20srfcp_mou_1953%20--%20jsp%20copy.pdf">ftp://ftp.water.ca.gov/mailout/CVFPB%20Outgoing/Orientation%20Materials/Item%203C%20-%20LM%20Assurance%20Agreements/Example%201%20-%20srfcp_mou_1953%20--%20jsp%20copy.pdf</a>]. In addition, the State has signed assurance agreements with the U.S. Army Corps of Engineers to maintain the San Joaquin River Flood Control Project in accordance with the 1955 MOU.</p> <p>Jurisdiction and authority throughout the drainage basin and for the 1.7 million acres within the state’s Sacramento and San Joaquin Drainage District (SSJDD) is the responsibility of the Central Valley Flood Protection Board (CVFPB/Board) [Footnote 4: Authority rests in the Flood Protection Board pursuant to assurance agreements with the USACE and the USACE Operation and Maintenance Manuals under Code of Federal Regulations, Title 33, Section 208.10 and United States Code, Title 33, Section 408]. Created by State legislation in 1913, the SSJDD holds the property rights on about 18,000 parcels of SPFC lands, some going back to 1900 [Footnote 5: Central Valley Flood Protection Board webpage, "Sacramento-San Joaquin Drainage District Jurisdiction Maps." Available at <a href="http://www.cvpfb.ca.gov/cvpfb/ssjdd_maps/">http://www.cvpfb.ca.gov/cvpfb/ssjdd_maps/</a>]. Annual inspections of the SPFC levee system are conducted twice annually by DWR [Footnote 6: 2013 Inspection and Local Maintaining Agency Report of the Central Valley State-Federal Flood Projection System (providing that “DWR, under the authority of Water Code § 8360, § 8370, and § 8371, performs a verification inspection of the maintenance of the SRFCP levees performed by the local responsible agencies, and reports to the USACE periodically regarding the status of levee maintenance accomplished under the provisions of Title 33, Code of Federal Regulations (CFR), Section 208.10. While there are no specific water code provisions directing DWR to inspect and report on Maintenance of the San Joaquin River Flood Control System, DWR has performed inspections and provided reports for many years as a matter of practice that is consistent with Title 33, CFR.”) Available at <a href="http://cdec.water.ca.gov/current_reports.html">http://cdec.water.ca.gov/current_reports.html</a>]. This comprehensive interconnected</p>	<p>Please note that the BDCP is no longer the preferred alternative. The preferred alternative is now Alternative 4A and no longer includes an HCP</p> <p>Please see Appendix 6A, Section 6A.6.2.1, FEIR/EIS, for a discussion on DWR consistency with the State Plan of Flood Control (SPFC), and Section 6A.6.1.2 for information on project consistency with USACE, CVFPB, and DWR flood standards and regulations. The project proponents are committed to designing and operating the proposed project to ensure no net increase in flood risk to the Delta and surrounding communities.</p> <p>For more information regarding project consistency with flood protection regulations, please see Appendix 6A.</p> <p>For more information regarding permitting please see Master Response 45.</p>

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		<p>system of levees is absolutely critical to public health and safety, including the protection of the region’s transportation, agriculture, business, homes, and even water conveyance [Footnote 7: DWR A Framework for Department of Water Resources Integrated Flood Management Investments in the Delta and Suisun Marsh (September 24, 2013)]. Levees in the Delta (Plan Area) provide this protection at all times, during two daily high tides and seasonal high-flow events.</p> <p>Under California law, no modification to the SPFC system (encroachment or project) may be constructed on or near the Sacramento and San Joaquin Rivers or their tributaries until plans have been reviewed and the projects have been approved or a permit issued by the CVFPB [Footnote 8: Central Valley Flood Protection Board , A Century of Progress: Central Valley Flood Protection Board 1911-2011 (2011). Available at <a href="http://www.cvpfb.ca.gov/Publications/DWR100Years_05.pdf">http://www.cvpfb.ca.gov/Publications/DWR100Years_05.pdf</a>]. The Board authorizes use of the SPFC facilities by issuing encroachment permits only if the project is compatible with the flood system and will not hamper the State’s Operations &amp; Management responsibilities.</p> <p>The, BDCP/WaterFix alternatives and RDEIR/SDEIS must embrace – as a fundamental permit condition – the requirement that the existing level of flood protection be maintained to protect people, property, infrastructure, habitat, and conveyance. As most public agencies within the Delta are constantly upgrading their level of flood protection, it is also essential that BDCP does not create a new barrier to future ability to increase local level of flood protection.</p> <p>All three of the new diversion intakes and the five barges in BDCP/WaterFix alternatives are encroachments on State Plan of Flood Control facilities, requiring permit approvals from the U.S. Army Corps of Engineers, Central Valley Flood Protection Board, and local reclamation districts.</p>	
2654	14	<p>Fails To Analyze Increased Flood Risks From Substantial Alteration the Location, Configuration, and Purpose of State Plan of Flood Control</p> <p>Following is a specific example of CM1 construction actions (not including mitigation measures) that may impact (adversely or beneficially) existing flood protection facilities and system design flow capacities:</p> <ul style="list-style-type: none"> <li>-Construct 3 intakes on Sacramento River eastside levee within 4 mile stretch (possibly moving these levees too?);</li> <li>-Erect at least eight in-water cofferdams in Sacramento River and several Delta channels (three intakes and five barge loading facilities);</li> <li>-Construct cutoff walls down middle of levees to prevent seepage;</li> <li>-Increase sediment loading and removal at intake locations;</li> <li>-At each of the three intakes, install 12 large gravity collector box conduits through the levee prism to convey flow to the sedimentation system on the landside (total of 36 levee penetrations);</li> </ul>	<p>Please see Appendix 6A, Section 6A.6.2.1.3, FEIR/EIS, for a discussion on DWR consistency with the State Plan of Flood Control (SPFC), and Section 6A.6.1.2 for information on project consistency with USACE, CVFPB, and DWR flood standards and regulations. Also, see Section 6A.6.3 and 6A.6.4, which discusses potential impacts of cofferdams on surface water, construction traffic effects on levee integrity, levee modifications, barge unloading facilities, among others.</p> <p>Refer to Section 3.6.1 in Chapter 3, FEIR/EIS for a description of Reusable Tunnel Material (RTM) storage sites and potential reuse. The storage areas would be created by excavating and stockpiling the native topsoil for future reuse. Once the area has been suitably excavated, and if a lined storage area is required, an impervious liner would be placed on the invert of the material storage area and along the interior slopes of the berms surrounding the pond. Additional features of the long-term material storage areas would include berms and erosion protection measures to contain storm runoff if necessary. The construction of storage sites will conform to applicable design guidelines and standards to address potential runoff and drainage issues.</p> <p>Section 6A.6 in Appendix 6A discusses potential future hydraulic analyses during the Section 408 permitting process.</p>

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		<ul style="list-style-type: none"> <li>-Construct 5 barge landings on levees;</li> <li>-Permanent barrier at the head of Old River;</li> <li>-Modify approximately six miles of levees, on either a temporary or permanent basis;</li> <li>-Blocking, re-aligning, re-routing, and removal of state highways, county and private roads with levees underneath pavement;</li> <li>-Removal and local storage/disposal of approximately 30.7 million cubic yards of tunnel muck;</li> <li>-Removal and local storage/disposal of approximately 8 million cubic yards of dredged material; and</li> </ul>	
2654	15	<p>Fails To Analyze Increased Flood Risks From Substantial Alteration the Location, Configuration, and Purpose of State Plan of Flood Control</p> <p>Following is a specific example of CM1 construction actions (not including mitigation measures) that may impact (adversely or beneficially) existing flood protection facilities and system design flow capacities:</p> <ul style="list-style-type: none"> <li>-Installation of power lines over existing levees.</li> </ul>	<p>Please see Appendix 6A, Section 6A.6.2.1.3, FEIR/EIS, for a discussion on DWR consistency with the State Plan of Flood Control (SPFC), and Section 6A.6.1.2 for information on project consistency with USACE, CVFPB, and DWR flood standards and regulations. Any modifications to Delta levees as a result of implementing the proposed project will comply with flood protection criteria to ensure flood neutrality.</p>
2654	16	<p>Following is an impact related to BDCP/WaterFix activities that specifically require more analysis, disclosure, and mitigation than what is provided in the current Draft:</p> <p>Damage to levee integrity and stability from tunnel muck haulage and other construction activities (that go way beyond the design and intended use of these rural facilities), seepage and erosion scour, intensive pile driving, and increased subsidence and sink holes from CM1 dewatering;</p> <p>Deflection and obstruction of flood flows in selected Delta channels due to cofferdam construction for three intakes and five barges, levee reconfigurations, sediment loading, and other construction activities that may redirect flows and alter flood risks throughout the ten-year construction timeframe;</p> <p>Impairment of ditches, pumps and other interior drainage facilities vital to the maintenance of low-lying Delta lands through the discharge from CM1 dewatering activities, disconnecting interconnected drainage systems, and seepage waters exceeding existing local capacity.</p>	<p>Please see Appendix 6A in the Final EIR/EIS, Sections 6A.6.3 and 6A.6.4, in the FEIR/EIS for information on potential impacts from construction traffic, seepage, erosion, pile driving, dewatering, cofferdams, sediment loading, barge unloading facilities, and effects to drainage, among others. Also, see Section 6A.6.2.1.3 for a discussion on DWR consistency with the State Plan of Flood Control (SPFC), and Section 6A.6.1.2 for information on project consistency with USACE, CVFPB, and DWR flood standards and regulations.</p>
2654	17	<p>Following is an impact related to BDCP/WaterFix activities that specifically require more analysis, disclosure, and mitigation than what is provided in the current Draft:</p> <p>Obstruction of levee maintenance, flood fighting and emergency response activities through the clogging of Delta levee roadways and channels with construction traffic and equipment, and through the monopolization of barges and repair materials.</p>	<p>Please see Section 6A.6 in Appendix 6A of the FEIR/EIS for a discussion on levees modified by construction of the California WaterFix (CWF), including responsibilities of the Lead Agencies.</p> <p>Before and/or during construction of the CWF water conveyance facilities, project proponents will explore opportunities with local reclamation districts and the Central Valley Flood Protection Board (CVFPB) to address potential conflicts regarding levee maintenance, inspection, and flood fighting activities on project and non-project levees. DWR will look to enter into agreements with local reclamation districts with jurisdiction in the Delta to ensure levee management activities by both government and local agencies are not interrupted during construction of the water conveyance facilities. In addition, DWR will comply with all applicable flood protection requirements and regulations to ensure flood neutrality during construction and</p>

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			operations of the CWF.  For potential impacts on emergency traffic routes and emergency response services, please see Chapter 19 (Transportation) and Chapter 20 (Public Services and Utilities) in the FEIR/EIS, respectively.
2654	18	Following is an impact related to BDCP/WaterFix activities that specifically require more analysis, disclosure, and mitigation than what is provided in the current Draft:  Interference with long-standing levee maintenance and repair programs in the Delta through usurpation of habitat mitigation opportunities on which these programs depend.	The California Department of Water Resources' Levee Repairs and Floodplain Management Office is responsible for administering levee programs through evaluation and direct rehabilitation of structural deficiencies in California's levee system. Overall levee repairs and improvement programs administered by DWR will continue with available funding. For additional information on the relationship between the proposed project and Flood protections in the Delta, please see EIR/EIS Appendix 6A BDCP/California WaterFix Coordination with Flood Management Requirements, FEIR/EIS.
2654	19	Following is an impact related to BDCP/WaterFix activities that specifically require more analysis, disclosure, and mitigation than what is provided in the current Draft:  Cumulative effects on the flood control system, particularly State Plan of Flood Control facilities and operations.  Regulatory constraints on implementing mitigation (e.g., U.S. Army Corps of Engineers no vegetation on project levees policy, obtaining anticipated dredging permits).	Please see Appendix 6A of the Final EIR/EIS, Section 6A.6.2.1.3, FEIR/EIS, for a discussion on DWR consistency with the State Plan of Flood Control (SPFC), and Section 6A.6.1.2 for information on project consistency with USACE, CVFPB, and DWR flood standards and regulations. Also, see Section 6A.6.2.1.2 for DWR compliance with USACE PL 84-99 design standards for levees modified by the proposed project.
2654	20	Following is an impact related to BDCP/WaterFix activities that specifically require more analysis, disclosure, and mitigation than what is provided in the current Draft:  Impacts reducing the current level of flood protection achieved with recent Prop. 13, 1E, and 84 investments.	Please see Appendix 6A, Sections 6A.2 and 6A.3, FEIR/EIS, for discussion on existing levee improvement programs and funding mechanisms, which would not be affected by the BDCP/CWF. Levees are an important public safety resource and the proposed project would not change levee policy or replace ongoing programs and grant projects aimed at facilitating and supporting levee improvements in or outside the Delta. It recognized that levee maintenance and safety in the Delta is an important issue for the residents of the Delta and for statewide interests.
2654	21	Following is an impact related to BDCP/WaterFix activities that specifically require more analysis, disclosure, and mitigation than what is provided in the current Draft:  Federal Emergency Management Agency building requirements and National Flood Insurance Program flood insurance eligibility.	Please see Appendix 6A, Section 6A.6.2.1.2, FEIR/EIS, for information on FEMA requirements for levees modified by the proposed project. In addition, the project would not affect National Flood Insurance Program flood insurance eligibility, and is committed to flood neutrality in the Plan Area.
2654	22	Following is an impact related to BDCP/WaterFix activities that specifically require more analysis, disclosure, and mitigation than what is provided in the current Draft:  Evacuation plans for communities (residents, businesses, schools, tourists, etc) in the Plan Area.	For potential impacts on emergency traffic routes and emergency response services, please see Chapter 19 (Transportation) and Chapter 20 (Public Services and Utilities) in the FEIR/EIS, respectively.
2654	23	Following is an impact related to BDCP/WaterFix activities that specifically require more analysis, disclosure, and mitigation than what is provided in the current Draft:  Financial impacts to Reclamation Districts in the Plan Area (e.g., reduced assessment revenues during the 10-year construction, increased maintenance costs to deal with seepage/erosion damage, increased drainage pumping costs).	Under Alternative 4A, publicly-owned water conveyance facilities would be constructed on land of which some is currently held by private owners. Property tax and assessment revenue generated by lands that would be transferred from private to is estimated to total \$6.7 million over the construction period. Typically, decreases in revenue could potentially result in the loss of a substantial share of some agencies' tax bases and particularly for smaller districts affected by a project. However, California Water Code (Section 85089 subdivision 9b) specifies that the entities constructing and operating a new Delta conveyance facility will fully mitigate for the loss of property tax revenues or assessments levied by local governments or special districts. This Water Code requirement will ensure that tax revenues forgone as a result of transferring land from private to public ownership will be fully offset.
2654	24	Following is an impact related to BDCP/WaterFix activities that specifically require more	Please see Appendix 6A of the Final EIR/EIS, Section 6A.6.2.1.3, FEIR/EIS, for a discussion on DWR

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		analysis, disclosure, and mitigation than what is provided in the current Draft:  Increase in Federal Emergency Management Agency flood insurance rates and building restrictions, or Public Law 84-99 eligibility problems as a result of BDCP/WaterFix project construction.	consistency with the State Plan of Flood Control (SPFC), and Section 6A.6.1.2 for information on project consistency with USACE, CVFPB, and DWR flood standards and regulations. Also, see Section 6A.6.2.1.2 regarding DWR maintenance responsibilities and conformance with USACE PL-84 standards. Overall, construction and operations of the proposed project would not increase flood risk to people or structures in the Delta.
2654	25	California Central Valley Flood Control Association requests that the BDCP/WaterFix project alternatives and RDEIR/SDEIS be revised to address the multiple levee integrity and general flood control challenges and be recirculated again for public review and comment [Footnote 9: RC Section 21092.1 and Guidelines Section 15088.5 require an EIR to be re-circulated whenever significant new information has been added to the EIR after the draft has been available for review, but prior to certification of the final EIR. The addition of these omissions and providing the required analysis, disclosure, and mitigation would constitute significant new information.].In addition, prior to final certification of the EIR/EIS, DWR should execute a binding agreement with the Central Valley Flood Protection Board (CVFPB) and local Reclamation Districts to:  1) Establish general principles and guidelines for any proposed alterations of flood control facilities in the Plan Area, particularly those affecting the State Plan of Flood Control's (SPFC) location, configuration, purpose, and functionality.	Please see Appendix 6A, Section 6A.6.2.1.3, FEIR/EIS, for a discussion on DWR consistency with the State Plan of Flood Control (SPFC), and Section 6A.6.1.2 for information on project consistency with USACE, CVFPB, and DWR flood standards and regulations. Also, see Section 6A.6.2.1.2 regarding DWR maintenance responsibilities for levees modified by the proposed project.  Section 6A.6 also includes a discussion on levees modified by construction of the California WaterFix (CWF/Alternative 4A), including responsibilities of the project proponents.  Before and/or during construction of the CWF water conveyance facilities, project proponents will explore opportunities with local reclamation districts and the Central Valley Flood Protection Board (CVFPB) to address potential conflicts regarding levee maintenance, inspection, and flood fighting activities on project and non-project levees. DWR will look to enter into agreements with local reclamation districts with jurisdiction in the Delta to ensure levee management activities by both government and local agencies are not interrupted during construction of the water conveyance facilities. In addition, DWR will comply with all applicable flood protection requirements and regulations to ensure flood neutrality during construction and operations of the CWF.
2654	26	California Central Valley Flood Control Association requests that the BDCP/WaterFix project alternatives and RDEIR/SDEIS be revised to address the multiple levee integrity and general flood control challenges and be recirculated again for public review and comment [Footnote 9: RC Section 21092.1 and Guidelines Section 15088.5 require an EIR to be re-circulated whenever significant new information has been added to the EIR after the draft has been available for review, but prior to certification of the final EIR. The addition of these omissions and providing the required analysis, disclosure, and mitigation would constitute significant new information.].In addition, prior to final certification of the EIR/EIS, DWR should execute a binding agreement with the Central Valley Flood Protection Board (CVFPB) and local Reclamation Districts to:  Design and operate BDCP/WaterFix conveyance construction and operation to be consistent and complementary to the modifications of the SPFC and other flood protection facilities currently being planned in the Central Valley Flood Protection Plan (CVFPP) process, including Regional Plans.	Please see Appendix 6A, Section 6A.6.2.1.3, FEIR/EIS, for a discussion on DWR consistency with the State Plan of Flood Control (SPFC), and Section 6A.6.1.2 for information on project consistency with USACE, CVFPB, and DWR flood standards and regulations. Also, see Section 6A.7.1 for information on future coordination efforts with existing flood protection programs and plans in the Plan Area.
2654	27	California Central Valley Flood Control Association requests that the BDCP/WaterFix project alternatives and RDEIR/SDEIS be revised to address the multiple levee integrity and general flood control challenges and be recirculated again for public review and comment [Footnote 9: RC Section 21092.1 and Guidelines Section 15088.5 require an EIR to be re-circulated whenever significant new information has been added to the EIR after the draft has been available for review, but prior to certification of the final EIR. The addition of these omissions and providing the required analysis, disclosure, and mitigation would constitute significant new information.].In addition, prior to final certification of the EIR/EIS, DWR should execute a binding agreement with the Central Valley Flood Protection Board (CVFPB) and local Reclamation Districts to:  Avoid impacts that reduce the level of flood protection recently achieved from the	Please see Appendix 6A of the Final EIR/EIS, Section 6A.6.2.1.3, FEIR/EIS, for a discussion on DWR consistency with the State Plan of Flood Control (SPFC), and Section 6A.6.1.2 for information on project consistency with USACE, CVFPB, and DWR flood standards and regulations. Overall, construction and operations of the proposed project would not increase flood risk to people or structures in the Delta.  Section 6A.6 also includes a discussion on levees modified by construction of the California WaterFix (CWF/Alternative 4A), including responsibilities of the project proponents.  Before and/or during construction of the CWF water conveyance facilities, project proponents will explore opportunities with local reclamation districts and the Central Valley Flood Protection Board (CVFPB) to address potential conflicts regarding levee maintenance, inspection, and flood fighting activities on project and non-project levees. DWR will look to enter into agreements with local reclamation districts with

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		<p>construction of flood protection projects in the Plan Area that were financed with local, State and Federal funding (i.e., Prop. 1E and 84, Water Resources Reform &amp; Development Act appropriations) as well as projects planned for implementation in the near future pursuant to the Central Valley Flood Protection Plan or U.S. Army Corps of Engineers' ongoing feasibility studies in the Plan Area.</p>	<p>jurisdiction in the Delta to ensure levee management activities by both government and local agencies are not interrupted during construction of the water conveyance facilities. In addition, DWR will comply with all applicable flood protection requirements and regulations to ensure flood neutrality during construction and operations of the CWF.</p>
2654	28	<p><b>B. Cofferdams and In-Water Intakes Create Additional Construction Impacts</b></p> <p>According to the BDCP/WaterFix documents, several encroachments into the Sacramento River and tributary Delta channels associated with the 10-year construction of CM1 will occur, including eight separate cofferdams in the Sacramento River and tributaries.</p> <p>The three new intakes alone will occupy a total of 7.5 acres of the Sacramento River between river miles 37 and 41, leaving only about 380-580 feet open for flood flows in this four-mile stretch during the 4-6 year construction period. Yet, the EIR/EIS for BDCP/WaterFix alternatives assumes there will be no reduction in flood capacity because both of the permitting agencies will require the project to be flood-neutral and will therefore require mitigations such as setting back the levees on the other side of the river.</p> <p>The setback of levees as CA WaterFix construction mitigation or USACE 408 permit requirement is no small undertaking. Setting back the Project levee on the Westside of the Sacramento River as mitigation for CM1 temporary cofferdams and permanent intakes could also include seepage berms, relief wells, and cutoff (slurry) walls. In some cases, setback levees can themselves alter the flood flows, creating additional impacts that must be mitigated by</p> <p>project proponents [Footnote 10: See, e.g., DWR, Sutter Bypass RMA2 Model Report (Construction of setback levees not recommended because "Model results indicate that although peak water levels in the Feather River are reduced significantly by the setback levee, water levels in the Sutter Bypass increased as a result of the revised levee configuration.")].</p> <p>Glossing over the setback of the Westside levee represents a significant omission of environmental impacts, because such an action would require the condemnation of significant number of acres, houses and businesses. Permanent crops and county roads will also be affected, causing even greater disruptions to agriculture and transportation than those disclosed in the RDEIR/SDEIS.</p> <p>One option to reduce adverse impacts to levees is to phase construction, building only one intake and/or one tunnel at a time instead of concurrently.</p>	<p>As discussed in the FEIR/EIS, Appendix 3F Paragraph 3F.8, DWR performed preliminary hydraulic modeling to evaluate potential impacts of proposed intake structures for CM1 along the Sacramento River on river hydraulics. The modeling results indicated on-bank intakes, as proposed under the BDCP/CWF, would have minimal impacts on river hydraulics. As part of future engineering, additional hydraulic modeling will be performed to accommodate design refinements and to comply with U.S.C. Title 33 – Navigation and Navigable Waters Section 408 and other permitting requirements. Potential impacts on Sacramento and San Joaquin River flood flows are discussed in Chapter 6, FEIR/EIS. Overall, the proposed project would not result in an increase in potential risk for flood management. Localized surface elevation changes would not exceed an increase of 0.10 feet at any intake location even under flood flow conditions.</p> <p>Also, see Appendix 1F in the FEIR/EIS for a discussion on potential future hydraulic analyses during the Section 408 permitting process.</p> <p>Please see Appendix 6A, Section 6A.6.4.1, FEIR/EIS, for information on setback levees under the proposed project.</p>
2654	29	<p><b>Disrupts Levee Inspections, Maintenance, And Improvements For A Decade</b></p> <p>Local Reclamation Districts (RDs) are responsible for daily inspection of levee conditions for issues such as cracks, slippage, encroachments, seepage, burrowing animals, etc., as well as for performing routine maintenance activities on and around the levees in order to meet U.S. Army Corps of Engineers and Federal Emergency Management Agency levee standards. DWR conducts levee inspections twice a year and the U.S. Army Corps of Engineers conducts more extensive Periodic Inspections every 5 years of the SPFC project levees.</p> <p>Over the 10-year Project construction period, local Reclamation Districts, DWR, and U.S.</p>	<p>Please see Section 6A.6 in Appendix 6A for a discussion on levees modified by construction of the California WaterFix (CWF/Alternative 4A), including responsibilities of the project proponents.</p> <p>Before and/or during construction of the CWF water conveyance facilities, project proponents will explore opportunities with local reclamation districts and the Central Valley Flood Protection Board (CVFPB) to address potential conflicts regarding levee maintenance, inspection, and flood fighting activities on project and non-project levees. DWR will look to enter into agreements with local reclamation districts with jurisdiction in the Delta to ensure levee management activities by both government and local agencies are not interrupted during construction of the water conveyance facilities. In addition, DWR will comply with all applicable flood protection requirements and regulations to ensure flood neutrality during construction and</p>

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		<p>Army Corps of Engineers will be unable to conduct levee inspections, conduct levee maintenance or construct repairs or improvements due to competition or blockage by BDCP/WaterFix construction activities and equipment staging. In addition, during an emergency, Reclamation Districts and other responders may not be able to provide floodfighting if they are denied access to an area or are unable to stage equipment.</p> <p>Disruptions to the routine levee inspection and maintenance, as well as Reclamation Districts drainage and floodfighting responsibilities will mostly be hindered due to the multi-year construction of two forebays and the 60.2 miles of main tunnels and 13.7 miles of northern tunnels connecting to the three new intakes, which will prevent access to large areas of an extensive construction zone.</p> <p>In some cases, DWR may need to assume all levee maintenance and floodfighting responsibilities for several reaches of levees, particularly if there are not enough remaining landowners to sustain funding of levee maintenance and island drainage after lands are condemned for CM1 construction.</p> <p>DWR should consider phasing construction and immediately engage local Reclamation Districts, the Central Valley Flood Protection Board, DWR's levee inspection branch, and U.S. Army Corps of Engineers to negotiate a memorandum of agreement (MOA) between these entities as to how levee inspections and annual levee maintenance will be performed during the 10-year construction of CM1 amid the planned staging of construction equipment, construction traffic, and/or road re-routing.</p>	<p>operations of the CWF.</p>
2654	30	<p>Dewatering Discharges and Drainage Disconnections Increase Inundation</p> <p>As stated in the EIR/EIS Groundwater Chapter, the existing drainage facilities in the Plan Area are "intricate networks" of canals, ditches, pipes, and pumps which means they have been carefully designed to function as a system and located to work with gravity and the natural land contours and drainage patterns that exist on the Delta islands. Therefore, any disconnection potentially renders the whole system inoperable.</p> <p>Because EIR/EIS confirms that successful agriculture is dependent on the operation of this drainage system and clearly states the islands will become flooded without the drainage systems functioning properly, the seepage, runoff, and dewatering discharges during CM1 construction are significant and adverse impacts to the ongoing flood maintenance responsibilities or RDs and to agricultural productivity of lands.</p>	<p>Impacts to agricultural areas, including impacts to drainage facilities are presented in Chapter 14 of the FEIR/EIS. With respect to the portion of the comment related to potential disruption of water supplies and drainage facilities for lands located near the intakes, tunnel shafts, and forebays, during the design phase, DWR would conduct site-specific analysis to determine the extent of the potential conflicts related to conveyance facility construction, including locations of water supply and drainage facilities. DWR would consult with local reclamation districts and land owners to ensure that construction activities would not conflict with existing infrastructure. Mitigation measures have been identified in the FEIR/EIS to reduce the impacts to drainage facilities and related agricultural operations to a level of less than significant as compared to Existing Conditions. Mitigation Measures AG-1, GW-1, GW-5, and WQ-11 will reduce the severity of significant impacts in agricultural areas by implementing activities such as siting project footprints to encourage continued agricultural production; monitoring changes in groundwater levels during construction; monitoring seepage effects; relocating or replacing agricultural infrastructure in support of continued agricultural activities; identifying, evaluating, developing, and implementing feasible phased actions to reduce EC levels; engaging counties, owners/operators, and other stakeholders in developing optional agricultural stewardship approaches; and/or preserving agricultural land through off-site easements or other agricultural land conservation interests.</p>
2654	31	<p>We could not find data on existing conditions for seepage areas where construction is planned, despite this information being readily available, including in DWR Bulletin 125 seepage investigations on Delta islands. In addition, the July 1, 2015 Conceptual Engineering Report by Delta Habitat Conservation &amp; Conveyance Program[Footnote 11: Delta Habitat Conservation &amp; Conveyance Program (DHCCP), Conceptual Engineering Report: Modified Pipeline/Tunnel Option – Clifton Court Forebay Pumping Plant, Volume 1, (July 1, 2015)]. Acknowledges that geotechnical information for the proposed tunnel alignment is currently limited and the estimated flood levels to be used in the design for each conveyance option facility is still be developed.</p>	<p>During the design phase, detailed geotechnical surveys, analysis of well logs in the vicinity of the construction sites, and well water elevation and water quality testing would be completed. Localized site-specific groundwater modeling may be required to confirm that the adjacent pre-construction groundwater conditions would not be changed due to the construction activities. The groundwater elevations, groundwater quality, and surface water quality would continue to be monitored during construction and during initial operations.</p> <p>Effects on overall groundwater resources are described in Chapter 7, FEIR/EIS. Effects on agriculture and municipal/industrial water supplies are described in Chapters 14 and 20, FEIR/EIS respectively. As described in the FEIR/EIS, during construction, slurry walls would be constructed around the construction site at the</p>

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		<p>BDCP/WaterFix alternatives, including Preferred Alternatives 4/4A, would involve extensive excavation, grading, stockpiling, soil compaction, and dewatering, resulting in temporary and long-term alteration and disruption of drainage patterns, paths, and facilities. These alternatives assume being able to discharge the dewatering volumes into local irrigation/drainage ditches, but there is no extra capacity in these local facilities and therefore can not be used by BDCP/WaterFix project.</p>	<p>intakes, tunnel shafts, and forebays to reduce the effect of dewatering wells. No dewatering would be required along the tunnel alignment. The effects on groundwater at locations with slurry wall installations would not result in significant effects as compared to Existing Conditions. It is possible, that some impacts may result in effects depending upon specific information that would be collected during design and construction phase. Mitigation measures have been identified in the FEIR/EIS to reduce the impacts to less than significant as compared to Existing Conditions. Mitigation Measures AG-1, GW-1, GW-5, and WQ-11 will reduce the severity of significant impacts in agricultural areas by implementing activities such as siting project footprints to encourage continued agricultural production; monitoring changes in groundwater levels during construction; monitoring seepage effects; relocating or replacing agricultural infrastructure in support of continued agricultural activities; identifying, evaluating, developing, and implementing feasible phased actions to reduce EC levels; engaging counties, owners/operators, and other stakeholders in developing optional agricultural stewardship approaches; and/or preserving agricultural land through off-site easements or other agricultural land conservation interests.</p>
2654	32	<p>Increased water volumes from 24/7 dewatering discharged into the rivers and waterways would increase surface water elevations locally, and erosion and scour on adjacent levees may create adverse impact depending on the velocities and volumes of water being discharged. The impacts associated with the water quality from dewatering discharges and to tunnel muck storage/disposal should also be acknowledged and mitigated in either the Water Supply or Agricultural Resources Chapters of the EIR/EIS. Mitigation should specify that before more stress/increases in peak flows can be added to Delta rivers or tributaries, the project proponent (DWR/USBR) will need to pay for actions to improve the current flood capacity in some channels and drainage ditches prior to CM1 construction.</p>	<p>As described in the Final EIR/EIS, during construction, slurry walls would be constructed around the construction site at the intakes, tunnel shafts, and forebays to reduce the effect of dewatering wells. Dewatering wells also would be installed at construction sites associated with levees without the use of slurry walls. No dewatering would be required along the tunnel alignment because the drilling would occur with a positive hydraulic head that can construct the tunnel in conditions with saturated soils. The effects on groundwater at locations with slurry wall installations would not result in significant effects as compared to Existing Conditions and would minimize the amount of water to be removed by the dewatering wells. With the utilization of the slurry walls, dewatering would primarily occur during the initial construction activities at each site and would not continue throughout the construction period which was described in the Draft EIR/EIS and RDEIR/SDEIS.</p> <p>The placement of storage locations for Reuseable Tunnel Material (RTM) in a manner to avoid or minimize effects on drainage and other infrastructure is addressed in Appendix 3B and Chapter 14, FEIR/EIS. Mitigation measures have been identified in the EIR/EIS to reduce the impacts to drainage and other agricultural infrastructure.</p> <p>As described under Impact SW-4 in Chapter 6, Surface Water, Impact WQ-31 in Chapter 8, Water Quality, and Appendix 3B in the FEIR/EIS, groundwater removed during construction and runoff from RTM storage areas would be treated as necessary at the dewatering locations. The water may contain elevated levels of sediment, organic carbon, and other constituents. As described in Chapter 8 and Appendix 3B during design permits would be obtained from the State Water Resources Control Board to that would include Best Management Practices (BMPs) for the discharge of dewatering flows to surface water bodies in accordance with State Water Board's NPDES Stormwater General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ/NPDES Permit No. CAS000002). This General Construction NPDES Permit requires the preparation and implementation of Stormwater Pollution Prevention Plans that identify pollution prevention BMPs that would be used to avoid and minimize construction-related contaminant discharges due to direct discharges to surface water bodies and to reduce the potential for erosion of the channels near the discharge locations. These permits would be completed during design and prior to construction, and would include a monitoring plan, numerical limits for turbidity, pH, and other specific constituents identified during the design phase for the surface water bodies, adjacent drains, and groundwater.</p> <p>Also, Section 6A.6 in Appendix 6A of the FEIR/EIS for project consistency with flood protection regulations, including effects to flood flows and water surface elevation. The project will be implemented in a way to not</p>

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			increase flood risk to the Delta.
2654	33	<p>California Central Valley Flood Control Association recommends the EIR/EIS:</p> <p>Examine existing conditions in terms of interconnected drainage systems and whether CM1 construction will disconnect or disrupt the existing drainage facilities' ability to function/drain effectively;</p> <p>Identify specific discharge locations, how many locations, the capacity of the discharge location or what its capacity availability is based on local usage/needs (winter drainage or summer irrigation)</p> <p>Quantify the daily discharge rates and volumes from CM1 dewatering;</p> <p>Identify how long dewatering and subsequent discharges will occur at each location;</p> <p>Identify and analyze the additional drainage maintenance works and costs BDCP will need to assume in order to keep the drainage facilities functioning and able to accommodate the increased dewatering discharges.</p>	<p>During the design phase, DWR would conduct site-specific analysis to determine the extent of the potential conflicts related to conveyance facility construction, including locations of water supply and drainage facilities. DWR would consult with local reclamation districts and land owners to ensure that construction activities would not conflict with existing wells and other facilities. It is possible, that some impacts may result in effects depending upon specific information that would be collected during design and construction phase. Mitigation measures have been identified in the FEIR/EIS to reduce the impacts to less than significant as compared to Existing Conditions. Mitigation Measures AG-1, GW-1, GW-5, and WQ-11 will reduce the severity of significant impacts in agricultural areas by implementing activities such as siting project footprints to encourage continued agricultural production and land uses; monitoring changes in groundwater levels during construction; monitoring seepage effects; relocating or replacing infrastructure in support of continued agricultural and other land use activities; identifying, evaluating, developing, and implementing feasible phased actions to reduce EC levels; engaging counties, owners/operators, and other stakeholders in developing optional approaches.</p> <p>Also, see Section 6.3.3 in Chapter 6 of the FEIR/EIS for potential impacts to existing drainage patterns under the project alternatives.</p>
2654	34	<p>Construction Dewatering Increases Delta Land Subsidence</p> <p>Primarily limited to interior portions of the Central Delta, land subsidence has slowed in recent years in the Delta, which has allowed landowners and reclamation districts to keep pace with it and manage it over time. However, according to the EIR/EIS Chapters on Geology and Soils CM1 construction could potentially increase Delta subsidence and sinkholes as a result of the widespread and intensive 2/47 dewatering that will occur during the 10-year construction period.</p> <p>With dewatering pumps placed every 50 to 75 feet around the entire perimeter of all the CM1 facilities under construction, each pumping between 240 to 10,500 gallons per minute, the EIR/EIS estimates the groundwater will be lowered 10-20 feet for a 2,600-foot radius from each pump. However, because CA WaterFix is still at a preliminary conceptual design level, we could find no studies or references to any evidence to support how the lowered groundwater depth or the radius of influence were determined, so they appear to be nothing more than professional guesstimates without any factual surveys or technical analysis to verify these claims.</p>	<p>Effects on groundwater resources are described in Chapter 7 and effects on geology are described in Chapter 9, FEIR/EIS. Effects to soil are described in Chapter 10, FEIR/EIS. Section 7.3.1 in Chapter 7 describes the methodology used to estimate potential changes in groundwater resources. As described in the EIR/EIS, during construction, slurry walls would be constructed around the construction site at the intakes, tunnel shafts, and forebays to reduce the effect of dewatering wells. No dewatering would be required along the tunnel alignment. The use of slurry walls was included in the Draft EIR/EIS and RDEIR/SDEIS as a mitigation measure. In the Final EIR/EIS, the use of slurry walls were included as part of the project description. The effects on groundwater and soils at locations with slurry wall installations would not result in significant effects as compared to Existing Conditions.</p>
2654	35	<p>The amount of intensive, long-term dewatering has the potential to destabilize the soils, resulting in sink holes and subsidence in a large area in the North Delta where the intakes and forebay with connecting pipelines will be built as well as the length of the 34-mile-long twin tunnels. Damage to the existing interconnected drainage and irrigation systems due to sinking land will increase localized flooding of crops, fruit packing sheds, and homes if drainage systems can not perform as designed and built. These individual and cumulative impacts need to be analyzed, disclosed, and mitigated.</p>	<p>As described in response to Comment 2654- 34, the use of long-term dewatering has been eliminated from the project description through the use of slurry walls that would surround the construction sites for the intakes, tunnel shafts, and forebays. Dewatering activities would only occur within the limited area of the slurry walls and would not affect the surrounding groundwater. Also, see response to comment 2654-33 regarding potential impacts to drainage systems.</p>
2654	36	<p>The EIR/EIS geology and soil chapter should also include a map depicting the levees and drainage facilities (ditches/pipes/canals/pumping stations) that are expected to experience subsidence or liquefaction due to dewatering activities.</p>	<p>As described in Chapters 9 and 14 and in Appendix 3B of the FEIR/EIS, detailed on-site analyses will be completed to identify site-specific geotechnical information and the location of all drainage and water supply facilities.</p> <p>As described in the FEIR/EIS, during construction, slurry walls would be constructed around the construction site at the intakes, tunnel shafts, and forebays to reduce the effect of dewatering wells. Dewatering wells</p>

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			<p>also would be installed at construction sites associated with levees without the use of slurry walls. No dewatering would be required along the tunnel alignment. The effects on groundwater at locations with slurry wall installations would not result in significant effects as compared to Existing Conditions. It is possible, that some impacts may result in effects depending upon specific information that would be collected during design and construction phase. Mitigation measures have been identified in the EIR/EIS to reduce the impacts to less than significant as compared to Existing Conditions. Mitigation Measures AG-1, GW-1, GW-5, and WQ-11 will reduce the severity of significant impacts in agricultural areas by implementing activities such as siting project footprints to encourage continued agricultural production; monitoring changes in groundwater levels during construction; monitoring seepage effects; relocating or replacing agricultural infrastructure in support of continued agricultural activities; identifying, evaluating, developing, and implementing feasible phased actions to reduce EC levels; engaging counties, owners/operators, and other stakeholders in developing optional agricultural stewardship approaches; and/or preserving agricultural land through off-site easements or other agricultural land conservation interests.</p> <p>Also, see Appendix 6A of the FEIR/EIS for information on project consistency with flood protection regulations. The lead agencies are committed to no net increase in flood risk in the Plan Area during construction and operations.</p>
2654	37	<p><b>Extensive and Concurrent Pile Driving Could Destabilize Levees</b></p> <p>Concerns over levee stability and their performance during a seismic event are some of the primary reasons Project Proponents state for building the new facilities in CM1. Intensive and sustained ground-shaking from hundreds of construction trucks on levee roads 24/7 and 700 pile- driver strikes driving in more than 1,000 total piles for construction of the three new North Delta intakes [Footnote 11: Representing a total of 700,000 total pile drive strikes just for the 3 intakes] will adversely affect the stability of the nearby levees.</p> <p>The sustained intensive localized vibration for such a long duration as contemplated in the CM1 construction description could cause stress fractures and possibly levee failures, but is not acknowledged as an adverse impact or mitigated.</p> <p>We could find no technical analyses, data, or scientific research evaluating how the excessive pile driving described in CM1 will affect the integrity and stability of nearby levees; most of which are SPFC Project levees. Failure to conduct a rigorous analysis in accordance with NEPA</p> <p>§ 1502.13(a) of the potential risk of levee failure and effects on the overall performance of the SPFC in a high water flood event is a glaring and serious omission that needs to be corrected in the EIR/EIS and again recirculated for public review and comment.</p> <p>The cumulative effects of pile driving and dewatering on reducing levee stability and increasing land subsidence/sink holes in the CM1 construction area should be acknowledged and mitigated pursuant to CEQA/NEPA. A map should be included in the EIR/EIS Surface Water Chapter depicting the locations of all pile driving for CM1 facilities (including but not limited to intakes, forebays, pipelines, tunnels, shafts, sedimentation basins, barge loading facilities, etc.) and the radius of influence for any related subsidence.</p> <p>To reduce the impacts to levees, the Association recommends the addition of a mitigation measure requiring the construction of new diversion intakes and tunnels be phased, installing one at a time, instead of building concurrently as proposed in BDCP/WaterFix</p>	<p>Please see Appendix 6A, Section 6A.6.3.4, FEIR/EIS, for information in potential pile driving impacts to levee stability, and Section 6A.6.3.2 for impacts from construction traffic and dewatering. Also, see Section 6A.6.2.1.3 for a discussion on DWR consistency with the State Plan of Flood Control (SPFC), and Section 6A.6.1.2 for information on project consistency with USACE, CVFPB, and DWR flood standards and regulations. Refer to Master Response 2 regarding the level of detail and adequacy of mitigation in EIR/EIS documents, including conducting additional analysis for mitigation after project approval.</p> <p>Refer to Section 6A.7 for a discussion on potential future hydraulic analyses during the Section 408 permitting process.</p> <p>Also, see Appendix 3C, FEIR/EIS, for water conveyance features that will require pile driving, and Appendix 22B for construction schedules. Locations of project features can be found in the Chapter 3 figures and map books.</p>

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		alternatives.	
2654	38	<p>Heavy Construction Vehicles and Increased Traffic Volumes Significantly Erode Integrity of Local Levees and SPFC</p> <p>The lack of knowledge of existing conditions in the Plan Area is particularly evident in the Transportation Chapter. The chapter fails to acknowledge that most of the roads and highways in the Delta are in fact pavement on top of a levee (both project and non-project levees). Consequently, the transportation study only analyzed two things: road surface conditions and traffic patterns/volume (level of service) and therefore failed to analyze, disclose impacts, or</p> <p>provide mitigation for the daily wear and tear on levees that the thousands of construction trucks on Delta roads 24/7 for ten long years will cause.</p> <p>The amount of construction truck activity over 10 years exceeds the weight and traffic volume that current levees upon which much of the construction trucks will travel over are designed and will degrade them to a point of reducing their stability which could result in a levee failure during CM1 construction.</p> <p>As noted by the Central Valley Flood Protection Board's and Delta Stewardship Council's 2014 comments on the BDCP, this simple, qualitative traffic analysis provided by the BDCP EIR/EIS will not adequately assess the potential for damage to levees that are underneath the roads. The Board correctly explains the potential for impacts to the levees themselves, including the possibility of "deformation and crest depression due to non-uniform settlement and damage to levee slopes due to use of levee hinge points for vehicle turn-outs."</p>	<p>The lead agencies will implement Mitigation Measure TRANS-1a in coordination with local agencies for local roads, including levees. Prior to construction, the lead agencies will be responsible for project management and may contract with one or more construction management firms to assist in ensuring that construction contractors' crews and schedules are coordinated and that the plans and specifications are being followed.</p> <p>The lead agencies will also ensure development of site-specific construction traffic management plans (TMPs) that address the specific steps to be taken before, during, and after construction to minimize traffic impacts, including the mitigation measures and environmental commitments identified in this FEIR/EIS. This will include potential expansion of the study area identified in this FEIR/EIS to capture all potentially significantly affected roadway segments.</p> <p>Also, see Section 6A.6.3.2 in Appendix 6A, FEIR/EIS regarding increases in construction traffic and levee integrity.</p>
2654	39	<p>The local Reclamation District (RD) is responsible for the regular inspection of levee conditions (cracks, slippage, encroachments, seepage, burrowing animals, etc.) and for performing routine maintenance activities on and around the levees in order to meet U.S. Army Corps of Engineers and Federal Emergency Management Agency levee standards. Their efforts will be hindered by any blockage or access issues caused by construction activities and extensive truck traffic. Indeed, the construction activities and extensive truck traffic may lead to a need for more frequent inspections, the cost and manpower requirements of which have not been disclosed, analyzed, or mitigated in the EIS/EIR.</p> <p>From a public safety standpoint, it is critical for Delta Habitat Conservation and Conveyance Program consultants to immediately consult with local Reclamation Districts, the Central Valley Flood Plan Board, DWR's levee inspection branch, and the U.S. Army Corps of Engineers to discuss drafting a specific mitigation measure to deal with the effects that staging of construction equipment, construction traffic, and/or road re-routing will have on levee inspections and routine levee maintenance to be performed during the 10-year construction period.</p>	<p>Before and/or during construction of the CWF water conveyance facilities, project proponents will explore opportunities with local reclamation districts and the Central Valley Flood Protection Board (CVFPB) to address potential conflicts regarding levee maintenance, inspection, and flood fighting activities on project and non-project levees. DWR will look to enter into agreements with local reclamation districts with jurisdiction in the Delta to ensure levee management activities by both government and local agencies are not interrupted during construction of the water conveyance facilities. In addition, DWR will comply with all applicable flood protection requirements and regulations to ensure flood neutrality during construction and operations of the CWF.</p> <p>The lead agencies will implement Mitigation Measure TRANS-1a in coordination with the local Reclamation District (RD) for local roads, including levees. Prior to construction, the lead agencies will be responsible for project management and may contract with one or more construction management firms to assist in ensuring that construction contractors' crews and schedules are coordinated and that the plans and specifications are being followed.</p> <p>The lead agencies will also ensure development of site-specific construction traffic management plans (TMPs) that address the specific steps to be taken before, during, and after construction to minimize traffic impacts, including the mitigation measures and environmental commitments identified in this FEIR/EIS. This will include potential expansion of the study area identified in this FEIR/EIS to capture all potentially significantly affected roadway segments.</p>
2654	40	All of the levees to be used during CM1 construction will need to be stabilized and fortified every spring during all 10 construction years and will need to meet the same level of public	Please see Appendix 6A, Section 6A.6.2.1.3, FEIR/EIS, for a discussion on DWR consistency with the State Plan of Flood Control (SPFC), and Section 6A.6.1.2 for information on project consistency with USACE,

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		<p>safety condition the levee was in prior to implementation of construction at no cost to the local levee maintaining agency, landowners, or county governments once CM1 is completed. Central Valley Flood Protection Boards regulations, Title 23, contain general guidelines on levee maintenance and restoration to a certain condition that must be followed; however in order for Reclamation Districts to provide the lead agency with more specific mitigation measures they will need more specific construction and project details such as (but not limited to):</p> <ol style="list-style-type: none"> <li>1) The number of construction vehicles/equipment expected to drive on roadways in the Plan Area;</li> <li>2) The approximate weight of vehicles expected to frequently drive on roadways in the Plan Area;</li> <li>3) The approximate start and end date for heavy construction traffic usage;</li> <li>4) Whether construction traffic will be 24/7 or be limited to certain days and hours on all roadways identified for use in the Plan Area;</li> <li>5) Provide results from studies and analyses conducted that have tested the weight and multiple load tolerance levels of existing levees underneath roadways to be heavily used in CM1 construction.</li> </ol>	<p>CVFPB, and DWR flood standards and regulations. Overall, construction and operations of the proposed project will not increase flood risk to people or structures in the Delta because the project will be designed and operated to ensure flood neutrality in the Delta and surrounding communities.</p> <p>Also, see Section 6A.6.3.2 for potential impacts of construction traffic on levees. Potential construction traffic effects on levees would be assessed prior to project construction to determine specific geotechnical issues related to construction traffic loading. Based on the initial assessment from field reconnaissance, geotechnical exploration and analyses would be performed for levee Sections that need further evaluations. Should the geotechnical evaluations indicate that certain segments of existing levee roads need improvements to carry the expected construction truck traffic loads, DWR is committed to carry out the necessary improvements to the affected levee Sections or to find an alternative route that would avoid the potential deficient levee Sections.</p>
2654	41	<p>Technical studies should immediately be conducted and a new CEQA/NEPA Impact added to the Transportation Chapter disclosing the level of impacts CM1 construction traffic will create on levees underneath roads proposed for use in the Plan Area. A map should also be added to the chapter depicting which State Plan of Flood Control Project and non-project levees that will be impacted by increased traffic volumes.</p>	<p>Please see response to comment 2654-40 regarding construction traffic on levees.</p>
2654	42	<p><b>Sediment Loading Reduces Flood Flow Capacity</b></p> <p>CM1 conveyance construction is expected to increase sediment loading and place fill (dirt) in waterways in the Plan Area, which is also described in the 404 permit submitted to the U.S. Army Corps of Engineers for the CA WaterFix project. Increased sediment amounts in most described areas would result in reduced flood capacity and higher risks of overtopping.</p> <p>Based on our experience, the amount of in-water dredging the BDCP/WaterFix alternatives expect to conduct in order to prevent overloading of sediment is unrealistic and infeasible from a regulatory permitting standpoint. Therefore, the reduction in sediment impacts that the EIR/EIS claims is overly optimistic and more severe impacts to flood flow capacity are likely to occur as a result of the multiple CM1 construction activities (eight temporary cofferdams, three permanent in-water intakes, five multi-year barges, 24/7 dewatering for 10 years).</p>	<p>Dredging expected for the intake construction would be minimal and localized along each intake fish-screen face. Based on the preliminary numerical analyses completed, the proposed on-bank intakes for the California WaterFix are not expected to significantly change the sediment deposition pattern in the Sacramento River. Additional analyses will be performed as part of future engineering phases to refine intake design and to minimize effects on sediment loading in the Sacramento River. The proposed sedimentation basins on the landside at the intake sites and intermediate forebay will be used to capture sediments in the diverted water, off the main channel of the river.</p> <p>Fill associated with the installation of the Head of Old River Barrier will not significantly change the sediment deposition pattern in Old River because the structure would not inhibit higher flow events that act as flushing flows to move sediment consistent with pre-project conditions.</p> <p>Other fill activities as described in the 404 application pertain mostly to fill which is proposed to be placed in wetland habitats or open water areas isolated from delta waterways. The fill would convert the wetland/open water to upland. These types of fill would have no effect on sedimentation in the delta waterways.</p>
2654	43	<p>Project proponents should conduct an analysis of the multiple activities increasing sediment in areas of the Plan Area with specific emphasis on the cumulative impacts to flood control facilities, Operation and Management costs and activities.</p>	<p>Please see response to comment 2654-42 regarding sedimentation issues. Also, see Section 6A.A in Appendix 6A of the FEIR/EIS for information on project consistency with flood protection regulations, including a discussion of potential sedimentation effects from the proposed project.</p>
2654	44	<p>Emergency Response And Flood Recovery Conflicts</p>	<p>Please see Section 6A.6 in Appendix 6A for a discussion on levees modified by construction of the California</p>

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		<p>Risk from levee failures can be reduced, but not eliminated, so being prepared for a flood emergency is the best defense. This requires having an effective strategy for preventing failures with ongoing levee improvements and maintenance, protocols for responding with emergency flood fighting activities, and a plan for levee repair and local recovery after the flood event.</p> <p>Based on the flood history in the Delta, the BDCP/WaterFix project is guaranteed to experience at least one major flood event during the 10-year construction period. In addition to modification of the State Plan of Flood Control levee system, BDCP/WaterFix preferred alternatives propose extensive alteration of the existing Delta road configuration, including re-routing and blocking local roads and highway segments. EIR/EIS fails to analyze these impediments to a safe and timely evacuation during a flood or other emergency.</p> <p>The inability to quickly floodfight and repair a damaged levee will result in loss of life and property in the area protected by that levee, and could have the domino effect of causing neighboring levee failures if CM1 construction activities/equipment prevent access to the levee break or key floodfighting personnel and supplies.</p> <p>DWR should identify through Memorandum of Understandings with local emergency response agencies a clear chain of command regarding who pays for what, coordination of response and funding, and cooperative effort to pursue federal reimbursements for recovery; and to mutually develop a flood emergency</p> <p>response plan that addresses floodfighting, worksite and community evacuation, and levee repairs.</p>	<p>WaterFix (CWF/Alternative 4A), including responsibilities of the project proponents.</p> <p>Before and/or during construction of the CWF water conveyance facilities, project proponents will explore opportunities with local reclamation districts and the Central Valley Flood Protection Board (CVFPB) to address potential conflicts regarding levee maintenance, inspection, and flood fighting activities on project and non-project levees. DWR will look to enter into agreements with local reclamation districts with jurisdiction in the Delta to ensure levee management activities by both government and local agencies are not interrupted during construction of the water conveyance facilities. In addition, DWR will comply with all applicable flood protection requirements and regulations to ensure flood neutrality during construction and operations of the CWF.</p> <p>Please see and Sections 6A.2 and 6A.3 for discussion on existing levee improvement programs and funding mechanisms, which would not be affected by the BDCP/CWF.</p>
2654	45	<p>CEQA/NEPA DEFICIENCIES</p> <p>Inadequate Project Description</p> <p>A proper environmental analysis of a project of this size and scope requires an accurate, stable, and finite description of all major project components and the existing baseline conditions. Otherwise, the public cannot determine the true nature and extent of the actual impacts likely to be caused by the Project.</p> <p>However, a recent DWR engineering report discloses that CA Waterfix design is still at a very preliminary conceptual level:</p> <ul style="list-style-type: none"> <li>-alignment and alignment features are “preliminary and subject to change”</li> <li>-alignment and alignment features will ultimately “need to be verified as part of additional investigations and detailed design.”</li> <li>-the facility locations, dimensions, and elevations (both topographic and facility) are “approximate” and “subject to change”</li> <li>-geotechnical information for the proposed tunnel alignment is currently limited, so preliminary designs will be refined “once adequate geotechnical investigations have been</li> </ul>	<p>The BDCP and EIR/EIS documents are complete in their evaluation of impacts, direct and cumulative, that project description is complete and satisfies the requirements of NEPA, that the project objectives are also precise and complete and satisfy the requirements of CEQA. The lead agencies agree that the 2013 Public Draft EIR/EIS and 2015 RDEIR/SDEIS provided the public and decision-makers with sufficient information on which to make informed comments which have been considered and incorporated into the Final EIR/EIS.</p> <p>Please see Section 6A.6.2.1.3 in Appendix 6A, FEIR/EIS, for a discussion on DWR consistency with the State Plan of Flood Control (SPFC), and Section 6A.6.1.2 for information on project consistency with USACE, CVFPB, and DWR flood standards and regulations. Chapter 3 of the FEIR/EIS includes full descriptions of the project alternatives.</p> <p>Please refer to comment letters #1448 and #2546 to see responses to the Delta Independent Science Board’s comments. Also, see response to comment 2654-6 regarding the level of project design, and Master Response 38 regarding the length and complexity of the EIR/EIS.</p>

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		<p>performed.”</p> <p>A specific example of the preliminary stage that one of the project components, borrow/fill availability is described in the DWR engineering report: “At this point in project development, sufficient geotechnical information is not available to fully assess the suitability of borrow areas near the Modified Pipeline Tunnel Option/Clifton Court Fore Bay Pumping Plant Option alignment to determine if adequate quantities of borrow material are actually available.” The report further acknowledges, “Additional explorations, land ownership considerations, and engineering analyses are needed to better define the actual borrow sites and associated borrow quantities that will be used for the work.”</p> <p>California Central Valley Flood Control Association contends that this information is readily available, but Project Proponents simply have not spent the time or money to collect such data despite being in the 9th year of project planning. For instance, CA WaterFix could find a great deal of baseline data on the system of levees in the Plan Area in the technical documents included as part of the Central Valley Flood Protection Plan.</p> <p>NEPA requires that the proposal in an EIS is properly defined (§ 1502.4(a)). Under CEQA, the fundamental purpose of an EIR “is to demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action [Footnote 13: (CEQA Guidelines §15003(d), citing People ex rel. Department of Public Works v. Bosio 1975)].</p> <p>Trying to decipher the description of the project’s new alternatives is particularly daunting. For instance, the conclusions for Alt. 4A often refer to BDCP 4 impact analysis, which then refers readers to BDCP sections n BDCP Alt. 1A. Frankly, the project is a jumbled mess, resulting in a complex labyrinth that has created an even higher level of navigation difficulty and</p> <p>fails to substantiate environmental conclusions, as pointed out in several reviews by scientific panels [Footnote 14: See, e.g.,: 1) September 30, 2015, Review of the Partially Recirculated Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement (California WaterFix) conducted by Delta Independent Science Board; 2) National Academy of Science Panel to Review California’s Draft Bay Delta Conservation Plan, 2011, A Review of the Use of Science and Adaptive Management in California’s Draft Bay Delta Conservation Plan (“The lack of an appropriate structure creates the impression that the entire effort is little more than a post-hoc rationalization of a previously selected group of facilities, including an isolated conveyance facility, and other measures for achieving goals and objectives that are not clearly specified.”) <a href="http://www.nap.edu/openbook.php?record_id=13148">http://www.nap.edu/openbook.php?record_id=13148</a>; 3) Delta Independent Science Board, Review of the Draft EIR/EIS for the Bay Delta Conservation Plan (May 15, 2014), . (“The DEIR/DEIS provides an exhausting wealth of information about the Delta and the likely impacts of the proposed alternatives. However, this wealth of information and data is not organized in a way that can usefully inform difficult public and policy discussions.”)].</p>	
2654	46	<p>Uncertainties Confounded by Significant Analytical Omissions and Data Gaps</p> <p>Under CEQA the lead agency’s factual conclusions must be supported by substantial evidence – facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts (CEQA Guidelines §15384(b)). Speculation does not constitute substantial evidence, and unsubstantiated narrative or expert opinion asserting nothing</p>	<p>The BDCP and EIR/EIS documents are complete in their evaluation of impacts, direct and cumulative, that project description is complete and satisfies the requirements of NEPA, that the project objectives are also precise and complete and satisfy the requirements of CEQA. The lead agencies agree that the 2013 Public Draft EIR/EIS and 2015 RDEIR/SDEIS provided the public and decision-makers with sufficient information on which to make informed comments which have been considered and incorporated into the Final EIR/EIS.</p>

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		<p>more than “it is reasonable to assume” that something “potentially may occur” is not analysis supported by factual evidence (e.g.; 2,600 dewatering radius).</p> <p>There are too many chapters and individual impact statements that rely on conjecture instead of providing evidence to support the CEQA/NEPA conclusions to list them all. The following are general examples of the extensive amount of environmental analysis that is lacking from the Delta Independent Science Board’s review of CA Waterfix:</p> <p>“the Current Draft fails to consider how levee failures would affect the short-term and long-term water operations spelled out in Table 4.1-2.” (Pg 7)</p> <p>“The Current Draft does not evaluate how the proposed project may affect estimates of the assets that the levees protect.” (Pg 8)</p> <p>“Neither the Previous Draft nor the Current Draft, however, provides a resource chapter about Delta levees.” (Pg 8)</p> <p>“Although sensitivity modeling was used to address the effects of changes in the footprint and other minor changes of the revised project, full model runs were not carried out to assess the overall effects of the specific changes.” (Pg 11)</p> <p>“Current draft generally neglects recent literature, suggesting a loose interpretation of ‘best available science.’” (Pg 11)</p> <p>“Confounding interactions that may enhance or undermine the effectiveness of proposed actions were overlooked.” (Pg 12)</p>	<p>Please refer to comment letters #1448 and #2546 to see responses to the Delta Independent Science Board’s comments.</p> <p>Also, the FEIR/EIS includes updated modeling for the new sub-alternatives, 5A, 4A, and 2D. Please see Chapter 5 and appendices for the updated hydrological modeling. In addition, Appendix 6A of the FEIR/EIS discusses project consistency with flood protection regulations and how the proposed project will be implemented in a way to ensure no net increase in flood risk to the Delta.</p> <p>Please see Master Response 16 for a discussion on potential operational responses during a levee failure situation.</p>
2654	47	<p>A specific example of where more details are needed is the removal of groundwater during CM1 dewatering activities, with the intent to discharge into local drainage infrastructure or directly to the rivers and sloughs, resulting in a localized increase in flows and water surface elevations. Only passing reference is made, but few details provided, regarding dispersion facilities being used to reduce the potential for channel erosion due to discharge of dewatering flows.</p> <p>Knowing the dewatering discharge amounts and velocities is critical for the reclamation districts to determine if the design or dispersal facilities being proposed by BDCP will be effective in reducing the level of adverse impacts. We are extremely concerned by the repeated assumptions throughout all EIR/EIS chapters we reviewed that all the mitigation measures will be fully implemented and will in fact work, without any supporting evidentiary in the record.</p> <p>The analysis should also discuss well-known prior seepage and levee boil impacts from fairly recent inundation of Prospect Island and subsequent landowner lawsuits against the U.S. Bureau of Reclamation [Footnote 15: See, e.g., Islands, Inc. v. U.S. Bureau Of Reclam., Dept. Interior 64 F.Supp.2d 966 (1999)]. Or how Liberty Island levees quickly deteriorated and crumbled when they were not immediately fixed after a breach.</p>	<p>As described in response to Comment 2654-34, the use of long-term dewatering has been eliminated from the project description through the use of slurry walls that would surround the construction sites for the intakes, tunnel shafts, and forebays. Dewatering activities would only occur within the limited area of the slurry walls and would not affect the surrounding groundwater. The amount of groundwater removed from inside the slurry walls would be determined following detailed geotechnical surveys at the construction sites during the design phase to determine the extent of the dewatering activities and locations of discharge of the dewatering water. DWR would consult with local reclamation districts to ensure that construction activities would not conflict with reclamation district flood protection measures. As described under Impact SW-4 in Chapter 6, Surface Water, and Impact WQ-31 in Chapter 8, Water Quality, in the FEIR/EIS, groundwater removed during construction would be treated as necessary at the dewatering locations. The water may contain elevated levels of sediment, organic carbon, and other constituents. As described in Chapter 8 and Appendix 3B, Environmental Commitments, FEIR/EIS, during design permits would be obtained from the State Water Resources Control Board to that would include Best Management Practices (BMPs) for the discharge of dewatering flows to surface water bodies in accordance with State Water Board’s NPDES Stormwater General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ/NPDES Permit No. CAS000002). This General Construction NPDES Permit requires the preparation and implementation of Stormwater Pollution Prevention Plans that identify pollution prevention BMPs that would be used to avoid and minimize construction-related contaminant discharges. These permits would be completed during design and prior to construction, and would include a monitoring plan, numerical limits for turbidity, pH, and other specific constituents identified during the design phase for the surface water bodies and groundwater.</p>
2654	48	<p>The following Alt. 4/4A mitigation habitat activities were not analyzed as adverse effects on flood control, but will significantly increase Reclamation District costs and create regulatory</p>	<p>All restoration activities will be designed and managed to comply with flood protection standards and regulations, including those of the USACE, CVFPB, and DWR. Vegetation siting and density on or near levees</p>

