# **CENTRAL DELTA WATER AGENCY**

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# NOV 0 3 2015

Re: BDCP/California Water Fix RDEIR/SDEIS DJN Sr. Part Four

Our comments regarding the above are being submitted in multiple parts.

Enclosed herewith are Comments on the Revised Public Draft DBCP EIR/S – Additional Central and South Delta Water Agency Comments constituting Part Four.

Very truly yours

Dante John Nomellini, Sr. Manager and Co-Counsel

# Comments on the Revised Public Draft BDCP EIR/S - Additional Central and South Delta Water Agency Comments

#### **Global Comments:**

We 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 level of detail as provided for the new project alternatives must be recirculated for public draft EIR/S. The revision of the analysis for the other alternatives must be recirculated for public comment as these are material omissions of this revised document.

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 RPDEIR/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 RPDEIR/S and recirculate those for public comment.

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 on-going 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, on-going habitat quality and quantity degradation from continued sediment and large woody debris capture at Orville Dam, continued salt accumulation degradation of soils and agricultural productivity in the SWP service area from on-going SWP export of salts in the delivered irrigation water, and many other significant and on-going 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 on-going 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 on-going 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.

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 Water Fix". 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 going back to the beginning of the public noticing and scoping as they must do for this new project. The BDCP NOI and NOP do not describe the current BDCP proposed project as the notices describe a canal with an HCP/NCCP. The California Water Fix 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 Water Fix project and must be renoticed as a new project - see related comments. The BDCP project scoping no longer is applicable to the project being proposed by the California Water Fix - see related comments. The new California Water Fix alternatives do not reasonably meet the BDCP purpose and need and project objectives - see related comments. The only thing that is the same between the two very different projects is that the proponents are the same. The California Water Fix project, as a new project, must conform to NEPA and CEQA requirements and must be publicly noticed, scoped, 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.

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, § 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.

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, recently commented that the RPDEIR/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 are required to implement to address the construction-related impacts of the proposed Project." (http://www.kcwa.com/public/documents/PublicBoardPacket.pdf, pdf 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, analyze and mitigated at a project level of detail, KCWA would not have a basis for this concern. "

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, environmental commitments and other conservation measures. " (http://www.kcwa.com/public/documents/PublicBoardPacket.pdf , pdf page 126, first paragraph) We concur with KCWA'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 embeded hyperlinks between sections of related and dependent content and for the document to be recirculated for public comment.

#### **Contracting Procedure Violations:**

The BDCP is in violation of the First Amendment MOA 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 NCCPA to be incorporated into the Delta Plan and to be eligible for state funding. The BDCP does not include a NCCPA 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 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.

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).

http://www.swca.com/images/uploads/Facts\_About\_National\_Environmental\_Policy\_Act.pdf. 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 contaminated and all materials created by this unlawfully selected and contracted consultant team must discarded. 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 principle consultant preparer of the RPDEIR/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 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.

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."

(http://www.wineindustryinsight.com/ex\_nf.php?url=http://www.sacbee.com/news/local/environme nt/article4644687.html) 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.

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 size and complexity water conveyance construction projects. The engineering firms (URS and Black and Veetch) 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.

The development of the Public Condemnation Process document (http://restorethedelta.org/wpcontent/uploads/2015/08/DCE-Cm1-Property-Acquisition-Plan-1-Fr-MWD-PRA-2015.pdf) 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.

The SAIC Team, which ICF International was a part of, was contracted by ZONE 7 (a SWP water contractor) to produce the BDCP HCP/NCCPA. 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 requirements.

As further 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 which 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 re-noticed 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. 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 has been complete the lead agencies must review and revise the developed materials into a suitable and appropriate informational and decision document.

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.

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 1506.5(c). The companies identified above 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.

Since ICF International, SAIC, The Hallmark Group and others identified above 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 prepared for the BDCP HCP/NCCP that were developed by the project proponents, e.g. Metropolitan Water District, Kern County Water Agency, etc. material and edits 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.

