

**SOLANO COUNTY Department of  
Resource Management** Administrative  
Services Division  
675 Texas Street, Suite 5500  
Fairfield, CA 94533  
www.solanoCountv.com

Telephone No: (707) 784-6765  
Fax: (707) 784-4805

Bill Emlen, Director  
Terry Schunidba er, Assistant Director

July 28, 2014

BDCP Comments

Ryan Wulff, National Marine Fisheries Service  
650 Capitol Mall, Suite 5-100  
Sacramento, CA 95814

BDCP.comments@noaa.gov

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Nai-I Morine Fisheries Svs.  
Sacramento, CA

RE: Solano County comments on the Bay Delta Conservation Plan (BDCP),  
Associated EIR/EIS, and Implementing Agreement

Dear Mr. Wulff:

Thank you for the opportunity to comment on the Bay Delta Conservation Plan ("BDCP" or "Plan"), including the Implementing Agreement and the associated Draft Environmental Impact Report/Environmental Impact Statement (DEIR/EIS). This "Introduction" provides our overarching comments on the subject, with detailed comments provided in the attachments that follow.

### **Introduction**

Solano County, as one of the five "Delta Counties," has been actively following the evolution of the BDCP since its inception. The County has in good faith commented as requested by BDCP proponents during drafting of administrative drafts, formally became a "cooperating agency" under the National Environmental Policy Act (NEPA) for purposes of participating in the environmental review of the BDCP, and participated in numerous meetings and workshops where BDCP was discussed. Through the process the County focused on providing constructive comments intended for drafters to understand local issues and circumstances relative to the BDCP and Solano County with the hope that the Plan would be modified to (1) reduce impacts to our local area and (2) provide full mitigation for any unavoidable impacts.

Regrettably, in reviewing the formal draft BDCP, DEIR/EIS and Implementing Agreement, the County continues to find that the Plan has significant and far-reaching impacts that will erode the agricultural base that the County has spent decades trying to responsibly preserve. Furthermore, we see little evidence of consideration of Plan modifications, or earnest consideration of alternatives or consideration of meaningful mitigation responsive to reducing impacts of the BDCP on Solano County and the Delta region. These are all areas where many comments have been made in prior BDCP public forums from Solano County and many others in the Delta. In light of the current formal draft and the fact that there are few meaningful changes from the earliest drafts, we can only conclude that all of the outreach relative to the BDCP has been nothing more than a "check-off-the-box" exercise with a pre-determined outcome already in place. Hopefully, this comment process will amplify the significance of the local concerns and impacts and result in meaningful changes that respect local concerns.

The following impacts, all of which are described in greater detail in our attached comments, are unique to Solano County and appear to have been largely ignored as the Plan evolved:

- The BDCP will result in the conversion of tens of thousands of the County's Delta agricultural lands. The resulting economic, environmental and social impact to the County and its agricultural base could be devastating. Yet little effort has been expended to reduce critical impacts of the BDCP on the County and the Delta region and mitigate for impacts that are unavoidable.
- As stewards of some of California's best agricultural lands, Solano County notes that the BDCP is inconsistent with the County's General Plan due to the aforementioned conversion of agricultural lands.
- Aside from the significant and deleterious conversion of agricultural land, the BDCP will degrade our water quality, disrupt agricultural infrastructure, and impose new regulatory constraints that will further erode agricultural acreage in Solano County.
- The County has not had an opportunity for any meaningful participation in the Plan's development or implementation.
- The Plan neglects to address viable alternatives that will greatly reduce impacts to Solano County and our region and still achieve core project objectives.
- The BDCP is not consistent with recent State initiatives in addressing climate change, greenhouse gas emissions and sustainable planning practices -nor does it appear to account for climate change itself by failing to evaluate impacts of the BDCP in all regions that will be affected or benefit by the Plans implementation.

- Despite these profound and significant impacts to Solano County, there is little guarantee the BDCP will even achieve its purpose. And if it does not, reversing the damage will be a near impossibility.
- With less fresh water and new large intakes being located upstream of the County, our agricultural areas and recreational areas will be diminished and could be completely choked off in years of water crisis such as this year.
- The Plan and EIR both underestimate or ignore the full range of impacts that will affect Solano County. The vague commitment to address impacts coupled with weak mitigation measures provides little or no confidence that we will not be significantly negatively impacted if the plan is implemented.
- The DEIR/EIS does not serve its intended purpose as an informational document, because it does not provide sufficient analysis of the project, the project's environmental impacts, appropriate mitigation measures, and a reasonable range of project alternatives

As a consequence, at this critical juncture the Solano County Board of Supervisors and staff are unable to lend support to the BDCP in its current form.

### **Negative Impact to Agriculture**

Solano County has some of California's best agricultural land. As stated in the County's General Plan, "Agriculture has historically been both an important industry in Solano County and a central part of the County's identity." The County's General Plan designates virtually all land for the Delta region as agricultural. Moreover, the voters of the County over the years have voted to preserve agricultural areas outside of incorporated cities to assure orderly growth, including Measure T by an overwhelming 70% majority.

The BDCP, by virtue of provisions for large restoration opportunity areas in Cache Slough and the Suisun Marsh, will likely result in the conversion of tens of thousands of acres of the County's Delta agricultural lands. From the County's perspective this will have very real economic, environmental and social impacts, not to mention it being a de-facto penalty for being good stewards of agricultural lands.

Furthermore, beyond ecosystem restoration, there are many other aspects of the BDCP that may have negative consequences on the County's agriculture, including degradation of water quality used for farming operations, disruption of agricultural infrastructure, and new regulatory constraints, among others. These factors, and the associated cumulative impacts, could greatly increase the number of acres of lost productive farmland due to the BDCP well beyond those projected for ecosystem restoration. These are significant issues for the County and one that is basically "papered-over" in the BDCP. This is not acceptable to the County.

### **Inconsistency with the County's General Plan- and the Co-Equal Goals**

Early in development of the BDCP, it would have been appropriate to truly take into account local general plans and policies and local interests in general as BDCP concepts were formulated. If this had occurred, it would have become readily apparent that our County is highly committed to preserving agricultural lands and has been for decades. But that did not occur. And it is important to note that this clear inconsistency with the County's General Plan is not even acknowledged in a serious way in the BDCP documents nor is mitigation for related impacts clearly articulated.

Moreover, the Plan is contradictory to the State Legislature's construct of the "co-equal goals" from the 2009 Delta Legislation. That legislation expressly states that the co-equal 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." (Water Code§ 85054.)

### **Lack of Meaningful Participation in the Plan's Development or Implementation**

Despite the significant impacts to the County, it and the larger Delta community will play a diminished if not nonexistent role in governance of the Plan. The County's role is primarily confined to being one voice among dozens of others -including the state and federal water project contractors -on the "Stakeholder Council," which has no real authority. This is true despite the fact the Delta Counties will bear the brunt of impacts from the BDCP. When no meaningful seat at the table was made available during the BDCP process, any expectation that implementation will be less one sided defies credibility.

The net effect of the Plan is to deal a serious if not fatal blow to agriculture and the economy in the Delta region so that other regions can sustain or build their economies. If the public process had not been controlled by regional interests and BDCP proponents, perhaps a more balanced plan could have evolved. Instead, we are left with a draft plan that is strongly opposed by nearly if not all Delta interests and seriously questioned by many other interests throughout the state. By many measures the public process for the BDCP has failed and further divided already disparate interests. A restart and an honest commitment to an inclusive public process seem essential to achieve progress in meeting the state's current and future water needs.

### **Lack of Meaningful Exploration of Alternatives**

The Plan's imbalance is particularly evident in its choice not to explore alternatives with less impact to the Delta communities. During the course of BDCP development, the County has shown a willingness to work with BDCP proponents in good faith and cooperation, understanding the larger challenges facing our state in the critical area of water. But Plan alternatives that might reduce impacts to Solano County and the Delta region have been summarily dismissed or given only token assessment in the DEIR/EIS.

Solutions like the "Portfolio Alternative" and "Garamendi Plan," which involve smaller conveyance and less ecosystem restoration, would greatly reduce impacts to our region while still achieving core project objectives. Perhaps even more preferable would be a fresh look at other alternatives that are less dependent on a trans- regional conveyance system that may have reached its maximum limits in the context of climate change and overall available water to be allocated. The current drought crisis highlights the need to invest in new cutting edge ways to meet future water needs. With available dollars precious, it seems prudent to invest in new sources of water that may be derived from new desalination technologies, water recycling infrastructure, groundwater remediation and similar measures where local supply enhancement is emphasized. In this context and with the future in mind, these alternatives seem far more deserving of limited investment dollars than focusing on a project that does not generate more water and is dependent on moving water great distances at great expense.

To elaborate on the investment point, if freshwater flows into and through the Delta continue to diminish on average into the future, it is hard to understand the value of the investment in a BDCP that does not create more water for the system. The BDCP does allow for drawing water at different times than the current south intakes, but the ability to draw water in the new intakes may become constrained anyway due to lower average flows under climate change. Worse yet, the County is concerned that the potential for more frequent drought crisis in the future will force decisions to draw water into the new intakes under emergency declarations despite low flows, which will ultimately make the water in our agricultural channels so saline as to be unusable for agricultural purposes. That would not improve the Delta ecosystem - the key tenant of the BDCP.

Indeed, Solano County recognizes that new statewide solutions to water supply must be developed. Shared sacrifices must clearly be part of the solution. The County is ready to be part of those discussions. What is unacceptable is the current solution which clearly places the burden on the Delta region in an inequitable way. As this process evolves, the County urges further consideration of alternatives that reduce impacts on our region.

### **Inconsistency with Other State Initiatives**

Looking at the bigger picture, it is difficult to understand how the BDCP can be found consistent with recent State initiatives in addressing climate change and sustainable planning practices. As noted above, the BDCP will result both directly and indirectly in the loss of many thousands if not hundreds of thousands of acres of high-quality, sustainably farmed lands in the Delta with a favorable growing climate, good soils, and naturally available water. Producers in the Delta region are able to efficiently move product to nearby urban centers and grow a wide variety of agricultural product, thus minimizing greenhouse gas emissions.

In contrast, the BDCP will essentially take quality farming areas away in the Delta while empowering continuation and expansion of farming in areas with poorer soils, harsher

climates, higher evapotranspiration rates, and higher greenhouse gas emissions both from powering a series of pumps to move water to distant farming areas and from shipping products to distant markets. It is curious the State is advocating for a project with such a glaring contrast from the greenhouse gas policies that have been embraced legislatively.

And there are other looming questions of the BDCP relative to climate change. Impacts from climate change and impacts from drought do not appear to be well thought out. Is the BDCP preferred project concept the best solution going forward in the face of climate change? It seems entirely possible that a climate change scenario evolves whereby Northern California's climate becomes similar to what has been experienced in Southern California over the past few centuries. This means longer and more severe drought periods and fewer higher than normal rainfall years. In essence, the State and Federal water projects were designed under the premise of California climate paradigms that may change dramatically and seem to be changing already. In fact, the past few decades have already shown a pattern of fewer "above the mean" rainfall years in many parts of Northern California and that may be a trend under climate change. Reduced snowpack and earlier snowpack melt-offs are already occurring. Why is this important to the County? With less freshwater coming through the system and new large intakes to be located upstream of the County under the BDCP, freshwater coming into our agricultural areas would be diminished and could be completely choked off in years of water crisis, such as this year. Assuming this occurs more frequently, it is inevitable that large agricultural areas in the Delta would be negatively affected, which represents a loss that is not proposed to be mitigated. Agricultural lands that would be lost as a result of the BDCP project should instead be preserved, because those lands cannot be recreated. Very little of the information in the BDCP document or DEIR/EIS gives the County any assurance that such a scenario can be avoided.

### **No Guarantee the Plan will even Achieve its Purpose**

As noted above, the effects of the BDCP are far reaching and damaging to the County and the Delta region. The offered basis for these changes is a theory that somehow many acres of ecosystem restoration can compensate for significantly modified natural system and reduced freshwater flows where many species are in peril. The reality is the BDCP documents themselves are hardly reassuring that targeted species will be restored. The concept of "Adaptive Management" still seems largely speculative and may not reveal failure to achieve objectives until long after too much has been invested to turn back the clock. In the process the County and other Delta areas will have to deal with the effects of BDCP infrastructure and habitat areas along with an extremely damaged agricultural economy. Furthermore counties like Solano will likely have to respond to the unintended consequences of ecosystem restoration such as service and maintenance costs of such areas. This concern is exacerbated by the fact that mitigation to the County for such impacts is weak and unspecific in current BDCP documents.

## Summary

For the reasons that are set forth in this letter, Solano County is unable to support the BDCP as proposed. We had hoped the formal draft would be more reflective and responsive to comments from Solano County during administrative draft phases but, if anything, our concerns have grown as more information has become available. We recognize that statewide solutions to water supply are essential and continue to offer our willingness to share in solutions that address the problem. We are unwilling, however, to support an effort that could devastate our agricultural industry and negatively alter the ecosystem in the Delta. As proposed the Plan appears to ignore the mandated "co-equal goals" as outlined by the 2009 Legislature amplifying the impacts from the BDCP impacts to our County-one that is central to this Plan-in a way that are so significant and so devastating that it leaves Solano County with no alternative at this time but to raise serious objections and call for significant changes responsive to the County's comments and comments from other Counties in the Delta region.

The following attachments contain detailed comments regarding the BDCP, including the Implementing Agreement and the associated DEIR/EIS.

Sincerely,

Bill Emlen  
Director, Solano County Department of  
Resource Management

Enclosure

CC: Solano County Board of Supervisors  
Rep. Mike Thompson  
Rep. John Garamendi  
Senator Dianne Feinstein  
Senator Barbara Boxer  
Senator Lois Wolk  
Assemblymember Susan Bonilla  
Assemblymember Jim Frazier  
Assemblymember Mariko Yamada

**Comments of the County of Solano on  
The Draft Bay Delta Conservation Plan (BDCP),  
The Draft EIR/EIS for the BDCP Project (DEIR/EIS), and  
The Draft Implementing Agreement  
July 28, 2014**

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## **Both the DEIR/EIS and BDCP Documents Fail to Properly Distinguish Between Project, Impacts, and Mitigations**

The format and content of the Bay Delta Conservation Plan ("BDCP") and the Draft Environmental Impact Report/Environmental Impact Statement ("DEIR/EIS") are governed by multiple statutes and their implementing regulations. As an environmental impact assessment document, the DEIR/EIS must comply with CEQA for use by California state agencies and must also comply with NEPA for use by federal agencies. The BDCP, as a habitat conservation planning document, must comply with the NCCPA and, to the extent it is intended to be approved as a HCP, the federal ESA. In addition, as to any component of the BDCP project that provides public benefits, the BDCP must comply with requirements established in the ORA in order for that component to be eligible for state funding. (Water Code, § 85320, subd. (b).) As to any component of the BDCP project that does not provide public benefits, that component would be ineligible for state funding due to the constitutional prohibition against gifts of public funds. The CEQA, NEPA, and federal ESA HCP processes are structured so that the various steps required by those processes occur sequentially; if the specified sequence is not followed, the process does not work as intended. Because the entire BDCP document is included as part of the DEIR/EIS, the various sequential processes established in each of these statutes must all be synchronized so that one process does not begin or end its course out of sync with the others.

DWR, a state agency, will be the first agency to take a project approval action on the BDCP project. As a state agency, DWR's primary responsibility when conducting environmental review is to comply with CEQA. Under CEQA, state agencies are instructed to cooperate with federal agencies "to the fullest extent possible to reduce duplication" in the environmental review process, including preparing joint documents when possible. (CEQA Guidelines, § 15226.) The phrase "to the fullest extent possible" means that CEQA does not cede document preparation standards to NEPA. Therefore, to the extent the document formatting standards under CEQA differ from those established by NEPA, DWR is required to prepare an EIR that describes and evaluates its proposed project in the manner required by CEQA.

The CEQA Guidelines allow flexibility in document formatting, but recommend that each required element be covered in distinct sections of the EIR. (CEQA Guidelines, § 15120, subd. (a).) The Guidelines identify "Project Description" and "Alternatives to the Proposed Project" as separate elements of an EIR. (CEQA Guidelines, §§ 15123 & 15126.6.) Although the CEQ's NEPA regulations suggest that a proposed action should be described in the same portion of an EIS as the project alternatives, those regulations allow for the proposed action to be described separately from the alternative when the federal agency preparing the EIS determines that there is a compelling reason to do so.

(40 CFR §1502.10.) In this case, the formatting standards established in the CEQA Guidelines and to which DWR is subject provide a sufficiently compelling reason.

More generally, an EIR must cover each of the topics or elements specified in Article 9 of the CEQA Guidelines, either separated into distinct sections of the EIR or else clearly identified regarding where in the EIR each required element is discussed. (CEQA Guidelines, §§ 15120, subd. (a), & 15160; see *Citizens for a Sustainable Treasure Island v. City and County of San Francisco* (7/7/2014) xxx Cai.App.4th xxx.) These required elements of any EIR include a summary of the project and its consequences, a project description, a description of the project's environmental setting, consideration and discussion of the project's significant environmental impacts, discussion of the project's significant effects which cannot be avoided, consideration and discussion of proposed mitigation measures, consideration and discussion of project alternatives including the No Project Alternative, and a discussion of cumulative impacts. Each of these required elements has unique meaning and significance for the CEQA processes, and the critical distinctions between the various elements cannot be ignored. For example, if a portion of the project description is identified and presented in the EIR as a mitigation measure, then the EIR has likely failed to evaluate the full environmental impacts of the project as proposed. NEPA establishes similar requirements.

The HCP process draws a sharp and clear distinction between the underlying or "otherwise lawful" activity that will be the cause of incidental take, on the one hand, and the measures proposed by the incidental take permit applicant to minimize or mitigate the impacts of that incidental take, on the other. (16 USC §1539, subd. (a)(1)(B) & (a)(2)(A)(ii).) For example, the opening paragraph of the Department of Interior's Habitat Conservation Planning Handbook ("HCP Handbook") states as follows:

The purpose of the habitat conservation planning process and subsequent issuance of incidental take permits is to authorize the incidental take of threatened or endangered species, not to authorize the underlying activities that result in take. This process ensures that the effects of the authorized incidental take will be adequately minimized and mitigated to the maximum extent practicable. (HCP Handbook, p.1-1.)

The HCP Handbook describes the required process for preparing an HCP and identifies the following specific steps, as well as others, that should be performed in sequence in order to be performed correctly:

- The first step is identifying the impacts likely to result from the proposed incidental take. This first step includes multiple subtasks, including (a) delineating the plan area, (b) collecting biological data, (c) identifying the underlying "otherwise lawful" activities that are likely to result in incidental

take, and (d) quantifying anticipated take levels from these activities. (HCP Handbook, pp. 3-10 & 3-12-3-15.)

- The second step is identifying measures the applicant will undertake to monitor, minimize, and mitigate the impacts of anticipated incidental take, as well as the funding that will be made available to undertake such measures. (Handbook, p. 3-10.) Determining anticipated take levels, developing the mitigation program, and establishing authorized take levels is necessarily an iterative subroutine, but it is a subroutine that is conducted after the underlying "otherwise lawful" activities have been fully identified as the first step of the process. (HCP Handbook, p. 3-15.)
- Incidental take caused by mitigation activities rather than by the underlying activity, or second-order incidental take, can be permissible where the mitigation measures are intended to minimize more serious forms of take. (HCP Handbook, p. 7-2.) CEQA recognizes an equivalent concept of environmental impacts cause by mitigation measures rather than by the project itself. An EIR must consider and discuss such second-order impacts, but not to the same degree as impacts caused by the proposed project. (CEQA Guidelines, § 15126.4, subd. (a)(1)(D).)
- The HCP document or other evidence in the record must demonstrate that the measures identified in the HCP will minimize and mitigate the impacts of incidental take "to the maximum extent practicable." (16 USC § 1539, subd. (a)(2)(B)(ii).)

Just as the CEQA and NEPA processes require that the proposed project, its environmental impacts, and proposed mitigation measures be separately identified and evaluated in an EIR or EIS, the HCP process requires that the proposed underlying "otherwise lawful" activity, the incidental take caused by that activity, and the measures proposed to minimize or mitigate that incidental take be separately identified and evaluated in an HCP. If an agency uses the "mulligan stew" approach when drafting its EIR, EIS, or HCP, the agency and its document "jumbles several important concepts, each having a different meaning and each entitled to separate consideration." (*Planning and Conservation League v. Dept. of Water Resources* (2000) 83 Cal.App.4th 892, 918.)

### **The BDCP is not Adequate as a HCP/NCCP**

A fundamental problem with the BDCP document, as currently drafted, is the failure to separately identify and quantify the level of anticipated incidental take based on the type

of underlying activity that is the cause of the take. An incidental take permit issued pursuant to either the federal ESA or the NCCPA is prospective, allowing the future occurrence of take that will be caused by the underlying activities. Under the federal ESA, an incidental take permit must be supported by an approved HCP and Section 10(a)(2)(B) findings, while under the NCCPA a permit must be supported by an approved NCCP. Take that has been already been caused by past activities may be the subject of an enforcement action or voluntary remediation, but it cannot be authorized after the fact through issuance of a prospective incidental take permit.

The ORA's definition of "restoration" includes restoration efforts for ecosystem changes that have already occurred or will occur in future due to sea level rise and climate change, but not restoration efforts to offset or mitigate future construction and operational activities of the SWP/CVP. (Water Code, § 85066.) As a state statute, the ORA cannot amend the federal ESA; it explicitly does not amend the NCCPA. (See Water Code, § 85032, subd. (a).) Therefore, the ORA cannot and does not make past activities, future sea level rise, or future climate change an underlying "otherwise lawful" activity for purposes of either the federal ESA or the NCCPA. While species currently listed as threatened or endangered have already been harmed due to past activities, and are likely to be harmed in the future due to sea level rise and climate changes, take caused by these sources of harm cannot be authorized through the HCP and NCCP processes.

Restoration for ecosystem changes that have already occurred can be either voluntary or involuntary. Voluntary creation or enhancement of habitat involving physical changes to the environment is not exempt from CEQA. (*California Farm Bureau Federation v. County of Tehama* (2006) 143 Cal.App.4th 173; cf. CEQA Guidelines, § 15333 [5 ac. exemption].) On the other hand, involuntary remediation of degraded habitat, pursuant to an enforcement order, is exempt from CEQA. (CEQA, § 21174; CEQA Guidelines, § 15321; see *Friends of the East Fork v. Thorn* (W.O.Wash. 2010) 688 F.Supp.2d 1245 [application of NEPA in conjunction with ESA enforcement order].) Nevertheless, while remediation to be done pursuant to an enforcement order is exempt from CEQA as a project, it is a reasonably foreseeable future activity that must be addressed in the cumulative impacts analysis during environmental review of related projects.

The BOCIP identifies 22 broad categories of covered activities but fails to differentiate the various purposes behind these activities. Construction and operation of a new water conveyance facility and ongoing operation of the existing SWP/CVP system will cause a certain amount of incidental take; voluntary restoration activities to remediate ecosystem changes caused by past operation of the SWP/CVP system may cause an additional amount of incidental take; voluntary restoration activities to remediate ecosystem changes caused by past acts of non-SWP/CVP actors may cause even more incidental take; finally, "restoration" activities to compensate for future sea level

rise and climate may cause even more take. Lumping prospective SWP/CVP operations together with remediation of damage caused by non-SWP/CVP actors is a political choice, not a legal requirement. The amount of take caused by each type of underlying activity needs to be estimated and described in the BDCP, so that the public and the decision makers have full information regarding the need for full or partial implementation of this cafeteria style HCP and issuance of associated incidental take permits. Apportionment can be difficult, but juries are routinely required to apportion causation based on far less evidence than is available here. While apportionment with exact precision is rarely possible, a reasonable apportionment will be upheld if it is supported by substantial evidence.

Another fundamental problem with the BDCP document is its conflation of the underlying otherwise lawful activities, which cannot be authorized through an incidental take permit, with the measures being proposed to minimize or mitigate the effects of take caused by those underlying activities, which will be conditions of an incidental take permit. This is an example of the "mulligan stew" approach to document drafting that the Court of Appeal soundly criticized in the *Planning and Conservation League v. Department of Water Resources* case.

To the extent the concepts of underlying activity and mitigation measure are not fully merged, the BDCP document creates artificial distinctions. For example, with respect to CM1, the BDCP document classifies construction of new facilities as a covered activity while operation of new and existing SWP facilities is classified as mitigation. The BDCP document fails to explain how an environmentally sensitive operations plan carried out during years 11-50 will mitigate for incidental take that would occur because of environmentally insensitive facility construction practices during years 1-10. In addition, such an artificial distinction between the underlying activity and proposed mitigation either hides or fails to identify incidental take caused by the underlying activity, which consists of both facility construction and system operation. The Implementing Agreement ("IA") further clouds the distinction drawn in the BDCP document between construction and operation of the conveyance facility by stating, in Section 9.2 of the IA on page 21, that the Covered Activities described in Chapter 4 of the BDCP document "consist primarily of activities related to the development *and* operation of water conveyance infrastructure." [Emphasis added.] As a result, it is not clear whether operation of the proposed conveyance facility is part of the underlying activity that will cause incidental take, part of the mitigation proposed to minimize incidental take caused by other activities, or both.

The artificial distinction made in the BDCP document between the underlying activity and the mitigation associated with CM1 is not only an information disclosure problem, it is also a permitting problem. To the extent the operation of the existing or augmented SWP/CVP system might cause incidental take, such take would not be covered by the

HCP/NCCP and associated incidental take permits because system operations is not identified as a covered activity in the BDCP document. An HCP should account for second-order take caused by mitigation (see HCP Handbook, p. 7-2), but the BDCP document fails to provide that required level of detail.

Designing an underlying activity to avoid incidental take or to minimize the impacts of unavoidable take is good, but the applicant for the incidental take permit must still demonstrate that such design avoids or minimizes take to the maximum extent practicable. (16 USC § 1539, subd. (a)(2)(B)(ii).) The BDCP document either fails to make such a required demonstration, or does so in such an oblique manner that it is not readily apparent. When an HCP fails to demonstrate, based on substantial evidence, that impacts to endangered and threatened species have been minimized or mitigated to the maximum extent practicable, the associate environmental document will be defective. The alternatives considered in the EIR or EIS need to bracket the mitigation proposed in the HCP in order to demonstrate, for purposes of CEQA or NEPA, that the HCP provides the maximum practicable extent of impact minimization. (*National Wildlife Federation v. Babbitt* (E.D.Ca. 2000) 128 F.Supp. 1274 [“*Natomas I*”].)