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		<p>compliance problems for levee maintenance and island drainage:</p> <p>-“increase burrow availability for for burrow-dependent species”</p> <p>-“planting elderberry shrubs in high-density clusters”</p> <p>-“site valley elderberry longhorn beetle habitat restoration within drainages”</p>	<p>and floodplains will also conform to applicable flood protection and levee criteria. Please see Appendix 6A, Section 6A.6.2.1.3, FEIR/EIS, for a discussion on DWR consistency with the State Plan of Flood Control (SPFC), and Section 6A.6.1.2 for information on project consistency with USACE, CVFPB, and DWR flood standards and regulations. Also, see Section 6A.6.2.1.2 for a discussion on levees modified by the proposed project.</p> <p>Before and/or during construction of the CWF water conveyance facilities, project proponents will explore opportunities with local reclamation districts and the Central Valley Flood Protection Board (CVFPB) to address potential conflicts regarding levee maintenance, inspection, and flood fighting activities on project and non-project levees. DWR will look to enter into agreements with local reclamation districts with jurisdiction in the Delta to ensure levee management activities by both government and local agencies are not interrupted during construction of the water conveyance facilities. In addition, DWR will comply with all applicable flood protection requirements and regulations to ensure flood neutrality during construction and operations of the CWF.</p>
2654	49	<p>Currently, CM1 as proposed will require the three new North Delta intakes to undergo some operational fish screen testing prior to full pumping – but only after all three North Delta diversions have been built. If these never-before-used screens do not function as planned, then this gamble will end up a losing proposition for the Delta fisheries, Delta-as-Place, or CVP/SWP Delta water contractors (who will be stuck with long-term payments on a very expensive stranded asset).</p>	<p>As described in the Conceptual Engineering Report, the fish screen design criteria will be developed during the design phase with input from the Fish Facilities Team which will be convened during the design phase. The Fish Facilities Team and other representatives from DWR, Reclamation, USFWS, NMFS, and CDFW also will consider lessons learned from recently constructed fish screens along the Sacramento River with similar design criteria, although not as large, including fish screens for Freeport Regional Water Authority and Natomas Mutual Water Company. The most similar large fish screen on the Sacramento River was completed for Bureau of Reclamation at Red Bluff.</p>
2654	50	<p>It is important to point out a fact that is rarely discussed in BDCP/WaterFix alternatives – SIZE matters. The average size of the Delta’s agricultural water diversion intakes is about 12 inches with a 10-15 cubic feet per second capacity (mostly siphon, not pumps) while the urban intakes are less than 300 cubic feet per second. The precedent for the size selected for CM1 is the Glenn-Colusa Irrigation District’s (GCID) 3,000 cubic feet per second intake. However, GCID’s facilities are not located in a tidal estuary, do not have to screen for smelt, and were not without their own problems [Footnote 16: These problems ultimately resulted in a very expensive redesign of fish screens and forebay. See chronology in U.S.A. v. Glenn-Colusa Irrigation District CVS-91-1074-DFL-JFM (1991)].</p>	<p>Please refer to response to Comment 2654-49 regarding fish screens at the north Delta intakes.</p>
2654	51	<p>To reduce the level of adverse impacts, the preferred alternative (4/4A) should be modified to either delay CEQA/NEPA analysis until the project is at a 60% design level, or require phasing of construction for the intakes and two main tunnels. To address uncertainties, the original the Peripheral Canal conveyance project approved by the State Legislature in 1980 (Senate Bill 200 and ACA 90), required the intakes to be installed one at a time and environmental impacts analyzed for two years before proceeding with further construction. The extreme amount of risk warrants a similar phased construction approach so that the altered Delta hydraulic and surface water elevation changes to flood protection, and local water supply and quality can be analyzed and mitigated before building the other intakes/tunnel. Governor Jerry Brown’s Administration obviously agreed to this precautionary approach the first time around and should do no less with CA WaterFix.</p>	<p>Appendix 3A, in Section 3A.11.5, DSC Staged Proposal, provides an overview of the consideration of this approach and the reasons for it not being carried forward for EIR/EIS analyses. Among other considerations, the cost for such an approach is thought to be not viable based on this evaluation. It should be noted that the range of alternatives evaluated in the FEIR/EIS does capture the potential for environmental effects from implementing one intake (Alternatives 5 and 5A), two intakes (Alternative 3) and three intakes (Alternatives 4 and 4A). This approach captures the range of potential effects that could occur if construction implementation were phased or staged as suggested in this comment.</p> <p>For more information regarding construction assumptions please see Appendix 3C of the FEIR/EIS.</p>
2654	52	<p>C. Overly Optimistic CEQA/NEPA Impact Conclusions and Mitigations</p> <p>CEQA conclusions lack credibility because they are typically general and vague in making optimistic assumptions without site-specific identification of where, for how long impacts will occur, or who will be impacted. Will reclamation district have increased pumping costs due to additional discharges by BDCP activities? Will there still be sufficient capacity</p>	<p>The 2013 Draft EIR/EIS and 2015 RDEIR/SDEIS are complete in their evaluation of impacts, direct and cumulative, that project description is complete and satisfies the requirements of NEPA, that the project objectives are also precise and complete and satisfy the requirements of CEQA. The lead agencies agree that the 2013 Public Draft EIR/EIS and 2015 RDEIR/SDEIS provided the public and decision-makers with sufficient information on which to make informed comments which have been considered and incorporated into the</p>

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		<p>for adjacent landowners to discharge their drainage? Will BDCP's use of local drainage facilities require approval or permitting by owners/operators of the drainage system?</p> <p>The RDEIR/SDEIS fails to specify the scientific background on how these assumptions were made. Where are these assumptions anticipated to occur? Are these impacts anticipated to occur more frequently than existing conditions? If so, how much more often and when?</p> <p>The Delta ISB had the following to say about the "unwarranted optimism" that continues to persist in CA WaterFix:</p> <p>-"The level of certainty seems optimistic, and it is unclear whether there are any contingency plans in case things don't work out as planned. This problem persists from the Previous Draft." (Pg 17)</p> <p>-"Here, as in many other places, measures are assumed to function as planned, with no evidence to support the assumptions." (Pg 17)</p> <p>-"This conclusion is built on questionable assumptions;" (Pg 8)</p> <p>-"A scientific basis for this statement is lacking, and an adaptive or risk-based management framework is not offered for the likely event that such optimism is unfulfilled." (Pg 10)</p> <p>-"The literature does not support this assumption." (Pg 18)</p>	<p>Final EIR/EIS.</p> <p>Please refer to comment letters #1448 and #2546 to see responses to the Delta Independent Science Board's comments.</p> <p>Also, see response to comment 2654-30 regarding drainage issues.</p>
2654	53	<p>Deferral of Analysis and Mitigation</p> <p>In order to approve a project, the lead agencies must identify feasible mitigation measures or alternatives that would avoid or substantially lessen any significant adverse environmental effects of the project [Footnote 17: California Public Resources Code § 21002]. The mitigation measures must also be specific and mandatory, such that they are fully enforceable.</p> <p>The EIR/EIS cannot defer the determination of the scope and nature of significant impacts until future studies and reports are prepared without including specific performance standards, timeframes for completion, and a commitment to mitigate. However, many Alt. 4/4A Mitigation Measures fail to set specific performance standards or criteria for surveying, relocating, repairing, replacing, compensating, or restoring the impacted resource.</p>	<p>Addressing some mitigation more programmatically is appropriate when the specifics of certain impacts cannot reasonably be determined because, for example, they are dependent on future actions. Where appropriate, performance standards are set forth for such measures. Please see Master Response 22 for a discussion on mitigation measures and Master Response 2 for a discussion of the project vs. program level analysis in the FEIR/EIS and why this is adequate and allowed under CEQA and NEPA.</p>
2654	54	<p>Misleading conclusions and missing impacts associated with Alt 4A that would affect flood management adversely are common throughout the EIR/EIS, mostly because studies about the existing baseline conditions and the Project's impacts are deferred to a later time</p>	<p>Please see Master Response 2 regarding the level of detail sufficient for EIR/EIS documents and mitigation measures requiring additional analysis after project approval. Also, see Appendix 6A for information on project consistency with flood protection regulations.</p>
2654	55	<p>The amount of environmental analysis that is deferred to a later date identified by the Delta Independent Science Board is concerning to California Central Valley Flood Control Association:</p> <p>"It defers essential material to the Final EIR/EIS" (09-3-15 cover letter)</p> <p>"overall incompleteness through deferral of content to the Final EIR/EIS" (Pg 4)</p>	<p>For responses to comments related to the Delta Independent Science Board's letters, please refer to comment letters BDCP 1448 and/or RECIRC 2546.</p>

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2654	56	<p>The amount of environmental analysis that is deferred to a later date identified by the Delta Independent Science Board is concerning to California Central Valley Flood Control Association:</p> <p>“modeling of the effects of levee failure would be presented in the Final Report.” (Pg 4)</p>	<p>For responses to comments related to the Delta Independent Science Board's letters, please refer to comment lettes BDCP 1448 and/or RECIRC 2546. Also, see Master Response 16 regarding potential operational responses during levee failure events.</p>
2654	57	<p>The amount of environmental analysis that is deferred to a later date identified by the Delta Independent Science Board is concerning to California Central Valley Flood Control Association:</p> <p>“The Current Draft does not demonstrate consideration of recently available climate science, and it defers to the Final Report analysis of future system operations under potential climate and sea-level conditions.” (Pg 11)</p>	<p>For responses to comments related to the Delta Independent Science Board's letters, please refer to comment lettes BDCP 1448 and/or RECIRC 2546. Also, see Chapter 29 and associated appendices for information on climate change and project operations.</p>
2654	58	<p>The amount of environmental analysis that is deferred to a later date identified by the Delta Independent Science Board is concerning to California Central Valley Flood Control Association:</p> <p>The California Central Valley Flood Control Association contends that when it comes to flood control impacts, it is reckless to assume that the details of mitigation will be fleshed out at an unknown future date.</p>	<p>Please see Master Response 2 regarding the level of detail sufficient for EIR/EIS documents and mitigation measures requiring additional analysis after project approval. Also, see Appendix 6A for information on project consistency with flood protection regulations.</p>
2654	59	<p>Because CA WaterFix alternatives/project is still at a preliminary conceptual level, the Draft EIR/S inappropriately bifurcates the proposed project from disclosing legally required mitigation actions that are likely to be required once the Project reaches a 60% design level and submits a 408 permit application to the U.S. Army Corps of Engineers (USACE). This results in an incomplete picture of the environmental impacts for the decision maker to evaluate.</p> <p>Section 408 requires permission whenever a person or project will “take possession of or make use of for any purpose, or build upon, alter, deface, destroy, move, injure, obstruct by fastening vessels thereto or otherwise, or in any manner whatever impair the usefulness of any sea wall, bulkhead, jetty, dike, levee, wharf, pier, or other work built by the United States, or any piece of plant, floating or otherwise, used in the construction of such work under the control of the United States, in whole or in part, for the preservation and improvement of any of its navigable waters or to prevent floods, or as boundary marks, tide gauges, surveying stations, buoys, or other established marks, nor remove for ballast or other purposes any stone or other material composing such works.” Because many of the activities in CA WaterFix alternatives involve modification of Project levees (authorized for flood protection or navigational purposes by Congress), section 408 permission will be required.</p>	<p>Please see Master Response 2 regarding the level of detail sufficient for EIR/EIS documents and mitigation measures requiring additional analysis after project approval. Also, see Appendix 1F in the FEIR/EIS for information on future USACE Section 408 compliance and permitting.</p>
2654	60	<p>Under section 408, U.S. Army Corps of Engineers may grant permission for the encroachment “when in the judgment of [USACE] such occupation or use will not be injurious to the public interest and will not impair the usefulness of such work.” In evaluating projects to determine whether they are injurious to the public interest, USACE always looks at the change to the water surface elevation as a result of the project. Where the water surface elevation increases by even a tenth of a foot, USACE requires that the impact be mitigated by (i) addition of other projects to lower the water surface elevation (e.g., a setback levee) or (ii) strengthening of the levees impacted by the rise in water. Each</p>	<p>As described in Appendices 3B and 3C of the FEIR/EIS, there will be a future submittal of information to the USACE which will include an analysis that will show that there will be no increased flood potential due to construction or operations of the conveyance facilities, including installation of cofferdams, barge docks, Head of Old River Barrier, discharge of water from construction sites, or changes in drainage from constructed facilities locations. This future submittal will include the latest bathymetric information and modeling results, and methods included in the design criteria to meet the USACE requirements. The portion of the levee at the intake location will be replaced with a slurry diaphragm wall that will reconnect into the</p>

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		<p>of these means that if there is a water surface elevation increase, then there will need to be additional projects to off-set these impacts as required by Federal law.</p> <p>But the Draft EIR/S fails to identify these specific projects, or the additional environmental impacts associated with their implementation, even though these potential additional projects and impacts are all foreseeable based on actions required in other similar projects such as the new in- river water supply intakes at Freeport and Stockton. For this reason, the Draft EIR/S is inadequate, must be supplemented, and must be recirculated.</p>	<p>adjacent levees in a manner that will not compromise flood protection.</p>
2654	61	<p>Inadequate Modeling</p> <p>The RDEIR/SDEIS retains a number of deficiencies from the BDCP, including the use of flawed models and failure to conduct full model runs for the new CA WaterFix alternatives.</p> <p>Refer to MBK Engineers’ October 25, 2015 Technical Comments on the Bay Delta Conservation Plan/California Water Fix memorandum for more detailed comments on modeling deficiency issues.</p>	<p>The FEIR/EIS includes updated modeling for the additional sub-alternatives, in addition to sensitivity analyses demonstrating similarities and differences between the previous and new modeling runs conducted for the project alternatives. Also, see Master Response 30 regarding the MBK modeling.</p>
2654	62	<p>The Delta Independent Science Board also pointed out the following issues with the modeling:</p> <p>-“Although sensitivity modeling was used to address the effects of changes in the footprint and other minor changes of the revised project, full model runs were not carried out to assess the overall effects of the specific changes.” (Pg 11)</p> <p>-“Consequently, modeling that would help bracket ranges of uncertainties or (more importantly) assess propagation of uncertainties is still inadequate.” (Pg 11)</p> <p>-“the Current Draft is probably outdated in its information on climate change and sea- level rise.” (Pg 11)</p> <p>-“the failure to consider how climate change and sea-level rise could affect the outcomes of the proposed project is a concern that carries over from our 2014 review and is accentuated by the current drought” (Pg 8)</p>	<p>The FEIR/EIS includes updated modeling for the additional sub-alternatives (see Appendix 5A for new hydrological model outputs), in addition to sensitivity analyses demonstrating similarities and differences between the previous and new modeling runs conducted for the project alternatives. Also, see Master Response 30 regarding the modeling performed in the EIR/EIS, and Appendix 29C of the FEIR/EIS for a general discussion on climate change and potential effects to reservoir operations. In addition, Section 3.6.4.4 in Chapter 3 of the FEIR/EIS describes the Adaptive Management and Monitoring Program under the preferred alternative, 4A, which would be used to help address future uncertainties, among others.</p>
2654	63	<p>Water Use Disclosure</p> <p>The restoration of floodplain, tidal wetlands, and other habitat restoration actions anticipated to be implemented through separate permits for CA EcoRestore will require extensive amounts of water, particularly implementation of CM2 to inundate the Yolo Bypass more frequently and for longer duration. According to the BDCP/WaterFix Effects Analysis, CM2 will result in the diversion of approximately 650,000acre feet of Sacramento River water into the Yolo Bypass between November and mid-May through an operable gate with a total capacity of 6,000 cubic feet per second in order to benefit fish.</p> <p>Since CA WaterFix alternatives anticipate implementation of CM2/Yolo Bypass-Fremont Weir project, the current RDEIR/SDEIS should identify the volume of water to be utilized for this related SWP/CVP project, whose water rights will be used to provide that diversion, and how removal of 6,000 cubic feet per second upstream of new intakes will affect WaterFix water operations. The CA WaterFix alternative and RDEIR/SDEIS Water Supply Chapter should also disclose the impacts to the SWP/CVP contractor water supplies that would presumably be supplying the water from storage needed to inundate the Yolo Bypass for</p>	<p>As described in the Final EIR/EIS, implementation of a program to increase the extent and duration of inundation of the Yolo Bypass under the 2009 NMFS biological opinion is anticipated to be completed under the No Action Alternative as well as other alternatives. Therefore, there would be no changes under implementation of the proposed project as compared to the No Action Alternative related to habitat restoration in the Yolo Bypass. Separate engineering and environmental documentation are being completed by DWR and Reclamation for habitat restoration in the Yolo Bypass. It should also be noted the alternatives being developed for the Yolo Bypass Salmonid Habitat Restoration and Fish Passage Implementation Plan (not included in the proposed project) may not be reflective of Conservation Measure 2 described in the BDCP and analyzed in the EIR/EIS documents, due to different project assumptions, modeling, and construction features and operations, among others.</p> <p>The EcoRestore program is currently under development and is considered in the FEIR/EIS as a cumulative action. It would be speculative to project habitat changes and specific effects at this time. Separate engineering and environmental documentation will be completed for habitat restoration projects under the EcoRestore Program.</p>

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2654	64	<p>The following CA WaterFix operational assumptions disclosed in the Delta Habitat Conservation and Conveyance Plan Conceptual Engineering Report (July 1, 2015) require disclosure and analysis:</p> <ul style="list-style-type: none"> <li>-Must be able to deliver up to 9,000 cubic feet per second from north Delta intakes at the low water level in the Sacramento River;</li> <li>-Must be able to deliver 9,000 cubic feet per second flow rate 99% of the time;</li> <li>-Operating volume of the new North Clifton Court Forebay (NCCF) is significantly less than the existing Clifton Court Forebay.</li> </ul> <p>The cumulative effects analysis in the CA WaterFix alternatives and EIR/EIS Water Supply Chapter should identify how much water (and whose water) will be used for construction, operation, and ongoing management of CA EcoRestore habitat restoration projects and the BDCP/WaterFix north Delta intake water operations.</p>	<p>The text related to design criteria for the intakes referred to in this comment is related to design criteria for the conceptual design of the intakes and associated pumping plants in a manner that would provide a conservative estimate for construction activities to be analyzed in the EIR/EIS. In Chapter 3 of the FEIR/EIS, there are further restrictions of diversions from both the north and south Delta intakes, including north Delta bypass flows and Old and Middle River flow criteria. The anticipated diversion patterns from both the north and south Delta intakes are presented in Appendix 5A, Section C, of the FEIR/EIS.</p> <p>The Clifton Court Forebay in its entirety will be expanded. Although the North Clifton Court Forebay will be modified to store water from the north Delta intakes, the southern portion of the forebay will be expanded to maintain adequate volume for operations of the DWR south Delta intakes.</p>
2654	65	<p>Scope of Cumulative Impacts is Insufficient</p> <p>The RDEIR/SDEIS Cumulative Impacts Analysis does not provide any sort of comprehensive discussion or analysis of how impacts associated with California WaterFix mitigation measures and BDCP conservation measures, or California EcoRestore projects relate to each other. How other foreseeable projects (e.g., California EcoRestore, BiOps, Central Valley Flood Protection Plan, etc.) will affect this proposal or how the activities and effects of individual conservation and mitigation measure will react to each other, conflict with other, or complement each other should be disclosed.</p>	<p>The cumulative impacts disclosed in Section 5 of the RDEIR/SDEIS and Chapters 5 – 27 of this Final EIR/EIS disclose potential for cumulative effects of an action alternative and other cumulative projects on Delta resources as required by CEQA and NEPA. Impacts of the alternatives in the FEIR/EIS are judged against existing environmental conditions under CEQA and against a no action alternative for NEPA to determine if action alternative impacts would exceed thresholds of significance. In cases where impacts are determined to be significant/adverse mitigation measures are recommended to reduce these impacts. The existence of numerous projects, programs and baseline environmental conditions as well as regulatory processes and requirements are included in the Setting/Affected Environment portion of resource chapters but interactions of specific projects, programs or action in the Delta are only addressed if they are germane to specific impact analysis.</p>
2654	66	<p>The habitat projects and activities being proposed as mitigation for construction of California WaterFix conveyance facilities and the new water operations combined with the California EcoRestore projects anticipated in the Plan Area have the potential to create redirected impacts and increased Operations and Management costs for reclamation districts with responsibility for maintaining levees in the Plan Area. In general, higher water levels along a floodway will require taller levees, and changes in the Delta hydrodynamics will require increased armoring of levees to protect against erosion and seepage. Examples of the many cumulative adverse impacts in the Plan Area (Delta) the EIR/EIS should specifically describe, analyze, and quantify include:</p> <p>Cumulative impacts to levee stability and Delta flood risk from CM1 pile driving, dewatering lowering groundwater 10-20 feet, sediment loading, 9 cofferdams in the Sacramento River and tributaries, and damage from erosion, seepage, and overtopping;</p>	<p>Alternative 4A reflects the State’s proposal to separate the conveyance facility and other non-conveyance habitat restoration measures into two separate efforts: California WaterFix and California EcoRestore. The Proposed Action includes habitat restoration as necessary to mitigate significant environmental effects and satisfy applicable ESA and CESA standards.</p> <p>Please see Section 6A.6 in Appendix 6A, FEIR/EIS for a discussion on levees modified by construction of the California WaterFix (CWF/Alternative 4A), including responsibilities of the project proponents.</p> <p>Before and/or during construction of the CWF water conveyance facilities, project proponents will explore opportunities with local reclamation districts and the Central Valley Flood Protection Board (CVFPB) to address potential conflicts regarding levee maintenance, inspection, and flood fighting activities on project and non-project levees. DWR will look to enter into agreements with local reclamation districts with jurisdiction in the Delta to ensure levee management activities by both government and local agencies are not interrupted during construction of the water conveyance facilities. In addition, DWR will comply with all applicable flood protection requirements and regulations to ensure flood neutrality during construction and operations of the CWF.</p> <p>Section 6A.6 of Appendix 6A of the Final EIR/EIS also summarizes potential effects to levees and flood protection, including measures to reduce and avoid impacts, from pile driving, dewatering, sediment</p>

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			loading, cofferdams, and erosion and seepage, among others.  See Section 6A.6.2.1.3, specifically, for a discussion on DWR consistency with the State Plan of Flood Control (SPFC), and Section 6A.6.1.2 for information on project consistency with USACE, CVFPB, and DWR flood standards and regulations. Overall, construction and operations of the proposed project will not increase flood risk to people or structures in the Delta because the project will be designed and operated to ensure flood neutrality in the Delta and surrounding communities.
2654	67	The habitat projects and activities being proposed as mitigation for construction of California WaterFix conveyance facilities and the new water operations combined with the California EcoRestore projects anticipated in the Plan Area have the potential to create redirected impacts and increased Operations and Management costs for reclamation districts with responsibility for maintaining levees in the Plan Area. In general, higher water levels along a floodway will require taller levees, and changes in the Delta hydrodynamics will require increased armoring of levees to protect against erosion and seepage. Examples of the many cumulative adverse impacts in the Plan Area (Delta) the EIR/EIS should specifically describe, analyze, and quantify include:  Cumulative impacts to Delta agriculture from land conversion, seepage damage, water quality degradation, soil contamination (salinity absorption), blocked access to parcels, and reduce water elevations (surface and groundwater) stranding diversion intakes and wells;	The potential for effects on construction on levees is addressed in Chapter 9, Geology and Seismicity, FEIR/EIS. The potential for changes in surface water related to the project is presented in Chapter 6, Surface Water. Because of the relatively minor changes in surface water flows in the Delta related to the California WaterFix none of the effects on water supply intakes or levees identified in this comment are expected. Effects of the action alternatives on agricultural resources is disclosed in Impact AG-1 and AG-2 in Chapter 14, Agricultural Resources and Mitigation Measure AG-1, describing agricultural stewardship in the Delta is proposed. The cumulative effects of the California EcoRestore and other cumulative projects in combination with the action alternatives is presented in Section 5 of the RDEIR/SDEIS and the cumulative impacts sections of Chapters 5-27 in this Final EIR/EIS. Potential effects on groundwater from dewatering and seepage are addressed in Chapter 7, Groundwater and a mitigation measure to reduce the potential for groundwater effects is proposed.
2654	68	The habitat projects and activities being proposed as mitigation for construction of California WaterFix conveyance facilities and the new water operations combined with the California EcoRestore projects anticipated in the Plan Area have the potential to create redirected impacts and increased Operations and Management costs for reclamation districts with responsibility for maintaining levees in the Plan Area. In general, higher water levels along a floodway will require taller levees, and changes in the Delta hydrodynamics will require increased armoring of levees to protect against erosion and seepage. Examples of the many cumulative adverse impacts in the Plan Area (Delta) the EIR/EIS should specifically describe, analyze, and quantify include:  Cumulative impacts to in-Delta water supply (agriculture and drinking water) from 7 significant and “unavoidable” adverse impacts identified in Water Quality Chapter 8.	The potential for effects on construction on levees is addressed in Chapter 9, Geology and Seismicity, FEIR/EIS. The potential for changes in surface water related to the project is presented in Chapter 6, Surface Water. Because of the relatively minor changes in surface water flows in the Delta related to the California WaterFix none of the effects on water supply intakes or levees identified in this comment are expected. Effects of the action alternatives on agricultural resources is disclosed in Impact AG-1 and AG-2 in Chapter 14, Agricultural Resources and Mitigation Measure AG-1, describing agricultural stewardship in the Delta is proposed. The cumulative effects of the California EcoRestore and other cumulative projects in combination with the action alternatives is presented in Section 5 of the RDEIR/SDEIS and the cumulative impacts sections of Chapters 5-27 in this Final EIR/EIS. Potential effects on groundwater from dewatering and seepage are addressed in Chapter 7, Groundwater and a mitigation measure to reduce the potential for groundwater effects is proposed.
2654	69	The failure to adequately analyze the cumulative impacts was pointed out by the Delta Independent Science Board:  “The proposed project is part of the broader array of management actions in the Delta and should be considered in that broader context.” (Pg 18)	For additional information on cumulative impacts please see Master Response 9. Please also see responses to the Delta Independent Science Board letter, RECIRC 2546.
2654	70	The failure to adequately analyze the cumulative impacts was pointed out by the Delta Independent Science Board:  “the Current Draft fails to consider how levee failures would affect the short-term and long-term water operations spelled out in Table 4.1-2.” (Pg 7)	For additional information on cumulative impacts please see Master Response 9. Please also see responses to the Delta Independent Science Board letter, RECIRC 2546. Also, see Master Response 16 regarding potential operational response during levee failure events.
2654	71	The failure to adequately analyze the cumulative impacts was pointed out by the Delta Independent Science Board:  “What are the cumulative impacts of wetland losses in the Delta? What is the tipping point	For additional information on cumulative impacts please see Master Response 9. Please also see responses to the Delta Independent Science Board letter, RECIRC 2546. Chapter 12 of the FEIR/EIS analyzes potential impacts to wetlands under the project alternatives.

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		beyond which further wetland losses must be avoided?" (Pg 18)	
2654	72	The failure to adequately analyze the cumulative impacts was pointed out by the Delta Independent Science Board:  "Up to 14 years of construction activities were predicted for some areas (e.g., San Joaquin Co.); this would have cumulative impacts (e.g., dewatering would affect soil compaction, soil carbon, microbial functions, wildlife populations, and invasive species)." (Pg 19)	For additional information on cumulative impacts please see Master Response 9. Please also see responses to the Delta Independent Science Board letter, RECIRC 2546. Potential impacts to Soil are discussed in Chapter 10, FEIR/EIS, and potential impacts to terrestrial species are discussed in Chapter 12.
2654	73	Adaptive Management, Funding, and Mitigation Commitments are Vague  Under CEQA, an EIR must be sufficiently descriptive and specific to allow the public to clearly understand exactly how significant effects will be mitigated so they can weigh in on the adequacy of such measures. Unfortunately, neither the BDCP nor the California WaterFix EIR/EIS documents meet CEQA or NEPA requirements in terms of assurances necessary for adaptive management, funding, or mitigation measure commitments.	The 2013 Draft EIR/EIS and 2015 RDEIR/SDEIS are complete in their evaluation of impacts, direct and cumulative. The project description and objectives are also complete and satisfies the requirements of NEPA CEQA. The lead agencies agree that the 2013 Public Draft EIR/EIS and 2015 RDEIR/SDEIS provided the public and decision-makers with sufficient information on which to make informed comments which have been considered and incorporated into the Final EIR/EIS. Please see Section 3.6.4.4 in Chapter 3 of the FEIR/EIS for an updated description of the Adaptive Management and Monitoring Program to be implemented under the new preferred alternative, 4A. Also, see Master Response 33 regarding adaptive management.
2654	74	Fundamental concerns regarding the effectiveness of adaptive management and mitigation measures due to vague descriptions and deferred commitments were noted by the Delta Independent Science Board:  "The lack of substantive treatment of adaptive management in the Current Draft indicates that it is not considered a high priority or the proposer have been unable to develop a substantive idea of how adaptive management would work for the project." (Pg 5)  "We did not find examples of how adaptive management would be applied to assessing – and finding ways to reduce – the environmental impacts of project construction and operations." (Pg 5)  "The missing details also include commitments and funding needed for science-based adaptive management and restoration to be developed, and more importantly, to be effective." (Pg 6)  "The Current Draft does little more than promise that collaborations will occur and that adaptive management will be implemented." (Pg 6)  "The test will be whether the measures will be undertaken as planned, be as effective as hoped, and continue long enough to fully mitigate effects. This is where adaptive management and having contingency plans in place becomes critically important. It is not apparent that the mitigation plans include these components." (Pg 13)  "Monitoring is mentioned, but details of organization, intent, and resources seem lacking.  Adequate funding to support monitoring, collaborative science, and adaptive management is a chronic problem." (Pg 15)  Finally, environmental conclusions in the RDEIR/SDEIS simply stating that future projects/actions/designs will comply with applicable law does not constitute avoidance of all impacts and does not suffice to replace mitigation. All of the EIR/EIS Chapters we reviewed also had many examples where the adverse impacts identified in the title and	For more information regarding adaptive management please see Master Response 33. Also, see Section 3.6.4.4 in Chapter 3 of the FEIR/EIS for an updated description of the Adaptive Management and Monitoring Program to be implemented under the new preferred alternative, 4A.  Please refer to comment letters #1448 and #2546 to see responses to the Delta Independent Science Board's comments.  Also, see Master Response 22 regarding adequacy of mitigation measures.

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		description were left unmitigated in the CEQA Conclusion.	
2654	75	<p>Coordination with flood management agencies, planning efforts, and delta protection laws</p> <p>Central Valley Flood Protection Plan Coordination and Compliance</p> <p>To safeguard at-risk people, properties and communities, the State of California holds the responsibility for a system of levees, weirs, bypasses and other risk-management facilities.</p> <p>Collectively, these State-federal flood protection works –as well as their associated lands, programs, conditions, and mode of operations and maintenance – make up the State Plan of Flood Control (SPFC)[ Footnote 18: A complete description of these assets and resources has been compiled by DWR into the State Plan of Flood Control Descriptive Document, available at <a href="http://www.water.ca.gov/cvfm/docs/DRAFT_SPFC_Descriptive_Doc_20100115.pdf">http://www.water.ca.gov/cvfm/docs/DRAFT_SPFC_Descriptive_Doc_20100115.pdf</a>]. The SPFC system and local Delta levees provide flood protection during major storms to over 2 million people in 14 counties and an estimated \$70 billion worth of urban and agricultural development.</p> <p>According to the National Oceanic and Atmospheric Association, every year floods cause an estimated \$2 billion in property damage, and California’s Central Valley has been identified in one of the nation’s highest risk categories. California voters approved more than \$4 billion in bond money for flood infrastructure after Hurricane Katrina raised public awareness to the dangers of levee failures, allowing state and local partnerships to diligently improve the level of flood protection in the Sacramento and San Joaquin River watersheds.</p> <p>The BDCP indicates several portions of the State Plan of Flood Control facilities will be removed, built on, vegetated, inundated, moved, or breached in order to construct new SWP water conveyance facilities and restore habitat as project mitigation. However, the BDCP/WaterFix alternatives fail to describe how the BDCP/WaterFix actions will either complement or conflict with the hundreds of flood protection projects identified in Regional Plans developed as part of the Central Valley Flood Protection Plan. These are costly omissions if BDCP/WaterFix preferred alternatives increase Sate’s liability exposure or conflict with flood investments identified during Central Valley Flood Protection Plan implementation.</p>	<p>Please see Section 6A.7.1 in Appendix 6A, FEIR/EIS, for information on future BDCP/CWF coordination efforts with existing flood protection programs and plans in the Plan Area. Also, see Section 6A.6.2.1.3 for a discussion on DWR consistency with the State Plan of Flood Control (SPFC), and Section 6A.6.1.2 for information on project consistency with USACE, CVFPB, and DWR flood standards and regulations.</p> <p>Refer Sections 6A.2 and 6A.3 for discussion on existing levee improvement programs and funding mechanisms, which would not be affected by the BDCP/CWF. Levees are an important public safety resource and the proposed project would not change levee policy or replace ongoing programs and grant projects aimed at facilitating and supporting levee improvements in or outside the Delta. It recognized that levee maintenance and safety in the Delta is an important issue for the residents of the Delta and for statewide interests.</p>
2654	76	<p>There are ongoing cooperative flood control projects within the Plan Area in various phases of funding and implementation coordination between the U.S. Army Corps of Engineers, Central Valley Flood Protection Board, and local Regional Districts. Yet, the public and decision makers are not informed of this or told how BDCP/WaterFix will ultimately integrate projects slated for the same or adjacent levee locations.</p>	<p>Please see Appendix 3B, FEIR/EIS, for information on projects and programs included in the Existing Conditions baseline and action alternative impact analyses. As described in Chapter 6 (Surface Water), FEIR/EIS, the surface water cumulative impact analysis considers numerous flood management programs and projects, including the Delta Islands and Levees Feasibility Study, CALFED Levee Stability Program, FloodSAFE, West Sacramento Levee</p> <p>Improvements Program, Delta Risk Management Strategy, and the California Water Action Plan.</p> <p>Also, see Appendix 6A, Section 6A.6.2.1.3, FEIR/EIS, for a discussion on DWR consistency with the State Plan of Flood Control (SPFC), and Section 6A.6.1.2 for information on project consistency with USACE, CVFPB, and DWR flood standards and regulations. Section 6A.7.1 discusses future BDCP/CWF efforts to coordinate with applicable flood management entities in the Plan Area.</p>
2654	77	<p>U.S. Army Corps of Engineers PL 84-99 Requirements, Including Levee Vegetation Policies</p>	<p>The new proposed project, Alternative 4A, significantly reduces the amount of planned habitat restoration,</p>

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		<p>Many of the individual actions contained in the BDCP’s habitat conservation measures and California WaterFix mitigation measures propose planting “riparian” vegetation to benefit aquatic and terrestrial species, including modification of channel geometry to accommodate new riparian habitats on the water side of levees to improve conditions along salmon migration routes.</p> <p>The Army Corps has “minimum” standards for maintaining vegetation-free buffer zones on all State Plan of Flood Control Project Levees, but fails to analyze the “feasibility” of vegetating project levees or the possibility that these mitigation measures cannot be achieved due to conflicts with the Army Corps’ levee vegetation policies.</p> <p>California WaterFix habitat mitigation measures must be carefully designed to avoid encroachment onto Project levees and not assume that the vegetation objective of BDCP/WaterFix habitat proposals can be accommodated during the U.S. Army Corps of Engineers’ 408 permitting process.</p> <p>DWR should coordinate with the Central Valley Flood Protection Board to develop an appropriate strategy for how the BDCP/WaterFix modifications of the State Plan of Flood Control project levees will ensure compliance with U.S. Army Corps of Engineers’s PL 84-99 and other conditions contained in the 1953 Memorandum of Understanding between Central Valley Flood Protection Board and U.S. Army Corps of Engineers. Mitigation measures should include payment of all levee repair/rehabilitation costs for any project or non-project levees in the U.S. Army Corps of Engineers Rehabilitation and Inspection Program (PL 84-99) program that will have vegetation plantings pursuant to implementation of BDCP/WaterFix alternatives.</p> <p>Finally, the Association recommends DWR immediately engage with the Central Valley Flood Protection Board and local Reclamation Districts to execute binding agreements (Memorandum of Understanding) for SWP/CVP’s funding of the ongoing maintenance of all new vegetation within the footprint of a flood control easement. Memorandum of Understanding should consider requiring vegetation management commitment by DWR to: 1) maintain the safety, functionality, and structural integrity of the flood facility; 2) ensure accessibility for surveillance, monitoring, inspection, maintenance, and flood-fighting is retained; 3) conduct periodic clearing of some types of vegetation; and submit annual updates to Central Valley Flood Protection Board on levee vegetation management with particular attention to any instances where maintenance is falling behind and affecting the reliability of State Plan of Flood Control flood control structures.</p>	<p>compared to the originally preferred BDCP HCP alternative, Alternative 4. Instead, the proposed project includes habitat restoration necessary to mitigate significant environmental effects under CEQA and meet the regulatory standards of ESA Section 7 and California Endangered Species Act (CESA) Section 2081(b).</p> <p>Please see Appendix 6A, Section 6A.6.2.1.3, FEIR/EIS, for a discussion on DWR consistency with the State Plan of Flood Control (SPFC), and Section 6A.6.1.2 for information on project consistency with USACE, CVFPB, and DWR flood standards and regulations. Also, see Section 6A.6.2.1.2 regarding DWR maintenance responsibilities, including conformance with USACE PL-84 standards.</p> <p>Section 6A.6 also includes a discussion on levees modified by construction of the California WaterFix (CWF/Alternative 4A), including responsibilities of the project proponents.</p> <p>Before and/or during construction of the CWF water conveyance facilities, project proponents will explore opportunities with local reclamation districts and the Central Valley Flood Protection Board (CVFPB) to address potential conflicts regarding levee maintenance, inspection, and flood fighting activities on project and non-project levees. DWR will look to enter into agreements with local reclamation districts with jurisdiction in the Delta to ensure levee management activities by both government and local agencies are not interrupted during construction of the water conveyance facilities. In addition, DWR will comply with all applicable flood protection requirements and regulations to ensure flood neutrality during construction and operations of the CWF.</p>
2654	78	<p>Central Valley Flood Protection Board Encroachment Permit</p> <p>Under California law, no modification to the federal/State flood control system (State Plan of Flood Control), encroachment, or project may be constructed on or near the Sacramento and San Joaquin Rivers or their tributaries without the explicit approval of the Central Valley Flood Protection Board. Recent legislation has increased the board’s encroachment enforcement authority to remove such encroachments if necessary.</p> <p>The construction description for CM1 water conveyance facilities indicates numerous work areas and activities that are planned on or near flood control facilities in the Board’s jurisdiction, including roads and highways that have State Plan of Flood Control project levees underneath that are to be moved, blocked, driven on in excess of current conditions</p>	<p>Please see Appendix 6A of the Final EIR/EIS, Section 6A.6.2.1.1 for information on potential DWR encroachment permits. Also, see Section 6A.6.2.1.3 for a discussion on DWR consistency with the State Plan of Flood Control (SPFC), and Section 6A.6.1.2 for information on project consistency with USACE, CVFPB, and DWR flood standards and regulations.</p> <p>Section 6A.6 also includes a discussion on levees modified by construction of the California WaterFix (CWF/Alternative 4A), including responsibilities of the project proponents.</p> <p>Before and/or during construction of the CWF water conveyance facilities, project proponents will explore opportunities with local reclamation districts and the Central Valley Flood Protection Board (CVFPB) to address potential conflicts regarding levee maintenance, inspection, and flood fighting activities on project and non-project levees. DWR will look to enter into agreements with local reclamation districts with jurisdiction in the Delta to ensure levee management activities by both government and local agencies are</p>

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		<p>or have construction equipment staged on or next to the levee.</p> <p>A commitment to enter into binding agreements (Memorandum of Understanding) with the Central Valley Flood Protection Board and Local Maintaining Agencies/Reclamation Districts should be inserted as a condition of the Project permits to memorialize how staging of construction equipment, construction traffic, and/or road re-routing will occur and negotiate permit conditions prior to any construction activities. The Memorandum of Understanding should also require development of a floodfighting and evacuation plan, provide funding to Reclamation District for increased levee maintenance and drainage costs, a levee maintenance schedule, and other mitigation measures necessary to ensure the reliability of the flood protection infrastructure to perform in a high water event.</p>	<p>not interrupted during construction of the water conveyance facilities. In addition, DWR will comply with all applicable flood protection requirements and regulations to ensure flood neutrality during construction and operations of the CWF.</p>
2654	79	<p>Compliance with Delta Statutes</p> <p>Changes to the BDCP/WaterFix project require additional disclosures explaining how compliance with various Delta statutes has changed. For instance, the 2009 Delta Reform Act (Water Code §85320(b)) declares that the BDCP (which includes California WaterFix alternatives) is not eligible for state funding if project analysis fails to:</p> <p style="padding-left: 40px;">Comply with CA Natural Community Conservation Planning laws;</p>	<p>The Preferred project is no longer a natural community conservation plan. . For information on the BDCP alternative, please see Master Response 5.</p>
2654	80	<p>Compliance with Delta Statutes</p> <p>Changes to the BDCP/WaterFix project require additional disclosures explaining how compliance with various Delta statutes has changed. For instance, the 2009 Delta Reform Act (Water Code §85320(b)) declares that the BDCP (which includes California WaterFix alternatives) is not eligible for state funding if project analysis fails to:</p> <p>-Include a reasonable range of flow criteria, rates of diversion, or identify the remaining water available for export;</p> <p>-Include a reasonable range of alternatives.</p>	<p>As described in Appendix 3J, FEIR/EIS, selection of the California WaterFix is compliant with the Delta Reform Act requirements cited in this comment. See Master Response 31 for more information on the Delta Reform Act.</p>
2654	81	<p>Compliance with Delta Statutes</p> <p>Changes to the BDCP/WaterFix project require additional disclosures explaining how compliance with various Delta statutes has changed. For instance, the 2009 Delta Reform Act (Water Code §85320(b)) declares that the BDCP (which includes California WaterFix alternatives) is not eligible for state funding if project analysis fails to:</p> <p>Include potential effects of climate change, possible sea level rise up to 55 inches, and possible changes in total precipitation and runoff patterns on the conveyance alternatives and habitat restoration activities;</p>	<p>Please see Master Response 5 regarding the adequacy of the BDCP/CWF funding strategy. Please also note that BDCP is no longer included in the preferred alternative, Alternative 4A. Also, see response to comment 2654-80 regarding compliance with the Delta Reform Act. See Chapter 29 of the FEIR/EIS for climate change information/analysis, including sea level rise and changes in precipitation and runoff in the future.</p>
2654	82	<p>A. Compliance with Delta Statutes</p> <p>Changes to the BDCP/WaterFix project require additional disclosures explaining how compliance with various Delta statutes has changed. For instance, the 2009 Delta Reform Act (Water Code §85320(b)) declares that the BDCP (which includes California WaterFix alternatives) is not eligible for state funding if project analysis fails to:</p>	<p>As described in Chapter 6, Surface Water, Impact SW-2: "Changes in Sacramento and San Joaquin River flood flows" is less than significant for all alternatives, including the preferred alternative, 4A. .</p> <p>Please see Master Response 31 for more information regarding Compliance with Delta Reform Act.</p>

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		Include the potential effects on Sacramento and San Joaquin River flood management;	
2654	83	<p>Compliance with Delta Statutes</p> <p>Changes to the BDCP/WaterFix project require additional disclosures explaining how compliance with various Delta statutes has changed. For instance, the 2009 Delta Reform Act (Water Code §85320(b)) declares that the BDCP (which includes California WaterFix alternatives) is not eligible for state funding if project analysis fails to:</p> <p>Describe the resilience and recovery of conveyance alternatives in the event of catastrophic loss from flood, earthquake, or other natural disaster.</p>	<p>See Chapter 9, Geology and Seismicity, FEIR/EIS for impact discussions regarding Alternative 4A. All geology and seismicity-related impacts would be less than significant.</p> <p>Also, see Master Response 16 for Seismic Issues.</p> <p>Refer to response to comment 2654-80 regarding compliance with the Delta Reform Act.</p>
2654	84	<p>The Delta Reform Act established several other standards that BDCP/WaterFix should describe, including but not limited to:</p> <ul style="list-style-type: none"> <li>-Cannot be incorporated into the Delta Plan unless the project is approved as a Habitat Conservation Plan/ Natural Community Conservation Planning (Water Code § 85320€);</li> <li>-Must include a transparent, real-time operational decision-making process to ensure biological performance measures area achieved (Water Code §85321);</li> <li>-Requires any SWP/CVP change in the point of diversion order to include appropriate Delta flow criteria and to reimburse State Water Resource Control Board for costs (Water Code § 85086);</li> </ul>	<p>State and Federal agencies developed the modified proposed project (Alternative 4A/California WaterFix) in response to public and agency input. Alternative 4 remains a viable alternative. Alternative 4A reflects the State’s proposal to separate the conveyance facility and habitat restoration measures into two separate efforts: California WaterFix and California EcoRestore. The Proposed Action includes habitat restoration as necessary to mitigate significant environmental effects and satisfy applicable ESA and CESA standards.</p> <p>Also, see response to comment 2654-80 regarding compliance with the Delta Reform Act.</p>
2654	85	<p>The Delta Reform Act established several other standards that BDCP/WaterFix should describe, including but not limited to:</p> <ul style="list-style-type: none"> <li>-Prohibits commencement of construction for any diversion, conveyance, or other facility until the State Water Resource Control Board issues an order approving a change in point of diversion for SWP/CVP (Water Code §85088);</li> <li>-Prohibits construction of new Delta conveyance facilities until contracts from persons/entities to receive water from SWP/CVP have been entered into to pay for the costs of environmental review, planning, design, construction, and mitigation of new conveyance facilities (Water Code §85089).</li> </ul>	<p>The comment refers to requirements established in the Delta Reform Act regarding commencement of construction. In April, 2015 state and federal agencies announced a new sub-alternative—Alternative 4A (California WaterFix) —which replaced Alternative 4 (the proposed BDCP) as the state’s proposed project. Alternative 4A reflects the state’s proposal to separate the conveyance facility and habitat restoration measures into two separate efforts: California WaterFix and California EcoRestore. Also, see response to comment 2654-80 regarding compliance with the Delta Reform Act.</p>
2654	86	<p>The Delta Reform Act established several other standards that BDCP/WaterFix should describe, including but not limited to:</p> <p>The Delta Independent Science Board 2015 Review suggested, “more details on the governance operations (such as the Real Time Operations process) would be useful.”</p>	<p>Please see the response to comment letter 2653-102 regarding real-time operations and CSAMP under the proposed project, and Master Response 31 regarding the Delta Reform Act. Also, see Section 3.6.4.4 in Chapter 3 of the FEIR/EIS for an updated description of the Adaptive Management and Monitoring Program to be implemented under the new preferred alternative, 4A. Also, see Master Response 33 regarding adaptive management. Real-time operations are discussed in Section 3.6.4.2 in Chapter 3, FEIR/EIS.</p>
2654	87	<p>Conduct Comprehensive and Unbiased Economic Evaluation of BDCP</p> <p>To be credible, DWR should undertake objective and comprehensive cost-benefit and socioeconomic analyses. The new effort must be consistent with government economic analysis standards for public water projects [Footnote 19: “Economics and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies” (P&amp;G) and the “Department of Water Resources Economic Analysis Guidebook.”], and independently peer-reviewed for accuracy and efficacy of the methodology, assumptions,</p>	<p>The FEIR/EIS (and RDEIR/SDEIS) is not required to provide a cost-benefit analysis of a proposed action, only the effects on the human environment of that proposed action. However, potential effects to socioeconomics are discussed in Chapter 16 of the FEIR/EIS. In addition, the MMRP will be funded by the lead agencies.</p> <p>Commitments to adaptive management and collaborative science will be secured through a MOA between DWR, Reclamation, the public water agencies, CDFW, NMFS, and USFWS. Details of the collaborative science and adaptive management process, including adaptive management decision-making, an organizational structure for adaptive management decisions, and funding for collaborative science will be developed and</p>

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		<p>models, and results.</p> <p>DWR’s Economic Analysis Guidebook specifically states: “DWR should also broaden the economic analysis to include regional economic development (RED) or other social effects (OSE) accounts, which can significantly assist in the decision-making process. The RED account is particularly important if a proposed plan will have significantly different effects upon regions that might otherwise be irrelevant to the NED national perspective.” As described in comments herein, the BDCP/WaterFix alternatives certainly represent different benefits and impacts between Northern and Southern California, which should be accounted for as RED or OSE – but is not accounted for in this way.</p> <p>A new, more comprehensive cost-benefit analysis should analyze the costs of such things as:</p> <ul style="list-style-type: none"> <li>-The Mitigation Monitoring Plan, including the hundreds of individual actions called for in the Avoidance and Minimization Measures (Plan Appendix 3.C);</li> <li>-The Monitoring and Adaptive Management Program;</li> <li>-Management contingency assumptions;</li> </ul>	<p>incorporated through the MOA, as needed.</p>
2654	88	<p>Conduct Comprehensive and Unbiased Economic Evaluation of BDCP</p> <p>To be credible, DWR should undertake objective and comprehensive cost-benefit and socioeconomic analyses. The new effort must be consistent with government economic analysis standards for public water projects [Footnote 19: “Economics and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies” (P&amp;G) and the “Department of Water Resources Economic Analysis Guidebook.”], and independently peer-reviewed for accuracy and efficacy of the methodology, assumptions, models, and results.</p> <p>DWR’s Economic Analysis Guidebook specifically states: “DWR should also broaden the economic analysis to include regional economic development (RED) or other social effects (OSE) accounts, which can significantly assist in the decision-making process. The RED account is particularly important if a proposed plan will have significantly different effects upon regions that might otherwise be irrelevant to the NED national perspective.” As described in comments herein, the BDCP/WaterFix alternatives certainly represent different benefits and impacts between Northern and Southern California, which should be accounted for as RED or OSE – but is not accounted for in this way.</p> <p>A new, more comprehensive cost-benefit analysis should analyze the costs of such things as:</p> <ul style="list-style-type: none"> <li>-Payment of in-lieu property assessments for lands associated with CM1 (Water Code § 85089(b)) and for mitigation lands transferred from private to public property in the Plan Area.</li> </ul>	<p>The FEIR/EIS (and RDEIR/SDEIS) is not required to provide a cost-benefit analysis of a proposed action, only the effects on the human environment of that proposed action. Please also refer to Master Response 5 for additional details on the costs of project implementation.</p> <p>The proposed project (Alternative 4A) does include property tax/assessments revenue replacement consistent with Water Code § 85089(b)). Currently, over \$48 million will be set aside for this purpose (see Exhibit E of Design and Construction Enterprise Draft Agreement released by DWR on January 15, 2016, “2081/Section 7 Mitigation Cost Estimate” Table). Potential socioeconomic impacts can be found in Chapter 16 of the FEIR/EIS.</p>
2654	89	<p>Conduct Comprehensive and Unbiased Economic Evaluation of BDCP</p> <p>To be credible, DWR should undertake objective and comprehensive cost-benefit and socioeconomic analyses. The new effort must be consistent with government economic analysis standards for public water projects [Footnote 19: “Economics and Environmental</p>	<p>For additional information on the cost of the proposed project, please see Master Response 5. Also, see response to comment 2654-89 regarding cost-benefit analyses.</p>

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		<p>Principles and Guidelines for Water and Related Land Resources Implementation Studies” (P&amp;G) and the “Department of Water Resources Economic Analysis Guidebook.”), and independently peer-reviewed for accuracy and efficacy of the methodology, assumptions, models, and results.</p> <p>DWR’s Economic Analysis Guidebook specifically states: “DWR should also broaden the economic analysis to include regional economic development (RED) or other social effects (OSE) accounts, which can significantly assist in the decision-making process. The RED account is particularly important if a proposed plan will have significantly different effects upon regions that might otherwise be irrelevant to the NED national perspective.” As described in comments herein, the BDCP/WaterFix alternatives certainly represent different benefits and impacts between Northern and Southern California, which should be accounted for as RED or OSE – but is not accounted for in this way.</p> <p>A new, more comprehensive cost-benefit analysis should analyze the costs of such things as:</p> <ul style="list-style-type: none"> <li>-Redirected improvement and operations and management costs for flood control infrastructure impacted by implementation of BDCP conveyance and habitat restoration projects.</li> </ul>	
2654	90	<p>A significant potential fiscal impact that should specifically be addressed in a new economic analysis is the State’s exposure, both DWR and Central Valley Flood Protection Board, to tort liability related to CA WaterFix construction and operation of facilities on State Plan of Flood Control project levees.</p> <p>Inverse condemnation liability gives private individuals a pathway to recover for disproportionate damages caused by public improvements projects [Footnote 20: Locklin v. City of Lafayette, (1994) 7 Cal.4th 327 at 367]. After the 1986 storms and subsequent levee failures, a lawsuit involving some 3,000 plaintiffs claiming damages from a SPFC Project levee failure which resulted in evacuations, deaths, and hundreds of millions of property damage was filed against the State (Paterno v. State of California) [Footnote 21: Paterno v. State of California, (2003) 113 Cal. App. 4th 998; 6 Cal.Rptr.3d 854 (2004)].</p> <p>Key factors in assessing the “reasonableness” of the risk inherent to the state’s levee project included the large size of the project, the lack of direct benefit to the plaintiffs from the project, the feasibility of alternatives, and the fact that the state benefitted as a whole from the decision not to fund the levee improvements that would have prevented the breach [Footnote 22: Id. at 1017; Locklin, 7 Cal 4th at 368-369], with foreseeability a supplemental issue considered.</p> <p>The appellate decision also cited case law stating that a public entity is a proper defendant in an action for inverse condemnation if the entity “substantially participated in the planning, approval, construction, or operation of a public project or improvement that proximately caused injury to private property. So long as the plaintiffs can show substantial participation, it is immaterial ‘which sovereign hold title or has the responsibility for operation of the project [Footnote 23: Paterno, citing Arreola, 99 Cal.App.4th at p. 761].’”</p>	<p>Please see Section 6A.6.2.1.3 in Appendix 6A, FEIR/EIS for a discussion on DWR consistency with the State Plan of Flood Control (SPFC), and Section 6A.6.1.2 for information on project consistency with USACE, CVFPB, and DWR flood standards and regulations. New facilities would be designed to withstand the applicable flood management standards through construction of flood protection embankments or construction on engineered fill to raise the facilities to an elevation above the design flood elevation for that specific location. For modified levees, design criteria would consider the most recent criteria, including new guidelines for urban and rural levees.</p>
2654	91	<p>In the case of CA WaterFix, the purpose of this project is increasing water supply in export Service Areas, so there are no direct benefits to residents in the Delta that pay assessments for levee maintenance and improvements. In addition, many of the project components</p>	<p>Chapters 6, 9, and 10 of the FEIR/EIS indicate that implementation of the proposed project would not increase the potential for levee failure or floods as compared to the No Action Alternative. It is recognized that there are continued flood risks and potential for levee failures that would continue under the No Action</p>

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		<p>propose a substantial amount of moving, modifying, or building on State Plan of Flood Control levees, so meets the large size criteria. However, CA WaterFix fails to include feasible alternatives to maintain or improve flood protection, such as cost-sharing in the funding of ongoing maintenance and improvement of levees needed for all BDCP/WaterFix alternatives that rely on dual conveyance with a path towards the South Delta pumps. The California Central Valley Flood Control Association and many others, including the Delta Independent Science Board, have recommended BDCP/WaterFix include maintenance of levees as a critical project component.</p> <p>In 2003, the State of California settled the case for \$467 million after the Third Appellate Court concluded in an appeal of the inverse condemnation lawsuit that the State was liable as the party responsible for the Sacramento River Flood Control Project facilities. The court agreed that the Paterno plaintiffs' damages were "directly caused by an unreasonable State plan which resulted in the failure" of the levee, therefore finding the State liable to pay for these damages [Footnote 24: Id]. Therefore, the significant financial exposure to the State (DWR/ Central Valley Flood Protection Board) from liability should be disclosed and analyzed in a new, more comprehensive economic analysis.</p>	<p>Alternative as compared to the Existing Conditions with or without implementation of the project. It is also recognized that the potential for levee failures could increase under the No Action Alternative as compared to the Existing Conditions due to climate change and sea level rise with or without implementation of the project. However, these changes would not be related to project implementation and are not considered in the mitigation measures.</p> <p>Also, see response to comment 2654-90 regarding project consistency with flood protection standards.</p>
2654	92	<p><b>Redirected Financial Burdens Not Analyzed or Mitigated</b></p> <p>Neither the Plan's finance chapter nor the EIR/EIS provide any sort of cost analysis of the annual budgets for Reclamation Districts in the Delta in order to evaluate the fiscal ability of districts to weather redirected financial impacts from BDCP/WaterFix actions affecting their revenues and operating budgets.</p> <p>For instance, changes to channel hydrodynamics and flows as well as water elevations and volumes, as proposed in many of the CM1 mitigation measures could create additional costs to reclamation districts from erosion and seepage damage that may require additional rock, large land-side berms, or other levee improvements to mitigate the impacts. At the very least, seepage monitoring will need to be installed and addressed in locations surrounding new aquatic habitat areas, which adds to the projects costs not analyzed in the BDCP/WaterFix economic analysis.</p> <p>Finally, the reclamation and levee districts that operate and maintain most flood protection and control infrastructure in the Delta rely on the local assessment roll as their primary direct funding source, and it would be highly inequitable to leave them to protect new levee improvements or higher maintenance costs associated with CM1 construction, operation, and mitigation actions. Central Valley Flood Control Agency requests a mitigation measure be added requiring DWR to pay for all additional Operations and Management or other related district costs (i.e., higher electricity costs for drainage pumping, levee improvements to add freeboard due to sediment increases raising water surface elevations, wave fetch erosion damage from open water/tidal habitat restoration, etc.) incurred by reclamation districts as a result of implementation of any CA WaterFix actions. These costs must have own section and budget line item in the BDCP/WaterFix's Annual Work Plan and Budget.</p>	<p>Please see Section 6A.6 in Appendix 6A for a discussion on levees modified by construction of the California WaterFix (CWF/Alternative 4A), including responsibilities of the project proponents.</p> <p>Before and/or during construction of the CWF water conveyance facilities, project proponents will explore opportunities with local reclamation districts and the Central Valley Flood Protection Board (CVFPB) to address potential conflicts regarding levee maintenance, inspection, and flood fighting activities on project and non-project levees. DWR will look to enter into agreements with local reclamation districts with jurisdiction in the Delta to ensure levee management activities by both government and local agencies are not interrupted during construction of the water conveyance facilities. In addition, DWR will comply with all applicable flood protection requirements and regulations to ensure flood neutrality during construction and operations of the CWF.</p> <p>For more information regarding cost of the proposed project please see Master Response 5. Also, see Chapters 9 (Geology and Seismicity) and 14 (Agricultural Resources) for information on potential seepage effects.</p>
2654	93	<p>The very preliminary conceptual nature of the BDCP/CA WaterFix project alternatives, results in a failure to assess numerous significant impacts and development of CEQA/NEPA conclusions that are primarily based on conjecture. In addition, the environmental and public safety impacts are nearly impossible to decipher due to the disjointed document organization and presentation; and therefore fails to satisfy the most basic requirement of CEQA – to inform the public about the environmental consequences of a proposed decision</p>	<p>Uncertainty is inherent in any planning effort of this geographic and temporal scale. However, DWR strived to use the best available science throughout the effects analysis, consistent with the requirements of the ESA. Additionally, the official public review process for the Draft BDCP and EIR/EIS and the RDEIR/SDEIS provided an opportunity for formal public comment on the proposed project and project alternatives. Public and agency comments on the public draft have led to further refinement of the proposed project, as</p>

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		<p>or project.</p> <p>As pointed out by the Delta Independent Science Board, the CA WaterFix project alternatives and RDEIR/SDEIS lack completeness, defer essential material to the Final EIR/EIS, and retain a number of deficiencies inherent in the 2014 BDCP DEIR/DEIS.</p>	<p>evidenced in the RDEIR/SDEIS.</p> <p>The lead agencies believe that the BDCP and EIR/EIS are complete in their evaluation of impacts, direct and cumulative, that project description is complete and satisfies the requirements of NEPA, that the project objectives are also precise and complete and satisfy the requirements of CEQA. The lead agencies agree that the 2013 Public Draft EIR/EIS and 2015 RDEIR/SDEIS provided the public and decision-makers with sufficient information on which to make informed comments which have been considered and incorporated into the Final EIR/EIS. The primary objective of the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) is to disclose to decision makers the environmental impacts of a proposed action and alternatives, evaluating the potential adverse change to existing conditions and determining if mitigation is available to offset the potential impact. These documents, along with many others developed through the project planning (e.g., engineering, economic, and other technical studies and other environmental compliance processes [e.g., Endangered Species Act, Clean Water Act, and water rights compliance]), will serve as the basis for the lead agencies' decision on whether to approve the project. The Federal and State Lead Agencies have done their best to make the EIR/EIS for the proposed project as fair, objective, and complete as possible and believe the scope of the project and the analysis contained in each chapter sufficiently discloses the potential impacts associated with each of the action alternatives.</p> <p>Please refer to comment letters 1448 and 2546 to see responses to the Delta Independent Science Board's comments. Also, see Master Response 4 regarding adequacy of alternatives, and Master response 38 regarding length and complexity of the EIR/EIS,</p>
2654	94	<p>Limiting factors prevent California Central Valley Flood Control Association, its member agencies, and the general public from fully understanding the true scope, severity, and duration of potential environmental and economic effects associated with the construction, permitting, operation, and mitigation of BDCP/WaterFix project components.</p>	<p>The lead agencies believe that the 2013 Draft EIR/EIS, 2015 RDEIR/SDEIS, and FEIR/EIS are complete in their evaluation of impacts (using the best available science and modeling), direct and cumulative, that project description is complete and satisfies the requirements of NEPA, and that the project objectives are also precise and complete and satisfy the requirements of CEQA. The lead agencies believe that the 2013 Public Draft EIR/EIS and 2015 RDEIR/SDEIS provided the public and decision-makers with sufficient information on which to make informed comments which have been considered and incorporated into the Final EIR/EIS.</p>
2654	95	<p>The substantial inadequacies of the BDCP/WaterFix alternatives and RDEIR/SDEIS fail to protect people and property in the Plan Area or meet the legal requirements for state and federal endangered species, environmental assessment, or various Delta protection laws. Therefore, the California Central Valley Flood Control Association requests the State to revise per comments contained herein and once again recirculate the Plan and EIR/EIS for public review and comment.</p>	<p>The lead agencies believe that the 2013 Draft EIR/EIS, 2015 RDEIR/SDEIS, and FEIR/EIS are complete in their evaluation of impacts, direct and cumulative, that project description is complete and satisfies the requirements of NEPA, that the project objectives are also precise and complete and satisfy the requirements of CEQA. The lead agencies agree that the 2013 Public Draft EIR/EIS and 2015 RDEIR/SDEIS provided the public and decision-makers with sufficient information on which to make informed comments which have been considered and incorporated into the Final EIR/EIS. Also, see Master Response 5 regarding ESA/CESA compliance</p>
2654	96	<p>[ATT 3] North Delta Diversion Operations Plan/Point of Diversion Prioritization:</p> <p>The RDEIR/SDEIS does not include an operations plan for use of the North Delta Diversion (NDD). An operations plan is necessary to understand and describe the conditions under which the NDD would be used in the context of State Water Project (SWP) and Central Valley Project (CVP) operations, and how SWP and CVP diversions would be prioritized between the existing points of diversion in the South Delta and the NDD. Without describing how the CVP and SWP would be operated with a NDD, it is not possible to analyze the changes in CVP and SWP operations that may occur with the NDD; therefore it is not possible to determine the environmental effects that would be caused by changes in CVP and SWP operations.</p> <p>The RDEIR/SDEIS describes the operation of the NDD as follows: "The proposed project operations include a preference for south Delta pumping in July through September to</p>	<p>The initial operations criteria assumptions for the north Delta diversion under Alternative 4A were outlined in the Chapter 4 of the RDEIR/SDEIS and included in the Final EIR/EIS (see Chapter 3). The modeling performed to evaluate the potential environmental effects was consistent with these operating criteria assumptions. From the long-term planning purposes the modeling performed analyzed likely environmental effects. Further, as noted in the Appendix 5A, FEIR/EIS modeling result tables, the resulting north versus south Delta exports will be different under Alternative 4A compared to the No Action Alternative depending on the permitted initial operating criteria, which is expected to fall between Alternative H3 and H4 scenarios. The range of water quality effects under Alternative 4A as a result of these export changes are also analyzed in Chapter 4 of the RDEIR/SDEIS and included in the Final EIR/EIS (see Chapter 8). The proposed mitigation measures account for the future uncertainties in the operations.</p> <p>With respect to the south Delta diversion preference in the summer months, Alternatives 1 through 9 assumed use of a portion of Sacramento River inflow to maintain south Delta water quality in summer months, as described in this comment. In the Final EIR/EIS, the CALSIM II model was modified to simulate</p>