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 violations should conflict them out of potential contention for future contracting of the BA or any future BDCP contracts.

#### Inadequate and Unrepresentative Public Noticing:

The NOP and NOI 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 re-analyzed 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.

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 4, the project proponents must renotice and rescope their project.

The name of the project has changed from "BDCP" on the PDEIR/S to "BDCP/Ca Water Fix" on the RPDEIR/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 an new PDEIR/S.

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 BDCP proposed ITP would be based on a section 7 ESA consultation which would issue a Biological Opinion 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 anytime 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 renotice the new project and return to public scoping and alternatives development.

Due to all of the inaccuracies in this notice as identified in the following comments, 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.

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 re-issued and the project rescoped and subject to subsequent public scoping processes. The project no longer even goes under the same name as used in the federal notice. I the notice, the project is the BDCP and in the current RPDEIR/S, the project is the BDCP/California Water Fix.

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 RPDEIR/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; 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 Water Fix 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.

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. 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. 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.

Current alt does not include analysis or mitigations for ongoing impacts of the CVP or SWP - see related comments. Since these impacts are not covered in the EIR/S, then any ITP 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 alteratives. Since the BDCP will not get ITPs to cover these maintenance and on-going impacts as was specified in the NOI and NOP, then the public noticing is additionally deficient and misleading for the project that is currently being proposed by the BDCP.

DWR misrepresents the nature and scope of the BDCP project in public press releases. "The twomonth 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." (http://resources.ca.gov/docs/press\_release/150722-

Public\_Comment\_Period\_on\_Revised\_Delta\_Conveyance\_Document.pdf). 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.

BDCP EIR/S FAQ - page 3,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 those 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 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 as it did for the previous alternatives which assumed a section 7 consultation ESA permitting pathway. 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.

## Failure of Alternatives to Meet Purpose and Need and Project Objectives:

The Purpose and Need and Project Objectives of the BDCP have not been modified from the November 2013 Public Draft EIR/S. The following comments provide evaluations of how the current and previously analyzed BDCP alternatives fail to reasonably meet nearly every single aspect and component of the identified project purpose and need and project objectives.

The BDCP EIR/S from November 2013 Purpose and /Need 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 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.

The BDCP EIR/S from November 2013 says habitat restoration component of Purpose and Need will now be addressed by California EcoRestore, but Ca 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." (http://resources.ca.gov/ecorestore/) 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 piece-mealing violations.

The BDCP EIR/S from November 2013 purpose and need identified that the project would have "coequal goals". Water Code § 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 RPDEIR/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.

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 - see related comments. 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% - see related comments. Other flow related affects from reduced western and southern delta contributory flows are completely unaddressed by any BDCP alternative - see related comments. 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 D1641 levels. The new alternatives of the BDCP do not restore water quality and in fact these alternatives precipitate some potentially catastrophic impacts on water quality that were determined to be significant and unavoidable by the BDCP EIR/S - see related comments. 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. - see related comments.

Comment continued: 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 NCCPA are not consistent with the requirements 2009 Delta Reform Act as the act requires the BDCP to include a NCCPA. These new BDCP alternatives not only inconsistent with the requirements of this law, but is in outright violation of it - see related comments. 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 BO RPA 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 - see related comments. In summary, the new BDCP project alternatives does not restore habitat, does not protect ecosystems, does not restore water supply, does not restore water quality (and in fact degrades it), does not result in a stable regulatory framework, is not consistent with existing laws and statutes and fails 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 - see related comments.

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: I Respond to the applications for incidental take permits2 for the covered species that authorize take related to:

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; 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 §10(a)(1)(B) and its implementing regulations and policies;

3. The diversion and discharge of water by Mirant LLC for power generation in the Western Delta." The new BDCP alternatives fail to reasonably meet these project objectives too. The new alternatives do not include "covered species" as they are not HCP/NCCPs. 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 conveyance operations and leakage, service area water delivery (e.g. salt accumulation) and downstream of service area drainage impacts. Because these impacts of the on-going operations of the CVP/SWP are not evaluated, disclosed, characterized, guantified, 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 on-going impacts nor have the alternatives included any substantial compensatory actions to make up for these on-going impacts. 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.