The BDCP document does not provide clear and rational distinctions between the identified underlying activities and the proposed impact minimization and mitigation measures. As a result, it is not clear how much incidental take is anticipated to be caused by the various types of underlying activities, what types of incidental take will be either authorized or outside the scope of the incidental take permit to be issued, and whether the incidental take anticipated to be caused by the full range of underlying activities will be minimized or mitigated to the maximum extent practicable. Adding insult to injury, the analysis provided in the DEIR/EIS suffers substantially as a result of these errors in the BDCP document.

## **Funding for Mitigations/Conservation Measures in the BDCP is Uncertain**

The introduction to Chapter 8 of the BDCP acknowledges that “[t]he federal Endangered Species Act (ESA) requires that habitat conservation plans (HCPs) specify ‘the applicant will ensure that adequate funding for the plan will be provided’ for conservation actions that minimize and mitigate impacts on covered species (United States Code [USC] 1539(a)(2)(A)). The Natural Community Conservation Planning Act (NCCPA) requires that natural community conservation plans (NCCPs) contain ‘provisions that ensure adequate funding to carry out the conservation actions identified in the Plan’ (California Fish and Game Code [Fish & Game Code] 2820(a)(10)).” However, the BDCP fails to provide a credible plan for funding Conservation Measures 2 through 22, which are necessary to mitigate the impacts of Conservation Measure 1

(water conveyance facilities). For example, according to a February 2014 analysis by the State of California's Legislative Analyst's (LAO) office, "[t]he BDCP expects nearly 90 percent of the costs of ecosystem restoration and program administration to be shared by the state and federal governments. Most state funding is anticipated to be provided by future water bonds, including a bond currently scheduled for the November 2014 ballot. Federal funding is expected to be provided almost exclusively by congressional appropriations with a small amount expected from an existing surcharge on CVP water users." Additionally, the LAO report states, "BDCP relies on two future bond measures to fund the state share of ecosystem restoration, but it is unclear if and when voters will approve them. If bond funds are not available in the near future and no additional funding sources are identified, some ecosystem restoration may not be funded, including the restoration actions needed before the tunnels begin operation. The BDCP states that the SWP and CVP will not pay additional costs or forgo water in the event of a funding shortfall."

It would be irresponsible for the State to move forward with the water conveyance portion of the BDCP project without identifying secure funding sources for the eMs/mitigations needed to address the project's impacts. Reliance on California voters to approve bonds and on the Legislature and U.S. Congress to make appropriations to provide necessary funding in the future is not a secure funding plan. This is a fatal flaw in the BDCP as currently written, which must be addressed prior to moving the project forward. The significance of this flaw is compounded by the fact that the BDCP likely under-estimates the costs of implementation, particularly given the reliance on the BDCP's proposed "adaptive management" approach which, in essence, acknowledges that the project proponents do not know with any degree of certainty whether the proposed eMs/mitigations will be effective and/or the cost of other measures that may be necessary to mitigate adequately the impacts of the proposed project. The BDCP and the DEIR/EIS should acknowledge this situation and incorporate provisions to ensure the availability of funding to mitigate fully the proposed project's impacts, including potential unforeseen impacts and/or unforeseen actions needed to effectively mitigate the impacts that have been identified so far.

### **The Contents of the DEIR/EIS are not Clearly Identified**

The BDCP DEIR/EIS is available through the baydeltaconservationplm.com website ("BDCP website"), but the "Public Review Draft EIR/EIS" page on that website is the electronic equivalent of the cardboard box disparagingly referenced by the Court of Appeal in *Camp v. Board of Supervisors* (1981) 123 Cal.App.3d 334, 349, fn.8. In the *Camp* case, the court described the county general plan it was asked to review as "a sheaf of uncoordinated documents stuffed into an unlabeled carton" and concluded that



"[t]he physical composition of this 'general plan' would appear to make resort to it for planning information an awkward exercise and would also seem to generate doubt concerning the integrity of the plan, when so many of its elements are merely deposited loose in a cardboard box."

On the "Public Review Draft EIR/EIS" page of the baydeltaconservationplan.com website, the DEIR/EIS is presented as a collection of 197 PDF files, over half of which are labeled as appendices. The CEQA Guidelines direct that the inclusion of highly technical and specialized analysis and data within the body of the EIR should be avoided, and that such information should be made available for public examination in appendices separate from the EIR document. (CEQA Guidelines, § 15147; see also 40 C.F.R. § 1502.18.) Based on the CEQA Guidelines and NEPA regulations, one would normally assume that appendices are supplemental to, rather than part of, the DEIR/EIS document. If someone wanted to read only the DEIR/EIS document and not the supporting appendices, especially when presented with a list of 197 PDF files, that person might download and review only the 75 files not labeled as being appendices. Such an assumption would be entirely reasonable, but it would be incorrect.

The DEIR/EIS discloses in a footnote that it is in fact a much larger document than presented on the "Public Review Draft EIR/EIS" webpage, as follows: "The full Draft EIR/EIS should be understood to include not only the EIR/EIS itself and its appendices but also the proposed BDCP documentation including all appendices." (DEIR/EIS, p. 1-2, fn. 3; see also p. ES-3, fn. 3.) In other words, the DEIR/EIS includes not only all 197 files listed on the "Public Review Draft EIR/EIS" webpage, but also all 47 files listed on the "Public Review Draft BDCP" webpage as well. This critical information regarding what the lead agencies themselves consider to be the contents of their DEIR/EIS document appears nowhere on the BDCP website.

The 244 electronic files listed and available for download on the "Public Review Draft EIR/EIS" and "Public Review Draft BDCP" webpages consist of approximately 40,000 pages, in aggregate. The Draft Implementing Agreement ("IA") is a separate file, added to the "Public Review Draft BDCP" webpage on May 30, 2014. We have not found any statements in footnotes or elsewhere indicating that the lead agencies intend for the IA to be understood as part of the DEIR/EIS. In addition, the IA was not available at the time the Notices of Completion and Availability were provided (see CEQA Guidelines, §§ 15085 & 15087) and there *is* no indication that specific details of the IA were evaluated as part of the proposed project or the proposed action in the DEIR/EIS.

In these comments, we will refer generally to the entire 40,000-page document as the DEIR/EIS, in reliance on the lead agencies' description of the document's contents made in two footnotes. However, specific page references will cite either to the

DEIR/EIS or to the BDCP since those individual portions of the larger 40,000-page document are presented on separate pages of the BDCP website.

### **The DEIR/EIS is not Useful as an Informational Document due to its Size**

The enormous size of the Bay Delta Conservation Plan DEIR/EIR represents a gross violation of both the letter and the spirit of California Environmental Quality Act ("CEQA") and the National Environmental Policy Act ("NEPA"). As a consequence, local agencies such as Solano County, which do not have unlimited in-house staffing resources, and the public have been deprived of any meaningful opportunity to review and comment on that document in its entirety. Solano County requests that the DEIR/EIS be edited and rewritten in compliance with CEQA and NEPA, and then recirculated for public review and comment, prior to any action being taken on any component of the BDCP project. (See CEQA Guidelines, § 15088.5, subd. (a).)

In interpreting CEQA, the CEQA Guidelines are to be accorded "great weight" except where they are clearly unauthorized or erroneous. (*Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal. 4th 412, 428, fn. 5.) The CEQA Guidelines recommend that "the text of draft EIRs should normally be less than 150 pages and for proposals of unusual scope or complexity should normally be less than 300 pages." (CEQA Guidelines, § 15141.) There is no indication that these page limits recommended in the CEQA Guidelines are clearly erroneous or unauthorized under CEQA. Similar regulations issued by the Council on Environmental Quality ("CEQ") to implement the procedural provisions of NEPA state that the text of environmental impact statements shall "normally be less than 150 pages and for proposals of unusual scope or complexity shall normally be less than 300 pages." (40 CFR § 1502.7.)

As stated above, the DEIR/EIS document is approximately 40,000 pages, according to the self-description of that document provided in footnote 3 of its Executive Summary and in footnote 3 of Chapter 1. This exceeds the maximum pages limits called for in both the CEQA Guidelines and the NEPA regulations by an astounding 13,300%. Even if the statement in footnote 3 regarding the contents of the document incorrectly represents the intent of the lead agencies, in which case reviewers would have been materially misled, Chapters 1 through 31 of the Draft EIR/EIS as presented on the "Public Review Draft EIR/EIS" page of the BDCP website, excluding appendices, are more than 12,000 pages in aggregate. Even such a lesser-sized document exceeds the CEQA and NEPA maximum page limits by 4000%. Such a gross exceedance of the recommended page limits is not a mere technical blunder, but amounts to a prejudicial

abuse of discretion that causes substantial and irreparable injury to both commenting agencies, such as Solano County, and the public in general.

It is by now axiomatic that the EIR is the "heart of CEQA." (CEQA Guidelines, § 15003, subd. (a); see *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 392.) The EIR must be organized and written in a manner that will be meaningful and useful to decision makers and the public. (Pub. Res. Code, § 21003, subd. (b); CEQA Guidelines, § 15002, subd. (a)(1) & (4).) "The audience to whom an EIR must communicate is not the reviewing court but the public and the government officials deciding on the project." (*Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 443.) "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made. Thus, the EIR 'protects not only the environment but also informed self-government.'" (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564.) "To this end, public participation is an 'essential part of the CEQA process.'" (*Laurel Heights Improvement Assn. v. Regents of University of California* (1993) 6 Cal.4th 1112, 1123; see also CEQA Guidelines, § 15201.)

This gross exceedance of the recommended maximum page limits. has significant adverse consequences to the public participation process. The CEQA Guidelines require the lead agency to provide adequate time for other public agencies and members of the public to review and comment on a draft EIR. (CEQA Guidelines, § 15203; see also 40 C.F.R. § 1503.1, subd. (a)(4).) The minimum standards of adequacy are established within CEQA itself, which requires a minimum 45-day public review period for a draft EIR submitted to the State Clearinghouse. (Pub. Res. Code, § 21091, subd. (a).) The CEQA Guidelines reiterate the 45-day minimum requirement and recommend an upper limit on the public review period of 60 days, "except under unusual circumstances." (CEQA Guidelines, § 15105, subd. (a).) This recommended 60-day upper limit should be read in light section 15141 of the Guidelines, which calls for EIRs to be less than 150 pages except "for proposals of unusual scope and complexity," in which case EIRs can be as large as 300 pages.

Together, CEQA and the CEQA Guidelines establish a presumption that a review period of at least 45 days provides adequate time for public agencies and members of the public to review and comment on a draft EIR that does not exceed 150 pages in length. Extrapolating based on this standard, the minimally adequate review period for a 40,000 page draft EIR would be 12,000 days, or almost 33 years. The review period for the BDCP DEIR/EIS was arbitrarily limited to 228 days, a period of time that CEQA and the CEQA Guidelines imply would be adequate for a document that did not exceed 750 pages in length.

During the recent statewide conversation regarding the need to reform and improve CEQA, one area identified as ripe for reform was the abusive tactic engaged in by a small number of often-habitual project opponents of dumping massive quantities of marginally-relevant documents on the lead agency in a way that deprives the lead agency of any meaningful opportunity to review and respond to those documents. A 40,000 page EIR represents this same abusive tactic played in reverse: a monumental document dump by the lead agency on the public and interested agencies, effectively depriving them of any meaningful opportunity to comment on the contents of that document. CEQA is not intended to be a game of gotcha played between opposing sides, where "might makes right" or the biggest stack of documents determines the winner. In fact, CEQA is not a game at all; it is a structured process for participatory democracy, whereby the people of California and their elected state and local officials can work together to intelligently guide growth and development, while protecting the state's natural resources and the environment to the greatest extent practicable. (See CEQA, §§ 21000, 21001, 21002.1, 21003, 21003.1, & 21005.)

In order for the CEQA process to work as intended, an EIR must be readable and understandable on a human scale. Individuals should be able to participate meaningfully in the CEQA process as individuals and not just as members of well-staffed organizations or special interest groups. For those citizens who want to participate in the CEQA process as individuals, the price each must pay in order to participate in an informed and meaningful manner is the investment of sufficient time to read the entire EIR or a substantial portion of it. Of course, a typical California resident could not read an entire draft EIR in a single day or even a weekend, due to commitments imposed on him or her by work and/or family. That is why both CEQA and the CEQA Guidelines require a minimum 45-day public review period and recommend that a draft EIR not exceed 150 to 300 pages in length. More broadly, the CEQA Guidelines require a lead agency to "provide adequate time for other public agencies and members of the public to review and comment on a draft EIR." (CEQA Guidelines, § 15203.) In order to read a 40,000-page EIR within a 228-day public review period, however, one would need to average over 175 pages per day, each and every day, for over seven months. In terms of the time commitment required to participate meaningfully in the CEQA process, the lead agencies have set the price far too high for ordinary citizens to afford; public agencies with limited staffing resources, such as Solano County, fare only slightly better.

CEQA allows a lead agency to provide its EIR to the public in electronic format, but does not require it. (Pub. Res. Code, § 21089, subd. (c); CEQA Guidelines, § 15201; see also CEQA Guidelines, § 15206, subd. (a)(2) [lead agency shall submit both printed and electronic copy of draft EIR to State Clearinghouse].) Although the Guidelines may be amended in the future as technology and public access to it evolves, the current

version of the Guidelines makes electronic documents supplemental to, rather than a substitute for, printed hardcopy documents. By providing this DEIR/EIS to the public only or primarily in electronic form rather than as a physical document, the lead agencies have masked the fact that a 40,000-page document is functionally inaccessible in paper format: a physical document of this size could not be carried in one hand, like a normal EIR, but would instead require both a handtruck and a strong back. However, the tradeoff is that this DEIR/EIS is accessible only to those with a computer or other personal electronic device, and only where those devices are present. For someone without a laptop, the document is accessible only at a fixed location. In addition, while electronic documents can be formatted to provide accessibility enhancements not available on paper documents, such as hyperlinks and embedded multimedia, this exclusively-electronic DEIR/EIS fails to take advantage of the electronic medium.

The size of the DEIR/EIS also prevents informed decision making by the CEQA lead agency and the responsible agencies. Prior to approving a project for which an EIR has been prepared, the lead must certify that its decision-making body reviewed and considered the information contained in the final EIR. (CEQA Guidelines, § 15090, subd. (a)(2).) When the lead agency's decision-making body is a single official rather than a board or commission, that individual must certify that he or she has personally read and considered the entire EIR before making a decision to approve the project; certification cannot be delegated by the decision-maker to staff or to a subordinate body. (*California Clean Energy Com. v. City of San Jose* (2013) 220 Cc; I.App.4th 1325; *POET, LLC v. State Air Resources Bd.* (2013) 218 Cai.App.4th 681; CEQA Guidelines, § 15025, subd. (b)(1).) While a responsible agency is not required to certify the EIR prior to approving its portion of the overall project, the responsible agency is still required to consider all relevant portions of the EIR prior to making a decision. (CEQA Guidelines, § 15096, subd. (f).)

DWR's CEQA regulations allow the Director to delegate decision-making authority. (Cal. Code Regs, tit. 23, § 502, subd. (b).) Because approval of the BDCP project will irrevocably set the course of California's water, agriculture, and urban development policy for the next half century, we expect that the Director will not delegate decision-making authority over this important project to a subordinate. Although we also question whether an unelected public official should be entrusted with major statewide policy decisions of this nature, we will express no opinion at this time as to whether the Legislature has given such policy-setting authority to the Director. Instead, our immediate concern is whether the Director is capable of thoughtfully reviewing the entire 40,000-page DEIR/EIS, plus all comments and responses, while simultaneously carrying out his normal responsibilities as Director of DWR. Like any other citizen, the Director would need to take substantial time away from his normal workplace

responsibilities in order to review and consider the entire 40,000-page DEIR/EIS within the allotted time.

Whether the Director will in fact personally read and consider the entire 40,000-page DEIR/EIS, plus all comments and responses, prior to taking action on the BDCP project is almost beside the point. Often, the public's perception of governmental operations is more important than actual fact. We fear that the Director's certification of this DEIR/EIS will be seen as a sham, a mere formality required to ratify a pre-ordained decision. The inevitable result will be to further undermine the public's faith in a CEQA process that, while not perfect, has helped to improve public agency decision making in California while giving protection to the environment.

The BDCP project is arguably the largest public infrastructure project ever to be reviewed under CEQA. We firmly believe that the CEQA process can work for a project of this size as long as the statute and the CEQA Guidelines are followed, both in letter and in spirit. In order for the CEQA process to work as intended, however, the lead agency must produce an EIR-the heart of CEQA-that is large enough to provide adequate environmental information about the proposed project yet small enough to be reviewed and understood by both the public and the decision maker within a limited amount of time. The courts, of course, have ultimate authority to decide whether the level of information presented in a particular EIR is adequate, but the adequacy of the information is necessarily a function of the document's overall size. An EIR is inadequate as an informational document if the document as a whole is not usable by its intended audience. The lead agencies here have done a substantial disservice both to the public and to agency decision makers by producing a document that is inherently unusable for either audience due to its size.

### **The Project Description Provided in the DEIR/EIS is not Accurate, Stable, or Finite**

It is axiomatic that an accurate, stable, and finite project description is the *sine qua non* of an informative and legally sufficient EIR. Similarly, under NEPA, an EIS must accurately describe the federal action being taken. A fundamental defect of the BDCP DEIR/EIS is its failure to provide an accurate, stable, and finite description of the proposed project.

A legally sufficient project description provides important benefits both to the public and to agencies. The public and commenting agencies, including responsible agencies, needs to be adequately informed of the parameters and details of the proposed project in order to offer meaningful comments on the proposal, including whether the lead agency has sufficiently considered and discussed all impacts, potential mitigation

measures, and a reasonable range of project alternatives that should be evaluated in the EIR or EIS. An adequate project description ensures that the public, commenting agencies, and the lead agency are all evaluating and discussing the same proposal. The lead agency, as an institution, needs to create an adequate record of what it studied as the proposed project in its EIR, so that the institution, in the future, will have a clear record of what was and was not studied. The need for subsequent or supplement environmental review depends, in part, on whether substantial changes are proposed in a project. (CEQA Guidelines, §§ 15162 & 15163.) If there is not a clear and unambiguous record of the parameters and details of the project studied in the original EIR, it will be impossible to determine whether subsequently proposed modifications to the project are significant or not. Close or doubtful calls will likely be resolved adverse to the agency, resulting in a requirement to conduct subsequent environmental reviews that could otherwise have been avoided through better drafting of the project description in the original EIR.

The project description provided in this DEIR/EIS does not comply with regulatory standards and is therefore inadequate. Section 15124 of the CEQA Guidelines describes the four mandatory elements of a legally adequate project description: the precise location and boundaries of the project, a statement of project objectives, a general description of the project's technical, economic, and environmental characteristics, and a statement of intended uses of the EIR, including a list of agencies, approvals, and related environmental review and consultation requirements. All of these elements must be present. Section 15124 section further requires that the presentation of such information in the EIR "should not supply extensive detail beyond that needed for evaluation and review of the environmental impact."

It has been our experience that the four required elements of a CEQA project description are typically presented in a single chapter of an EIR, usually titled "Project Description." This straightforward approach to document formatting enhances the informational value of the EIR to the public and the decision maker, and assists a reviewing court in determining the legal sufficiency of the document. In contrast to this standard practice, the BDCP DEIR/EIS provides a bulleted list of project objectives in Section 2.3, a non-specific statement of intended uses for the EIR/EIS in Section 1.6, a single state-wide map of the Project Area in Figure 1-4, and a general description of the project's technical characteristics scattered across Sections 3.5.9, 3.6.1, 3.6.4, 3.6.2, 3.6.3, and perhaps elsewhere. The DEIR/EIS also includes a reference statement, buried within a footnote, that Chapter 3 of the BCDC document "more fully describes the proposed project." (DEIR/EIS p. 1-2, fn. 3.) We have never seen a programmatic EIR that used the plan or program document itself as the EIR's project description in lieu of providing a concise summary of the plan or program, but the format of the BDCP DEIR/EIS is unprecedented in many ways. However, the reference to Chapter 3 of the

BDCP serves as an unstable project description because the IA, in Section 6.0 on page 15, states that its terms will prevail over any conflicting terms in the BDCP document.

The CEQA Guidelines allow flexibility in document formatting, but recommend that each of the required elements, including the project description, be covered in a distinct section of the EIR; if a required element is presented in multiple sections of the EIR, the document must state where in the document that required element discussed. (CEQA Guidelines, 15120(a).) The DEIR/EIS fails this requirement. For example, the Table of Contents indicates that the Project Objectives are presented in Chapter 2 but anyone wondering where a description of the proposed project might be found in the DEIR/EIS is left guessing.

The four required elements of a project must, of course, be in agreement with each other. Quantitative project objectives must be plausibly achievable through the project's described technical, economic, and environmental characteristics. For example, if a project objective is to transport a specific quantity of water from point A to point B, the proposed hardware must be sized appropriately to accomplish this objective, neither too large nor too small. If an EIR's project characteristics are inconsistent with its project objectives, then the project description is not stable throughout the document. In addition, if the described project characteristics are capable of achieving something other than the stated project objectives, and appropriate limitations are not included through other parts of the project description, it is possible that the lead agency has failed to provide an accurate description of its true proposal.

Qualitative project objectives must be defined and quantified in the description of the project's technical, economic, and environmental characteristics. Without quantification in either of these elements, the project description is not finite. Adaptive management is inherently not finite because it is intentionally open-ended in order to be quantified and adjusted over time as new information becomes available. While properly bounded adaptive management is an appropriate mitigation technique, both in an EIR or EIS and in an HCP or NCCP, it can never be appropriate for a project description in an environmental document or a description of underlying otherwise lawful activities in a conservation plan. For this reason, the adaptive management portions of the BDCP project must not be evaluated as part of the proposed project, but must instead be evaluated as potential mitigation for the impacts that will be caused by the project.

One of the DEIR/EIS's stated project objectives, on page 2-3, is to "restore and protect the ability of the SWP and CVP to deliver up to full contract amount." While water delivery is identified as only one of three broad project objectives in the DEIR/EIS, the IA clarifies, on page 21, that the development and operation of new Delta water conveyance facilities is the primary objective of the BDCP project. Given its recently acknowledged importance to the overall project, it is critical that the water delivery



objective be quantified in the project description with as much specificity as possible. However, on page 2-5, the phrase "up to full contract amount" is defined as any quantity between the amount delivered under No Project Alternative and the aggregate amount described in all existing contracts. With this qualification, the water delivery objective is neither stable nor finite, but is instead a broad range with no intended target value identified within that range.

In addition, with this qualification of the phrase "up to full contract amount," the DEIR/EIS discloses that the No Project Alternative fully attains DWR's stated water delivery objective. Of the three bulleted project objectives identified on page 2-3, the No Project Alternative fully attains the water delivery objective and renders the HCP objective moot, leaving Delta ecosystem improvement as the sole remaining objective left to be attained by the project. As a result, project alternatives focused only on ecosystem improvement and restoration, without any new conveyance facilities or changes in SWP/CVP operations beyond those described in the No Project Alternative, should have been evaluated in the DEIR/EIS.

While the broad range of water delivery quantity encompassed by the phrase "up to full contract amount" has a clear upper bound, it is not clear whether that upper bound could be achieved by the proposed project. Given the description of the proposed project's technical characteristics diffused throughout Chapter 3 and elsewhere, all that is certain regarding the water delivery capability of the proposed conveyance facility is that it would have a maximum pumping capacity of 9,000 cfs. As a result, regardless of the lower and upper bounds for water delivery defined in the project objective, it is not clear how much water actually could be delivered by the proposed project. The equivocal conclusions on pages 5-106 to 5-107, that deliveries might show a small decrease or an increase relative to an unquantified amount, are not informative.

Although the lead agencies' intended water delivery capabilities for the proposed project are not quantified in the stated project objectives, the 9,000 cfs pumping/export capacity of the proposed project, described in section 4.2.1.1.1 of the BDCP document, is an important benchmark for conducting environmental analysis in the DEIR/EIS. Because the DEIR/EIS fails to quantify the total amount of additional water that the lead agencies seek to export from the Delta through construction and operation of the proposed project, the lead agencies' proposed maximum rate of export from the proposed North Delta diversion facility necessarily serves as the required quantitative objective for the project.

As stated above, one of the reasons that an accurate, stable, and finite project description is the *sine qua non* of a legally sufficient EIR is that the range of project alternatives required to be discussed in the EIR is dependent on the project objectives component of the EIR's project description. An EIR must describe and evaluate "a

range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project." (CEQA Guidelines, § 15126.6, subd. (a).) Ten of the fourteen "action" alternatives to the proposed project described and evaluated in the DEIR/EIS would redesign the proposed North Delta diversion facility to have a pumping/export capacity of 15,000 cfs. The DEIR/EIS does not explain how any of the ten 15,000 cfs alternatives would "avoid or substantially lessen any of the significant effects of the project" and it seems highly unusual that a substantially larger project, which could pump/export from the North Delta at 167% of the stated project objective, would be more environmentally benign than the proposed project.

Although the BDCP document describes the proposed project as including a 9,000 cfs North Delta diversion facility, the inclusion of ten 15,000 cfs alternatives in the DEIR/EIS creates the possibility that the lead agency may later approve amendments to the BDCP project to increase diversion capacity to 15,000 cfs without conducting further environmental review. In addition, because the lead agency has included these ten 15,000 cfs alternatives in its DEIR/EIS without any apparent environmental reason to do

so, it raises the possibility that the lead agency's true proposed project includes a 15,000 cfs diversion facility rather than a 9,000 cfs one. Regardless of the lead agency's true intent, the inclusion of oversized project alternatives in the DEIR/EIS without apparent environmental reason to do so renders the DEIR/EIS's project description inaccurate and unstable.