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		<p>provide limited flushing for improving general water quality conditions and reduced residence times" (p. 4.1-6). These appear to be the only guidelines provided in the RDEIR/SDEIS that describe how the CVP and SWP operators would decide to either export water through-Delta at the existing South Delta diversions or at the NDD facility. This statement is insufficient to analyze NDD facility operations in conjunction with existing South Delta facilities. The following example illustrates this point.</p> <p>Inflows from upstream reservoir releases and Delta exports are frequently governed by water quality standards in State Water Resources Control Board (SWRCB) Decision 1641 (D-1641) from July through September. Compliance with water quality standards is achieved through the combination of Delta inflows and exports. When water quality standards govern Delta operations, increases in Delta inflows generally allow for increases in Delta exports from the South Delta facilities at less than a one-for-one ratio because Delta outflows must increase to maintain water quality as South Delta exports increase. This additional outflow is commonly referred to as the "carriage water cost" for any additional exports from the South Delta. However, if water quality standards are being met with specific Delta inflow and South Delta export amounts, and if either the CVP or SWP wants to increase Delta exports, there would be no carriage water cost if the water were exported at the NDD. Therefore, 100 percent of any additional Delta inflow could be exported from the NOD, creating a water supply benefit to using the NDD during this period. However, operating the NDD to create this water supply benefit would not be consistent with the RDEIR/SDEIS's stated operational guideline, which is to "improve general water quality conditions and reduce residence times." The RDEIR/SDEIS does not provide an adequate description of how the NDD facilities would be operated under this, or any other, condition. Nor does the RDEIR/SDEIS offer any description of how diversions would be prioritized between the NOD and South Delta facilities outside the July through September period. An operations plan for the NDD must be defined before technical analyses of environmental effects can be performed.</p>	<p>Alternatives 2D, 4A, and 5A to explicitly provide a preference for use of the south Delta intakes for up to 3,000 cfs in the summer months to manage water quality conditions in the south Delta channels. No specific intake preference is assumed beyond 3,000 cfs.</p>
2654	97	<p>[ATT 3] Definition and Source of Additional Spring Outflow:</p> <p>The RDEIR/SDEIS identifies Alternative 4A (ALT 4A) as the preferred alternative (p. 2-20). A component of ALT 4A is a requirement for additional Delta outflow in the spring (P. 4.1-9). However, the project description does not adequately describe the expected quantity, timing, or source of the additional spring outflow. It is not possible to analyze the potential environmental effects associated with providing additional spring outflow without more definition as to the source, quantity, and timing of the flow.</p> <p>According to the spring outflow section in RDEIR/SDEIS Table 4.1-2,</p> <p>"initial operations will provide a March-May average Delta outflow bounded by the requirements of Scenario H3, which are consistent with D-1641 standards, and Scenario H4, which would be scaled to Table 3-24 in Chapter 3, Section 3.6.4.2 of the Draft EIR/EIS " (p. 4.1-9)</p> <p>This description implies that, when meeting the existing outflow requirements in D-1641, the additional spring outflow would be bounded between zero and 9,200 to 44,500 cubic feet per second (cfs), as defined in Table 3-24 of the BDCP Draft EIR/EIS. While the existing outflow requirements in D-1641 are well defined and understood in terms of source, quantity, and timing, the upper bound on this additional required spring outflow is not.</p>	<p>The text referred to in this comment has been modified in the Final EIR/EIS for Alternative 4A to not include acquisition of water related to spring outflow criteria. The model results presented in the Final EIR/EIS for Alternative 4A do not include water acquisition methods.</p> <p>Also, see response to comment 2654-97 regarding operational scenario H3+.</p>

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		<p>Regarding the source of the additional spring outflow, the RDEIR/SDEIS states:</p> <p>"the proposed project includes spring outflow criteria, which are intended to be provided through acquisition of water from willing sellers. If sufficient water cannot be acquired for this purpose, the spring outflow criteria will be accomplished through operations of the SWP and CVP to the extent an obligation is imposed on either the SWP or CVP under federal or applicable state law." (p. 4.1-6)</p> <p>The ALT 4A project description does not adequately describe the source of additional spring outflow, a necessary component for analyzing the environmental effects and, particularly, for determining what effects implementing California Water Fix would have on non-participating CVP and SWP contractors and other Sacramento Valley water users. Additional detail is required to identify willing sellers, to describe where sellers would be located, how sellers would provide the additional water, when sellers would be able to provide water, and to provide other similar information. This information must be provided before the potential environmental effects of providing additional spring outflow can be determined. These details must be provided because the environmental effects of making water available through land retirement, groundwater pumping, temporary crop idling, non-CVP/SWP reservoir releases, or water transfers are significantly different, may have different environmental effects and, possibly require different forms of mitigation. Where these environmental effects occur should also be described to ensure that the effects on local ecosystems and economies are disclosed.</p> <p>Additionally, agricultural water users are typically not irrigating during the entire March through May period. Therefore, there may not be sufficient water available from willing sellers to directly meet increased spring Delta outflow requirements through reductions in agricultural diversions. This may require additional releases of stored water from CVP and SWP reservoirs. This potential is partially acknowledged in the statement that Delta outflow would be provided from a combination of SWP and CVP operations if or when outflow is not available from willing sellers. However, this statement lacks the detail necessary to describe potential environmental effects within the CVP/SWP system. The proposed project should describe under what conditions additional spring outflow would be provided from the CVP, the SWP, or a combination of both projects. These details must be provided before potential environmental effects can be determined, because providing additional water from Shasta Reservoir would have different environmental effects than providing it from Trinity, Oroville or Folsom Reservoir, or through reductions in exports. Providing additional Delta outflow from either the CVP or SWP through any combination of additional reservoir releases or changes in Delta exports would affect the operations of both projects through the Coordinated Operations Agreement (COA). These factors must be considered, defined, and then analyzed before the potential environmental effects can be determined.</p> <p>How California Water Fix would implement the increased spring outflow component of the preferred alternative must be better described to allow for analyses of environmental effects. The RDEIR/SDEIS's reliance on the effects being bounded by analyses of the BDCP ALT 4 H3 and H4 simulations leaves too much uncertainty concerning the breadth of operational and environmental effects and, likely omits numerous potential environmental impacts.</p>	
2654	98	<p>[ATT 3] Definition and Description of Adaptive Management Process:</p> <p>The RDEIR/SDEIS describes an Adaptive Management Process that may be used to adjust</p>	<p>As described in Chapter 3 of the Final EIR/EIS, the adaptive management and monitoring program would use new information and insight gained during the implementation of the Proposed Project to develop and subsequently implement alternative strategies to achieve the goals and objectives. It is possible that some of</p>

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		<p>certain operational criteria, including spring Delta outflow requirements, NDD bypass flows, South Delta export operations including Old and Middle River (OMR) flow requirements, and Head of Old River Barrier (HORB) operations. The potential for adjustment in the operational criteria is contained in Table 4.1-2: "Adjustments to the criteria above [NDD bypass, South Delta exports, OMR, and HORB] and these outflow targets [spring Delta outflow] may be made using the Adaptive Management Process ..." (p. 4.1-9).</p> <p>These potential adjustments and the environmental effects are not analyzed in the RDEIR/SDEIS. The RDEIR/SDEIS suggests that the range of the spring Delta outflow requirements would be bounded by two different scenarios, H3 and H4, which are evaluated in Table 4.1-1 of the BDCP Draft EIR/EIS (p. 4.1- 5). However, no attempt to quantify the range of effects associated with any of the other criteria is provided in the RDEIR/SDEIS.</p> <p>Evaluating a range of additional spring outflows without identifying their source, quantity, and timing does not adequately disclose the potential environmental effects associated with the Adaptive Management Process. Providing no description of the likely range of changes in the other criteria that may occur under the Adaptive Management Process is another area where the project description lacks sufficient detail for analysis of potential environmental effects.</p>	<p>the Proposed Project measures will not achieve their expected outcomes, while others will produce better results than expected. The adaptive management process describes how changes to the Proposed Project measures will be made to improve the effectiveness of the Proposed Project over time. However, details of the adaptive management strategies will not be developed until the Proposed Project begins to be implemented.</p> <p>With respect to North Delta Bypass flows, it should be noted that the primary purpose of the North Delta Bypass Flows is to maintain appropriate flows in the Sacramento River downstream of the proposed intakes and to avoid reverse flows due to operation of the proposed intakes. The actual conditions will be monitored under the Adaptive Management Process following implementation of the intake operations to confirm accomplishment of these goals and objectives.</p> <p>With respect to OMR flow criteria, the Proposed Project (Alternative 4A) includes OMR criteria to primarily secure south Delta intake operations that are expected to provide beneficial changes in south Delta flows under the dual conveyance operations to lessen reverse flows in Old and Middle Rivers. The actual conditions will be monitored under the Adaptive Management Process following implementation of the intake operations to confirm accomplishment of these goals and objectives.</p> <p>With respect to the HORB, the Final EIR/EIS includes model results for Alternative 4A at ELT conditions as compared to the No Action Alternative at ELT conditions and compared to Existing Conditions. The Final EIR/EIS indicates that for the purposes of the CALSIM II model runs, the modeling assumptions for operations of the Head of Old River Barrier in October included would result in the barrier to be open 50 percent of the time for 2 weeks (pre-pulse) and closed for 2 weeks (pulse). In November, the Head of Old River Barrier is required to be open 50 percent for 2 weeks (post-pulse) and 100 percent open for 2 weeks. It is assumed that the barrier would be open 100 percent of the time in December. In January, barrier becomes operational 50 percent of the time when salmon fry are migrating (based on real time monitoring), which generally occurs when flood flow releases are being made. The model assumptions include the initiation of the salmon fry migration to start on January 1. The model assumes that the barrier would be open 50 percent of the time in February through May. In June, the barrier would be open 50 percent for 2 weeks and 100 percent open for 2 weeks. The barrier is assumed to be open 100 percent of the time in July, August, and September.</p> <p>With respect to spring outflow, the Proposed Project (Alternative 4A) includes an additional spring Delta outflow objective, which falls between the spring outflow requirements described in operational scenarios for Alternatives 4H3 and 4H4. In the Final EIR/EIS, it was assumed that the spring outflow requirement under the Proposed Project would be to maintain the average Delta outflow between March through May that would occur under the No Action Alternative at ELT. This requirement was achieved under Alternative 4A by constraining the total Delta exports during April and May. The text in the RDEIR/SDEIS has been modified in the Final EIR/EIS, including the text referred to in this comment related to acquisition of water for spring outflow in Alternative 4A. This text has been modified in the Final EIR/EIS to not include acquisition of water related to spring outflow criteria. The model results presented in the Final EIR/EIS do not include water acquisition methods.</p> <p>Finally, with respect to south Delta exports, the ability to operate the south Delta intakes will be a result of compliance with the entire range of operational limitations and regulatory criteria of the Proposed Project or other action alternatives to meet the Project objectives, as described in Chapters 2, 3, and 5 of the Final EIR/EIS.</p>
2654	99	<p>[ATT 3] PROJECT DESCRIPTION IS INCONSISTENT WITH ANALYSIS:</p> <p>As described above, the project description does not contain the specificity necessary to</p>	<p>The Final EIR/EIS includes model results specifically for Alternatives 2D, 4A, and 5A as compared to the No Action Alternative and Existing Conditions in Appendix 5A, Section C, in addition to the model results previously provided in the Draft EIR/EIS. The comparative results between Alternatives 2D, 4A, and 5A and</p>

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		<p>identify, analyze, and disclose the environmental effects of implementing the preferred alternative. Furthermore, the RDEIR/SDEIS's analyses performed to assess the environmental effects are inconsistent with the description of the project alternatives in the RDEIR/SDEIS. This inconsistency between the project description for the proposed, and ultimately the preferred, alternative and the analysis chosen for that alternative occurs because of reliance on model results and technical analyses conducted for the BDCP Draft EIR/EIS alternatives, notably BDCP Alternative 4 (BDCP ALT 4) Scenarios H3 and H4. The RDEIR/SDEIS states that "the Lead Agencies have determined that they may reasonably rely on the modeling conducted for Alternative 4 to accurately predict the environmental effects of Alternative 4A" (p. 4.1-43, line 17-19).</p> <p>BDCP Draft EIR/EIS alternatives, however, are fundamentally different in several key areas from the alternatives described in the RDEIR/SDEIS. These key areas are described in the following sections. To support their conclusion that model results for a project analyzed in the BDCP Draft EIR/EIS may be relied upon to "accurately predict" environmental effects for a different proposed project in the RDEIR/SDEIS, the Lead Agencies conducted a sensitivity analysis for the RDEIR/SDEIS.</p> <p>1. Tidal Wetland Restoration:</p> <p>The BDCP Draft EIR/EIS's ALT 4 assumed that 25,000 acres of tidal wetland restoration would be in place as part of the project in the Early Long Term (ELT), at approximately 2025, and that 65,000 acres of tidal wetland restoration would be in place in the Late Long Term (LLT), at approximately 2060. There was no tidal wetland restoration in the No Action Alternative (NAA). In the BDCP Draft EIR/EIS, it was assumed the restored tidal wetlands would influence Delta tidal fluctuations, salinity, and operations. Generally, when the Delta contained more fresh water and lower salinity, it was expected that less Delta outflow would be necessary to keep it fresh with the wetlands in place because the wetlands served as a bulwark against tidal intrusion. On the other hand, when the Delta contained more salt water, the opposite would be true. More Delta outflow would be necessary to flush salts out because of the retention capacity of the wetlands. In either case, the effect was expected to be significant enough that tidal wetland restoration needed to be represented in the CalSim II simulations of the BDCP project alternatives. Operationally, additional wetlands could result in a different balance of Sacramento River inflows and exports to meet D-1641 standards, which could result in changes in CVP and SWP reservoir releases, allocations, and deliveries.</p> <p>Depending on the location of the restored tidal wetlands, they could also buffer and reduce the tidal energy that carries salt water into the Delta. This is important when considering that operation of the NOD may reduce the volume of fresh water in the lower Sacramento River used to repel tidal energy and salt water intrusion. In this way, restoring tidal wetlands as part of BDCP ALT 4 reduced the additional salinity intrusion that would otherwise result from an NOD.</p> <p>The ALT 4A project description in the RDEIR/SDEIS includes 59 acres of tidal wetland restoration (p. 4.1- 5), or 0.2 percent of the area included at the ELT in the BDCP Draft EIR/EIS. This area would likely be too small to have a significant effect on Delta water quality, tidal energy, or CVP/SWP operations. However, CalSim II modeling performed for the BDCP Draft EIR/EIS was assumed to represent the operation of the ALT 4A for the RDEIR/SDEIS and was compared to an NAA that did not include any tidal wetland restoration. It is inappropriate to assume that ALT 4A in the RDEIR/SDEIS would have the</p>	<p>the No Action Alternative and the Existing Conditions are generally consistent with the impact analysis results presented in the RDEIR/SDEIS.</p> <p>Tidal Wetlands Restoration described under Alternatives 1 through 9 in the 2013 Draft EIR/EIS and in the Draft BDCP are not included in the modified Proposed Project (Alternative 4A) and Alternatives 2D and 5A in the RDEIR/SDEIS and the Final EIR/EIS. Alternative 4 remains a viable alternative; however, the preferred alternative (Alternative 4A/California WaterFix) is being considered to provide modified conveyance facilities for the SWP and CVP and does not include large-scale habitat restoration. Alternatives 2D, 4A, and 5A would only include a small area of wetlands restoration based upon mitigation requirements for construction of the conveyance facilities (e.g., loss of riparian corridor at the three intake locations) and will be further defined under the regulatory permitting processes. The Final EIR/EIS includes model results specifically for Alternatives 2D, 4A, and 5A as compared to the No Action Alternative and Existing Conditions in Appendix 5A, Section C. Large-scale restoration could occur under the EcoRestore program which is currently under development and is considered in the Final EIR/EIS as a cumulative action. It would be speculative to project habitat changes and their effects at this time. Separate engineering and environmental documentation will be completed for EcoRestore.</p> <p>With respect to the agricultural water quality compliance point described in State Water Resources Control Board D-1641, the modified Proposed Project (Alternative 4A) and Alternatives 2D and 5A do not change the compliance location. Therefore, the Final EIR/EISA model runs for Alternatives 2D, 4A, and 5A include the assumptions that the D-1641 compliance point continues to be located at Emmatton in the same manner as under the Existing Conditions and No Action Alternative.</p> <p>With respect to an operable gate at Fremont Weir, implementation of a program to increase the extent and duration of inundation of the Yolo Bypass under the 2009 NMFS biological opinion is anticipated to be completed under the No Action Alternative as well as other alternatives, as described in the Final EIR/EIS. Therefore, Alternative 4A and the No Action Alternative both include diversions into the Yolo Bypass at Fremont Weir; and there would be no changes in the Sacramento River flows downstream of the Fremont Weir or habitat restoration in the Yolo Bypass due to this diversion under Alternative 4A as compared to the No Action Alternative presented in Appendix 5A, Section C, of the Final EIR/EIS. Separate engineering and environmental documentation are being completed by DWR and Reclamation for habitat restoration in the Yolo Bypass.</p> <p>With respect to the use of the sensitivity analyses in the RDEIR/SDEIS, as noted in the previous portions of this response to this comment, the Final EIR/EIS includes model results for Alternatives 2D, 4A, and 5A as compared to the No Action Alternative and Existing Conditions in Appendix 5A, Section C, in addition to the model results previously provided in the Draft EIR/EIS. The comparative results between Alternatives 2D, 4A, and 5A and the No Action Alternative and the Existing Conditions are generally consistent with the impact analysis results presented in the RDEIR/SDEIS.</p>

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		<p>same effects on Delta water quality, tidal energy, and CVP/SWP operations as the BDCP alternative that would have included nearly 25,000 acres more tidal wetland restoration. The RDEIR/SDEIS's modeling for ALT 4A does not reflect the reality of ALT 4A's significantly reduced amount of restored wetlands.</p> <p>2. Relaxation of the Sacramento River Agricultural Water Quality Compliance Point:</p> <p>BDCP ALT 4 would have relaxed the Sacramento River agricultural water quality compliance point contained in D-1641 from Emmaton to Threemile Slough, a location approximately 3 miles upstream of Emmaton. The project description of ALT 4A in the RDEIR/SDEIS removes the relaxation of this water quality compliance point and leaves compliance at Emmaton, as specified in D-1641 (p. 4.3.4-23). Changing the water quality compliance location to Threemile Slough would require less fresh water flow from the Sacramento River to comply with the water quality standard because Threemile Slough is located further from Suisun Bay and the Pacific Ocean. The change in location for the water quality standard would likely affect the balance between exports and Sacramento River inflow necessary for compliance. Additionally, because meeting a water quality standard at Threemile Slough can be done with less Sacramento River flow, it could allow higher diversions at the NOD facility, or lower releases from upstream reservoirs. Therefore, it is inconsistent and inappropriate for the RDEIR/SDEIS to state that the operational effects in the modeling results for BDCP ALT 4 which includes moving the water quality compliance point, are the same as ALT 4A in the RDEIR/SDEIS, which does not include moving the compliance point.</p> <p>3. Fremont Weir Gates:</p> <p>BDCP ALT 4 included habitat restoration in the Yolo Bypass. One component of the restoration was installation of operable gates on Fremont Weir at the northern end of the Yolo Bypass to allow for more frequent flooding of the bypass. The operable gates would be opened when Sacramento River flows at Freeport exceed 25,000 cfs, and would divert as much as 6,000 cfs of Sacramento River flow into the Yolo Bypass, depending on the stage of the river. Therefore, opening the Fremont Weir gates would result in up to 6,000 cfs less flow at Freeport.</p> <p>The ALT 4A project description in the RDEIR/SDEIS removes the Fremont Weir gates from the alternative because they are now considered to be included in the NAA (p. 4.1-23). However, the CalSim II modeling performed for the BDCP Draft EIR/EIS, which included the Fremont Weir gates, is assumed to represent the operation of ALT 4A for the RDEIR/SDEIS and is compared to an NAA that did not include the Fremont Weir gates. It is inconsistent and inappropriate for the RDEIR/SDEIS to attempt to determine the operational impacts of ALT 4A by comparing BDCP ALT 4, which includes the operable gates, to an NAA that does not include the gates. However, unlike the first two inconsistencies described above, this change will likely have lesser impacts on key operational parameters such as reservoir storage, exports and Delta outflow, since the gates would be opened during high-flow events when the system would likely be in a surplus condition.</p> <p>4. RDEIR/SDEIS Sensitivity Analysis:</p> <p>The RDEIR/SDEIS attempts to address the inconsistencies identified above with a sensitivity analysis as described in the RDEIR/SDEIS's Appendix B. In this sensitivity analysis, BDCP ALT 4 is modified to remove the tidal wetland restoration, water quality compliance point relaxation, and Fremont Weir operable gates. No additional modifications were made to the</p>	

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		<p>BDCP ALT 4 CalSim II model, including any updates to the model since the analysis was done for the BDCP Draft EIR/EIS (p. B-3).</p> <p>Appendix B is comprised of three pages of text and 613 pages of figures and tables of results from CalSim II. The conclusions from the sensitivity analysis are summarized in a single paragraph on page B-3.</p> <p>"As shown in the figures Alt4A (H3) and Alt4A (H4) CALSIM II results are generally similar to A4_H3 and A4_H4, respectively. The results indicate that the incremental changes for Alt4A (H3) and Alt4A (H4) when compared to the No Action Alternative are trending similar to A4_H3 and A4_H4, at both ELT and LLT."</p> <p>It is not reasonable or defensible to rely upon the results of modeling performed for the BDCP Draft EIS/EIR, which considered a project with different physical and operational effects, to accurately predict the environmental effects of a different project compared to a different no project/no action alternative as defined in the RDEIR/SDEIS because CalSim II model results are "generally similar" and "trending similar." Environmental effects should be determined through a project-specific analysis of the potential effects on species and resources. These non-specific conclusions do not provide sufficient information for the public to understand the basis for the RDEIR/SDEIS's conclusions about the significance of project effects. Project-related changes in flows and hydrodynamics can have a significant effect to aquatic species, water quality and beneficial uses of water, and it should not be assumed that environmental effects are the same because model results are "generally" or "trending" similar.</p> <p>The RDEIR/SDEIS includes an acknowledgement that the project description is inconsistent with the analysis.</p> <p>"Nevertheless, there is notable uncertainty in the results of all quantitative assessments that refer to modeling results, due to the differing assumptions used in the modeling and the description of Alternative 4A and the No Action Alternative (ELT)." (pp. 4.3.4-1 to 4.3.4-2)</p> <p>In our opinion, this statement may suggest that preparers of the RDEIR/SDEIS recognized the weakness in the assumption that model results of a fundamentally different project could be compared to a different NAA than described in the RDEIR/SDEIS to "accurately predict" the environmental effects of the proposed project.</p>	
2654	100	<p>[ATT 3] Incorporation of Climate Change Ignores Reasonably Foreseeable Adaptation Measures:</p> <p>The following conclusion in the [7/11/2014] MBK Report's Executive Summary is applicable to the RDEIR/SDEIS:</p> <p>The BDCP Model uses assumed future climate conditions that obscure the effects of implementing the BDCP. The future conditions assumed in the BDCP model include changes in precipitation, temperature, and sea level rise. The result of this evaluation is that the modeled changes in water project operations and subsequent environmental impacts are caused by three different factors: (1) sea level rise; (2) climate change; and (3) implementation of the alternative that is being studied.</p>	<p>As described in Chapter 5, Water Supply, the EIR/EIS analyses assume continued implementation of regulatory requirements for the all of the upstream reservoirs, including those in the American River watershed, in accordance with the requirements under the CEQA definition of Existing Conditions and under the NEPA definition of the No Action Alternative. Changes in the regulatory requirements would only occur following detailed analyses, including project-specific CEQA and NEPA analyses and ESA and CESA analyses. Following adoption of changes to the regulatory requirements by the State and federal governments, DWR and Reclamation would need to determine if changes in the SWP and CVP would be necessary. These changes are considered to be speculative and are not included in the No Action Alternative.</p> <p>The EIR/EIS evaluates long-term operation of the SWP and CVP over an 82-year long hydrologic period with extended wet periods and dry/critical dry periods. The evaluation is a comparative analysis to determine the incremental differences between conditions under the Proposed Project (Alternative 4A) and all of the other action alternatives as compared to conditions under the Existing Conditions and the No Action Alternative.</p>

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		<p>Including climate change, without adaptation measures, results in insufficient water needed to meet all regulatory objectives and user demands. For example, the BDCP Model results that include climate change indicate that during droughts, water in reservoirs is reduced to the minimum capacity possible. Reservoirs have not been operated like this in the past during extreme droughts and the current drought also provides evidence that adaptation measures are called for long in advance to avoid draining the reservoirs. In this aspect, the BDCP Model simply does not reflect a real future condition. Foreseeable adaptations that the CVP and SWP could make in response to climate change include: (1) updating operational rules regarding water releases from reservoirs for flood protection; (2) during severe droughts, emergency drought declarations could call for mandatory conservation and changes in some regulatory criteria similar to what has been experienced in the current and previous droughts; and (3) if droughts become more frequent, the CVP and SWP would likely revisit the rules by which they allocate water during shortages and operate more conservatively in wetter years. The modifications to CVP and SWP operations made during the winter and spring of 2014 in response to the drought supports the likelihood of future adaptations. The BDCP Model is, however, useful in that it reveals that difficult decisions must be made in response to climate change. But, in the absence of making those decisions, the BDCP Model results themselves are not informative, particularly during drought conditions. With future conditions projected to be so dire without the BDCP, the effects of the BDCP appear positive simply because it appears that conditions cannot get any worse (i.e., storage cannot be reduced below its minimum level). However, in reality, the future condition will not be as depicted in the BDCP Model. The Reviewers recommend that Reclamation and DWR develop more realistic operating rules for the hydrologic conditions expected over the next half-century and incorporate those operating rules into any CalSim II Model that includes climate change. (p. 4)</p> <p>The CVP's and SWP's operations during the current drought confirm this comment. Operations have been modified to meet human and environmental needs to the extent possible, and preserve some water in reservoir storage to continue to do so if drought condition persist. Modeling assumptions for the RDEIR/SDEIS and simulated operations with climate change are not consistent with recent operations.</p>	<p>The analyses were not conducted to identify specific values or to respond to short-term emergency situations, such as the ongoing drought under either the No Action Alternative or action alternatives. It is anticipated that these types of changes would occur under the action alternatives as well as the No Action Alternative; and although specific values (e.g., water deliveries) would change, the incremental differences between the action alternatives and the No Action Alternative would be similar to the results presented in the Final EIR/EIS. Separate engineering and environmental studies have been and will continue to be prepared when water resources regulations are modified in emergencies as occurred under the recent drought conditions. Separate engineering and environmental studies also will be prepared if long-term reservoir operations criteria are modified, and those studies would consider the effects of such changes on the currently Proposed Project (if adopted at that time) and the No Action Alternative developed at that time.</p> <p>Also, see Master Response 30 regarding the MBK modeling.</p>
2654	101	<p>[ATT 3] The BDCP Model Was Built on a Benchmark Study with Numerous Inaccuracies:</p> <p>The following conclusion in the [7/11/2014] MBK Report is applicable to the RDEIR/SDEIS:</p> <p>CalSim II is continuously being improved and refined. As the regulatory environment changes and operational and modeling staff work together to improve the model's capability to simulate actual operations, the model is continually updated. The BDCP Model relied upon a version of CalSim II that dates back to 2009, immediately after the new biological opinions (BiOps) from the NMFS and the United States Fish and Wildlife Service (USFWS) significantly altered the operational criteria of the CVP and SWP. In the last 4 to 5 years, DWR, Reclamation, and outside modeling experts have worked together to improve the model. Changes include better (more realistic) implementation of the new BiOps and numerous fixes to the code. Since CalSim II is undergoing continual improvements, there will always be "vintage" issues in that by the time a project report is released, the model is likely slightly out of date. However, in this case- with the major operational changes that have occurred in the new regulatory environment- many issues have been identified and fixed in the last 4 to 5 years that have a significant effect on model results. CalSim II modeling for the DWR 2013 Delivery Reliability Report contains numerous modeling</p>	<p>Please see Master Response 30. Modeling for the EIR/EIS has been based on the Existing Conditions, No Action Alternative, and Alternative 1 models developed in April and May of 2010 (2010 models), which were the state-of-the-art at the time, and formed the basis for universal assumptions in the other action alternatives in the EIR/EIS. However, in August 2011 several model improvements were identified by the water agencies, fishery agencies, and the modeling community. The identified improvements were compiled, and the Existing Conditions, No Action Alternative, and Alternative 1 models were updated in coordination with DWR, Reclamation and USFWS. This update was performed to verify if the compiled model improvements altered the incremental changes between the BDCP Alternative 1 and the Existing Conditions and the No Action Alternative relative to the 2010 models. The findings from the 2011 update showed that the incremental differences between Alternative 1 and the Existing Conditions and the No Action Alternative remained consistent with the 2010 modeling. Therefore, the action alternatives modeled since 2011 continued to rely on the 2010 modeling, allowing consistency and comparability throughout the BDCP EIR/EIS. Similarly, when Alternative 4A was modeled using the 2013 baseline referred to in this comment, the incremental changes in the operational results for Alternative 4A as compared to the No Action Alternative were similar to the prior incremental results between the 2010 modeling for the No Action Alternative and Alternative 4A. It should be noted that the modeling used in the EIR/EIS must be used in a comparative manner and not to define absolute values.</p>

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		<p>updates and fixes that significantly alter results of the BDCP Model. A key modeling revision in the 2013 DWR modeling was fixing an error regarding artificial minimum instream flow requirements in the Sacramento River at Hood. An "artificial" minimum instream flow requirement had been specified; the requirement is artificial in that it does not represent a regulatory requirement, but rather is a modeling technique to force upstream releases to satisfy Delta needs. (p. 14)</p>	<p>Also, see Appendix 5G, FEIR/EIS for a comparison of Alternative 4A FEIR/EIS modeling to the 2015 CALSIM modeling conducted for the California WaterFix biological assessment.</p>
2654	102	<p>[ATT 3] BDCP Model Coding and Data Issues Significantly Skew the Analysis and Conflict with Actual Real-Time Operational Objectives and Constraints:</p> <p>The following conclusion in the [7/11/2014] MBK Report is applicable to the RDEIR/SDEIS:</p> <p>Operating rules used in the BDCP Model, specifically regarding Alternative 4, result in impractical or unrealistic CVP and SWP operations. Reservoir balancing rules cause significant drawdown of upstream reservoirs during spring and summer months while targeting dead pool level in San Luis from September through December resulting in artificially low Delta exports and water shortages. CVP allocation rules are set to artificially reduce south of Delta allocations during wetter years resulting in underestimates of diversions at the NOD and the SOD. Operating rules for the Delta Cross Channel Gate do not reflect how the gates may be operated in "With Project" conditions.</p> <p>Operational logic is coded into the CalSim II model to simulate how DWR and Reclamation would operate the system under circumstances for which there are no regulatory or other definitive rules. This attempt to specify (i.e., code) the logic sequence and relative weighting so that a computer can simulate "expert judgment" of the human operators is a critical element to the CalSim II model. In the BDCP version of the CalSim II model, some of the operational criteria for water supply allocations and existing facilities such as the Delta Cross Channel and San Luis Reservoir are inconsistent with real-world conditions. (p. 18)</p> <p>Because the RDEIR/SDEIS evaluates Alternative 4A, which is based on Alternative 4, these conclusions now apply to the RDEIR/SDEIS.</p>	<p>Please refer to Master Response 30. In modeling assumptions for Alternative 4A, as included in the Final EIR/EIS, the availability of the additional export capacity in the winter and spring months compared to the No Action Alternative allows capturing winter and spring excess flows and filling of the San Luis Reservoir to a greater extent than under the No Action Alternative. This also changes the release patterns from the upstream reservoirs. However, the end-of-May and end-of-September storage conditions are similar to the No Action Alternative under Alternative 4A.</p> <p>The San Luis Reservoir rule curve is an input to CALSIM II which provides a target storage each month that is dependent on the South-of-Delta allocation and upstream reservoir storage. The rule curve allows CALSIM II to emulate judgement of the operators in balancing the north-of-Delta and south-of-Delta storage conditions. In the absence of any other operating criteria controlling the upstream reservoir releases or the Delta exports, different San Luis Reservoir rule curves can result in differences in upstream reservoir release patterns, and Delta exports. Assumed San Luis Reservoir rule curve could differ depending on the available export capacity during winter and spring months, and the need to protect upstream carryover storage in the fall months.</p> <p>For the No Action Alternative simulation, the San Luis Reservoir rule curve is managed to maximize filling during summer and fall months when the Delta export pumping is less constrained to minimize situations in which south-of-Delta shortages may occur due to lack of storage or exports. Under the action alternatives with the north Delta diversion, the CALSIM II San Luis Reservoir rule curve was modified in expectation that the new north Delta diversion facility would allow capturing winter and spring excess flows and filling of the San Luis Reservoir to a greater extent than the No Action Alternative. Additional modifications to the rule curve were included to preserve upstream carryover storage conditions while minimizing south-of-Delta shortages in the fall months. Under Alternative 4A, the San Luis Reservoir storage conditions are also affected by the restrictive south Delta export operations in October.</p> <p>It is recognized that future projects could change the San Luis Reservoir rule curve or assumptions related to Delta Cross Channel operations. However, these future actions would require engineering and environmental analyses that would consider the potential changes to the existing and planned infrastructure at the time of those studies. Changes in these assumptions would be speculative and are not included in the No Action Alternative in this EIR/EIS. Changes in these assumptions also are not necessarily consistent with the project objectives or purpose and need for the project proponents, and are not included in the action alternatives.</p>
2654	103	<p>[ATT 3] BDCP's "High Outflow Scenario" is Not Sufficiently Defined for Analysis:</p> <p>MBK and Steiner previously commented on the lack of definition for the additional spring outflow requirement contained in the BDCP Draft EIR/EIS. The following conclusion in the [7/11/2014] MBK Report Executive Summary is applicable to the RDEIR/SDEIS, which now includes additional spring outflow as an element of Alternative 4A:</p> <p>The effects of many critical elements of the BDCP cannot be analyzed because those elements are not well-defined. The Reviewers recommend that the BDCP be better defined and a clear and concise operating plan be developed so that the updated CalSim II model</p>	<p>Under Alternative 4 H4, the SWP would provide the additional Delta outflow outside of COA (as described in Appendix 5A, Section B, CALSIM II and DSM2 Modeling Simulations and Assumptions in the FEIR/EIS). This would result in reductions in SWP water contract deliveries as indicated in Appendix 5A, Section C, Modeling Results.</p> <p>In the description of alternatives as presented in Chapter 3 of the Final EIR/EIS, the increased Delta outflow would be provided by reduction in Delta exports under Alternative 4A (Proposed Project) instead of the combination of reduction in Delta exports and releases from Lake Oroville as under Alternative 4 H4. Please see Master Response 30.</p>

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		<p>can be used to assess effects of the BDCP.</p> <p>The High Outflow Scenario (HOS) requires additional water (Delta outflow) during certain periods in the spring. The BDCP Model places most of the responsibility for meeting this new additional outflow requirement on the SWP. However, the SWP may not actually be responsible for meeting this new additional outflow requirement. This is because the Coordinated Operations Agreement ("the COA") would require a water allocation adjustment that would keep the SWP whole. Where one project (CVP or SWP) releases water to meet a regulatory requirement, the COA requires a water balancing to ensure the burden does not fall on only one of the projects. The BDCP Model is misleading because it fails to adjust project operations, as required by the COA, to "pay back" the water "debt" to the SWP due to these additional Delta outflow requirements. Unless there is a significant revision to COA, the BDCP Model overstates the impacts of increased Delta outflow on the SWP and understates the effects on the CVP.</p> <p>Furthermore, after consulting with DWR and Reclamation project operators and managers, the Reviewers conclude that there is no apparent source of CVP or SWP water to satisfy both the increased Delta outflow requirements and pay back the COA "debt" to the SWP without substantially depleting upstream water storage. It appears, through recent public discussions regarding the HOS, that BDCP anticipates additional water to satisfy the increased Delta outflow requirement and to prevent the depletion of cold water pools will be acquired through water transfers from upstream water users. However, this approach is unrealistic. During most of the spring, when BDCP proposes that Delta outflow be increased, agricultural water users are not irrigating. This means that there is not sufficient transfer water available to meet the increased Delta outflow requirements and therefore, additional release of stored water from the reservoirs would be required. Releasing stored water to meet the increased Delta outflow requirements could potentially impact salmonids on the Sacramento and American River systems due to reductions in the available cold water pool. (p. 5)</p>	
2654	104	<p>[ATT 3] Delta Cross Channel Operational Assumptions Overestimate October Outflow:</p> <p>The following conclusion in the [7/11/2014] MBK Report is applicable to the RDEIR/SDEIS:</p> <p>When south Delta exports are low due to regulatory limits, and upstream reservoirs are making releases to meet the instream flow objectives at Rio Vista, operators have the ability to close the Delta Cross Channel (DCC) in order to reduce the required reservoir releases (by closing the DCC a greater portion of water released from the reservoirs stays in the Sacramento River to meet the Rio Vista requirements). As long as the Delta salinity standards are met, operators have indicated that they would indeed close the DCC in this manner (as was done in October and November 2013). In the BDCP Model, the DCC is not closed in this manner. The net result is that the BDCP Model overestimates outflow under such circumstances typically occurring in October.</p> <p>The overestimated outflow leads to incorrect conclusions regarding the effects of BDCP. For instance, an actual increase in fall outflow could be beneficial for the endangered fish species delta smelt (USFWS, 2008). Therefore, by overestimating outflow in October, the BDCP studies likely overestimate the benefit to delta smelt (Mount et al., 2013). Similarly, an actual increase in fall outflow would reduce salinity in the western Delta, which could be beneficial for in-Delta diverters; therefore, overestimating outflow in October artificially</p>	<p>Please see Master Response 30. The Delta Cross Channel assumptions in the CALSIM II model are consistent between the No Action Alternative and action alternatives in the EIR/EIS. As discussed in this comment, the criteria for Sacramento River flows at Rio Vista in October would become more critical with action alternatives that include north Delta intakes. Under the future operations, there would be a balance between operations of Delta Cross Channel closure to minimize effects on upstream reservoir storage and water quality criteria. Operations under proposed project (Alternative 4A) would increase Old and Middle River flows compared to the No Action Alternative. It is recognized that assumptions were used for the impact analysis in the EIR/EIS based upon modeling analyses; and that the real-time operations would provide more flexibility than the CALSIM II monthly-model time step.</p> <p>It must be noted that the evaluation is a comparative analysis to determine the incremental differences between conditions under the Proposed Project (Alternative 4A) and all of the other action alternatives as compared to conditions under the Existing Conditions and the No Action Alternative. The analyses were not conducted to identify specific values under the action alternatives, Existing Conditions, or No Action Alternative. Therefore, the incremental differences that could occur under Alternative 4A as compared to the No Action Alternative conditions would be similar with different CALSIM II model assumptions that would be incorporated into both the No Action Alternative conditions and Alternative 4A.</p>

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		reduces salinity, incorrectly reducing the net impacts on in-Delta diverters. (p. 17)	
2654	105	<p>[ATT 3] San Luis Reservoir Operational Assumptions Produce Results Inconsistent with Real-World Operations:</p> <p>The following conclusion in the [7/11/2014] MBK Report is applicable to the RDEIR/SDEIS:</p> <p>San Luis Reservoir (SLR) is an off-stream reservoir located south of the Delta and jointly owned and operated by CVP and SWP. The reservoir is used to store water that is exported from the Delta when available and used to deliver water to CVP and SWP Contractors when water demands exceed the amount of water that can be pumped from the Delta. The decision of when to move water that is stored in upstream reservoirs, such as Shasta, Folsom, or Oroville, through the Delta for export to fill SLR is based on the experience and expert judgment of the CVP and SWP operators.</p> <p>CalSim II attempts to simulate the expert judgment of the operators by imposing artificial operating criteria; the criteria are artificial in the sense that they are not imposed by regulatory or operational constraints but rather imposed as a tool to simulate expert judgment. One such artificial operating criteria is the SLR target storage level: CalSim II attempts to balance upstream Sacramento Basin CVP and SWP reservoirs with storage in SLR by setting artificial target storage levels in SLR, such that the CVP and SWP will release water from upstream reservoirs to meet target levels in SLR. The artificial target storage will be met as long as there is ability to convey water (under all regulatory and physical capacity limits) and as long as water is available in upstream reservoirs. SLR target storage criteria are also sometimes described in section 4.2 as the "San Luis rule-curve."</p> <p>In the BDCP Model, CVP and SWP reservoir operating criteria for Alternative 4 H3 ELT differ from the corresponding without project scenario (e.g. NAA-ELT). The difference in criteria and result is primarily driven by changes to the artificial constraint used to determine when to fill SLR: the SLR target storage. In Alternative 4 H3 ELT, SLR target storage is set very high in the spring and early summer months, and then reduced in August and set to SLR dead pool from September through December. This change in SLR target storage relative to the no action alternative causes upstream reservoirs to be drawn down from June through August and then recuperate storage by cutting releases in September. This change to the artificial operating criteria SLR target storage causes changes in upstream cold water pool management and affects several resource areas.</p> <p>In addition to changes in upstream storage conditions, changes in SLR target storage cause SLR storage to drop below a water supply concern level (300,000 acre-feet) in almost 6 out of every 10 years under ELT conditions and more than 7 out of every 10 years under LLT conditions for Alternative 4 H3. When storage in SLR drops below this 300,000 acre-foot level, algal blooms in the reservoir often cause water quality concerns for drinking water at Santa Clara Valley Water District. The change in SLR target storage also causes SLR levels to continue to drop and reach dead pool level for the SWP in 4 out of every 10 years and also dead pool level for the CVP in 1 out of every 10 years under the ELT conditions.</p> <p>Reaching dead pool level in SLR creates shortages to water users south of the Delta. Although some delivery shortages are due to California Aqueduct capacity constraints, the largest annual delivery shortages are a result of inappropriately low SLR target storage. Average annual Table A shortages due to artificially low SLR storage levels increased from 3 TAF in the NAA-ELT scenario to 35 TAF in the Alt4-ELT scenario. Such shortages occurred in</p>	<p>Please see Master Response 30. One of the goals for the EIR/EIS impact analysis modeling is to maintain similar end-of-May and end-of-September carryover storage conditions as simulated under the No Action Alternative. In the action alternatives with the north Delta diversion facility, the availability of the additional export capacity in the winter and spring months compared to the No Action Alternative allows capturing winter and spring excess flows and filling of the San Luis Reservoir to a greater extent than under the No Action Alternative. This also changes the release patterns from the upstream reservoirs. However, the end-of-May and end-of-September storage conditions are similar to the No Action Alternative under Alternative 4A. The effects of modified release patterns and changes in the storage conditions on the river temperatures are evaluated in Chapter 11 of the FEIR/EIS.</p> <p>The San Luis Reservoir rule curve is an input to CALSIM II which provides a target storage each month that is dependent on the South-of-Delta allocation and upstream reservoir storage. The rule curve allows CALSIM II to emulate judgement of the operators in balancing the north-of-Delta and south-of-Delta storage conditions. In the absence of any other operating criteria controlling the upstream reservoir releases or the Delta exports, different San Luis Reservoir rule curves can result in differences in upstream reservoir release patterns, and Delta exports. Assumed San Luis Reservoir rule curve could differ depending on the available export capacity during winter and spring months, and the need to protect upstream carryover storage in the fall months.</p> <p>For the No Action Alternative simulation, the San Luis Reservoir rule curve is managed to maximize filling during summer and fall months when the Delta export pumping is less constrained to minimize situations in which south-of-Delta shortages may occur due to lack of storage or exports. Under the action alternatives with the north Delta diversion, the CALSIM II San Luis Reservoir rule curve was modified in expectation that the new north Delta diversion facility would allow capturing winter and spring excess flows and filling of the San Luis Reservoir to a greater extent than the No Action Alternative. Additional modifications to the rule curve were included to preserve upstream carryover storage conditions while minimizing south-of-Delta shortages in the fall months. Under Alternative 4A, the San Luis Reservoir storage conditions are also affected by the restrictive south Delta export operations in October.</p> <p>It is recognized that future projects could change the San Luis Reservoir rule curve or assumptions related to Delta Cross Channel operations. However, these future actions would require engineering and environmental analyses that would consider the potential changes to the existing and planned infrastructure at the time of those studies. Changes in these assumptions would be speculative and are not included in the No Action Alternative in this EIR/EIS. Changes in these assumptions also are not necessarily consistent with the project objectives or purpose and need for the project proponents, and are not included in the action alternatives.</p>

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		<p>2% of simulated years in the NAAELT scenario and 23% of years in the Alt4-ELT scenario. In addition to the inability to satisfy Table A allocations, low storage levels cause loss of SWP Contractors' Article 56 water stored in SLR. Average annual Article 56 shortages were 43 TAF in the Alt4-ELT scenario because of low San Luis storage and 5 TAF in the NAA-ELT scenario. Low San Luis storage causes Article 56 shortages in 27% of simulated years in the Alt4-ELT scenario as compared to 5% of simulated years in the NAA-ELT. Another consequence of low storage levels in SLR is a shift in water supply benefits from Article 21 to Table A.</p> <p>In summary, the operational assumptions for SLR are unrealistic in Alternative 4 because they create problems in upstream storage reservoirs and create shortages for south of Delta water users that would not occur in the real world. In reaching this conclusion, the Reviewers met with operators from CVP and SWP to review the BDCP Model results and discussed real-time operations. (p. 16)</p>	
2655	1	<p>The 2015 RDEIR/S fails to include a reasonable range of alternatives that stems directly from and relies upon the 2013 Draft EIR/S. In order to understand and respond to new alternatives 4A, 2D, and 5A, and assess whether these new alternatives fill out a "reasonable range of alternatives," it is necessary to understand the screening and development of alternatives presented in the 2013 Draft EIR/S. Where that process was flawed or incomprehensible, references to it and requests for corrections are appropriate at this point. Portions of these comments that describe and analyze portions of the 2013 Draft EIR/S are necessary, and must be allowed, in order to make meaningful comments on the RDEIR/S. Further, the public must be able to understand the 2013 Draft EIR/S in order to understand the RDEIR/S. Comments directed to failure of the 2013 Draft EIR/S as an informational document are indispensable to a lawful CEQA/NEPA process.</p> <p>Many commenters called for changes in the 2013 Draft EIR/S and for repairs to its informational presentation. The 2015 DEIR should have responded to these calls, but largely did not. These failures of the 2015 DEIR can only be meaningfully addressed by references to the 2013 Draft EIR/S.</p> <p>Further, the 2015 RDEIR/S re-issues, revises, and incorporates the 2013 Draft EIR/S in 2015 Appendix A. The 2013 Draft EIR/S is an integral, current, component of the 2015 RDEIR/S. References to the original pagination/section numbering in the 2013 Draft EIR/S, rather than the same information as it is re-presented in Appendix A, are necessary to a clear and comprehensible presentation and to allow a meaningful response to these comments. This is particularly so in light of the condition of informational chaos present in BDCP/Fix environmental review documents.</p> <p>Failure to respond to any of the criticisms presented in these comments on grounds that the comment period on the 2013 Draft EIR/S would violate the duty of the Lead Agencies to respond to comments as required by NEPA and CEQA.</p>	<p>The EIR/EIS evaluates 18 action alternatives. Appendix 3A, Identification of Water Conveyance Alternatives, Conservation Measure 1, EIR/EIS, describes the range of conveyance alternatives considered in the development of the EIR/EIS, including additional proposals by public and private individuals and organizations, which have also been evaluated and described in Chapter 3 of the EIR/S and Appendix 3A. Regarding development of alternatives for the EIR/EIS, a description of the process the Lead Agencies followed to develop and screen alternatives is provided in Master Response 4. For more information regarding the document's length and complexity please see Master Response 38.</p> <p>Since 2006, the proposed project has been developed based on sound science, data gathered from various agencies and experts over many years, input from agencies, stakeholders and independent scientists, and more than 600 public meetings, working group meetings and stakeholder briefings. The lead agencies believe that the 2013 Draft EIR/EIS and 2015 RDEIR/SDEIS are complete in their evaluation of impacts (using the best available science and modeling), direct and cumulative, that the project description is complete and satisfies the requirements of NEPA, and that the project objectives are also precise and complete and satisfy the requirements of CEQA. The lead agencies believe that the 2013 Public Draft EIR/EIS and 2015 RDEIR/SDEIS provided the public and decision-makers with sufficient information on which to make informed comments which have been considered and incorporated into the Final EIR/EIS. The DEIR/SDEIS did not purport to respond to all comments on the Draft EIR/EIS but explicitly stated that while some comments are addressed, the remainder of the comments would be addressed in the Final EIR/EIS. Appendix A was provided in a redline strike out format so that it was clear what had been changed. Only those sections that had been changed were provided since the full original text was still available on the website and on disk by request.</p>
2655	2	<p>The EIR/S-RDEIR/S fails to meet minimal requirements for fostering informed agency decision-making and informed public participation. "The touchstone for our inquiry is whether an EIS's selection and discussion of alternatives fosters informed decision-making and informed public participation. State of Cal. v. Block, 690 F.2d 753, 766-67 (9th Cir. 1982). The BDCP/Fix EIR/S does not. "The Current Draft lacks key information, analyses, summaries, and comparisons. The missing content is needed for evaluation of the science that underpins the proposed project. Accordingly, the Current Draft fails to adequately inform weighty decisions about public policy." 2015 Independent Science Board DEIR</p>	<p>As described in response to comment 2655-1, the EIR/EIS describes the range of conveyance alternatives considered in the development of the proposed project, including additional proposals by public and private individuals and organizations which have also been evaluated and described in Chapter 3 of the EIR/S and Appendix 3A. Regarding development of alternatives for the EIR/EIS, a description of the process the Lead Agencies followed to develop and screen alternatives is provided in Master Response 4.</p> <p>More information on how DWR has developed the project in an open and transparent manner is provided in Master Response 41. More information about the public outreach conducted during the planning process,</p>

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		<p>Review 4 (ATT 21).</p> <p>"Judicial review of the range of alternatives considered by an agency is governed by a 'rule of reason' that requires an agency to set forth only those alternatives necessary to permit a "reasoned choice." State of Cal. V. Block, 690 F.2d at 766-67. "These reasonable expectations go largely unmet in the Bay Delta Conservation Plan/California WaterFix Partially Recirculated Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement Draft. We do not attempt to determine whether this report fulfills the letter of the law. But we find the Current Draft sufficiently incomplete and opaque to deter its evaluation and use by decision-makers, resource managers, scientist, and the broader public." 2015 ISB DEIR Review (footnote 1: For a discussion of obduracy in a legal context, see Fink v. Gomez, 293 F.3d 989, 992 (9th Cir. 2001).)</p> <p>It is perhaps unnecessary to add to the ISB's comments to make the point that the EIR/S-RDEIR/S fails as an informational document within the meaning of 42 U.S.C. § 4332, the large body of case law requiring that environmental impact statements be informative and comprehensible, and applicable Council on Environmental Quality implementing regulations. If a panel of eminent scientists, charged by the California Legislature with being the preeminent science advisors to Delta decision-makers, and who have followed and participated in the BDCP/Fix process from the beginning, find the documents "incomplete and opaque," it would seem a tautology to argue that less specialized participants, such as lawyers representing stakeholders, let alone members of the public, could not be reasonably informed by the documents. The comments of the Delta ISB reflect the frustration of almost all stakeholders with the obdurate obduracy<sup>1</sup> of those responsible for preparing BDCP/Fix documents in refusing to heed repeated and longstanding calls for documents that meet the basic requirements of informed decision-making: "For over three years, the Delta ISB has been specifically requesting summaries and comparisons: first in June 2012, then in June 2013, and again in a review of the Previous Draft in May 2014. Appallingly, such summaries and comparisons remain absent in the current draft." 2015 ISB DEIR Review 9.</p>	<p>including information on the working groups and public meetings held prior to the release of the 2013 Draft EIR/EIS, is provided in Master Response 40. For responses to comments related to the Delta Independent Science Board's letters, please refer to comment letters BDCP 1448 and/or RECIRC 2546.</p> <p>Please also note that all comments received during the 2013 and 2015 public comment period are included in the FEIR/EIS. Please refer to the table of commenters to locate the letter of interest.</p>
2655	3	<p>Alternative 9A was apparently intended to comply with the requirement of the California Legislature that the Lead Agencies consider a scientific report issued by the California State Water Resources Control Board explicitly for the use of the Lead Agencies in developing the BDCP. "For the purposes of informing planning decisions for the Delta Plan and the Bay Development and Conservation Plan, the board shall, pursuant to its public trust obligations, develop new flow criteria for the Delta ecosystem necessary to protect public trust resources." Cal. Water Code § 85086(c)(1) ("Flow Criteria Report").</p> <p>The SWRCB issued the Flow Criteria Report on August 3, 2010. It calls, in brief, for restoration of Delta flows to 75% of unimpaired flow. The report stresses that it takes account only of "the flows that would be needed in the Delta ecosystem if fishery protection was the sole purpose for which its waters were put to beneficial use." Flow Criteria Report cover page. It does not (and was not commissioned to) perform the extensive detailed analysis needed to balance fishery protection with other beneficial uses, including water supply, nor does it examine how to implement a restoration of 75% of unimpaired flow. It does conclude that restoration of 75% of unimpaired flow is necessary to protect public trust resources in the Delta at certain times of the year and that other standards for Delta outflow also are necessary to protect public trust resources. Flow Criteria Report 96.</p> <p>It was incumbent upon the Lead Agencies to consider alternatives that examined the flow</p>	<p>See response to comment 2655-1 for discussion of the range of alternatives considered in the development of the EIR/EIS.</p> <p>As it relates to the SWRCB Flow Criteria Report, as described in Appendix 3A, Identification of Water Conveyance Alternatives, EIR/EIS, comments and suggestions received from the State Water Board were influential in defining the range and content of alternatives considered in the EIR/EIS, including the State Water Board's Delta Flow Criteria Report, prepared pursuant to the Sacramento-San Joaquin Delta Reform Act of 2009. Scoping comments from the State Water Board included requests for an alternative providing for reduced diversions and an alternative incorporating changes to Delta outflows (and potentially inflows) that would reflect a more natural hydrograph. The Lead Agencies determined that an additional alternative would be required to be responsive to the State Water Board's comments. Informed by these comments, as well as several letters from the State Water Board to the Natural Resources Agency, DWR met with State Water Board staff to identify a general approach to model an increased spring Delta outflow alternative. This alternative was designed to increase spring Delta outflow by approximately 1.5 million acre-feet, on average, above the NEPA baseline assumptions. This became Alternative 8 as analyzed in the EIR/EIS.</p> <p>Consideration of the specific determination contained in the Delta Flow Criteria Report, which identified 75% of unimpaired net Delta outflow for January through June, would not have been feasible to include as an alternative in the EIR/EIS. A letter from the Executive Director of the State Water Board to the deputy secretary of the Natural Resources Agency on April 19, 2011 recognized that the determination did not</p>

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		<p>criteria goal in the context of meeting water supply and other beneficial use needs. However, the EIR/S-RDEIR/S's treatment of Alternative 9A is frustratingly obscure, opaque, and contradictory and it is nowhere apparent that appropriate consideration to the relevant factors was given.</p> <p>First, Alternative 9A is treated within 2013 Draft EIR/S Chapter 3 (in the body of the EIR/S) and subsequently in Appendix 3A. Chapter 3 is titled "Description of Alternatives" and is 212 pages long. Chapter 3 repeatedly refers the reader to Appendix 3A for an explanation of the screening process and those alternatives that were summarily dismissed without detailed examination. The reader is advised to refer to Appendix 3A "for description of alternatives that were eliminated." 2013 Draft EIR/S 3-7. Appendix 3A contains ninety-four pages of text and an additional sixty-three pages of tables. Although pdf bookmarks appear after downloading Appendix 3A, there is no table of contents for Appendix 3A, tables or text. No bookmarks at all appear for the sixty three pages of tables. The main table of contents for the entire EIR/S lists Appendix 3A only as "Identification of Water Conveyance Alternatives, Conservation Measure CM1." 2013 Draft EIR/S lxxiv. Many of the crucial tables in Appendix 3A are printed in text that appears to be five or six-point. See, e.g., 3A-146 (left hand column) (ATT 1). Appendix 3A also has seven attachments, consuming 104.47 megabytes of disk space. The table of contents does not list the titles of the attachments and there are no bookmarks for the separate attachments. (footnote 2: It occurred to the present reviewer that the omission of tables of contents for the critical documents could not have passed unnoticed. However, no erratum providing the tables of contents was found. There is a link at the bottom of the 2013 Public Review Draft BDCP EIR/EIS document page entitled "Errata to the Draft EIR/EIS." None of the omitted tables of contents were found at this link.)</p> <p>It is within this informational setting, then, that the interested reader must pursue Alternative 9A - the only alternatives response to the express call of the California Legislature and subject of a scientific report issued at the direction of the California Legislature expressly for the use of the Lead Agencies in formulating the BDCP/Fix project. 2013 Draft EIR/S section 3.2.2 states that screening alternatives (including 9A) "were evaluated to narrow them to a more manageable field by eliminating similar or duplicative features (i.e., based on conveyance facilities or operations), or because the alternative would fail to meet the purpose and need for the BDCP or would likely violate federal and state statutes or regulations."</p> <p>Accordingly, "the following conveyance alternatives were dismissed from further evaluation as detailed in Appendix 3A." 2013 Draft EIR/S 3-12. Six screening alternatives, including screening Alternative 9A, are then listed as being dismissed. Id. No reference to page numbers in Appendix 3A is provided as to where the reader will find details on what these alternatives contained or why they were dismissed. No explanation or notation as to which of the proffered reasons (duplicative Features, fail to meet purpose and need, or violate statutes or regulations) applies to which alternative.</p> <p>Turning to Appendix 3A, the alternatives are inconsistently and incrementally described. Compare 3A-11 and 3A-43-50, and renumbered, see 3A-53, and renumbered again, see 3A-72-73, and renumbered again, see 3A-79 ("the conveyance alternatives have been renumbered to be consistent with information presented in the BDCP process"). There is no concordance table or straightforward, comprehensible explanation or chart showing the progress of alternatives identification and transformation.</p> <p>Alternative 9A first appears in Appendix 3A with a one sentence description at 3A-72.</p>	<p>consider the competing needs for water or other public trust resource needs, such as the need to manage cold-water resources in tributaries to the Delta. Further, implementation of these flows would also likely affect water users beyond those receiving CVP and SWP deliveries south of the Delta. As described in Section 3A.3.5, alternatives requiring impairment of senior water rights held by entities not participating in the BDCP were eliminated from full consideration in the EIR/EIS, as such rights could not be infringed by CDFW, USFWS, or NMFS through those agencies' actions or through "ESA Section 7 consultation" with Reclamation.</p> <p>For additional supplemental modeling requested by the SWRCB related to increased Delta outflows please see Appendix C of the RDEIR/SDIES.</p> <p>In response to concerns expressed on readability of the EIR/EIS, as they did with the Draft EIR/EIS, the Lead Agencies balanced readability with thoroughness in describing and analyzing the new alternatives in the RDEIR/SDEIS. To assist reviewers, the Lead Agencies provided a "Document Review Road Map" at the beginning of the RDEIR/SDEIS. Chapter 1, Section 1.3, of the RDEIR/SDEIS describes the contents of the document and provides references to the locations where readers may find specific discussions and analyses. Table 1-2 in the RDEIR/SDEIS identifies the exact portions of the Draft EIR/EIS that are modified in the RDEIR/SDEIS. In addition, the PDFs of the RDEIR/SDEIS, the Draft EIR/EIS, and the BDCP are bookmarked so that readers may quickly navigate to the proper section. In addition, in order for the Lead Agencies to effectively communicate with the public, several different types of summary documents and presentations on the BDCP, Draft EIR/EIS, and related documents were made available on the BDCP website. For instance, lay-friendly highlight documents for both the BDCP and the EIR/EIS were published to provide summary information about the documents and to help readers get acquainted with the documents. The BDCP Highlights and the EIR/EIS Highlights were posted online at <a href="http://baydeltaconservationplan.com/AboutBDCP/InformationalMaterials.aspx">http://baydeltaconservationplan.com/AboutBDCP/InformationalMaterials.aspx</a>. Short one-page factsheets on the BDCP and EIR/EIS, as well as California Water Fix, were also provided online and by request. In addition, 17 narrated informational webinar episodes were posted to the website for both the BDCP and EIR/EIS. These webinars were developed to provide short, easy to understand summaries of key elements of the BDCP and EIR/EIS. Background documents, additional factsheets, and FAQs continue to be available on-line. For more information, please see Master Response 38 regarding the length and complexity of the documents.</p>