November 2013 BDCP EIR/S, page 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 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" - see related comments. 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 project objective. 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.

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." 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 D1641 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. Since 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, are 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.

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.

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 as 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 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. 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.

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." 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. 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.

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 NCCPA (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 - see related comments. Out of the 6 components of the objective, the current BDCP proposed project does not reasonably meet any of them. The original BDCP alternatives only partially satisfy 3 out of the 6 components of this project objective.

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." 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) so the incremental cost of the additional water delivered (\$6,000 - \$8,000/AF by some estimates) by the project fail 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.

November 2013 BDCP EIR/S, page 2-4, line 13 "The purposes of the proposed actions are to achieve the following.

1. Consider the applications for incidental take permits for the covered species that authorize take related to the actions listed below.

a. The operation of existing SWP Delta facilities.

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.

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 21 10(a)(1)(B) and its implementing regulations and policies."

The new BDCP alternatives fail to reasonably meet these project purposes too. 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 conveyance operations and leakage, service area water delivery (e.g. salt accumulation) and downstream of service area drainage impacts. Because these impacts of the on-going 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 purpose. The new alternatives still pump 60% of the diversions from the south delta and the project has done nothing to mitigate for these on-going impacts nor have the alternatives included any substantial compensatory actions to make up for these on-going impacts. 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.

November 2013 BDCP EIR/S, page 2-4, line 23 "2. Improve the ecosystem of the Delta by implementing the actions listed below.

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.

b. Protecting, restoring, and enhancing certain aquatic, riparian, and associated terrestrial natural communities and ecosystems.

c. Reducing the adverse effects on certain listed species due to diverting water."

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. b) The new alternatives do not "protect" or "restore" or "enhance" - see related comments. 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. 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 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.

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." 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 D1641 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 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. Since 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, are 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.

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.

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.

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 - see related comments.

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 - see related comments. 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) - see related comments. 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.

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 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.

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." Right. The preceding comment quote identifies that the 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. 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 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 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.

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 - see related comments. The BDCP alternatives do proposed to create new facilities with new impacts to these declining species, but they fail 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.

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 - see related comments. 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 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 and 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.

November 2013 BDCP EIR/S, page 2-6, line 16 "...the USFWS and NMFS Biological Opinions, including the Reasonable and Prudent Alternatives..." DWR and Reclamation have not complied with the vast majority of the current OCAP BO RPAs - see related comments. 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.

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 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. These "significant and unavoidable" (and unmitigated) water quality exceedances degrade the beneficial uses of water supply for municipal, industrial, agricultural, recreation, wildlife, and fisheries see related comments. 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 - see related comments. 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 see related comments. 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 - see related comments. 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.

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 - see related comments. The current project and all of the BDCP alternatives fail to meet this project need.

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.

#### **Inconsistencies with Current Plans, Policies and Regulations:**

The BDCP project is inconsistent with and is in direct conflict with existing policy and water code of the state of California. Water Code § 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. The new BDCP alternatives fail to reasonably meet the stated Purpose and Need and Project Objectives of the BDCP - see related comments. 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.

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 identified in the biological opinions 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 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.

The BDCP is inconsistent with and in violation of the 2009 Delta Reform Act as it does not include a NCCPA and is not CEQA compliant - see related comments. 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 project. 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.

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."

(http://www.waterboards.ca.gov/waterrights/water\_issues/programs/bay\_delta/deltaflow/docs/final\_ rpt080310.pdf, page 2, paragraph 1) 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.