### **The Proposed Project's Technical Characteristics for Exports from the South Delta are not Consistent with the Stated Project Objectives**

The modeling data for the proposed project (Alternative 4) reveals that the monthly exports from the South Delta exceeded the U.S. Army Corps limits on inflow to Clifton Court Forebay from the South Delta. As described on page 5-36 of the DEIR/EIS, per U.S. Army Corps of Engineers Public Notice 5820A (13 October 1981), the USAGE determined that DWR would not require additional USAGE permitting for the SWP's diversions from the Delta as long as the SWP's daily diversion into Clifton Court Forebay would not exceed 13,870 acre-feet and the 3-day average diversions into Clifton Court Forebay would not exceed 13,250 acre-feet. (DEIR, section 5.2.1.3, p. 5.36.) In addition, the SWP can increase diversions into Clifton Court Forebay by one third of the San Joaquin River flow at Vernalis during the period from mid-December to mid-March when the flow of the San Joaquin River at Vernalis exceeds 1,000 cfs. An additional capacity of 500 cfs (up to 7,180 cfs) is allowed into Clifton Court Forebay for

July-September for reducing impact of NMFS biological opinion (June 2009) Action IV.2.1 Phase II on the SWP. (DEIR, p. 5A-B63.)

During the July through September period, in the CALSIM modeling studies for the proposed project (Alternative 4), the inflows to Clifton Court (SWP through-Delta exports) were as high as 9,800 cfs, for a total South Delta export of 14,400 cfs. Additional analysis of the BDCP project's changes to exports is attached to these comments of Solano County as Attachment A. Considering the existing total exports are normally no more than 11,280-11,780 cfs in the July through September period, this is not consistent with the goal or need to reduce exports from the South Delta.

The DEIR/EIS is also inadequate because it fails to clearly disclose that the BDCP is proposing to eliminate existing limits on the inflow to Clifton Court. In several locations, it is noted that pumping at Banks Pumping Plant is assumed to be up to the installed capacity of 10,300 cfs. But this could just apply to the sum of North and South Delta exports. In Table 3-6 on page 3-36 of the DEIR/EIS, it is stated that Alternatives 1 through 4 and Alternatives 6 through 8 do not incorporate the operational rule related to the permitted limit on Clifton Court Forebay inflow (6,680 cfs plus 1/3 of San Joaquin River Dec 15-March 15). However, it is not clear whether the operation rule is therefore 10,300 cfs.

The proposal to increase exports from the South Delta for the SWP is a major change that could have significant impacts on the Delta ecosystem and Delta water quality. It is also contrary to the goal of reducing the existing adverse impacts of South Delta diversions. The DEIR/EIS must be revised to fully disclose DWR's intent to increase South Delta exports and to analyze operations of the proposed BDCP project without eliminating the current U.S. Army Corps limits. This will enable the public and regulatory agencies to gauge the adverse environmental impacts of this proposed change.

### **The DEIR/EIS does not Describe the Whole of the Action**

Under CEQA, the term "project" is broadly defined as "the whole of an action, which has the potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment." (CEQA Guidelines, § 15378, subd. (a).) "The term 'project' refers to the activity which is being approved and which may be subject to several discretionary approvals by governmental agencies. The term 'project' does not mean each separate governmental approval." (CEQA Guidelines, § 15378, subd. (c).) NEPA similarly requires that a single EIS encompass the full set of new and ongoing federal actions that are connected, cumulative, or similar in timing or geography. (40 CFR § 1508.25.) The "whole of the

action" includes all *actions* taken by the lead agency and all responsible agencies to implement the project or any part of the project. Each of these permits or other approval *actions* must be listed *in* the EIR. (CEQA Guidelines, § 15124, subd. (d)(1)(B).) The DEIR/EIS, *in* Table 1-2, *identifies* agencies that will be using the DEIR/EIS and the statutory authority under which those agencies *will* be acting, but *it* does not *list* the permits or other approvals required to implement the project.

The "whole of the *action*" that *is* the BDCP project includes at least the *following* five components:

1. All proposed changes *in* the program for export and delivery of water from the Delta using the SWP and CVP, including both operational changes and *facility* changes. While the project description must describe what these proposed program amendments are, the No Project Alternative must describe the existing SWP/CVP program and what is likely to occur *into* the future *if* that existing program is not amended as proposed. (CEQA Guidelines, § 15126.6, subd. (e)(3)(A).) The proposed changes to the SWP/CVP program includes the following four sub-components:
  - a. Activities within the Delta Region or "Plan Area," as defined in Section 1.5.2 and shown in Figures 1-4 and 1-9 of the DEIR/EIS, that are likely to cause incidental take. Generally, these are the underlying otherwise lawful activities that necessitate the preparation of the BDCP as a HCP and NCCP. Specifically, these activities include the construction of new facilities, the improvement of existing facilities, and changes in SWP/CVP system operations within the Plan Area.
  - b. Activities within the Delta Region or Plan Area that will not cause incidental take, either directly or indirectly, and therefore do not need to be described or assessed in the BDCP document.
  - c. Any proposed changes *in* the SWP/CVP program, including facilities or operations, that will occur Upstream of the Delta Region. (See *Section* 1.5.1 of the DEIR/EIS.) This area is outside of the Plan Area and therefore not part of the BDCP document.
  - d. Proposed changes in the SWP/CVP program, including facilities or operations, that will occur in the SWP and CVP Service Areas. (See *Section* 1.5.3 of the DEIR/EIS.) These areas are outside of the Plan Area and are therefore not part of the BDCP document. The most significant change in the SWP/CVP program that *will* occur in these areas is increased water deliveries, above the levels described in the No Project Alternative, to meet anticipated increased demand or needs in those areas.

2. Measures proposed in the BDCP, for the purpose of that document serving as a HCP and NCCP, to minimize or mitigate the impacts of incidental take caused by any of the identified underlying otherwise lawful activities. Excluded from this component are measures not specifically identified in the BDCP but instead left to be defined and developed over time through adaptive management. All measures that utilize adaptive management or are otherwise to be developed and defined over time should be evaluated as mitigation in the DEIR/EIS, rather than as part of the proposed project.
3. All proposed actions to improve and restore the Delta ecosystem other than measures proposed in the BDCP for the purpose of that document serving as a HCP and NCCP. Also excluded from this component would be any actions to restore the Delta ecosystem that must be taken pursuant to an enforcement order; such involuntary actions would not be part of the proposed project, but would need to be identified and addressed in the cumulative impact section of the DEIR/EIS.
4. The BDCP Implementation Agreement, to the extent it expands on or proposes activities not included in any of the above-described components.
5. All other activities that will normally and naturally occur as a result of the any of the above-described activities without being subject to separate CEQA review and discretionary approval. For example, if the any of proposed increase delivery of water to SWP/CVP service areas is to serve increase demand by agricultural customers, and these customers can increase their use without CEQA review or discretionary approval, such increased water use must be evaluated as part of the proposed project in the DEIR/EIS.

The No Project Alternative describes the amount of water that would be delivered to the contractors given current or known constraints. The continued operation of the SWP/CVP system, and the continued delivery of water as described in the No Project Alternative, is exempt from CEQA review as an existing or ongoing project. Delivery of the full contract amount of water to SWP and CVP contractors, or any amount greater that can be delivered by the existing SWP/CVP system given current or known constraints, is not exempt from CEQA review as an existing or ongoing project. (*North Coast Rivers Alliance v. Westlands Water Dist.* (7/3/2014) xxx Cai.App.4.th xxx.)

Because the delivery commitments made in the existing contracts pre-date CEQA, the environmental impacts of delivery of that full contract amount to SWP and CVP service areas has never been subject to environmental review. The difference between what the contracts promise and what the existing system can actually supply is only paper water and not an enforceable entitlement. (*Planning and Conservation League v. Dept. of Water Resources* (2000) 83 Cai.App.4th 892.) In hindsight, it is now clear that DWR

over promised when it entered into those contracts, because the facilities necessary for DWR to fully perform under those contracts simply did not exist for reasons outside the control of DWR. As a result, the amounts promised in the existing contracts may provide priority to existing contractors in a situation of competing claims to limited supply, but otherwise those amounts are only a wishful number without legal significance.

The purpose of the BDCP project is not to continue ongoing operations under a pre-CEQA or otherwise existing project...-this scenario is the represented by the No Project Alternative-but to create new water delivery capability. The SWP/CVP facilities located between the Delta and the SWP and CVP service areas is essentially a large pipe that withdraws water from the Delta at one end of the pipe and delivers it to the SWP and CVP contractors at the other end. The DEIRIEIS evaluates the project's environmental impacts in the Delta, but gives only cursory treatment to the project's environmental impacts in the SWP and CVP service areas, as if the water simply disappeared into a black hole at the delivery end of the pipe. While such impacts at the delivery end were not required to undergo environmental review at the time the contracts entered into, the impacts that will result from the delivery of more water to the service areas than can be delivered under the No Project Alternative are now subject to such review.

Facilitating growth and related land use changes can be either a project objective, a growth inducing project impact, or both, depending on where it will occur. Growth and land use changes that will occur within the project area as a direct result of the project is a project objective and therefore must be evaluated as part of the project. (*Bozung v. Local Agency Formation Com.* (1975) 13 Cal.3d 263.) Growth and land use changes that are likely to occur in the surrounding environment near the project area as a direct or indirect result of the project is a growth inducing impact of the project. (CEQA Guidelines, § 15126.2, subd. (d).) When growth will occur both within the project area and in the surrounding area due to installation of new or improved public infrastructure, growth within the project area must be evaluated as part of the project while off-site growth must be evaluated as a growth inducing impact of the project. (*Clover Valley Foundation v. City of Rocklin* (2011) 197 Cal.App.4th 200.)

The "whole of the action" that is the BDCP project includes growth and land use changes in the SWP and CVP service areas, including changed agricultural practices, that will be served or facilitated by the additional water delivered to those areas above the amounts that could be delivered under the No Project Alternative. To the extent the increase in SWP/CVP water delivery to contractors is the first step in development or land use changes within the SWP and CVP service areas, the effects of probable ultimate development in these areas based on that increased water supply must be evaluated in the DEIRIEIS in order to avoid piecemealing review of the whole of the

action. (*Napa Citizens for Honest Government v. Napa County Bd. of Supervisors* (2001) 91 Cai.App.4th 342.)

Water supply and water demand are complementary forces, and planning for both can be done either from the supply side or the demand side. The DEIR/EIS assumes increased demand or need for water in the export service areas, based on Department of Finance forecasts and growth projections contained in the California Water Plan. (See DEIR/EIS sections 30.1.2 & 30.1.3.) The California Water Plan presents DWR's assumptions and other estimates regarding future population, future land use patterns, and future water needs. (Water Code, § 10004.6, subd. (c)(3), (5) & (6).) The California Water Plan is a supply-side planning document, based on DWR's best estimate as to where growth might occur; it is not a demand-side planning document prepared for the purpose of identifying where growth should occur. Under the Planning and Zoning Law, the Legislature has assigned to cities and counties, and not to DWR, the responsibility of regulating where growth occurs within California through the adoption of enforceable demand-side land use plans. Cities and counties carry out this responsibility by adopting local general plans. (Govt. Code, § 65302.) The California Water Plan does not serve the same function as adopted local general plans. When the California Water Plan is erroneously used as a demand-side plan in lieu of adopted general plans to justify construction of water supply infrastructure, then, under the principle of "if you build it, they will come," DWR's own growth and water demand estimates are likely to become self-fulfilling prophecies.

Approval of a water supply project to accommodate anticipated but unplanned growth, based on a supply-side planning document, "places the proverbial cart before the horse" and piecemeals the overall project. (*County of Amador v. El Dorado County Water Agency* (1999) 76 Cai.App.4th 931, 949.) Making additional water available to an area removes a major barrier to growth and land use changes within that area, and can virtually assure development. If the BDCP project is approved and additional water is made available to the SWP and CVP service areas, local agencies within those export service areas will have no reason to restrict growth to levels that could be served by the amount of water available under the No Project Alternative. However, once a local agency has adopted a general plan after conducting appropriate CEQA review, the water supplier can generally rely on the general plan EIR as an adequate evaluation of growth and land use changes associated with an increased water supply. (*Friends of the Eel River v. Sonoma County Water Agency* (2003) 108 Cai.App.4th 859; see also *Vineyard Area Citizens v. City of Rancho Cordova* (2007) 40 Ca1.41 412.) This latter

scenario properly places the proverbial horse before the cart.

## **The DEIR/EIS Provides an Inadequate List of Permits and Other Approvals Required to Implement the Project**

As described above, an EIR must include a list of permits and other approvals required to implement the project. (CEQA Guidelines, § 15124, subd. (d)(1)(B).) The DEIR/EIS, in Table 1-2, states that DWR will be taking one or more discretionary approval actions pursuant to authority conferred on it generally by the Central Valley Project Act (Water Code, Division VI, Part 3, § 11100 et seq.) and the California Water Resource Development Bond Act (Water Code, § 12930 et seq.), and specifically by section 11451 of the CVP Act, which provides that DWR shall have full charge and control of the construction, operation, and maintenance of the CVP.

Table 1-2 does not explicitly reference section 11290, which authorizes DWR to "add additional units [to the CVP] which are consistent with and which may be constructed, maintained, and operated as part of the [CVP] and in furtherance of the single object contemplated by [the Central Valley Project Act]." The Attorney General has concluded that DWR may authorize additional units to the CVP by administrative action, pursuant to section 11290, but in the absence of DWR taking such administrative action any additional units to the CVP must be authorized by the Legislature. (29 Ops.Atty.Gen. 161 (1957).) In addition, Table 1-2 does not explicitly reference section 12931, which describes the SWP as consisting of State Water Facilities as defined in section 12934(d), and such additional facilities as may be authorized "by the Legislature as part of (1) the Central Valley Project or (2) the California Water Plan, and including additional facilities as [DWR] deems necessary and desirable to meet local needs." Again, DWR may take discretionary administrative action approving additional facilities, based on a finding that such facilities are necessary and desirable to meet local needs, but such facilities are not authorized in the absence of DWR taking action.

The DEIR/EIS must identify that DWR will be taking an action approving the construction and operation of one of the conveyance facility alternatives, contingent on approval of incidental take authorization. The DEIR/EIS must also disclose whether DWR will be approving the conveyance facility as (1) an additional unit to the CVP that is consistent with and in furtherance of the single object contemplated by the CVP Act, pursuant to section 11290, (2) an additional facility to the SWP that is necessary and desirable to meet local needs, pursuant to section 12931, (3) a facility that is already a system component of State Water Facilities, as defined in section 12934(d), (4) an additional facility authorized by the Legislature as part of the CVP, or (5) an additional facility authorized by the Legislature as part of the California Water Plan. The DEIR/EIS must also identify that DWR will be taking another administrative action submitting applications to the appropriate state and federal agencies seeking incidental take



authorization, based on the commitment by DWR and others to implement the minimization and mitigation measures described in the proposed HCP/NCCP.

As described above, the underlying activity that will cause incidental take is separate and distinct from the measures proposed to minimize and mitigate such take, and the lead agency's action approving the underlying activity and its action seeking approval of an incidental take permit should be separately identified in the DEIR/Eis. It would seem appropriate for the lead agency to take action approving the underlying activity, contingent on approval of an incidental take permit, prior to taking action directing that the incidental take permit application be submitted, although the two actions could be taken simultaneously. Regardless of sequence, the first action taken will constitute approval of the whole of the action on the part of the lead agency, at which time it must adopt its CEQA findings and Statement of Overriding Considerations, adopt the Mitigation Monitoring or Reporting Plan, and file its Notice of Determination. (See CEQA Guidelines, §§ 15091, 15093, 15094 & 15097.) The DEIR/EIS must provide sufficient details regarding the lead agency's approval actions to enable the public to know both what specific conduct by the lead agency will constitute approval of the project and when that conduct is likely to occur.

### **The DEIR/EIS Fails to Describe or Evaluate the Possibility of Incomplete Project Approval**

Although Table 1-2 falls short of the requirements imposed by section 15124 of the CEQA Guidelines, it makes clear that the discretionary approval actions of many state and federal agencies will be required in order for the BDCP project to be fully implemented. Each state agency acting as a responsible agency on the BDCP project must reach its own conclusions on whether or how to approve its own component of the overall project. (CEQA Guidelines, § 15096, subd. (a).) DWR, as the state lead agency, cannot assume that every state responsible agency and every federal agency will approve its piece of the whole of the action. Instead, the DEIR/EIS must evaluate the possibility of partial approval or incomplete implementation of the project.

The water delivery commitments made in the existing SWP contracts are a good example of outcomes falling short of forecasts due to incomplete project implementation. If the SWP had been fully implemented as DWR anticipated when it entered into those contracts, the BDCP project would not be necessary, at least not in its current form. What will be the environmental consequences if the BDCP project is not fully implemented as proposed?

The Implementing Agreement ("IA") is intended to establish a mechanism that will ensure some portions of the BDCP project are implemented, but it does not cover all

portions of the overall project. At a minimum, the DEIR/EIS should evaluate the possibility that only the portions of the BDCP project covered by the IA by real and enforceable funding commitments are implemented.

The DEIR/EIS should describe the extent to which implementation of the BDCP project is dependent on future actions by the Legislature, including approval of funding for the project. Although actions by the Legislature are not subject to CEQA (see CEQA Guidelines, §§ 15378, subd. (b)(1), & 15383), any required approval actions by the Legislature potentially affecting implementation of the BDCP project or attainment of its anticipated environmental benefits are a contingency that must be addressed in the DEIR/EIS.

### **The DEIR/EIS Must Clarify the Baseline Used for Preparation of the BDCP**

The relevant baseline for conducting environmental impact review under CEQA and NEPA is not necessarily the same as the baseline used for conducting incidental take impact analysis under the state and federal endangered species acts and the NCCPA. Under CEQA, the relevant baseline is existing conditions at the time the Notice of Preparation is issued, although an alternative baseline may also be used in appropriate circumstances. For incidental take impact analysis, the default baseline is existing conditions unless the party or parties seeking authorization for future incidental take have a present enforceable duty to restore habitat or otherwise compensate for past or ongoing incidental take. (*Friends of the East Fork v. Thorn* (W.D.Wash. 2010) 688 F.Supp.2d 1245.)

SWRCB's Water Rights Decision 1641 ("0-1641") amended DWR's water rights permits to add terms and conditions intended to protect municipal and industrial, agricultural, and fish and wildlife beneficial uses of the Delta. Pursuant to Water Code section 138.10, OWR prepared a report, dated January 2006, describing its compliance with 0-1641. Pages 22 -23 of that report describe DWR's compliance with state and federal ESA requirements.

It is not clear from the DEIR/EIS whether DWR is currently operating the SWP system in full compliance with state and federal ESA requirements. If the identified species and their habitat are still in the process of recovery, and will continue to recover into the future if the compliance activities described in the January 2006 report or other presently-required restoration measures continue to be followed, then anticipated future equilibrium conditions of species populations rather than current conditions should be used as the baseline for conducting incidental take impact analysis.

## **The DEIR/EIS Must Acknowledge that SWP Water is Exported from the Delta under Junior Water Rights**

As part of both the project description and the discussion of the relevant regulatory setting, the DEIR/EIS must acknowledge that SWP water is exported south of the Delta under junior water rights and that the Delta Protection Act of 1959 (California Water Code Sections 12200 et seq.) was intended to protect Delta water users from the, then, future impacts of the SWP. Section 12203 declares the State or the United States should not *divert* water from the channels of the Sacramento-San Joaquin Delta to which the users within the Delta are entitled. Section 12204 was intended to ensure that no water would be exported which is necessary for salinity control in the Delta and the water needs of users of water in the Delta. Had there been a greater awareness of environmental issues in 1959, fish and wildlife would also have been considered as users of water in the Delta.

An essential but unstated objective of the BDCP project must be that the construction and operation of the project will conform with existing law, including the 1959 Delta Protection Act. To accomplish this objective, the project must ensure no water is exported from the Delta that is needed to meet the environmental, water supply, and other needs of the Delta.

It is therefore unacceptable for the DEIR/EIS to conclude that adverse water quality impacts caused by exports by junior water rights holders is unavoidable. The 1959 Delta Protection Act requires that these types of impacts be avoided or fully mitigated. The 2009 Delta Reform Act requires that any Delta solution improve Delta water quality as part of the requirement to meet both of the coequal goals. The water quality mitigation measures suggested in Chapter 8 and Appendix 38 are not commitments. DWR only agrees to meet with impacted parties after the new BDCP conveyance facilities are operating and at such time determine whether it is feasible to take further action. This deferral of mitigation development is unacceptable under CEQA. The DEIR/EIS must be revised to recommend binding commitments for mitigating all significant adverse water quality impacts.

## **The DEIR/EIS does not Evaluate the BDCP's Compliance with the Delta Reform Act or its Consistency with the Delta Plan**

Under the Delta Reform Act ("ORA"; Water Code, § 85000 et seq.), all actions defined as "covered actions" within the ORA must be consistent with the Delta Plan ("DP") adopted by the Delta Stewardship Council. (Water Code, § 85225.) The adoption of the BDCP by DWR, together with all state and local agency approvals of discretionary actions within the Delta or Suisun Marsh implementing the BDCP, are "covered actions"

under the ORA (Water Code, § 85057.5.) The statement on page 13-13 of the DEIR/EIS that the "BDCP is not a project for which a certificate of consistency must be prepared" is not explained and appears to be inconsistent with definition of "covered actions" provided in the ORA. The ORA defines two coequal goals, but the DP and the BDCP are not coequal documents. Because adoption of the BDCP is defined as a covered action under the ORA, and therefore subject to the ORA's consistency requirement, the BDCP is subordinate to the DP.

Appendix 3-1 of the DEIR/EIS addresses the BDCP's consistency with subsections 85320(b)(2)(A) through (G) of the ORA but does not evaluate the BDCP's consistency with the DP. The statement at page 13-13 of the DEIR/EIS, that "additional discussion of the relationship between BDCP and the Delta Plan can be found in Appendix 3-1," is hollow. On that same page, it is alleged that Chapter 13 of the DEIR/EIS "discusses how the BDCP is consistent with the 14 policies of the Final Draft Delta Plan," but the discussion provided is cryptic, conclusory, and buried deep within other discussions. For example, the DEIR/EIS's entire discussion of the proposed project's consistency with the DP is provided in a single paragraph on page 13-107, which concludes that "avoidance of all incompatibilities is likely to be considered infeasible."

The DP, adopted several months prior to the release of the DEIR/EIS, is intended to further the coequal goals defined in the ORA. The DP includes subgoals and strategies to assist in guiding state and local agency actions related to the Delta. (Water Code, § 85300, subd. (a).) Specifically, it is intended by both the Legislature and the Delta Stewardship Council that implementation by state and local agencies of the various measures included in the DP will promote both a healthy Delta ecosystem and a reliable water supply. (Water Code, § 85302, subd. (c) & (d).) In addition to the measures intended to promote a healthy Delta ecosystem, the DP also includes subgoals and strategies for restoring a healthy ecosystem. (Water Code, § 85302, subd. (e).) The BDCP and the DEIR/EIS fail to evaluate the BDCP's consistency with any of these measures, subgoals, and strategies.

The ORA required CDFW to produce flow criteria and biological objectives, and required SWRCB to produce a separate set of flow criteria. (Water Code, §§ 85084.5 & 85086.) It is not clear whether the data and conclusions in the BDCP document and in the DEIR/EIS are consistent with the flow criteria and biological objectives that were produced pursuant to these statutory mandates.

By statute, the BDCP is intended to serve as a NCCP and HCP. (Water Code, §§ 85053 & 85320, subd. (d) & (e).) As a result, the BDCP must maintain the distinction between underlying activities and mitigation measure required in the drafting of those types of multispecies conservation plans. The ORA cannot affect the federal ESA or the federal HCP process, and explicitly does not affect NCCPA, CEQA, or the California

ESA. (Water Code, § 85032.) Therefore, to the extent there is a conflict between any provision of the ORA and any of these other statutes, the ORA provision must yield to the requirements imposed through the other statute.

The ORA vests planning responsibility for achieving the coequal goals in DSC and does not authorize the DSC to delegate this planning responsibility to DWR. Given the BDCP's subordinate role with respect to the DP under the ORA, a threshold requirement for the BDCP is for it to explain the purpose of its constellation of underlying activities with respect to the DP. Are the underlying actions identified in the BDCP intended to be actions that implement the OP's measures to promote ecosystem health and water supply reliability, as well as the DP's subgoals and strategies to restore ecosystem health? Or are the BDCP's underlying actions consistent with but largely independent of the DP's measures, subgoals, and strategies?

The DEIR/EIS states that the intent of the lead agencies in proposing the BDCP project is "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." (DEIR/EIS, p. 2-5.) However, the intent of the 2009 ORA is that the coequal goals will be met through the coordinated actions of numerous agencies all following the roadmap laid out in the Delta Plan. The DP loses its purpose as a planning document if each agency is free to decide for itself how it can advance the ORA's coequal goals, following its own muse.

There is, potentially, a high degree of overlap between the DP and the BDCP, and the ORA anticipates that the two documents will be merged. Because of this close connection between the DP and the BDCP, the failure of the BDCP DEIR/EIS to tier off of the OP EIR suggest that environmental review on either the DP or the BDCP, or both, has been inappropriately piecemealed. At a minimum, the functional relationship between the BDCP and the DP must be explained and evaluated more thoroughly within the DEIR/EIS so that the two plans do not become ships passing in the night, heading to similar but different ports.

### **The DEIR/EIS does not Evaluate the Project's Consistency with Receiving Area General Plans, the Local Protection Program, or the Ecosystem Restoration Program and Recovery Plan**

Section 15125, subdivision (d), of the CEQA Guidelines requires an EIR to discuss any inconsistencies between the proposed project and applicable general plans, specific plans, and regional plans.