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		<p>Alternative 9A next appears at table 3A-12 with a one-sentence description in what appears to be five or six-point font. 2013 Draft EIR/S 3A-145, and again at table 3A-13 with the same one-sentence description, and again at table 3A-14 with an additional one-sentence description indicating that it would likely require "reducing deliveries to upstream water rights holders." 2013 Draft EIR/S 3A-148.</p> <p>Alternative 9A is apparently eliminated from consideration in the EIR/S by table 3A-17, which answers the question as to whether the range of alternatives would result in the impairment of "existing senior water rights" as follows: "No for the range of conveyance alternatives that have been consistent with the three levels of screening criteria" although some alternatives may require a "change in legal ownership due to sale of property." 2013 Draft EIR/S 3A-150. Alternative 9A was included in the chart applying third-level screening criteria and is a second-screening alternative. Cite. The table text continues, in what appears to be eight-point font, "However, the answer would be likely for Second Screening Dual Conveyance Alternative 8A, which includes operations alternatives based on Scenario 7a, and Second Screening Dual Conveyance Alternative 9A, which includes the State Water Resources Control Board 2010 flow recommendations for Delta Ecosystem." However, Alternative 9A was carried forward to Table 3A-21, the last of the Appendix 3A tables, and the closest thing (along with preceding Table 3A-20) to a coherent summary of alternatives. This table reports that Alternative 9A was eliminated because it "probably would violate federal or state statutes or regulations." 2013 App. A 3A-157. This must be a reference to Table 3A-14 Column 6, which indicates that Alternative 9A would likely violate statutes or regulations because "Delta outflow criteria could not be accomplished even with reducing deliveries to upstream water rights holders." 2013 App. A 3A-148.</p> <p>Section 3A.9.3 is entitled, "State Water Resources Control Board Enhanced Spring Delta Outflow Alternative." 2013 Draft EIR/S 3A-62. This alternative is discussed in the context of the SWRCB Flow Criteria Report. The "alternative includes a requirement of 55% of unimpaired flow, as estimated for the Sacramento River at Freeport, to become Delta outflow." 2013 Draft EIR/S 3A-64.</p> <p>Section 3A.9.3 does not disclose under which numbered alternative, if any, this alternative is analyzed as in the EIR/S. A separate perusal of Appendix 3A reveals, as best as can be determined, that it wound up as Alternative 8. Section 3A.9.3 appears to be the closest approximation, untitled and unreferenced as such, that analyzes or explains why the 2010 Flow Criteria Report recommendation of 75% of unimpaired flow was not carried forward as an alternative in the EIR/S or what became of it.</p>	
2655	4	<p>This garble of information for Alternative 9A is repeated for the 15 conveyance alternatives identified in scoping (see Appendix 3A at 3A-11), the 21 alternatives listed at section 3.2.1.5 (see 2013 Draft EIR/S 3-10), and various other "proposals" that were never given a number and are treated at section 3A.11 (which repeatedly refers the reader back to numerous components of other alternatives treated elsewhere) of Appendix 3A. See 2013 Draft EIR/S Appendix 3A 3A-80-94.</p> <p>To follow the disposition of Alternative 9A, the doggedly determined reader is left to print out a dozen sub-sections of the EIR/S, lay them on a table, shuttle back and forth between them, and create his or her own concordance table and table of contents, and ultimately construct his or her own comparison.</p> <p>It is unreasonable to expect members of the public and even specialized commenters - let</p>	<p>See responses to comments 2655-1 and 2655-3 for discussion of the range of alternatives considered in the development of the EIR/EIS. For responses to comments related to the Delta Independent Science Board's letters, please refer to comment letters BDCP 1448 and/or RECIRC 2546.</p>

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		<p>alone decision-makers - to follow that same procedure for all of the alternatives (importantly including those eliminated in scoping and those referred to as "proposals"), much less construct his or her own comparison of all these alternatives: "According to guidance for project proponents, "Environmental impact statements shall be written in plain language and may use appropriate graphics so that decision-makers and the public can readily understand them" (Code of Federal Regulations, 40 CFR 1502.8). Far-reaching decisions should not hinge on environmental documents that few can grasp.</p> <p>This guidance applies all the more to an EIR/S of the scope, complexity, and importance of the Current Draft. It demands excellent comparative descriptions of alternatives that are supported by readable tables and high quality graphics, enumeration of major points, well-organized appendices, and integration of main figures with text. For policy deliberations, the presentation of alternatives should include explicit comparisons of water supply deliveries and reliabilities as well as economic performance. For decision-makers, scientists, and the public, summaries of impacts should state underlying assumptions clearly and highlight major uncertainties. The current draft is inadequate in these regards." 2015 ISB DEIR Review 9.</p> <p>Promises that these deficiencies will be corrected in the final project documents do not fulfill the purposes of NEPA and CEQA, which are to provide decision-makers with comprehensible information upon which to base their decisions early in the process, when changes of course are practicable. Depriving the public of comprehensible information until after final decisions have been made further frustrates informed public participation and constitutes actionable informational injury as well as depriving decision-makers of informed comments to guide their deliberations.</p>	
2655	5	<p>The 2015 RDEIR/S compounds the informational injury inflicted by BDCP/Water Fix environmental review documents because it adds further confusion and is misleading. The 2015 RDEIR contains several features that may have been intended to address the informational chaos created by the 2015 Draft EIRS. For example, the 2015 RDEIR/S provides an Appendix A, which is a redline version of the 2013 Draft EIR/S. This could be a useful feature. However, the Lead Agencies have chosen to renumber all the sections, without providing a concordance table or a table of contents. (footnote 3: Like 2013 Appendix 3A, there are only pdf bookmarks available after download) Some new text is indicated in redline insertion text. Some new text is not so indicated. The pagination has been radically altered. For example, 2013 page 8-420 has become 2015 Appendix A page 8-217. These pages describe significant unmitigated impacts on water quality. They are crucial. The section under which this critical text appears has yet again been renumbered, from 8.4.3.9 to 8.3.3.9. Compare 2015 RDEIR/S Appendix A 8-204 with 2013 Draft EIR/S 8-407. The numbering change does not appear in strikeout or underline. Absent a concordance table and/or table of contents/concordance of table of headings (new and original), Appendix A is a source of frustration that will drive away informed comments. The present reviewer can imagine no rational basis for the failure to use well-established techniques, such as keeping all original heading numbering the same and inserting new headings as .0001, .0002, etc.</p> <p>As it stands, the most expedient way to find out what changes were made to a specific passage from the 2013 Draft EIR/S is to select unique phrases from the 2013 text of interest and run a word search in Acrobat on the 2015 Appendix A in hopes of landing at the correct text.</p> <p>A line has to be drawn somewhere as to how confusing, poorly organized, and poorly</p>	<p>Because the RDEIR/S/DEIS does not revisit the entire Draft EIR/EIS, a different approach to numbering was taken. The RDEIR/S/DEIS contains sections rather than chapters to make clear the material is new since preparation of the Draft EIR/EIS. Revisions to the Draft EIR/EIS are contained in RDEIR/S/DEIS Appendix A, whose chapter numbering scheme matches the Draft EIR/EIS so that readers may easily compare the revisions with the original Draft EIR/EIS. Chapter 1, Section 1.3, of the RDEIR/S/DEIS describes the contents of the document and provides references to the locations where readers may find specific discussions and analyses. Table 1-2 in the RDEIR/S/DEIS identifies the portions of the Draft EIR/EIS that are modified in the RDEIR/S/DEIS. See also response to comment 2655-3.</p>

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		<p>presented NEPA/CEQA documents may be. Here, the line has been crossed and the only remedy is to re-draft the 2015 RDEIR/S and reopen the comment period, if for no other reason than to address the basic requirement of informing the public as to what is being proposed and evaluated, and to allow for informed public comment at stages early enough to allow their meaningful use by decision-makers.</p> <p>More troubling yet is the misleading presentation several critical portions of the 2015 RDEIR/S. For example, table ES-9 purports to summarize the impacts of the three new alternatives (2D, 4A, and 5A) (Attachment 2). However, it lacks a key feature: a further column that would direct the reader to the text of the DEIR that supports the table's conclusory presentations. This leads to a misstatement of impacts.</p> <p>Two of the significant unmitigated adverse impacts/effects of preferred Alternative 4A disclosed by the 2013 Draft EIR/S were GW-8 and GW-9, which are statewide impacts to groundwater. Table ES-9 lists GW-8 and GW-9 as having no impact for new alternatives 2D, 4A, and 5A. 2015 RDEIR ES-43. However, a tiny footnote cue, appearing only on the column "Impact Conclusion Before Mitigation," directs the reader to footnotes stating that the preferred alternative, Alternative 4A, "could have" significant/adverse unmitigated impacts on groundwater. The right-hand column, "Impact After Mitigation," lists Alternative 4A as LTS and B (less than significant or Beneficial). This is false. The actual finding purporting to be summarized is that the "overall impact for Alternative 4A [on groundwater supplies and recharge is] considered significant and unavoidable." REDIER/S 4.3.3-8. Most readers of this table will skim the right-hand columns, which list as "S" or "SU" or "A" those impacts that are significant and unmitigated. On this method, Alternative 4A appears benign, which it is not. An executive summary table constructed with the aim of alerting readers to significant impacts that are worthy of further perusal in the body of the document would not have presented information in this manner.</p> <p>In addition to noncompliance with CEQA and NEPA, and relevant federal government contracting requirements, it may further be argued that the deterrent effect of these documents is so great as to deprive the public of its right to petition the government for a redress of grievances within the meaning of the First Amendment to The United States Constitution. Physical exclusion of dissenting citizens from a hearing room would have no more pernicious effect than the organization of these documents, especially if deceptive intent is found.</p>	
2655	6	<p>The current range of Alternatives (including new Alternatives 2D and 5A) and the preferred project (Alternative 4A) do not represent a reasonable range of alternatives as required by CEQA and NEPA.</p>	<p>See response to comment 2655-1 for discussion of the range of alternatives considered in the development of the EIR/EIS.</p>
2655	7	<p>The extent of the lead agencies' duty to rigorously explore and objectively evaluate all reasonable alternatives is at its zenith in this matter. An agency must "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative use of available resources." 42 U.S.C.A. § 4332(2)E. "Judicial review of the range of alternatives considered by an agency is governed by a 'rule of reason' that requires an agency to set forth only those alternatives necessary to permit a 'reasoned choice.'" California v. Block, 690 F.2d 753, 767 (9th Cir. 1982). The "touchstone for our inquiry is whether an EIS's selection and discussion of alternatives fosters informed decision-making and informed public participation." Id.</p>	<p>See response to comment 2655-1 for discussion of the range of alternatives considered in the development of the EIR/EIS.</p> <p>Please refer to Master Response 3 for the Purpose and Need and Master Response 28 for a discussion of the proposed project's Operational Criteria.</p> <p>Please also note that all comments received during the 2013 and 2015 public comment period are included in the FEIR/EIS. Please refer to the table of commenters to locate the letter of interest.</p>

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		<p>As acknowledged in the RDEIR/S, federal agencies are required to take a "hard look" at the environmental consequences of their actions, including a hard look at potential alternatives to recommended courses of action that might lessen environmental impacts. See RDEIR/S 4.1-3. "The purpose of NEPA is to require disclosure of relevant environmental considerations that were given a 'hard look' by the agency, and thereby permit informed public comment on proposed actions and any choices or alternatives that might be pursued with less environmental harm." <i>Te-Moak Tribe of Western Shoshone of Nevada v. United States Dep't of the Interior</i>, 608 F.3d 592, 601 (9th Cir. 2010) (citation omitted). "The existence of a viable but unexamined alternative renders an environmental impact statement inadequate." <i>Id.</i> (citation omitted).</p> <p>It would be hard to overstate the conflicts surrounding alternative competing uses of Delta water resources, including but not limited to the conflicts between environmental needs and water supply needs; and the conflicts between in-basin consumptive users, upstream diverters, and export consumptive users. It would also be hard to overstate the cost of a wrong decision. The ecosystem of the largest and most important estuary on the west coast of North and South America is on the brink of collapse. The wrong decision could push numerous species to extinction and take a horrific toll on communities and the economies that rely on Delta water. Indeed, near final drafts of the BDCP, as operated in and in conjunction with expected climate-changed conditions, and vetted by the Action Lead Agencies, would have driven important fish species, including winter-run and spring-run Chinook salmon, to extinction. See NMFS Progress Assessment and Remaining Issues Regarding the Administrative Draft BDCP Document 1 ("Red Flag Comments") (ATT 22).</p> <p>The responsibility of the Lead Agencies in this matter to "describe appropriate alternatives," 42 U.S.C. § 4332(2)(E), that are 'necessary to permit a 'reasoned choice,'" <i>California v. Block</i>, 690 F.2d at 767, after a "hard look" at environmental consequences in the context of lessening them by considering alternative courses of action, <i>Te-Moak</i>, 608 F.3d at 601, is commensurate with the gravity and far-reaching consequences of the ultimate decision in this matter. In short, the Lead Agencies' public duty to "rigorously explore and objectively evaluate all reasonable alternatives," 40 C.F.R. § 1502.14(a), is here at its zenith. The federal Lead Agencies would perhaps not dispute this characterization of their duty. What we (Save the California Delta Alliance) ask, upon review of these and all other comments on the RDEIR, is for the Federal Lead Agencies to earnestly re-examine whether they have lived up to it.</p>	
2655	8	<p>The BDCP/Water Fix statements of purpose and need may not be drawn or interpreted in terms so narrow as to unreasonably limit the range of alternatives considered. On February 13, 2009, the Lead Agencies issued a Notice of Intent to Prepare an Environmental Impact Statement/Environmental Impact Report and Notice of Public Scoping Meetings pursuant to NEPA, 74 FR 7257 ("2009 NOI"), and a Revised Notice of Preparation OF Environmental Impact Report and Environmental Impact Statement for the Bay Delta Conservation Plan, State Clearinghouse Number 2008032062, pursuant to CEQA ("2009 NOP"). These statements remained in effect until they were revised on through July 10, 2015, as part of the RDEIR/S.</p> <p>These documents contain the statement of purpose and need and the statements of objectives and fundamental underlying purpose pursuant to NEPA and CEQA respectively. Because the framing and interpretation of these statements are closely related to the duty</p>	<p>See response to comment 2655-1 for discussion of the range of alternatives considered in the development of the EIR/EIS. See Master Response 3 for discussion of the proposed project purpose and need. With regard to alternatives, please also see Master Response 4.</p>

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		<p>to discuss alternatives, they are being increasingly used by lead agencies to limit the range of alternatives they wish to consider. As explained by leading practice guides on NEPA and CEQA: "[An EIS] must briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action" The courts have recognized these requirements are closely related to the duty to discuss alternatives, because the purpose of an action determines the universe of alternatives an agency must consider." Daniel R. Mandelker, NEPA Law and Litigation § 9:23 (Thomson Reuters 2015)(citations and quotation marks omitted) ("NEPA Law and Litigation").</p> <p>"Lead agencies have considerable discretion to select the project objectives they wish to achieve. Although a lead agency may not give a project's purpose an artificially narrow definition, a lead agency may structure its EIR alternatives analysis around a reasonable definition of underlying purpose and need not study alternatives that cannot achieve that basic goal." Stephen I. Kostka and Michael H. Zischke, Practice Under the California Environmental Quality Act (CEB 2d ed. 2015) ("Practice Under CEQA").</p> <p>However, courts are increasingly recognizing that lead agencies may abuse the statement of purpose and need to evade the requirement to earnestly evaluate a reasonable range of alternatives. See, e.g., National Parks &amp; Conservation Ass'n v. Bureau of Land Mgmt., 606 F.3d 1058, 1072 (9th Cir. 2009) (summarizing 9th Circuit precedent to "forbid the [lead agency] to define its objectives in unreasonably narrow terms") (striking down lead agency's EIS because "[a]s a result of this unreasonably narrow purpose and need statement, the [lead agency] necessarily considered an unreasonably narrow range of alternatives"); see also id. At 1071 (stating that the court will "determine whether the [lead agency's] purpose and need statement properly states the [lead agency's] purpose and need - in a manner broad enough to allow consideration of a reasonable range of alternatives").</p> <p>Courts also scrutinize unreasonably narrow interpretations of purpose and need statements by lead agencies where the statement of purpose and need, fairly read, would allow for consideration of alternatives that the lead agency rejected as outside the project's purpose and need statement. See, e.g., Center for Biological Diversity v. National Highway Traffic Safety Admin., 538 F.3d 1172, 1219 (9th Cir. 2008) (holding that "[w]e also disagree with [the lead agency] that Petitioners' suggested alternatives would not be reasonably related to the project's purpose").</p>	
2655	9	<p>At the very outset of the process, the lead agencies unreasonably eliminated any portfolio approach by drafting and/or interpreting the 2009 statement of purpose and need in unreasonably narrow terms and drafted the revised 2015 statement in unreasonably narrow terms. Virtually all stakeholders agree a "portfolio" approach is required if we are to make meaningful progress in solving California's water problems. A portfolio approach simply combines elements of conveyance with one or more elements of storage, groundwater management/recharge, and conservation. However, the Lead Agencies unreasonably eliminated any possibility of a portfolio approach at the outset of the process.</p> <p>"Scoping" is the process undertaken at the outset of environmental review to determine the scope of issues that the EIS will include. As part of the scoping process the lead agency shall "determine the scope and the significant issues to be analyzed in depth in the environmental impact statement." 40 C.F.R. § 1501.7(a)(2). The 2009 Notice of Intent, which contained the statement of purpose and need, also announced the commencement of 10 public scoping meetings. However, through their drafting/interpretation of the statement of purpose and need announced in the 2009 NOI, the Lead Agencies had already effectively</p>	<p>See response to comment 2655-1 for discussion of the range of alternatives considered in the development of the EIR/EIS.</p> <p>Please see Master Response 4 for discussion of the scope of the proposed project and alternatives (such as desalination) that were not carried forward for analysis because they are beyond the scope of the proposed project. However, nothing in the proposed project would prevent other entities from pursuing innovative approaches to desalination or other water supply solutions in the overall portfolio of water management strategies. For example, as described in Appendix 3A, Section 3A.7, Results of Initial Screening of Conveyance Alternatives, EIR/EIS (2013), desalination was included as part of Alternative B7. Issues related to desalination include land use impacts, costs, and substantial energy use requirements. Advances in technology have improved feasibility of desalination and as a statewide water use planning component; it will be evaluated by water agencies on a local/regional level.</p> <p>The proposed project is one component, among many, of the California Water Action Plan. The California Water Plan evaluates different combinations of regional and statewide resources management strategies to reduce water demand, increase water supply, reduce flood risk, improve water quality, and enhance</p>

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		<p>eliminated from meaningful consideration any water infrastructure other than conveyance within the statutory Delta: "The 2009 Notice of Preparation and NOI stated that the new points of diversion could be located along the Sacramento River between South Sacramento and Walnut Grove. The new conveyance facility could extend from the new points of diversion to the existing SWP and CVP pumping facilities in the South Delta and be located either to the west or east of the Sacramento River." 2013 Draft EIR/S, App. 3A 3A-11.</p> <p>The Lead Agencies interpretation of the 2009 NOI/NOP had also absolutely eliminated from consideration any conservation element; had eliminated from consideration any groundwater component; and had eliminated from consideration any storage component. The 2015 revised statement of purpose in need is narrowed and also excludes storage. This is a failure to respond to changed circumstances because the need for storage has become all the more acute as recognition of the severe diminishment of the snowpack as a storage element has become much better understood and more pronounced in the last six years. It was out of bounds from this point forward for the Lead Agencies to meaningfully consider any portfolio approach or any surface storage, groundwater recharge and storage, or demand reduction/management measures.</p> <p>The 2015 Revision to the statement of purpose and need only further unreasonably narrows the purpose and need.</p> <p>The now six-year-old environmental review process, while producing tens of thousands of pages of reports, convening dozens of public meetings, drawing thousands of comment letters, and proclaiming itself one of the most thorough ever undertaken, had eliminated the most promising alternatives at the outset. The 2015 DEIR revision to the statement of purpose and need should have corrected course by including a reasonable range of alternatives, but it did not. All of the hundreds of thousands of hours of study and hundreds of millions of dollars in consultant's fees were focused on assessing a badly defined project with a self-imposed constraint that forbids or refuses consideration of better alternatives.</p> <p>As explained to the public: "While water storage is a critically important tool for managing California's water resources, developing new water supplies and including new storage is not part of the BDCP purpose and need." 2013-4 Your Questions Answered, available at <a href="http://baydeltaconservationplan.com/Library/BDCPLibrary/YourQuestionsAnswered.aspx">http://baydeltaconservationplan.com/Library/BDCPLibrary/YourQuestionsAnswered.aspx</a> x (last visited October 23, 2015) (ATT 3).</p> <p>"New water supplies" or "new water" as used in the BDCP/Fix documents, and in California water discussions generally, includes storage and conservation measures. Increasing storage capacity makes "new water" because it allows the capture and storage of water supplies that would not otherwise be available; it increases the total amount of water available for management. Likewise, conservation measures are considered to provide "new water" because "using water more efficiently reduces demand, which has the same effect as adding water to the system." Delta Plan 91, n.1.</p> <p>The Lead Agencies, therefore, dismissed the basic reaction to initial scoping by concerned stakeholders whose comments "described methods to reduce reliance upon Delta water supplies, including water conservation, recycling, and use of other water supplies such as conjunctive use programs to ensure adequate groundwater recharge operations." 2013 Draft EIR/S App A 3A-11.</p> <p>Where this process has ended up, stand-alone (single focus) new conveyance infrastructure,</p>	<p>environmental and resource stewardship. Follow the California Water Plan here: <a href="http://www.waterplan.water.ca.gov/">http://www.waterplan.water.ca.gov/</a>.</p> <p>By establishing a point of water diversion in the north Delta the proposed project is designed to improve native fish migratory patterns while securing reliable water deliveries. Appendix 3A, Identification of Water Conveyance Alternatives, Conservation Measure 1, EIR/EIS, describes the range of conveyance alternatives considered in the development of the EIR/EIS. Appendix 1B, Water Storage, EIR/EIS, describes the potential for additional water storage and Appendix 1C, Demand Management Measures, EIR/EIS, describes conservation, water use efficiency, and other sources of water supply including desalination. While these elements are not proposed as part of the proposed project, the Lead Agencies recognize that they are important tools in managing California's water resources.</p> <p>The Natural Resources Agency and DWR staff will continue seeking improvements and refinements to the current proposal in order to enhance species benefits and to avoid, reduce or mitigate for negative impacts to people, communities, sensitive species and habitats.</p> <p>Please see Master Response 7 regarding desalination, Master Response 6 regarding demand management and Master Response 37 regarding water storage.</p> <p>Please also note that all comments received during the 2013 and 2015 public comment period are included in the Final EIR/EIS. Please refer to the table of commenters to locate the letter of interest.</p>

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		<p>is one of the few choices that were available to the Lead Agencies that does not increase water supplies: "The benefits of new Delta conveyance infrastructure should be maximized by integrating with new and expanded storage projects, implementing projects that increase water-use efficiency and conservation, improving groundwater management, and restoring the structure and function of some key Delta ecosystems. New Delta conveyance infrastructure by itself does not create any new supplies of water."</p> <p>Delta Stewardship Council, 18 Principles for Water Conveyance in the Delta, Storage Systems, and for the Operation of Both to Achieve the Coequal Goals ¶ 4, available at <a href="http://www.deltacouncil.ca.gov/docs/delta-stewardship-counciloctober-22-23-2015-meeting-agenda-item-10-attachment-1-draft">http://www.deltacouncil.ca.gov/docs/delta-stewardship-counciloctober-22-23-2015-meeting-agenda-item-10-attachment-1-draft</a> (ATT 20).</p> <p>The Lead Agencies' narrow drafting/and or narrow interpretation of the purpose and need of the project as excluding "developing new water supplies" also excludes groundwater storage from meaningful consideration. Groundwater storage is considered a source of "new water" and has the potential to provide up to two million acre-feet of new water annually. See, e.g. Delta Plan 92 (ATT 4). (footnote 4: The 2013 Delta Plan has long been available to the lead agencies and was made a part of the administrative record in its entirety as a part of comments in July 2014. Several excerpts are attached here for the convenience of the reader.) But because it is considered a source of "new water" it has been excluded by the lead agencies, through use of the purpose and need statement, from meaningful consideration.</p> <p>The 2009 NOI stated that "improvements to the conveyance system are needed" and that the project would include "three major elements," one of which was "potential capital improvements to the water conveyance system." 74 FR 7259. However, the description of potential alternatives in the 2009 NOI stated that: "Three general alternatives are being considered as they relate to the potential changes in the water conveyance system and CVP/SWP operations. These include (1) A through-Delta alternative; (2) a dual conveyance alternative; and (3) an isolated facility alternative." Each of these alternatives was limited to conveying water from a point on the Sacramento River between South Sacramento and Walnut Grove to the existing CVP and SWP pumping plants near Tracy, about forty miles away. 2013 Draft EIR/S App. 3A 3A-11. (footnote 5: Two conveyance components outside the statutory Delta, one conveying water from a point on the Sacramento River near the confluence of the Feather River, and the other from a point near Fremont Weir, were summarily eliminated without evaluation as project alternatives in the EIR/S.)</p> <p>The elimination of serious consideration of any portfolio alternatives was unreasonable on its face. See, e.g., National Highway Traffic Safety Administration, 538 F.3d 1172, 1219 (9th Cir. 2008) (striking down impact statement and rejecting lead agency's argument that "Petitioners' suggested alternatives would not be reasonably related to the project's purpose").</p> <p>Groundwater recharge, surface storage, and conservation are all reasonably related to the project's purpose. Project documents repeatedly state that the underlying goal of the project is to improve deliveries of water to consumptive users while at the same time improving ecological conditions in the Delta: "As described in Chapter 1, Introduction, the BDCP is intended to provide for the ecological needs of a number of at-risk species adversely affected by a range of human activities while also ensuring adequate and reliable water supplies from the Sacramento- San Joaquin River Delta (Delta) and its stream tributaries, for people, communities, agriculture, and industry." Draft EIR/S App. 3G-2</p>	

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		<p>(2013). "As stated in Section 1, Introduction, the RDEIR/SDEIS considers additional sub-alternatives that meet the goals of restoring the ecological functions of the Delta and improving water supply reliability." RDEIR/S 4.1-1 (2015). "The current and projected future inability of the SWP and CVP to deliver water to meet the demands of certain south of Delta CVP and SWP water contractors is a very real concern. More specifically, there is an overall declining ability to meet defined water supply delivery volumes and water quality criteria to support water users' needs for human consumption, manufacturing uses, recreation, and crop irrigation." 2013 Draft EIR/S 2-6.</p> <p>Federal regulators, who are not project proponents, also understand that the project has a broad fundamental purpose. "EPA fully supports the stated purpose of the BDCP effort: to produce a broad, long-term planning strategy that would meet the dual goals of water reliability and species recovery in this valuable ecosystem..." Letter from Jared Blumenfeld, Regional Administrator, Region 9 United States Environmental Protection Agency to Will Stelle, Regional Administrator, West Coast Region National Marine Fisheries Service 1, August 26, 2014 ("August 26, 2014, EPA Comments") (ATT 23). Federal regulators understand that portfolio approach alternatives are well within the BDCP/Fix project's purpose and need." "Other reasonable alternatives could be developed by incorporating a suite of measures, including Integrated Water Management, water conservation, levee maintenance, and decreased reliance on the Delta. Such alternatives would be consistent with the purpose and need for the project, as well as with the California Bay Delta Memorandum of Understanding among federal agencies and the Delta Reform Act of 2009." Id. At 3.</p> <p>Not only is a portfolio approach consistent with the Statement of Purpose and Need, the Lead Agencies' own science advisors deem it indispensable. In 2014, the Action Lead Agencies commissioned four eminent Delta scientists to author a report addressing the challenges facing the Sacramento-San Joaquin Delta in the context of solving the vexing problems of water supply and ecological degradation. See Louma, et. Al, Challenges Facing the Sacramento-San Joaquin Delta (Delta Science Program 2015) ("Delta Challenges") (ATT 5). Delta Challenges concludes that Delta problems are too complex to be addressed by single-focus solutions, such as lone conveyance projects. "Single-focus problem solving can create unanticipated outcomes." Delta Challenges 9. Instead: Simultaneous attention to a portfolio that includes actions like addressing overuse and misuse of water, and improving ground water management and storage, should accompany any necessary water infrastructure adjustments. Delta Challenges 4. The rejection of portfolio elements on purpose-and-need rationale was unreasonable.</p>	
2655	10	<p>A portfolio approach with additional conveyance options is reasonable, feasible, proven, and necessary and should have been included in the 2015 RDEIR/S. The self-imposed limitation of considering conveyance options located only within the statutory Delta excludes many types of viable conveyance improvements. For example, the SWP and CVP canal system, along with interconnected regional canals, stretches from the Delta south to the Mexican border, west to the coastline at Santa Barbara, and east to Arizona. Many critically over-drafted groundwater basins lie adjacent to this extensive canal network, which forms the largest and most complex piece of water supply infrastructure in the United States (if not the world). ATT 6 (Delta Plan 70) is a map of the canal network. ATT 7 (Delta Plan 98) is a map showing the location of critically over-drafted ground water basins.</p> <p>Smaller regional conveyance improvements, in the form of branch lines connecting to</p>	See response to comment 2655-9.

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		<p>ground water recharge facilities, or improvements to existing branch lines, along much of the route already traversed by existing canals could create new water by recharging badly over-drafted aquifers.</p> <p>Reclamation has found feasible and approved exactly these types of projects. See U.S. Dept. Of the Interior, Record of Decision: Madera Irrigation District Water Supply Enhancement Project 1 (approving "Alternative B which includes the banking of MID CVP water outside MID's service area in the proposed Water Supply Enhancement Project, modification of Reclamation's 24.2 canal and potential federal funding"). See also Measure J94 Goleta Water District (local self-imposed ordinance requiring that portions of SWP water supply be devoted to groundwater recharge) (ATT 8).</p> <p>There is scientific consensus that recharge of depleted groundwater basins is feasible and necessary to California's water future. A dozen or so scientific reports emphasizing this fact were attached to our July 29, 2014, comments. In addition to the reports, Lead Agency DWR's California Water Plan, emphasizing the feasibility and necessity of groundwater recharge, was also attached.</p> <p>The recently released Delta Challenges underscores that creating new water to take pressure off the Delta is essential to recovering the Delta ecosystem. "Water scarcity has defined and will continue to define the future of the Delta and all that is linked to it." Delta Challenges 28. However: "Many approaches used in water-scarce environments elsewhere are underutilized in the Delta. While adjustments to the infrastructure as it ages are essential, opportunities exist to simultaneously redefine bold action as we pursue proven (although not always initially popular) ways to work more effectively with what we have. Examples include the following: Groundwater recharge and conjunctive use offer storage potential beyond that available for surface waters." Delta Challenges 26</p>	
2655	11	<p>We have previously provided detailed comments on the feasibility of portfolio alternatives that include surface storage, either within, north, or south of the Delta. See Delta Alliance July 29, 2014, Comments. Our comments included a discussion of Sites Reservoir, also known as North of Delta Offline Storage ("NODOS") as an integral component of a BDCP/Fix portfolio alternative. A "Sensitivity Analysis of Operations with the BDCP" was and is referenced by the NODOS website. <a href="http://www.water.ca.gov/storage/northdelta/index.cfm#NODOSDocs">http://www.water.ca.gov/storage/northdelta/index.cfm#NODOSDocs</a>, last visited October 27, 2015. The document is still not available to the public. The Lead Agencies should consider it, and if it has not been produced, should produce it and an analysis of integral operation of BDCP/Fix conveyance with NODOS as an alternative to the preferred project. The NODOS Draft EIR was previously provided. A NODOS Investigation Highlights booklet is attached hereto (ATT 9). (footnote 6: We are aware that the Sacramento Valley Water Management Agreement eyes the NODOS project as a source of new water for local interests. However, the project has been languishing at a snail's pace and integration with the DCP/Fix could benefit all interested parties.)</p> <p>The currently preferred Fix twin tunnels (Alternative 4A) and the identical previously preferred BDCP twin tunnels (Alternative 4) both have the ability to take from the Delta more water more often than the existing infrastructure system. That ability could make sense in the context of restoring the Delta ecosystem and restoring the ability of the "SWP and CVP to deliver up to full contract amounts" while doing less damage to the Delta ecosystem. 2009 NOI, 74 FR 7258. The ability to take more water at times of abundance makes sense when the project also has the ability to convey and store it for use at times of</p>	<p>See response to comment 2655-1 for discussion of the range of alternatives considered in the development of the EIR/EIS. See Master Response 3 for discussion of the proposed project purpose and need. Please see also response to comment 2655-9.</p> <p>Alternative 4A, also known as California WaterFix, has been developed in response to public and agency input and is the new CEQA Preferred Alternative. Alternative 4A is also the NEPA Preferred Alternative, a designation that was not attached to any of the alternatives presented in the 2013 Public Draft EIR/EIS. Alternative 4 remains a potentially viable alternative and is being carried forward in this RDEIR/SDEIS because it represents the original habitat conservation plan/natural community conservation plan (HCP/NCCP) alternative approach, and because it provides an important reference point from which the Alternative 4A, 2D, and 5A descriptions and analyses were developed. If the Lead Agencies ultimately choose the alternative implementation strategy and select an alternative presented in the RDEIR/SDEIS after completing the CEQA and NEPA processes, elements of the conservation plan contained in the alternatives in the 2013 Public Draft EIR/EIS may be utilized by other programs for implementation of the long term conservation efforts.</p> <p>The proposed project aims to stabilize water supplies, and exports could only increase under certain circumstances. Water deliveries from the federal and state water projects under a fully-implemented Alternative 4A are projected to be about the same as the average annual amount diverted in the last 20 years. Although the proposed project would not increase the overall volume of Delta water exported, it would make the deliveries more predictable and reliable, while restoring an ecosystem in steep decline.</p> <p>Please also note that all comments received during the 2013 and 2015 public comment period are included</p>

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		<p>scarcity.</p> <p>Conveying "surplus" Delta water to groundwater banking facilities so it could be drawn upon when Delta flows are low and exports are most harmful would provide a more reliable water supply and ease the damage of exports to the Delta ecosystem. Alternatives 4 and 4A do not have that ability. The BDCP "does not significantly reduce pressure on the Delta during drier periods." Saracino and Mount, et al., Panel Review of the Draft Bay Delta Conservation Plan 30 (September 2013) ("Mount Report") (reviewing Alternative 4 in the 2013 administrative draft BDCP) (attached to our July 29, 2014 comments). "Expanding potential storage, particularly groundwater storage, would have created considerably more flexibility in exports" allowing more water to be harvested in wet years and conserving environmental flows during periods of scarcity. Mount Report 22. Alternative 4A has not meaningfully changed this dynamic. This was the original rationale for new high-capacity conveyance, referred to in BDCP promotional materials as "Big gulp, little sip," that the BDCP/Fix has failed to fulfill.</p> <p>There is no logic whatsoever in the tunnels' initial intake capacity being set at 9,000 cubic feet per second absent integral storage components. There is only the danger, and perhaps probability, that the high-capacity tunnels will be used to meet the project's expressed goal of providing full contract amounts while wreaking further havoc on the Delta ecosystem. This looming disaster is only made more frightening by considering that the tunnels themselves have a capacity to divert 15,000 cubic feet per second (a scenario previously given serious consideration by the Lead Agencies) and could be so employed by adding two additional intakes (that have already been designed) and related diversion components (that have also already been designed).</p> <p>Increased water use efficiency/conservation, in both urban and agricultural settings, has the potential to produce up to 4.1 million acre-feet of new water annually. Delta Plan 92. In the context of recovering the Delta ecosystem, "Making water conservation a continual, long-term, statewide investment is a necessary part of accepting water scarcity." Delta Challenges 26. Although much of California depends on Delta water for some portion of its water supply, the relative contribution of Delta water compared to regional sources is small. See Delta Plan 78 (ATT 19).</p> <p>Conservation and groundwater recharge are necessary to restore the capacity to deliver up to full contract amounts while at the same time reducing harm to the Delta ecosystem and restoring its health. These elements are reasonably related to the project's purpose and were unreasonably excluded from any meaningful consideration.</p> <p>The Mount Report, reviewing then preferred Alternative 4 in September 2013, was commissioned by ex officio BDCP Steering Committee members American Rivers and The Nature Conservancy. In their July 29, 2014, comments on Alternative 4 ("American Rivers 2014 Comments") these organizations summarized the Mount Report's findings: "While finding that Conservation Measure 1, including the new north Delta diversion, may improve conditions for Delta smelt, the overall conclusion is that the plan will not significantly improve the ecosystem as a whole or assure reliable water supply. We regretfully conclude that the plan, in its current draft form, will not make a sufficient contribution to the attainment of the co-equal goals as required by applicable laws." American Rivers 2014 Comments 2. As all are aware, the "coequal goals" are "providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem." These were also the originally proffered twin promises of BDCP/Fix that thus far have not been</p>	<p>in the FEIR/EIS. Please refer to the table of commenters to locate the letter of interest.</p>

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		<p>fulfilled.</p> <p>The 2015 RDEIR/S further narrows the description of purpose and need. It also eliminates the 90,000 or more acres of habitat restoration and breaks the promise to meet the "gold standard" of a Habitat Conservation Plan and Natural Communities Conservation Plan proffered from the earliest days of the BDCP to assure its environmental benefits.</p> <p>Left are single-focus giant diversion facilities and conveyance tunnels. (footnote 7: EcoRestore, a recently announced separate program to restore Delta habitat, is little more than a branding effort. Much of the habitat restoration proffered by EcoRestore is merely the implementation of measures already required by federal regulators as a condition of continued operation of the SWP and CVP. These orders are long-standing and EcoRestore does not represent any new, increased, or significant effort to restore Delta habitats or repair the Delta ecosystem.)</p>	
2655	12	<p>The lead agency arguments against a portfolio alternative lack merit. The arguments against even considering one portfolio alternative with even one portfolio element are found at 2013 Draft EIR/S Appendix 3A § 3A.11.1.1 at 3A-82-83. This section rejects a call from the Natural Resources Defense Council to consider a portfolio alternative and generally eliminates any portfolio approach as well. The principal argument is that portfolio elements are "beyond the scope of a Habitat Conservation Plan/Natural Community Conservation Plan focused on the Delta." 2013 Draft EIR/S 3A-81. The first part of this answer, that an HCP/NCCP cannot accommodate portfolio elements, is gone because preferred Alternative 4A is not an HCP/NCCP and the idea of BDCP/Fix qualifying as an HCP/NCCP is, for all practical purposes, dead. The second part, that Fix is focused on the Delta, begs the question and ignores the overwhelming consensus that single-focus in-Delta projects cannot solve the problems of water supply and in-stream ecological needs, which are two sides of the same coin.</p> <p>The arguments further conflate the call for portfolio-based alternatives with a demand to instantaneously implement the entire California Water Plan. Considering an alternative that includes some significant storage is not the same as a demand to solve all of the state's water problems in one fell swoop.</p>	<p>See response to comment 2655-1 for discussion of the range of alternatives considered in the development of the EIR/EIS. See Master Response 3 for discussion of the proposed project purpose and need. Please see also response to comment 2655-9.</p>
2655	13	<p>The arguments that "DWR has no control over" local programs, id., and that generally portfolio elements are beyond DWR's reach is also without merit. First, the document and project are joint products of the Lead Action Agencies, DWR and Reclamation. The resources of the federal government are available for this project. Second, the elements are within DWR's reach: DWR has no control of local water supply and recycling. The water contractors are integral partners, along with the federal and state governments, in the BDCP/Fix process. They have been voting members of the BDCP steering committee from the beginning - unlike environmental groups that were ex-officio members. See Planning Agreement regarding the Bay Delta Conservation Plan, October 6, 2006 (ATT 10); see also First Amendment to the Memorandum of Agreement Regarding Collaboration on the Bay Development and Conservation Plan 7 (2011) (ATT 11) (parties to support contractors as applicants and permittees along with DWR). Indeed, the contractors are paying hundreds of millions of dollars to fund the BDCP/Fix planning effort. Id. At 10. And they do have control over local water supply and recycling as well as the money and expertise to implement these programs. The BDCP/Fix federal/state/local partnership is one of extraordinary capacity and opportunity. What better opportunity is DWR waiting for?</p>	<p>The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS. The proposed project is the result of more than seven years' collaboration and consultation with numerous stakeholders, agencies, public water agencies and environmental organizations. The organizations that have participated in the Steering Committee, public meetings or written letters to provide input on the Plan include: American Rivers, Bay Institute, Defenders of Wildlife, The Endangered Species Coalition, Environmental Defense Fund, The Golden Gate Salmon Association, National Audubon Society, Natural Resources Defense Council, the Nature Conservancy, and Planning and Conservation League. The feedback was used to guide the development and subsequent revisions of the Proposed Project and its associated EIR/EIS to reflect concerns addressed from the various groups. All of the documents, studies, administrative drafts, and meeting materials have been posted online since 2010 in an unprecedented commitment to provide public access and government transparency.</p> <p>Although the RDEIR/SDEIS, EIR/EIS and much of the proposed project has been drafted by scientists working for a private consulting firm (ICF) working for the Lead Agencies, the Agencies' scientists have been intimately involved, and their judgments are reflected throughout the EIR/EIS and the proposed project itself. The State is most interested in putting forth the best project that meets the goals of ecosystem improvement and water supply reliability. To the degree that the current Plan is endorsed by some</p>

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			<p>environmental organizations serves as confirmation that the proposed plan protects species, habitats and the Delta ecosystem in a way that is compatible with their goals. The website includes correspondence from agencies and NGOs received prior to the start of the formal comment period. Comments received during the comment period are to be included in the Final EIR/EIS.</p> <p>For more information on public outreach efforts and transparency of the process please see Master Responses 40 and 41.</p> <p>The water agencies throughout the state have developed portfolios to provide the necessary water for their region. The solution to the State's water problem is multi-faceted and will include multiple actions throughout the state. Ways to reduce demand are in process at this time. Various programs for storage, reuse and added reliability are being evaluated and implemented. Those actions do not provide the entire solution; therefore, the project is being proposed as one of the pieces of the overall program. However, neither the State nor Federal government has the authority to dictate action by the various water entities. Please see Appendix 1C, Demand Management Measures in the final EIR/EIS and Master Response 6 (Demand Management) for additional information. The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.</p>
2655	14	<p>The arguments that "DWR has no control over" local programs, id., and that generally portfolio elements are beyond DWR's reach is also without merit. First, the document and project are joint products of the Lead Action Agencies, DWR and Reclamation. The resources of the federal government are available for this project. Second, the elements are within DWR's reach: DWRs support for such supply augmentation cannot transform the BDCP from an incidental take permit focused on the Delta into a broader focus. The BDCP/Fix is no longer pursuing a section 10 incidental take permit. As we pointed out in our November 16, 2011, comments on the First Amendment to the Memorandum of Agreement, description of the project as "issuance of ESA permits" has never been a legally adequate or factually accurate description of the "major federal action" in any event.</p>	<p>The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS. Please refer to Master Response 45 regarding permitting and Master Response 5 regarding compliance with the ESA. See response to comment 2655-1 for discussion of the range of alternatives considered in the development of the EIR/EIS. Please see also response to comment 2655-9.</p> <p>Comment infers that DWR and Reclamation have authority over local water agencies. DWR and Reclamation have authority over the SWP and CVP; however, DWR nor Reclamation can require local agencies to augment supply or storage.</p> <p>Please refer to Master Response 45 regarding permitting and Master Response 5 regarding compliance with the ESA. The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.</p>
2655	15	<p>The arguments that "DWR has no control over" local programs, id., and that generally portfolio elements are beyond DWR's reach is also without merit. First, the document and project are joint products of the Lead Action Agencies, DWR and Reclamation. The resources of the federal government are available for this project. Second, the elements are within DWR's reach: Many of the aspects of a portfolio approach can only be accomplished through Integrated Water Management. "Other reasonable alternatives could be developed by incorporating a suite of measures, including Integrated Water Management." August 26, 2014, EPA Comments 3. What better opportunity to integrate water management on a project-specific basis is DWR waiting for?</p>	<p>See response to comment 2655-1 for discussion of the range of alternatives considered in the development of the EIR/EIS. See Master Response 3 for discussion of the proposed project purpose and need. Please see also response to comment 2655-9.</p>
2655	16	<p>The preferred project and present alternatives have numerous adverse effects that could be eliminated by a portfolio alternative.</p> <p>Unmitigated significant adverse impact/effect GW-8: Statewide long-term depletion of groundwater supplies and interference with groundwater recharge/recharge opportunities. Under Alternative 4A surface water deliveries "may decrease by approximately 179 TAF per year depending on the range of spring Delta outflow requirements compared to Existing Conditions. A decrease in surface water deliveries could result in an increase in groundwater pumping and a decrease in groundwater levels, depending on the total water portfolio of the site-specific areas. Therefore, decreases in surface water deliveries would result in</p>	<p>The RDEIR/SDEIS did not include analyses using CALSIM II or CVHM modeling, and instead extrapolated potential changes in surface water and groundwater conditions based upon results for similar alternatives presented in the Draft EIR/EIS. This Final EIR/EIS includes CALSIM II and CVHM model results for the proposed project (Alternative 4A) as well as Alternatives 2D and 5A. The model results for Alternative 4A indicate that long-term surface water deliveries to SWP and CVP water users in the San Francisco Bay Area, San Joaquin Valley, Central Coast, and Southern California areas would be higher under Alternative 4A as compared to the No Action Alternative. Therefore, groundwater conditions in these areas would be similar or improved under Alternative 4A as compared to the No Action Alternative.</p> <p>See response to comment 2655-1 for discussion of the range of alternatives considered in the development</p>

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		significant impacts on groundwater resources under Alternative 4A." 2015 RDEIR/S 4.3.3-8. The "overall impact for Alternative 4A [on groundwater supplies and recharge is] considered significant and unavoidable." Id. 4.3.3-8.	of the EIR/EIS. Please see also response to comment 2655-9.
2655	17	<p>The preferred project and present alternatives have numerous adverse effects that could be eliminated by a portfolio alternative.</p> <p>Significant unmitigated adverse impact/effect GW-9: Degradation of statewide groundwater quality. "If groundwater pumping is increased, there could be resulting changes in regional patterns of groundwater flow and a change in groundwater quality. Due to the uncertainty associated with these effects, this effect is considered adverse. For the same reasons discussed earlier in connection with the possibility of increased groundwater pumping in Southern California, there is no feasible mitigation available to mitigate any changes in regional groundwater quality." 2015 RDEIR/S 4.3.3-8. Implementation "of Alternative 4A at Early Long Term and Late Long Term could degrade groundwater quality in portions of the Southern California SWP Export Service Areas; this impact is considered significant due to the possibility of increased groundwater pumping and the resulting effects on regional groundwater flow patterns. As discussed above, there is no feasible mitigation to address this significant impact. The impact would be considered significant and unavoidable in these areas." Id. 4.3.3-8-9. The "overall impact for Impact Gw-9 Alternative 4A is considered significant and unavoidable." Id. 4.3.3-9.</p>	See response to comment 2655-16.
2655	18	<p>The preferred project and present alternatives have numerous adverse effects that could be eliminated by a portfolio alternative.</p> <p>Significant adverse impact/effect WQ-11: Increased electrical conductivity. "The increase in EC in the Sacramento River at Emmaton, particularly during summer months of dry and critical water years, and the additional exceedances of water quality objectives in the San Joaquin River at Prisoners Point constitute an adverse effect on Water Quality. Mitigation Measure WQ-11 would be available to reduce these effects." 2015 RDEIR/S 4.3.4-28.</p> <p>"Based on these findings, this impact in the Plan Area is considered to be significant. Implementation of Mitigation Measure WQ-11 would be expected to reduce these effects to a less-than-significant level." Id. 4.3.4-30.</p> <p>Mitigation measure WQ-11, however, would not be applied when it is needed most: in critical water years. "These actions [comprising WQ-11] would not be required in critical water years, when the objective does not apply." 2015 RDEIR/S. This constitutes a significant unmitigated negative impact/adverse effect because it exacerbates an already critical salinity problem when it is at its worst. The "objectives" that do not apply in critical years are SWRCB water quality objectives for salinity. However, regardless of the suspension of these regulatory requirements in critical years because current infrastructure cannot meet both these environmental needs and minimal export needs for the protection of human health and safety, the project does have a significant unmitigated effect on the environment. It increases salinity at Prisoners Point, Jersey Point, and Emmaton where it has adverse impacts on Stripped Bass and other species.</p> <p>This is negative impact is an inherent part of the project. Changing the points of diversion to the north Delta means that water that would, under existing conditions, flow through the Delta and contribute to dilution of salinity will be diverted before it reaches Delta streams and sloughs and diverted through the tunnels directly to the export pumps. Shifting exports</p>	<p>See response to comment 2655-1 for discussion of the range of alternatives considered in the development of the EIR/EIS. Please see also response to comment 2655-9.</p> <p>Although the proposed project would not increase the overall volume of Delta water exported, it would make the deliveries more predictable and reliable, while restoring an ecosystem in steep decline. Local water agencies will need to invest in additional strategies and technologies, including efficiency improvements, conservation, recycling, and desalination, to meet future water demand. The proposed project is one part of a diverse portfolio of strategies needed to meet California's overall water management needs. It is not a substitute for increased commitments to other water supply solutions, including recycling, desalination, water conservation and storage.</p> <p>With regard to performance standards or criteria, it is important to recognize that the proposed project must be adaptively managed for a range of circumstances and conditions. The operational criteria included in the preferred alternative, 4A, are based on several years of coordination with fish agencies and incorporation of the best available science to avoid and minimize the effects of changes in Delta operations. The existing south Delta and proposed NDD would operate in coordination and the maximum diversion capacity at each facility is subject to various constraints included in the preferred alternative, 4A, as well as existing regulations such as D-1641. Current operations of the SWP and CVP are described in detail in the EIR/EIS, and reflect the lead agencies' highly successful record of operating to the water quality standards in the Delta. Please see Master Response 14 for additional discussion of water quality.</p>

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		<p>to existing south-Delta diversion points will not reasonably be expected to avoid this impact because south Delta pump operations themselves draw salt water upstream from the bay and contribute to the problem and self-limit the ability to pump from the south Delta location. See ATT 13.</p> <p>Further, Mitigation Measure WQ-11 impermissibly defers formulation of the content of the mitigation measure to some future date. "Generally CEQA requires mitigation measures to be formulated in an EIR and not deferred to the development of future plans or measures" that are promised to mitigate impacts. Center for Biological Diversity v. Dept. of Fish and Wildlife, 183 Cal. Rptr. 3d 736, 754 (2015). The only exception is where the deferred mitigation measure provides a performance standard that will be met and demonstrates that the impact can be mitigated in the manner described. Id. The deferred measures must "satisfy specific performance criteria articulated at the time of project approval." Sacramento Old city Ass'n v. City Council, 229 Cal. App. 3d 1011, 1028-1029 (1991). WQ-11 relies on commitments to "Adaptively Manage Diversions at the North and South Delta Intakes to Reduce or Eliminate Water Quality Degradation in Western Delta" as well as adaptively managing the head of Old River barrier and north and south Delta intakes to eliminate exceedances at Prisoners Point. 2015 DEIR 4.3.4-30. These measures depend on an impermissibly deferred adaptive management plan. The project proponents have steadfastly refused to articulate how the adaptive management plan will work and have not demonstrated it can be effective.</p>	
2655	19	<p>The preferred project and present alternatives have numerous adverse effects that could be eliminated by a portfolio alternative.</p> <p>Significant adverse impact/effect WQ 7: Chloride concentrations. "All of the Alternative 4H1-H4 Scenarios would result in increased water quality degradation ... and could contribute measurable water quality degradation relative to the 303[d] impairment in Suisun Marsh." 2015 RDEIR/S 8-226. "Substantial long-term degradation may occur at Antioch under all of the H1-H4 Scenarios." Id. 8-227.</p> <p>However, the NEPA Effects and CEQA Conclusion sections at 2015 RDEIR 4.3.4-18 conclude that there would be no adverse effect or significant adverse impact. These conclusions appear to be based on re-visiting the results of the original modeling and making additional assumptions, providing explanations, and re-visiting metrics. Questionable conclusions include the following:</p> <p>1) The increase in long-term average chloride concentration at Staten Island would be 25%. 2015 DEIR 4.3.4-13. But this is dismissed as insignificant because it is "extremely small in absolute terms" relative to "applicable water quality objectives." Id. However, as discussed at section IV.A.2, existing applicable water quality objectives are recognized as inadequate. Water quality for fish, municipal, and industrial uses suffers harm from excessive chloride concentrations under existing conditions. A 25% increase over existing conditions is an adverse effect and significant impact under these circumstances.</p> <p>2) "In the Sacramento River at Emmaton, there would be an increase in chloride objective exceedance during the drought period modeled, from 55% to 57% under operations scenario H3, although these changes are within the uncertainty of the modeling approach; there would be no increase in objective exceedances under operations scenario H4." 2015 RDEIR/S 4.3.4-14.</p>	<p>See response to comment 2655-1 for discussion of the range of alternatives considered in the development of the EIR/EIS. Please see also response to comment 2655-9.</p> <p>The commenter raises concerns over modeled increases in the Mokelumne River at Staten Island. Tables Cl-69 and Cl-70 in Appendix 8G, Chloride, of the Final EIR/EIS confirm the conclusions in the RDEIR/SDEIS for chloride in Impact WQ-7 for Staten Island. These tables show that long-term average modeled increases in chloride at Staten Island would be 0–1 mg/L relative to the No Action Alternative (this comparison allows for isolating the effect of the alternative from effects due to climate change and sea level rise). This change could not result in an adverse impact at Staten Island, where long-term average concentrations would be 17 mg/L (Table Cl-81 in Appendix 8G of the Final EIR/EIS), well below the secondary drinking water MCL of 250 mg/L.</p> <p>Regarding chloride changes at Emmaton, relative to the No Action Alternative, which isolates effects due to Alternative 4A separate from climate change and sea level rise, the frequency of objective exceedance would decrease under Alternative 4A (Table Cl-81 in Appendix 8G of the Final EIR/EIS. Thus, this alternative would not contribute to chloride exceedances at Emmaton.</p> <p>Regarding Montezuma Slough Salinity Control Gates, the description of Alternative 4A (and 2D and 5A) in the RDEIR/SDEIS included the assumption that the gates would continue to be operated consistent with the current BiOps (10-20 days per year), which was found to have the same or similar effects on migratory fish as 0 days of operation (NMFS 2009). However, the modeling of Alternative 4A (and 2D and 5A) did not include this assumption. To address this inconsistency, the water quality analysis for Alternative 4A (and 2D and 5A) presented in the RDEIR/SDEIS relied, in part, on sensitivity analyses conducted to evaluate the effect of gate control on EC results (presented in Appendix 8H, Electrical Conductivity, Attachment 1). The modeling results and analysis in Impact WQ-11 for EC presented in Chapter 8, Water Quality, of the Final EIR/EIS is based on modeling that was updated to include operation of the salinity control gates. The updated modeling results and impact assessment for EC in the Final EIR/EIS confirms the impact findings in the RDEIR/SDEIS that Alternative 4A (and 2D and 5A) would have a less than significant impact to EC in</p>

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		<p>3) Changing assumptions about operations of the Montezuma Slough Salinity Gates. Original modeling assumed the gates would not be operated and showed adverse effects of Alternative 4A on chloride concentrations. When the model was changed to include operation of the gates, the adverse effect was diminished. However, operation of these Gates has its own negative effects and the wisdom of the operating the gates at all has been questioned. The gates "did have a negative effect on salmon passage" and attempts at modifying the gates "did not improve salmon passage at the SMSG." Suisun Marsh Salinity Control Gates Salmon Passage Evaluation Report 1 (DWR and DFG 2003) (ATT 12). Because of the opaque nature of the environmental documents, it is unknown if the gates were not included in original modeling in anticipation that they would not be operated because of their negative impact on salmon populations in view of recent crashes in salmon abundance. In any event, reliance on gate operation to find no adverse effect was an unreasonable assumption. There is a fair argument that locking gate operation in place to avoid salinity impacts of Alternative 4A itself may have a negative impact on Salmon populations that must be analyzed.</p> <p>Overall, the finding that there is no adverse effect/significant impact of WQ-11 is not supported.</p>	Suisun Marsh.
2655	20	<p>The preferred project and present alternatives have numerous adverse effects that could be eliminated by a portfolio alternative.</p> <p>Significant adverse effect/unmitigated impact WQ-14: Degradation of water quality by increased mercury concentrations. The Lead Agencies propose wetland creation as mitigation for the loss of wetlands due to project facilities replacing existing wetlands. First, there is no good evidence that "wetland creation" can ever be an adequate replacement for existing wetlands. This is especially true here. Wetland projects that enhance existing wetlands elsewhere create no new wetland areas. Therefore they do not mitigate the destruction of other wetlands for project construction because the wetlands that were destroyed are not replaced and there is a decrease in total wetland area equal to the amount of wetlands destroyed by the project. See 2015 ISB DEIR Review 6-7. The idea that wetlands can be created from farmland, other land that is not already a wetland or emergent wetland, or from uplands is highly speculative and unproven. These attempts often end up as mud holes that may look in some respects like a wetland but have little ecological function. This type of wetland creation cannot serve as mitigation for the destruction of wetlands because the outcome is too speculative and theoretical to serve as a concrete mitigation measure. While there may be an offset in the amount of acres of "wetland," there is no evidence that these created wetlands will replace the biological functions of the destroyed wetlands. In fact, evidence is to the contrary. At the very minimum, the ration of "created" wetlands to destroyed wetlands would have to be very high.</p> <p>This mercury pollution is an unlawful violation of water quality standards and must be removed from the project because it cannot be justified on the basis that it is a mitigation measure. It is pollution without any justification.</p>	See response to comment 2655-1 for discussion of the range of alternatives considered in the development of the EIR/EIS. Please see also response to comment 2655-9. Please refer to Master Response 14 regarding mercury. For responses to comments related to the Delta Independent Science Board's letters, please refer to comment letters BDCP 1448 and/or RECIRC 2546.
2655	21	<p>The preferred project and present alternatives have numerous adverse effects that could be eliminated by a portfolio alternative.</p> <p>Unmitigated destruction of wetlands. The destruction of wetlands for the construction and</p>	The commenter does not offer any evidence on how the project would result in significant impacts related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS. See response to comment 2655-1 for discussion of the range of alternatives considered in the development of the EIR/EIS. Please see also response to comment 2655-9.