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:

• 75% of unimpaired Delta outflow from January through June;

75% of unimpaired Sacramento River inflow from November through June"

" In comparison, historic flows over the last 18 to 22 years have been:

• approximately 30% in drier years to almost 100% of unimpaired flows in wetter years for Delta outflows;

• about 50% on average from April through June for Sacramento River inflows"

(http://www.waterboards.ca.gov/waterrights/water\_issues/programs/bay\_delta/deltaflow/docs/final\_ rpt080310.pdf, page 5) 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. " 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."

(http://www.waterboards.ca.gov/waterrights/water\_issues/programs/bay\_delta/deltaflow/docs/final\_ rpt080310.pdf, page 7, 5th paragraph) 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.

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) (Stats. 2009 (7th Ex. Sess.) ch 5, § 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 identify quantifiable biological objectives and flow criteria for the species of concern in the Delta. " (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=25987, pdf page 5, paragraph 3)

# Comment continued: "Terrestrial Species Biological Goals

• Achieve, first, recovery and then self-sustaining populations of the following atrisk 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.

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.
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." (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=25987, pdf page 6) 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.

## Comment continued: "Aquatic Species Biological Goals

• 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.

• 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:

Yolo Bypass

Sacramento River and its basin

San Joaquin River and its basin

Eastside streams and their basins

Interior Delta including Old and Middle rivers

Delta outflow" (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=25987, pdf page 6) 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.

The ELT 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 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.

Dropping of the BDCP implementation of the OCAP BO RPAs in early implementation is in direct conflict with the requirements 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.

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.

Provide for the conservation and management of covered species within the planning area. Preserve, restore, and enhance aquatic, riparian, and associated terrestrial natural communities and ecosystems that support covered species within the planning area through conservation partnerships.

Allow for projects that restore and protect water supply, water quality, ecosystem, and ecosystem health to proceed within a stable regulatory framework.

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, 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.

Provide a less costly, more efficient project review process which results in greater conservation values than project-by-project, species-by-species review.

Provide clear expectations and regulatory assurances regarding covered activities occurring within the planning area." (March 2010 BDCP Scoping Report, page 1-3, line 41) 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), does not preserve or restore habitat above levels that are required by compensatory mitigation, precludes the implementation of other conservation efforts both through conflicts for space as well as impacts that preclude implementation of other conservation actions (see related comments), does 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 it does not include an HCP/NCCP it does not provide for regulatory assurances. Since the new BDCP alternatives only potentially meet one of criteria of the Planning Agreement, the California Water Fix project is a new project with new proponents, a new scope and one which requires a new purpose and need. The new California Water Fix 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.

The OCAP BO determined that without the RPAs that the CVP/SWP continued operations would result in jepeoardy of listed species. Six and seven years after the FWS and NMFS BO's made their jepeoardy determinations, DWR and Reclamation have yet to implement the vast majority of these mandatory actions to avoid jepeoardy. 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 jepeoardize 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 jepeoardy call on the BDCP proposed project and 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.

The BDCP has dropped from the scope of the Proposed Project and new alternatives included in the RPDEIR/S the actions that would bring the SWP/CVP into compliance with the OCAP BO RPAs. 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) the BDCP would be part of California EcoRestore's baseline and No Action condition. What California Eco Restore 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&E species. Therefore, the CVP/SWP must comply with the pre-existing OCAP BO RPAs to avoid jeopardy of T&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.

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.

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 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.

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. "Complete Comprehensive Plans to Recover Populations of Threatened and Endangered Species in the Delta and Improve Water Supply Reliability for Users of Delta Water

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 specific actions, 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."

(http://resources.ca.gov/docs/california\_water\_action\_plan/Final\_California\_Water\_Action\_Plan.pdf, page 8, paragraph 2) 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 - see related comments. 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 see related comments. 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 - see related comments. 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 - see related comments. 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 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. 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 (see related comments), 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.

"Once the BDCP is permitted, it will become part of the Delta Plan."