Sections 13.3.3.9 of the DEIR/EIS discuss the project's consistency with city and county general plan land use designations only within a seven-county study area or Plan Area (see DEIR/EIS, sections 13.2.3.4 & 13.2.3.5; see also § 14.1.1), even though the DEIR/EIS acknowledges that the project area for the BDCP project is larger than the Plan Area and includes areas upstream of the Delta region as well as the SWP and CVP export service areas (see DEIR/EIS, p. 1-11). As a result of this narrow focus, the DEIR/EIS has failed to evaluate the project's consistency with general plans applicable in a significant portion of the project area. In order to comply with the general plan consistency evaluation requirement of section 15125, the DEIR/EIS must identify whether the additional water proposed to be delivered to the export service areas relative to the No Project Alternative is intended to support growth and land use changes that have already planned and subjected to environmental impact analysis in adopted general plans, or is instead intended to support growth and land use changes that is anticipated by DWR but has not been planned or subjected to environmental impact analysis by the cities and counties that exercises land use regulatory authority within those areas.

The DEIR/EIS concludes, at page 13-18, that all public and private development activities proposed as part of the BDCP project are consistent with the Suisun Marsh Protection Plan ("SMPP"). The analysis that supports this conclusion may be correct, but it is insufficient. As required by the Suisun Marsh Protection Act, Solano County has prepared a Local Protection Program ("LPP") regulating development within the unincorporated area of the Suisun Marsh. (See Pub. Res. Code, § 29400.) The County's LPP was certified in 1982, and has been amended several times since then. (See Pub. Res. Code, §§ 29415 & 29418.) Unless exempted by statute, all public and private development within the unincorporated area of Marsh is required to be consistent with the County's certified LPP. (See Pub. Res. Code, §§ 29501, 29503 & 29505.) As a result, consistency with the SMPP is no longer sufficient to support approval of development; instead, consistency with the certified LPP must be found.

The current version of the certified LPP includes provisions requiring that "every effort must be made to preserve natural channels and drainage ways" and allowing modification of existing watercourses "only where no reasonable alternative is available." (See *SPRAWLDEF v. San Francisco Bay Conservation & Development Com.* (2014) 226 Cai.App.4th 905 [petition for review pending].) As a result, the DEIR/EIS must identify whether the BDCP project proposes any modifications to existing watercourses within the portion of the Marsh subject to the County's LPP, and if so, evaluate whether there are any reasonable alternatives available. Solano County is currently considering amendments to these provisions, but any amendments to the LPP will not become effective until certified by the Bay Conservation and Development Commission. (See Pub. Res. Code, § 29419.)

Either Solano County or the Bay Conservation and Development Commission, or both, are responsible for determining whether proposed development within the unincorporated area of the Marsh is consistent with the LPP. If the DEIR/EIS provided an adequate evaluation of the BDCP project's consistency with the LPP, the County and the Commission might be entitled to rely on the DEIR/EIS when approving marsh development permits for activities included within the BDCP project. (See CEQA Guidelines, § 15096.) However, because the DEIR/EIS does not evaluate whether any part of the BDCP project is consistent with the LPP, the County and the Commission will be left to the remedies described in section 15096, subdivision (e), of the CEQA Guidelines.

In May 2014, CDFW issued its Ecosystem Restoration Program Conservation Strategy for Restoration of the Sacramento-San Joaquin Delta ("ERP"). In July 2014, NOAA released its Recovery Plan for salmon and steelhead that recommends recovery activities for the Delta and other areas. While these documents were released after release of the DEIR/EIS, consistency between the activities proposed as part of the BDCP project and those proposed in these two latter documents is critical for the successful implementation of all three plans. CDFW's ERP and NOAA's Recovery Plan potentially constitute significant new information that requires recirculation of the DEIR/EIS. (CEQA Guidelines, § 15088.5.) If the lead agencies decide not to revise and recirculate their DEIR/EIS due to the ERP and Recovery Plan, they must explain why the plans do not constitute significant new information.

### **The DEIR/EIS's Discussion of Impacts to Water Supply (Chapter 5) is Inadequate**

The DEIR/EIS states, "the [CALSIM] model will still sometimes show *in very dry years dead pool conditions* that appear to prevent Reclamation and DWR from meeting their contractual obligations to these contractors. Such model results are anomalies that reflect the inability of the model to make real-time policy decisions under extreme circumstances, as the actual (human) operators must do. Thus, any reductions simulated due to reservoir storage conditions being near dead pool for these types of delivery should only be considered an indicator of stressed water supply conditions under that Alternative, and *should not necessarily be understood to reflect literally what would occur in the future*. In actual future operations, as has always been the case in the past, the project operators would work in real time to satisfy legal and contractual obligations given then current conditions and hydrologic constraints." (DEIR/EIS, p. 5-46 (emphasis added].)

This discussion of water supply impacts is inadequate because it fails to model project operations under the BDCP to reflect real world adjustments by the CVP and SWP

project operators to dry year conditions and increased demands. MBK Engineers recent review of the BDCP CALSIM modeling also found that the reservoir and export operational rules were not properly adapted to reflect how project operators would adjust to climate change, increase flow requirements, and adding new intakes in the North Delta. (Presentation by Walter Bourez on BDCP Operations Modeling Review to Delta Independent Science Board on January 17, 2014). MBK Engineers' analysis suggests that the BDCP modeling underestimates North Delta intake exports and total SWP and CVP exports.

The BDCP modeling of exports with the BDCP alternatives must be revised to include realistic responses by SWP and CVP project operators to the new facilities and fish protection measures. It is especially important to develop new reservoir rule curves when simulating BDCP operations based on the SWRCB flow criteria (Alternative 8). Simulating these increase Delta outflow and Rio Vista flow requirements using existing reservoir rule curves that were tuned to existing facilities and sea level conditions does not provide useful information.

The DEIR/EIS redefines the SWRCB export/inflow ratio limits in D-1641 for the preferred project Scenarios H1 and H3. In these scenarios, the export/inflow limits are only applied at the South Delta intakes, and the north Delta exports are not included in the Delta inflow or the Delta exports computation. (DEIR/EIS, p. SA-840.) Conversely, in the Alternative 4 H2 and H4 scenarios, this requirement is applied to the total Delta exports by including the North Delta diversion in the Delta inflow and the Delta exports computation used to determine this requirement.

The DEIR/EIS must be revised to disclose the additional adverse Impacts of this relaxation of the SWRCB's D-1641 export/inflow standards. In addition, the DEIR/EIS must provide sufficient information to allow the SWRCB to make decisions regarding such a modification of the export/inflow standard and adding new points of diversion for the SWP and CVP.

### **The DEIR/EIS's Discussion of Impacts to Surface Water and Recommended Mitigations (Chapter 6) is Inadequate**

At page 6-100 of the DEIR/EIS, the discussion of changes in reverse flow conditions for Old and Middle River (Impact SW-3) focuses on changes in OMR with the BDCP project operational relative to both Existing Conditions (without Fall X2) and the No Project Alternative, and refers to Figure 6-23. However, the data in Figure 6-23 are the long-term averages of 82 years of data, and these long-term averages mask adverse impacts of OMR flows in individual years.



The discussion of Impact SW-3 in the DEIR/EIS also fails to disclose whether the reverse flows were large and negative in the baseline case and are therefore only slightly improved with the BDCP project. Because the new North Delta intakes and isolated conveyance facility are being presented as a conservation measure that reduces the adverse impacts of exports from the South Delta, the BDCP should eliminate any reverse flows lower (more negative) that cause adverse impacts. This amount of negative flow may be approximately -4,000 cfs, but a specific amount must be identified in the DEIR/EIS.

The simulated BDCP reverse flow data (OMR) for each year (1922-2003) of certain months is presented in "BDCP Water Quality Impacts in Barker Slough and Suisun Marsh Area," attached to these comments of Solano County as Attachment B. These data show that reverse flows in July, August, and September would continue to be strongly negative with the BDCP. The OMR values in July and August would become even more negative in some years with BDCP.

The BDCP project is being proposed as a conservation measure because it may reduce exports from the South Delta. This amounts to an explicit admission by the BDCP proponents that the current level of South Delta exports adversely impacts fish species. If the proposed project is going to increase reverse flows, then the adverse impacts of the South Delta exports will increase rather than decrease, and recovery of the key fish species and other resident Delta species will not occur.

As proposed, the BDCP project fails to improve conditions in the South Delta and fails to improve the Delta ecosystem. Alternatives to the proposed project that significantly decrease reverse flows (increase OMR) in all months must be developed and analyzed in the DEIR/EIS.

### **The DEIR/EIS's Discussion of Impacts to Water Quality and Recommended Mitigations (Chapter 8) is Inadequate**

The BDCP project proposes to make numerous major changes to the current Delta export system and the rules under which that system is operated. The rule changes include eliminating existing U.S. Army Corps of Engineers limits on inflows to Clifton Court and relaxing the Emmaton water quality standard. The DEIR/EIS is inadequate because it fails to analyze and disclose the separate impacts of each of the following elements of the BDCP project:

- Project conveyance and operations (CM1)

- Habitat restoration

- Climate change (change in runoff hydrology and sea level rise)
- Moving the Emmaton compliance location (DEIR/EIS, p. 3-188)
- Adding a permanent operable Head of Old River Barrier (DEIR/EIS, p. 3-203)
- Elimination of the US Army Corps of Engineers restrictions on inflow to Clifton Court (DEIR/EIS, p. 3-32)
- Additional storage that is needed for a sustainable Delta solution.

Each of these actions are likely to have significant adverse impacts on key fish species, Delta water quality, the water supply for senior water right holders, and water supply reliability in the export areas. These actions will require decisions by different regulatory agencies, including as the SWRCB, U.S. Army Corps of Engineers, the fish agencies, and local agencies. The DEIR/EIS will not be able to be used by these other regulatory entities without analyses of the individual impacts of each action.

Lumping all these elements together also masks individual impacts and fails to disclose to the public and the agency decision makers the environmental impacts of each element. DWR has previously released three different EIRs regarding its proposal to implement a permanent operable Head of Old River barrier. The 1990 and 1996 drafts were revised, and a new draft was released in 2005, followed by a final EIS/EIR in December 2006. The project still has not been permitted. If this barrier project cannot be justified environmentally on its own merits, it should not be slipped in as part of a larger, even more damaging, project.

The analysis of the proposed BDCP project includes new intakes and conveyance facilities, new habitat restoration, changes in runoff and tidal elevations due to climate change, moving the compliance point for the Emmaton water quality standard, adding an operable Head of Old River barrier, and eliminating existing restrictions on inflow to Clifton Court Forebay. The proposed project is then compared with an existing baseline case, which contains none of these elements, and a No Project Alternative, which also contains none of these elements except climate change. This approach masks the impacts of each individual element and fails to disclose to regulatory agencies and the public the adverse impacts of each element.

The DEIR/EIS is also inadequate because it fails to analyze any alternatives that include state of the art fish screens for Clifton Court and the Jones Pumping Plant. DWR is proposing screening other, much smaller unscreened diversions (CM21), yet has not evaluated the potential benefits to key fish species of a new screened intake on Victoria Canal or low flow screened intakes.

The January 2014 California Water Action Plan and letters and reports from the Delta Vision Foundation, Delta Stewardship Council, and others recommend that new storage is needed to be able to meet both coequal goals under the 2009 Delta Reform Act. However, the BDCP fails to propose new storage and the DEIR/EIS fail to analyze the environmental impacts of new storage. This represents piecemealing of the "whole of the action" needed to achieve the coequal goals, which in turn results in a constricted discussion of true project impacts associated with likely future operations of the BDCP project.

The DEIR/EIS's analysis of environmental impacts of the BDCP must be revised to include separate modeling simulations and analyses for: (a) just new conveyance, (b) just new habitat, and (c) just new storage, so that the separate impacts of each action is fully disclosed and mitigated.

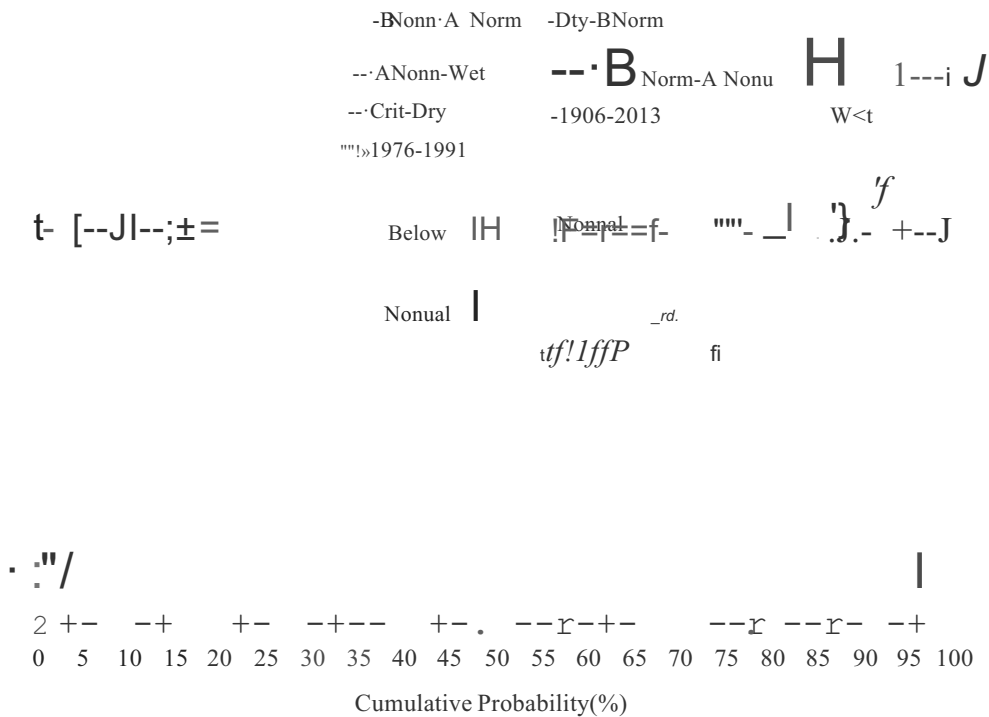
The analysis of water quality impacts in the DEIR/EIS is also flawed because the decision to disaggregate only some of the monthly CALSIM II flow output into daily flows prior to input into the DSM2 model. (DEIR/EIS pp. 5A-A15 & 5A-A40). The Sacramento inflows are input as daily data but the exports are still monthly-averages, which implies an equal export quantity for each day of a given month. In months where a storm occurs late in the month, this disaggregation process can create unrealistic negative daily flows at the beginning of the month and cause unrealistically large spikes in salinity that often exceed D-6141 standards. The BDCP water quality modeling must be revised using either all daily data as inputs, which is the preferable method, or all monthly data.

The daily specific conductance (EC) data for the No Project Alternative in early November 1981 at Jersey Point and Rock Slough is a good example of this flaw, where the EC at Rock Slough spikes up to 1,800 IJS/cm, equivalent to a chloride concentration of 460 mg/L. This is well in excess of the SWRCB 250 mg/L standard. These errors in the predictive calculations render any comparisons between the baseline and the proposed project or to the project alternatives invalid. This also distorts the potential impacts on water quality, Delta water users, and fish.

In the information presented on pages 8-8 and 8-9 of the DEIR/EIS regarding the Sacramento River Watershed, it should be noted that the original SWRCB water year classifications for the Sacramento Valley were defined in SWRCB Water Rights Decision 1641 such that 30% of historical water years to that time were wet, 20% were above normal, 20% were below normal, 15% were dry, and 15% were critically dry. Climate change, however, will likely change those percentages in future years. The water year types for the San Joaquin Valley were based on the same percentages. (DEIR/EIS, p. 8-10.)

The DEIR/EIS should also disclose that the historical period use for the CALSIM II modeling (1922-2003) is consistent with the longer historical record reported by DWR in their Water Supply Index report (1906-2013). However, the shorter historical period (1976-1991) used by the DSM2 water quality modeling is much drier than the 1906 to 2013 historical record. A comparison of the cumulative probabilities for the full historical record (1906-2013), CALSIM modeling (1922-2003) and water quality modeling (1976-1991) is given in the following graph. More than 50% of the years from 1976-1991 are either critical or dry, compared to only 35% for the full historical record.

### Sacramento Basin Water Year Types



Appendix SA of the DEIR/EIS includes an August 2013 technical memorandum from DWR staff titled: "CaiSim II and DSM2 Modeling for BDCP (16-years versus 82-years)." A bullet in this memorandum at page SA-0208 states, "The distribution of year types in the 16-year period is similar to the distribution in the 82-year period (i.e., a wide range of hydrological conditions is reflected in both data sets)." It is clear from the probability distributions plotted above that the distribution of year types and Sacramento 40-30-30 indices are not similar. The number of years for the water quality modeling (16) is only 20% of the number of years used for the reservoir, flow and export operations modeling (82). About 30% of the years in the water quality modeling are critical years, but only about 15% are critical for the reservoir and operation modeling.

The DEIR/EIS is inadequate because it fails to dedicate the same level of detail to analyzing the potential adverse water quality impacts to users of water in and south of the Delta as it does to analyzing water supply impacts. The 16-year simulation period is insufficient to fully disclose the full impacts of the BDCP project on Delta water quality.

The DEIR/EIS is also inadequate because it only discloses the drought impacts for a single drought period, water years 1987-1991 (p. 8-135), and fails to disclose the impacts on water quality during other drought periods such as 1928-1934 and 1976-1977. In fact the drought that started in 1987 did not end until 1993 (an above normal year) and 1993 was followed by another critical water year. The period 1987-1991 does not even represent the full extent of the 1987-1992 or 1987-1994 drought. Given the significance and cost of the proposed project, it is important that water quality be evaluated over a much longer period, preferably for at least 82 and extending through 2013 rather than just through 2003. This will provide the necessary information regarding the resilience of the proposed project over a series of drought conditions, not just part of one drought period.

Although the maximum intrusion and variability of chloride have been reduced since 1921 because of CVP and SWP reservoir operations (Figure 8-4 and Figure 8-5), salinity in the Delta during the fall has increased in since 1994. This increase is due primarily to a shift in export operations away from the spring, to protect fish, to summer and fall. If Fall X2 is indeed a factor affecting fish abundance in the Delta, then this degradation of Delta water quality in the fall (increased Fall X2) may be a contributing factor to the Pelagic Organism Decline. Construction of the major storage reservoirs and implementation of Delta water management facilities and operations may have improved water quality from 1921 through the 1980s, but export operations have degraded water quality in the Delta since the mid-1990s.

Section 8.2.1.4 of the DEIR/EIS must be revised to fully disclose the effects of project operations on Delta water quality in the last 20 to 30 years, and the subsequent adverse impacts on fish species. The DEIR/EIS, as well as any terms and conditions regarding operation of the BDCP facilities, must also take into account the fact that implementation of new Spring X2 standards in 1995 redirected impacts to fish in the fall. Similarly, additional Fall X2 and spring outflow requirements will redirect the effects of exports and reduced flows to July and August. Although the densities of key covered species in the South Delta are currently not high during July and August, that will likely change and other resident fish species could begin to decline if the SWP and CVP increase exports in July and August to meet demand. The DEIR/EIS must fully analyze and disclose future impacts of not setting protective fish terms and conditions for July and August.

As mentioned at page 8-129 of the DEIR/EIS, changes in Delta water quality can also be attributable to non-construction related actions associated with implementation of conservation measures CM2 through CM22. The DEIR/EIS is inadequate because it fails to assess the effects of implementing CM2 through CM22 quantitatively. (See DEIR/EIS, p. 8-137.) Even though the other conservation measures are only analyzed at a programmatic level, the adverse impacts of habitat restoration and other measures will be real and, like the significant adverse water quality impacts due to operation of CM1 and construction activities-impacts such as total and dissolved organic carbon, as well as methyl mercury-must be identified, quantified, and mitigated.

The DEIR/EIS, at page 8-157, states as follows: "Understanding some basic input assumptions for DSM2 is important for interpreting the results and effects analysis, including assessment of compliance with water quality objectives. While DSM2 simulates EC on a 15-minute time-step, the Delta inflow and agricultural return flow inputs, and Delta operations (e.g., Delta Cross Channel gate operations) inputs to DSM2 are on a monthly time-step. Because the DSM2 inputs are on a monthly time-step, the assessment of compliance with sub-monthly objectives (e.g., 14-day running averages) is conducted in terms of assessing the overall direction and degree to which Delta EC would be affected relative to a baseline, and discussion of compliance does not imply that the alternative would literally cause Delta EC to be out of compliance a certain period of time. In other words, the model results are used in a comparative mode, not a predictive mode."

There appears to be a major problem with the water quality simulations because the monthly CALSIM II flow output, but not the monthly export data, were disaggregated into daily flows for input to the DSM2 model. Where a storm occurs late in a month, this disaggregation process creates unrealistic negative daily Delta outflows at the beginning of the month and leads to unrealistically large spikes in salinity in the DSM2 model output. These spikes often exceed SWRCB D-1641 standards. The DEIR/EIS is inadequate because spikes in the simulations of water quality do not represent real Delta operations and the water quality data are not suitable for disclosing the potential water quality impacts of the BDCP on Delta water users and fish.

The DEIR/EIS also argues that using model results in a comparative mode (i.e., subtracting a without-BDCP simulation from a with-BDCP simulation) somehow gives the correct answer even if both simulations are wrong. If the absolute salinities estimated for the baseline case and with-project scenario are inaccurate, then subtracting one from the other will result in erroneous estimates of the net impact of the BDCP. Contrary to what is stated in the DEIR/EIS, baseline or with-project cases that exceed SWRCB standards are not valid, and considering them in a comparative mode is still not valid. It is important that the DEIR/EIS modeling be accurate in a predictive

mode, both to assess project impacts accurately and to ensure the water supply benefits of the BDCP project are not exaggerated by the modeling.

Because the BDCP modeling estimates that SWRCB water quality standards are being exceeded in the baseline case, and even more so in the with-project scenarios, the salinity-outflow algorithm in CALSIM II appears to be underestimating how much Delta outflow and export reductions are needed to meet these standards. The major modeling errors in the DEIR/EIS must be corrected to ensure SWRCB standards are met as required by state law, that the absolute salinities in the base case are consistent with historical data, that all erroneous salinity spikes are eliminated, and all adverse water quality impacts are fully mitigated.

The DEIR/EIS states, at page 187, that chloride concentrations at Vernalis are inversely correlated to net river flow and the dilution provided by that flow. This is correct only in general terms. The first major storms of the year typically carry with them a first flush of salt that result in higher salinities at Vernalis for a given flow. It is, therefore, very inaccurate to use a simple best-fit regression of San Joaquin River flow and salinity-in this case chloride-that does not take into account the first flush resulting from the first large storm of the winter, the differences between the irrigation and non-irrigation seasons, and other effects on salinity at Vernalis. The DEIR/EIS is inadequate because it relies on an oversimplified regression relationship between salinity and flow at Vernalis. This modeling error must be corrected.

The DEIR/EIS's description of Alternative 1 impacts on water quality describes the adverse impacts on bromide, chloride, EC, and dissolved organic carbon as significant and unavoidable. (DEIR/EIS, pp. 8-238, 8-246, 8-255, & 8-270.) Similar findings are made for the other BDCP alternatives. Several water quality mitigation measures are proffered, including WQ-5, WQ-7, WQ-11, and WQ-18) but concern is expressed in the DEIR/EIS as to each of these mitigation measures that "the effectiveness of this mitigation measure to result in feasible measures for reducing water quality effects is uncertain." The proposed mitigation measures are therefore inadequate for eliminating adverse water quality impacts caused by the BDCP project on other users of Delta water, including key fish species.

The BDCP project is being proposed by export water users that currently export water from the Delta under junior SWP water right holders, and that do not have the legal protections of the Area of Origin statutes or 1959 Delta Protection Act. Any adverse water quality impacts due to the proposed project must be avoided. The DEIR/EIS is inadequate because it fails to identify mitigation measures that would eliminate adverse water quality impacts. A number of Bay-Delta stakeholders have recommended alternatives to the BDCP project that would reduce water demands from the Delta, add new storage, increase Delta outflows, or comply with the original BDCP Planning "big

gulp, little sip" principle to divert more water in wet periods and reduce diversions in dry periods. Capturing new water in new storage during wetter periods would allow some of that stored water to contribute to increased Delta flows during drier periods, as well as producing a net improvement in water supply reliability. The EIR/EIS must be revised to include analysis of additional alternatives that improve rather than degrade water quality.

The EIR/EIS acknowledges, at page 8-441, that it is uncertain whether "the available and existing salinity response and countermeasure actions of SWP and CVP facilities, municipal water purveyors, or Suisun Marsh salinity control facilities would be capable of offsetting the actual level of changes in EC that may occur from implementation of Alternative 4 [the proposed project]." Similar statements are made throughout Chapter 8 with respect to the BDCP alternatives. The DEIR/EIS therefore proposes a series of phased actions to merely identify possible actions to reduce but not eliminate EC and other salinity impacts on Delta beneficial uses. These adverse impacts would be caused by the new conveyance facilities operations under CM1 and hydrodynamic effects of tidal restoration under CM4.

CEQA Guidelines section 15126.4, subdivision (a)(1)(B), provides that "formulation of mitigation must not be deferred to a future time." The DEIR/EIS is inadequate because a study to try and identify actions to offset adverse impacts is not an acceptable mitigation measure. The BDCP proponents must commit to not operate the isolated facility, and commit to increasing Delta outflows to eliminate adverse water quality impacts, until actions under Mitigation Measure WQ-11 are identified and fully implemented. DWR is currently studying the North of Delta Offstream Storage Project (aka Sites Reservoir) and recently released a Preliminary Administrative Draft Environmental Impact Report. This storage project could be used to release additional flow into the Delta to improve water quality and mitigate the significant adverse water quality impacts of the BDCP proposed project.

CEQA and NEPA require mitigation for significant adverse water quality impacts. However, pursuant to the 2009 Delta Reform Act, DWR also has a responsibility not only to avoid degrading Delta water quality, but to improve Delta water quality. DWR and Reclamation should enter into a binding agreement with key Delta stakeholders that require specific water quality goals, representing net improvements in water quality relative to historical conditions, to be met. For example, the 1968-1975 period used by U.S. EPA in 1993 to formulate new estuarine habitat standards (Spring X2) under the Clean Water Act could be used as benchmark historical conditions. Failure to achieve these legally-binding water quality goals would result in the North Delta intakes being shut down until the water quality goals are again met. The water quality goals could be expressed in terms of required numbers of days per year when the chloride concentrations at given locations must be 50, 100, 150 and 200 mg/L or better. The



numbers of days per year would vary by water year type. The lower chloride values are necessary to preserve existing periods of time when there is low salinity water in the Delta for agricultural and drinking water use.