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		operation of project facilities remains an adverse effect/significant unmitigated impact.	
2655	22	<p>The preferred project and present alternatives have numerous adverse effects that could be eliminated by a portfolio alternative.</p> <p>Significant adverse effect/impact WQ32: Microcystis. The NEPA and CEQA conclusions that Alternative 4A would not have adverse effects is unsupported. "Modeling that adequately accounted for the effects of water conveyance facilities operations and maintenance and the hydrodynamic impacts of the environmental commitments on long-term average residence times in the six Delta subareas was not available for Alternative 4A, so the hydrodynamic effects of this alternative on Microcystis were determined qualitatively." This amounts to unjustified speculation driven by a rush to push Alternative 4A to approval. The Lead Agencies have the capacity to do exactly the modeling that was foregone. They have done it for other alternatives, and it showed significant adverse effects. Such modeling is the basis for all the impacts analysis on water quality. Abrupt departure here is suspect. The lead agencies have failed to take the requisite "hard look" at this impact. Taking that look is indisputably within their capacity and it is required to comply with NEPA and CEQA. In its absence, this impact must be considered adverse and significant.</p>	<p>Please refer to Master Response 14 regarding the adequacy of the Microcystis assessment and new information supporting the Microcystis assessment for Alternatives 4A, 2D, and 5A. In addition see also Master Responses 14 and 30 regarding the modeling that was done to support the water quality assessments in the RDEIR/SDEIS and Final EIR/EIS for Alternative 4A.</p> <p>See response to comment 2655-1 for discussion of the range of alternatives considered in the development of the EIR/EIS. Please see also response to comment 2655-9.</p>
2655	23	<p>The preferred project and present alternatives have numerous adverse effects that could be eliminated by a portfolio alternative.</p> <p>Significant adverse effect/impact AQUA-22: Longfin smelt. Project operations of Alternative 4A will have an adverse effect on spawning, egg incubation, and rearing habitat for longfin smelt. ES-50. The proposed mitigation measure is "adjustment via adaptive management, which is intended to allow for further evaluation of spring outflow." This is an unlawful deferral of mitigation based on nonexistent adaptive management as described at subparagraph c. above and section IV.B below. The impacts on longfin smelt, therefore, must be considered adverse and significant.</p>	<p>See response to comment 2655-1 for discussion of the range of alternatives considered in the development of the EIR/EIS. Please see also response to comment 2655-9.</p> <p>Considerable scientific uncertainty exists regarding the Delta ecosystem, including the effects of CVP and SWP operations and the related operational criteria. To address this uncertainty, DWR, Reclamation, DFW, USFWS, NMFS, and the public water agencies will establish a robust program of collaborative science, monitoring, and adaptive management. It is assumed the Collaborative Science and Adaptive Management Program (AMMP) developed for Alternative 4A would not, by itself, create nor contribute to any new significant environmental effects; instead, the AMMP would influence the operation and management of facilities and protected or restored habitat associated with Alternative 4A.</p> <p>Collaborative science and adaptive management will support the proposed action by helping to address scientific uncertainty where it exists, and as it relates to the benefits and impacts of the construction and operations of the new water conveyance facility and existing CVP and SWP facilities.</p> <p>The collaborative science effort is expected to inform operational decisions within the ranges established by the biological opinion and 2081b permit for the proposed action. However, if new science suggests that operational changes may be appropriate that fall outside of the operational ranges evaluated in the biological opinion and authorized by the 2081b permit, the appropriate agencies will determine, within their respective authorities, whether those changes should be implemented. An analysis of the biological effects of any such changes will be conducted to determine if those effects fall within the range of effects analyzed and authorized under the biological opinion and 2081b permit. If NMFS, USFWS, or DFW determine that impacts to listed species are greater than those analyzed and authorized under the biological opinion and 2081b Bay Delta Conservation Plan/California WaterFix permit, consultation may need to be reinitiated and/or the permittees may need to seek a 2081b permit amendment. Likewise, if an analysis shows that impacts to water supply are greater than those analyzed in the EIR/EIS, it may be necessary to complete additional environmental review to comply with CEQA or NEPA. For additional information regarding performance standards and the effectiveness of adaptive management, please see Master Response 33. Please see also Master Response 22 for discussion of the adequacy of proposed mitigation measures.</p>
2655	24	The preferred project and present alternatives have numerous adverse effects that could be	See response to comment 2655-1 for discussion of the range of alternatives considered in the development

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		<p>eliminated by a portfolio alternative.</p> <p>Significant adverse effect/impact AQUA-78: Chinook salmon migration. This impact is significant. ES-54. The proposed mitigation measure, AGUA-78D, states that "Whenever possible during real-time operations, project proponents will slightly adjust Shasta, Folsom and/or Oroville Reservoir operations to ensure that instream flows are sufficient to minimize or avoid migration-related effects to fall-run Chinook salmon." 2015 RDEIR/S 4.3.7-193. This is an unlawful deferred mitigation as described at subparagraph c. above and section IV.B below. There is no "real-time operations" monitoring or adaptive management mechanism, and all indications are that project proponents either cannot or will not develop one. The preface of "wherever possible" is not quantified or analyzed as to when and under what conditions it will be possible.</p> <p>The impacts on Chinook salmon migration, therefore, must be considered adverse and significant.</p>	<p>of the EIR/EIS. Please see also response to comment 2655-9.</p> <p>As noted in the new Appendix 11E in the Final EIR/S, Sensitivity Analysis to Confirm RDEIR/SDEIS Determinations for Fish and Aquatic Species Using Updated Model Outputs for Alternative 2D, 4A, and 5A, there would be no need for Mitigation Measure AQUA-78d if 2010 and 2015/BA modeling had been used in this analysis because Impact AQUA 78 determination would not be adverse and less than significant. These two modeling versions have been updated to better reflect the system operations under Alternative 4A from the RDEIR/SDEIS modeling, which included some assumptions that were no longer valid.</p> <p>A footnote has been added to the table in the Executive Summary explaining this.</p> <p>Please see also response to comment 2655-24 for discussion of adaptive management and adequacy of proposed mitigation measures.</p>
2655	25	<p>The preferred project and present alternatives have numerous adverse effects that could be eliminated by a portfolio alternative.</p> <p>Significant unmitigated impact/adverse effect AQUA-201: Striped bass and American shad. This impact is significant and unmitigated for CEQA purposes. ES-59. Entrainment at the new north Delta intakes of early life stage striped bass and American shad would significant under CEQA and entrainment of early life state American shad would be adverse under NEPA. 2015 RDEIR/S 4.4.7-213-214.</p>	<p>See response to comment 2655-1 for discussion of the range of alternatives considered in the development of the EIR/EIS. Please see also response to comment 2655-9.</p> <p>It should be noted that although this impact is considered significant and unavoidable in the EIR/EIS, subsequent impacts to later life stages and the population overall are uncertain. As described in Chapter 11, Fish and Aquatic Resources, density-dependence during the juvenile stages of the striped bass life cycle means that losses of early life stages do not necessarily translate into proportional reductions in abundance of older individuals, and entrainment has not recently been identified as a significant driver of juvenile abundance (Mac Nally et al. 2010; Thomson et al. 2010). In addition, American shad early life stages may rear to sufficiently large size above the Delta to avoid entrainment at the north Delta intakes.</p> <p>In cases where it is not possible to offset those significant impacts (see Chapter 31, Other CEQA/NEPA Required Sections for a complete list of significant and unavoidable impacts), that information will be provided in the Statement of Overriding Considerations and will be acted on by the decision makers with each lead agency to determine if the project should still be approved or not.</p>
2655	26	<p>The preferred project and present alternatives have numerous adverse effects that could be eliminated by a portfolio alternative.</p> <p>Significant impacts/effects on aesthetics and Delta-as-place. Construction and operation of the north Delta intakes and associated infrastructure would existentially transform one of the most scenic and iconic sections of the Delta as viewed from both land and water. The industrial character of the facilities and restrictions on boating and land access are incompatible with the Delta Reform Act's requirements to preserve Delta as place and respect existing land uses. Under these circumstances these impacts are significant and adverse for purposes of NEPA and CEQA.</p>	<p>See response to comment 2655-1 for discussion of the range of alternatives considered in the development of the EIR/EIS. Please see also response to comment 2655-9.</p> <p>Chapter 16 of the EIR/EIS and RDEIR/SDEIS Appendix A (Socioeconomics) identifies the unique features of the Delta and describes the potential effects on Delta communities. Please see chapter 15 for a discussion on impacts to recreation. Impacts to agriculture are identified and discussed in Chapter 14; the lead agencies have proposed measures that would support and protect agricultural production in the Delta by securing agricultural easements and/or by seeking opportunities to protect and enhance agriculture with a focus on maintaining economic activity on agricultural lands. Please see Master Response 18 for more information on agricultural mitigation and Master Response 24 for information on the Delta As a Place.</p>
2655	27	<p>The preferred project and present alternatives have numerous adverse effects that could be eliminated by a portfolio alternative.</p> <p>Adverse environmental impacts on recreational navigation of the head of Old River Barrier and violation of Federal statutory navigability requirements. Making the head of Old River barrier a permanent engineering structure is a significant change in the physical environment and makes a temporary seasonal (although longstanding) impairment to</p>	<p>See response to comment 2655-1 for discussion of the range of alternatives considered in the development of the EIR/EIS. Please see also response to comment 2655-9.</p> <p>Waterways will still be navigable during construction and operation of the proposed project. The proposed project would result in temporary impacts to boaters and on-water recreationists. However, the project includes plans to reduce those impacts as much as possible with implementation of environmental commitments to prepare and implement a water navigation plan and provide notification of construction and maintenance activities in waterways (Appendix 3B, Environmental Commitments). Additionally,</p>

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		<p>recreational boating permanent.</p> <p>The severe negative impact on boaters of barriers to recreational navigation is documented in the comments we submitted to Lead Agency DWR on March 18, 2015, with regard to their proposed Emergency Drought Barriers Project (ATT 13). Our Drought Barrier Comments also point out that barriers to recreational navigation violate the act of Congress admitting California to the union, which requires keeping "all navigable waters within the said State shall be common highways, and forever free." This barrier and the cumulative impact of the many barriers proposed at various locations by the Lead Agencies and others violate this act of Congress. See 9 Stat. 453 (1850).</p> <p>Those comments are incorporated here and apply equally to this barrier. The many letters from boaters objecting to barriers to recreational navigation attached to our Drought Barrier Comments are worth perusal.</p> <p>This is a significant impact/adverse effect that must be analyzed, avoided, or mitigated.</p>	<p>Mitigation Measure TRANS-1a would reduce impacts on marine navigation by development and implementation of site-specific construction traffic management plans, including specific measures related to management of barges and stipulations to notify the commercial and leisure boating communities of proposed barge operations in the waterways.</p> <p>For operable gate sites, construction would be phased, allowing for at least half of the waterway to remain open at any one time. In this way, use of the waterway for recreational navigation would be allowed to continue during construction.</p>
2655	28	<p>Alternatives containing one or more portfolio element would avoid/eliminate/mitigate to a level of insignificance the adverse effects. Enhancing in-Delta flows by providing new water while at the same time taking pressure off of groundwater supplies and providing new water could eliminate the adverse water quality and groundwater impacts described above. By providing new water, the portfolio approach would also allow reduction or elimination of massive new infrastructure in the most scenic part of the Delta that damages the Delta as place and impairs recreational boating and other recreation. This could eliminate impacts k and l described above. New water also allows more flexibility in diversions that could eliminate impacts.</p> <p>Providing more flow in the Delta is the key to restoring the Delta ecosystem. Providing new water allows more flow to remain in the Delta because it provides a substitute for drawing down Delta flows as a source of supply. The impacts listed in sections 1a-d above could be eliminated by including one or more of the portfolio elements listed at section II.C.</p> <p>Providing additional groundwater recharge capacity through modest new infrastructure in the Southern California, which could use water available at times of surplus (perhaps in conjunction with new north of Delta surface storage), would eliminate adverse effects GW-8 and GW-9. The Water Replenishment District of Southern California engages in groundwater recharge. See generally Water Replenishment District of Southern California Engineering and Survey Report, March 5, 2015 (ATT 14). Agencies like WRPDSC provide partners for eliminating the adverse effects of GW-8 and GW-9 through increased recharge. Providing surface storage by itself would also eliminate adverse effects GW-8 and GW-9 because it would provide water supplies alternative to further drawing down already depleted aquifers.</p> <p>Surface storage and groundwater recharge would also eliminate adverse effects WQ-7 and WQ-11 because "new water" available from groundwater recharge and/or surface storage would replace water drawn from Delta flows, leaving more water available for in-stream flow. It is the reduction in freshwater flows that causes increases in EC and chloride concentrations. For example, installation of the Suisun Marsh Salinity Gates was mitigation for impacts of the SWP and CVP diminishing freshwater flows in the first place. See, e.g., Chris Enright, DWR, Suisun Marsh Salinity Control Gate: Purpose, Operation, and Hydrodynamics/Salinity Transport Effect 3 (ATT 15).</p>	<p>See response to comment 2655-1 for discussion of the range of alternatives considered in the development of the EIR/EIS. Please see also response to comment 2655-9.</p>

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		<p>Conservation creates new water to replace water inappropriately drawn from Delta flows at times when there is inadequate flow to support both exports and in-stream needs.</p> <p>Integrated Water Management allows the coordination of local, regional, and statewide supplies. It allows water to go where it is needed most when it is needed most from the least environmentally harmful means of supply. The CVP and SWP systems, along with interconnected regional canals, link the water management districts of concern in almost all of California in a "water internet." Many of the water management districts of concern are already BDCP/Fix partners. Why not use this partnership to implement Integrative Water Management for this project?</p> <p>A multi-focus solution alternative can have a new point of diversion as its major (or a major) element. The new point of diversion could be located exactly where the Alternative 4A point of diversion is located. The alternative could retain the current design of the twin tunnels. Addition of some complimentary component that would alleviate the adverse impacts by working in conjunction with the tunnels would satisfy the legal requirements of NEPA and CEQA. We are not asking the Lead Agencies to give up their project or pursue a radically different alternative. We are asking them to take a hard look at an alternative that fills the critical gaps in all of the currently proposed alternatives and preferred project, and makes the project work.</p> <p>Development and consideration of such an alternative is all the more imperative in light of the failure of BDCPs habitat restoration component.</p> <p>It was thought by BDCP proponents that massive amounts of new shallow-water habitat would provide enough ecological benefit to allow for diversion of more water without net damage to the ecosystem. The entire BDCP was premised on the assumption that habitat could be substituted for flow. In essence, BDCP visionaries theorized that habitat restoration would be a source of "new water." The intensive investigation and modeling of this assumption, at a cost of tens of millions of dollars over six years, proved that it doesn't work. It was worth a try but it doesn't work. Now what?</p> <p>The answer is to refine the project by including sources of new water that are already proven to work. The law and common sense demand that the Lead Agencies at least develop and consider such an alternative before making a decision to either abandon the whole effort through adoption of the no-action alternative or adopt a project that has severe negative environmental consequences and falls far short of the aspirations of project proponents.</p> <p>Integration of a portfolio approach could well resuscitate the dream-come-true of a Habitat Conservation Plan and the attendant fifty-year take permit that the Action Lead Agencies and contractors desire.</p>	
2655	29	<p>Screening Alternative 9A was unreasonably eliminated and the 2015 RDEIR/S should include a detailed analysis of alternative 9A. The 2010 State Water Resource Control Board Flow Criteria Report, commissioned by the California Legislature for use in making BDCP planning decisions, concluded that restoration of 75% of unimpaired Delta flow was the minimum needed to protect public trust resources. This finding deserves serious consideration. However, the Lead Agencies have dismissed attaining 75% of unimpaired flow and further dismissed any percentage of unimpaired flow as a metric for the preferred Alternative.</p>	<p>FEIR/EIS Appendix 3A "Identification of Water Conveyance Alternatives, Conservation Measure 1" provides an overview of the process the lead agencies followed in developing alternatives that were ultimately brought forward for detailed assessment in the BDCP/CWF EIR/EIS. Alternative 9A was considered in the screening process and was eventually eliminated from evaluation in the EIR/EIS because preliminary hydrologic modeling indicated that Delta outflow criteria could not be accomplished even with reducing deliveries to upstream water right holders and operation of the water conveyance facilities probably would violate federal statutes and regulations. As an example, reductions in cold water pool storage at major upstream reservoirs could result in non-compliance with the NMFS Biological Opinion. In addition the</p>

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		<p>Summarily dismissed screening Alternative 9A was the only alternative addressing attainment of 75% of unimpaired flow.</p> <p>Although the confused presentation of materials makes it difficult to discern with any certainty the Lead Agencies' reason or reasons for eliminating alternatives from detailed consideration, it appears that Alternative 9A was eliminated because 1) "based upon preliminary model analysis, both of these alternatives [Alternatives 8A and 9A] would result in reductions in water deliveries to [upstream] Sacramento River water rights holders in order to achieve the flow and water quality objectives in these operations alternatives," 2013 Draft EIR/S App. 3A table 3A-17 at 3A-150; and 2) "preliminary modeling analysis indicates that Delta outflow criteria could not be accomplished even with reducing deliveries to upstream water rights holders." Id. App. 3A table 3A-14 at 3A-148. The Lead Agencies further argue that "[r]educed water diversions from these water rights holders cannot be feasibly accomplished through approval of the BDCP [because] these water rights holders are not applicants for the BDCP." Id. 2013 App. 3A 3A-68.</p> <p>First, DWR has, in important past agreements, paid upper Sacramento Valley water rights holders for forgoing use of their rights on a per acre-foot basis so DWR could meet its environmental in-stream flow obligations and water supply goals. Phase 8 Settlement Agreement 14-15 (ATT 16). DWR has also agreed to share costs with upstream rights holders to help them develop new local projects to provide new water and allow more in-stream flow - available downstream to DWR for meeting environmental obligations and water supply goals. See Phase 8 Settlement Agreement passim. The Phase 8 settlement is closely related to the Sacramento Valley Water Management Agreement (Attachment 17), a partnership between DWR, Reclamation, upstream Sacramento River water rights holder, the water contractors, and others.</p> <p>Indeed, Alternative 4A itself depends upon "spring outflow criteria, which are intended to be provided through the acquisition of water from willing sellers." 2015 RDEIR/S 4.1-6. A significant restoration of Delta flows, including a successful BDCP/Water Fix, may involve similar agreements and acquisitions in the future. Dealing appropriately and lawfully with upper Sacramento River water rights holders and other upstream diverters is feasible and may be part of a reasonable alternative that is based on achieving a percentage of unimpaired flow. The impairment-of-upstream-rights reason provided for summarily dismissing Alternative 9A was not reasonable.</p> <p>Second, the flow objectives could be met in a phased approach over time. Achievement of 75% of unimpaired flow might take 20 years or more as a BDCP/Water Fix portfolio alternative is implemented. In considering the environmental effects of its proposed actions, Congress directed all federal agencies to consider "the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity." 42 U.S.C. § 4332(c)(iv). The Lead Agencies have summarily dismissed screening Alternative 9A based on local short-term uses of upper Sacramento Valley water rights holders and failed to consider resolving short-term considerations in light of the need for long-term ecological productivity of the Delta ecosystem. Achievement of 75% of unimpaired flow (or any percentage of unimpaired flow) does not have to happen on project ribbon-cutting day. Project milestones could include, for example, 60% within five years of project operation, 65% within ten years, 70% within 20 years, 75% within 25 years; or any other phased implementation of some ultimate percentage of unimpaired flow as determined through detailed analysis as part of a portfolio alternative. The BDCP was</p>	<p>preliminary modeling conducted for Alternative 9A indicated that meeting Delta outflow goals may require changes in the legal Sacramento River water rights or entitlements of third parties other than the BDCP/CWF lead agencies. Finally, the State Water Board specifically stated in their 2010 report that although the report provided an assessment of the flows needed to protect the Delta and its ecological resources, it does not address other public trust resource considerations.</p> <p>It should also be noted that Section 4 of the RDEIR/SDEIS does indicate that spring outflow objectives under Alternative 4A are not solely dependent on the acquisition of water from willing sellers. If sufficient water cannot be acquired for the purpose of meeting these objectives, the objectives would be accomplished through operations of the SWP and CVP.</p> <p>See response to comment 2655-1 for discussion of the range of alternatives considered in the development of the EIR/EIS. Please see also response to comment 2655-9. See response to comment 2655-3 includes further discussion of Delta outflow and water rights. With regards to water rights, please also see Master Response 32.</p>

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		<p>conceived as a fifty-year plan. These time horizons are reasonable in light of the project description, purpose, and need.</p> <p>Unimpaired flow as a metric of achieving restoration of restored Delta flows deserves further consideration in light of the findings of the Flow Criteria Report: In order to preserve the attributes of a natural variable system to which native fish species are adapted, many of the criteria developed by the State Water Board are crafted as percentages of natural or unimpaired flows. These criteria include: 75% of unimpaired Delta outflow from January through June; 75% of unimpaired Sacramento River inflow from November through June; and 60% of unimpaired San Joaquin River inflow from February through June.</p> <p>Flow Criteria Report 5. The current Fix approach of Alternative 4A to Delta flows, measuring bypass flows at the new point of diversion, is not consistent with the Flow Criteria Report or the California Legislature's directive to restore Delta flows. Bypass flows were not the metric developed to protect public trust resources and do not address restoring natural Delta flows.</p> <p>We do not suggest, and have never suggested, that the Lead Agencies are required to adopt the Flow Criteria Report as the flow requirements for BDCP/WaterFix. It is an informational document and was prepared for the SWRCB by an independent panel of eminent Delta scientist. We do suggest that it is due considerable regard rising to the level of further consideration as part of an alternative that starts out by including the elements, in addition to conveyance, that will be required to implement it and not disrupt water supply or other environmental needs. Such elements might include any of the portfolio elements as discussed herein and/or modifications, such as an unimpaired flow plus alternative, just as Alternative 4A depends upon an H3 plus operational scenario.</p> <p>In this light, Alternative 9A (or its derivative(s)) should be given full consideration in a further revised RDEIR/S.</p>	
2655	30	<p>On the whole, alternative 4A does not advance the coequal goals and, in the long term, hinders achievement of the coequal goals.</p> <p>The coequal goals and inherent sub-goals apply To BDCP/Water Fix. The Delta Reform Act requires that all state agencies conform their actions to the Act's coequal goals, which are the pole star of Delta policy. The coequal goals are "providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem." Cal. Water Code § 85054. Inherent in the coequal goals are the subgoals of "[r]estor[ing] Delta flows and channels to support a healthy estuary and other ecosystems," Cal. Water Code § 85302(e)(4), and "[i]mproving water quality to meet drinking water, agriculture, and ecosystem long-term goals." Cal. Water Code § 85302(e)(5). That these requirements apply to the BDCP/Fix is not in dispute.</p>	<p>See Master Response 31 for more information about the Delta Reform Act.</p> <p>No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised.</p>
2655	31	<p>On the whole, alternative 4A does not advance the coequal goals and, in the long term, hinders achievement of the coequal goals.</p> <p>Alternative 4A does not restore Delta flows or protect public trust resources within the meaning of the Delta Reform Act. The Act provides that "the public trust doctrine shall be the foundation of state water management policy and [is] particularly important and applicable to the Delta." Cal. Water Code § 85023. Restoring and maintaining adequate Delta flows is the cornerstone of meeting public trust obligations with respect to Delta</p>	<p>The EIR/EIS fully addresses the potential water quality effects of the California WaterFix on beneficial uses upstream of the Delta, in the Delta and downstream of the Delta. Most of the water quality constituent effects would not be significant. Where significant effects are identified impacts are reduced to less than significant levels with mitigation (i.e electrical conductivity). One impact for the California WaterFix related to mercury levels in tidal restoration areas is considered significant. Please refer to Chapter 8, Water Quality and Master Response 14, which addresses water quality issues. See Master Response 31 for more information about the proposed project's consistency with the Delta Reform Act. See response to comment 2655-3 includes further discussion of Delta outflow and water rights. Master Response 13 includes a</p>

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		<p>water management policy.</p> <p>Alternative 4A relies, in large measure, on extant standards in the State Water Resource Control Board 2006 Bay-Delta Water Quality Control Plan as implemented through Water Rights Decision No. 1641 ("D-1641"). See, e.g., 2015 RDEIR/S 4.1-9 n.17 ("an alternative operation for spring outflow would be to follow flow constraints established under D-1641"); see also id. At 4.1-10-12. However, it has been established that D-1641 standards are inadequate to protect public trust resources. The Flow Criteria Report, commissioned explicitly to guide the Lead Agencies in this regard, concludes that "[r]ecent Delta flows [as controlled by] ... existing regulatory requirements included in the 2006 Bay-Delta Plan are insufficient to support native fishes for today's habitats." Flow Criteria Report 5 &amp; n.3. See also Delta Plan 148 ("The best available science suggests that currently required flow objectives within and out of the Delta [D-1641] are insufficient to protect the Delta ecosystem.").</p> <p>In many respects, the NEPA and CEQA conclusions of no adverse effect/significant impact are based on the project not violating applicable laws and regulations with respect to water quality, even though the project admittedly causes some water quality degradation. Of the thirty-five water quality impacts listed for Alternative 4A in Table ES-9, none is listed as "beneficial" although the table key provides for a beneficial listing. 2015 RDEIR/S ES-45. One is listed as adverse/significant. We believe many more water quality impacts are actually adverse, including, but not limited to impacts WQ-11 and WQ-7, discussed above. Even on the project proponents reckoning, the project has net negative effect on water quality.</p> <p>Water quality is a function of flow. The project's failure to restore Delta flows causes its failure to improve water quality.</p>	<p>discussion of proposed project compliance with the Public Trust Doctrine. Additionally, please see Master Response 32 regarding water rights.</p>
2655	32	<p>On the whole, alternative 4A does not advance the coequal goals and, in the long term, hinders achievement of the coequal goals.</p> <p>The benefits, if any, to Old and Middle River reverse flows and Delta smelt entrainment, are outweighed by the project's negative effects. The impetus for new points of diversion in the north Delta is to move the diversion points away from Delta smelt habitat areas so operations can continue when smelt are in the area of the south Delta intakes. Further impetus is to avoid the limiting effect of reverse OMR flows on the ability to pump. Regulatory restrictions and the self-limiting factor of drawing salt water upstream limit operations of the south Delta pumps. There are incidental environmental effects of these water supply goals. However, the many negative impacts of the project far outweigh any incidental positive effects. Further, according to the most recent analysis of Alternative 4A, it does not significantly contribute to water supply reliability if operated as promised. The project, on the whole, does not contribute to the coequal goals and has many attributes that will interfere, over the long term, with attaining the coequal goals.</p>	<p>See Master Response 31 for more information about the proposed project's consistency with the Delta Reform Act. The proposed project would enable DWR to construct and operate new conveyance facilities that improve conditions for endangered and threatened aquatic species in the Delta while at the same time improving water supply reliability, consistent with California law (see, e.g., Cal.Wat. Code, § 85001[c]). Implementing the conveyance facilities would help resolve many of the concerns with the current south Delta conveyance system, and would help reduce threats to endangered and threatened species in the Delta, including entrainment at the south Delta export facilities. For instance, implementing a dual conveyance system would align water operations, and their location, to better reflect natural seasonal flow patterns by creating new water diversions in the north Delta equipped with State-of-the-art fish screens, thus reducing reliance on south Delta exports during times of the year when listed aquatic species are present and most vulnerable.</p> <p>Analyses in Chapter 11, Fish and Aquatic resources indicate that most of the impacts would be less than significant, with several potentially being beneficial. In cases where significant impacts are identified, mitigation measures are presented to reduce the impacts to less-than-significant levels. Please refer to Table ES-9 in the Executive Summary for an overview of impacts and mitigation measures for all of the alternatives.</p>
2655	33	<p>Alternative 4A and all the Alternatives fail to comply with the Delta Reform Act because they lack adaptive management. California Water Code section 85321 requires that the "BDCP shall include a transparent, real-time operational decision making process in which fishery agencies ensure that applicable biological performance measures are achieved in a timely manner with respect to water system operations." Rebranding the project as</p>	<p>The proposed project is a joint RDEIR/SDEIS prepared in compliance with the requirements of CEQA and NEPA. Before the selection and approval of an alternative considered, the Lead Agencies must comply with the necessary state and federal environmental review requirements. This document, along with the BDCP Draft EIR/EIS, and expected Final EIR/EIS are intended to provide sufficient CEQA and NEPA support for approval of the proposed project or any of the action alternatives for either compliance strategy. As</p>

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		<p>California Water Fix and deleting 65,000 or more acres of habitat restoration does not repeal section 85321. Legislative intent was to protect the Delta from a mega-diversion project gone awry. The Lead Agencies have acknowledged, throughout the process, that effective adaptive management is essential to ensuring that high-capacity diversion tunnels do not harm the Delta ecosystem. Revising the project description to delete the goal of achieving Habitat Conservation Plan status does not change that dynamic. An effective, fully developed and described, adaptive management program is essential to the legal sufficiency of Alternative 4A and to any claim to the scientific legitimacy of the effects analysis, operational criteria, and environmental review documents. Practice in the scientific community (which develops and implements adaptive management programs) has been to interpret the Act's adaptive management requirements to required "science-based adaptive management of all ecosystem and water management programs in the Delta." Mount Report 99 (citing Cal. Water Code § 85308(f)).</p> <p>Indeed, much of Alternative 4A's commitment to not harming the Delta ecosystem depends on, and is deferred to, adaptive management. The Lead Agencies acknowledge a great deal of scientific uncertainty about Alternative 4A's effects on the Delta ecosystem, and depend upon adaptive management to ensure mitigation of adverse effects. Adaptive management "will be used to consider and address scientific uncertainty regarding the Delta ecosystem and to inform implementation of the operational criteria..." 2015 RDEIR/S4.1-6.</p> <p>At bottom, all of the EIR/S assumptions about environmental impacts depend on effective adaptive management. However, Alternative 4A's (like the BDCP's) adaptive management is largely a repetition of slogans about what adaptive management should be. Despite sustained outcry from the scientific community and the public about the Lead Agencies' chimerical treatment of adaptive management, the documents remain an exercise in specious deflection of calls for a real adaptive management program. As the Independent Science Board put it, "We are not looking here for a primer on adaptive management." 2015 ISB DEIR Review 5. The project's "missing content includes: 1. Details about the adaptive management process, collaborative science, monitoring, and the resources that these efforts will require." Id. 1. Further: "The lack of a substantive treatment of adaptive management in the Current Draft indicates that it is not considered a high priority or the proposers have been unable to develop a substantive idea of how adaptive management would work for the project." Id. 5.</p> <p>The current state of vacuity in adaptive management is the progression of a process that sought to frustrate the ability of adaptive management to throttle back exports through the high-capacity tunnels no matter how dire or immediate the harm to the Delta ecosystem. From the outset, the regulated entities, including the water contractors whose self-interest is to derive as much water as possible from the Delta, have been given an illegitimate role in adaptive management. See, e.g., Mount Report 100 (commenting on 2013 Administrative Draft) (noting that the adaptive management structure "confuses the roles of regulators and regulated entities" and will likely result in "rendering the concept of adaptive management moot"); see also id. At 83 (noting that adaptive management "is undermined by provisions in the draft Plan that grant the Authorized Entity Group [water contractors] - rather than regulatory agencies - veto authority over changes to the conservation measures [including CM1, operation of the tunnels themselves], biological objectives, and adaptive management strategies, as well as over amendments to the BDCP itself").</p> <p>The water contractors, mentioned in the Mount Report as being given veto authority over</p>	<p>implementation of the proposed project or any of the action alternatives will require permits and approvals from public agencies other than the Lead Agencies, the CEQA and NEPA documents are prepared to support the various public agency permit approvals and other discretionary decisions. These other public agencies are referred to as responsible agencies and 20 trustee agencies under CEQA (State CEQA Guidelines Sections 15381 and 15386) and cooperating agencies under NEPA (e.g., USACE and EPA).</p> <p>For more information please see 1.1.5 of Section 1 Introduction of the RDEIR/SDEIS.</p> <p>See Master Response 31 for more information about the proposed project's consistency with the Delta Reform Act. For responses to comments related to the Delta Independent Science Board's letters, please refer to comment letters BDCP 1448 and/or RECIRC 2546.</p> <p>For more information regarding adaptive management please see Master Response 33.</p> <p>Please also note that all comments received during the 2013 and 2015 public comment period are included in the FEIR/EIS. Please refer to the table of commenters to locate the letter of interest.</p>

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		<p>any change in the initial operating criteria that sets export rates, characterize the "need to restore adequate water supplies to protect the state's environmental resources" as "throwing more water at the problem." Letter from Byron Buck, Executive Director, State and Federal Water Contractors Association to Phillip Isenberg, Chairman, Delta Stewardship Council 1, March 3, 2011 (ATT 18).</p> <p>To be legally sufficient, the adaptive management program must be fully formed and circulated for public comment before any decision is made to approve the project. It cannot be deferred to some future time after project approval. "If adaptive management and monitoring are central to California Water Fix, then details of how they will be done and resourced should be developed at the outset (now) so they can be better reviewed, improved, and integrated into related Delta activities." 2015 Delta ISB Review 6.</p> <p>The Act and Delta Plan require that all water management decisions be based on adaptive management and that adaptive management be based on the best available science. "The Delta Reform Act requires that the Delta Plan be based on and implemented using the best available science, and requires the use of science-based, transparent, and formal adaptive management strategies for ongoing ecosystem restoration and water management decisions." Delta Plan 34. The Lead Agencies stated that reliance on adaptive management would be "based on best available science" but have deferred any content of adaptive management to the future. 2013 Draft EIR/S 3-207.</p> <p>Every scientific peer review that has been conducted of the adaptive management "plan" concludes that it is not an adaptive management plan as that term is used in the scientific community, but rather a vague promise for a future adaptive management plan. These promises, rather than an actual plan, all reviewers have concluded, are not acceptable. There is consensus in the scientific community that the Lead Agencies' deferral of adaptive management violates the principles of best available science.</p>	
2655	34	<p>The change in the project is too fundamental to be accomplished through an amended project description and requires issuance of a new Notice of Intent/Notice of Preparation. All of alternatives 1-9 described in the 2013 Draft EIR/S were Habitat Conservation Plans. The changed project description is intended to eliminate any HCP from the project. This is a different project, not a permissible change or "lessening" of the project. Those cases that allow a changed project description to "lessen" a project do so on the rationale that the environmental balance is thereby tipped in favor of the environment. A smaller project has fewer and less severe impacts.</p> <p>Here, the opposite is the case. The conservation "gold standard" of an HCP, promised to the public from the outset, has been abruptly abandoned. This tips the balance sharply against the environment and in favor of outright water diversion without any real environmental benefit. The current project description and alternatives that include mitigations and "environmental commitments" are not of the same basic nature as the original project.</p> <p>If project proponents want to pursue this entirely different kind of project, they are, of course, at liberty to do so - so long as they comply with CEQA and NEPA by issuing a new NOI/NOP and initiating a NEPA/CEQA process for this new and different undertaking.</p>	As discussed in response to comment 2655-34, this document, along with the BDCP Draft EIR/EIS, and expected Final EIR/EIS are intended to provide sufficient CEQA and NEPA support for approval of the proposed project or any of the action alternatives for either compliance strategy. Please see Master Response 46 for information on why additional scoping and recirculation are not required.
2655	35	We join with and incorporate the comments of others. We agree with many of the comments being made, and that have been made, by other parties. We do not repeat them here. Repetition of other comments is not necessary to exhaust remedies for purposes of	All comments received during the 2013 and 2015 public comment period are included in the FEIR/EIS. Please refer to the table of commenters to locate the letter of interest.

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		<p>NEPA and we join and incorporate the comments of others that address CEQA/NEPA inadequacies for the purpose of exhausting NEPA administrative remedies. Exhaustion is satisfied because the agencies are on notice of our concerns and they have had a chance to address them in detail by their detailed presentation in the comments of others. Where we use CEQA terminology here, the NEPA equivalent terminology is also intended to be included. We join other commenters' criticisms including the inadequacy of mitigations; undisclosed or unanalyzed impacts; the failure to consider a reasonable range of alternatives; the unstable project description; the false, misleading, and inadequate project description; failure to adequately define baseline conditions; failure to analyze secondary effects; failure to describe and evaluate reasonable and feasible mitigation measures that could eliminate or substantially lessen significant environmental impacts of the project; unlawful segmentation and deferral of environmental review (piece meal).</p> <p>We also join with and incorporate the comments of others pointing out that the project and environmental documents do not comply with the Delta Reform Act, state and federal endangered species acts, the federal Clean Water Act, and the Porter Cologne Water Quality Control Act.</p>	<p>As discussed in response to comment 2655-34, this document, along with the BDCP Draft EIR/EIS, and expected Final EIR/EIS are intended to provide sufficient CEQA and NEPA support for approval of the proposed project or any of the action alternatives for either compliance strategy. Please see Master Response 46 for information on why additional scoping and recirculation are not required.</p> <p>Please see also response to comment 2655-24 for discussion of adaptive management and adequacy of proposed mitigation measures.</p> <p>For more information regarding how the lead agencies analyzed the project as a whole, please see Master Response 8.</p> <p>See Master Response 31 for more information about the proposed project's consistency with the Delta Reform Act.</p> <p>The EIR/EIS is expected to be used by other entities to gain the necessary permits and approvals to implement the proposed project. USACE is expected to use the EIR/EIS as part 32 of its permit issuance responsibilities regarding compliance with Section 404 of the Clean Water Act, 33 which will result in a separate Record of Decision in consideration of related permit actions. The State Water Resources Control Board is expected to use the EIR/EIS in their decision-making processes which include implementation of the Porter-Cologne Water Quality Control Act (Water Code, Sec 13000 et seq.). See Master Response 29 for compliance with the ESA and 45 for additional information on permitting.</p>
2655	36	<p>State Funds May Not Be Used For Anything Associated With The Project. This is in part a comment on the project and in part a comment on the Draft BDCP and in part on the RDEIR/S.</p> <p>California Water Code section 85320(b) provides that: "The BDCP shall not be incorporated into the Delta Plan and the public benefits associated with the BDCP shall not be eligible for state funding, unless the BDCP does all of the following: (1) Complies with Chapter 10 (commencing with Section 2800) of Division 3 of the Fish and Game code." Chapter 10 provides the specifications required to qualify as an NCCP. Alternative 4A does not qualify as a Natural Community Conservation Plan. It is therefore ineligible for any state funding.</p> <p>The BDCP provides that much funding comes from the water contractors. 2013 Draft BDCP 8-65. However, state funding is shown for aspects of public benefits associated with the BDCP. Id. 8-65-8-69. These funding assumptions were made at a time when it was thought that the BDCP would comply with Chapter 10. They are now void. A revenue bond is a bond secured by specific revenue - here it was thought the revenue would be payments from the water contractors based, at least in part, upon water deliveries. This constitutes state funding within the meaning of Water Code section 85320(b)(1) and is now impermissible.</p> <p>2013 Draft BDCP section 8.3.3 discusses the issuance by DWR of revenue bonds, to be repaid over time by the water contractors. This is no longer permissible. State funding is prohibited, regardless of whether it is provided with agreements for repayment.</p> <p>It is unclear how Alternative 4A will be funded, but state funds may not be used. Rebranding the project, revising the project description, and re-circulating the environmental documents does not make it a "new" or "different" project within the meaning of Water Code section 85320. Project proponents could adopt the no-project alternative and start a new project with whatever funding sources are appropriate. But they have elected not to do</p>	<p>The comment suggests that using revenue bonds to fund the project would not be allowable with respect to California Water Code section 85320. Please see Master Response 5 for more information on funding and Master Response 31 for more information about the Delta Reform Act.</p> <p>No issues related to the adequacy of the environmental impact analysis in the CEQA and NEPA documents were raised.</p>

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		that. To the extent that mitigations or environmental commitments are premised on state funding, they are inadequate and cannot be relied on for environmental analysis.	
2655	37	ATT 1: Table 3A-13. Second Screening: Comparison of Conveyance Alternatives with Second Level Screening Criteria Related to CEQA and NEPA.	This comment describes an attachment to the comment letter and did not raise any issues related to the adequacy of the environmental analysis and appears to be from the draft EIR/EIS. See response to comment 2655-3.
2655	38	ATT 2: Table ES-9. Summary of BDCP/California WaterFix RDEIR/SDEIS Impacts and Mitigation Measures.	See comment response 37 above.
2655	39	ATT 3: 2013-2014 Your Questions Answered.	This comment describes an attachment to the comment letter and did not raise any issues related to the adequacy of the environmental analysis and appears to be outreach materials for the BDCP.
2655	40	ATT 4: Chapter 3 A More Reliable Water Supply for California.	This comment describes an attachment to the comment letter and did not raise any issues related to the adequacy of the environmental analysis and related to Alternatives considered issues raised were addressed above.
2655	41	ATT 5: Challenges Facing The Sacramento-San Joaquin Delta. Complex, chaotic or simply cantankerous.	This comment describes an attachment to the comment letter and did not raise any issues related to the adequacy of the environmental analysis. See response to comment 2655-9.
2655	42	ATT 6: Moving and Soring California's Water.	This comment describes an attachment to the comment letter and did not raise any issues related to the adequacy of the environmental analysis. See response to comment 2655-10.
2655	43	ATT 7: Critically Overdrafted Groundwater Basins.	This comment describes an attachment to the comment letter and did not raise any issues related to the adequacy of the environmental analysis. See response to comment 2655-10.
2655	44	ATT 8: Full Text of Measure J94, Goleta Water District.	This comment describes an attachment to the comment letter and did not raise any issues related to the adequacy of the environmental analysis. See response to comment 2655-10.
2655	45	ATT 9: North-of-the-Delta Offstream Storage.	This comment describes an attachment to the comment letter and did not raise any issues related to the adequacy of the environmental analysis. See response to comment 2655-11.
2655	46	ATT 10: Planning Agreement regarding the Bay Delta Conservation Plan, October 6, 2006.	This comment describes an attachment to the comment letter which appears to be the planning agreement addressed in comment above.
2655	47	ATT 11: Planning Agreement regarding the Bay Delta Conservation Plan, October 6, 2006.	See response 46 above.
2655	48	ATT 12: Suisun Marsh Salinity Control Gates Salmon Passage Evaluation Report, 2003.	This comment describes an attachment to the comment letter and did not raise any issues related to the adequacy of the environmental analysis. See response to comment 2655-19.
2655	49	ATT 13: Letter to Jacob McQuirk Re: Comments on Emergency Drought Barriers Mitigated Negative Declaration.	This comment describes an attachment to the comment letter and did not raise any issues related to the adequacy of the environmental analysis for the proposed project and alternatives. For information related to how Drought conditions were considered in the Final EIR/EIS, please see Master Response 47.
2655	50	ATT 14: Water Replenishment District of Southern California. Engineering Survey and Report.	This comment describes an attachment to the comment letter and did not raise any issues related to the adequacy of the environmental analysis. See response to comment 2655-28.
2655	51	ATT 15: Suisun Marsh Salinity Control Gate: Purpose, Operation and Hydrodynamics/Salinity Transport Effect.	This comment describes an attachment to the comment letter and did not raise any issues related to the adequacy of the environmental analysis. See response to comment 2655-28.

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2655	52	ATT 16: Short-Term Agreement to Guide Implementation of Short-Term Management Actions to Meet Local Water Supply Needs and to Make Water Available to the SWP and CVP to Assist in Meeting the Requirements of the 1995 Water Quality Control Plan and to Resolve Phase 8 Issues.	This comment describes an attachment to the comment letter and did not raise any issues related to the adequacy of the environmental analysis. See response to comment 2655-29.
2655	53	ATT 17: The Sacramento Valley Water Management Agreement.	This comment describes an attachment to the comment letter and did not raise any issues related to the adequacy of the environmental analysis. See response to comment 2655-29.
2655	54	ATT 18: Letter to Phillip Isenberg Re: Comments on the Delta Plan.	This comment describes an attachment to the comment letter and did not raise any issues related to the adequacy of the environmental analysis. See response to comment 2655-33.
2655	55	ATT 19: Local Water Sources Meet Most of California's Water Needs.	This comment describes an attachment to the comment letter and did not raise any issues related to the adequacy of the environmental analysis. See response to comment 2655-11.
2655	56	ATT 20: 18 Principals for Water Conveyance in the Delta, Storage Systems and for the Operation of Both to Achieve the Coequal Goals.	This comment describes an attachment to the comment letter and did not raise any issues related to the adequacy of the environmental analysis. See response to comment 2655-9.
2655	57	ATT 21: Letter to Randy Fiorini Re: Review of environmental documents for California Water Fix.	This comment describes an attachment to the comment letter. See response to comment 2655-2.
2655	58	ATT 22: NMFS Progress Assessment and Remaining Issues Regarding the Administrative Draft BDCP Document. 4/4/13.	This comment describes an attachment to the comment letter. See response to comment 2655-7.
2655	59	Letter to Will Stelle Re: Draft Environmental Review Impact Statement for the Bay Delta Conservation Plan, San Francisco Bay Delta, California CEQ# 20130365	This comment describes an attachment to the comment letter. See response to comment 2655-9.
2656	1	<p>We [Save the California Delta Alliance] would like to point out that we have on several occasions requested that the environmental review contain a fine grain analysis of the water quality impacts on the bays of Discovery Bay.</p> <p>To our knowledge, this has not yet been done.</p>	<p>The water quality analysis presented in the RDIER/RDEIS sections covering the new proposed Alternatives and Appendix A provide a thorough analysis of water quality at multiple locations throughout the Delta to present the effects from implementing the project alternative. Please see also Master Response 14 and the water quality assessment included in Chapter 8 of the DEIR/DEIS, RDEIR/SDEIR/ and FEIR/FEIRS.</p> <p>Although it would not be practical to present water quality results at every location in the Delta, for water quality constituents that were modeled, the analysis provides enough information at 11 different locations within the Delta to characterize areas near the chosen locations. For example, potential water quality changes in Discovery Bay can be approximated by evaluating the modeling results presented for Old River near Rock Slough. The modeling was conducted to evaluate potential water quality changes with project alternative implementation relative to existing conditions and the future No Action baseline conditions. For water quality constituents that were not modeled, with few exceptions, specific locations in the Delta were not discussed, but rather, the assessment addresses qualitatively the types of changes, if any, which are expected for various regions of the Delta or the Delta as a whole, including terminal/dead-end sloughs and areas such as Discovery Bay. This approach is valid for constituents whose levels or concentrations of pathogens, dissolved oxygen, trace metals, etc., are not expected to change as a result of the project at any location throughout the Delta by a large enough magnitude that effects on beneficial uses would be expected.</p> <p>Water circulation and exchange in Discovery Bay, as with other terminal/dead-end sloughs in the Delta, is expected to be dominated by tidal effects and local withdrawals and agricultural returns. The proposed project will not have direct effects on agricultural or other water withdrawals or returns local to Discovery Bay. Reductions in pumping from the existing South Delta pumping plants will affect flows in Old River, but</p>

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			the effects of these changes on Discovery Bay exchange and circulation is expected to be small relative to other factors (i.e., tidal effects and local withdrawals and agricultural returns). The largest effect on water quality of Discovery Bay is expected to be the change in its source water, which is Old River, as a result of the replacement of Sacramento River water with San Joaquin River water. This change is reflected in water quality modeling results presented for Old River at Rock Slough.
2656	2	<p>The south Delta pumps create reverse OMR [Old and Middle River] flows. Part of the intent of the project is to lessen these reverse flows. That intent is laudable. However, the reverse flows also have some positive effects on the environment and reducing them may have significant localized adverse effects.</p> <p>Discovery Bay contains several thousand waterfront residences. Virtually all of the waterfront residences have attached docks. Discovery Bay has numerous man-made bays that are fed by Indian Slough and Kellogg Creeks. The circulate system throughout the bays is gravity fed. There are no pumps.</p> <p>The flows in Kellogg Creek and Indian Slough drive the circulation in the bays. There is significant increased circulation due to increased velocities of flow caused by pumping at the south Delta pumps. Now that this pumping will be eliminated at some times and reduced at others, circulation in the bays will be reduced.</p>	Reduction in south Delta exports would reduce the velocities within Discovery Bay waterways. Water quality conditions within Discovery Bay are considered as part of the DSM2 modeling analysis. However, results for Discovery Bay were not specifically reported in the EIR/EIS. Please refer to response to comments 2565-1.
2656	3	<p>These bays are the most intensively used waters of the Delta as far as human contact is concerned. Everyone swims and plays in the water. Contact is especially intense for children of all ages.</p> <p>Increased residence time, reduced DO [dissolved oxygen], increased algal blooms and other water quality impacts are likely going to be significant.</p> <p>These impacts can be mitigated by improving the circulation system, perhaps by installing pumps or wing dams that will better direct what current there is into the bays.</p>	The water quality assessment included in Chapter 8 of the DEIR/DEIS, RDEIR/SDEIR/ and FEIR/FEIS provide an assessment of a wide range of water quality constituents at a wide range of locations throughout the Delta study area. This includes disclosure of changes in dissolved oxygen under each of the action alternatives including Alternative 4A (preferred alternative). The impacts resulting from operating the water conveyance facilities was considered less than significant for all alternatives. Potential changes in other water quality constituents including organic carbon and microcystis were also considered less than significant under Alternative 4A. Please see also Response to Comment 2656-1. With regard to water quality, please see Master Response 14.
2656	4	<p>Former BDCP facilitator Jerry Meral met with me in Discovery Bay to discuss these issues. In addition to the fine grain analysis, I requested that monitoring stations be place in the bays of Discovery Bay, where human contact is intense, as a part of the adaptive management monitoring program. As far as I know these monitoring stains have not been included.</p> <p>Secretary Meral retired shortly after our meeting. My subsequent requests to Karla Nemeth have not been responded to.</p>	<p>This comment is apparently related to water quality analyses and conditions in the southern and western Delta. These analyses are included in Chapter 8 of the DEIR/DEIS, and FEIR/FEIS. Please see also Master Response 14 for additional information on the water quality analyses.</p> <p>Monitoring locations already present in Old River near Discovery Bay are sufficient to support and inform these activities with regards to salinity (including both chloride and electrical conductivity) and organic carbon. Monitoring of mercury and selenium will be further defined in site specific monitoring and management plans associated with the restoration areas.</p>
2656	5	<p>We [Save the California Delta Alliance] hereby repeat our request that the Lead Agencies perform a fine grain analysis of the water quality impacts of the project, including Alternative 4A, on the waters in the bays of Discovery Bay and include monitoring stations in the bays of Discovery Bay in the adaptive management/mitigation and monitoring plan.</p> <p>We believe that protecting human health and safety should be the top priority when considering the impacts of the project on the human environment. Especially where it is known that there is intensive human contact and more especially when the health of children is at stake.</p>	Please see Responses to Comments 2656-1 through 2656-4.
2657	1	Solano County continues to have significant concerns about the BDCP and the new WaterFix	Projects that are initiated under the California EcoRestore program are separate from the California

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		<p>Project. As a County with a very large agricultural base that is expected to take on a significant degree of habitat restoration entailing the conversion of agricultural land, we are particularly concerned about the lack of information available about the impacts to our region. The divestment of the Habitat Conservation Plan/Natural Communities Conservation Plan components, which identified some 153,000 acres of habitat restoration and protected lands, is now absent, replaced by a series of unformed or non-public plans and programs, and EcoRestore, which purports to restore/protect some 30,000 acres, most of which are required by existing Biological Opinions and for which very little information is available. We understand that this ecosystem restoration will occur, but there is no indication that a public process will be required or initiated for implementation of these projects that will impact us so greatly. In addition, the siting and development of habitat will have great impacts to the sustainability of remaining agricultural areas, also not discussed in the documents.</p>	<p>WaterFix (Alternative 4A) presented in the EIR/EIS and would require separate environmental review prior to implementation. Restoration, enhancement and protection measures described as Environmental Commitments for Alternative 4A would be implemented in a similar manner as mitigation measures and in fact these Environmental Commitments are considered “defacto” mitigation measures that may require additional environmental review prior to implementation. The analysis of Alternative 4A Environmental Commitment effects on agricultural resources provide an estimate of the potential effects on agricultural land conversion based on the total habitat restoration, enhancement and protection that would be required under this Alternative. This level of analysis is sufficient to determine the potential impact significance and the need for mitigation measures to reduce these potential impacts.</p>
2657	2	<p>The sheer volume of the combined documents and the difficulty in reviewing a significantly changed project which uses parts of the original project as a base continues to be problematic to agencies and the public in enabling meaningful understanding, review or comment, and is particularly troubling in a project of this size. This is further exacerbated by the narrow focus of the project on isolated conveyance and the speed at which the project is moving as well as the lack of scientific and technical underpinning for a project of this complexity. Among other problems, the lack of scientific and technical basis precludes meaningful identification of impacts and their level of significance, mitigation and subsequent analysis of cumulative impacts. In many areas of the documents, analysis and decisions are delayed to an undetermined point in the future by an unidentified entity.</p>	<p>This is a general comment on the complexity and adequacy of the EIR/EIS analyses. Refer to Master Response 38 (Length of Environmental Document). No specific deficiencies have been identified.</p>
2657	3	<p>Water quality is critical to our agriculture, and even small changes in salinity have huge impacts to farmers, determining what crops can be planted at what time and even whether planting can occur in a given year. Yet the water quality modeling in the document is far too broad, quite outdated, and among many other problems, does not recognize that small changes in salinity can have significant impacts.</p>	<p>It cannot simply be concluded that any increase in any constituent concentration constitutes a significant impact. Water diversions for agricultural uses are affected continuously by seasonal and year-to-year variations in water quality conditions. The determination of significant impacts to agricultural resources is evaluated relative to significance criteria in water quality assessment in Chapter 8, Water Quality, and the agricultural resources assessment in Chapter 14, Agricultural Resources.</p> <p>It is assumed that the reference in this comment to “quite outdated” is referring to the use of the 2010 version of the CALSIM II model referenced in Comment 59. Modeling for the EIR/EIS has been based on the Existing Conditions, No Action Alternative, and Alternative 1 models developed in April – May of 2010 (2010 models), which were the state-of-the-art at the time, and formed the basis for universal assumptions in the other action alternatives in the EIR/EIS. However, in August 2011 several model improvements were identified by the water agencies, fishery agencies, and the modeling community. The identified improvements were compiled, and the Existing Conditions, No Action Alternative, and Alternative 1 models were updated in coordination with DWR, Reclamation and USFWS. This update was performed to verify if the compiled model improvements altered the incremental changes between the BDCP Alternative 1 and the Existing Conditions and the No Action Alternative relative to the 2010 models. The findings from the 2011 update showed that the incremental differences between Alternative 1 and the Existing Conditions and the No Action Alternative remained consistent with the 2010 modeling. Therefore, the action alternatives modeled since 2011 continued to rely on the 2010 modeling, allowing consistency and comparability throughout the EIR/EIS. Similarly, when Alternative 4A was modeled using the 2013 baseline, the incremental changes in the operational results for Alternative 4A as compared to the No Action Alternative were similar to the prior incremental results between the 2010 modeling for the No Action Alternative and Alternative 4A. It should be noted that the modeling used in the EIR/EIS must be used in a comparative manner and not to define absolute values.</p>

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			For further information about modeling, please see Master Response 30.
2657	4	Despite the excessively large and ponderous nature of the environmental document, it is amazingly lacking in critical analysis on significant impacts to the Delta region. This [is] of particular concern to Solano County where we believe agriculture and the local economy it serves will be seriously impacted by the "WaterFix" and "EcoRestore" projects over the years they are implemented and beyond. By segregating the two projects in terms of environmental and economic impacts the documents prepared have effectively downplayed the true and cumulative impacts of the projects being proposed.	<p>Temporary and permanent effects to agriculture were discussed in Chapter 14 and socioeconomic effects were addressed in Chapter 16. As noted in the Executive Summary Table ES-9. Summary of BDCP/California WaterFix RDEIR/SDEIS Impacts and Mitigation Measures, there were some significant effects (CEQA) and Adverse (NEPA) associated with various alternatives. There were no significant socioeconomic effects associated with CEQA; however, some adverse effects were noted under the NEPA analysis. For example, although Alternatives 4A, 2D, and 5A would require much less conversion of agricultural land to restored or protected habitat than the alternatives that include a HCP/NCCP, agricultural land will still be affected by implementing any of the alternatives (ES.1.13). Similarly, Alternatives 4A, 2D, and 5A would have lesser socioeconomic effects associated with agricultural land conversions compared with other BDCP alternatives.</p> <p>EcoRestore was included as a cumulative project (see Chapter 5 for more details). Therefore, based upon a review of Chapters 5, 14, 16 and the Executive Summary, the RDEIR/SDEIS did adequately address the temporary, permanent, and cumulative effects for agriculture and socioeconomic issues.</p>
2657	5	Solano County's interest in submitting these comments is twofold: First, the County seeks to ensure that the entire EIR/EIS document prepared by the state and federal lead agencies for their proposed project -- particularly the WaterFix RDEIR/SDEIS document released for public review and comment in July 2015 -- fully discusses how the proposed project could impact the people and environment of Solano County, including the quantity and quality of water available from the Delta for beneficial use within Solano County; second, the County seeks to ensure that the EIR/EIS document identifies feasible mitigation measures and a reasonable range of project alternative that will effectively mitigate or avoid any significant impacts of the proposed project.	<p>The Lead Agencies acknowledge the county's interest. The Lead Agencies have prepared an EIR/EIS that fully discloses all impacts and that identifies all feasible mitigation measures to address significant impacts.</p> <p>Please refer to Master Response 14 for further information regarding water quality, Master Response 4 regarding the development of alternatives, and Master Response 22 regarding mitigation measures.</p>
2657	6	<p>General Comments regarding Structure of the RDEIR/SDEIS:</p> <p>An accurate, stable, and finite project description is the sine qua non of a legally-adequate EIR, because without such a project description, it is impossible for an EIR to provide an adequate discussion of project impacts, potential mitigation measures, or feasible project alternative. The Draft EIR/EIS for the proposed project, now consisting of both the original BDCP DEIR/DEIS released for public review in December 2013 and the WaterFix RDEIR/SDEIS released for public review in July 2015, is fundamentally and fatally flawed due to the unstable and open-ended project description provided in that document. This shifting project description causes two separate but related points of concern: (1) the Draft EIR/EIS fails as an informative public-disclosure document; and (2) because the Draft EIR/EIS discusses project "alternatives" that far exceed the water export capacity of either the proposed BDCP project or the proposed WaterFix project, the discussion of those expanded water export options in this Draft EIR/EIS document opens the possibility that the lead agencies may approve a much larger project than either the BDCP or WaterFix projects without ever conducting further environmental impact review.</p>	<p>Please see Master Response 4 regarding the range of alternatives selected.</p> <p>The alternatives included in the Draft EIR/EIS represent a legally adequate reasonable range of alternatives and the scope of the analysis of alternatives fully complies with both CEQA and NEPA. The Lead Agencies carefully considered all potential alternatives that were proposed during the scoping process and during the time of preparation of the Draft EIR/EIS. In response to public input, several new alternatives have been studied in the Recirculated DEIR/EIS and a new preferred Alternative (4A) identified.</p> <p>The project proposes to stabilize water supplies, and exports could only increase under certain circumstances. Water deliveries from the federal and state water projects under a fully implemented Alternative 4A are projected to be about the same as the average annual amount diverted in the last 20 years. Although the California WaterFix, Alternative 4A, would not increase the overall volume of Delta water exported, it would make the deliveries more predictable and reliable, while restoring an ecosystem in steep decline.</p>
2657	7	Section ES.I.2.1 of the WaterFix RDEIR/SDEIS contends there is sufficient legal justification for both the state and federal lead agencies to use the combination of the 2013 BDCP DEIR/DEIS and the 2015 WaterFix RDEIR/SDEIS documents to evaluate the potential environmental impacts of the WaterFix project. While the CEQ's NEPA regulations allow a federal lead agency to use a supplement to a draft EIS when the agency "makes substantial changes in the proposed action that are relevant to environmental concerns" (40 C.F.R. [Section] 1502.9(c)(1)(i)), this is a point on which CEQA and NEPA differ.	Please refer to the response to Comment 8 below.