(http://resources.ca.gov/docs/california\_water\_action\_plan/Final\_California\_Water\_Action\_Plan.pdf, page 8, paragraph 3, last sentence) 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 for consideration of a compliance consistency with the Delta Plan so the BDCP fails to meet this requirement of the California Water Action Plan as well. The BDCP is not consistent with the Delta Plan and must not be certified as compliant with the Delta Plan - see related comments.

#### Inadequacies of Alternatives:

The alternatives that do not include the HCP/NCCP, must include the assumptions of the California Eco Restore project in their future conditions baseline assumptions as the Ca Eco Restore is the designated project, in those cases, for DWR and BOR to comply with the current mandated OCAP BO 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 (see related comments) 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.

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 purpose and need and project objectives which are the basis of the alternatives development screening criteria. In other comments (see related comments) we 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 rational 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.

March 2010 BDCP Scoping Report (downloaded from

http://baydeltaconservationplan.com/EnvironmentalReview/EnvironmentalReview/Scoping/Scoping20 09.aspx) page 1-2, line 22 "Scoping frequently continues throughout the preparation of the Draft EIS." 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.

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.

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. 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 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 - see related comments.

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 on-going effects of the SWP/CVP system so permits must not cover those undescribed and unanalyzed activities, e.g. reservoir fluctuations and fisheries affects upstream of reservoirs; does not cover species that may be listed in the future; does not use a section 10 ESA process; and does not cover Mirant operations.

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.

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 on-going impacts from the continued operation of the CVP/SWP. These on-going 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 affects on reservoir and upstream fisheries and wildlife, hatchery impacts, aqueduct leaks, greenhouse gasses, and other previously submitted and other comments included herein.

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 (see previously submitted and comments included herein), the public noticing and public meetings for the new California Water Fix project must be conducted to comply with NEPA and CEQA requirements.

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.

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, 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." 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.

March 2010 BDCP Scoping Report, pdf page 33 - Of the 7 planning goals identified, the new BDCP alternatives may potentially accomplish only #5 - see related comments.

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 BOs or are compensatory mitigations for adverse impacts of implementing the BDCP project.

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 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 Water Fix 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 Water Fix 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.

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." Per other comments included herein, the California Water Fix is a different project than the previously noticed BDCP project. California Water Fix 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 Water Fix is a different project with different characteristics and impacts than the previously noticed BDCP project, the California Water Fix 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.

March 2010 BDCP Scoping Report, pdf page 37, last paragraph, "<u>The Department's practice is to make comments</u>, including names, home addresses, home phone numbers, and email addresses of respondents, <u>available for public review</u>." "In the absence of exceptional, documentable circumstances, this information will be released. <u>The Department will always make submissions</u> from organizations or businesses, and from individuals identifying themselves as representatives of or officials of organizations or businesses, <u>available for public inspection</u> in their entirety." (underlining emphasis added) 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".

March 2010 BDCP Scoping Report, pdf page 44 - Of the 8 planning goals identified, the new BDCP alternatives may potentially accomplish only #5 - see related comments.

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 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.

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 § 46.415(b), citing 40 CFR § 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 (see related comments) and they do not even satisfy the one significant issue they attempt to of water supply reliability with regulatory stability.

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. In previous comments we have demonstrated that the new BDCP alternatives do not reasonably meet the Purpose and Need of the project - see related comments. 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.

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, § 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 - see related comments. 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 - see related comments. The new BDCP alternatives are not compliant with the Delta Reform Act, so they are not legally feasible either.

NEPA requires an EIS must "objectively evaluate all reasonable alternatives" (40 C.F.R. § 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.

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. § 1536(a)(2)) 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 - see related comments. The new BDCP alternatives do not include implementation of the OCAP BO RPAs which were required by FWS and NMFS to avoid a jepeoardy call on listed species (see related comments), delays the OCAP BO RPAs implementation by making them after the proposed BDCP conveyance is constructed (see related comments) and precludes the later implementation of the RPAs due to environmental impacts that would occur with the BDCP conveyance as part of the baseline condition (see related comments), the new BDCP alternatives would result in the continued jepeoardy of listed species. Because Section 7 of the ESA prohibits a federal agency from implementing any action that would jepeoardize 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.