Following commencement of initial operations of the new intakes and conveyance system, the BDCP proponents propose to conduct additional evaluations, and to develop additional modeling, to determine whether modified operations could reduce or eliminate the significant adverse water quality impacts of the BDCP project. (DEIR/EIS, p. 8-441.) However, the BDCP proponents state that if sufficient operational flexibility to offset EC increases is not feasible, achieving salinity reduction would not be feasible.

The DEIR/EIS is inadequate because it fails to use operations and water quality models that comply with SWRCB D-1641 standards, and fails to analyze alternatives that improve rather than degrade Delta water quality. The DEIR/EIS also fails to include actions and commitments to avoid or mitigate significant adverse water quality impacts. The BDCP modeling and alternatives must be revised, and legally binding and effective mitigation measures must be developed.

The DEIR/EIS is inadequate because it fails to disclose the significant adverse impacts of the BDCP project and alternatives on salinity (as represented by electrical conductivity, EC) in the agricultural areas of Solano County near Barker Slough. Appendix 8H of the DEIR/EIS does not present any EC data for the Barker Slough area. However, chloride data for Barker Slough are presented in Tables CL-27 and CL-28 of Appendix 8G for the proposed project (Alternative 4). The chloride data suggest the normally low salinity water presently available to farmers in the area of the North Delta west of the Sacramento River could increase in salinity as much as 73% with the proposed project. The changes in salinity in the Barker Slough region are almost entirely due to the north Delta intake operations, not sea level rise. Degradation of the water supply available to farmers in Solano County will have significant adverse impacts on crop production and the economics of this region.

As shown in Attachment B to this comment letter, the BDCP project will result in significant adverse impacts to the salinity of the water supply of North Delta farmers. The DEIR/EIS must include a detailed analysis of the impacts of both water quality degradation, and conversion of Solano County farmland to habitat, and disclose and mitigate those impacts.

In Appendix 3-B, at page 3B-42, the DEIR/EIS states that the BDCP proponents commit to assisting in-Delta municipal, industrial, and agricultural water purveyors that will be subject to significant water quality effects from operation of the new intakes and conveyance system and effects on dissolved organic carbon (DOC) due to implementation of the conservation measures. This commitment focuses on the

financial costs required to treat or otherwise supply water to acceptable standards. Assistance for construction and/or operation of facilities or the procurement of replacement sources is offered but is limited to reasonable, cost-effective solutions developed with input from the BDCP proponents. This "commitment" would still require thorough investigation and completion of environmental review.

This offer to partner with the adversely impacted stakeholders, and presumably assist with financing mitigation measures, is certainly warranted given that the BDCP proponents would be the cause of the adverse water quality impacts. However, development of mitigation measures and commitment to implement these measures is the responsibility of the BDCP proponents. These commitments must be clearly defined prior to certification of the BDCP EIR and issuance of a Record of Decision on the EIS, and mitigation must be in place prior to initial operation of the new intakes and conservation measures.

### **The DEIR/EIS's Discussion of Impacts to Fish and Aquatic Resources and Recommended Mitigations (Chapter 11) is Inadequate**

The original basis for the Bay-Delta Conservation Plan was to obtain regulatory assurance for 50 years for operation of the CVP and SWP in the Delta and to improve water supply reliability for the CVP and SWP export contractors. The concept was to improve and restore the ecosystem in the Delta for key fish species.

A major component of the BDCP's proposed ecosystem restoration is adding new export intakes in the North Delta of the Sacramento River to reduce the impacts of the South Delta export facilities on fish. This had been recommended by the fish agencies for many years. However, as revealed in the DEIR/EIS, the BDCP proponents have developed North Delta intake alternatives that harm rather than benefit key fish species. Significantly, by reducing flows in the Sacramento River below the new intakes, the BDCP's proposed North Delta intakes will reduce the survival of anadromous fish heading to and from the ocean, will change the olfactory cues used by the salmon to return to their native spawning grounds, and will increase predation. (See, e.g., BDCP pp. 3.2-8, 5.5.3-32, & 5.5.3-39).

The BDCP also assumes that reductions in entrainment at the South Delta export facilities will contribute to offsetting any entrainment and impingement at the proposed North Delta diversion facilities. (BDCP, p. 5.5.2-24). However, the BDCP is:

- Proposing that the existing U.S. Army Corps of Engineers limits on inflow to Clifton Court Forebay be eliminated which would increase the maximum inflow from 6,680-7,180 cfs up to 10,300 cfs. (DEIR/EIS, p. 3-32.)
- Not planning on screening the intake to the Forebay, even though DWR's November 2009 Conceptual Engineering Report - Through-Delta Facility Conveyance Option, in Figure 7-5, contains examples of how this could feasibly be done.
- Proposing to make reverse flows (OMR) worse at certain times of the year relative to existing conditions.
- Proposing to continue using the South Delta for 51% of the SWP and CVP exports.

The proposed new intake and tunnel facilities for the BDCP are likely to seriously harm key fish species and fail to contribute to restoring and sustaining the Delta ecosystem. The DEIR/EIS must be revised to include alternatives that reduce the impact of South Delta exports on threatened and endangered species and other resident fish in the Delta

The OEIR/EIS, at page 11-58, states, "While operation of the NOD intake could affect winter-run Chinook salmon migration conditions, the magnitude of effects is uncertain, and additional modeling assessments are needed to verify that no adverse effects are reasonably likely to occur." The DEIR/EIS is replete with similar examples where the effect of operation of the new North Delta Diversion intakes are said to be uncertain and that additional modeling assessments are needed to verify that no adverse effects are reasonably likely to occur. If the impacts are uncertain, the proposed project should include additional measures to protect covered fish species, such as increased minimum flow requirements downstream of the new intakes and higher Delta outflows.

The DEIR/EIS is inadequate because it fails to provide a factor of safety to protect key fish species in case the adverse effects of operation of the NOD intake are underestimated. If, in the future, it can be shown that the established minimum flow requirements and Delta outflow requirements are higher than needed to sustain fish populations, these can be reduced through adaptive management. The DEIR/EIS must be revised to include higher minimum flow requirements that account for the acknowledged uncertainty over the adverse impacts of the NOD intake.

The DEIR/EIS, at page 11-1533, makes the following four statements:

"Near-field effects of Alternative 4 NOD on Sacramento River steelhead related to impingement and predation associated with three new intake

structures could result in negative effects on juvenile migrating steelhead, although there is high uncertainty regarding the overall effects."

"Alternative 4 also includes an Adaptive Management Program and Real-Time Operational Decision-Making Process to evaluate and make limited adjustments intended to provide adequate migration conditions for steelhead. However, at this time, due to the absence of comparable facilities anywhere in the lower Sacramento River/Delta, the degree of mortality expected from near-field effects at the NOD remains highly uncertain."

"Two recent studies (Newman 2003 and Perry 2010) indicate that far-field effects associated with the new intakes could cause a reduction in smolt survival in the Sacramento River downstream of the NOD intakes due to reduced flows in this area. ... The overall magnitude of each of these factors and how they might interact and/or offset each other in affecting salmonid survival through the plan area is uncertain, and remains an area of active investigation for the BDCP."

"However, until these [modeling] efforts are completed and their results are fully analyzed, the overall cumulative effect of Alternative 4 on steelhead migration remains uncertain."

As discussed above, the initial bypass flows and Delta outflow requirements must be high enough to account for these uncertainties over the adverse impacts of the NOD intakes.

The DEIR/EIS, at page 11-1549, states, "Alternative 4 also includes an Adaptive Management Program and Real-Time Operational Decision-Making Process to evaluate and make limited adjustments intended to provide adequate migration conditions for fall- and late fall-run Chinook. However, at this time, due to the absence of comparable facilities anywhere in the lower Sacramento River/Delta, the degree of mortality expected from near-field effects at the [North Delta Diversion] NOD remains highly uncertain." As discussed above, the initial bypass flows and Delta outflow requirements must be high enough to account for this uncertainty.

### **The DEIR/EIS's Discussion of Impacts to Agriculture and Recommended Mitigations (Chapter 14) is Inadequate**

The DEIR/EIS has not evaluated the impacts to agriculture caused by construction activities related to CMs 2-22. Because of the large scale of these operations and the extended duration of the habitat restoration activities, they could have significant and

long-lasting impacts on agricultural operations. The DEIR/EIS must evaluate these types of impacts. The proposed mitigation measures included in the DEIR/EIS only address the permanent conversion of agricultural land to habitat. They do not address the impacts to agricultural operations during the extended (10 to 12-year) construction period, which could increase costs of production and transport of commodities to market. The DEIR/EIS must recommend mitigation measures to address adverse impacts to agricultural and other business operations due to construction activities related to any of the CMs.

In evaluating the significance of the project's impacts on agriculture, the DEIR/EIS must account for the fact that costs of agricultural production could increase on an ongoing basis during the operation of the proposed project due to implementation of various CMs and related activities, which may impose new restrictions and/or requirements on farming operations in order to ensure the effectiveness of CMs. For example, if farmers and/or irrigation water purveyors are required to install and maintain fish screens on existing surface water intakes under CM-21, this would impose up-front costs and ongoing maintenance costs. Similarly, farmers may be required to change their production practices in order to prevent impacts to protected species *ON* adjacent lands

that are restored for habitat purposes. Although the concept of "safe harbor" for existing agricultural practices has been referenced in the BDCP, the County and local agricultural stakeholders have grave concerns about the enforceability of safe harbor provisions. The DEIR/EIS must provide an assessment of the potential costs to agricultural operations arising from each of the CMs and recommend appropriate and adequate mitigations to ensure that farmers are compensated for increased costs. If existing agriculture in portions of Solano County is rendered economically infeasible as a result of the BDCP project, this will be a significant change to the physical environment caused by the project.

The DEIR/EIS does not provide an assessment of how increased salinity in Delta water could affect farming operations that are not directly affected by habitat restoration. Impacts could include, but are not limited to, impacts to intakes (consolidation and other infrastructure changes), reduced yields from crops irrigated with water that has increased salinity and/or increased costs of production for farmers who are forced to pump groundwater as a substitute for surface water that has excessive salinity levels, and resultant increases in costs and regulation relative to point and non-point discharges. The DEIR/EIS must analyze the potential impact of increased salinity levels within the Delta waterways and groundwater on farming operations and identify appropriate mitigations to address such impacts.

In evaluating the significance of the project's impacts to agriculture; the DEIR/EIS should address the effect that uncertainty about the plans for habitat acquisition can have on farmers' investment decisions and the ability of property owners and

businesses to obtain financing for improvements and operations. Such uncertainty has the potential to cause disinvestment and lack of maintenance, which in turn can indirectly cause a variety of environmental impacts. The DEIR/EIS should identify appropriate mitigations to address such impacts.

The impacts to agriculture of habitat conversion in adjoining areas present issues of harborage of invasive species that are inadequately addressed in the CMs. Macro fauna proliferation and weed pests can spread to adjoining agriculture causing economic losses to growers. Examples of the effects of invasive species include:

- Blackbird consumption of Sunflowers
- Coyote predation on Lambs
- Beaver lodges impairing agricultural drains
- Johnsongrass and nutsedge propagules carried out to row crops.

The introduction of new invasive species to the Delta is inadequately addressed in the DEIR/EIS. The analysis of invasive species impacts in the document over emphasizes species that impair water conveyance (Quagga and Zebra Mussels) and under emphasizes species that adversely impact agriculture and the environment. Pest Exclusion and Pest Detection programs that prevent the introduction of important invasive pests are not adequately discussed. These programs to prevent the introduction and establishment of new invasives are far more cost effective than eradication post introduction. Invasives that would negatively impact agriculture, fisheries, and the environment include the submersed aquatic weed Hydrilla, the predatory fish Alligator Gar and Northern Pike, riparian weeds such as Red Sesbania and Purple Loosestrife, and floating aquatic weeds such as exotic Spongeworts. These pests are interdicted through the collaboration of the State Border Station network and the County Agricultural Commissioners. Agricultural Commissioners also perform pest exclusion inspections on arriving nursery stock and at package receiving terminals. To adequately protect the Delta from invasive species, High Risk Exclusion funding for Agricultural Commissioners in Delta counties should be restored to full program levels.

Economic impacts from Delta land conversion should consider the opportunity costs of growing high value crops historically cultivated in the Delta. In the past, Liberty Island has produced market peas, asparagus, sugar beets, and other crops that greatly out value recent production. Despite recent changes in crop being grown, the productive capacity, soils, and water availability have not changed. In addition, orchard and vine crops are emerging in importance regionally and the opportunity to plant these should be considered in the analysis.

In Section 14.3.4.1 at page 14-191, the DEIR/EIS asserts that the future of agriculture *in* the Delta area is uncertain, citing subsidence, levee breaches, and climate change as causes. This assertion is unfounded and exaggerated; agriculture has flourished *in* this area for well over a hundred years, with most areas unaffected by earthquake, levee break, or flood. The more troubling aspect of this assertion and Section 14.3.4.1 as a whole, however, is its singular focus on the Delta Region and blind eye toward the export service areas, even though both areas plus the upstream watershed is acknowledge in section 1.5 to comprise the EIR/EIS Project Area. A more appropriate examination *in* Section 14.3.4.1 and elsewhere in Chapter 14 would be *the* effects of the project and cumulative effects on agriculture *in* all three portions of the Project Area. For example, the DEIR/EIS should address the future of agriculture in the export service areas, including cumulative effects of *toxic* soils, lack of adequate drainage, groundwater overdraft, subsidence, increasing drought due to climate change and other causes, and junior water rights. For example, the recent decision in *North Coast Rivers Alliance v. Westlands Water Dist.* (7/3/2014) xxx Cai.App.4th xxx, which discusses the existing drainage problems in the export service areas that will not be improved, and will likely be exacerbated, by the proposed project. Due to these factors, the future of agriculture in export service area is uncertain at best, even if the proposed project is built and lives up to its promises.

### **The DEIR/EIS's Discussion of Impacts to Recreation and Recommended Mitigations (Chapter 15) is Inadequate**

In evaluating the impacts of the BDCP project to recreation, the DEIR/EIS must acknowledge that Delta recreational fishing is a major activity and economic driver that is dependent upon maintaining freshwater in the Delta. The DEIR/EIS must analyze the potential effects of the proposed project and project alternatives on recreational fishing, including potential economic losses due to reductions in fishing activities. The DEIR/EIS must also include mitigations to address such impacts and evaluate the adequacy of the recommended *mitigation* measures.

The DEIR/EIS must also acknowledge that hunting is a major activity and economic driver that occurs on private and public land within the Delta, and that hunting could be displaced by habitat restoration activities. The DEIR/EIS must analyze the potential effects of the proposed project and project alternatives on hunting, including potential economic losses due to reductions in hunting activities to the extent *economic* losses affect the significance of the effect. The DEIR/EIS must include mitigations to address all such impacts that are determined to be significant.

## **The DEIR/EIS's Discussion of Socioeconomic Impacts and Recommended Mitigations (Chapter 16) is Inadequate**

Chapter 16 of the DEIR/EIS should acknowledge the many environmental and regulatory restrictions that make it very difficult for Delta communities to adapt to changes in the environment and the economy, and how this can affect the significance of impacts of the proposed project and alternatives. For example, land use and building regulations in the Delta Primary Zone will make it very difficult for businesses, residents, and property owners to make physical changes in order to minimize negative impacts or to take advantage of potential new economic opportunities that may arise. The DEIR/EIS analysis of impacts and proposed mitigation measures should be augmented and revised to acknowledge the challenges to adaptation in the Delta.

Table 16-6 shows generally low housing vacancy rates in Delta communities (except Isleton, which is very small). The DEIR/EIS must identify housing demand created by the proposed construction project and recommend mitigations to address impacts on housing demand from construction and O&M work and possible displacement of existing Delta residents and workforce from available housing stock due to increased competition for a limited supply of housing in the Delta. The DEIR/EIS must also include analysis of the potential disparate impacts and social justice issues related to the impacts of proposed project and alternatives on farmworkers and other lower-income households due to displacement from existing housing in the Delta. The DEIR/EIS must acknowledge that commuting long distances to workplaces in the Delta is not an option for many lower-income employees, and commuting is made difficult by lack of public transit service to worksites in rural areas.

In Section 16.1.1.6, the DEIR/EIS must acknowledge the special role that Reclamation Districts provide in the Delta and their dependence on property assessments for operating revenue. The DEIR/EIS must also acknowledge the other types of local government agencies located in the Delta, such as fire protection districts, that are dependent upon receiving a share of property taxes that are collected on property within the Delta in order to maintain important public services.

Section 16.2.3.4 makes only limited reference to relevant portions of the Solano County General Plan. This discussion needs to be augmented to acknowledge the goals and policies of the Agriculture and Economic Development chapters of the General Plan that influence socioeconomic forces by seeking to preserve agricultural lands for agricultural uses in the unincorporated area of Solano County, in particular goals AR.G-1 [support the critical role of all agricultural lands], AR.G-2 [protect agricultural lands as an irreplaceable resource], AR.G-3 [support the ability of farmers to earn sufficient income], AR.G-5 [reduce conflict between agriculture and non-agricultural uses], AR.G-6 [sustain



agricultural water resources], ED.G-1 [maintain and improve the County's diversified economic base], and ED.G-6 [preserve and expand the County's agricultural base].

Section 16.3 states that nine of the CMs are not anticipated to result in any socioeconomic impacts. The DEIR/EIS should provide an analysis of the individual CMs to justify this conclusion. The unsupported aggregate conclusion stated in the DEIR/EIS is particularly suspect, given that many of the CMs are described only conceptually or programmatically at this point, with many small and large details left to be developed over time through adaptive management or as other new information becomes available.

Section 16.3.1 assumes an 8-year construction period, which is not reasonable for a project of this complexity. At the minimum, the DEIR/EIS must acknowledge that habitat restoration construction activities are likely to extend over multiple decades and provide an analysis of the potential socio-economic impacts due to implementation activities occurring over this extended time period.

Section 16.3.1.1 focuses only on those communities in the Statutory Delta where direct effects of the BDCP project would occur and where social and community effects would be greatest. The DEIR/EIS anticipates that social and community effects elsewhere in the larger five-county Delta region would be minor because they would be spread over a large, heavily populated area and among many communities. This obscures the impacts of the project on Solano County as a whole. The DEIR/EIS should be augmented to provide meaningful analysis of the potential impacts of the proposed project and all alternatives at the level of individual communities within the Delta, impacts on Solano County as a whole, and impacts within the larger five-county region as a whole. Further, the DEIR/EIS should be augmented to identify the cumulative impacts of proposed actions throughout the five-county region.

The economic analysis used to support Chapter 16 in the DEIR/EIS should acknowledge the interdependencies between communities throughout the region. An element of the BDCP project that has direct impact in one location of the Delta may have indirect impacts elsewhere in the Delta, and contribute to cumulative impacts throughout the Delta. While conversion of agricultural land in Solano County will certainly have an impact on other businesses in Solano County, conversion of agricultural land outside of the County can also affect Solano County businesses. If agricultural support businesses located in other counties that serve Solano County agriculture are adversely affected by loss of agriculture anywhere in the Delta, this can affect viability of Solano County agricultural production. These types of concerns and issues should be acknowledged and analyzed in the DEIR/EIS, and appropriate mitigations should be incorporated into the proposed project.

Section 16.3.1.2 states that "changes in employment and income associated with potential abandonment of existing natural gas wells in the study area were not estimated using a regional IMPLAN model because employment effects are anticipated to be very small." The DEIR/EIS should provide analysis rather than assumptions regarding these impacts in order to justify conclusion presented. The analysis should recognize that while employment impacts may be relatively small, effects on income to owners may be significant.

Section 16.3.2 states that "a concentrated, substantial increase in population or new housing associated with BDCP activities would constitute an adverse socioeconomic effect." The DEIR/EIS should also acknowledge that an adverse effect could occur if there are changes in demand that are not addressed via changes in availability of housing. Mitigation measures should be developed to address such impacts.

Section 16.3.2.1 states in conclusory fashion that changes in population and housing are anticipated to be minor, and that effects are anticipated to be dispersed throughout the region. This obscures the potentially significant impacts within small Delta communities. What will happen if competition for employees creates shortages of workers for Delta businesses? What will happen if demand for housing related to the BDCP project results in displacement of the Delta resident labor force, which is necessary for the continued viability of Delta farming and other businesses? The DEIR/EIS must acknowledge that the proposed project may have severe, localized impacts within the Delta.

Section 16.1.1.6 does not adequately acknowledge the economic importance of recreation and tourism to the Delta economy and how existing activities would be affected by the proposed project, especially CMs 2-22. For example, the DEIR/EIS does not acknowledge the economic contributions of hunting as a recreational activity in the Delta. Habitat restoration activities can displace commercial hunting operations as well as non-commercial hunting activity on land currently used for agriculture or other activities. Displacement of this activity can reduce Delta visitation and the associated spending within the local economy. The DEIR/EIS should acknowledge the importance of recreation and tourism and the potential adverse impacts from implementation of the proposed project.

Section 16.3.2 states that "an adverse socioeconomic effect would result if a BDCP activity led to a reduction in local government revenue. A beneficial socioeconomic effect would result if a BDCP activity led to an increase in local government revenue." The DEIR/EIS should acknowledge that an adverse socioeconomic effect would also result if a BDCP activity led to an increase in local government costs. For example, many roads in the Delta were not built to withstand the wear from heavy truck and equipment use. Use of such vehicles in conjunction with construction and maintenance

related to any of the CMs could cause extraordinary wear and tear on the roads, which could create the need for increased maintenance expenditures. Similarly, if more people are attracted to the Delta region due to increased activity related to construction and maintenance of the CMs, this could result in increased calls for service to local public safety departments and agencies. The DEIR/EIS should analyze the potential for the proposed project and alternatives to create increased costs for local government agencies.

Section 16.3.3 considers only the economic impacts of loss of agricultural production due to CM-1, and ignores the much greater impacts from conversion of agricultural land for other CMs that involve habitat restoration. As a result, the DEIR/EIS significantly understates the impacts on the local economy from the proposed project and alternatives. The DEIR/EIS must acknowledge and analyze the economic impacts due to conversion of agricultural land as a result of implementing other CMs. Similarly, the DEIR/EIS must acknowledge and analyze the economic losses from displacement of recreational fishing and hunting activities as the direct or indirect result of implementation of the various CMs.

The DEIR/EIS approaches the evaluation of the socio-economic impacts of the various project alternatives by utilizing a standardized set of impacts, labeled ECON-1, ECON-2, ECON-3, etc. For a given socio-economic impact, such as ECON-1, the analytical approach is similar for all of the alternatives; thus the comments on the socioeconomic impact analysis that follow are keyed to the different socio-economic impacts, and generally apply to the analysis contained in the EIR/EIS for all alternatives.

- The DEIR/EIS should provide an analysis of the effect of each CM that is specifically tailored to each individual alternative considered in the EIR. For the most part, the Chapter 16 analysis of impacts for different alternatives mentions only a few of the CMs and completely ignores most of the CMs and their potential impacts. The DEIR/EIS should be modified to correct this. Greater transparency of how conclusions were drawn that certain CMs would have no socio-economic impacts in relation to individual alternatives is necessary. Without such analysis, it is impossible for the reader to have a meaningful understanding of how various aspects of the proposed project could affect local communities.

Evaluation of alternatives with regard to Impact ECON-1 should be augmented to include analysis of how the increase in job opportunities due to the proposed project may affect Delta businesses that will face increased competition for labor. It is likely that many construction workers could be paid wages that are high relative to the wages of existing Delta residents and workers, which could mean that Delta businesses would face increased competition for labor to sustain Delta businesses. For example, discussion at lines 1-8 of page 16-55 indicates that

peak construction employment impacts could be as high as 12,716 FTE, which would have a significant impact within the context of the existing Delta labor pool.

The evaluation of alternatives in relation to ECON-2 (housing) has not provided any analysis of how the surge in employment could affect the balance of supply and demand for housing in the Delta, and has instead obscured the impacts with comparison to the population in the five-county region as a whole. The DEIR/EIS must discuss how increased housing demand due to project employment could affect Delta housing prices and availability, particularly given the constraints to production of new housing in the Delta. It is likely that many construction workers could be paid wages that are high relative to the wages of existing Delta residents and workers, which could mean that long-time residents are displaced, which would have an adverse effect on the availability of labor to sustain Delta businesses. The DEIR/EIS should be amended to acknowledge the severe local impacts that could occur under the different alternatives, due to a combination of loss of existing housing and increase in demand for housing due to an influx of workers, many of whom will prefer to live near their worksites, either on a temporary or semi-permanent basis, given the extended construction time-frame for the proposed project and the environmental and regulatory constraints on production of new housing within the Delta.

The evaluation of alternatives in relation to ECON-4 (local government fiscal impacts) has not provided any assessment of the potential increases in demand for public services and/or increases in costs to provide public services within the Delta due to the proposed project. The DEIR/EIS should evaluate potential adverse impacts due to increased public service costs from issues such, but not limited to, increased roadway maintenance costs, and increased demand for public safety services due to increased presence of human activity in the region.

The discussion in Section 16.3.3 suggests that Delta communities could grow and take advantage of new economic activity created by the project; however, this does not acknowledge the severe constraints on growth within the Delta, both natural and regulatory, and thus overstates any beneficial economic impacts that might otherwise occur. This section also asserts that the project would generate a beneficial effect from increased sales tax revenues for local government entities to offset losses. In order to state this conclusion, the DEIR/EIS must provide substantiation for it.

Section 16.3.3 states, in several places, "When required, DWR would provide compensation to property owners for economic losses due to implementation of the alternative." (E.g., DEIR/EIS, p. 16-63, lines 26-28.) For all alternatives, the DEIR/EIS should expand upon this statement to identify or define when

payments would be required. In addition, the DEIR/EIS should acknowledge that business owners and residential tenants (e.g., lessees of affected property), in addition to property owners, must be compensated for economic losses caused by the project. The DEIR/EIS should also acknowledge the potential need for the project proponents to acquire property needed for mitigation through eminent domain proceedings, if sufficient land required for CMs/mitigation cannot be obtained from willing sellers, and how properties to be acquired through use of eminent domain will be selected.