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2657	8	<p>Section ES.I.2.1 of the WaterFix RDEIR/SDEIS cites section 21092.1 of the Public Resources Code and section 15088.5 of the CEQA Guidelines as legal authority for DWR use [of] a partially-recirculated draft EIR to evaluate the WaterFix project. (WaterFix RDEIR/SDEIS, p. ES-4, lines 24- 27.) Section 21092.1 authorizes a CEQA lead agency to use the recirculation process when "significant new information" is added to an EIR prior to certification, but that statutory section does not define what the Legislature meant by its use of the phrase "new information." Instead, the phrase "new information" has been broadly defined in the CEQA Guidelines as including changes in the proposed project, changes in the project's environmental setting, or other additional data and information. (CEQA Guidelines, [Section] 15088.5(a).) The use of the recirculation process to publicly vet significant new information regarding a project's environmental setting, impacts, mitigation measures, or alternatives is clearly sanctioned by section 21092.1 and CEQA case law. But a lead agency's use of the recirculation process to vet new information regarding significant changes to the proposed project being evaluated in the EIR is fundamentally inconsistent with well-established CEQA case law.</p> <p>In County of Inyo v. City of Los Angeles (1977) 71 Cal.App.3d 185, 193 and 199, the Court of Appeal said: "[A]n accurate, stable and finite project description is the sine qua non of an informative and legally sufficient EIR. The defined project and not some different project must be the EIR's bona fide subject."</p> <p>This statement has been cited by the Supreme Court and by the Court of Appeal in more than twenty published appellate opinions.</p> <p>While section 15088.5 of the CEQA Guidelines purports to authorize use of a partially-recirculated draft EIR whenever the lead agency makes substantial changes to the proposed project after publication of the original draft EIR, such practice means that the project description in the EIR is evolving over time rather than remaining stable throughout the entire document. The Supreme Court has repeatedly said that courts should afford great weight to the Guidelines except when a provision is clearly unauthorized or erroneous under CEQA. (See, e.g., Sunset Sky Ranch Pilots Assn. v. County of Sacramento (2009) 47 Cal.4th 902, 907 fn. 3; Muzzy Ranch Co. v. Solano County Airport Land Use Con1. (2007) 41 Cal.4th 372, 380 fn. 2; Laurel Heights Improvement Assoc. v. Regents (1988) 47 Cal.3d 376, 391 fn. 2.) To the extent language in section 15088.5 is interpreted by a lead agency as allowing it to use an unstable or evolving project description in an EIR, such an interpretation of section 15088.5 would be clearly unauthorized and erroneous under CEQA.</p> <p>If a CEQA lead agency chooses to make significant modifications to its proposed project after a draft EIR had been circulated for public review and prior to certification of that EIR, CEQA gives the lead agency only one option: start the CEQA process over by preparing a new draft EIR for that newly-defined project and then circulate that new document for public review. If the lead agency instead cuts corners by utilizing the recirculation process to patch a draft EIR prepared for a previously-proposed and subsequently-abandoned project, the agency has not proceeded in the manner required by law.</p>	<p>This comment provides an opinion that significant new information presented in the RDEIR/SDEIS should have been presented in a new Draft EIR/EIS versus partially recirculating revised portions of the 2013 Draft EIR/EIS. Contrary to this opinion, the RDEIR/SDEIS presents alternatives revisions and environmental analysis in the RDEIR/SDEIS to fully meet the letter and spirit of CEQA and NEPA for full public disclosure of project changes. These changes have been made, in part, with the intent to continue to lessen the environmental effects of the project alternatives as required by CEQA. Alternative 4, for example, has been modified to reduce the effects of facility construction on private property by siting more reusable tunnel material on state-owned land. The project facilities have also been modified to reduce the environmental effects on Staten Island, which is important habitat for the greater sandhill crane. The intermediate forebay has been substantially reduced in size. Intake pumping plants have also been relocated and consolidated adjacent to Clifton Court Forebay to reduce effects on private property in Sacramento County and to use state-owned property for these facilities. Operations of the preferred CEQA and NEPA alternative have also been modified to reduce effects on special-status fish species and increase delta outflow during spring months. All of these and other project changes have been offered and fully disclosed with the intent of reducing environmental impacts of the project and improve its constructability. The alternatives revisions are fully described in Sections 3 and 4 of the RDEIR/SDEIS and have also been republished in this Final EIR/EIS.</p> <p>For further information related to the issue of recirculation, please see Master Response 46.</p>
2657	9	<p>There are Significant Differences between California WaterFix and BDCP:</p> <p>The recently-proposed California WaterFix project is substantially different than the Bay</p>	<p>Please note that the BDCP is no longer the preferred alternative. The preferred alternative is now Alternative 4A and no longer includes an HCP.</p>

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		<p>Delta Conservation Plan project described by the lead agencies in the 2013 BDCP DEIR/DEIS.</p> <p>The Bay Delta Conservation Plan or "BDCP" is defined in the Sacramento-San Joaquin Delta Reform Act of 2009 as "a multispecies conservation plan." (Pub. Res. Code, [Section] 85053.) Under federal law, a multispecies conservation plan is referred to as a habitat conservation plan (HCP), prepared and approved pursuant to section 10 of the federal Endangered Species Act (16 USC [Section] 1539), while under state law such a plan is referred to as a natural community conservation plan, prepared and approved pursuant to the Natural Community Conservation Planning Act (Fish &amp; G. Code, [Section] 2800 et seq.). (See BDCP DEIR/DEIS, p. 1-15, lines 25-30, &amp; p. 2-2, lines 5- 10.)</p> <p>The lead agencies' November 2013 Public Draft BDCP proposes a collection twenty-two separate project components consisting of infrastructure projects and habitat restoration and enhancement programs; these project components are euphemistically identified in the Public Draft BDCP document as "conservation measures" CM1 through 22. (See BDCP, section 3.4.) Taken together, these twenty-two separate project components comprise the overall "project" that is purportedly evaluated in the BDCP DEIR/DEIS. (See CEQA Guidelines, [Section] 15378 ["'project' means the whole of an action"].) Component CM1 includes construction of new water conveyance facilities and operational plans for both existing and new facilities (BDCP, section 3.4.1), while components CM2 through 22 "will restore over 80,000 acres of natural communities, including tidal natural communities, seasonally inundated floodplains, and adjacent transition uplands; enhance 20 miles of channel margin; and enhance seasonally inundated floodplain in the Yolo Bypass through operation of a modified Fremont Weir" (BDCP, Ex. Sum., p. 8). The duration of the BDCP project is described in section 1.4.5 of the Public Draft BDCP document as follows:</p> <p>"DWR is seeking take permits from the fish and wildlife agencies that remain in effect for a term of 50 years. The proposed 50-year permit duration is necessary to allow sufficient time for the proper implementation of the actions set out in the Plan and to realize the overall BDCP goals of water supply reliability and ecosystem restoration."</p> <p>For purposes of CEQA and NEPA compliance, the lead agencies will "approve" the overall BDCP project when they submit applications for incidental take permits and a NCCP permit to the relevant federal and state fish and wildlife agencies. (BDCP DEIR/DEIS, section 1.6; see CEQA Guidelines, [Section] 15352(a) ["'approval' means the decision by a public agency which commits the agency to a definite course of action in regard to a project"].) We anticipate that the lead agencies will promptly file the CEQA Notice of Determination and NEPA Record of Decision after formally deciding to submit such applications. (Pub. Res. Code [Section] 21108; 40 C.F.R. [Section] 1505.2.) While the fish and wildlife agencies rather than the lead agencies have final authority to decide whether the BDCP, as drafted by the lead agencies, will be approved as governing HCP/NCCP document, the lead agencies will commit themselves to a definite course of action regarding the overall BDCP project at the time they each formally make a decision to submit their respective applications to the fish and wildlife agencies.</p> <p>In contrast, the description of the California WaterFix project provided in the lead agencies' various PR documents is much narrower than the BDCP project in both scope and process. We have attached two of these PR documents -- two sets of Frequently Asked Questions (FAQs) prepared by the lead agencies, one undated and the other dated July 2015 [ATT5, ATT6] -- to ensure that these statements by the lead agencies regarding the WaterFix project are physically included within the final EIR/EIS document rather than simply included</p>	<p>The lead agencies believe that the 2013 Draft EIR/EIS and 2015 RDEIR/SDEIS are complete in their evaluation of impacts (using the best available science and modeling), direct and cumulative, that project description is complete and satisfies the requirements of NEPA, and that the project objectives are also precise and complete and satisfy the requirements of CEQA. The lead agencies believe that the 2013 Public Draft EIR/EIS and 2015 RDEIR/SDEIS provided the public and decision makers with sufficient information on which to make informed comments that have been considered and incorporated into the Final EIR/EIS.</p> <p>Although Alternatives 4A, 2D, and 5A include only those habitat restoration measures needed to provide mitigation for specific regulatory compliance purposes, habitat restoration is still recognized as a critical component of the state's long-term plans for the Delta. Such larger endeavors, however, will likely be implemented over time under actions separate and apart from these alternatives. The primary parallel habitat restoration program is called California EcoRestore (EcoRestore), which will be overseen by the California Resources Agency and implemented under the California Water Action Plan. Under EcoRestore, the state will pursue restoration of fish and wildlife habitat by 2020.</p> <p>Proposition 1 funds and other state and public dollars will be directed exclusively for public benefits unassociated with any regulatory compliance responsibilities.</p> <p>Additional priority restoration projects will be identified through regional and locally led planning processes facilitated by the Delta Conservancy. Plans will be completed for the Cache Slough, West Delta, Cosumnes, and South Delta. Planning for the Suisun Marsh region is already complete and a process for integrated planning in the Yolo Bypass is underway. The Delta Conservancy will lead the implementation of identified restoration projects, in collaboration with local governments and with a priority on using public lands in the Delta.</p> <p>For more information regarding Section 7 of the Endangered Species Act, please see Master Response 29.</p> <p>As mentioned in an earlier response, the current proposed project is not a HPC/NCCP and therefore is no longer seeking a 50-year permit term as described in the comment. For more information regarding the permits that are being sought, please refer to Master Response 45. For clarification, EcoRestore is an entirely separate effort and is not seeking any approvals under the proposed project.</p> <p>The comment suggests that changes to the purpose and need should have been made as part of the recirculated document. The lead agencies have made changes to the purpose and need and those changes were provided in Section 1.1.4 of the 2014 RDEIR/SDEIS for review. Those changes have been incorporated into the Final EIR/EIS.</p>

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		<p>as part of the administrative record.</p> <p>According to these FAQ documents, the WaterFix project would consist only of a new variation of the water conveyance facilities and operational plans described in the Public Draft BDCP as component CM1, and would omit the habitat restoration and enhancement programs described as components CM2 through 22. A substantially reduced subset of the twenty-one BDCP habitat programs have now been split off into a separate project -- repackaged and renamed as California EcoRestore and limited to 30,000 acres -- that might be considered and approved by either the WaterFix lead agencies or other agencies under an independent and unspecified timeline. (July 2015)</p> <p>FAQ, p. 6.) Significantly, while components CM2 through 22 were identified as part of the proposed BDCP project rather than mitigation measures for water facility construction and operations, the lead agencies have now done a complete about-face and have recharacterized some habitat restoration activities -- limited to approximately 2,300 acres -- as mitigation for construction and operation of the WaterFix project. (July 2015 FAQ, pp. 4 &amp; 6.)</p> <p>Under WaterFix, the lead agencies will no longer be seeking approval of a HCP/NCCP multispecies conservation plan from the federal and state fish and wildlife agencies. Instead, the lead agencies now propose to engage in formal section 7 consultation with the UFWS and NMFS (16 USC [Section] 1536) and to seek incidental take permits from the state DFW (Fish &amp; G. Code, [Section] 2081(b)). (July 2015 FAQ, p. 4.) In addition, the lead agencies are no longer seeking take authorization from the fish and wildlife agencies for a 50-year period. The WaterFix RDEIR/SDEIS fails to explain why a 50-year permit duration is no longer "necessary to allow sufficient time for the proper implementation of the actions set out in the [proposed project] and to realize the overall [project] goals of water supply reliability and ecosystem restoration," as was the case with the BDCP project. (See BDCP, p. 1-26, lines 28- 30.) The implication is that the goals and objectives of the WaterFix project are much different than those of the BDCP project, even though the WaterFix RDEIR/SDEIS does not make any revisions to Chapter 2 of the BDCP DEIR/DEIS.</p>	
2657	10	<p>The WaterFix Proposal requires Changes to the Public Draft BDCP:</p> <p>For the original BDCP DEIR/DEIS, DWR chose to utilize a document preparation procedure similar to the one described in section 15166 of the CEQA Guidelines, which allows a city or county to combine a local general plan (see Gov. Code, [Section] 65300) and the EIR for that general plan into a single document. DWR's decision to combine the Public Draft BDCP and the BDCP DEIR/DEIS into a single, unified document is reflected in Chapter 1, footnote 3, of the BDCP DEIR/DEIS, which states as follows:</p> <p>"The full Draft EIR/EIS should be understood to include not only the EIR/EIS itself and its appendices but also the proposed BDCP documentation including all appendices. For example, the Chapter 5, Effects Analysis, and its associated appendices are repeatedly referred to herein and include much of the substantial evidence supporting the environmental analysis and conclusions herein, and Chapter 3, Conservation Strategy, more fully describes the proposed project."</p> <p>This footnote has not been altered in the WaterFix RDEIR/SDEIS, and therefore remains the lead agencies' definitive statement as to the intended contents of their combined draft CEQA/NEPA document for the proposed project. It is therefore our understanding that the</p>	<p>The California WaterFix, Alternative 4A, and the Draft BDCP are complex. The Lead Agencies have attempted to present the analysis in the EIR/EIS in a clear format with an emphasis on information that is useful to the public, agencies, and decision makers. Recognizing the length and complexity of the Draft EIR/EIS, the Lead Agencies took numerous steps to make the information accessible and understandable. The Lead Agencies posted online documents highlighting important aspects of the BDCP and the EIR/EIS. They produced 17 narrated informational webinar episodes regarding the BDCP and EIR/EIS that were available online, and they distributed factsheets throughout the comment period. In addition, both the BDCP and EIR/EIS contain executive summaries, and the most complex EIR/EIS chapters contain reader's guides. For the RDEIR/SDEIS, the Lead Agencies provided a summary of revisions. Chapter 1 of the RDEIR/SDEIS describes the contents of the document and provides references to the locations where readers may find specific discussions and analyses. For more information regarding document length and complexity, please see Master Response 38.</p>

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		<p>full draft EIR/EIS is now almost 50,000 pages in length and includes the following component documents:</p> <p>Public Draft BDCP, without appendices -- 2,740 [pages]</p> <p>BDCP appendices -- 6,251 [pages]</p> <p>2013 BDCP DEIR/DEIS (bare) -- 13,365 [pages]</p> <p>BDCP DEIR/DEIS appendices -- 17,863 [pages]</p> <p>WaterFix RDEIR/SDEIS, without appendices -- 2,927 [pages]</p> <p>WaterFix RDEIR/SDEIS appendices -- 5,976 [pages]</p> <p>Total page count: 49,122</p> <p>The final EIR/EIS will of course be a much larger document because it will also include all comments on the BDCP DEIR/DEIS and the WaterFix RDEIR/SDEIS, as well as the lead agencies' responses to those comments.</p>	
2657	11	<p>Because the Public Draft BDCP document has been physically integrated into the full DEIR/DEIS rather than simply being referenced, any change to the BDCP document is also a change to the Draft EIR/EIS. On the other hand, if the lead agencies make changes to the project description through the WaterFix RDEIR/SDEIS process but fail to make conforming changes within the Public Draft BDCP document, then the draft EIR/EIS is rendered internally inconsistent. That is exactly what has happened here.</p> <p>The lead agencies have described their proposal in so many different ways that it is not clear what version of the project is the proposed "project" for purposes of CEQA and NEPA evaluation. According to the Public Draft BDCP document, the water conveyance infrastructure to be built as part of project component CM1 would include three new north Delta intakes with a total combined intake capacity not exceeding 9,000 cfs [cubic feet per second]. (BDCP, p. 3.4-12, lines 39- 41.) The Public Draft BDCP implies that the proposed twin 40-foot diameter tunnels have been sized no larger than necessary to allow gravity flow of the maximum 9,000 cfs quantity from these three proposed intakes. (BDCP, p. 3.4-13, lines 1-3, &amp; p. 4-11, Table 4-3.) "Diversion[s] at the north Delta intake[s] would be greatest in wetter years and lowest in drier years, when south Delta diversions would provide the majority of the CVP and SWP south-of-Delta exports." (BDCP, p. 3.4-12, lines 29-31.)</p> <p>Yet ten of the fourteen "action" alternatives described in the DEIR/DEIS would have an export capacity of 15,000 cfs using the same twin 40-foot diameter tunnels. The DEIR/EIS does not explain how any of the ten 15,000 cfs export alternatives would "avoid or substantially lessen any of the significant effects of the project." (CEQA Guidelines, [Section] 15126.6(a); see also 40 C.F.R. [Section] 1502.1.) Even more troubling, the DEIR/DEIS does not explain the inconsistency between its implication that the twin 40- foot diameter tunnels are no larger than necessary to convey the maximal 9,000 cfs flows from the three proposed north Delta intakes, but yet large enough to handle gravity flows of up to 15,000 cfs if two additional north Delta intakes are constructed.</p>	<p>The purpose of the separate BDCP report was to be used as a Habitat Conservation Plan (HCP) for submittal to the USFWS and NMFS and as a Natural Communities Conservation Plan (NCCP) for submittal to CDFW. Alternative 4 remains a viable alternative; however, the preferred alternative is now Alternative 4A/California WaterFix and does not involve an HCP component. The description of the proposed project, Alternative 4A, is presented in Chapter 3 of the Final EIR/EIS.</p> <p>As described in the Conceptual Engineering Report referenced in the EIR/EIS, Alternative 4A would not include pumping plants at the intakes. Instead, a pumping plant would be installed at the northern end of an expanded Clifton Court Forebay. The tunnels were redesigned to allow for water to flow by gravity to the Clifton Court Forebay pumping plants which would lift the water into the expanded Clifton Court Forebay. It would not be possible to operate the proposed tunnels at flows greater than 9,000 cfs unless the entire proposed pumping plant at the northern Clifton Court Forebay was reconstructed to provide for hydraulic flow of larger flows. This type of modification would require additional engineering and environmental studies and is not addressed in this EIR/EIS.</p>

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2657	12	<p>It is not clear whether the project described in the Public Draft BDCP, which functions as the project description in the draft EIR/EIS for purposes of CEQA and NEPA, is actually the project that the lead agencies intend to approve. According to their latest public statements, reflected in the two FAQ documents attached hereto [ATT5, ATT6], the lead agencies are now proposing to approve the WaterFix project and are deferring consideration of the EcoRestore project until some future time. But according to the 50,000-page draft EIR/EIS currently before the public, as augmented in July 2015 to include the WaterFix RDEIR/SDEIS, the state and federal lead agencies are still proposing to approve all twenty-two components of the BDCP project through a single project-approval action by each agency.</p>	<p>The proposed project is Alternative 4A, also known as California WaterFix. Alternative 4A replaces the BDCP. The description of this proposed action is provided in Section 4 of the RDEIR/SDEIS. CEQA and NEPA require that more than one alternative action be evaluated, thus a total of 18 action and 2 no action alternatives are evaluated. Decision makers can choose to adopt any of the action alternatives or reject all of them.</p>
2657	13	<p>As a result of shifting an unstable project description, there are at least three different projects described in the draft EIR/EIS as it currently exists. The draft EIR/EIS does not provide an adequate CEQA/NEPA environmental impact evaluation of any of these projects, but the first step in providing an adequate evaluation is for the lead agencies to settle on a single stable, accurate, and finite project description. The three different projects described or alluded to in the current draft EIR/EIS are the following:</p> <p>-BDCP: up to 9,000 cfs [cubic feet per second] export capacity; approximately 80,000 to 145,000 acres of habitat enhancement, restoration, or preservation; impacts to special status species to be mitigated through federal Section 10 HCP process and state NCCP process, with 50-year duration of commitments.</p> <p>-California WaterFix: up to 9,000 cfs export capacity; project impact mitigation of approximately 2,300 acres of habitat restoration and up to 13,300 acres of habitat preservation; impacts to special status species to be mitigated through federal Section 7 consultation and state 208(b) incidental take permit process. An additional approximately 30,000 acres of habitat may be enhanced or restored through the future and yet undefined California EcoRestore project, but approval and implementation of the Water Fix project is not dependent on approval of the EcoRestore project.</p> <p>-"Super" BDCP: up to 15,000 cfs export capacity; approximately 80,000 to 145,000 acres of habitat enhancement, restoration, or preservation; impacts to special status species to be mitigated through federal Section 10 HCP process and state NCCP process, with 50-year duration of commitments.</p>	<p>The Lead Agencies believe that the 2013 Draft EIR/EIS and 2015 RDEIR/SDEIS are complete in their evaluation of impacts, direct and cumulative, that project description is complete and satisfies the requirements of NEPA, that the project objectives are also precise and complete and satisfy the requirements of CEQA. The Lead Agencies agree that the 2013 Public Draft EIR/EIS and 2015 RDEIR/SDEIS provided the public and decision makers with sufficient information on which to make informed comments, which have been considered and incorporated into the Final EIR/EIS.</p> <p>The project description for the currently proposed project, California WaterFix, Alternative 4A, was provided in 2015 for public review in Section 4 of the RDEIR/SDEIS. Please see Master Response 4 for more information on the alternatives.</p>
2657	14	<p>WaterFix and BDCP cannot be evaluated in same Draft EIR/EIS.</p> <p>The differences between the WaterFix project and the BDCP project present the problem discussed by the Supreme Court in <i>Vineyard Area Citizens v. City of Rancho Cordova</i> (2007) 40 Cal.4th 412, namely, the requirement for a lead agency to discuss the reasonably foreseeable impacts of incomplete project implementation in its EIR. (Id. at p. 434.) In <i>Vineyard</i>, the City of Rancho Cordova proposed to adopt two planning documents: a conceptual community plan for a 6,000-acre area that envisioned more than 22,000 homes and as many as 60,000 people, and a specific plan for a 2,600-acre subarea of the community plan area that established land use and infrastructure plans for 9,886 homes. The City recognized that the two plans together constituted a single "project" for purposes of CEQA review, and therefore evaluated the net environmental impacts of the two plans by preparing a single EIR for the overall project. The City had firm water supplies for anticipated development in the 2,600-acre specific plan area, but sources of water to develop the remaining 3,400 acres of the community plan area were less certain. To</p>	<p>This comment summarizes the legal findings of a separate project which is not related to implementation of the California WaterFix. Please see responses to subsequent comments submitted by this commenter.</p>

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		<p>mitigate for this uncertainty, the City's EIR provided that development of the 3,400 acres would not be approved until firm water supplies were identified and evaluated through a future CEQA process.</p> <p>The Supreme Court held that the City's EIR was legally inadequate because it failed to evaluate the reasonably foreseeable impacts of developing only the 2,600-acre specific plan area without also developing the remaining 3,400 acres of the community plan area. Although the City's EIR had evaluated the net impacts of the two plans being implemented in combination, it did not evaluate the impacts of the specific plan being implemented without the community plan. Given the uncertainty that the City would ever secure water supplies for development of the remaining 3,400 acres, it was reasonably foreseeable that only the 2,600-acre specific plan area would be developed, and that this reasonably foreseeable smaller project could have significant environmental impacts that were not identified and discussed in the EIR.</p>	
2657	15	<p>The courts have long been vigilant against agency attempts to piecemeal CEQA review. "The requirements of CEQA cannot be avoided by piecemeal review which results from 'chopping a large project into many little ones -- each with a minimal potential impact on the environment -- which cumulatively may have disastrous consequences.'" (Rio Vista Farm Bureau Center v. County of Solano (1992) 5 Cal.App.4th 351, 370.) In Vineyard, the Supreme Court held that adequate CEQA review also requires a lead agency to identify and evaluate the reasonably foreseeable environmental impacts of piecemeal or incomplete project approval and implementation.</p> <p>By now proposing the WaterFix and EcoRestore projects as substitutes for the BDCP project, the lead agencies are acknowledging that approval and implementation of the BDCP project will be intentionally piecemealed. In addition, by fast-tracking approval and implementation of Water Fix while deferring analysis and consideration of EcoRestore -- effectively de-linking the two sets of activities -- the lead agencies are acknowledging that approval of their substitute projects will potentially be incomplete.</p>	<p>Alternative 4 remains a viable alternative; however, the preferred alternative is now Alternative 4A/California WaterFix and no longer includes an HCP. Alternative 4A reflects the state's proposal to separate the conveyance facility and habitat restoration measures into two separate efforts: California WaterFix and California EcoRestore. Restoration actions that are independent of Proposed Action, such as EcoRestore, are evaluated as part of the cumulative impact analysis. If the WaterFix is not implemented, the EcoRestore projects can and are proposed to proceed. For more information regarding piecemealing and segmentation please see Master Response 8.</p>
2657	16	<p>Despite the approximately 50,000 pages of environmental impact analysis included in the lead agencies' draft EIR/EIS, that draft document does not adequately identify and discuss the reasonably foreseeable significant environmental impacts of the WaterFix project being approved and implemented in isolation from other possible future projects, such as EcoRestore or project components CM2 through 22 that were proposed as part of the apparently-abandoned BDCP project. Of course, any EIR/EIS for the WaterFix project must discuss the cumulative impacts of that project in combination with other past, present, and reasonably foreseeable future projects, but a cumulative impacts analysis is not a substitute for a project impact analysis. (Compare CEQA Guidelines, [Section] 15126.2 with [Section] 15130.) Because EcoRestore is now being proposed as a project separate and independent from WaterFix, any beneficial impacts of EcoRestore are relevant only to a discussion of WaterFix's cumulative impacts, and cannot be used as mitigation or otherwise balanced against the significant adverse impacts that will be caused directly or indirectly by the WaterFix project. The current draft EIR/EIS does not provide such an impact analysis of the WaterFix project and is therefore inadequate to be used as the CEQA/NEPA document to support approval of that project.</p>	<p>The California EcoRestore program is separate from the California WaterFix and is not used to mitigate impacts of constructing or operating proposed conveyance facilities. As described in the Section 4 of the RDEIR/SDEIS and Chapter 3, Description of Alternatives in this Final EIR/EIS, Alternative 4A (California WaterFix), includes Environmental Commitments that would require restoration, protection and other actions to reduce conveyance facility effects. These Environmental Commitments and mitigation measures would be implemented to reduce the severity of environmental effects. The EIR/EIS also discloses environmental commitments and avoidance and minimization measures in Appendix 3B to further reduce effects of the action alternatives. The combined effects of California WaterFix and California EcoRestore and other cumulative projects are evaluated in each resource chapter in the cumulative impacts analyses section.</p>
2657	17	<p>The Draft EIR/EIS must not include Super BDCP as a Project Alternatives.</p> <p>The draft EIR/EIS evaluates ten alternatives to the BDCP project that would enable the lead</p>	<p>In response to input from the public on the Draft EIR/EIS comment period as well as from agencies, the lead agencies developed additional alternatives that were analyzed in the RDEIR/SDEIS. Please see Master</p>

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		<p>agencies to export of up to 15,000 cfs [cubic feet per second] from the north Delta rather than "only" the 9,000 cfs of export capacity that would be provided by the project described in the Public Draft BDCP. We will refer to these 15,000 cfs alternatives as "Super BDCP." The lead agencies' draft EIR/EIS both as originally released for public review in 2013 and as augmented by the 2015 WaterFix RDEIR/SDEIS does not adequately explain how increasing water exports from the north Delta would "avoid or substantially lessen any of the significant effects of the [BDCP] project." (CEQA Guidelines, [Section] 15126.6(a); see also 40 C.F.R. [Section] 1502.1 [EIS "shall inform decision-makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment".])</p> <p>Given the apparent lack of any legitimate environmental reason for evaluating a Super BDCP project alternative -- with sixty-seven percent more water export capacity -- in the draft EIR/EIS, [Solano] County is concerned that a Super BDCP project or some equivalent-capacity variation thereof, rather than the 9,000 cfs BDCP project, may in fact be the bona fide subject of the draft EIR/EIS document.</p>	<p>Response 4 for additional information regarding the development of alternatives.</p> <p>The alternatives included in the Draft REIR/DEIS represent a legally adequate reasonable range of alternatives and the scope of the analysis of alternatives fully complies with both CEQA and NEPA.</p>
2657	18	<p>In Committee for a Progressive Gilroy v. State Water Resources Control Board (1987) 192 Cal.App.3d 847, the City of Gilroy had prepared and certified an EIR for a wastewater treatment plant with a capacity of 6.4 million gallons per day (mgd). The City built the facility it had evaluated in the EIR, but the Regional Water Quality Control Board limited operation of the facility to 5.15 mgd. After the City made some improvements and management changes at the facility, the Regional Board gave the City authorization to operate up to a maximum flow of 6.1 mgd. The Committee challenged the Regional Board's approval action, arguing that further CEQA review was required before the Regional Board could approve operation of the facility at the higher treatment capacity. The Court of Appeal disagreed, holding that the Regional Board's approval simply authorized the City to operate the facility in a manner that had already been evaluated in the certified EIR was not a new project subject to a new EIR. (Id., at pp. 862-863.) Because none of the factors that would require preparation of a subsequent or supplemental EIR were present (see Pub. Res. Code, [Section] 21166; see also CEQA Guidelines, [Sections] 15162 &amp; 15163 ), the Regional Board could have authorized the City to operate the facility up to the full 6.4 mgd design capacity evaluated in the certified EIR without conducting any further CEQA review.</p> <p>In light of the Committee for Progressive Gilroy decision and given the lead agencies' acknowledgment that the proposed twin 40-foot diameter tunnels could comfortably convey by gravity flow exports from the north Delta of up to 15,000 cfs [cubic feet per second], the County is justifiably concerned that the bona fide subject of the draft EIR/EIS, as augmented with the WaterFix RDEIR/SDEIS, could be a 15,000 cfs Super BDCP project rather than a 9,000 cfs project. For this reason, [Solano] County requests that all 15,000 cfs alternatives be deleted from the draft EIR/EIS document, and that a new DEIR/DEIS document that properly describes the true proposed project and discusses a properly focused range of reasonable project alternatives be circulated for public review and comment.</p>	<p>The evaluation of a range of alternatives is a required part of the CEQA and NEPA processes. The lead agencies make the final decisions regarding which alternative to approve and implement. The fact that an alternative was evaluated in the 2013 Draft EIR/EIS or the 2015 RDEIR/SDEIS does not mean that it would be implemented, it means rather that the lead agencies can review the various alternatives and their impacts, and make the best choice based on the project objectives and impacts. Please see Master Response 4 for more information regarding alternatives.</p>
2657	19	<p>The WaterFix RDEIR/SDEIS is inadequate because it fails to describe and analyze alternatives that would improve rather than degrade water quality in the Delta. CEQA requires that an "EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the</p>	<p>The proposed project is not intended to serve as a state-wide solution to all of California's water problems, and it is not an attempt to address directly the need for continued investment by the State and other public agencies in increased water storage, elimination of invasive species including aquatic weeds in the Delta, agricultural and municipal/industrial water conservation, recycling, desalination, treatment of contaminated aquifers, or other measures to expand supply and storage (as described in Section 1.C.3 of Appendix 1C,</p>

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		<p>comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decisionmaking and public participation." (CEQA Guidelines, [Section] 15126.6(a))</p> <p>The WaterFix RDEIR/SDEIS is inadequate because it fails to consider and analyze feasible alternatives that incorporate additional storage and infrastructure to capture "new" water during periods of high flow in the Delta, as well as other more viable intake locations that would not harm key fish species. Both the south Delta and north Delta intake locations would significantly harm fish species. The south Delta intakes are unscreened or inadequately screened and cause reverse flows that increase entrainment and mortality of fish species in the Delta.</p> <p>The north Delta intakes will reduce flow into and through the Delta, cause reverse flows in the north Delta, reduce migrating fish survival, and increase predation impacts. The 2013 Public Draft BDCP acknowledged that the north Delta intakes will have an adverse impact on key fish species. This is not offset by reducing exports from the south Delta because the south Delta intakes will continue to be used for 50% of the total exports and most of the exports will still be from the south Delta in dry periods.</p>	<p>Demand Management Measures). Please refer to Master Responses 3, 4, and 37 related development of new storage facilities in other projects and this proposed project.</p> <p>The potential for adding fish screens to the existing south Delta intake at Clifton Court Forebay was evaluated by Department of Water Resources and was found to not be feasible due to geographical characteristics of the sloughs in the south Delta, as described in Section 3A.7 of Appendix 3A, Identification of Water Conveyance Alternatives Conservation Measure 1, of the EIR/EIS.</p> <p>Under the proposed project, Alternative 4A, the CALSIM II model assumptions related to the North Delta Bypass Flows were specifically developed to reduce or eliminate diversions at the north Delta intakes during periods that would cause reverse flow patterns along the Sacramento River (see Appendix 5A, Section B). Therefore, tidal flows in the Sacramento River would be similar under the action alternatives and the No Action Alternative.</p>
2657	20	<p>The WaterFix RDEIR/SDEIS fails to adequately analyze alternatives that incorporate increased Delta flows consistent with the Delta Flow Criteria developed by the SWRCB and Department of Fish and Wildlife in 2010. The analyses that were done (BDCP Alt. 8 and WaterFix Alt. 4H3) used the same configuration as the proposed project without incorporating any infrastructure such as new storage that would allow "new" water to be captured to offset the water being made available to help restore and sustain the Delta ecosystem. New alternatives involving higher Delta flows during dry periods and new storage would improve water quality in the Delta, as required by the 2009 Delta Reform Act, rather than degrade it.</p>	<p>With regard to alternatives, for example, the broad range of alternatives included in the EIR/EIS reflects a commonly used type of "bookend" analysis, referring to a range of decision-making options (alternatives) consisting of a continuum of choices. Under the "bookend" approach utilized by the Lead Agencies for the operational alternatives, the EIR/EIS evaluated alternatives that ranged from higher export deliveries at one end, and reduced exports and higher outflows to protect fish species at the lower end. (See Final EIR/EIS Appendix 3A, Section 3A.9 and Chapter 3, Section 3.2.1.4.) By analyzing various alternatives covering the entire spectrum of impacts, the alternatives included in the Draft EIR/EIS, RDEIR/SDEIS and Final EIR/EIS represent an appropriate range of alternatives and will permit the Lead Agencies to make a reasoned choice among alternatives. Thus, the range of alternatives included in the EIR/EIS fully complies with CEQA and NEPA. For additional information regarding the formulation and selection of alternatives for evaluation in the EIR/EIS, please see Master Response 4. For additional information regarding SWRCB flow criteria, please see Appendix 3A of the Final EIR/EIS and Master Response 8.</p>
2657	21	<p>The WaterFix RDEIR/SDEIS is inadequate because it assumes away significant adverse impacts on water quality without doing any detailed modeling runs. The 2013 BDCP DEIR/DEIS concludes that the BDCP project will have significant adverse impacts on water quality in the Delta. The BDCP DEIR/DEIS described these significant adverse impacts as unavoidable, despite State policy and antidegradation statutes requiring that Bay-Delta projects not only contribute to achieving both of the coequal goals, but also contribute to improving water quality in the Delta (2009 Delta Reform Act, Cal. Water Code[Section] 85020(e)). The BDCP DEIR/DEIS failed to offer any meaningful, binding, or effective mitigation for these significant adverse impacts.</p> <p>The July 2015 California WaterFix RDEIR/SDEIS concludes that the new alternatives (4A, 2D, and 5A) will not have any significant impacts on water quality in the Delta. Apparently, the lead agencies' new position is that the significant adverse impacts identified in the BDCP DEIR/DEIS were avoidable after all, but this change in position is not explained in the WaterFix RDEIR/SDEIS or supported by any substantial evidence.</p> <p>The WaterFix RDEIR/SDEIS assumes away these significant adverse impacts without supporting those assumptions with any detailed model runs, and only using "brief sensitivity</p>	<p>Numerous, detailed model runs have been conducted for the use in assessing and analyzing potential water quality impacts. RDEIR/SDEIS 4.3.4 (4A) and Final EIR/EIS Chapter 8, Section 8.3.4, describes whether concentrations of various water quality constituents are expected to increase or decrease with the project, relative to existing conditions and the No Action Alternative. To the extent that concentrations of various water quality constituents are expected to increase, it is described whether these increases are expected to result in impacts to beneficial uses of water in the Delta. For constituents for which adverse impacts were expected, mitigation and other commitments, such as additional evaluation and modeling and consultation with water purveyors to identify additional measures to avoid and minimize or offset these impacts, were introduced to address those impacts.</p> <p>Additionally, adding intakes in the North Delta will allow for operational flexibility that can improve natural flow in the Delta and avoid impacts to migratory fish based on real time data and operations. Please refer to Master Response 14 for additional information related to the modeling approach employed in the RDEIR/SDEIS, Chapter 8 of the Final EIR/EIS and the Impacts Summary Table in the Executive Summary.</p> <p>This comment also suggests that there are deficiencies in the water quality assessment of the project alternatives on electrical conductivity (EC), chloride, and/or bromide (i.e., salinity), and organic carbon, specifically in regard to effects on drinking water intakes of Contra Costa Water District (CCWD) or City of</p>

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		<p>analyses" (WaterFix RDEIR/SDEIS Appen. B, p. B-1) based on flawed modeling studies used for the BDCP DEIR/DEIS. Comments on the BDCP DEIR/DEIS by the North Delta Water Agency, Contra Costa Water District, City of Antioch, and others identified significant problems with those studies and the modeling tools that were used. The WaterFix RDEIR/SDEIS acknowledges that the CALSIMII model has since been updated (id., at p. B-3), but the RDEIR/SDEIS fails to provide the public and regulatory agencies with new, corrected, detailed model runs. Instead, the CALSIM II model runs from the BDCP DEIR/DEIS were "used as is . . . to remain consistent with the draft EIR/EIS modeling." (Ibid.) As a result, all errors and shortcomings of the original modeling are repeated in the WaterFix RDEIR/SDEIS's sensitivity analyses.</p> <p>The conclusions reached in the WaterFix RDEIR/SDEIS that there are no significant adverse water quality impacts are purely speculative and optimistic, without any accurate analysis to support them.</p>	<p>Antioch. Commenters asserted one or more of the following issues with the assessment:</p> <ul style="list-style-type: none"> <li>• Effects at Antioch and CCWD intakes were underestimated because of coarse averaging periods (monthly, long-term, annual), and commenters assert that assessing impacts on a 15-minute or daily basis provides a more accurate representation of effects on the intake, and results in a greater level of effect than disclosed in the Draft EIR/EIS;</li> <li>• Related, longer averaging periods are inappropriate because improvements during periods when water quality is high do not offset degradation of water quality during periods when the quality is low;</li> <li>• The analysis only included two of CCWD's four intakes, and thus impacts to CCWD cannot be completely understood from the analysis;</li> <li>• Modeling simulated CCWD operations, including Los Vaqueros Reservoir storage, but this information was not used in the water quality assessment;</li> <li>• The project reduces the periods of time when there is good water quality in the Delta (e.g., periods when chloride concentrations at Contra Costa Water District's intakes are less than 50 and 65 mg/L), which causes a significant adverse impact on CCWD's delivered water quality and operation of the Los Vaqueros Reservoir. The Draft EIR/EIS fails to disclose impacts to CCWD's Los Vaqueros Reservoir.</li> </ul> <p>Regarding use of 15-minute or daily data for assessment purposes, Appendix 5A Section C of the Draft EIR/EIS, "Appropriate Use of Model Results" states that:</p> <p>"Due to the assumptions involved in the input data sets and model logic, care must be taken to select the most appropriate time-step for the reporting of model results. Sub-monthly (e.g. weekly or daily) reporting of model results is inappropriate for all models and the results should be presented on a monthly basis."</p> <p>The models contain various assumptions and limitations that preclude use of daily or sub-daily modeling results for most assessments, particularly those that compare modeling results to specific thresholds. A detailed description of modeling limitations can be found in Appendix 5A of the Draft EIR/EIS, as well as in Chapter 8 Section 8.3.1.1 and 8.3.1.3 of the RDEIR/SDEIS. Given the models used and the associated limitations in interpreting the output, utilizing a shorter time step than monthly average for assessing the City of Antioch and CCWD's intakes would not result in a more accurate assessment of effects of the project on salinity. While there would be days within a month in which salinity at a given location would be higher than the monthly average at that location (just as there would be days when it is lower), given the modeling limitations, comparing alternatives and baselines based on the monthly average at those locations is considered appropriate for the purposes of NEPA and CEQA.</p> <p>Regarding comments that the analysis only included two of CCWD's four intakes, and thus impacts to CCWD cannot be completely understood from the analysis, impacts to salinity were assessed at various locations throughout the Delta. Locations were chosen such that the assessment of changes under the alternatives relative to baselines would be representative of changes in various portions of the Delta as a whole. Some commenters have asserted that the chosen locations are not representative of other locations, in some cases by showing time-series plots of a water quality constituent concentration at the two locations and highlighting the differences. Water quality in the Delta does vary spatially and temporally. It is obvious that there are many locations in the Delta that would not have identical water quality to the chosen locations for assessment. However, assessment was done on a comparative basis (i.e., alternatives as compared to baselines). Given the purposes of the assessment, the effects of the project at the locations assessed are considered representative of the effects of the project in various portions of the Delta as a whole. Thus, although CCWD's four intakes vary in their instantaneous water quality, effects of the project</p>

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			<p>on water quality at the two intakes assessed are considered representative of degree and direction of salinity changes at the other intakes.</p> <p>Regarding use of modeling for Los Vaqueros Reservoir impacts, modeling conducted for the project includes a representation of CCWD operations and Los Vaqueros Reservoir. However, the representation is a simplification and was not optimized for CCWD operations and intake options. The water quality assessment evaluated chloride levels relative to the Bay Delta Water Quality Control Plan (WQCP) chloride objectives. Objectives that apply at Contra Costa Pumping Plant #1 ensure that the municipal and industrial beneficial use of surface water in the west Delta is protected, relative to salinity. Los Vaqueros Reservoir is not a named water body in the Basin Plan and does not contain surface water beneficial uses. Furthermore, the project does not cause direct effects in Los Vaqueros Reservoir; rather, effects are indirect and are due to CCWD diversion of water from the Delta into the reservoir. Therefore, the assessment did not directly assess effects to Los Vaqueros Reservoir, but did assess effects of the project on surface water near CCWD intakes that divert water into the reservoir.</p> <p>CCWD has a goal of 65 mg/L chloride in water delivered to customers. This goal is not a state or federal water quality objective. Arguments made in some comments imply that any increases in chloride represent an impact to the beneficial use of water in Los Vaqueros Reservoir, but small increases in chloride concentrations when chloride is &lt; 100 mg/L typically do not adversely affect the municipal and industrial beneficial use of the surface water body. Adverse effects to the municipal and industrial beneficial use may occur when water quality objectives are exceeded (which was assessed via comparison of the modeling results to Bay Delta WQCP objectives), or when substantial water quality degradation occurs, such that exceedance is more likely and beneficial uses may be impacted. The chloride assessment in the Draft EIR/EIS includes an assessment of degradation on a monthly average basis for the entire period modeled and the drought period modeled that evaluated use of assimilative capacity relative to the WQCP objective of 250 mg/L that applies year-round. Adverse impacts were identified where degradation would result in substantially increased risk for adverse effects to municipal and industrial beneficial uses, including at Antioch and CCWD Pumping Plant #1, which are of concern to the commenters. Thus, the Draft EIR/EIS discloses adverse effects associated with chloride degradation where they would occur.</p> <p>Finally, for chloride, project alternatives evaluated in the Draft EIR/EIS (Alternatives 1A, 1B, 1C, 2A, 2B, 2C, 3, 4, 5, 6A, 6B, 6C, 7, 8, 9) were considered to have significant and unavoidable impacts in the Delta due in part to water quality degradation occurring in the western Delta, and for some alternatives, exceedance of the 150 mg/L chloride objective. Various analyses and improvements to the assessment were added, as described in Section 2.2.1 of the RDEIR/SDEIS and as incorporated into this Final EIR/EIS. Alternatives 2D, 4A, and 5A did not show significant impacts for chloride from substantial degradation or objective exceedance in the western Delta, and thus impacts for chloride are considered less than significant.</p>
2657	22	<p>Sensitivity Analyses based on completely different operating rules and climate change conditions are not a substitute for full model runs.</p> <p>The conclusions reached in the WaterFix RDEIR/SDEIS are based on "brief sensitivity analyses" that DWR acknowledges are not full model runs. The WaterFix RDEIR/SDEIS revised language of the BDCP DEIR/DESIS to state:</p> <p>"Understanding the uncertainties and limitations in the modeling and assessment approach is important for interpreting the results and effects analysis, including assessment of compliance with water quality objectives. . . . In light of these limitations, the assessment of compliance is conducted in terms of assessing the overall direction and degree to which Delta chloride would be affected relative to a baseline, and discussion of compliance does not imply that the alternative would literally cause Delta chloride to be out of compliance a</p>	<p>The Final EIR/EIS includes model results for Alternatives 2D, 4A, and 5A as compared to the No Action Alternative and Existing Conditions in Appendix 5A, Section C, in addition to the model results previously provided in the Draft EIR/EIS. The comparative results between Alternatives 2D, 4A, and 5A and the No Action Alternative and the Existing Conditions are generally consistent with the impact analysis results presented in the RDEIR/SDEIS.</p> <p>With respect to the version of CALSIM II used in the EIR/EIS analysis, the modeling for the EIR/EIS has been based on the Existing Conditions, No Action Alternative, and Alternative 1 models developed in April – May of 2010 (2010 models), which were the state-of-the-art at the time, and formed the basis for universal assumptions in the other action alternatives in the EIR/EIS. However, in August 2011 several model improvements were identified by the water agencies, fishery agencies, and the modeling community. The identified improvements were compiled, and the Existing Conditions, No Action Alternative, and Alternative 1 models were updated in coordination with DWR, Reclamation and USFWS. This update was performed to</p>

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		<p>certain period of time. In other words, the model results are used in a comparative mode, not a predictive mode." (WaterFix RDEIR/SDEIS Appen. A revision to Appen. 80, p. 80-1): The WaterFix RDEIR/SDEIS is inadequate because it fails to carry out full model runs that simulate the full impacts of the proposed project.</p> <p>The WaterFix RDEIR/SDEIS states that Alternative 4 CALSIM II models from draft EIR/EIS were used as-is for the Alternative 4A sensitivity analysis, without including any recent updates and improvements that have been made to the CALSIM II. (WaterFix RDEIR/SDEIS Appen. B, p. B-3.) The WaterFix RDEIR/SDEIS says the reason for not using the most recent, corrected versions of the CALSIMIII flow operations model was to remain consistent with the draft EIR/EIS modeling." (Ibid.) As discussed in detail in comments by the North Delta Water Agency, Contra Costa Water District, the City of Antioch, and others on the BDCP DEIR/DEIS, the modeling used in that 2013 DEIR/DEIS was seriously flawed and the models themselves have been updated.</p> <p>The sensitivity analysis approach in the WaterFix RDEIR/SDEIS is not valid and does not inform the Alternative 4A impact analysis in the REIR/EIS, and in fact may result in misleading results. For example, the water quality sensitivity analyses were carried out using the BDCP project Alternative 4 at late long term (year 2060 future conditions, 65,000 acres of habitat restoration and 45 cm of sea level rise), but the impact analysis in the WaterFix RDEIR/SDEIS is done at the early long term (year 2025, 25,000 acres of habitat restoration and 15 cm of sea level rise) conditions. Because the water quality analyses still included sea level rise, the effect of seawater is simulated to be much greater at late long term than at early long term.</p>	<p>verify if the compiled model improvements altered the incremental changes between the BDCP Alternative 1 and the Existing Conditions and the No Action Alternative relative to the 2010 models. The findings from the 2011 update showed that the incremental differences between Alternative 1 and the Existing Conditions and the No Action Alternative remained consistent with the 2010 modeling. Therefore, the action alternatives modeled since 2011 continued to rely on the 2010 modeling, allowing consistency and comparability throughout the EIR/EIS. Similarly, when Alternative 4A was modeled using the 2013 baseline, the incremental changes in the operational results for Alternative 4A as compared to the No Action Alternative were similar to the prior incremental results between the 2010 modeling for the No Action Alternative and Alternative 4A. It should be noted that the modeling used in the EIR/EIS must be used in a comparative manner and not to define absolute values or absolute conditions that would occur with implementation of a specific alternative. The EIR/EIS analysis is based upon comparison of conditions under the proposed project (Alternative 4A) and other action alternatives and the conditions under the Existing Conditions and the No Action Alternative. These types of models are the most appropriate to analyze potential changes due to different operational assumptions for the SWP and CVP. The purpose of this comparison is to provide information to the Lead Agency decisionmakers to select the proposed project.</p>
2657	23	<p>The WaterFix RDEIR/SDEIS is inadequate because it uses the same flawed modeling used in the BDCP DEIR/DEIS and a "brief sensitivity analysis" to analyze and disclose the environmental impacts of a project of statewide importance that is likely to cause significant harm to the Delta ecosystem and other Delta beneficial uses. (WaterFix RDEIR/SDEIS Appen. B, p. B-1.) In addition, the WaterFix RDEIR/SDEIS acknowledges that "there is notable uncertainty in the results of all quantitative assessments that refer to modeling results, due to the differing assumptions used in the modeling and the description of the No Action Alternative (ELT [Early Long Term])." (WaterFix RDEIR/SDEIS, p. 4.2-18).</p>	<p>Please see the response to 2657-22.</p>
2657	24	<p>The WaterFix RDEIR/SDEIS states: "Based on the sensitivity analyses, optimizing the design and siting of restoration areas is expected to be able to reduce EC [electrical conductivity] and chloride increases in Suisun Marsh, relative to Existing Conditions and the No Action Alternative, to levels that would be less than significant." (WaterFix RDEIR/SDEIS, p. ES-27, line 16.)</p> <p>The sensitivity analyses were performed under quite different conditions (late long term with additional sea level rise and much more habitat restoration, 65,000 acres) than the preferred alternative, Alternative 4A (early long term, less sea level rise, no shift in the Emmatton compliance location, and no significant amount of habitat restoration). The WaterFix RDEIR/SDEIS makes no firm commitments to mitigate the expected impacts by implementing habitat restoration at optimized sites. Only a small amount of habitat restoration is being considered as part of California EcoRestore, most of which is already required under the OCAP [Operations and Criteria Plan] Biological Opinions. There is no longer a commitment by the WaterFix lead agencies to conduct that habitat restoration in a manner that would mitigate impacts to Suisun Marsh or Barker Slough, or to mitigate other</p>	<p>Since the time of the RDEIR/SDEIS, CALSIM/DSM2 modeling has been updated to more accurately reflect the Alternative 4A, H3+ operational scenario and restoration proposal. Chapter 8 of this Final EIR/EIS accurately presents the electrical conductivity and other water quality constituent analyses. No changes to the water quality impact significance conclusions were required based on the revised modeling and water quality analysis. The California EcoRestore program is a separate program from the California WaterFix (Alternative 4A) and is not analyzed as part of Alternative 4A. Projects under this program are included in the cumulative impacts discussion.</p>

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		expected Delta water quality impacts. There is no substantial evidence included or cited in the WaterFix RDEIR/SDEIS to support the optimistic expectation that water quality impacts will be reduced to less than significant levels. Detailed modeling studies and analysis are necessary to identify the impacts of Alternative 4A and to recommend appropriate mitigation measures.	
2657	25	<p>Sensitivity Analyses show a large range of potential water quality impacts at Barker Slough and in Suisun Marsh.</p> <p>The Sensitivity Analyses were based on the flawed modeling for Alternative 4, Scenario H3 at late long term [LLT], i.e., 2060 conditions with habitat restoration (which is no longer included with new Alternative 4A), and not updated using the most recent versions of the CALSIMII and DSM2 models. The following two figures [ATT1, ATT2] show the range of EC [electrical conductivity] at Barker Slough for the following sensitivity analyses used by DWR:</p> <p>SA1 -- BDCP Draft EIR/EIS Alternative 4, Scenario H3 at LLT</p> <p>SA2d -- Same as SA1 but with compliance at Emmaton and daily flow variations</p> <p>SA4 -- Same as SA1 but with Suisun Marsh Control Gate operations consistent with the NAA No Action Alternative]</p> <p>SA4A -- Same as SA4 but without the 65,000 acres of tidal habitat restoration</p>	It appears that the commenter is utilizing sensitivity analysis modeling results to identify impacts to water quality at Barker Slough and Beldon's Landing in Suisun Marsh. The sensitivity analyses discussed in Chapter 8, Water Quality, and presented in Appendix 8H, Electrical Conductivity were used to inform what was driving impacts to salinity-related parameters. The Draft EIR/EIS and Final EIR/EIS have identified significant impacts to salinity-related parameters bromide, chloride, and electrical conductivity (EC) for Alternatives 1A, 1B, 1C, 2A, 2B, 2C, 3, 4, 5, 6A, 6B, 6C, 7, 8, and 9, and introduced mitigation for those impacts. Mitigation includes consideration of siting of restoration areas. The RDEIR/SDEIS and Final EIR/EIS identified significant impacts to EC for Alternatives 4A, 2D, and 5A, and provided mitigation for those impacts. Again, please refer to Master Response 14 for the portions of the comment related to the modeling approach.
2657	26	[ATT1: Figure 1: Daily EC [electrical conductivity] values at Barker Slough from the sensitivity analyses for the period October 1976 through September 1984.]	This comment describes a graph included in the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. Please see responses to Comments 25 and 28.
2657	27	[ATT2: Figure 2: Daily EC [electrical conductivity] values at Barker Slough from the sensitivity analyses for the period October 1984 through September 1991.]	The comment is a description of a graph included in the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. Please see responses to Comments 25 and 28.
2657	28	<p>Plotted for comparison purposes [ATT1, ATT2] is the No Action Alternative developed for the WaterFix RDEIR/SDEIS for late long term. The WaterFix RDEIR/SDEIS only presented the water quality data as the averages for each month of the year for the short period modeled, water years 1976-1991, and for the water year 1987-1991 drought period. The 1976-1977 drought period was not included in the drought averaging.</p> <p>As shown in Figures 1 and 2 [ATT1, ATT2], the changed circumstances of removing 65,000 acres of habitat restoration could reduce EC [electrical conductivity] at Barker Slough during drought periods (relative to the BDCP DEIR/DEIS proposed project, SA1) but increase EC significantly in normal and wetter years.</p> <p>The WaterFix RDEIR/SDEIS only presents bromide concentration changes at Barker Slough and Belden's Landing as period averages (Appendix B, Tables Br-1 and Br-2) but does present chloride concentration changes at these two locations as period averages for each month of the year (Tables Cl-6 and Cl-7). The bromide and chloride concentrations are derived from the simulated EC data using two different methods. However, the</p>	It appears that the commenter is utilizing sensitivity analysis modeling results to identify impacts to water quality at Barker Slough and Beldon's Landing in Suisun Marsh. The sensitivity analyses discussed in Chapter 8, Water Quality, and presented in Appendix 8H, Electrical Conductivity were used to inform what was driving impacts to salinity-related parameters. The Draft EIR/EIS and Final EIR/EIS have identified significant impacts to salinity-related parameters bromide, chloride, and electrical conductivity (EC) for Alternatives 1A, 1B, 1C, 2A, 2B, 2C, 3, 4, 5, 6A, 6B, 6C, 7, 8, and 9, and introduced mitigation for those impacts. Mitigation includes consideration of siting of restoration areas. The RDEIR/SDEIS and Final EIR/EIS identified significant impacts to EC for Alternatives 4A, 2D, and 5A, and provided mitigation for those impacts. The type of modeling results presented in supporting appendices for Chapter 8, Water Quality, varies for each constituent as necessary to support the water quality assessment. Regarding EC, the assessment focused on changes in EC at Bay-Delta Water Quality Control Plan (WQCP) compliance locations, which were established by the State Water Resources Control Board for the protection of agricultural beneficial uses. Barker Slough is not an EC compliance location. Beldon's Landing is a compliance location for protection of fish and wildlife beneficial uses and modeling results are presented in Appendix 8H, Electrical Conductivity. Effects to agricultural beneficial uses were determined through evaluating changes in EC levels and compliance with

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		corresponding presentation of EC data (Table EC-8A) does not show the averages for Barker Slough or Belden's Landing. This is a significant omission.	objectives at WQCP locations.
2657	29	As noted by the Delta Independent Science Board in their September 30, 2015 review of the WaterFix RDEIR/SDEIS, the presentation of data in this environmental document is "sufficiently incomplete and opaque to deter its evaluation and use by decision makers, resource managers, scientists and the broader public." The use of long-term averages in the tables in Appendix B masks the significant changes in water quality at Barker Slough and Belden's Landing and fails to disclose significant adverse water quality impacts.	Evaluation of long-term average changes in water quality conditions in Barker Slough was one component of the water quality assessment. The assessment also considered monthly average changes in water quality relative to applicable water quality objectives. At Beldon's Landing, the assessment of EC changes was conducted quantitatively to the extent the modeling results could reasonably and appropriately be interpreted. Appendix 5A, Section C of the Final EIR/EIS, "Appropriate Use of Model Results" states that: "Due to the assumptions involved in the input data sets and model logic, care must be taken to select the most appropriate time-step for the reporting of model results. Sub-monthly (e.g., weekly or daily) reporting of model results is inappropriate for all models and the results should be presented on a monthly basis." The models contain various assumptions and limitations that preclude use of daily or sub-daily modeling results for most assessments, particularly those that compare modeling results to specific thresholds. Additional discussion of modeling limitations can be found in Appendix 5A of the Draft EIR/EIS, as well as in Chapter 8, Water Quality, Sections 8.3.1.1 and 8.3.1.3 of the Final EIR/EIS. Given the models used and the associated limitations in interpreting the output, it is not possible to use model results to interpret changes relative to Bay-Delta Water Quality Control Plan objectives for Suisun Marsh, which are established as monthly average of the two daily high tide values. While a monthly average is a coarser time-step than the objectives, comparison of the degree to which monthly average EC levels would change under the alternatives provides an indication of the effect of the alternative on marsh EC levels.
2657	30	Depending on where the habitat restoration needed to mitigate the significant adverse impacts of the WaterFix preferred alternative is implemented, and where the habitat restoration for California EcoRestore is implemented, the water quality impacts at Barker Slough and in Suisun Marsh could be significant. The timing of those impacts will also vary depending on the degree of habitat restoration. It is crucial that these impacts be determined, analyzed using full model runs, disclosed, and then either avoided or mitigated before any decisions regarding the WaterFix project are made by the lead agencies and regulatory agencies such as SWRCB and the Army Corps [of Engineers].	The EIR/EIS assesses impacts to the environment due to California WaterFix; California EcoRestore is unassociated with any habitat restoration that may be required as part of the construction and operation of new Delta water conveyance facilities under WaterFix. The area of habitat restoration for WaterFix is limited in size, relative to the Delta as a whole, and thus was not included in modeling of Alternatives 4A, 2D, and 5A so as to isolate and assess effects of the conveyance facility on water quality.
2657	31	[ATT3: Figure 3: Scatter plot of daily EC [electrical conductivity] values at Barker Slough from the WaterFix sensitivity analyses with no restoration (SA4A, LLT [Late Long Term]) for the period October 1975 through September 1991. Some peak EC are reduced relative to the No Action equivalent but significant adverse impacts occur at other times.]	This comment describes an attachment to the comment letter. The attachment provides data but does not raise any issues related to the environmental analysis. Please see response to comment 33.
2657	32	[ATT4: Figure 4: Scatter plot of daily EC [electrical conductivity] values at Belden's Landing from the WaterFix sensitivity analyses with no restoration (SA4A, LLT [Late Long Term]) for the period October 1975 through September 1991. There are some reductions in EC relative to the No Action equivalent but significant adverse impacts occur at other times.]	This comment describes an attachment to the comment letter. The attachment provides data but does not raise any issues related to the environmental analysis. Please see response to comment 33.
2657	33	Figures 3 and 4 [ATT3, ATT4] show the EC [electrical conductivity] data for each month of the 16-year sensitivity analysis simulation period (192 data points) in the form of scatter plots. The EC data for Barker Slough and Belden's Landing for Sensitivity Analysis #4 (no habitat restoration) are plotted as a function of the WaterFix No Action Alternative. Both are at late long term.  Some peak ECs at Barker Slough are reduced relative to the No Action equivalent but significant adverse impacts occur at other times. There are some reductions in EC relative to the No Action equivalent at Belden's Landing but significant adverse impacts occur at other times. The presentation of water quality data must present the data in sufficient detail to	Please see response to Comments 28 and 29.

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		<p>fully disclose the daily or month to month variations in water quality, in particular the occasions when salinities increase significantly. It is not acceptable to only present long-term averages that obscure and reduce the significant impacts on urban and agricultural water users, and the Delta ecosystem.</p> <p>The WaterFix RDEIR/SDEIS is inadequate because it fails to present analysis data in a form that discloses the daily or month to month impacts of the proposed project on water quality and fails to avoid or provide definitive mitigation for these significant impacts on water quality.</p>	
2657	34	<p>The WaterFix RDEIR/SDEIS presents unsubstantiated water quality data for the new alternatives.</p> <p>The WaterFix RDEIR/SDEIS is inadequate and confusing for the public and decision-makers because it claims that Alternatives 4A, 2D, and 5A were evaluated and that the evaluation was at early long term. Of particular concern are the tables in Appendix B, Supplemental Modeling Results for New Alternatives, that claim to present the water qualities for Alternative 4A for Scenario H3 and H4 at early long term when no full model runs or even sensitivity runs were performed for those cases.</p>	<p>Please see responses to comments 21 and 22 of this letter regarding modeling used to support water quality assessments of Alternative 4A, 2D, and 5A in the RDEIR/SDEIS, and updates to that modeling completed for the Final EIR/S.</p>
2657	35	<p>Executive Summary, Page ES-8, line 33:</p> <p>The WaterFix RDEIR/SDEIS states: "the other alternatives evaluated in the WaterFix RDEIR/SDEIS, Alternative 4A, 2D, and 5A, are evaluated at the Early Long-Term (ELT) time-frame because the project implementation period is anticipated to be shorter." This is not correct. No full model runs for these three alternatives were carried out and the "brief sensitivity analyses" of water quality impacts that were performed were at late long term (2060 rather than 2025 conditions). The sensitivity analyses were based on flawed Alternative 4 model runs from the BDCP DEIR/DEIS, never included all the components of the preferred alternative 4A, and most included 65,000 acres of habitat restoration and much greater sea level rise and seawater intrusion.</p> <p>The WaterFix RDEIR/SDEIS inaccurately claims that Alternatives 4A, 2D, and 5A were evaluated, and that the evaluation was at early long term. Of particular concern are the tables in Appendix B, Supplemental Modeling Results for New Alternatives, that claim to present the water qualities for Alternative 4A for Scenario H3 and H4 at early long term when no full model runs or even sensitivity runs were performed for those cases.</p>	<p>Please see responses to comments 21 and 22 of this letter regarding modeling used to support water quality assessments of Alternative 4A, 2D, and 5A in the RDEIR/SDEIS, and updates to that modeling completed for the Final EIR/EIS.</p>
2657	36	<p>Section ES.1.3 (page ES-9): Areas of Known Controversy:</p> <p>The WaterFix RDEIR/SDEIS identifies an insufficient range of reasonable project alternatives as one known area of controversy. The range and adequacy of project alternatives is an issue of concern to the public as well as to governmental agencies. Of the fifteen project alternatives described in the BDCP DEIR/DEIS, only one (Alternative 9) was substantially different in terms of infrastructure than the others. The others all involved new intakes in the north Delta with an isolated conveyance system linking various configuration of three to five intakes to the SWP and CVP export pumps in the south Delta. The adverse environmental impacts on aquatic species and water quality in the Delta were not significantly different whether the isolated conveyance was a canal, pipeline or tunnel or whether it followed an eastern or western alignment. The three new "sub-alternatives" added by the WaterFix RDEIR/SDEIS are very similar to the earlier fourteen in terms of</p>	<p>Although many of the proposed alternatives included meritorious water policy principles, the proposals rejected by the Lead Agencies did not qualify as appropriate alternatives for various reasons. For example, proposals were rejected because they were inconsistent with the project's objectives and purpose and need or included components that are beyond the scope of the project. The text of the Draft EIR/EIS in Chapter 3 (section 3.2) and Appendix 3A to that document thoroughly explain the process used to develop the alternatives, and explain why certain potential alternatives were considered but ultimately rejected by the Lead Agencies. Please see Master Response 4 for further detail regarding alternatives development and why the tunnel option was optimized.</p> <p>The Proposed Project is intended to provide a more reliable water supply, with diversions that are more protective for fish, in accordance with the Delta Reform Act co-equal goals of improving water supply reliability and Delta ecosystem health. Please refer to Master Response 31 (Compliance with the Delta</p>

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		<p>intake location and isolated conveyance, and again fail to reduce exports during drier months and capture more water in wetter months when it is surplus to the needs of the Delta, or otherwise contribute to achievement of the coequal goals.</p> <p>A new Draft EIR/EIS is warranted that includes new alternatives that are substantially different than those already studied, e.g., incorporating new storage, actions to reduce demand on the Delta -- such as water reuse -- especially during drier periods, levee-strengthening, and fully analyzes and discloses, avoids, and mitigates their impacts.</p>	<p>Reform Act).</p> <p>Additional water storage was eliminated from consideration in the BDCP EIR/EIS and RDEIR/SDEIS through the alternatives development and screening process (discussed in the response to Comment 38 and in Appendix 3A, Identification of Water Conveyance Alternatives). As such, the California WaterFix, Alternative 4A, does not propose storage as a project component. Although the proposed project would be part of an overall statewide water system of which new storage could someday also be a part, Alternative 4A is a stand-alone project which demonstrates independent utility just as future storage projects would demonstrate. For more information related to storage, please see Master Response 37.</p>
2657	37	<p>Section ES.1.4.3 (page ES-12): Cumulative Impact Analyses:</p> <p>The WaterFix RDEIR/SDEIS includes additional reasonably foreseeable proposed projects that, when considered together with the action alternatives, could have a significant cumulative effect. The analysis includes a discussion of the California Water Action Plan, California EcoRestore, and the Sustainable Groundwater Management Act to better describe the roles of the new Delta conveyance facilities and habitat restoration in the context of the state's comprehensive vision for water management.</p> <p>The proposed project fails to produce any significant improvement in water supply reliability, degrades rather than improves water quality in the Delta, harms key fish species (BDCP Executive Summary), and otherwise fails to meet the state and federal statutory requirements to contribute to achieving the coequal goals. The California Water Action Plan includes additional actions such as new storage that will be necessary. As such the WaterFix RDEIR/SDEIS should have analyzed operations of the preferred alternative in the future with new storage, actions to reduce demand, and the long-overdue habitat restoration required by the SWP and CVP biological opinions. DWR also indicated, in the BDCP Draft EIR/EIS, its intent to request that the compliance location for the Emmatton standard be moved to Three Mile Slough. The new alternatives do not include this change in compliance location to reduce the significant adverse water quality impacts of the BDCP alternatives, but a future request that this compliance location be shifted is reasonably foreseeable and should also be modeled as a cumulative impact.</p> <p>The WaterFix RDEIR/SDEIS also notes that the SWRCB is working on revising its Water Quality Control Plan to increase flows on the San Joaquin River (Phase 1) and in the Delta and the other tributaries. The cumulative impact of these flow increases on the proposed project and the viability of the new intakes and twin tunnels once the increased flows are implemented by the SWRCB must be fully analyzed.</p>	<p>Discussion of the main environmental attributes affecting individual covered species are provided in Appendix 2.A of the 2013 Public Draft. Effects of the proposed water conveyance and associated restoration activities on general resource areas are discussed in Ch. 4 of the RDEIR/SDEIS. Resource areas are addressed separately under sections for each of the new project Alternatives, including surface water, groundwater, water quality, fish and aquatic resources, terrestrial biological resources, agricultural resources, air quality and greenhouse gases, public health, and others. Where impacts are determined to be significant, environmental commitments will be implemented to avoid and/or offset these effects, where possible.</p> <p>The Proposed Project would enable DWR to construct and operate new conveyance facilities that improve conditions for endangered and threatened aquatic species in the Delta while at the same time improving water supply reliability, consistent with California law (see, e.g., Cal.Wat. Code, § 85001(c)). Implementing the conveyance facilities would help resolve many of the concerns with the current south Delta conveyance system, and would help reduce threats to endangered and threatened species in the Delta, including entrainment at south Delta export facilities. For instance, implementing a dual conveyance system would align water operations, and their location, to better reflect natural seasonal flow patterns by creating new water diversions in the north Delta equipped with State-of-the-art fish screens, thus reducing reliance on south Delta exports during times of the year when listed aquatic species are present and most vulnerable. For more information on mitigation measures to minimize contraction and operational-related impacts to fish species, including Delta and longfin smelt, please see Chapter 11, EIR/EIS.</p> <p>The Cumulative Impact Analyses that was written for the 2013 Public Draft EIR/EIS has been revised to include the impacts associated with the new proposed project alternatives and also updates past analyses. Environmental Commitments are to minimize effects to the Delta and its inhabitants and mitigate for loss of habitat to the ecosystem and its species. For more information please see Section 5 Revisions to Cumulative Impact Analyses, Appendix A Chapter 11 Fish and Aquatic Resources, Appendix A Chapter 12 Terrestrial Biological Resources, and Appendix 3B Environmental Commitments, AMMs, and CMs of the RDEIR/SDEIS. For additional information regarding cumulative impacts, please see Master Response 9.</p> <p>The proposed project is just one element of the state's long-range strategy to meet anticipated future water needs of Californians in the face of expanding population and the expected effects of climate change. The BDCP/WaterFix is not a comprehensive, statewide water plan, but is instead aimed at addressing many complex and long-standing issues related to the operations of the SWP and CVP in the Delta, including reliability of exported supplies, and the recovery and conservation of threatened and endangered species that depend on the Delta.</p> <p>The California Water Plan evaluates different combinations of regional and statewide resources management strategies to reduce water demand, increase water supply, reduce flood risk, improve water quality, and enhance environmental and resource stewardship. Follow the California Water Plan here: <a href="http://www.waterplan.water.ca.gov/">http://www.waterplan.water.ca.gov/</a>.</p>