The BDCP requires a "Section 404" permit from the Army Corps of Engineers pursuant to section 404 of the Clean Water Act. 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. § 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 as it has more wetlands impacts than the 3,000cfs 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 (see related comments on DO and other water quality parameters) or exceedance with state water quality standards (see related comments). An alternative that does not achieve the overall project purpose is not considered practicable. (40 C.F.R. §§ 230.10(a) and 230.10(a)(2)) The new BDCP alternatives do not meet the overall project purpose - see related comments. 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.

When evaluating which alternative is the least environmentally damaging practicable alternative, 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 CM1). 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 (ie.3,000cfs total capacity) would be the only option for the LEDPA selection under the 404 process.

"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."

(http://baydeltaconservationplan.com/Libraries/Dynamic\_Document\_Library\_-\_Archived/EIR-EIS\_Alternatives\_Update\_Fact\_Sheet\_3-6-12.sflb.ashx) 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.

"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." (http://baydeltaconservationplan.com/Libraries/Dynamic\_Document\_Library\_-\_Archived/EIR-EIS\_Alternatives\_Update\_Fact\_Sheet\_3-6-12.sflb.ashx) 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 (see related comments) do not restore aquatic, riparian, and terrestrial habitat (beyond compensatory mitigation), and they also fail to restore and protect water supply reliability (see related comments on lack of increase in delivered water and lack of regulatory assurances protections for 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.

"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." (http://baydeltaconservationplan.com/Libraries/Dynamic\_Document\_Library\_-\_Archived/EIR-EIS\_Alternatives\_Update\_Fact\_Sheet\_3-6-12.sflb.ashx) 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 (see related comments). 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 (see related comments). "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." (http://baydeltaconservationplan.com/Libraries/Dynamic\_Document\_Library\_-\_Archived/EIR-EIS\_Alternatives\_Update\_Fact\_Sheet\_3-6-12.sflb.ashx) 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.

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 - see related comments.

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 identified in the biological opinions 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 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.

The BDCP RPDEIR/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 RPDEIR/S do not meet the criteria of the Purpose and Need of the project (see related comments). Many of the other project alternatives that were proposed in public comment and that were not given full consideration and analysis in the RPDEIR/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 RPDEIR/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.

Under NEPA, the project alternatives must accomplish the same objectives as the Proposed 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.

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 HC/NCCP it is inappropriate and misleading to label the conveyance as a conservation measure.

"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, no final EIR/S, no NOD/ROD, etc. This is not a project and is not reasonably foreseeable by any test. Any reliance by DWR, BOR or the BDCP on this project implementing OCAP BO compliance is unsupportable.

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.

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 River," 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 eminent domain issue and taking land away from private citizens against their will." "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."

(http://mavensnotebook.com/2015/08/26/legislative-hearing-are-the-delta-tunnels-good-forcalifornia-part-2-of-2/) There are few if any experts on the delta more qualified to speak on this topic than the former Delta Water Mater 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.

CRAIG WILSON, former SWRCB Delta water master, "The second aspect of the 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." 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."

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 certainly begs the question as to why that kind of alternative was or is not being studied."

"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." (http://mavensnotebook.com/2015/08/26/legislative-hearing-are-thedelta-tunnels-good-for-california-part-2-of-2/) There are few if any experts on the delta more qualified to speak on this topic than the former Delta Water Mater 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.

DR. JEFF MICHAEL, University of the Pacific, "The California Water Fix 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."

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."

"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." (http://mavensnotebook.com/2015/08/26/legislative-hearing-are-the-delta-tunnels-good-forcalifornia-part-2-of-2/) Dr. Micheal 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 not currently provide PWAs 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." (http://www.kcwa.com/public/documents/PublicBoardPacket.pdf, page 123 of the pdf, paragraph 1) 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 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 Water Fix 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.