Impacts ECON-6 and ECON-7 consider the loss of economic activity during construction and operation of the proposed water conveyance activities. The DEIR/EIS must evaluate the loss of economic activity due to loss of agricultural production. Impact analysis relating to ECON-6 and ECON-7 must also address the issue of increased costs for agricultural production and the need for compensation to farmers due to new restrictions and/or requirements that arise as a result of implementation of the water conveyance facilities.

Impact ECON-8 acknowledges that the alternatives would generate new employees for O&M of the water conveyance facilities; however, it obscures the impact of increased demand for housing that this would create in the Delta and does not consider that the Delta land use policies will make new housing construction very difficult. The DEIR/EIS should analyze the localized effects of increased housing demand and how that would affect housing and labor availability for existing Delta residents and businesses, respectively, for all of the alternatives.

Impact ECON-10 considers changes to local government fiscal conditions due to O&M of the water conveyance facilities. The DEIR/EIS analysis relating to ECON-10 must be broadened to consider impacts to local government fiscal conditions resulting from implementation of CMs 2 through 22, in addition to the water conveyance facilities. As with ECON-4, the evaluation of impacts must consider not only changes in local government revenue, but changes in local government service costs, due to all CMs and for all alternatives.

Evaluation of alternatives relative to Impact ECON-11 must consider not just effects on recreational economics during the O&M of the water conveyance facilities, but also during the ongoing O&M of all other CMs and for all alternatives.

The evaluation of alternatives relative to Impact ECON-12 is limited to permanent effects on agricultural economics from loss of land in agricultural production due to the water conveyance activities. This assessment must be expanded to

evaluate the impacts on agricultural economics from any increased costs of production for remaining agricultural operations that may be caused by the water conveyance activities, such as, but not limited to, effects on Delta agriculture due to increased salinity of surface water and ground water due to water diversions. This potentially affects use of water for livestock as well as for irrigation.

Impact ECON-13 is defined as effects on the Delta Region's economy and employment due to the implementation of the proposed CMs 2 through 22; however, the analysis of alternatives in relation to this impact is extremely limited. For example, for Alternative 4, the DEIR/EIS evaluates only the loss of agricultural employment related to implementation of CM-2 in a limited area in Yolo County, and only evaluates the potential losses of employment from abandonment of natural gas wells related to implementation of CMs 4, 5, and 10. This limited discussion is inadequate to provide a meaningful examination of the potential impacts of all of the other CMs not mentioned, and all of the other possible effects of the CMs throughout the affected areas. The DEIR/EIS must carefully evaluate the potential to impact the Delta Region economy due to changes that could occur throughout the region, due to any of the CMs, and consider all economic sectors instead of just the limited slice of the economy such as that examined for Alternative 4.

- Analysis of alternatives relative to Impact ECON-16, changes in local government fiscal conditions as a result of implementing the proposed CMs 2 through 22 must be expanded to include not just changes in revenue, but also changes in service costs.

- Analysis of alternatives in relation to Impact ECON-17 states, "Beneficial recreational effects would generally result during later states of the BDCP permit period as Conservation Measure 2-22 are implemented and environmental conditions supporting recreational activities are enhanced. These effects could improve the quality of recreational experiences, leading to increased economic activities related to recreation, particularly in areas where conservation measure implementation would create new recreational opportunities." The DEIR/EIS analysis for alternatives should clarify the beneficial effects on recreation, and specifically identify how implementation of CMs could expand and ensure public recreational access in the Delta and specifically how the Delta can accommodate increased economic activities related to recreation, acknowledging the significant constraints placed on new development within the Delta by environmental and land use regulations.

Analysis of alternatives relating to Impact ECON-18, effects on agricultural economics in the Delta Region as a result of implementing the proposed CM 2

through 22, state that BDCP proponents would provide compensation to property owners for losses due to implementation of the project. This should be expanded to include business owners and residents who may be displaced or adversely affected. The analysis of the project and alternatives should also define when and how compensation will be required, to provide a clear commitment as to circumstances when mitigation will be provided and how the appropriate compensation will be determined. The analysis of the project and all alternatives relating to ECON-18 should be expanded to provide a thorough analysis of the impacts of all CMs on agricultural economics. For example, the analysis for Alternative 4 provides only limited discussion of the impacts from CM-2. Also, in addition to direct effects, the analysis should consider the cumulative effects within the Delta from reductions in agricultural production and the larger surrounding region, recognizing that the loss of agricultural production in the Delta may lead to a loss of critical mass of agricultural activity to support key agricultural support businesses, such as suppliers and services, which could jeopardize the viability of other agricultural operations remaining in the Delta and/or outside the Delta.

The heavy reliance on Mitigation Measure AG-1, the Agricultural Land Stewardship Program, in Chapter 16 and elsewhere in the DEIR/EIS, is a major flaw of the BDCP and the DEIR/EIS. This mitigation program lacks any meaningful description of what it would do, how it would be managed, and how it would be funded, to the point that it is impossible for anyone to make a reasonable judgment as to its potential appropriateness and effectiveness in mitigating the impacts for which it is intended. The DEIR/EIS must provide a detailed and meaningful description of Mitigation Measure AG-1 and its potential effectiveness at addressing the types of impacts for which it is being proposed at mitigation. Conceptual mitigation without specific and clearly attainable performance standards is inadequate.

The BDCP will have many localized effects which will be specific to individual communities within the Delta. It is simply not possible for the DEIR/EIS to precisely forecast all of the potential impacts from a project of this geographic magnitude and 50-year duration, and therefore, it will be critical that the BDCP include mechanisms for local governments and their affected stakeholders to have flexibility to make decisions about how best to mitigate unforeseen impacts. The BDCP should incorporate provisions to establish "Community Mitigation Funds" for this purpose, to give local decision-makers the ability to direct funds to address local needs. "Adaptive management" as defined in the ORA can be an appropriate mitigation technique for a variety of project impacts besides impacts to biological resources.

The DEIR/EIS must include mitigation measures to address the impact of "temporary" housing demand that will bring thousands of workers into the Delta over a decade-long

construction project. The DEIR/EIS must discuss how this housing demand will affect the limited availability of housing within the Delta communities. Mitigation measures must be recommended to address how existing Delta businesses will be affected if increased competition for the available housing supply displaces their workers from their homes. Lack of local housing availability will create a major challenge to employee recruitment and retention, and mitigation measures should address this concern. Mitigation measures should incorporate housing strategies to address temporary housing demand and prevent dislocation of existing residents and workforce supporting other Delta industry.

The DEIR/EIS must include mitigation measures to address the impact of the project on competition for the Delta's limited labor force. Mitigation measures should address the fact that employment opportunities related to the construction of the proposed project might prove attractive to workers currently employed in existing Delta businesses, in which case, Delta businesses may face a combination of worker shortages and/or the need to increase wages in order to retain and recruit employees. Mitigation measures should address the potential adverse impacts on the economic viability of Delta businesses from this competition for labor.

The DEIR/EIS suggests that the project will make payments in lieu of taxes to compensate local governments for lost revenues as a result of habitat conversions that take property off the tax rolls. Solano County and other local agencies have grave concerns about the reliability of any such mechanism. Historically, payments in lieu of taxes promised by the State have been subject to appropriations by the State Legislature. In order for payments in lieu of taxes to be reliable mitigations for lost revenues, the BDCP must incorporate enforceable mechanisms to ensure that these payments are sufficient and are made consistently. In addition, such mitigation measures must not involve payments that are fixed in their amount based on current costs. Rather, the mitigation mechanisms must allow for increased payments, to keep pace with increases in costs over time, at least extending over the BDCP's 50-year permit period.

The DEIR/EIS asserts that local governments in the Delta will benefit from increased local sales tax revenues, due to the proposed project. In order to ensure that such benefits will be realized, a mitigation measure should be incorporated to ensure that Delta communities will be recorded as the point of sale for these projected sales transactions.

The DEIR/EIS acknowledges that costs of agricultural production could increase for farmers not directly affected by the project, due to construction delays and other indirect impacts. (E.g., DEIR, p. 16-62). As described above, the project's impacts on the



agricultural environment could be significant due to these types of increased costs. The

DEIR/EIS must incorporate a mitigation mechanism to compensate farmers for these types of impacts.

The DEIR/EIS asserts that Delta communities can benefit from increased public recreational access and use in the Delta. The DEIR/EIS must include mitigation measures that will ensure increased public recreational access and use in the Delta. Additional mitigation measures must also be incorporated to address the need for new or expanded business activity in the Delta to accommodate the spending of new recreational visitors within the local economy.

The DEIR/EIS must recommend measures to mitigate for impacts to water quality and water availability for non-project water intakes and groundwater supplies within the Delta. Mitigation must include compensation for increased costs of water due to the need for capital improvements, increased operating costs, and increased costs from switching from relatively lower-cost water supplies, which are compromised by the proposed project and alternatives, to higher-cost water supplies. Mitigations should also include compensation for water conservation improvements that would help Delta residents, farmers, and other businesses cope with impaired water supplies.

Generally, Chapter 16 must be revised to provide more clarity on the types of financial mitigations that will be provided for socio-economic impacts, clarify thresholds for what will trigger implementation of financial mitigations, clarify who will be eligible to receive financial mitigations and how they will be calculated, and identify what mechanisms will be established to ensure the funding for these mitigations on a secure long-term basis. Eligibility for these mitigations should not be limited to property owners, but should also include residential and business tenants within the Delta who would be affected by proposed actions:

Uncertainty regarding the property to be acquired and the conditions under which land that is not acquired will continue to be farmed can have significant negative effects on the continued maintenance and investment in property within the Delta. The DEIR/EIS should incorporate mitigation measures that would help to reduce uncertainty wherever possible, and address the effects of uncertainty, to ensure that Delta property owners and business owners continue to maintain and invest in their property and establishments.

## **The DEIR/EIS's Discussion of Impacts to Air Quality and Greenhouse Gases and Recommended Mitigations (Chapter 22) is Inadequate**

The DEIR/EIS, in discussing Impact AQ-2 at page 22-118, states, "As shown in Table 22-39, construction emissions would exceed SMAQMD's daily NOX threshold for all years between 2014 and 2019, even with implementation of environmental commitments (see Appendix 38, Environmental Commitments). While equipment could operate at any work area identified for this alternative, the highest level of NOX emissions in the SMAQMD is expected to occur at those sites where the duration and intensity of construction activities would be greatest. This includes all intake and intake pumping plant sites along the west bank of the Sacramento River, as well as the intermediate pumping plant site on Ryer Island."

The BDCP West Alignment alternatives (1C, 2C, and 4C) involve construction of conveyance facilities through Solano County, including Ryer Island. Construction of the canal will involve concrete batch plants and fuel stations that would result in air quality, noise, recreation, and other adverse impacts on the residents of the Delta. An approximately 40-acre concrete plant and 2-acre fuel station is proposed along the canal alignment approximately 1 mile south of the SR 84/SR 220 junction on Ryer Island.

The DEIR/EIS, on page 22-252, states that construction of the water conveyance facility would involve the operation of thousands of pieces of mobile and stationary diesel- fueled construction equipment for multiple years in close proximity to sensitive receptors.

The DEIR/EIS must recommend, and the BDCP proponents must provide, mitigation for all adverse impacts including air-borne pollutants. The DEIR/EIS must be revised to recommend measures that would adequately mitigate the adverse impacts to residents of Solano County from air quality impacts caused by the construction of the intermediate pumping plant on Ryer Island and other similar facilities.

## **The DEIR/EIS's Discussion of Noise Impacts and Recommended Mitigations (Chapter 23) is Inadequate**

The DEIR/EIS, in discussing Impact NOI-2 at page 23-73, states that pile driving at the intake sites for Alternative 1C and other western alignment alternatives will result in adverse ground borne vibration levels at residences nearest to the intake work areas. Construction of intakes and barge unloading facilities would also result in adverse excessive ground borne vibration levels at these nearby residential structures. The

DEIR/EIS identifies two residential parcels in Solano County that would be affected. (DEIR/EIS, Table 23-38.)

The DERI/EIS must recommend, and the BDCP proponents must provide, mitigation for these significant adverse impacts on Solano County residents. The BDCP proponents should meet with Solano County staff to discuss these impacts and develop adequate measures.

### **The DEIR/EIS's Discussion of Growth Inducing Impacts and Displaced Development (Chapter 30) is Inadequate**

As discussed above, growth within the SWP and CVP export service areas due to additional water that would be made available to those areas through implementation of the BDCP project appears to be an objective of the project, and therefore must be evaluated as part of the project itself rather than a growth inducing impact of the project. However, to the extent growth facilitated by the availability of water supply is properly characterized as a project impact rather than objective and component of "the whole of the action," the discussion in Chapter 30 is inadequate because it addresses only the effects of growth being pulled toward the export service areas due to more water being available in those areas, and does not address the displaced development effects of growth being pushed away from or precluded from occurring within the water export areas due to less water being available in those areas. The concept of displaced development was discussed by the California Supreme Court in *Muzzy Ranch Co. v. Solano County Airport Land Use Commission* (2007) 41 Cal.4th 372.

The fact that the BDCP is being proposed as a combined habitat conservation plan and water diversion project rather than water just a diversion project indicates that it is no longer possible to divert significant quantities of water for consumptive uses from the Delta or the upstream watershed without causing harm to listed species within the Delta. It is not certain whether the incidental take caused by the BDCP's proposed water diversions will be adequately minimized or mitigated through the conservation measures proposed to be implemented through the HCP/NCCP process, but it is virtually certain that if the BDCP project is approved, any further significant water diversions from the Delta or the upstream watershed would cause additional incidental take within the Delta that would be even more difficult to minimize or mitigate. To the extent the BDCP project causes less water to be available in the Delta and upstream watersheds to support growth and new consumptive uses, then growth that otherwise would have occurred within these areas will be displaced to other areas. Under these circumstances, the potential for displaced development away from the water export areas and its effects must be evaluated in the DEIR/EIS.

## **The DEIR/EIS Fails to Describe and Evaluate a Reasonable Range of Project Alternatives**

Section 15126.6, subdivision (a), CEQA Guidelines provides that "the EIR shall describe a reasonable range of alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant impacts of the project." The DEIR/EIS does not describe an adequate range of project alternatives, in addition to the No Project Alternative, that would avoid or substantially less the significant adverse impacts of the proposed project. Instead, the DEIR/EIS describes and evaluates fourteen variation of one component of the overall BDCP project. The fourteen variations built on the North Delta intake theme are distinguished only by different isolated conveyance alignments and capacities, but have similar impacts on Delta water quality, Delta water supply, and the Delta ecosystem. The only other alternative evaluated in the DEIR/EIS is a through-Delta/separate corridors alternative (i.e., no new North Delta intakes).

The DEIR/EIS does not analyze other alternative ways of achieving all or most of the stated project objectives, such as increasing storage upstream and/or downstream of the Delta, reducing demand through water use efficiency measures, development of new water through wastewater reuse, or upgrading to a screened intake to Clifton Court Forebay located on Victoria Canal.

One of the stated project objectives is to restore and protect the ability of the SWP and CVP system to deliver up to full contract amounts, when hydrologic conditions result in the availability of sufficient water. Unfortunately, the proposed BDCP project appears to interpret availability of sufficient water in terms of the availability of stored water and water year types, and not in terms of seasonal or monthly availability of water in the Delta. Consistent with the original BDCP Planning Principles, the DEIR/EIS must fully analyze alternatives that divert more water in wetter months when Delta outflows are high and reduce diversions during periods when Delta outflows are low. To meet California's water needs during drought periods and in normal years, it will be necessary to develop additional surface and groundwater storage. This will also ensure that only water that is surplus to the needs of the Delta and senior water right holders is exported. By not considering new storage, the proposed BDCP project is unable to capture surplus water in wetter months and reduce exports during drier periods. Therefore, the environmental analysis does not inform the public and cannot inform decision-makers on whether new North Delta intakes are the least environmentally damaging method to achieve all or most of the project objectives.

In particular, the Alternative 4 (proposed project), H1 Scenario (low outflow scenario), must be eliminated from further consideration because it relies on increasing Delta

exports (from 11,280 cfs up to 15,000 cfs) during dry periods when Delta outflows are lowest. Scenario H1 fails to satisfy the criteria for approval of a natural community conservation plan as provided in subdivision (a) of Section 2820 of the Fish and Game Code, and other operational requirements and flows necessary for recovering the Delta ecosystem and restoring fisheries under a reasonable range of hydrologic conditions, which will identify the remaining water available for export and other beneficial uses.

Chapter 3 of the DEIR/EIS describes various viable project alternatives that were suggested by stakeholders but were then dismissed by the project proponents because those alternatives either did not focus solely on new North Delta intakes and conveyance, or involved some uncertainties, but no more and often less than the alternatives that were retained.

The DEIR/EIS must be revised to describe and evaluate new alternatives based on the following principles inherent in the BDCP's stated project objectives:

- Increase the restrictions on exports from South Delta to protect fish from reverse flows and entrainment.
- Increase minimum Delta flow requirements to improve the aquatic ecosystem and improve water quality.
- Develop facilities to capture more water when it is surplus to the needs of the Delta and San Francisco Bay, including:
  - Additional diversion capacity;
  - Additional storage upstream of the Delta, south of the Delta, and possibly in the Delta; and
  - Consider intakes locations other than in the North Delta to provide physical assurances that water will be diverted only during high flow periods.
- Include other key actions to increase the reliability of California's water supply, including but not limited to:
  - Strengthening levees;
  - Increasing water use efficiency; and
  - Developing additional local sources of water.

This approach involves similar actions to the Portfolio Concept proposed by NRDC and others, but it places greater emphasis on meeting export water needs when surplus flow is available in the Delta, which will require investment in new storage. The original intent of the State Water Project was to export only water that is surplus to the needs of the Sacramento Valley and Delta. Project alternative that follow these principles would be consistent with the commitments made in the area of origin statutes and 1959 Delta

Protection Act, and their inclusion in the DEIR/EIS is necessary in order for that document to describe and evaluate a reasonable range of alternatives that would feasibly attain most of the basic objectives of the project but would substantially avoid or lessen any of the significant impacts of the project.

### **Specific Comments Regarding Chapter 7 of the BDCP and the Implementing Agreement**

Many of the duties of the Program Manager detailed on page 7-5 of the BDCP will be modified by provisions in the subsequently-released Implementing Agreement ("IA"). Nevertheless, consideration should be given in the BDCP and the IA to the Implementing Agency and its Program Manager reporting to the POG, which would then interface with the AEG. On page 7-13 of the BDCP, the limited role of the POG—the only decision-making body without the contractors—becomes apparent. We suggest there should be a strong and independent entity comprised of scientists in the governance structure, which is absent here; the Science person in the Implementation Office would not be sufficient to fulfill this role. In addition, we ask that there be a high degree of collaboration with and peer review of AEG, POG, and particularly the AMT and Real-time Operations decisions with the larger scientific community. The governance structure should be thoroughly revamped to remove inherent conflicts of interest posed by the presence of the contractors, provide the POG with direct responsibility over AMT and Operations Team functions, and establish a strong role for agencies representing the impacted Delta region.

The Stakeholder Council, described on page 7-19 of the BDCP, is not proposed as a decision-making body; instead, the structure described in the BDCP requires the Stakeholder Council to report to the Implementation Office Program Manager, which in turn is distanced from decision bodies. Landowners, discussed on page 7-22, are limited to presenting their issues to the Program Manager and have no recourse to an actual decision body. Landowners should have the right to voice their concerns to the decision body in a public hearing process, either in the first instance or as part of an administrative appellate process.

In section 7.2.8 of the BDCP document, on page 7-26, there is a note indicating that an appropriate mechanism to involve Delta counties in Plan implementation will be identified and incorporated into the final BDCP document. The IA does not provide further information on these promised efforts. We expect that the public comment period on the BDCP and IA will be reopened once a mechanism is proposed to the Delta counties, which in turn may require recirculation of the DEIR/EIS.

Section 4.2.1 of the IA lists the various findings required of CDFW to approve the BDCP as a NCCP. Given the programmatic and experimental nature of the conservation measures, the uncertainties expressed in the BDCP document and the DEIR/EIS, and the use of the Decision Tree process to apply adaptive management, we question whether a finding of rough proportionality can be supported by the record. (See IA, section 11.1.1, p. 40.)

The second bullet point of Section 4.2.2 of the IA, at page 14, incorrectly tasks CDFW with determining that the final EIR/EIS complies with CEQA. The determination that a final EIR complies with CEQA is part of the EIR certification process. (CEQA Guidelines, § 15090, subd. (a).) For a state project such as the BDCP, the state lead agency has exclusive responsibility and authority for certifying that the final EIR has been completed in compliance with CEQA (Pub. Res. Code, § 21100.) This responsibility cannot be delegated to a responsible agency such as CDFW, which is responsible only for determining whether the certified EIR is adequate for its own use. (CEQA Guidelines, § 15096, subd. (e).) The ORA makes certification of the final EIR a prerequisite for incorporation of the BDCP into the DP, but does not specify which agency is responsible for certifying the EIR and explicitly provides that nothing in the ORA affects any provision of CEQA (Water Code, §§ 85320, subd. (b)(2), & 85032, subd. (f).) Therefore, the authority and responsibility for certifying the final EIR continues to reside with DWR despite what is said in the IA.

In Section 7.2, at page 16, the Fish and Wildlife Agencies are obligated to fund an unspecified portion of the Conservation Strategy. We question why these agencies should assume this obligation for two reasons: first, it obligates taxpayers statewide to pay for remediation of impacts to the Delta caused by past operations of the SWP and CVP systems rather than placing that tax burden on the contractor service areas that directly benefited from those operations; second, it represents a long-term funding commitment by public agencies that are subject to legislative oversight and an annual budget cycle. At a minimum, the IA must acknowledge that any State funding of either specific or yet-to-be-defined conservation measures will remain fully contingent on legislative appropriation throughout the full term of the NCCP.

There is an apparent conflict-of-interest in the governance structure proposed in the BDCP and the IA. The state and federal contractors, as applicants/permittees are on all but one of the decision bodies, and the IA requires their participation on the AEG. (IA, p. 15.) In addition, relative to the BDCP, the IA more clearly vests power in bodies on which the contractors sit. The IA allows Supporting Entities, which include the contractors, to use their respective authorities to implement aspects of the BDCP, further blurring the line between agency oversight and applicant/permittee interests. Conversely, the Delta counties and other local agencies with jurisdiction over impacted areas are not included in any decision bodies. We find the governance structure



presented in the IA and the BDCP inadequate and rife with conflict, constituting a misuse of public trust resources. We question inclusion of contractors on any governance body. At the very least, the establishment of an agency governance buffer between the applicants and the agencies, independent agency and scientific oversight, and full inclusion of the impacted agencies in all decision bodies should be required.

The IA provides a clearer delineation of the responsibilities of the various groups than is provided in the BDCP, and appears to shift more responsibilities onto the AMT, including acting as the decision body for Decision Tree matters such as adjusting outflows during critical periods and approving changes to the Conservation Measures. The AMT is given broad powers to change or abandon Conservation Measures through adaptive management (p. 29), and move funding and/or use supplemental funding sources (pp. 30, 32). There is a clear delineation in both the BDCP and the IA between the conveyance facility (CM1), operations and the other Conservation Measures (CM 2-22) relative to authorities, level of implementation certainty, and funding. There is either restricted or no ability for public participation at meetings of these bodies, with the exception of meetings of the Stakeholder Council, which are public and to which the County is relegated one of more than 36 seats (pp. 62-64). The Stakeholder Council can advise and comment on Plan Implementation only to the Program Manager, rather than directly to any of the decision bodies.

The IA appears skewed toward assurances for the contractors at the expense of the wildlife agencies, Delta water users, and the environment. Under the IA, the contractors are given limited liability and a 50-year permit while the wildlife agencies receive an inchoate conservation program with uncertain funding. Only a portion of funding is assured by the contractors for the programmatic Conservation Measures (pp. 1, 16, & 36), with the wildlife agencies and the taxpayers of the State generally left to cover the balance (p. 16). Because the conservation strategy proposed in the BDCP is so broad and allows so much flexibility in implementation, it provides only weak protections as a result. Significantly, the IA provides that changes to CMs would be handled by the AMT, which is given broad discretionary authority, and do not require changes to the BDCP or to the Permits (page 36). In addition, the contractors would not be responsible for additional costs; instead, the State and its taxpayers would be required to pay for any changes other than those identified in the IA. The IA provides that failure to achieve a biological goal would not constitute non-compliance with the Plan (p. 24). Under the IA, the wildlife agencies must authorize take beyond that included in the Plan (p. 19) and take of migratory birds in addition to aquatic and terrestrial species (p. 20), but the agencies may not hold the contractors accountable for failure to achieve biological goals contained in the BDCP (p. 24). The IA requires wildlife agencies to rely heavily on highly uncertain adaptive management and decision tree processes (p. 27) but limits them to operational adjustments contained in the Plan (pp. 27, 28). The

wildlife agencies cannot require additional land or financial compensation (p. 51), and cannot suspend or revoke permits should biological goals not be met (p. 24).

From an operations standpoint, the IA would allow permitting for the full range of outflow scenarios, thereby allowing for the full range of North Delta diversions outlined in the BDCP (pp. 25 & 26), and the conflict-ridden AMT would have jurisdiction over decision tree matters, dealing with flow during critical periods. The adaptive management program would go into effect as soon as the BDCP is approved and permits issued. Changes to Conservation Measures approved as adaptive management would not require an amendment to the BDCP or permits (page 36). It is inappropriate and a conflict for contractors to sit on the Real-time operations Team, and the non-voting status that clearly can be changed at will (p.27) is unacceptable.

Credit for any future mitigation of past impacts is discussed on page 41 of the IA. Given the programmatic and uncertain nature of future mitigation and the underlying questions of whether and to what extent the taxpayers will be aiding in payment of future mitigation, this section should be removed from the IA until the question of the public interest versus private mitigation is resolved.