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			<p>For information regarding cumulative impacts please see Master Response 9 (Cumulative Impact Analysis).</p> <p>One of the State Water Resources Control Board’s (State Water Board’s) charges is to ensure that the State’s water is put to the best possible use and that this use is in the best interest of the California public. This charge is reflected in part by the designation of beneficial uses established through the State Water Board’s planning process. These beneficial uses are identified in each Water Quality Control Plan (Basin Plan) issued by the State Water Board.</p> <p>As described in Appendix 3A, Section 3A.9.3, of the 2013 Public Draft EIR/EIS the State Water Resources Control Board prepared a Delta Flow Criteria Report in accordance with the requirements of the Sacramento-San Joaquin Delta Reform Act of 2009. Information from that report included “determinations of flow criteria for the Delta ecosystem to protect public trust resources. The report makes clear, however, that the flow criteria do not consider the balancing of public trust resource protection with public interest needs for water. The flow criteria also did not consider other public trust resource needs such as the need to manage cold-water resources in reservoirs tributary to the Delta. Nonetheless, the flow determinations contained in the Delta Flow Criteria Report, together with recent scientific conclusions of other State and federal agencies, including the Department of Fish and Wildlife, National Marine Fisheries Service, and the Interagency Ecological Program provide a useful guide to establish one side of a reasonable range of alternatives” (State Water Resources Board letter dated April 19, 2011). The information in the flow criteria report was used to inform the development of the proposed project.</p> <p>Please also see Appendix C of the RDEIR/SDEIS Supplemental Modeling Requested by State Water Resources Control Board Related to Increased Delta Outflows.</p>
2657	38	<p>Page ES-15:</p> <p>The WaterFix RDEIR/SDEIS says their alternative implementation strategy (Alternatives 4A, 2D, and 5A) focuses on the conveyance facility improvements necessary for the SWP to address more immediate water supply reliability needs, and allows for other state and federal programs to address the long-term conservation efforts for species recovery through programs separate from the proposed project. This is further confirmation that the WaterFix proposal is contrary to the 2009 Delta Reform Act because it only attempts to achieve one of the coequal goals.</p> <p>The new conveyance facilities will not improve conditions for endangered and threatened aquatic species in the Delta. Instead, reverse flows in the south Delta will continue, exports from the south Delta will actually increase during drier months, Clifton Court Fore bay will remain unscreened, and the new north Delta intakes will harm key fish species. (Draft BDCP, Executive Summary.) Implementing the conveyance facilities will exacerbate rather than help resolve many of the concerns with the current south Delta conveyance system. The WaterFix RDEIR/SDEIS also fails to present any evidence or arguments why implementing new conveyance separately will allow for implementing habitat restoration projects on an expedited schedule through the state’s EcoRestore program. These are restoration projects required under the biological opinions and there is no guarantee that these programs will be implemented or completed.</p>	<p>As described in Section 2.5, Purpose and need, FEIR/EIS, the Purpose statement reflects the intent to advance the coequal goals set forth in the Sacramento–San Joaquin Delta Reform Act of 2009 of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem.</p> <p>The California WaterFix, Alternative 4A, has been developed with the goals of minimizing and avoiding incidental take of listed species to the maximum extent practicable. Chapter 11, Fish and Aquatic Resources, and Chapter 12, Terrestrial Biological Resources, EIR/EIS, describe effects of the proposed project and several alternatives on fish and wildlife species in the Plan Area. Reclamation would be the lead federal action agency for Section 7 compliance where a non-HCP alternative is selected. Section 7 requires that federal agencies, in consultation with the federal fish and wildlife agencies ensure that their actions are not likely to jeopardize the continued existence of species or result in modification or destruction of critical habitat. For more information on ESA compliance, please see Chapter 3, FEIR/EIS.</p> <p>The existing operation of the SWP and CVP pumps in the south Delta can cause reversals in river flows, potentially altering salmon migratory patterns and contributing to the decline of sensitive fish species such as delta smelt. The new system would reduce the ongoing physical impacts associated with sole reliance on the southern diversion facilities and allow for greater operational flexibility to better protect fish. Minimizing south Delta pumping would provide more natural east–west flow patterns (RDEIR/SDEIS Section 4.1). Overall reductions in OMR reverse flows under all flow scenarios for the proposed project would be beneficial with corresponding increase in net positive downstream flows, during the migration period of Chinook salmon through the interior Delta channels (Appendix B, Supplemental Modeling for Alternative 4A, Section B.7 (RDEIR/SDEIS Section 4.3.7). Operations would still be consistent with the criteria set by the FWS (2008) and NMFS (2009) BiOps and State Water Resources Control Board Water Right Decision 1641 (D-1641), subject to adjustments made pursuant to the adaptive management process as described in the 2008 and 2009</p>

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			<p>BiOps (RDEIR/SDEIS Executive Summary ES.2.2).</p> <p>Screening the intakes at Clifton Court Forebay was analyzed during the water conveyance alternative development process and is described in the 2013 Public Draft EIR/EIS, Appendix 3A. This alternative was eliminated from further evaluation because initial results of recent studies, including information included in the recent NMFS biological opinions, supported a phased approach that would emphasize improvements to operations of fish handling facilities and reduced predator potential within Clifton Court Forebay prior to further analysis of installation of fish screens. Nevertheless, DWR and Reclamation will continue investigating strategies to increase fish salvage efficiency, reduce pre-screen losses, and improve screening efficiencies, consistent with the 2009 biological opinion of the SWP/CVP.</p> <p>Although Alternatives 4A, 2D, and 5A include only those habitat restoration measures needed to provide mitigation for specific regulatory compliance purposes, habitat restoration is still recognized as a critical component of the state's long-term plans for the Delta. Such larger endeavors, however, will likely be implemented over time under actions separate and apart from these alternatives. The primary parallel habitat restoration program is called California EcoRestore (EcoRestore), which will be overseen by the California Resources Agency and implemented under the California Water Action Plan. Under EcoRestore, the state will pursue restoration of more than 30,000 acres of fish and wildlife habitat by 2020. These habitat restoration actions will be implemented faster and more reliably by separating them from the water conveyance facility implementation.</p> <p>Proposition 1 funds and other state and public dollars will be directed exclusively for public benefits unassociated with any regulatory compliance responsibilities.</p> <p>Additional priority restoration projects will be identified through regional and locally led planning processes facilitated by the Delta Conservancy. Plans will be completed for the Cache Slough, West Delta, Cosumnes, and South Delta. Planning for the Suisun Marsh region is already complete and a process for integrated planning in the Yolo Bypass is underway. The Delta Conservancy will lead the implementation of identified restoration projects, in collaboration with local governments and with a priority on using public lands in the Delta.</p>
2657	39	<p>Page ES-26:</p> <p>The WaterFix RDEIR/SDEIS states that "the cause of the modeled increases in bromide in Barker Slough, which was driving the impact conclusion for almost all alternatives, is due to the assumptions regarding tidal habitat restoration not due to conveyance facility operations." No full model runs were performed for Alternative 4A to support this statement, and the brief sensitivity analyses do not provide adequate support. There are also no full model runs to support the speculation that "because new alternatives 4A, 2D, and 5A contain a lower acreage of tidal restoration, significant impacts with regard to bromide are not expected under these alternatives."</p>	<p>The quoted text from the RDEIR/SDEIS is regarding the action alternatives presented in the Draft EIR/EIS. Please see responses to comments 21 and 22 of this letter regarding modeling used to support water quality assessments of Alternative 4A, 2D, and 5A in the RDEIR/SDEIS, and updates to that modeling completed for the Final EIR/EIS. Based on the new modeling completed for the Final EIR/EIS with no tidal habitat restoration, the water quality conclusions of less than significant impacts to bromide presented in the RDEIR/SDEIS for Alternatives 4A, 2D, and 5A were confirmed, as presented in the Final EIR/EIS in Chapter 8, Water Quality in Impact WQ-5.</p>
2657	40	<p>Page ES-27, line 16:</p> <p>The WaterFix RDEIR/SDEIS speculates that "based on the sensitivity analyses, optimizing the design and siting of restoration areas is expected to be able to reduce EC [electrical conductivity] and chloride increases in Suisun Marsh, relative to Existing Conditions and the No Action Alternative, to levels that would be less than significant." The brief sensitivity analyses are not full model runs and were not even carried out for the preferred alternative configuration and operations. The CEQA requirement to avoid or mitigate significant adverse impacts requires more than an expectation that as yet specified habitat restoration</p>	<p>This comment is concerned with the effects of tidal habitat restoration on water quality in Barker Slough and Suisun Marsh. Modeling sensitivity analyses conducted for the RDEIR/SDEIS and Final EIR/EIS, and described in impact assessments for bromide (Impact WQ-5), chloride (Impact WQ-7) and EC (Impact WQ-11) demonstrate the effect the presence/absence of tidal habitat restoration areas could have on these parameters, and that the absence results in lesser adverse effects to these parameters in the Delta and Suisun Marsh. Also, please see response to comment 39.</p>

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		<p>will not result in significant adverse water quality impacts. The full, albeit flawed, model runs for Alternative 4 clearly indicate the impacts of habitat restoration on water quality at Barker Slough and in Suisun Marsh. The habitat restoration to be done as part of Water Fix, EcoRestore, and other relevant programs must be analyzed in the environmental documentation from the proposed WaterFix project and disclosed, not piecemealed and postponed.</p> <p>An established best estimate of the habitat restoration activities under WaterFix and, as part of the Cumulative Impacts Analysis, EcoRestore and other relevant BDCP habitat programs that are no longer part of WaterFix, is required. This requires full model runs as well as analysis and disclosure of the water quality impacts.</p>	
2657	41	<p>Page ES-27, line 36:</p> <p>Because Alternatives 4A, 2D, and 5A were not fully modeled for the WaterFix RDEIR/SDEIS, it is not possible to be certain that they would not result in significant impacts for EC [electrical conductivity] related to objective exceedance in the Sacramento River at Emmaton, or would not result in substantial degradation in the western Delta due to increased chloride concentrations, or would have less adverse water quality effects in the western Delta related to EC, or would have fewer exceedances of the fish and wildlife EC objective between Prisoners Point and Jersey Point. The same applies to speculation regarding bromide concentration impacts at Barker Slough (p. ES-28, line 18).</p> <p>The WaterFix RDEIR/SDEIS contains inadequate information to support this speculation regarding water quality impacts. A new Draft EIR/EIS must be prepared that models, analyzes, discloses and avoids or mitigates the impacts of the new alternatives and habitat restoration on water quality in the western Delta. The new Draft EIR/EIS must then be released for public review and comment.</p>	<p>Please see responses to comments 21 and 22 of this letter regarding modeling used to support water quality assessments of Alternative 4A, 2D, and 5A in the RDEIR/SDEIS, and updates to that modeling completed for the Final EIR/EIS. The EC impact assessment in Chapter 8, Water Quality, Impact WQ-11 for these alternatives, was updated in the Final EIR/EIS to reflect the new modeling results, which revealed significant impacts to EC at Emmaton and Prisoners Point, which would be reduced to a less than significant level with Mitigation Measures WQ-11e and WQ-11f. The updated modeling also confirmed less than significant impacts to bromide at Barker Slough under these alternatives.</p>
2657	42	<p>Section 1: Introduction</p> <p>Page 1-5, line 34:</p> <p>The WaterFix RDEIR/SDEIS discusses CEQA Guidelines [Section] 15088.5, which provides examples of disclosure that constitute "significant new information" for purposes of requiring recirculation of a revised EIR. Because the WaterFix RDEIR/SDEIS is so fundamentally and basically inadequate and conclusory in nature, meaningful public review and comment has been precluded. As found by the Delta Independent Science Board (September 30, 2015 review comments), the WaterFix RDEIR/SDEIS is "sufficiently incomplete and opaque to deter its evaluation and use by decision-makers, resource managers, scientists, and the broader public."</p>	<p>The Draft EIR/EIS contains a wealth of information and analyses. The document reflects seven years of collaboration, response to requests for additional information, careful thought, accumulation of the latest scientific information, and the thorough analyses needed to develop and conduct an environmental review of a project as massively critical as the proposed project, California WaterFix, Alternative 4A.</p> <p>The lead agencies believe that the BDCP and EIR/EIS are complete in their evaluation of impacts, direct and cumulative, that project description is complete and satisfies the requirements of NEPA, that the project objectives are also precise and complete and satisfy the requirements of CEQA. The lead agencies believe that the 2013 Public Draft EIR/EIS and 2015 RDEIR/SDEIS provided the public and decision makers with sufficient information on which to make informed comments which have been considered and incorporated into the Final EIR/EIS.</p> <p>Please refer to the tables in the EIR/EIS to find comment letters BDCP 1448 and RECIRC 2546 for responses to the Delta Independent Science Board's comments.</p>
2657	43	<p>Section 1: Introduction</p> <p>Page 1-5, line 34:</p> <p>There are feasible project alternatives considerably different from the two types of alternatives previously analyzed that would clearly lessen the environmental impacts of the proposed WaterFix project, but the lead agencies have declined to consider them. Such</p>	<p>Although many of the proposed alternatives included meritorious water policy principles, the proposals rejected by the Lead Agencies did not qualify as appropriate alternatives for various reasons. For example, proposals were rejected because they were inconsistent with the project's objectives and purpose and need or included components that are beyond the scope of the project. The text of the Draft EIR/EIS in Chapter 3 (section 3.2) thoroughly explains the process used to develop the alternatives, and explains why certain potential alternatives were considered but ultimately rejected by the Lead Agencies. For further information</p>

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		<p>alternatives include the following: modified project components that increase Delta flows to restore and sustain fish populations (2010 Delta Flow Criteria); new storage to enable new water to be captured, stored, and conveyed to the California Aqueduct and Delta-Mendota Canal; levee strengthening to protect the Delta and export water supply and water quality; and actions to reduce demand for water from the Delta. These types of alternatives should have been considered as part of a holistic solution. Most of these are identified in the July 2014 California Water Action Plan, which DWR helped to prepare, and some are required by the 2009 Delta Reform Act.</p>	<p>regarding alternatives, please see Master Response 4.</p> <p>The California WaterFix, Alternative 4A, is intended to provide a more reliable water supply, with diversions that are more protective for fish, in accordance with the Delta Reform Act co-equal goals of improving water supply reliability and Delta ecosystem health. Please refer to Master Response 31 for more information regarding compliance with the Delta Reform Act.</p> <p>It is important to note that California WaterFix, Alternative 4A, is not intended to serve as a statewide solution to all of California's water problems and it is not an attempt to address directly the need for continued investment by the State and other public agencies in conservation, recycling, desalination, treatment of contaminated aquifers, or other measures to expand supply and storage. Nor is the California WaterFix, Alternative 4A, intended to solve all environmental challenges facing the Delta. Though many of the suggested components have merit from a state-wide water policy standpoint, and some are being implemented or considered independently throughout the state, they are beyond the scope of the proposed project. Please see Master Response 6 (Require Desalination/Demand Management in BDCP) for further information.</p> <p>Additional water storage was eliminated from consideration in the BDCP EIR/EIS and RDEIR/SDEIS through the alternatives development and screening process (discussed in the response to Comment 38 and in Appendix 3A, Identification of Water Conveyance Alternatives). As such, the California WaterFix, Alternative 4A, does not propose storage as a project component. Although the proposed project would be part of an overall statewide water system of which new storage could someday also be a part, Alternative 4A is a stand-alone project which demonstrates independent utility just as future storage projects would so demonstrate. For more information regarding storage, please refer to Master Response 37.</p> <p>In addition, the EIR/EIS Alternative 8, developed in response to scoping comments from the SWRCB, includes operations that would increase net Delta outflow compared to the NEPA No Action Alternative baseline and Existing Conditions. Also, see Appendix 5E, FEIR/EIS, for supplemental modeling requested by the SWRCB related to increased Delta Outflows.</p>
2657	44	<p>Section 1: Introduction</p> <p>Page 1-20, line 35: San Joaquin Delta Estuary Water Quality Control Plan (Bay-Delta WQCP).</p> <p>The 2009 Delta Reform Act states that an order by the SWRCB approving any change petitions for the proposed project shall include appropriate Delta flow criteria and shall be informed by the analysis performed pursuant to Section 85086 of the Water Code (Cal. Water Code [Section] 85086(c)(2)). The intent of the 2009 Delta Reform Act was that development of the BDCP and WaterFix project alternatives would also be informed by the Delta flow criteria developed by the SWRCB and Department of Fish and Wildlife.</p> <p>The WaterFix RDEIR/SDEIS is inadequate because it fails to present alternatives compatible with, and including, increased Delta flow requirements consistent with the 2010 Delta Flow Criteria as required by State statutes. The legal reasoning for this is contained in the September 29, 2015 letter from NRDC [Natural Resources Defense Council], et al., sent to Tom Howard at the SWRCB. [Footnote 1: <a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/early_petition_comments/docs/nrdc_obegi093015.pdf">http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/early_petition_comments/docs/nrdc_obegi093015.pdf</a>] This letter is hereby</p>	<p>As described in Appendix 3A, Identification of Water Conveyance Alternatives Conservation Measure 1, of the EIR/EIS, one of the potential alternatives considered was based upon the State Water Resources Control Board 2010 Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem, which described providing up to 75 percent of unimpaired flow into the Delta to improve aquatic resources habitat conditions. This potential alternative was not evaluated in detail because the flow recommendations in the 2010 report could not be achieved without adverse impacts to cold water management for fisheries in the Sacramento, Feather, and American rivers without reductions in non-SWP and non-CVP water rights diversions. The purpose and need of this EIR/EIS would not allow changes to non-SWP and non-CVP water rights. However, Alternatives 7 and 8 in the EIR/EIS reflect similar flow criteria in a manner that would only affect SWP and CVP water rights.</p>

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		<p>incorporated into the County's comments by reference.</p> <p>(See Consolidated Irrigation Dist. V. Superior Ct. (2012) 205 Cal.App.4th 697, 723.)</p>	
2657	45	<p>Section 2: Substantive Draft EIR/EIS Revisions</p> <p>Page 2-6, line 31:</p> <p>The sensitivity analyses conducted by the lead agencies were performed at late long term (2060) rather than early long term (2025), which is the chosen future reference time for the WaterFix RDEIR/SDEIS. The sensitivity analyses were based on, and relative to, earlier modeling of BDCP Alternative 4 at late long term. This alternative is very different than the WaterFix project, and the earlier BDCP modeling was flawed; the CALSIMII and DSM2 models have since been updated. The sensitivity analyses did not include these updates and corrections. Full model runs for the alternatives must be produced. The statewide importance of the proposed project and the high level of public controversy require that the modeling results be disclosed for public review and comment now rather than slipped into a Final EIR/EIS document, leaving little chance for serious regulatory agency and public review and discussion.</p>	<p>The Final EIR/EIS includes model results for Alternatives 2D, 4A, and 5A as compared to the No Action Alternative and Existing Conditions in Appendix 5A, Section C, in addition to the model results previously provided in the Draft EIR/EIS. The comparative results between Alternatives 2D, 4A, and 5A and the No Action Alternative and the Existing Conditions are generally consistent with the impact analysis results presented in the RDEIR/SDEIS.</p>
2657	46	<p>Section 2: Substantive Draft EIR/EIS Revisions</p> <p>Page 2-8, line 2-9:</p> <p>It is not acceptable to merely anticipate that the new alternatives 2D, 4A, and 5A will contain a much lower acreage of tidal restoration, and therefore the new alternatives will not have significant impacts with respect to EC [electrical conductivity] and chloride in Suisun Marsh. A range of reasonably expected habitat restoration projects and acreages in the north Delta and Suisun Marsh under WaterFix and EcoRestore must be analyzed using full detailed model runs to quantify and disclose the potential significant adverse impacts to water quality in this region.</p>	<p>Please see response to Comment 30.</p>
2657	47	<p>Section 2: Substantive Draft EIR/EIS Revisions</p> <p>Page 2-13:</p> <p>The WaterFix RDEIR/SDEIS claims that "it is now known that the cause of the modeled increases in bromide in Barker Slough, which was driving the impact determinations for almost all alternatives, is assumptions regarding CM4 implementation, not operations in CMI." The WaterFix RDEIR/SDEIS fails to perform full model runs to determine whether this is correct. It is also not sufficient to speculate that "because the new alternatives (2D, 4A, and 5A) contain a lower acreage of tidal restoration, significant impacts with regards to bromide are not expected under these alternatives."</p>	<p>Please see responses to comments 21 and 22 of this letter regarding modeling used to support water quality assessments of Alternative 4A, 2D, and 5A in the RDEIR/SDEIS, and updates to that modeling completed for the Final EIR/EIS. The updated model runs for Alternatives 4A, 2D, and 5A, which had no restoration, confirm that habitat restoration area was affecting bromide concentrations in Barker Slough.</p>
2657	48	<p>Section 4: New Alternatives: Alternatives 4A, 2D, and 5A</p> <p>Section 4.2.7, pages 4.2-18 and 4.3.4-1: Water Quality</p> <p>The WaterFix RDEIR/SDEIS states: "In general, the significance of this difference is the assessment of bromide, chloride and EC [electrical conductivity] for the No Action Alternative (ELT [Early Long Term]), relative to Existing Conditions, likely underestimates increases in bromide, EC, and chloride that could occur, particularly in the west Delta.</p>	<p>The comment quotes a portion of the RDEIR/SDEIS.</p>

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		Nevertheless, there is notable uncertainty in the results of all quantitative assessments that refer to modeling results, due to the differing assumptions used in the modeling and the description of the No Action Alternative (ELT)."	
2657	49	<p>Section 4: New Alternatives: Alternatives 4A, 2D, and 5A</p> <p>Because of the statewide importance of developing a Delta solution that achieves both of the coequal goals, the public controversy surrounding the WaterFix project, and the extremely high cost of the new intakes and tunnels, it is very important that the models and modeling be refined. For example, daily rather than monthly timesteps should be used in the CALSIMII model, and the differing assumptions should be reconciled to reduce the acknowledged "notable uncertainty." A substantial amount of uncertainty was introduced by the lead agencies' decision to cut corners and use only "brief sensitivity analyses" based on earlier flawed modeling runs rather than performing new, updated full model runs.</p>	<p>The Final EIR/EIS includes model results for Alternatives 2D, 4A, and 5A as compared to the No Action Alternative and Existing Conditions in Appendix 5A, Section C, in addition to the model results previously provided in the Draft EIR/EIS. The comparative results between Alternatives 2D, 4A, and 5A and the No Action Alternative and the Existing Conditions are generally consistent with the impact analysis results presented in the RDEIR/SDEIS.</p> <p>CALSIM II is a water operations model that simulates Delta flows for regulatory and operational criteria assumed under the Existing Conditions, No Action Alternative, and action alternatives on a monthly time step. The model simulates compliance with salinity standards in the Delta on a monthly time step. CALSIM II relies on an "Artificial Neural Network" (ANN) for monthly averaged flow versus salinity relationships in the Delta. DSM2 uses the monthly CALSIM II Delta flow results, and simulates Delta hydrodynamics and salinity from the water year 1976 to water year 1991, on a 15-minute time step and accounts for the sea level rise and the proposed restoration. Flow inputs assumed in DSM2 modeling for the EIR/EIS are based on monthly CALSIM II outputs downscaled to a daily time step using WY 1976 – 1991 (16 years) historical Delta inflow patterns. The daily patterns assumed are based on observed historical Delta flows, and do not represent any sub-monthly operational adjustments that could occur to address any potential issues with salinity control in the Delta under the EIR/EIS Alternatives 1 through 9. In other words, the compliance with Delta salinity standards was only modeled on a monthly time step. However, daily averaged salinity outputs from DSM2 simulations were used to evaluate compliance with salinity standards under the alternatives in the EIR/EIS.</p>
2657	50	<p>Section 4: New Alternatives: Alternatives 4A, 2D, and 5A</p> <p>Page 4.3.4-24, line 4:</p> <p>The WaterFix RDEIR/SDEIS notes the significant differences between Alternative 4A and the modeling conducted for Alternative 4 in the early long term. The WaterFix RDEIR/SDEIS also claims "there are several factors related to the modeling approach that may result in modeling artifacts that show objective exceedance, when in reality no such exceedance would occur. [Solano] County agrees with the statement made in the Water Fix RDEIR/SDEIS: "The result of all of these factors is that the quantitative modeling results presented in this assessment is not entirely predictive of actual effects under Alternative 4A, and the results should be interpreted with caution."</p> <p>The lead agencies' apparent rush to release the WaterFix RDEIR/SDEIS without performing full model runs of the new alternatives or correcting the prior model runs for the BDCP alternatives is unacceptable, inconsistent with accepted scientific practices, and contrary to the requirements of CEQA and NEPA. Presenting tables of water quality impacts in Appendix B for Alternative 4A at early long term when no such analyses were actually performed is also unacceptable.</p>	<p>Please see responses to comments 21 and 22 of this letter regarding modeling used to support water quality assessments of Alternative 4A, 2D, and 5A in the RDEIR/SDEIS, and updates to that modeling completed for the Final EIR/EIS. Also, please see Master Response 30 related to the adequacy of the models used.</p>
2657	51	<p>Section 5: Revisions to Cumulative Impacts Analyses</p> <p>Page 5-78, line 23: Electrical Conductivity</p> <p>The WaterFix RDEIR/SDEIS claims: "Implementation of facilities operations and maintenance under these action alternatives, along with Mitigation Measure WQ-11, would not be expected to contribute substantially to this adverse cumulative condition for EC [electrical</p>	<p>Salinity in the Delta is a function of the amount and timing of freshwater input from the major tributaries, tidal action from San Francisco Bay, and exports from the Delta. During the late winter and spring months of seasonally elevated flows, and in wet years, seawater intrusion is limited and the Delta has mostly low salinity. During low-flow summer and fall months, and during dry years, lower freshwater flows result in greater amounts of seawater intrusion. Staff from DWR and USBR constantly monitor Delta water quality conditions and adjust operations of the SWP and CVP in real time as necessary to meet water quality objectives set by the State Water Resource Control Board protection of agricultural water supply, municipal</p>

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		<p>conductivity], because no additional exceedance of Bay-Delta WQCP [Water Quality Control Plan] EC objectives would be expected, and substantial long-term degradation with respect to EC would be avoided."</p> <p>Degradation of water quality in the Delta cannot be judged in terms of exceedance of the SWRCB's Bay-Delta water quality standards. Significant impacts can occur to urban and agricultural water uses even when water quality standards are not exceeded. For example, farmers in the north Delta, including Solano County, have developed farming practices and crops that rely on very fresh water. Increasing salinities in this area will have a significant adverse impact on these beneficial uses, even if SWRCB chloride standards are not exceeded. The environmental documentation must be revised to acknowledge that increasing salinities by even a small percentage can be a significant adverse water quality impact.</p>	<p>and industrial drinking water supply, and fish and wildlife beneficial uses.</p> <p>Please see Master Response 14 (Water Quality) for additional discussion regarding salinity and electrical conductivity.</p>
2657	52	<p>WaterFix RDEIR/SDEIS Appendix A</p> <p>Appendix A, Chapter 8, page 8-53:</p> <p>The WaterFix RDEIR/SDEIS states: "In reality, staff from DWR and Reclamation constantly monitor Delta water quality conditions and adjust operations of the SWP and CVP in real time as necessary to meet water quality objectives. These decisions take into account real-time conditions and are able to account for many factors that the best available models cannot simulate. . . . Thus, it is likely that some objective exceedances simulated in the modeling would not occur under the real-time monitoring and operational paradigm that will be in place to prevent such exceedances." It is not sufficient to speculate "it is likely that" some predicted exceedances will not occur in practice when there is no substantial evidence presented in the WaterFix RDEIR/SDEIS to support such a statement. To the extent DWR and Reclamation staff will need to increase flows or reduce exports through real time operations monitoring and adjustments in order to meet water quality objectives, staff will reduce flows and increase exports in subsequent months to meet water delivery commitment, which could cause adverse impacts that are not disclosed in the WaterFix RDEIR/SDEIS. The WaterFix RDEIR/SDEIS is inadequate because it fails to analyze and disclose, using actual water quality model runs, the significant adverse impacts of the proposed project and provide reasonable estimates of the frequency of water quality objective exceedances, and disclose how the project will likely operate in real time.</p>	<p>Operation of the SWP/CVP occurs in a dynamic and challenging environment. Among other things, SWP/CVP operations are constantly adjusted to compensate for hydrologic and tidal influences to ensure that SWP/CVP remain in compliance with the flow and water quality standards established by the State Water Board to protect other legal users of water as well as the environment.</p> <p>The new CWF diversion locations will increase the options available to SWP/CVP operators and increase the flexibility to more effectively balance the Bay-Delta system in real time to protect all beneficial uses of water whether for water supply, water quality, or fishery protection purposes.</p> <p>SWP/CVP operators have had a high degree of success in meeting all operative water quality standards since 1978. Even though rare instances of water quality exceedances have occurred, these instances have been due to factors beyond the SWP/CVP's reasonable control. With the North Delta Diversion, the SWP/CVP still will be required to meet all salinity and flow objectives regardless of which diversion location is being used.</p> <p>Please see Master Response 30 (Modeling) and Master Response 14 (Water Quality).</p>
2657	53	<p>Appendix A, Chapter 8, page 8-219:</p> <p>The WaterFix RDEIR/SDEIS discusses the effects of site-specific restoration areas proposed under CM4 on bromide concentrations in Barker Slough, stating as follows: "It is anticipated that these efforts will be able to reduce the level of projected increase, though it is unknown whether it would be able to completely eliminate any increases." The WaterFix RDEIR/SDEIS further states: "If sufficient operational flexibility to offset bromide increases is not practicable/feasible under Alternative 4 operations, and/or siting and design of restoration areas cannot feasibly reduce bromide increases to a less than significant level without compromising the benefits of the proposed areas, achieving bromide reduction pursuant to this mitigation measure would not be feasible under this alternative."</p> <p>If Mitigation Measure WQ-5 (Avoid, Minimize, or Offset, as Feasible, Adverse Water Quality Conditions; Site and Design Restoration Sites to Reduce Bromide Increases in Barker Slough) is insufficient to fully mitigate the significant adverse bromide impacts in the Barker Slough</p>	<p>Analysis of the California WaterFix (Alternative 4A) effect on bromide concentrations were determined to be less than significant in the RDEIR/SDEIS. Some of the differences in Bromide concentrations were related to the differences in tidal wetland restoration included for Alternative 4 versus Alternative 4A. Alternative 4A does not require implantation of mitigation measures as this impact WQ 5 has been determined to be less than significant/not adverse.</p>

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		region, additional mitigation measures must be developed.	
2657	54	<p>Appendix A, Chapter 8, page 8-225: 303(d) Listed Water Bodies-Relative to No Action Alternative</p> <p>The WaterFix RDEIR/SDEIS states: "Modeling results indicated that monthly average chloride concentrations at source water channel locations for the Suisun Marsh (Appendix 80, Figures CI-5, CI-7 and CI-8) would increase substantially in some months during October through May compared to the No Action Alternative conditions, but sensitivity analyses suggest that operation of the Salinity Control Gates and restoration area siting and design considerations could reduce these increases. However, the chloride concentration increases at certain locations could be substantial, depending on siting and design of restoration areas. Thus, these increased chloride levels in Suisun Marsh are considered to contribute to additional, measureable long-term degradation in Suisun Marsh that potentially would adversely affect the necessary actions to reduce chloride loading for any TMDL [total maximum daily load] that is developed. "</p> <p>It is not sufficient to merely do sensitivity analyses, especially when even the sensitivity analyses indicate that the proposed project will cause significant adverse impacts to water quality in Suisun Marsh. These significant impacts must be avoided or fully mitigated. Full model runs of the flows and exports in the Delta, and corresponding water quality variations, must be conducted. Based on the results of these model runs, all identified significant water quality impacts must be mitigated or avoided.</p>	<p>The existing modeling, including supporting sensitivity analyses regarding Montezuma Slough Salinity Control Gate operation and tidal habitat siting, used for the chloride assessment for Alternative 4 already identifies significant impacts and mitigation for chloride for Suisun Marsh in Impact WQ-7/Mitigation Measure WQ-7d. Additional modeling is not necessary, as the existing modeling already has allowed for identifying the driver of the significant impact to chloride and the type of mitigation necessary to lessen that impact.</p>
2657	55	<p>Appendix A, Chapter 8, page 8-228:</p> <p>The WaterFix RDEIR/SDEIS continues to propose aspirational water quality mitigation measures that defer development and identification of specific mitigation measures until after the project is completed. There are no commitments on behalf of the lead agencies that any mitigation will actually be identified or implemented. Mitigation Measure WQ-7 (Conduct Additional Evaluation and Modeling of increased Chloride Levels and Develop and Implement Phased Mitigation Actions) and Mitigation Measure WQ-7c (Consult with Delta Water Purveyors to Identify Means to Avoid, Minimize, or Offset for Reduced Seasonal Availability of Water That Meets Applicable Water Quality Objectives) are open-ended and put much of the onus for project impact mitigation on the impacted parties.</p> <p>The significant water quality impacts of the proposed project must be avoided or fully mitigated by the project proponents at no financial or resource cost to the impacted parties. Measures to avoid or fully mitigate all adverse water quality impacts and contributions to improvement of water quality in the Delta (Wat. Code, [Section] 85020) must be incorporated into the CEQA/NEPA document and made available for public review and comment.</p>	<p>Please see Master Response 18 (Agricultural Impact Mitigation) and Master Response 14 (Water Quality). Please also see Master Response 22 for more information regarding the adequacy of mitigation measures.</p>
2657	56	<p>Appendix A, Chapter 8, page 8-237:</p> <p>The revised language provided in the WaterFix RDEIR/SDEIS states: "As discussed in Chapter 5, Water Supply, Section 5.3.1, Methods for Analysis, under extreme hydrologic and operational conditions where there is not enough water supply to meet all requirements, CALSIM II uses a series of operating rules to reach a solution that is a simplified version of the very complex decision processes that SWP and CVP operators would use in actual extreme conditions. Thus, it is unlikely that the Emmaton objective would actually be</p>	<p>The Final EIR/EIS includes model results for Alternatives 2D, 4A, and 5A as compared to the No Action Alternative and Existing Conditions in Appendix 5A, Section C, in addition to the model results previously provided in the Draft EIR/EIS. The comparative results between Alternatives 2D, 4A, and 5A and the No Action Alternative and the Existing Conditions are generally consistent with the impact analysis results presented in the RDEIR/SDEIS.</p> <p>In the Final EIR/EIS, Alternative 4A was specifically modeled with the assumptions presented in Chapter 3 and Appendix 5A in the EIR/EIS, including location of the north Delta water quality compliance location to</p>

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		<p>violated due to dead pool conditions. However, these results indicate that water supply conditions could be either under greater stress or under stress earlier in the year, and levels at Emmaton and in the western Delta may increase as a result, leading to EC [electrical conductivity] degradation and increased possibility of adverse effects to agricultural beneficial uses."</p> <p>It does not necessarily follow that because the CALSIMII model is not able to handle extreme conditions that exceedances of the Emmaton objective are unlikely. Limitations in the CALSIMII model could result in exceedances being underestimated. Because of the statewide importance of finding a solution to the drastic problems of the Delta, it is imperative that the CALSIMII model be upgraded to adequately account for extreme conditions, such as the current drought situation, and to simulate daily rather than monthly time steps. The adverse impacts to agricultural beneficial uses indicated by the results must also be fully mitigated. New, accurate modeling must be conducted that analyzes project operations using an upgraded CALSIM II model and full model runs for flow and export operations and water quality over the full simulation period.</p>	<p>Emmaton as also included in the No Action Alternative.</p> <p>With respect to use of the 2010 version of the CALSIM II model, as described in the Response to Comment 22, modeling for the EIR/EIS has been based on the Existing Conditions, No Action Alternative, and Alternative 1 models developed in April–May of 2010 (2010 models), which were the state-of-the-art at the time, and formed the basis for universal assumptions in the other action alternatives in the EIR/EIS. However, in August 2011 several model improvements were identified by the water agencies, fishery agencies, and the modeling community. The identified improvements were compiled, and the Existing Conditions, No Action Alternative, and Alternative 1 models were updated in coordination with DWR, Reclamation and USFWS. This update was performed to verify if the compiled model improvements altered the incremental changes between the BDCP Alternative 1 and the Existing Conditions and the No Action Alternative relative to the 2010 models. The findings from the 2011 update showed that the incremental differences between Alternative 1 and the Existing Conditions and the No Action Alternative remained consistent with the 2010 modeling. Therefore, the action alternatives modeled since 2011 continued to rely on the 2010 modeling, allowing consistency and comparability throughout the EIR/EIS. Similarly, when Alternative 4A was modeled using the 2013 baseline, the incremental changes in the operational results for Alternative 4A as compared to the No Action Alternative were similar to the prior incremental results between the 2010 modeling for the No Action Alternative and Alternative 4A. It should be noted that the modeling used in the EIR/EIS must be used in a comparative manner and not to define absolute values.</p> <p>With respect to use of the CALSIM II model with a monthly time step, as described in the Response to Comment 49, CALSIM II is a water operations model that simulates Delta flows for regulatory and operational criteria assumed under the Existing Conditions, No Action Alternative, and action alternatives on a monthly time step. The model simulates compliance with salinity standards in the Delta on a monthly time step. CALSIM II relies on an “Artificial Neural Network” (ANN) for monthly averaged flow verses salinity relationships in the Delta. DSM2 uses the monthly CALSIM II Delta flow results, and simulates Delta hydrodynamics and salinity from the water year 1976 to water year 1991, on a 15-minute time step and accounts for the sea level rise and the proposed restoration. Flow inputs assumed in DSM2 modeling for the EIR/EIS are based on monthly CALSIM II outputs downscaled to a daily time step using WY 1976 – 1991 (16 years) historical Delta inflow patterns. The daily patterns assumed are based on observed historical Delta flows, and do not represent any sub-monthly operational adjustments that could occur to address any potential issues with salinity control in the Delta under the EIR/EIS action alternatives. In other words, the compliance with Delta salinity standards was only modeled on a monthly time step. However, daily averaged salinity outputs from DSM2 simulations were used to evaluate compliance with salinity standards under the alternatives in the EIR/EIS.</p>
2657	57	<p>Appendix A, Appendix SH, page SH-1:</p> <p>The WaterFix RDEIR/SDEIS states: "The sensitivity analysis modeling runs were limited to the Existing Conditions, No Action Alternative, and Alternative 4 Scenario H3, but the findings from these analyses can generally be extended to other scenarios of Alternative 4 and the other project alternatives." Because the sensitivity analyses were applied to Alternative 4 at late long term, they are not representative of Alternative 4A at early long term, which has almost no habitat restoration and significantly less sea level rise and seawater intrusion.</p> <p>The WaterFix RDEIR/SDEIS also states: "DWR and USBR [Reclamation] have every intention of operating SWP and CVP facilities by fine tuning reservoir storage and exports in real time to meet D-1641 standards, and any changes to D-1641 as adopted by the SWRCB. Actual operations are continuously adjusted to respond to reservoir storages, river flows, exports, in-Delta demands, tides, and other factors to insure compliance to regulatory requirements to the extent possible." Because of the failure of the WaterFix RDEIR/SDEIS to actually</p>	<p>The Final EIR/EIS includes model results for Alternatives 2D, 4A, and 5A as compared to the No Action Alternative and Existing Conditions in Appendix 5A, Section C, in addition to the model results previously provided in the Draft EIR/EIS. The comparative results between Alternatives 2D, 4A, and 5A and the No Action Alternative and the Existing Conditions are generally consistent with the impact analysis results presented in the RDEIR/SDEIS.</p> <p>With respect to use of the 2010 version of the CALSIM II model, as described in the 2657-22, modeling for the EIR/EIS has been based on the Existing Conditions, No Action Alternative, and Alternative 1 models developed in April – May of 2010 (2010 models), which were the state-of-the-art at the time, and formed the basis for universal assumptions in the other action alternatives in the EIR/EIS. However, in August 2011 several model improvements were identified by the water agencies, fishery agencies, and the modeling community. The identified improvements were compiled, and the Existing Conditions, No Action Alternative, and Alternative 1 models were updated in coordination with DWR, Reclamation and USFWS. This update was performed to verify if the compiled model improvements altered the incremental changes between the</p>

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		<p>model the new alternatives and revise the flawed modeling used for the 2013 BDCP DEIR/DEIS alternatives, actual operations of the WaterFix would likely be much different than what is described in the WaterFix RDEIR/SDEIS. For example, exports may need to be reduced in a given month and compensating increases made in a subsequent month, thereby shifting impacts to other more critical months.</p>	<p>BDCP Alternative 1 and the Existing Conditions and the No Action Alternative relative to the 2010 models. The findings from the 2011 update showed that the incremental differences between Alternative 1 and the Existing Conditions and the No Action Alternative remained consistent with the 2010 modeling. Therefore, the action alternatives modeled since 2011 continued to rely on the 2010 modeling, allowing consistency and comparability throughout the EIR/EIS. Similarly, when Alternative 4A was modeled using the 2013 baseline, the incremental changes in the operational results for Alternative 4A as compared to the No Action Alternative were similar to the prior incremental results between the 2010 modeling for the No Action Alternative and Alternative 4A. It should be noted that the modeling used in the EIR/EIS must be used in a comparative manner and not to define absolute values.</p>
2657	58	<p>Appendix A, Appendix SH- Attachment 1, page 3: BDCP EIR/EIS Water Quality Sensitivity Analysis</p> <p>The Draft Technical Memorandum, included as an attachment to the WaterFix RDEIR/SDEIS, states: "DSM2 sensitivity runs listed above were simulated at LLT [Late Long Term] conditions. NAA [No Action Alternative] DSM2 run at LLT accounts for 45 cm sea level rise at the Golden Gate Bridge. Alt4 H3 DSM2 runs at LLT account for 65,000 acres of restoration in addition to the 45 cm sea level rise. Even though the sensitivity analyses were performed at LLT, the factors identified to explain modeled salinity exceedances at LLT are expected to be valid similarly at Early Long-term (ELT) conditions."</p> <p>This speculation is not correct. The late long term conditions in the Delta will include a significant amount of additional seawater intrusion, especially at locations like Barker Slough (as shown by the sensitivity analyses). Comparing two simulations with a lot of seawater intrusion (subtracting one from the other) is very different from comparing two simulations under conditions with significantly less seawater intrusion (i.e., at early long term).</p> <p>It is also incorrect to claim that "the Lead Agencies have determined that they may reasonably rely on the modeling conducted for Alternative 4 to accurately predict the environmental effects of Alternative 4A." (Id., p. 4.2-18.) As is acknowledged in the WaterFix RDEIR/SDEIS on page 4.3.4-24, "the quantitative modeling results presented in this assessment is(sp) not entirely predictive of actual effects under Alternative 4A, and the results should be interpreted with caution."</p>	<p>The Final EIR/EIS includes model results for Alternatives 2D, 4A, and 5A as compared to the No Action Alternative at Early Long-Term conditions and Existing Conditions. The comparative results between Alternatives 2D, 4A, and 5A and the No Action Alternative and the Existing Conditions are generally consistent with the impact analysis results presented in the RDEIR/SDEIS.</p>
2657	59	<p>WaterFix RDEIR/SDEIS Appendix B Page B-3:</p> <p>The WaterFix RDEIR/SDEIS states: "For the Alternative 4A sensitivity analysis Alternative 4 CALSIM II models from draft EIR/EIS were used as is, without including any recent updates to the CALSIM II since the draft EIR/EIS was completed, to remain consistent with the draft EIR/EIS modeling."</p> <p>The environmental analyses and disclosures of impacts in the WaterFix RDEIR/SDEIS are inadequate because of flaws identified for the earlier BDCP model runs and CALSIMII and DSM2 models, and are exacerbated by the failure to include the recent updates to the models and revise the earlier modeling runs. The approach chosen by the lead agencies therefore does not allow any reliable verification of whether the draft EIR/EIS modeling</p>	<p>Modeling for the EIR/EIS has been based on the Existing Conditions, No Action Alternative, and Alternative 1 models developed in April – May of 2010 (2010 models), which were the state-of-the-art at the time, and formed the basis for universal assumptions in the other action alternatives in the EIR/EIS. However, in August 2011 several model improvements were identified by the water agencies, fishery agencies, and the modeling community. The identified improvements were compiled, and the Existing Conditions, No Action Alternative, and Alternative 1 models were updated in coordination with DWR, Reclamation and USFWS. This update was performed to verify if the compiled model improvements altered the incremental changes between the BDCP Alternative 1 and the Existing Conditions and the No Action Alternative relative to the 2010 models. The findings from the 2011 update showed that the incremental differences between Alternative 1 and the Existing Conditions and the No Action Alternative remained consistent with the 2010 modeling. Therefore, the action alternatives modeled since 2011 continued to rely on the 2010 modeling, allowing consistency and comparability throughout the EIR/EIS. Similarly, when Alternative 4A was modeled using the 2013 baseline, the incremental changes in the operational results for Alternative 4A as compared to the No Action Alternative were similar to the prior incremental results between the 2010 modeling for the No Action Alternative and Alternative 4A. It should be noted that the modeling used in the EIR/EIS must</p>

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		could be used to inform Alternative 4A impact analysis in the RDEIR/SDEIS.	be used in a comparative manner and not to define absolute values.
2657	60	<p>Appendix F: Supplemental Modeling Results at ELT for 3 Alternative 4 at H1 and H2</p> <p>Page F-1:</p> <p>WaterFix RDEIR/SDEIS Appendix F presents the CALSIM water operations modeling results for Alternative 4 for operational scenarios referred to as "Scenarios H1 and H2" at early long term. These two scenarios from the BDCP DEIR/ EIS do not include the Fall X2 required by the biological opinions and found by the SWRCB to be necessary to restore and sustain recovery of fish species in the Delta. Recent court decisions confirmed the validity of the USFWS's biological opinion requirement to meet Fall X2 in wet and above normal years.</p> <p>The WaterFix RDEIR/SDEIS does not explain why a project that has a stated objective of improving conditions for key fish species also proposes SWP and CVP operations that do not include the Fall X2 required by the applicable biological opinions. The failure of the project to conform to these biological opinions would result in continued to harm key fish species. This is contrary to the state and federal requirements to contribute to achieving the coequal goals.</p>	<p>Alternatives 4H1 and 4H2 do not include Fall X2 criteria in order to provide a range of alternatives with a range of Delta outflow. Under NEPA, not all alternatives considered in an EIS are required to be consistent with all regulatory requirements. If such an alternative were selected as the proposed project, Reclamation would be required to request reconsultation under the USFWS and NMFS biological opinions; and the USFWS and NMFS would need to find that the proposed project would not result in jeopardy to the continued existence of a special status species, or avoid destruction or adverse effects to their critical habitat.</p>
2657	61	[ATT5: California WaterFix (Alternative 4A)/Recirculated Environmental Analysis Frequently Asked Questions, July 2015.]	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS.
2657	62	[ATT6: California WaterFix and California EcoRestore Frequently Asked Questions, updated July 17, 2015.]	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS.
2658	1	As a small business owner and resident who drinks water supplied via the Delta, I am opposed to the construction of the tunnels. I fear water quality issues that would impact my business and the irreversible damage that would be done to the Delta ecosystem. More of my concerns are expressed below.	<p>This comment letter is in part a form letter that has been submitted by many commenters. To locate the response to the form letter portion of the comment, please refer to the index of commenters in Chapter 4 of Volume II of the Final EIR/EIS, and cross reference the Form Master letter number shown there with the index of Form Masters also provided in Chapter 4 of Volume II of the Final EIR/EIS. The text below responds to the specific substantive portions of the comment letter that were submitted by the commenter.</p> <p>Chapter 8, Water Quality, of the EIR/EIS discloses the potential water quality impacts resulting from constructing and operating the proposed project. See also Master Response 14 (Water Quality).</p>
2659	1	<p>We have lived in California for 50 years where our family has boated, camped and fished in the salt-free Delta water. We have brought out-of-state family and friends to enjoy and stay in this beautiful water resource, which in turn has helped the Delta economy.</p> <p>In 2000, we purchased property and built a home on the banks of the Sacramento River. We have noticed big changes in the last few years in our Delta area with less fishermen, because of less salmon and other game fish and an increase of huge quantities of warm water plants (water hyacinth, reeds, invasive grasses and general green scum) that dangerously choke our sloughs and waterways.</p>	<p>The proposed project may impact recreational opportunities including impacts on hunting, fishing, swimming, and boating. Mitigation is proposed to reduce these impacts; however some impacts may remain significant due to the long-term nature of the temporary construction related impacts. Please see Chapter 15, Recreation, and Section 4.3.11 for more detail on the impacts of the proposed project on recreational opportunities and the proposed mitigation.</p> <p>The prevalence of non-native species in the Delta is described in BDCP Section 2.3.4, where each natural community description contains a subsection describing the prevalence and ecological consequences of non-native species in that natural community. The proposed project will incorporate existing Conservation Measures from the BDCP as Environmental Commitments (ECs) to further address the issue of non-native species (RDEIR/SDEIS Appendix 3B Section 3B.5). EC 11 Natural Communities Enhancement and Management describes how non-native vegetation will be disturbed or removed. Restoration ECs may have non-native weed control through operation and maintenance of restored sites (EC 3, 4, 7, 8, 9, 10). EC 15, Localized Reduction of Predatory Fish, does not intend to entirely remove non-native predators at the</p>

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			north and south Delta export facilities. It is intended to reduce localized abundance of fish predators of salmonids at these two locations through active capture methods. Division of Boating and Waterways' Aquatic Weed Control Program helps suppress and control Water Hyacinth and Egeria densa.
2659	2	Our Sacramento River is the main supply of fresh water to the Delta and Bay estuary. The Twin tunnel project has the capacity to take away all the freshwater flow to the San Francisco Bay. We are especially concerned to what the twin tunnels will do to the landscape, removing 32 miles of soil, destroying present farmlands and old growth orchards.	<p>DWR and Reclamation operate with water rights issued by the State Water Resources Control Board that are junior in priority to many senior water rights holders in the Delta watershed. Under the action alternatives, senior water rights holders would continue to receive the same amount of water as under the No Action Alternative. Conveyance facilities under the action alternatives could only deliver the amount of water diverted under the existing SWP and CVP water rights and in accordance with the existing and future related regulatory requirements based upon river water levels and flow, water available in the system, the presence of threatened and endangered fish species, and water quality standards.</p> <p>The comment appears to refer to the soil removed by the tunnel boring machine along the tunnel alignment. The tunnel will be constructed at depths of more than 100 feet below the ground surface. Therefore, the agricultural lands would only be disturbed at or near the tunnel shaft and safe haven access areas and along roadways to access those locations. The extent of changes in agricultural land under each action alternative are presented in Chapter 14, Agricultural Resources, in the EIR/EIS.</p>
2659	3	We need new sources of fresh water. Let's look at other alternative plans to bring water to California: plans that will be more financially conservative, less disruptive to our beautiful state, while protecting our wildlife, our environment and especially our water quality.	Please refer to Master Response 6 for additional details on demand management. Also, please see Master Response 3 for additional details on the project purpose and need.
2660	1	I live in Butte Creek Canyon, Chico California (Butte County) and am writing to oppose the Delta Twin Tunnels project. I am opposed because of the extreme cost of the project, the tunnel muck problem, and the possible threat to Northern California's aquifer systems.	<p>The issue raised by the commenter addresses the merits of the project and does not raise any issues with the environmental analysis provided in the EIR/S.</p> <p>DWR's fundamental purpose of the proposed project is to make physical and operational improvements to the SWP system in the Delta necessary to restore and protect ecosystem health, water supplies of the SWP and CVP south of the Delta, and water quality within a stable regulatory framework, consistent with statutory and contractual obligations. By establishing a point of water diversion in the north Delta and new operating criteria to improve water volume, timing, and salinity, the proposed project is designed to improve native fish migratory patterns and allow for greater operational flexibility.</p> <p>Please see Master Response 3 for additional information regarding the purpose and need behind the proposed project. Please see Master Response 5 for more information on costs and funding.</p>
2661	1	<p>I am writing to express my strong objection to the so called "Bay Delta Conservation Plan". A title, by the way, that does not even begin to describe any part of this huge water grab.</p> <p>I have been a resident of the Delta since 1936 and since the mid 80's have been working hard to improve and maintain the levees along the Mokelumne River in the Thornton area. I have seen, at times, more water than the river systems in the Delta could handle and times when there just hasn't been enough to go around. We have a conveyance system now that does the job and with some improvements in the levees and adjusting the flows to the south, could continue to provide those to the south with water.</p>	<p>Please note that the BDCP is no longer the preferred alternative. The preferred alternative is now Alternative 4A/California WaterFix. Alternative 4A has been developed in response to public and agency input.</p> <p>The issue raised by the commenter addresses the merits of the project and does not raise any issues with the environmental analysis provided in the EIR/S.</p>
2661	2	It is inconceivable to envision a need for two huge pipes, draining every last bit of the flow from the Sacramento River, just to satisfy the needs of metropolitan areas, some located	Operation of the project water delivery system could not drain the Delta rivers and channels dry, including the Sacramento River. The project facilities, including water intakes and pumping plants would be operated

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		<p>adjacent to the Pacific Ocean and large farming interests trying to grow crops where nature has never designed them to grow. Any high school science student will explain that rain fall is very limited on the lee side of a mountain range, the soil has never been washed of it's harmful salts and other minerals and I ask just what are we doing in the lowlands as these substances rise to the surface?</p>	<p>in accordance with permits issued by the State Water Resources Control Board, U.S. Fish and Wildlife Service, National Marine Fisheries Service, and State Department of Fish and Wildlife. The project only would be permitted to operate with regulatory protections, including river water levels and flow, which would be determined based upon how much water is actually available in the system, the presence of threatened fish species, and water quality standards. More information on the ranges of project water diversions, based on water year types and specific flow criteria, can be found in Chapter 3, Section 3.6.4.2, North Delta and South Delta Water Conveyance Operational Criteria, EIR/EIS.</p> <p>The total amount of water exported by month in each water year type for each action alternative is presented in Appendix 5A, Section C, CALSIM II and DSM2 Model Results, of the EIR/EIS. As shown in Appendix 5A, the north Delta intake tunnels would not be fully utilized except for a few months in wet years. However, it is important to have the maximum capacity in the intakes and tunnels during those periods of time to convey water during extremely wet periods to areas south of the Delta for storage and use during drier times. The north Delta intakes would have minimal flows that would be required for maintenance of the pumps during critical dry years.</p>
2661	3	<p>The San Francisco Bay and the Delta are two jewels of our Great State. I am proud of them as are millions more. Why are we even thinking of a plan that could completely devastate the region in time? I have almost completely lost confidence in my government official and see no guarantee of proper flow control.</p> <p>The wool has been pulled over our eyes. We the people were never asked if we should spend billions to transport more water then what can be produced. I look at the CVP and Delta Mendota canals and they seem to be conveying water just fine, meanwhile we are limited to the amount we can use to grow our crop, if at all, here where the rain falls.</p> <p>I ask you please, let's scrap this tunnel idea and develop a plan to improve my Delta, allow us to use water that passes our farms and still provide water to the south when available.</p>	<p>Please refer to Master Response 4 for additional details on the selection of alternatives. Also, please see Master Response 3 for additional details on the project purpose and need.</p> <p>Regarding Delta flows, the proposed project would not affect upstream water rights or entitlements. It aims to allow the federal and state water projects to deliver more reliable water supplies, in a way less harmful to fish. The project does not increase the amount of water to which DWR holds water rights or for use as allowed under its contracts.</p>
2662	1	<p>I am writing to express my opposition to the Delta Tunnels/California Water Fix (Alternative 4A) project, which cannot help but have a disturbing impact on the ecological balance in our Delta bioregion and beyond. This expensive and destructive project does not take into account the potential of local projects and educational campaigns that can save billions of dollars while creating many new jobs.</p> <p>Subsidizing industrial agriculture through mammoth projects like the proposed Twin Tunnels is not only harmful to the survival of the fish and other fauna and flora that depend on the flow of the Sacramento River but it brings harm to the soil and to the health of the those who consume the factory-farmed produce.</p>	<p>The proposed project was developed to meet the rigorous standards of the federal and state Endangered Species Acts, as such it is intended to be environmentally beneficial, not detrimental. By establishing a point of water diversion in the north Delta and new operating criteria to improve water volume, timing, and salinity, the proposed project is designed to improve native fish migratory patterns and allow for greater operational flexibility.</p>
2662	2	<p>Increasing water independence by investing in groundwater storage and other water catchment and storage options will help to recharge our depleted aquifers. Investing in development and promotion of gray water systems is another promising direction to take. We need approaches that will help build long-term sustainability and begin to restore ecological health to our river systems and reduce public dependence on water that should flow through the Delta.</p>	<p>Please refer to Master Response 6 for additional details on demand management.</p>

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2663	1	I am opposed to the BDCP because the benefits do not outweigh the costs. These tunnels will be an environmental, economical and social disaster for the state. I am vehemently opposed to these tunnels.	The issue raised by the commenter addresses the merits of the project and does not raise any issues with the environmental analysis provided in the EIR/S. The proposed project was developed to meet the rigorous standards of the federal and state Endangered Species Acts; as such the proposed project is intended to be environmentally beneficial. By establishing a point of water diversion in the north Delta and new operating criteria to improve water volume, timing, and salinity, the proposed project is designed to improve native fish migratory patterns and allow for greater operational flexibility. Refer to Master Response 3 (Purpose and Need), Master Response 24 (Delta As A Place), and Master Response 5 (Cost).
2664	1	This project does not meet the statutory requirement of being co-equal to both a more reliable water supply and protecting and restoring the Delta. The project is strongly balanced in favor of water contractors and other users against the needs of the Delta. The fact is that all healthy Delta estuaries require water, and the California Delta is already severely oversubscribed. This project exacerbates this current predicament which will only hasten the Delta's demise.	<p>The EIR/EIS was prepared in a manner to comply with the 2009 Delta Reform Act, including sections that are included in this comment, as described in Appendix 3I, BDCP Compliance with the 2009 Delta Reform Act, of the EIR/EIS.</p> <p>Water rights issued on rivers in the Trinity and Central Valley watersheds include a wide range of beneficial uses from hydropower to municipal, industrial, and agricultural water users. However, not all of the water diverted under the water rights is consumptively used. For example, water diverted for hydropower electric generation is fully returned to the water bodies; and a portion of the water diverted from municipal, industrial, and agricultural water uses is returned to the water bodies. In addition, the amount of water diverted is dependent upon water rights priorities and the need to meet environmental flow and quality requirements. Therefore, it is difficult to compare the total volume of water rights licenses to the total amount of water available in the system. For example, water rights issued to DWR and Reclamation are not fully available to provide water under the SWP and CVP water contracts in many years due to the demands of senior water rights holders and regulatory requirements.</p> <p>All of the alternatives evaluated in the EIR/EIS would only divert water under existing water rights which were issued to DWR and Reclamation by the State Water Board with consideration for senior water rights and Area of Origin laws and requirements. Senior water rights holders are not affected by implementation of action alternatives. The amount of water that DWR and Reclamation can pump from the new north Delta facilities is set by Federal regulating agencies, ESA compliance and project design, and not by the water contractors. Operations for the proposed project would still be consistent with the criteria set by the U.S. Fish and Wildlife Service and National Marine Fisheries Service biological opinions and State Water Resources Control Board Water Right Decision 1641 (D-1641), subject to adjustments made pursuant to the adaptive management process, as described in Chapter 5, Water Supply of the EIR/S. In addition to permitting constraints on daily operations of the SWP and CVP, DWR and Reclamation must maintain proper performance and bypass flows across fish screens when endangered and threatened fish species are present within the north Delta facilities area.</p> <p>The project is just one element of the state's long-range strategy to meet anticipated future water needs of Californians in the face of expanding population and the expected effects of climate change. The project is not a comprehensive, statewide water plan, but is instead aimed at addressing many complex and long-standing issues related to the operations of the SWP and CVP in the Delta, including reliability of exported supplies. It is important to note that the project is not intended to serve as a statewide solution to all of California's water problems, and it is not an attempt to address directly the need for continued investment by the State and other public agencies in conservation, storage, recycling, desalination, treatment of contaminated aquifers, or other measures to expand supply and storage (as described in Section 1.C.3 of Appendix 1C, Water Demand Management).</p>
2664	2	<p>This project ignores many other methods, such as conservation and water recycling, that are much cheaper and less damaging to the environment.</p> <p>Shelve this project. Do not give in to hubris. Have the moral and political courage to revisit this project. To do otherwise is to attach your name to a catastrophic legacy. Do you want to</p>	<p>The commenter offers an opinion on the merits of a particular water supply augmentation approach (greater conservation and recycling).</p> <p>Please see Master Response 4 regarding the range of alternatives selected.</p>

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		be known as being part of the effort that destroyed one of the most ecological important areas in the world? Or do you want to help save it? I urge you to reconsider this project.	The alternatives included in the Draft EIR/EIS represent a legally adequate reasonable range of alternatives and the scope of the analysis of alternatives fully complies with both CEQA and NEPA. The Lead Agencies carefully considered all potential alternatives that were proposed during the scoping process and during time of preparation of the Draft EIR/EIS.
2665	1	I adamantly oppose the misdirected efforts to sustain Southern California development's demand for water through sucking our San Joaquin Delta to destructive levels, and further fostering an entitlement mentality towards Northern California water resources! Salt water intrusion is already jeopardizing habitat and species!	<p>Since 2006, the proposed project has been developed based on sound science, data gathered from various agencies and experts over many years, input from agencies, stakeholders and independent scientists, and more than 600 public meetings, working group meetings and stakeholder briefings.</p> <p>DWR's fundamental purpose of the proposed project is to make physical and operational improvements to the SWP system in the Delta necessary to restore and protect ecosystem health, water supplies of the SWP and CVP south of the Delta, and water quality within a stable regulatory framework, consistent with statutory and contractual obligations. By establishing a point of water diversion in the north Delta and new operating criteria to improve water volume, timing, and salinity, the proposed project is designed to improve native fish migratory patterns and allow for greater operational flexibility. Please see Master Response 3 for additional information regarding the purpose and need behind the proposed project.</p>
2666	1	I am writing to express my strong opposition to the Delta Tunnels plan. I have objections to the environmental, economic, and quality of life impact these tunnels will create. These tunnels may cause increased contamination of municipal and private wells for inhabitants of the Delta region and beyond.	In the Final EIR/EIS the description of the proposed project, Alternative 4A, was modified to include slurry wall installation to protect local groundwater conditions during construction including at intake locations, tunnel shafts, and forebays. The effects on groundwater at locations with slurry wall installations would not result in significant effects as compared to Existing Conditions. During the design phase, DWR would conduct site-specific analysis to determine the extent of the potential conflicts related to conveyance facility construction, including locations of water supply and drainage facilities. DWR would consult with local reclamation districts and land owners to ensure that construction activities would not conflict with existing wells and other facilities. It is possible, that some impacts may result in effects depending upon specific information that would be collected during design and construction phase. Mitigation measures have been identified in the EIR/EIS to reduce the impacts to less than significant as compared to Existing Conditions. Mitigation Measures AG-1, GW-1, GW-5, and WQ-11 will reduce the severity of significant impacts in agricultural areas by implementing activities such as siting project footprints to encourage continued agricultural production and land uses; monitoring changes in groundwater levels during construction; monitoring seepage effects; relocating or replacing infrastructure in support of continued agricultural and other land use activities; identifying, evaluating, developing, and implementing feasible phased actions to reduce EC levels; engaging counties, owners/operators, and other stakeholders in developing optional approaches. Please see Chapters 14 and 20 in the EIR/EIS.
2666	2	I am very concerned about the impact rising salinization rates will have on native salmon, and other species that rely on the availability of fresh water coming through the Delta from the Sacramento river. The Delta is a fragile ecosystem with many native fish, birds, and mammals that rely on the availability of the fresh water which will be compromised by this plan.	Potential operational effects of the alternatives on covered fishes and other animals are analyzed in Chapters 11 and 12 of the EIR/EIS. These include potential effects related to changes in flow, for which mitigation measures are provided when significant impacts are identified.
2666	3	The estimated high costs for the tunnels make it an economically unsound project which bears little fruit except for a few large corporate farm entities. I think it is unfair to ask the taxpayers of this state to foot the bill for such a large and ill-conceived idea as these twin tunnels which benefit so few. Why does the Governor think it is ok to ask California taxpayers to foot the bill for a project that benefits large industrial farming entities and privately owned water districts in the Kern County district? Especially when these farmers are growing water intensive crops such as almonds and nuts?	<p>The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.</p> <p>DWR has prepared a standalone assessment of the economic impacts of Water Fix. Please see Master Response 5 for more information on project costs and funding.</p>

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2666	4	<p>In the end the small family farms in the Delta region will be harmed by this project if not completely decimated by it. The economy of the region which is built on small family farming, fishing &amp; sport fishing, and other Delta area services that are dependent on the fresh water flow will most certainly be hurt by these tunnels. I urge you to vote against this project.</p>	<p>Please refer to Master Response 3 regarding the purpose and need.</p> <p>Please refer to Impact ECON-13, 4, 5 and 6 under Alternative 4A, the preferred alternative, in Chapter 16, Socioeconomics. As discussed under Impact ECON-1, construction of the water conveyance facilities would be anticipated to result in a net temporary increase of income and employment in the Delta region. Construction-related employment from the project is estimated to peak at 2,427 FTE jobs in year 3. Total employment (direct, indirect, and induced) would peak in year 12, at 8,673 FTE jobs. Direct agricultural employment would be reduced by an estimated 16 FTE jobs, while total employment (direct, indirect, and induced) associated with agricultural employment would fall by 57 FTE jobs. Throughout the five-county Delta region, population and employment would expand as a result of the construction of water conveyance facilities, as discussed under Impacts ECON-1 and ECON-2. Under Alternative 4A, additional regional employment and income could create net positive effects on the character of Delta communities.</p> <p>While fishing would be reduced at select locations during construction, it would not be reduced in the Delta as a whole. Please refer to Impact REC-4 under Alternative 4A in Chapter 15, Recreation. With implementation of mitigation measures, the project would result in a less-than-significant impact on recreational fishing opportunities.</p>
2667	1	<p>Scientific knowledge is being trumped by a political pipe dream. The destruction of the San Francisco Bay Delta will be the result of corporate greed and a leader bent on misguided legacy.</p> <p>Who is picking up the tab allowing salt water intrusion? Could it be Westlands Water District or the tax payers of the state?</p>	<p>Since 2006, the proposed project has been developed based on sound science, data gathered from various agencies and experts over many years, input from agencies, stakeholders and independent scientists, and more than 600 public meetings, working group meetings and stakeholder briefings.</p> <p>The proposed project was developed to meet the rigorous standards of the Clean Water Act and federal and state Endangered Species Acts; as such it is intended to be environmentally beneficial. DWR's fundamental purpose of the proposed project is to make physical and operational improvements to the SWP system in the Delta necessary to restore and protect ecosystem health, water supplies of the SWP and CVP south of the Delta, and water quality within a stable regulatory framework, consistent with statutory and contractual obligations. By establishing a point of water diversion in the north Delta and new operating criteria to improve water volume, timing, and salinity, the proposed project is designed to improve native fish migratory patterns and allow for greater operational flexibility. Please see Master Response 3 for additional information regarding the purpose and need behind the proposed project.</p> <p>With respect to salt water intrusion, the section of the RDEIR/SDEIS Appendix A - Revisions to the Draft EIR/EIS - Chapter 8 - Water Quality addresses alternatives' effects on salt water intrusion. See also Master Response 14.</p>
2668	1	<p>I am opposed to the Delta Tunnels. This proposed project will decimate an already fragile habitat and be devastating to the environment.</p> <p>Stop sending Northern California's water south.</p> <p>Building tunnels has nothing to do with earthquake upgrades or preparedness. That is a marketing sham/joke! It has everything to do with exporting more water south.</p> <p>Draining the Delta is not a solution to the declining Delta Bay environment. Wildlife and fisheries, particularly salmon, need more water and run off in the Delta Bay system, not less!</p>	<p>The preferred alternative, Alternative 4A, proposes to stabilize water supplies, and exports could only increase under certain circumstances in which hydrological conditions result in availability of sufficient water and ecological objectives are fully satisfied. It is projected that water deliveries from the federal and state water projects under the preferred alternative would be about the same as the average annual amount of water that would be diverted under the No Action Alternative (i.e. 2025 conditions without the preferred alternative).</p> <p>For information on how the project may affect seismic risk, please see Chapter 9, Geology and Seismicity.</p> <p>For information on how the project could affect fish and wildlife, please see Chapter 11, Fish and Aquatic Species, and Chapter 12, Terrestrial Biological Resources.</p>
2668	2	<p>Stop building so many new homes in communities where there is no water. New house</p>	<p>The Proposed Project is not intended to serve as a state-wide solution to all of California's water problems,</p>

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		production in communities such as Indo Valley, Chowchilla Valley etc. are irresponsible and all new home development should find alternative sources for water, not destroy other parts of the state.	and it is not an attempt to address directly the need for continued investment by the State and other public agencies in agricultural and municipal/industrial water conservation, recycling, desalination, treatment of contaminated aquifers, or other measures to expand supply and storage (as described in Section 1.C.3 of Appendix 1C, Water Demand Management). These actions are being considered to meet future water demands for planned municipal uses consistent with water demand projections in the recent Urban Water Management Plans submitted to DWR which include approaches to meet the 20 percent reduction per capita urban water use by 2020.  The issue raised by the commenter addresses the merits of the project and does not raise any issues with the environmental analysis provided in the EIR/S.
2668	3	Stop planting water intensive crops in the Tri Valley. Almond and rice farm production should be curtailed or stopped. These farmers should plant more responsible crops that are more drought friendly and use far less water.	State constitutional restrictions require the reasonable and beneficial use of water and state law requires that water supplied from the Delta be put to beneficial uses. The Lead Agencies do not have the authority to designate what water deliveries are used for. Please refer to Master Response 34 regarding the potential uses of water delivered via proposed conveyance facilities.
2668	4	Northern California residents have been on strict water rationing while Southern California has not.  I live on the water in Discovery Bay California. This is my home and back yard. Property prices, water quality, recreation quality will all be dramatically degraded if the tunnels are built. It is outrageous and unfair that politicians, mostly from Southern California get to decide and dictate what is best on this matter. All the while not having a clue, or any idea what damage will occur. They should at the very least visit the Delta Bay area for themselves be for making such detrimental policy.	Since 2006, the proposed project has been developed based on sound science, data gathered from various agencies and experts over many years, input from agencies, stakeholders and independent scientists, and more than 600 public meetings, working group meetings and stakeholder briefings.  DWR's fundamental purpose of the proposed project is to make physical and operational improvements to the SWP system in the Delta necessary to restore and protect ecosystem health, water supplies of the SWP and CVP south of the Delta, and water quality within a stable regulatory framework, consistent with statutory and contractual obligations. By establishing a point of water diversion in the north Delta and new operating criteria to improve water volume, timing, and salinity, the proposed project is designed to improve native fish migratory patterns and allow for greater operational flexibility. Please see Master Response 3 for additional information regarding the purpose and need behind the proposed project.
2669	1	I oppose the building of the Delta tunnels.	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.
2670	1	I am opposed to the California Water Fix idea.	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised.
2671	1	When does the public get to vote on this? If we do not get to vote on it then why will we have to pay for it? Do not tell me the public will not pay because we both know that is a lie. Water Fix is a bad idea.	The comment addresses the merits of the project but does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.  Please see Master Response 5 for comments pertaining to funding.
2672	1	We are in total opposition to the idea of having water intakes installed on the Sacramento River. There is no reason for these water intakes as they will deplete the river that we need for Northern California economy. If you install the water intakes and the tunnels The Delta will not function properly and the Delta will have salt water that will damage all the land. Do not install the water intakes on the river and do not build the tunnels  We are not in favor of the useless action.	The issue raised by the commenter addresses the merits of the project and does not raise any issues with the environmental analysis provided in the EIR/EIS.
2673	1	BDCP Draft EIR/EIS has showed significant and unavoidable impacts of the water in the delta if this project is to go forward. The RDEIR/SDEIS has concluded that the project "would not cause ....contaminants to be out of compliance" because "staff from Department of Water Resources and Reclamation constantly monitor Delta water quality"  This means nothing due the fact when in the past when contaminants, are "out of	The issue raised by the commenter addresses the merits of the project and does not raise any issues with the environmental analysis provided in the EIR/EIS.