DWR and Reclamation non-compliance with current OCAP BO RPAs: The OCAP BO RPAs are a part of the No Action definition for the BDCP comparative analysis (see related comments) 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 affects 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.

## **Clifton Court Forebay Criteria Compliant Fish Screen Alternative**

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.

Comment continued: 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 pumps.

Comment continued: 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 on-going 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.

Comment continued: 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 reduced fish salvage rates that resulted in a significant reduction of the principle impact of the SWP/CVP on the fish species that the project was putting into jepeoardy. Since the CLTO CVP/SWP reoperation has been so successful, it makes sense to combine project alternatives components with that reoperation to form other viable 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 Forebay; fish behavioral modification devices to manage fish distribution away from the intakes (bubble curtains, acoustic and light deterrents); and improved fish salvage capture, storage and release facilities and operations. Since the fish 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.

Comment continued: 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.

Comment continued: Designs for an isolated Clifton Court Forebay have been discussed many times by DWR and through the CALFED project, but these concepts discussed in the 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.

Comment continued: 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 an 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).

Comment continued: 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 Forebay 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.

Comment continued: 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.

Comment continued: 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. Comment continued: Behind the trash racks and just in front of the operable gates would be a course fish screen designed to keep out only larger "predator" size fish that have much higher swimming 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 course fish screens, at full capacity CVP/SWP diversions the approach velocity at the course 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 course large fish exclusion screen. There would be some predation at the trash racks and course 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 course 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.

Comment continued: 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' wide and deepen from the initial 30' channel depth at the operable gates to a conveyance channel depth of 60 feet deep. The rest of the length of the conveyance channel would be dredged to a 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. Comment continued: 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 Forebay 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, alternatives 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 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.

Comment continued: 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 15,000cfs 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.

Comment continued: 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.

Comment continued: 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 (see previously submitted related comments). 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.

Comment continued: 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 (see previously submitted related comments). 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 - see previously submitted related comments.

Comment continued: 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 guickly 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 course 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.

Comment continued: 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.

Comment continued: 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 Forebay. 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 predictable.

Comment continued: 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 thalwag, 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.

Comment continued: 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 Forebay 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 principle 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.

Comment continued: 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 with criteria fish screens in Clifton Court can be further complimented by an additional alternative which would include additional upstream and/or downstream storage, e.g. Sites 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 (see previously submitted related comments) 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.

Comment continued: The Fisheries Facilities Technical Team (FFTT) 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 FFTT 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.

Comment continued: 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 are 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 sub tidal habitat so the compensatory mitigation of converted habitat is minimal for this alternative compared to any of the other alternatives. From the USACE's mandatory 404 process guidelines, this alternative would inevitably become their LEDPA (see related comments). 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 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.

Comment continued: 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 alternatives 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.

Comment continued: 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 (see related comments). 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 (see related comments) to improve water supply reliability.

Comment continued: 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 affects 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 - see related comments.

**Operations-related Issues:** 

http://gov.ca.gov/docs/Delta\_Fact\_Sheets\_4.30.15.pdf page 6 lower right diagram depicting BDCP diversion operating rules, shows that at Sacramento River flows of 5,001 CFS, the BDCP could divert as much as 540CFS 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, 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.

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..." (http://mavensnotebook.com/2014/05/29/notes-from-metropolitans-special-committee-on-the-bay-delta-metropolitan-prepares-to-comment-on-the-bdcps-eir-a-briefing-on-the-design-and-construction-enterprise-and-an-update-on-the-status-of/ - 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 \$. 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 RPDEIR/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.

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.

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 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.

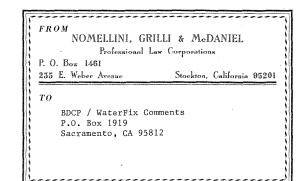


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