## Attachment A

### Analysis of BDCP Project Changes to Delta Exports

One of the alleged benefits of the Bay Delta Conservation Plan (BDCP) is that it will reduce the damaging effect of exports from the south Delta. There is general agreement that the location of the south Delta export locations (Clifton Court Forebay and the Jones Pumping Plant) cause reverse flows that direct fish toward the export pumps and adversely impact fish populations.

Another feature of the BDCP highlighted by its proponents is that it will operate according to a Big Gulp, little Sip principle. This principle was defined in the original planning principles of the BDCP Steering Committee (BDCP March 2009 "An Overview and Update") as "*Divert more water in the wetter periods and less in the drier periods.*"

An inspection of the monthly Delta export data from the BDCP modeling studies suggest that neither of these alleged benefits of the BDCP is actually true. Currently, the maximum rate of exports from the Delta during drier periods is about 11,300 cubic feet per second (6,680 cfs at the SWP export facility plus 4,600 cfs at the CVP pumps.). The modeling data, however, show that in many months, the combined SWP and CVP exports from the south Delta could be as high as 14,400 cfs. This is an increase in south Delta pumping of 3,100 cfs.

The same modeling simulations of the BDCP project alternatives suggest that the BDCP proposed project will increase rather than decrease total SWP and CVP exports during periods of low Delta outflow (drier months). During periods of high Delta outflow, there is no significant increase in export diversions, in large part because farmers' fields are already wet and south-of-Delta reservoirs quickly fill.

Increasing exports from the Delta in the dry months is also inconsistent with the 2009 Delta Reform Act (Water Code Section 85021) which states that 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. The BDCP proposed project includes no actions to improve regional self-reliance for water through investment in water use efficiency, water recycling, advanced water technologies, local and regional water supply projects, and improved regional coordination of local and regional water supply efforts.

#### Changes in South Delta Exports with BDCP Proposed Project

Diversion of water into Clifton Court Forebay is limited by a U.S. Army Corps of Engineers permit. The diversion rate is restricted to a three-day average inflow of 6,680 cfs and a daily average inflow of 6,993 cfs. From December 15 and March 15, the inflow can be increased by one-third of the San Joaquin River inflow to the Delta at Vernalis (for flows equal to or greater than 1,000 cfs.)

Attachment A  
Analysis of BDCP Project Changes to Delta Exports

The SWP also has a permit to export an additional SOD cfs between July 1 and September 30 to replace pumping reductions earlier in the year to benefit Delta fish species. This increases the SWP limit during the summer limit to 7,180 cfs.

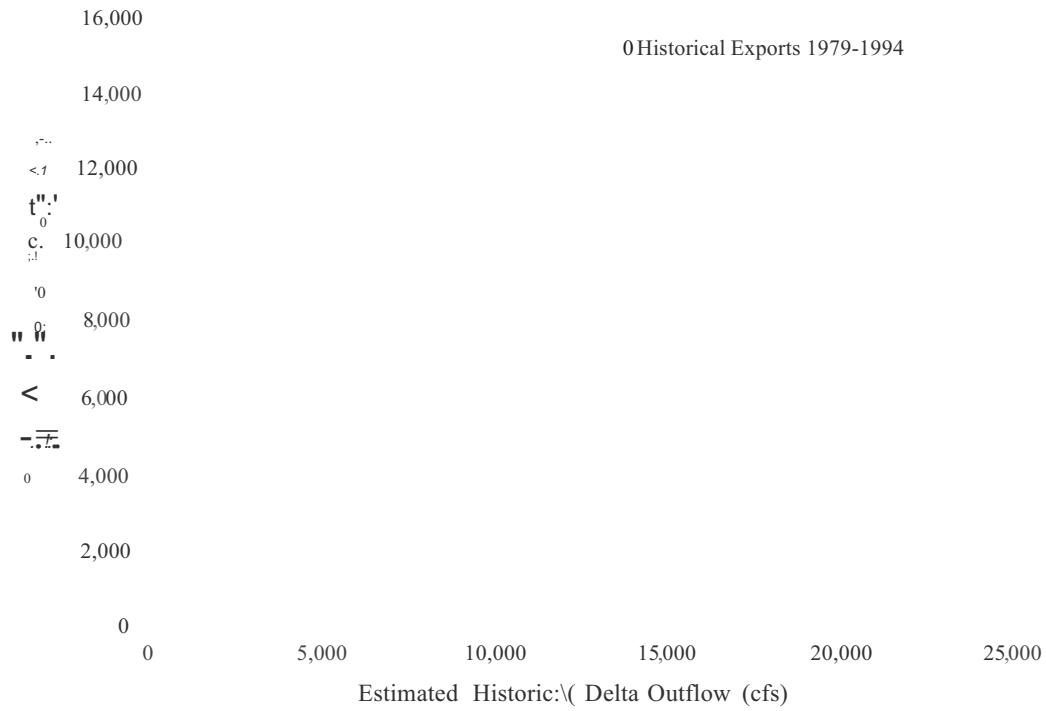
The CVP export capacity at Jones Pumping Plant near Tracy is about 4,600 cfs, so exports from the Delta are generally restricted to a total of 11,280 cfs, or 11,780 cfs from July-September.

*It is not obvious from when reading the DEIR/EIS that the BDCP proponents are proposing to eliminate the existing U.S. Army Corps of Engineers limits on inflow to Clifton Court Forebay (DEIR/EIS page 3-32, line 12). The BDCP proponents also assume in the DEIR/EIS that an additional limit on exports imposed by the 2009 NMFS Biological Opinion, the San Joaquin River inflow/exports ratio for April and May would no longer apply. This limit was assumed for the BDCP baseline condition cases ("existing biological conditions"), but was not included in the BDCP operations scenarios (Draft BDCP, page SC.2-4, line 7).*

Both of these relaxations of existing limitations will allow an increase in exports from the south Delta. As will be shown below by plotting monthly-averaged exports as a function of monthly-averaged Delta outflow, and despite the BDCP purpose of improving ecosystem conditions by reducing exports from the south Delta, the BDCP proponents are planning to significantly increase exports from the south Delta in many months. Contrary to the "Big Gulp, little Sip" concept, most of the increases would occur during the driest months when Delta outflows are the lowest.

Figure A-1 shows the historical Delta exports as a function of Delta Outflow for the years since the Bay-Delta Accord and SWRCB Water Rights Decision 1641, and the earlier period (1979-1994) after adoption of SWRCB Water Rights Decision 1485. D-1485 introduced minimum Delta outflow requirements and these were made even more stringent in D-1641. The south Delta exports are limited to 11,280 cfs with an extra 500 cfs allowed July-September. The additional allowance based on San Joaquin inflow to the Delta (December 15-March 15) typically does not apply until Delta outflows are much higher than 25,000 cfs.

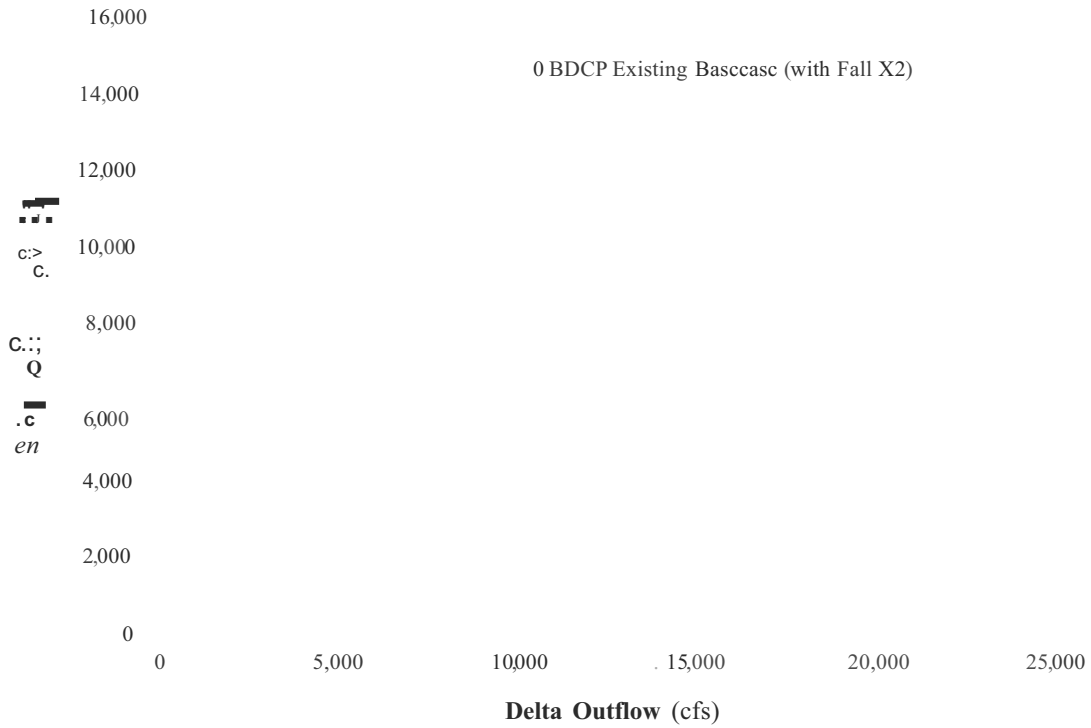
### Historical Delta Exports- DAYFLOW



*Figure A-1: Historical Delta exports as a function of Delta Outflow for the years since the Bay-Delta Accord and SWRCB Water Rights Decision 1641, and the earlier period (1979-1994) after adoption of SWRCB Water Rights Decision 1485. D-1485 introduced minimum Delta outflow requirements and these were made even more stringent in D-1641. Combined SWP and CVP exports from the south Delta are typically limited to 11,280 cfs, but an extra 500 cfs can be diverted*

Figure A-2 shows the south Delta export data from an existing basecase simulation (with Fall X2) for the BDCP, also as a function of Delta outflow. This simulation was based on historical hydrology for water years 1922-2003. However, in this DWR planning study, the level of development and demands are the same for the whole 83-year period. Figure A-2 shows similar results as the historical data (Figure A-1).

## South Delta Exports - BDCP Existing



*Figure A-2: South Delta exports as a function of Delta Outflow for a BDCP existing base case (with Fall X2) for outflows up to 25,000 cfs. The BDCP is being promoted as improving the Delta ecosystem by reducing exports from the south Delta. The BDCP proposed project, therefore, should be expected to reduce south Delta exports well below 11,280 cfs especially during drier months when fish species are stressed the most.*

### South Delta Exports- BDCP HOS Scenario

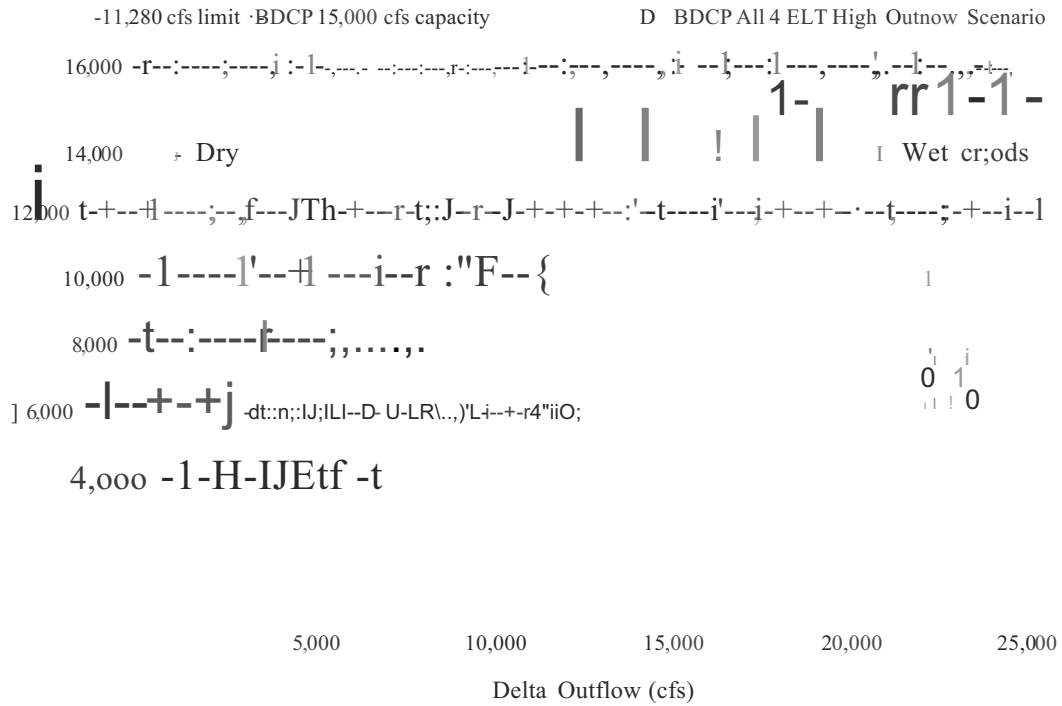


Figure A-3: South Delta exports as a function of Delta Outflow for BDCP Early Long Term Alternative 4 High Outflow Scenario for outflows up to 25,000 cfs. A goal of the BDCP is to improve ecosystem conditions in the south Delta by reducing exports from the south Delta. The BDCP proposed project may reduce south Delta exports in wetter months but significantly increases south Delta exports in a number of drier months when fish species are already stressed.

### South Delta Exports - BDCP LOS Scenario

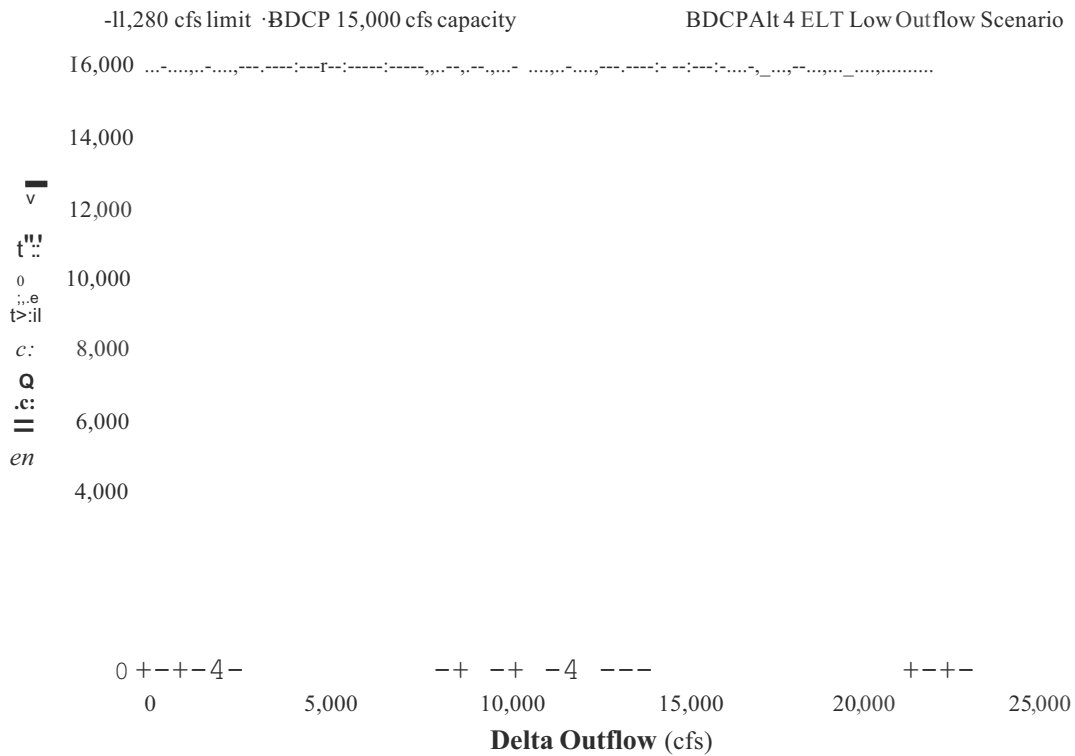
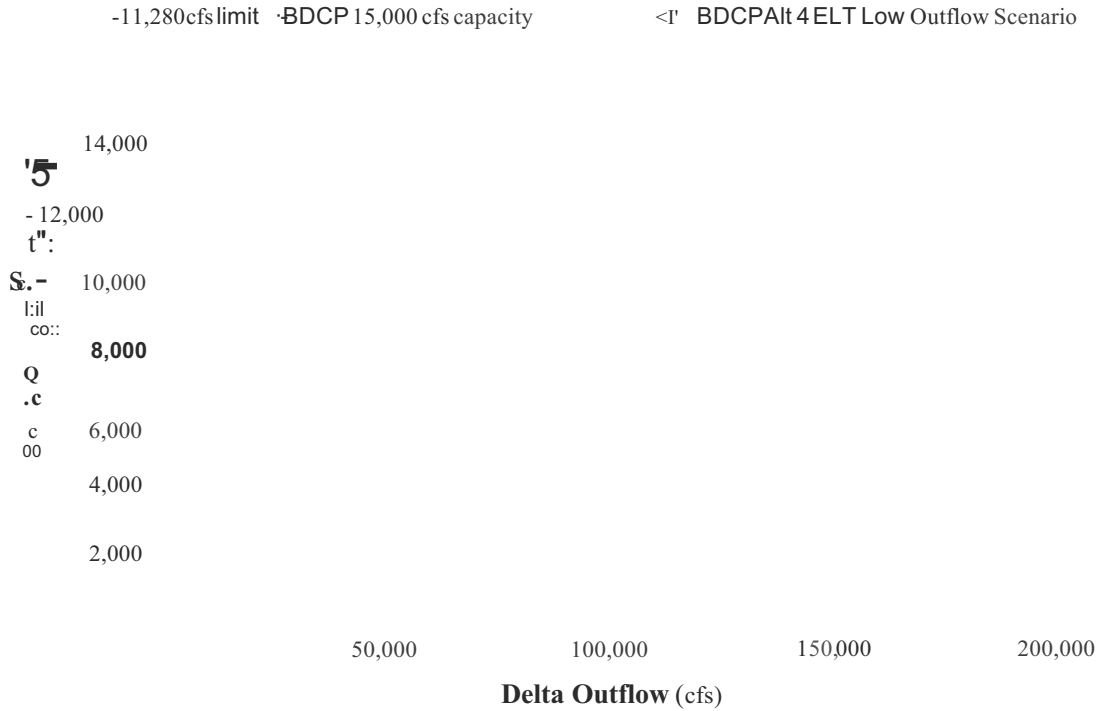


Figure A-4: South Delta exports as a function of Delta Outflow for BDCP Early Long Term Alternative 4 Low Outflow Scenario for outflows up to 25,000 cfs. A goal of the BDCP is to improve ecosystem conditions in the south Delta by reducing exports from the south Delta. The BDCP proposed project needs additional limits on exports because it significantly increases, rather than decreases south Delta exports in a number of months, and all those increases occur during the driest months when fish species are already stressed.



### South Delta Exports- BDCP LOS Scenario



*Figure A-5: South Delta exports as a function of Delta Outflow for BDCP Early Long Term Alternative 4 Low Outflow Scenario. This graph is the same as Figure A-4 but shows a larger range of Delta outflows (i.e., up to 200,000 cfs). A goal of the BDCP is to improve ecosystem conditions in the south Delta by reducing exports from the south Delta. The BDCP proposed project is inadequate and fails to meet the original BDCP goals because it significantly increases, rather than decreases, south Delta exports, and all those increases occur during the driest months when fish species are already stressed.*

#### Changes in Total Delta Exports with BDCP Proposed Project

According to the "Divert more water in the wetter periods and less in the drier periods" principle, BDCP should be expected to export less during periods of low outflow, i.e., export less under existing infrastructure and operation rules.

The total export graph for existing conditions is the same as the plot of south Delta exports (Figure A-2)

because there are currently no north Delta intakes or isolated facilities.

### Total SWP and CVP Exports - BDCP HOS Scenario

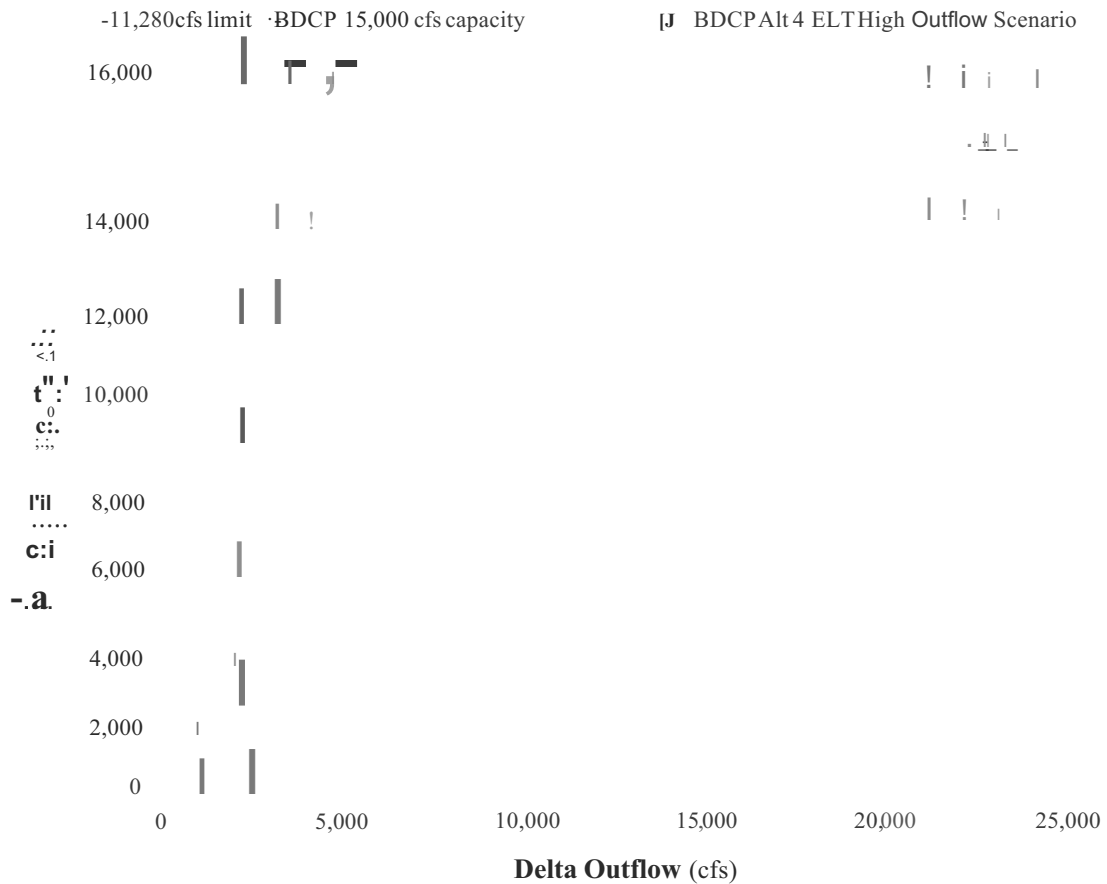
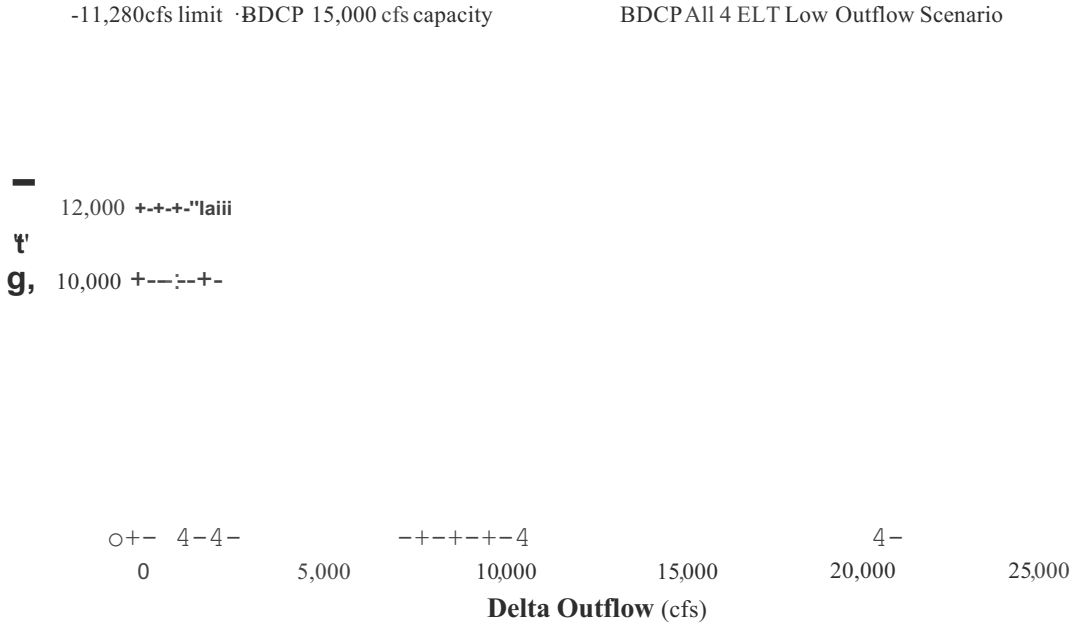


Figure A-6: Total exports as a function of Delta Outflow for BDCP Early Long Term Alternative 4 High Outflow Scenario. Contrary to the BDCP "Big Gulp, Little Sip" planning principle, the BDCP proposed project would increase exports from the Delta during drier months {low Delta outflow}. During wetter months (e.g., outflows greater than 10,000 cfs), there are only a few months when exports are greater than existing limit. Without additional south-of-Delta and near Deltastorage, the BDCP alternatives only have limited capacity to capture surplus water ("Big Gulp").