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		<p>compliance”, the Bureau of Reclamation and Department of Water Resources petition the State Water Resources Control Board and exports are allowed to continue, even when water quality is deemed “unacceptable”.</p> <p>Mitigation measures which have been proposed, Chapter 8, only ask for “more evaluation and modelling”. I cannot understand how “significant and avoidable” impacts can be mitigated by further research. The research needs to be done BEFORE the EIR/EIS, not after.</p> <p>I believe strict water quality limitations need to be set and these must be adhered to. The excuse of “there is a drought” or “we forgot this” needs to be part of system of water quality control. There needs to be a change where the Delta is not looked upon as the first party to give way when considering how to save water. This last summer, some people believe that if they purchase the water, they can use it how the please. You can tell by how many green lawns there still were. The delta needs water to survive. There are no written protections in this RDEIR / SDEIS.</p> <p>It is now time to place the Delta as a priority.</p>	
2673	2	<p>The west coast of the USA set a precedent nearly 100 years ago, when the Colorado River Delta became a completely dry waterbed. This destroyed that delta area. We can see what happens when we do things wrong. The excuse was that we did not know better. We do now. We cannot allow a repeat under the disguise of “we need it”. There must be written, cast iron protections for the delta to survive.</p>	<p>All of the alternatives evaluated in the EIR/EIS would only divert water under existing water rights which were issued to DWR and Reclamation by the State Water Board with consideration for senior water rights and Area of Origin laws and requirements. Senior water rights holders are not affected by implementation of action alternatives. The amount of water that DWR and Reclamation can pump from the new north Delta facilities is set by Federal regulating agencies, ESA compliance and project design, and not by the water contractors. Operations for the proposed project would still be consistent with the criteria set by the U.S. Fish and Wildlife Service and National Marine Fisheries Service biological opinions and State Water Resources Control Board Water Right Decision 1641 (D-1641), subject to adjustments made pursuant to the adaptive management process, as described in Chapter 5, Water Supply of the EIR/S. In addition to permitting constraints on daily operations of the SWP and CVP, DWR and Reclamation must maintain proper performance and bypass flows across fish screens when endangered and threatened fish species are present within the north Delta facilities area.</p> <p>The project is just one element of the state’s long-range strategy to meet anticipated future water needs of Californians in the face of expanding population and the expected effects of climate change. The project is not a comprehensive, statewide water plan, but is instead aimed at addressing many complex and long-standing issues related to the operations of the SWP and CVP in the Delta, including reliability of exported supplies. It is important to note that the project is not intended to serve as a statewide solution to all of California’s water problems, and it is not an attempt to address directly the need for continued investment by the State and other public agencies in conservation, storage, recycling, desalination, treatment of contaminated aquifers, or other measures to expand supply and storage (as described in Section 1.C.3 of Appendix 1C, Water Demand Management).</p>
2674	1	<p>We have many concerns about the BDCP/California Water Fix plan. Our family has owned a farm in the North Delta for 6 generations and have experienced the effects of salt-water intrusion and degeneration of water quality over the last 50 years. The health of the whole Bay-Delta ecosystem is in jeopardy due to the drastically reduced water flow from drought and aqueduct diversions. Rather than mitigating this threat to the delta, the plan you propose will increase it by sending more water south to irrigate orchards planted in sodium, boron, and selenium salts-laden, non-draining and unsustainable soil.</p>	<p>As described in Chapter 8, Water Quality, salinity would increase in the Delta with or without the proposed project due to climate change and sea level rise. The water quality assessment in Chapter 8 of the EIR/EIS and Section 4.2.7 of the RDEIR/SDEIS discusses instances in which there are water quality benefits of the project or alternatives. In some cases, water quality improvements may be present at certain locations for portions of the year, and not all of these instances are highlighted in the text. This is because at those same locations, there may be times when water quality is not improved or concentrations increase.</p> <p>As described in Chapter 5, Water Supply, of the EIR/S, it is anticipated that climate change would result in more frequent and more severe rainfall events and less snowfall than under historic conditions. These rainfall events would result in periods of time when rainfall would decline in drier years more than under</p>

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			Existing Conditions. Due to the reduction in rainfall and increased sea level rise, western Delta salinity could become greater than under the No Action Alternative and action alternatives. Water would be released from the SWP and CVP reservoirs to reduce the Delta salinity, however, in some years, adequate water supplies may not be available to reduce the surface water salinity, as described in Chapter 8, Water Quality.
2674	2	The plan EIR/EIS report ignores the requirements of Section 7 of the federal Endangered Species Act as well. Since the CA Water Fix does nothing to produce more reliable quality water supplies or improve conditions for sustaining the health of the Bay-Delta ecosystem and flagrantly side-steps the requirements of the Clean Water, Delta Reformation, and Endangered Species Acts, we are opposed to the Delta Tunnels/California Water Fix (Alternative 4A) Plan.	The California WaterFix has been developed with the goals of minimizing and avoiding incidental take of listed species to the maximum extent practicable. Chapter 11, Fish and Aquatic Resources, and Chapter 12, Terrestrial Biological Resources, EIR/EIS, describe effects of the Proposed Project and several alternatives on fish and wildlife species in the Plan Area. Section 7 requires that federal agencies, in consultation with the federal fish and wildlife agencies, ensure that their actions are not likely to jeopardize the continued existence of species or result in modification or destruction of critical habitat. Please refer to Chapter 5, Water Supply for discussion of the water supply effects of California WaterFix (Alternative 4A). California WaterFix would increase the operational flexibility of the SWP to balance restoration and protection of the Delta ecosystem, water supplies of the SWP and CVP and water quality. The project would also comply with all current and applicable Delta requirements under Decision 1641 and the USFWS and NMFS BiOps as well as other required state and federal permits.
2675	1	Dear Governor Brown: Although we have voted for you twice, we think this huge project to ship still more of the Sacramento River and other Northern California water resources to Southern California is a terrible idea. Please go back to the drawing board on this proposed project, and start broadcasting all further proposals on this subject to the public. Thank you in advance for seeking more reasonable water-conservation solutions for this obvious problem.	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.
2676	1	My home is on 17 acres on Scribner Road. The tunnel project proposes to move the State Scenic Highway 160 over across my holdings so that the road can be cut to install the tunnels. It is a callous and insensitive idea, completely disregarding our history of place. This is not fly over country. People live here, American was born in rural circumstances. This is not just a piece of dirt, it is Holy Ground. My wife died here, my daughter nearby. It was to be my legacy gift to my children and grandchildren. This notion of land ownership should not be taken lightly. It is part of the American Dream, a final repository of the idea of ownership of land, as embodied in the spirit of the Homestead Act and Kindcaid Act that drove the Westward Ho movement. In that part of the American Experience, land was bought by sweat equity, so many years you improved it, and title was yours. In the history of the Western World it was never done before. It became a lynchpin of the American Century. So, my equity was work to pay the mortgage, which I did. Some of my neighbors have invested five generations to bring the land to bear fruit and fiber. On my side of the fence, one generation ago, as an immigrant family we were not allowed to own land because of ethnic barriers. But goodness and justice prevailed, history blessed, and now I am faced with a sense of despair thinking of a future of Silent Springs which will fall on this land, never to enrichen the lives of my children and their children.	This comment expresses concern about loss of property associated with the California WaterFix conveyance facilities. DWR does not take the issue of Delta property acquisition lightly. The EIR/EIS discloses that approximately 76 structures could be affected by facility construction. Property owners affected by needed land acquisition would receive just compensation for the property acquired.
2677	1	I object to the proposed "tunnels" in the Sacramento Delta. This is just another attempt to build the peripheral canal [PC]. Governor Brown's father (Pat Brown) tried to get the PC built and twice we voted it down. Jerry Brown tried in his first administration to get approval for the PC. Now he has the "brilliant" idea of building it underground. Does he really think Californians are that dumb, that we wouldn't recognize the PC in this form? Stop trying to kill the Delta and stop trying to ship more water to your friends in Southern California. If they want/need more water, they can build some more reservoirs in Southern	A number of important improvements have been made to set the current proposal apart from the Peripheral Canal. For instance, tunnels are proposed to reduce surface impacts associated with canals. The capacity of the Proposed Project is more than 10,000 cfs smaller than the Peripheral Canal. The project as proposed allows for dual conveyance allowing through-Delta operations to continue in order to maintain in-Delta water quality. The Proposed Project would require operation of the proposed new in-Delta portions of the CVP and SWP pursuant to environmentally stringent rules under the Federal Endangered Species Act and California Endangered Species Act.

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		California.	Please see Master Response 4 regarding the selection of alternatives analyzed, Master Response 7 regarding desalination, Master Response 6 regarding demand management and Master Response 37 regarding water storage.
2678	1	Please stop the California WaterFix, and review more alternatives that will actually protect the Delta. I am strongly against the Tunnel project because I live in the Delta and for the last 50 years I have seen firsthand the devastation to the salmon, striped bass and other species of fish that the Central Valley Water Project has caused. This tunnel project is just an extension of that destruction because whatever environmental benefit claims made eventually will be outdone by water greed. Just look at the amount of water diverted from the Delta on a year-to-year basis and compare this with the numbers of spawning salmon for that year. Water allocation in California needs to be corrected so that the Delta stops being degraded from insufficient flows. These tunnels just create an avenue for greater amounts of water to be diverted.	The issue raised by the commenter addresses the merits of the project and does not raise any issues with the environmental analysis provided in the EIR/S. The proposed project was developed to meet the rigorous standards of the federal and state Endangered Species Acts, as such the proposed project is intended to be environmentally beneficial. By establishing a point of water diversion in the north Delta and new operating criteria to improve water volume, timing, and salinity, the proposed project is designed to improve native fish migratory patterns and allow for greater operational flexibility.
2678	2	Where this water goes is not to sustainable agriculture -- look at what the farming practices have done to the aquifer and at the problems caused by runoff from irrigating land poisoned with selenium. Permanent crops were never to be irrigated with Project water but look at the amount of new orchards in Kern County alone in the last 5 years. This tunnel project will not benefit Californians in general, just a small group of rich corporate farms and water districts.	The California WaterFix project is being proposed to address the conflict between the ecological needs of a range of at-risk Delta species and natural communities, while providing for more reliable water supplies for people, communities, agriculture, and industry.  State constitutional restrictions require the reasonable and beneficial use of water and state law requires that water supplied from the Delta be put to beneficial uses. The Lead Agencies do not have the authority to designate what water deliveries are used for. Please refer to Master Response 34 regarding the potential uses of water delivered via proposed conveyance facilities.
2678	3	Before any water project is completed, the problems of groundwater depletion, wildlife destruction and water allocation have to be solved.	Since 2006, the proposed project has been developed based on sound science, data gathered from various agencies and experts over many years, input from agencies, stakeholders and independent scientists, and more than 600 public meetings, working group meetings and stakeholder briefings.  DWR's fundamental purpose of the proposed project is to make physical and operational improvements to the SWP system in the Delta necessary to restore and protect ecosystem health, water supplies of the SWP and CVP south of the Delta, and water quality within a stable regulatory framework, consistent with statutory and contractual obligations. By establishing a point of water diversion in the north Delta and new operating criteria improve water volume, timing, and salinity, the proposed project is designed to improve native fish migratory patterns and allow for greater operational flexibility. Please see Master Response 3 for additional information regarding the purpose and need behind the proposed project.
2679	1	Please don't let the Tunnels get built, as the majority of voters voted against the Tunnels and I don't understand why the Governor thinks he knows best. We the people decided no, and no means no. Jerry Brown has disappointed me as a registered voter. Please help to stop the Tunnels from being unfairly built.	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.
2680	1	Our planet is in peril because of ideas like this. The Delta is a system that cannot survive if we make these kinds of changes. We have an ecosystem which manmade tunnels may harm forever. No tunnels!	It is important to note, as an initial matter, that the proposed project is not intended to serve as a state-wide solution to all of California's water problems and it is not an attempt to address directly the need for continued investment by the State and other public agencies in conservation, recycling, desalination, treatment of contaminated aquifers, or other measures to expand supply and storage. Nor is the proposed project intended to solve all environmental challenges facing the Delta. Please see Master Response 6 (Demand Management) for further information regarding how many of the suggested components have merit from a state-wide water policy standpoint, and some are being implemented or considered independently throughout the state, but are beyond the scope of the proposed project.  Although many of the proposed alternatives included meritorious water policy principles, the proposals

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			<p>rejected by the Lead Agencies did not qualify as appropriate alternatives for various reasons. For example, proposals were rejected because they were inconsistent with the project's objectives and purpose and need or included components that are beyond the scope of the project. The text of the Draft EIR/EIS in Chapter 3 (section 3.2) and Appendix 3A to that document thoroughly explain the process used to develop the alternatives, and explain why certain potential alternatives were considered but ultimately rejected by the Lead Agencies.</p> <p>Please refer to Master Response 4 (Alternatives) and Master Response 3 (Purpose and Need).</p>
2681	1	<p>You want us to believe that this is in the best interest to the state to build these tunnels. I didn't know a handful of special interests mega-agafarms were called a state. Secondly how can we believe anything you say when laws were passed to conceal the identity of all the farmers and irrigation districts, Glenn-Colusa Irrigation District in Northern California who are lining up to suck-up, sell and transfer groundwater the the highest bidder south of the Delta. I believe one of them, who is supposed to represent us in Northern California is our congressman Doug Lamalfa. If this is true that he is in line to sellout his neighbor to the west who relies solely on groundwater, I would like to know how transferring water out of Butte county benefits Butte county.</p>	<p>The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS. By establishing a point of water diversion in the north Delta and new operating criteria to improve water volume, timing, and salinity, the proposed project is designed to improve native fish migratory patterns and allow for greater operational flexibility. It is not the result of "favoring" large corporations (e.g., large agribusinesses). In fact, this issue is beyond the scope of the project as the Lead Agencies do not have local land use/zoning authority. The project does not increase the amount of water to which DWR holds water rights or for use as allowed under its contracts. See Master Response 3 (Purpose and Need), Master Response 34 (Beneficial Use of Water), Master Response 24 (Change in Delta Exports), and Master Response 35 (Southern California Water Supply).</p>
2682	1	<p>Why should the entire state's taxpayers be required to fund such a huge project that will only benefit a handful of corporate farms in the Central Valley? Will Central Valley big agriculture continue to deplete Northern California's groundwater and transfer it south through these tunnels? Our groundwater levels here in Chico are at historic lows, our ground is also sinking and wells are going dry! Will these big agriculture water buyers in the south compensate our homeowners and farms in the north state whose wells go dry as a result of these groundwater transfers? Will these water buyers in the south compensate the north state people who could be flooded as a result of groundwater transfers and the resulting subsidence and lowering of the Sacramento River levees that protect us during floods?</p>	<p>All of the alternatives evaluated in the EIR/EIS would only divert water under existing water rights which were issued to DWR and Reclamation by the State Water Board with consideration for senior water rights and Area of Origin laws and requirements. The amount of water that DWR and Reclamation can pump from the new north Delta facilities is set by Federal regulating agencies, ESA compliance and project design, and not by the water contractors. Operations for the Proposed Project would still be consistent with the criteria set by the U.S. Fish and Wildlife Service and National Marine Fisheries Service biological opinions and State Water Resources Control Board Water Right Decision 1641 (D-1641), subject to adjustments made pursuant to the project and the adaptive management process, as described in Chapter 5, Water Supply of the EIR/EIS.</p> <p>As described in Chapter 3, Description of Alternatives, the alternatives considered in the EIR/EIS do not include specific water transfers. The EIR/EIS acknowledges that water transfers would continue in a similar manner as historic transfers and in accordance with State and Federal laws and regulations. The EIR/EIS also acknowledges that the use of water transfers between agencies could increase in the future as SWP, CVP, and other surface water supplies are reduced due to climate change, sea level rise, and increased water demand in the Delta watershed, as described in Appendix 1E, Water Transfers in California: Types, Recent History, and General Regulatory Setting, and Appendix 5D, Water Transfer Analysis Methodology and Results, of the Draft BDCP EIR/EIS. Because specific agreements have not been identified for water transfers and other non-project voluntary water market transactions, project level analysis of impacts upstream of the Delta is highly speculative and this EIR/EIS does not constitute the CEQA/NEPA coverage required for any specific transaction. Rather, it provides an analysis of how transfers relate to the proposed project facilities. As indicated in Appendix 5D, the analyses are conservative because it is not known if adequate water would be available from other water users for transfer. As shown in Table 5D-8, the maximum cross-Delta transfers under the action alternatives would be greatest under Alternative 8 because there would be the most available capacity. Any future water transfers will require separate approvals. The analysis of any potential upstream impacts is not a part of this EIR/EIS and must be covered pursuant to separate laws and regulations once the specific transfer has been proposed. Please see Master Response 3 for additional information regarding the purpose and need behind the proposed project. Please see Master Response 5 for more information on costs and funding.</p>
2683	1	<p>Please do away with this nonsense and cut all the bureaucratic BS and build dams to save</p>	<p>While water storage is a critically important tool for managing California's water resources, it is not a topic</p>

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		new water instead of taking away existing water that will only destroy the Delta region. It would sure be nice to see common sense be the norm in government instead of stupidity.	that must be addressed in the EIR/EIS for the proposed project. This is because the proposed project does not, and need not, propose storage as a project component. Although the physical facilities contemplated by the proposed project, once up and running, would be part of an overall statewide water system of which new storage could someday also be a part, the proposed project is a stand-alone project for purposes of CEQA and NEPA, just as future storage projects would be. Appendix 1B, Water Storage, of the 2013 Public Draft BDCP EIR/EIS, describes the potential for additional water storage.  Please see Master Response 4 regarding the development of alternatives. Please see Master Response 6 for information on Demand Management.
2684	1	The cost of the project is being grossly understated. This state never builds projects on time or on budget; to wit, the Oakland-San Francisco Bay Bridge.	The project would cost approximately \$15 billion to build. There would be additional costs for mitigation of approximately \$800 million. Please refer to Master Response 5 for additional details on the costs of project implementation.
2684	2	I see Northern California, the origin of the water to be transferred in the tunnels, becoming a wasteland without agricultural prosperity. Our water will be used to fuel rampant development in the south, transferred through the tunnels with little or no consideration as to origin water rights.	All of the alternatives evaluated in the EIR/EIS would only divert water under existing water rights which were issued to DWR and Reclamation by the State Water Board with consideration for senior water rights and Area of Origin laws and requirements. The amount of water that DWR and Reclamation can pump from the new north Delta facilities is set by Federal regulating agencies, ESA compliance and project design, and not by the water contractors.  As described in Chapter 3, Description of Alternatives, the alternatives considered in the EIR/EIS do not include specific water transfers. The EIR/EIS acknowledges that water transfers would continue in a similar manner as historic transfers and in accordance with State and Federal laws and regulations. The EIR/EIS also acknowledges that the use of water transfers between agencies could increase in the future as SWP, CVP, and other surface water supplies are reduced due to climate change, sea level rise, and increased water demand in the Delta watershed, as described in Appendix 1E, Water Transfers in California: Types, Recent History, and General Regulatory Setting, and Appendix 5D, Water Transfer Analysis Methodology and Results, of the Draft BDCP EIR/EIS. Because specific agreements have not been identified for water transfers and other non-project voluntary water market transactions, project level analysis of impacts upstream of the Delta is highly speculative and this EIR/EIS does not constitute the CEQA/NEPA coverage required for any specific transaction. Rather, it provides an analysis of how transfers relate to the BDCP facilities. As indicated in Appendix 5D, the analyses are conservative because it is not known if adequate water would be available from other water users for transfer. As shown in Table 5D-8, the maximum cross-Delta transfers under the action alternatives would be greatest under Alternative 8 because there would be the most available capacity. Any future water transfers will require separate approvals. The analysis of any potential upstream impacts is not a part of this EIR/EIS and must be covered pursuant to separate laws and regulations once the specific transfer has been proposed.
2684	3	Many families who depend on Delta agriculture for their living will be dispossessed and it will be impossible to compensate the affected parties. We will have built an enormous project at the expense of generations who have chosen the Delta as a place to live and thrive.	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.
2684	4	Export of Northern California surface water to the arid and overdeveloped central and southern parts of California will cause even more pumping of groundwater in the north, leading to subsidence. Has everyone forgotten about Owens Valley? The Sacramento Valley is not exempt from devastation.	As stated in the Project Objectives and Purpose and Need (see Chapter 2 of the EIR/S), all of the action alternatives would continue the operation of the SWP and CVP in accordance with the existing water rights and regulatory criteria adopted by the State Water Resources Control Board, U.S. Fish and Wildlife Service, National Marine Fisheries Service, and California Department of Fish and Wildlife. All of the alternatives evaluated in the EIR/EIS would only divert water under existing water rights which were issued to DWR and Reclamation by the State Water Board with consideration for senior water rights and Area of Origin laws and requirements. The proposed project does not seek any new water rights or any changes in total water rights

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			issued to DWR and Reclamation. The proposed project would not include conveyance of groundwater. As described in Chapter 3, Description of Alternatives, the alternatives considered in the EIR/EIS do not include specific water transfers. The EIR/EIS acknowledges that water transfers would continue in a similar manner as historic transfers and in accordance with State and Federal laws and regulations. Any future water transfers will require separate approvals. The analysis of any potential upstream impacts is not a part of this EIR/EIS and must be covered pursuant to separate laws and regulations once the specific transfer has been proposed.
2684	5	Building the massive tunnel system does nothing to increase water storage in Northern California.	Water delivered to the SWP and CVP water contractors participating in proposed project would be within the existing contract amounts to serve agricultural lands that have been cultivated and existing and planned community populations. As described in Chapter 5, Water Supply, of the EIR/S, it is anticipated that climate change would result in more frequent and more severe rainfall events and less snowfall than under historic conditions. These rainfall events would result in periods of time when the capacity of the existing intakes would not be adequate. Therefore, the proposed project would provide the maximum capacity in the intakes and tunnels during those periods of time to convey water during extremely wet periods to areas south of the Delta for storage and use during drier times. The proposed project would decrease total exports of SWP and CVP water as compared to Existing Conditions and No Action Alternative in the summer and early fall months; and increase flows in the wet winter months when the river flows are high to improve conditions for aquatic resources. The water would be stored at locations south of the Delta during the high flow periods to allow reductions in deliveries in drier periods. The north Delta and south Delta intakes would only be used to divert water under existing water rights that were issued to DWR and Reclamation by the State Water Board with consideration for senior water rights and Area of Origin laws and requirements.
2685	1	I am opposed to the Twin Tunnels project.	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised.
2686	1	This is a plea to the committee studying the twin tunnels project not to go through with the plan. The twin tunnels would be a disaster not only for the Delta, but also for those of us living in Northern California.	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.
2686	2	In point of fact, the cities of Davis and Woodland, as well as the University of California, Davis, have water rights now to draw water from the Sacramento River for their drinking water. The pipeline to syphon that water is being laid as I write this plea. One can only imagine how two mid-sized cities and a large university draining water from the river will impact the Delta; if the twin tunnels are built, drawing even more water from the Delta, it will absolutely devastate what is left of that essential ecosystem.	The No Action Alternative and all action alternatives in the EIR/EIS include assumptions for full operation of the Davis-Woodland Water Supply Project in the future. All of the alternatives evaluated in the EIR/EIS would only divert water under existing water rights which were issued to DWR and Reclamation by the State Water Board with consideration for senior water rights and Area of Origin laws and requirements. The amount of water that DWR and Reclamation can pump from the new north Delta facilities is set by Federal regulating agencies, ESA compliance and project design, and not by the water contractors. Operations for the Proposed Project would still be consistent with the criteria set by the U.S. Fish and Wildlife Service and National Marine Fisheries Service biological opinions and State Water Resources Control Board Water Right Decision 1641 (D-1641), subject to adjustments made pursuant to the project and the adaptive management process, as described in Chapter 5, Water Supply of the EIR/EIS.
2686	3	The salmon run already is immensely diminished due to the 4-year drought. In addition, the water released from Shasta Dam is too warm -- about 58 degrees -- when salmon need the water to be no warmer than 56 degrees. These factors, too, impact the Delta.	The comments are noted.
2687	1	Please do not proceed with the twin tunnels project. It will have very negative effects on the Bay-Delta and the economic and environmental health of Northern California.	Since 2006, the proposed project has been developed based on sound science, data gathered from various agencies and experts over many years, input from agencies, stakeholders and independent scientists, and more than 600 public meetings, working group meetings and stakeholder briefings.  DWR's fundamental purpose of the proposed project is to make physical and operational improvements to the SWP system in the Delta necessary to restore and protect ecosystem health, water supplies of the SWP and CVP south of the Delta, and water quality within a stable regulatory framework, consistent with

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			statutory and contractual obligations. By establishing a point of water diversion in the north Delta and new operating criteria to improve water volume, timing, and salinity, the proposed project is designed to improve native fish migratory patterns and allow for greater operational flexibility. Please see Master Response 3 for additional information regarding the purpose and need behind the proposed project.
2687	2	I understand that Southern California wants more water, but there is much more that could be done to ease their situation. The culture of Southern California depends on a steady supply of water from the north, but that's not sustainable. Our culture must change to deal with reality. That means a growing population must use less per person to make the supply equal demand, or create more usable water.	<p>As stated in the Project Objectives and Purpose and Need (see Chapter 2 of the EIR/S), all of the action alternatives would continue the operation of the SWP and CVP in accordance with the existing water rights and regulatory criteria adopted by the State Water Resources Control Board, U.S. Fish and Wildlife Service, National Marine Fisheries Service, and California Department of Fish and Wildlife. All of the alternatives evaluated in the EIR/EIS would only divert water under existing water rights which were issued to DWR and Reclamation by the State Water Board with consideration for senior water rights and Area of Origin laws and requirements. The proposed project does not seek any new water rights or any changes in total water rights issued to DWR and Reclamation.</p> <p>The Proposed Project is not intended to serve as a state-wide solution to all of California's water problems, and it is not an attempt to address directly the need for continued investment by the State and other public agencies in agricultural and municipal/industrial water conservation, recycling, desalination, treatment of contaminated aquifers, or other measures to expand supply and storage (as described in Section 1.C.3 of Appendix 1C, Water Demand Management).</p> <p>The issue raised by the commenter addresses the merits of the project and does not raise any issues with the environmental analysis provided in the EIR/S.</p>
2687	3	Desalination, drip irrigation, low-water use landscaping, roof rainwater collection, recycled waste water: all these and more have to become part of our culture. Draining the resources of one area to satisfy the needs of an always-growing other area won't work in the long run.	Please refer to Master Response 6 for additional details on demand management. Also, please see Master Response 3 for additional details on the project purpose and need. Additionally, please refer to Master Response 7 for information on desalination and why it was not included as a project alternative.
2688	1	Do not proceed with the twin tunnels project. It is not good for the people of this community. Do not let greed be your primary motive.	The issue raised by the commenter addresses the merits of the project and does not raise any issues with the environmental analysis provided in the EIR/S. By establishing a point of water diversion in the north Delta and new operating criteria to improve water volume, timing, and salinity, the proposed project is designed to improve native fish migratory patterns and allow for greater operational flexibility. Refer to Master Response 3 (Purpose and Need) and Master Response 24 (Delta As A Place).
2689	1	The current BDCP is a rehash of the old peripheral canal plan, I oppose it and want to see genuine consideration to a plan that draws water west of the Delta.	<p>A number of important improvements have been made to set the current proposal apart from the Peripheral Canal. For instance, tunnels are proposed to reduce surface impacts associated with canals. The capacity of the Proposed Project is more than 10,000 cfs smaller than the Peripheral Canal. The project as proposed allows for dual conveyance allowing through-Delta operations to continue in order to maintain in-Delta water quality. The Proposed Project would require operation of the proposed new in-Delta portions of the CVP and SWP pursuant to environmentally stringent rules under the Federal Endangered Species Act and California Endangered Species Act.</p> <p>For more information regarding the differences between the proposed project and the peripheral canals please see Master Response 36.</p>
2690	1	I am strongly against the Twin Tunnels, which from what I understand is now a proposed triple tunnel due to the fact they can't take away enough of Northern California's water with just two tunnels.	The issue raised by the commenter addresses the merits of the project and does not raise any issues with the environmental analysis provided in the EIR/S.
2690	2	This all started decades ago when our politicians decided that the best thing for the Northern California Delta was to ship as much water as they could down canals to Central and Southern California. This alone was not a good idea for Northern California as our Delta	Since 2006, the proposed has been developed based on sound science, data gathered from various agencies and experts over many years, input from agencies, stakeholders and independent scientists, and more than

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		<p>has suffered since and so have Northern California farmers and inhabitants who have had to accommodate and cut back on their water usage for many decades.</p> <p>And now our current Governor would like to divert all this clean water from the north end above the Delta into these tunnels to the mouth of the canals that flow to Southern California so that all of this clean water bypasses the Delta. By keeping the clean water out of our Delta, they want us to believe that this is what is best for the health of our Delta?</p> <p>You have got to be kidding me! Who in their right mind would believe that this would benefit or be healthy for the Delta and the inhabitants of Northern California?</p>	<p>600 public meetings, working group meetings and stakeholder briefings.</p> <p>DWR's fundamental purpose of the proposed project is to make physical and operational improvements to the SWP system in the Delta necessary to restore and protect ecosystem health, water supplies of the SWP and CVP south of the Delta, and water quality within a stable regulatory framework, consistent with statutory and contractual obligations. By establishing a point of water diversion in the north Delta and new operating criteria to improve water volume, timing, and salinity, the proposed project is designed to improve native fish migratory patterns and allow for greater operational flexibility. Please see Master Response 3 for additional information regarding the purpose and need behind the proposed project.</p> <p>Please see Master Response 4 regarding the selection of alternatives analyzed, Master Response 7 regarding desalination, Master Response 6 regarding demand management and Master Response 37 regarding water storage.</p>
2690	3	<p>We have voted on this before and vetoed the twin tunnels and I can't believe that the politicians are going to push this through without the approval of the inhabitants of Northern California. I am appalled, disappointed and extremely concerned about what is to become of our beloved Delta.</p>	<p>The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.</p>
2691	1	<p>I am surprised that someone has talked Governor Brown, who is usually admirably fiscally sensible, into supporting this plan. It is bad for the ecology of the Delta without creating any new water.</p>	<p>The issue raised by the commenter addresses the merits of the project and does not raise any issues with the environmental analysis provided in the EIR/S. DWR's fundamental purpose of the proposed project is to make physical and operational improvements to the SWP system in the Delta necessary to restore and protect ecosystem health, water supplies of the SWP and CVP south of the Delta, and water quality within a stable regulatory framework, consistent with statutory and contractual obligations. By establishing a point of water diversion in the north Delta and new operating criteria to improve water volume, timing, and salinity, the proposed project is designed to improve native fish migratory patterns and allow for greater operational flexibility.</p>
2691	2	<p>More importantly, it ultimately takes resources away from creating new storage, which is what is needed in times of diminished snowpacks, severely fluctuating rainfall, and growing water demands. Even if the era of big dams is over, there are many opportunities for medium and small-sized reservoirs that could capture water in normal and wet years.</p>	<p>Please refer to Master Response 6 for additional details on demand management. Also, please see Master Response 3 for additional details on the project purpose and need.</p>
2692	1	<p>Scientists have made clear and will continue to make clear to California that extracting any additional water from the Delta will collapse the fragile ecosystem. Instead, Kern County needs to find its own water through desalination or making more realistic choices on what crops it attempts to grow.</p>	<p>Please refer to Master Response 6 for additional details on demand management. Also, please see Master Response 34 for additional details on the determination of beneficial use and Master Response 3 for additional details on the project purpose and need. Additionally, please refer to Master Response 7 for information on desalination and why it was not included as a project alternative.</p>
2692	2	<p>Instead of trying to push this fatally flawed and illegal plan through, we as a state need to focus on self-sufficiency, and not pull huge amounts of water to barren wastelands to supports crops like almonds that take a gallon of water for each almond produced.</p>	<p>No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised. All of the alternatives evaluated in the EIR/EIS would only divert water under existing water rights that were issued to DWR and Reclamation by the State Water Board with consideration for senior water rights and Area of Origin laws and requirements. The issue of crops and water use is beyond the scope of the Proposed Project. For more information please refer to the updated draft 2013 California Water Plan's strategy for agricultural water use efficiency, which describes the use and application of scientific processes to control agricultural water delivery and use. Also, refer to Master Response 6 and Appendix 1C for further information on demand management measures, including increasing agricultural water use efficiency and conservation.</p> <p>The project is just one element of the state's long-range strategy to meet anticipated future water needs of Californians in the face of expanding population and the expected effects of climate change. The project is not a comprehensive, statewide water plan, but is instead aimed at addressing many complex and long-standing issues related to the operations of the SWP and CVP in the Delta, including reliability of</p>

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			exported supplies. It is important to note that the project is not intended to serve as a state-wide solution to all of California's water problems, and it is not an attempt to address directly the need for continued investment by the State and other public agencies in conservation, storage, recycling, desalination, treatment of contaminated aquifers, or other measures to expand supply and storage (as described in Section 1.C.3 of Appendix 1C, Demand Management Measures). The proposed project would not increase the amount of water to which SWP and CVP hold water rights for use allowed under their contracts and permits and approvals for refuge water supplies or other environmental purposes.
2692	3	The California public and Delta community will not accept the Twin Tunnel idea and we need to think of environmentally acceptable methods as an alternative.	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.
2693	1	I was shocked to read in Tuesday's SF Chronicle that we voters would not have a chance to vote on this issue as we did in 1982. I had read about the proposed tunnels for some time, but I assumed that the voters would be able to make the final decision. It makes me feel as though I do not live in a democracy at all.  Please submit this issue to the voters of California.	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.
2693	2	I think these tunnels are total folly.	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.
2694	1	Please rethink the Twin Tunnels project. The water that will be sent to Southern California is needed to protect the Bay's wildlife, wetlands and recreation. We must keep fresh water flowing into the Bay and stop the Twin Tunnels. Thank you.	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised.
2696	1	Please add amendment for dredging to Antioch Bay Bridge from Sacramento City (not just to Clifton Bay Court, near Tracy).  Halfway? We appreciated USACE petition for Delta Levee Maintenance. However, partway is not fully cost effective. It could cause salt backup for vineyards, with drought in aquifer for wells and quality water for our health.	Please see Master Response 4 regarding the range of alternatives selected.  The alternatives included in the Draft EIR/EIS represent a legally adequate reasonable range of alternatives and the scope of the analysis of alternatives fully complies with both CEQA and NEPA. The Lead Agencies carefully considered all potential alternatives that were proposed during the scoping process and during time of preparation of the Draft EIR/EIS. In response to public input, several new alternatives have been studied in the Recirculated DEIR/EIS and a new Preferred Alternative (4A) identified.
2696	2	Stockton Record reported photos on algae growth from warm waters.	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.
2696	3	DISB (Delta Independent Science Board) enumerates environmental and economic impacts to oppose underground twin tunnels, 40 foot wide, 35 miles.	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.  DWR's fundamental purpose of the proposed project is to make physical and operational improvements to the SWP system in the Delta necessary to restore and protect ecosystem health, water supplies of the SWP and CVP south of the Delta, and water quality within a stable regulatory framework, consistent with statutory and contractual obligations. By establishing a point of water diversion in the north Delta and new operating criteria to improve water volume, timing, and salinity, the proposed project is designed to improve native fish migratory patterns and allow for greater operational flexibility.  Please see Master Response 3 for additional information regarding the purpose and need behind the proposed project. Please see Master Response 5 for more information on costs and funding. For responses to comments related to the Delta Independent Science Board's letters, please refer to comment letters BDCP 1448 and/or RECIRC 2546.
2697	1	Please reappropriate funds to USACE [U.S. Army Corps of Engineers] (with 100 year Delta	No issues related to the adequacy of the environmental impact analysis in the EIR/EIS were raised.

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		maps). Most vitally, it is for annual Delta dredging from Antioch Bay Bridge to Sacramento City! That is before El Nino heavy rains this winter. The Army Corps petition was encouraging, but Delta Dredging needs to include the main river ways of Sacramento City to Antioch Bay Bridge. Thereby they are assisting the Port of Stockton (algae from warm waters).	
2697	2	On July 10th at CVFPB [Central Valley Flood Protection Board]/flood workshop, data was 80% non-compliance for Delta Levee maintenance. In 2014, Senator B. Boxer sent levee funding for USACE to Washington State. That means (hopefully) she can "reappropriate", that is restore the Delta Levee repairs, before heavy rains of winter El Nino.	The comment discusses levee funding to repair levees before El Nino. It does not raise any environmental issue related to the EIR/EIS.
2697	3	Port of Stockton with Navy ships has algae overgrowth from warm waters (Stockton record; and awc/sjcgov.org).	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.
2697	4	Many experts give alarm on destructive Delta Twin Tunnels:  Reports are projected to have "occasional reverse flows" (Corwin, WB).  That means taking fresh water near Sacramento City, causing salt backup to food crops and ground water, natural aquifers, like in San Joaquin County (farm bureau, sjfb.org).	The issue raised by the commenter addresses the merits of the project and does not raise any issues with the environmental analysis provided in the EIR/EIS.
2697	5	USGS [U.S. Geological Survey], B2 shows San Joaquin County as mediterranean subtropical, and counties southward as semi-arid in Central Valley (of 28 counties). Delta counties have the most fertile soil in the Americas.  The financial impact/damage can be devastating as more communities in the Delta counties report their productivity (6th or 7th in the world, with California as #1 for USA): food crops; fishing; recreation; tourism, etc.	Please refer to Impacts ECON-3, 5, and 6 in Chapter 16, Socioeconomics, under Alternative 4A, for analysis of impacts to changes in community character, recreational economics, and agricultural economics.
2697	6	How can we encourage USACE/Sacramento [and private dredging] to continue to maintain Delta levee repairs in all of the islands? Soil purifies (by aeration and absorption). Silt can be realigned. Dredging needs to be done from Sacramento City all the way to Antioch Bridge.	The commenter does not raise a specific issue related to the adequacy of the EIR/EIS and rather advocates more dredging in the Delta. Please see Master Response 3 for additional information regarding the purpose and need behind the proposed project.
2697	7	Waste of Twin Tunnels "for not a drop more" -- can be better spent for continued prosperity, with restoration.	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.
2697	8	That is by options for jobs in business not bureaucracies (in water and land grab):  Delta dredging (U.S.A.C.E./ engineers);  26 testing points for coastal desalination (like do Navy ships; for three times more water; and ongoing business job developments);	The commenter does not raise a specific issue related to the adequacy of the EIR/EIS and rather advocates more dredging in the Delta. Please see Master Response 3 for additional information regarding the purpose and need behind the proposed project.
2697	9	Wording becomes general (on water districts) and meaningless to locals, without town, city and county maps: elected in counties or appointees by agencies? San Joaquin County or Central Valley (28 counties); pump use adjacent property values near rivers; region diverters; or divestments for housing taxes (with no water); hydraulic mining with basins for desalination options; etc. conveyance (siphon pipe or 35 mile destructive twin "channels".	Mapbooks and figures are included for most resource chapters. Please refer to Master Response 7 regarding desalination. As discussed under Impact ECON-4 in Chapter 16, Socioeconomics, project proponents would make arrangements to compensate local governments for the loss of property tax or assessment revenue for land used for constructing, locating, operating, or mitigating for new Delta water conveyance facilities.
2698	1	I believe that the twin tunnels, removing water from the Sacramento River with three giant intakes, transporting the water under the Delta to Los Angeles, is filled with long-lasting	All of the alternatives evaluated in the EIR/EIS would only divert water under existing water rights which were issued to DWR and Reclamation by the State Water Board with consideration for senior water rights

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		<p>problems. We have just experienced one of the longest water shortages that I can remember in my lifetime. We, in Northern California, are under strict water rationing. Our family lives on a small ranch with a well that supplies our water. We have let our pastures dry [and] our lawn dry, did not plant a garden this year, are feeding our animals every day with expensive grain and hay, and we are praying daily for rain. How will it help Southern California to send what little water we have left down there? If it is for the few wealthy businessmen who have large walnut and almond orchards that need lots of water -- let them dig wells as our farmers have done.</p>	<p>and Area of Origin laws and requirements. The amount of water that DWR and Reclamation can pump from the new north Delta facilities is set by Federal regulating agencies, ESA compliance and project design, and not by the water contractors. Operations for the Proposed Project would still be consistent with the criteria set by the U.S. Fish and Wildlife Service and National Marine Fisheries Service biological opinions and State Water Resources Control Board Water Right Decision 1641 (D-1641), subject to adjustments made pursuant to the project and the adaptive management process, as described in Chapter 5, Water Supply of the EIR/EIS. Over the long-term, the proposed project would decrease total exports of SWP and CVP water as compared to Existing Conditions and No Action Alternative in the summer and early fall months, especially in drier years; and increase exports in the wet winter months when the river flows are high. The water would be stored at locations south of the Delta during the high flow periods to allow reductions in deliveries in drier periods.</p> <p>The Proposed Project is not intended to serve as a state-wide solution to all of California's water problems, and it is not an attempt to address directly the need for continued investment by the State and other public agencies in agricultural and municipal/industrial water conservation, recycling, desalination, treatment of contaminated aquifers, or other measures to expand supply and storage (as described in Section 1.C.3 of Appendix 1C, Water Demand Management).</p>
2698	2	<p>Governor Brown has said that we should be ashamed of ourselves for asking that this "fix" be stopped. The billions of dollars involved in executing this "water fix" should be enough to give some people pause. How can we afford this when we have already started the bullet train to nowhere? Furthermore, when someone did question the vast amount of money this water project would cost, Governor Brown took out of the budget the money to take care of the environment, the wildlife and people who farm and live in the communities in the Delta.</p> <p>Once the Sacramento River is diverted from washing through the Delta we will experience saltwater intrusion in our wells. What do we do then, Governor Brown? Oh, that will no longer be your problem, will it? You will be somewhere else in retirement. The huge canal you now have running through Northern California to Southern California, transporting much of our water, even though we are in a four-year drought, is enough. Your 'water fix' is not wanted here in Northern California.</p>	<p>For more information regarding cost of the proposed project please see Master Response 5.</p> <p>Salinity in the Delta is a function of the amount and timing of freshwater input from the major tributaries, tidal action from San Francisco Bay, and exports from the Delta. During the late winter and spring months of seasonally elevated flows, and in wet years, seawater intrusion is limited and the Delta has mostly low salinity. During low-flow summer and fall months, and during dry years, lower freshwater flows result in greater amounts of seawater intrusion. Staff from DWR and USBR constantly monitor Delta water quality conditions and adjust operations of the SWP and CVP in real time as necessary to meet water quality objectives set by the State Water Resource Control Board protection of agricultural water supply, municipal and industrial drinking water supply, and fish and wildlife beneficial uses. See section 4.3.4 for a discussion on the proposed projects effects on water quality, salinity and electrical conductivity.</p> <p>Effects of the alternatives on salinity levels are described in Chapter 8, Water Quality, and Appendix 8H, Electrical Conductivity, EIR/EIS and Appendix A of the RDEIR/SDEIS. Modeling results indicate that the implementation of the water conveyance facilities may positively or adversely affect in-Delta water quality, depending on a number of factors including location, time of year, and hydrologic conditions. See tables in Appendices 8E through 8N for specific results related to various water quality constituents (including bromide and chloride).</p> <p>In addition to potential effects associated with the project and alternatives, modeling results for the No Action Alternative indicate that, with or without the proposed project, rising sea levels will bring saline tidal water further into the Delta than occurs at present.</p>
2699	1	<p>The Governor's "Waterfix" has dropped its original environmental mitigation requirements and now is pushing ahead to start construction early next year with no consumer or legislative approval needed. Only approval by federal authorities is required. Caught in the balance, is the ecological health of the SF bay and wetlands, fish species, thousands of threatened Sandhill cranes and other sensitive species that travel the Pacific fly way. Residents, all those who derive their work from the waters, tourists, and future generations of Californians will not know the pristine and vibrant ecosystem we enjoy today for commerce, recreation, and fish and wildlife habitat.</p>	<p>Although Alternatives 4A, 2D, and 5A include only those habitat restoration measures needed to provide mitigation for specific regulatory compliance purposes, habitat restoration is still recognized as a critical component of the state's long-term plans for the Delta. Such larger endeavors, however, will likely be implemented over time under actions separate and apart from these alternatives. The primary parallel habitat restoration program is called California EcoRestore (EcoRestore), which will be overseen by the California Resources Agency and implemented under the California Water Action Plan. Under EcoRestore, the state will pursue restoration of more than 30,000 acres of fish and wildlife habitat by 2020. These habitat restoration actions will be implemented faster and more reliably by separating them from the water conveyance facility implementation.</p>

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			<p>Proposition 1 funds and other state and public dollars will be directed exclusively for public benefits unassociated with any regulatory compliance responsibilities.</p> <p>Additional priority restoration projects will be identified through regional and locally-led planning processes facilitated by the Delta Conservancy. Plans will be completed for the Cache Slough, West Delta, Cosumnes, and South Delta. Planning for the Suisun Marsh region is already complete and a process for integrated planning in the Yolo Bypass is underway. The Delta Conservancy will lead the implementation of identified restoration projects, in collaboration with local governments and with a priority on using public lands in the Delta.</p>
2699	2	<p>Governor Brown has altered his original proposal that provided for the protection of water and the preservation of habitat. This Protection was dropped in the fall of 2014 and now the project has no requirement to preserve the ecosystem already at the breaking point. It also omitted any reference to an impact to San Francisco Bay, a tactic that the National Academie of Sciences cited as one of the BDCPs critical scientific gaps. Additionally Governor Brown has asked President Obama to tell the federal agencies officers to give the Water Fix Tunnel project a pass on the adherence to laws concerning the endangered species and water quality.</p>	<p>As stated in the comment, the preferred alternative is now Alternative 4A and no longer includes an HCP. Alternative 4A has been developed in response to public and agency input. The EIR/EIS analyzes all alternatives, including Alternative 4A.</p> <p>Please see Master Response 5 for additional detail on the BDCP and the alternatives involving an HCP component and Master Response 3 regarding the purpose of the project. Please see Master Response 17 regarding Biological Resources.</p>
2699	3	<p>The two tunnels will each be 40 feet wide and 30 miles long and run 150ft below the surface. They will begin at the Streamboat Slough, a major channel of the Sacramento River and divert water to the Central Valley via a pumping station in Tracy. They will run directly under rich Delta farmland (300 farms estimated to be acquired by eminent domain but no communications to farmers yet), and Staten Island – the winter home of the Sandhill Cranes that use the Pacific flyway.</p>	<p>Please note that the BDCP is no longer the preferred alternative. The preferred alternative is now Alternative 4A and no longer includes an HCP. Alternative 4A has been developed in response to public and agency input. The EIR/EIS analyzes all alternatives, including Alternative 4A. Alternative 4A includes two 28-foot tunnels from the intakes to the intermediate forebay, and one 40-foot tunnel from the intermediate forebay to the combined pumping plants at Clifton Court Forebay, north of Tracy. The overall tunnel length is 45 miles. Alternative 4A has been designed to minimize impacts on Staten Island. Alternative 4A would result in the temporary or short-term conversion of approximately 1,495 acres of Important Farmland and 1,132 acres of land subject to Williamson Act contracts to other uses. Permanent features associated with this alternative could convert approximately 3,909 acres of Important Farmland and 2,035 acres of land subject to Williamson Act contracts to other uses.</p>
2699	4	<p>The Metropolitan Water District of Southern California (Met Water) supplies water to 17 million Californians. It obtains most of its water from elsewhere, Colorado River, and 19% from Sacramento River in wet years. Met water has not waived in its support of the tunnel project. They are currently suing the Delta area farmers for using Sacramento River water to irrigate their crops... water to which the Delta farmers have the highest legal right. In addition, documents came to light in Sept 2015 that appear to outline a plan by Met water to buy Delta land in the path of the tunnels without publicly disclosing that they would be the purchasers.</p>	<p>No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised. All of the alternatives evaluated in the EIR/EIS would only divert water under existing water rights which were issued to DWR and Reclamation by the State Water Board with consideration for senior water rights and Area of Origin laws and requirements. The issue of crops and water use is beyond the scope of the Proposed Project. For more information please refer to the updated draft 2013 California Water Plan’s strategy for agricultural water use efficiency, which describes the use and application of scientific processes to control agricultural water delivery and use. Also, refer to Master Response 6 and Appendix 1C for further information on demand management measures, including increasing agricultural water use efficiency and conservation.</p> <p>The project is just one element of the state’s long-range strategy to meet anticipated future water needs of Californians in the face of expanding population and the expected effects of climate change. The project is not a comprehensive, statewide water plan, but is instead aimed at addressing many complex and long-standing issues related to the operations of the SWP and CVP in the Delta, including reliability of exported supplies. It is important to note that the project is not intended to serve as a state-wide solution to all of California’s water problems, and it is not an attempt to address directly the need for continued investment by the State and other public agencies in conservation, storage, recycling, desalination, treatment of contaminated aquifers, or other measures to expand supply and storage (as described in Section 1.C.3 of Appendix 1C, Demand Management Measures). The proposed project would not increase the amount of water to which SWP and CVP hold water rights for use allowed under their contracts and</p>

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			permits and approvals for refuge water supplies or other environmental purposes.
2699	5	<p>Equipment is already being positioned to begin work on the Waterfix site beginning early 2016.</p> <p>The Waterfix project is a reincarnation of the peripheral canal project defeated by voters in public referendum in 1982. It is a 20th century large infrastructure project that doesn't match up to 21st century issues like global warming and drought (i.e. shrinking snow pack in the Sierra). The project will not create one additional drop of water for Californians, will cost and estimate \$15B up to \$67B and take 10-15 years to build...making drought relief a moot point.</p>	<p>The California WaterFix proposed project is currently under study. Following adoption of the EIR/EIS and several associated approvals by regulatory agencies, design of the conveyance facilities will be initiated. During and following the design phase, additional approvals and permits will be obtained from regulatory agencies. These efforts will be completed over several years prior to the initiation of any construction activities, including obtaining and placement of construction equipment.</p> <p>The fundamental purpose of the project is to make physical and operational improvements to the SWP system in the Delta, water supplies of the SWP and CVP for users located south of the Delta, Delta water quality, and Delta habitat, as described in Section 2.3 of Chapter 2, Project Objectives and Purpose and Need, of the EIR/EIS. As stated in the project objectives and purpose and need, all of the action alternatives would continue the operation of the SWP and CVP in accordance with the existing water rights and regulatory criteria adopted by the State Water Resources Control Board, U.S. Fish and Wildlife Service, National Marine Fisheries Service, and California Department of Fish and Wildlife. All of the alternatives evaluated in the EIR/EIS would only divert water under existing water rights which were issued to DWR and Reclamation by the State Water Board with consideration for senior water rights and Area of Origin laws and requirements. The proposed project does not seek any new water rights or any changes in total water rights issued to DWR and Reclamation. Operations for the Proposed Project would still be consistent with the criteria set by the U.S. Fish and Wildlife Service and National Marine Fisheries Service biological opinions and State Water Resources Control Board. Please refer to Master Response 5.</p>
2699	6	<p>The diversion of greater amounts of fresh water from the Sacramento River will result in more intrusion of salt water into delta farmland and ecosystems. It will render natural fertile farmland useless, eliminate populations of native fish species; change the ecology of Delta waterways, the Suisun Marsh, San Pablo Bay, and San Francisco Bay. Some Fish biologists believe that the project will wipe out all 21 native fish species. The slowing currents and increased toxin laden San Joaquin river water, and increased salinity will turn sloughs into weedy polluted marshes with blooms of toxic algae to injure humans, pets, and wildlife. This will impact regional and commercial fisherman, marine owners workers farmers, and people who live and work in the Sacramento and San Francisco Bay area. Tourists and future generations of Californians will be deprived of the natural beauty of the vibrant ecology of the largest estuary on the west coast of the Americas. Many of these forecasted "waste land areas" are lower income.</p>	<p>No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised. The EIR/S modeling results for the No Action Alternative indicate that, with or without the project, rising sea levels will bring saline tidal water further into the Delta than occurs at present.</p>
2699	7	<p>The tunnels are vastly larger than needed and current flow of the rivers and could hold 2/3 of the average river flow of the Sacramento River. San Jose Mercury News columnist Paul Rogers said that it is "like building an 8 lane highway and only two lanes would ever be used. " Additionally no operating guidelines or governance plans in place to regulate the WaterFix.</p>	<p>Several issues raised by the commenter address the merits of the project and do not raise any specific issues related to the environmental analysis provided in the EIR/S.</p> <p>Please see Master Response 3 regarding purpose and need, and Master Response 28 regarding operating criteria.</p> <p>As implementation of the proposed project or any of the action alternatives will require permits and approvals from public agencies other than the lead agencies, the CEQA and NEPA documents are prepared to support the various public agency permit approvals and other discretionary decisions. Permits required are listed in Table 1-1 of Section 1 of the RDEIR/SDEIS. In order for the proposed project to be implemented, DWR and Reclamation will circulate the Final EIR/EIS for a 30-day NEPA review period. Following completion of the Final EIR/EIS and the NEPA 30-day review period, DWR and Reclamation decision-makers will have the opportunity to certify/approve the Final EIR/EIS and submit a Notice of Determination/Record of Decision (NOD/ROD). Upon completion of the NOD/ROD, the agencies would be able to move forward with final</p>

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			<p>permit approval and implementation. Section 1.1.5.1 of Section 1 in the RDEIR/SDEIS describes the roles and responsibilities of the agencies involved through implementation. DWR has the responsibility to operate and maintain the SWP and would be responsible for all construction activities associated with the proposed project and alternatives, including new intakes and associated conveyance facilities. Reclamation would operate the relevant CVP Delta facilities in coordination with the SWP, including new intake and conveyance facilities.</p>
2699	8	<p>The Environmental Water Caucus has proposed a comprehensive water plan to meet California's needs including more investments in water conservation, groundwater replenishment, storm water catchment, and water recycling. Californians have already stepped up and have conserved 25% through simple low cost strategies in a short amount of time.</p>	<p>The proposed project is just one element of the state's long-range strategy to meet anticipated future water needs of Californians in the face of expanding population and the expected effects of climate change. The California WaterFix is not a comprehensive, statewide water plan, but is instead aimed at addressing many complex and long-standing issues related to the operations of the SWP and CVP in the Delta, including reliability of exported supplies, and the recovery and conservation of threatened and endangered species that depend on the Delta. Although conservation components, water storage, and demand management measures have merit from a statewide water policy standpoint, and are being implemented or considered independently through the state, they are beyond the scope of the proposed project.</p> <p>Appendix 1C, Water Demand Management, in the EIR/EIS, describes conservation, water use efficiency, and other sources of water supply including storm water drainage. While these elements are not proposed as part of the BDCP or the California WaterFix, the Lead Agencies recognize that they are important tools in managing California's water resources.</p>
2699	9	<p>The beneficiaries of this project are not the citizens of CA but corporate fruit and nut tree farm interests in the arid region of central California (historically less than 6 inches of water per year). These interests have seen margins in the 30% range using water at subsidized rates. Product is often exported, and tree farms cannot fallow their fields during drought years. Paradise Foods (owned by Stuart and Lee Resnick) currently have 188 square miles of farms of high margin nut crops that use more water than 9 Million Californians. The Resnicks (multi-billionaires) have increased their acreage of water guzzling crops: walnuts 30%, almonds 47%, and pistachio 118% over the past ten mostly dry years. Recently they have said they will increase the almonds 10% annually. They are consistent political financial campaign contributors.</p>	<p>The issue of crops and water use is beyond the scope of the Proposed Project. For more information please refer to the updated draft 2013 California Water Plan's strategy for agricultural water use efficiency, which describes the use and application of scientific processes to control agricultural water delivery and use. Also, refer to Master Response 6 and Appendix 1C for further information on demand management measures, including increasing agricultural water use efficiency and conservation.</p>
2699	10	<p>The governor has used criticism of the Delta levee system in event of earthquakes as justification of moving the water. Geological experts have said the threat to the levees is blown totally out of proportion and any leaks have been prior to 1972 since no funds were allocated for upkeep of the levees. Federal monies have since been allocated and since then there have been no levee failures.</p>	<p>Please see Appendix 6A, Sections 6A.5.2, FEIR/EIS, for information on seismic and levee failure risks in the Delta.</p> <p>For more information regarding floods and levees please see Appendix 6A.</p>