## Total SVP and CVP Exports - BDCP LOS Scenario



*Figure A-7: Total exports as a function of Delta Outflow for BDCP Early Long Term Alternative 4 Low Outflow Scenario. Contrary to the BDCP "Big Gulp, Little Sip" planning principle, the BDCP proposed project would increase exports from the Delta during drier months (low Delta outflow). The increase in exports in drier months is even worse than for the High Outflow Scenario. During wetter months (e.g., outflows greater than 10,000 cfs), there are only a few months when exports are greater than existing limit. Without additional south-of-Delta and near Delta storage, the BDCP alternatives only have limited capacity to capture surplus water ("Big Gulp").*

### Total SWP and CVP Exports - BDCP LOS Scenario

-11,280 cfs limit -BDCP 15,000 cfs capacity (BDCP Alt 4 ELT Low Outflow Scenario)

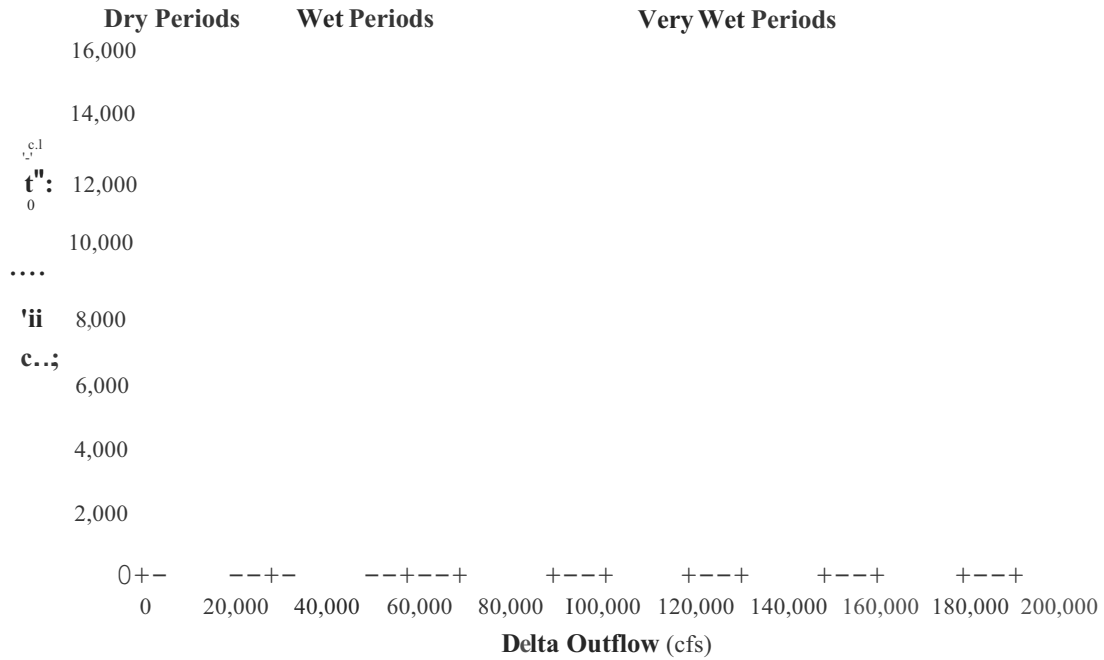


Figure A-8: Total exports as a function of Delta Outflow for BDCP Early Long Term Alternative 4 Low Outflow Scenario. This graph is the same as Figure A-7, but extends the range of Delta outflows to 200,000 cfs. During very wet periods (e.g., outflows greater than 60,000 cfs), there are a some of months when total exports approach the 15,000 cfs maximum, but also many months when total exports are less than existing levels. Without additional south-of-Delta and near Deltastorage, the BDCP alternatives only have limited capacity to capture surplus water during periods of high Delta outflow.

### Total SWP and CVP Exports -- Alternative 3

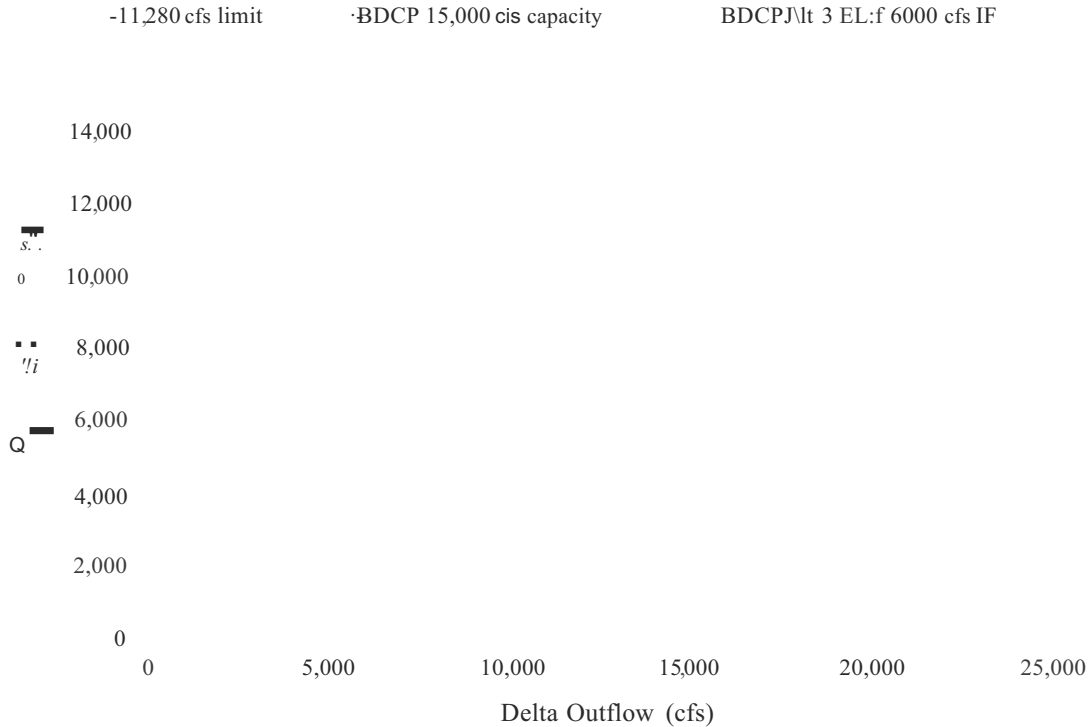


Figure A-9: Total exports as a function of Delta Outflow for BDCP Early Long Term Alternative 3 which has only 6,000 cfs of north Delta intake tunnel capacity. There are more months with exports in excess of 11,300 cfs during wetter periods (high outflow) than for Alternative 4 (9,000 cfs isolated facility). The reasons for this should be discussed and disclosed in the EIR/EIS.

To ensure that the BDCP operations actually reduce exports during periods of low Delta outflow, it will be necessary for the SWRCB and fishery agencies to set limits on exports based on Delta outflow. The minimum Delta outflows in D-1641 could be increased to 4,000 cfs to provide more protection for fish species. If the current lowest value of 3,000 cfs were retained, then the total exports could be limited to 3,000 cfs. Similarly, if the Delta outflow were 7,100 cfs, the combined SWP and CVP exports could not exceed, say, 10,000 cfs. No more than 13,000 cfs could be exported unless the Delta outflow remained at least 11,400 cfs.

These limits on total exports are hypothetical, but are consistent with the principle of reducing exports in drier months, and reducing reliance on the Delta for water supply.

Attachment A  
 Analysis of BDCP Project Changes to Delta Exports

These hypothetical "Little Sip" limits on total exports are shown in Figure A-10. The "Little Sip" export limits are compared with the same low Outflow Scenario data plotted in Figure A-7. The limit on total exports increases with increasing Delta outflow, and would allow for export increases in wetter periods to capture water when it is surplus.

### Total SWP and CVP Exports - BDCP LOS Scenario

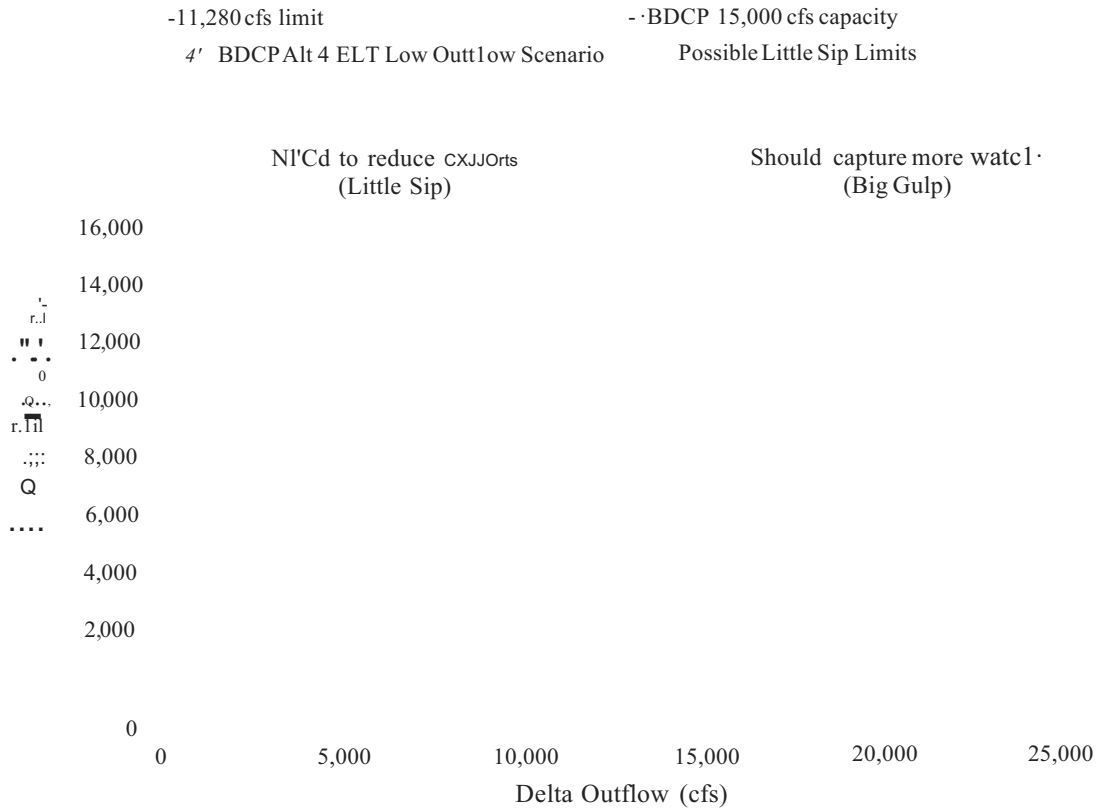


Figure A-10: Total exports as a function of Delta Outflow for BDCP Early Long Term Alternative 4 Low Outflow Scenario. Exports would increase rather than decrease during drier periods (low Delta outflow) and fail to increase to capture more water during wet periods (high Delta outflow). Limiting exports to no more than shown by the green line would ensure that only "little sips" are taken in drier periods to protect fish, and would allow for export increases in wetter periods to capture water when it is surplus.

The BDCP proposed project is deficient because it fails to reduce exports during drier months. This is in part due to the assumption that key operation limits on export operations will be eliminated (e.g., the Army Corps limits on Clifton Court inflow and NMFS Biological Opinion limits on the San Joaquin inflow to south Delta exports limit).

Attachment A  
Analysis of BDCP Project Changes to Delta Exports

The BDCP DEIR/EIS is also inadequate because it fails to analyze any alternatives that can increase exports above existing levels in wetter months. This is not possible without **new** storage south of and in or immediately adjacent to the Delta.

The BDCP proposed project is also inconsistent with the 2009 Delta Reform Act because it relies on increased exports from the Delta, especially in the driest months. The DEIR/EIS must be revised to include alternatives that do not increase south Delta exports, that reduce total exports in drier months, and capture water to storage in wetter months when flow is available that is surplus to the needs of the Delta ecosystem, Delta water quality, in-Delta water users and the Delta as a place.



## Attachment B

### BDCP Water Quality Impacts in Barker Slough and Suisun Marsh Areas

The BDCP DEIR/EIS is inadequate because it fails to disclose the impacts of the proposed project and other alternatives on the salinity of water diverted by north Delta farmers in the Barker Slough area (as represented by electrical conductivity, EC). Salinity impacts in some irrigation areas in the Delta are discussed but not the areas of the north Delta within or close to Solano County.

Figure B-1 presents daily EC data for the Barker Slough area for the period October 1976 through October 1983. The data are from four simulations performed for the BDCP using DWR's DSM2 water quality model. The four simulations are:

- No Action Alternative at Late Long Term
- Proposed Project Alternative 4, low Outflow Scenario (H1) at Early long Term
- Proposed Project Alternative 4, High Outflow Scenario (H4) at late long Term
- Proposed Project Alternative 4, low Outflow Scenario (H1) at Late long Term

Note that the BDCP only simulated Delta water quality for the period 1976-1991 and only used data for a single drought period, water years 1987-1991, when disclosing drought year impacts (DEIR/EIS page 8-135, line 23). The DEIR/EIS fails to disclose the impacts on water quality during other drought periods such as 1928-1934 and 1976-1977. The drought that started in 1987 did not end until 1993 (an above normal year) and 1993 was followed by another critical water year. The period 1987-1991 does not even represent the full extent of the 1987-1992 or 1987-1994 drought.

The data in Figure B-1 suggest that the BDCP proposed project will not only significantly increase the salinity of irrigation water for farmers in and near Solano County, but will change the time of the periods of high salinity. The peaks of salinity for the no action alternative at late long term (LLT) occur primarily in February and March and are due to local agricultural drainage (according to the DSM2 fingerprint analysis). The peak salinities for the proposed project at IT occur earlier in some years (in the fall) and are due to increased seawater intrusion.

The BDCP simulations of daily EC in the Barker Slough area show that the salinity increases are very large for the low Outflow Scenario and smaller for the High Outflow Scenario (which includes higher outflows in the fall to meet Fall X2 and higher outflow requirements in the spring). The salinities are highest during the 1976-1977 drought years.

The data in Figure B-1 also suggest that habitat restoration in the north Delta after early long term (ELT) and the resulting changes in local flow patterns, combined with additional sea level rise, will cause significant adverse impacts to irrigation water quality in this region. The salinities for the Low Outflow scenario at ELT are much smaller and primarily due to local agricultural drainage.

## Barker Slough EC

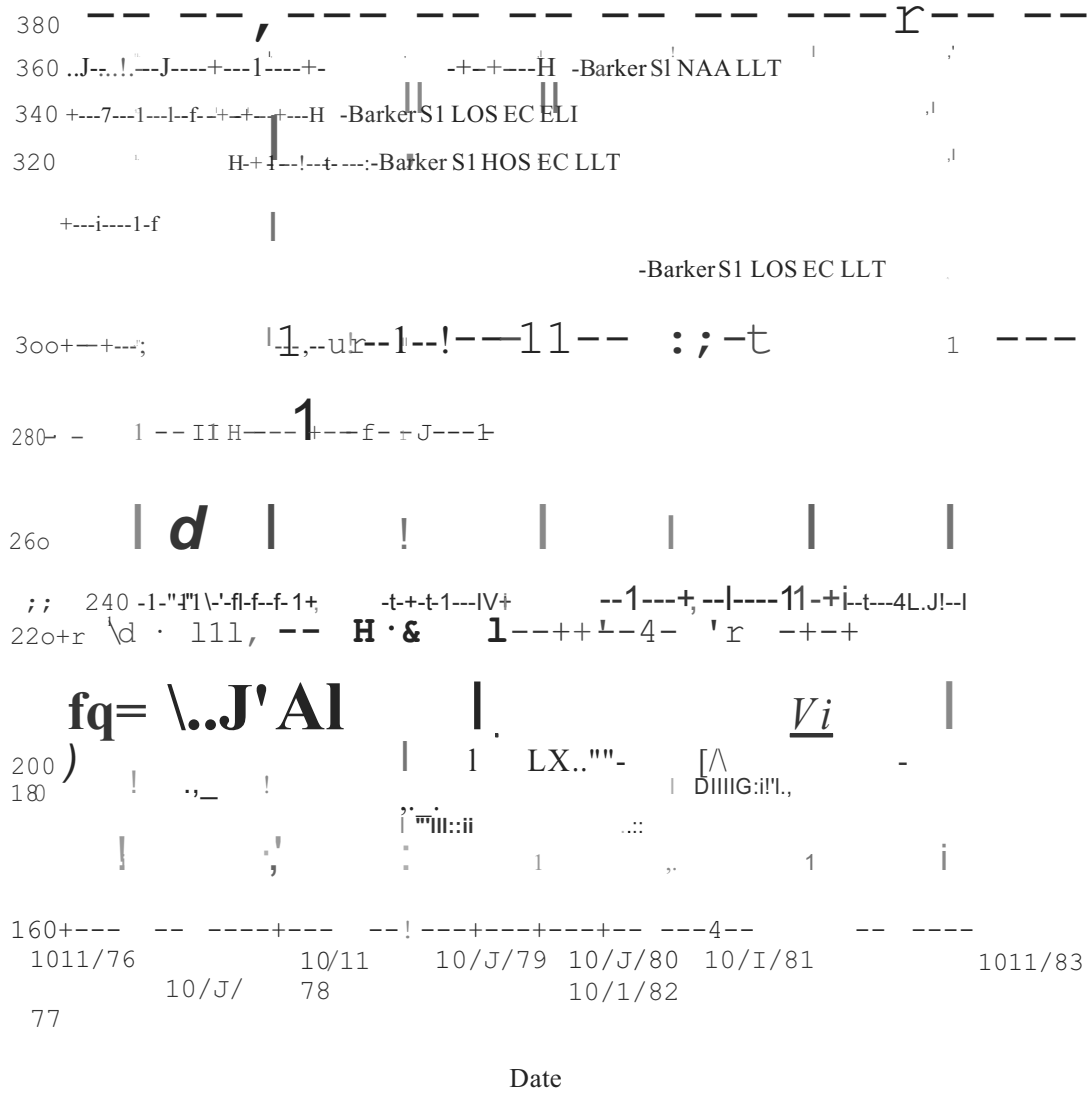


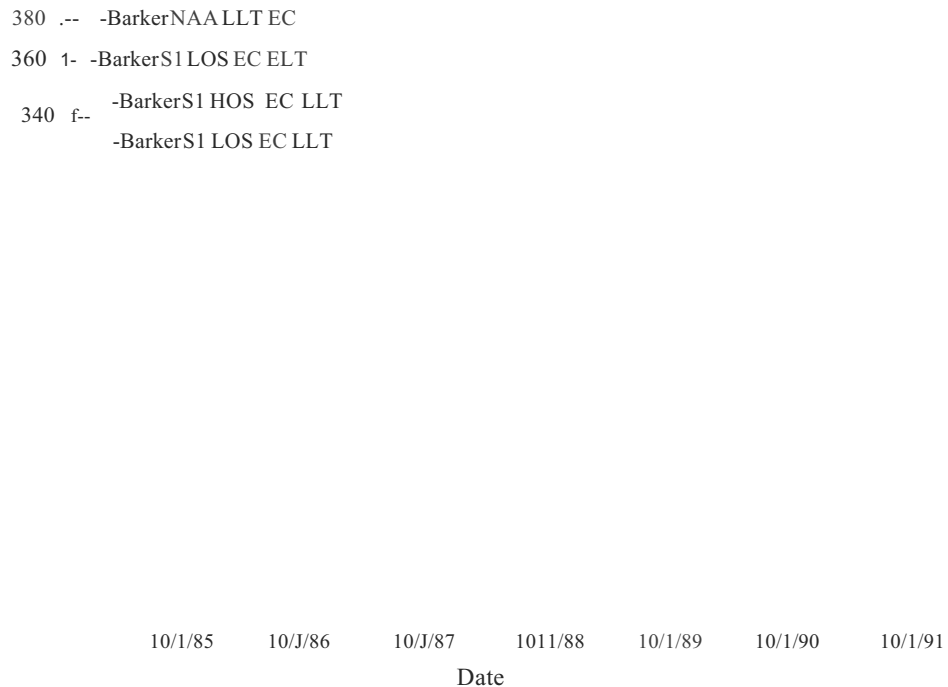
Figure 8-1: Variation in daily EC data for the Barker Slough area from October 1976 to October 1983 from the BDCP water quality modeling. Four simulations are shown; No Action at late long term, proposed project Low Outflow Scenario at ELT and LLT and proposed project High Outflow Scenario at LLT.



Attachment B  
 BDCP Water Quality Impacts in Barker Slough and Suisun Marsh Areas

Figure 8-2 shows the variations in EC for the same scenarios for the period October 1984 through October 1991.

### Barker Slough EC



*Figure 8-2: Variation in daily EC data for the Barker Slough area from October 1984 to October 1991 from the BDCP water quality modeling. Four simulations are shown; No Action at late long term, proposed project Low Outflow Scenario at ELT and LLT and proposed project High Outflow Scenario at LLT.*

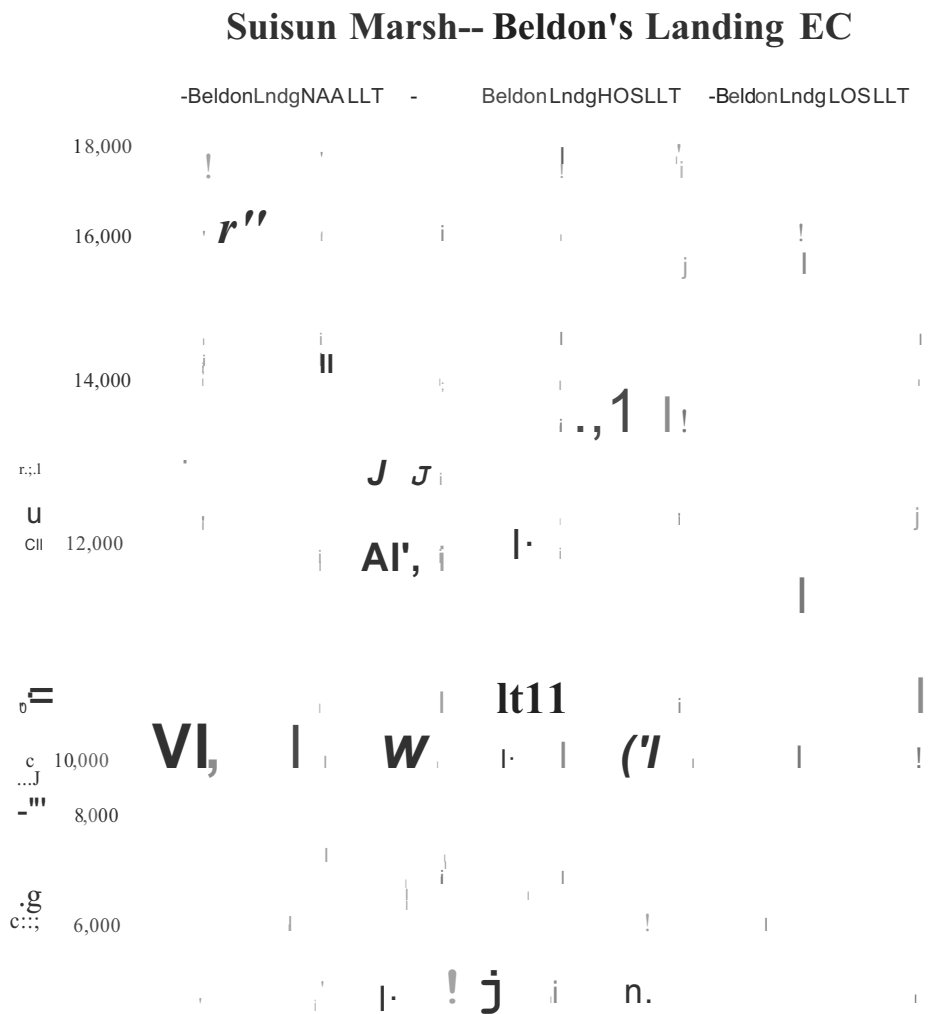
Suisun Marsh, in Solano County, is one of the largest contiguous estuarine wetlands in North America. The Marsh is a resting and feeding ground for millions of waterfowl migrating on the Pacific Flyway, and provides essential habitat for numerous birds, mammals and fish, including threatened and endangered species. The quality of water in Suisun Marsh is managed to promote preferred waterfowl habitat and retain wetland resource values.

The salinities in eastern Suisun Marsh are controlled under SWRCB Water Rights Decision 1641 at three locations: Sacramento River at Collinsville, Montezuma Slough at National Steel, and Montezuma Slough near Beldon's landing. The western Delta salinities are regulated at Chadbourne Slough at Sunrise Duck Club and Suisun Slough, 300 feet south of Volanti Slough.

Attachment B  
 BDCP Water Quality Impacts in Barker Slough and Suisun Marsh Areas

The DEIR/EIS is inadequate because it only assesses Suisun Marsh EC qualitatively, using average EC for the entire period modeled (1976-1991)- see Chapter 8 of the DEIR/EIS at page 8-157. The 82-year averages suggest that the BDCP proposed project would substantially increase salinities at Montezuma Slough at Beldon's Landing (i.e., over a doubling of concentration in December through February) (DEIR/EIS, Appendix 8G, Figure CI-8). This will seriously impair the ability of Suisun Marsh landowners to manage water quality and will adversely impact fish and wildlife beneficial uses. However, the 82-year averages do not disclose sufficient detail about the timing and magnitude of the salinity changes for individual months of different water year types.

Figure B-3 shows the BDCP simulations of the variation in daily EC in Suisun Marsh at Beldon's Landing from October 1976 through October 1983. There are significant adverse impacts to salinity for the proposed project for both the Low Outflow and High Outflow scenarios. The largest increases in salinity occur primarily in the fall. The impacts are greatest for the Low Outflow scenario which assumes there will not be any Fall X2 requirements.



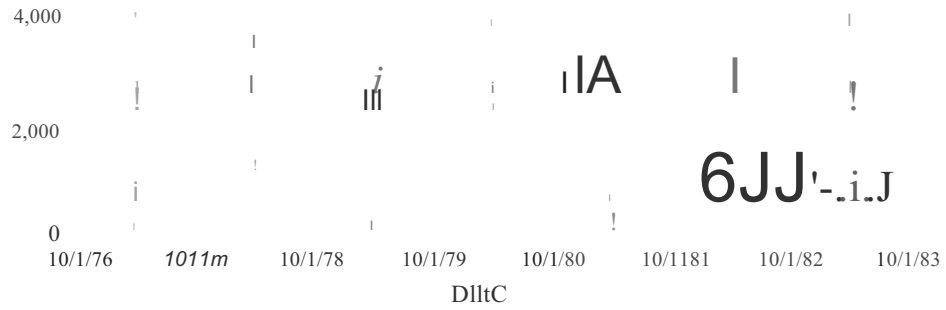


Figure 8-3: Variation in daily EC data for the Montezuma Slough at Beldon's Landing from October 1976 to October 1983 from the BDCP water quality modeling. Three simulations are shown; No Action at late long term, proposed project Low Outflow Scenario at LLT, and proposed project High Outflow Scenario at LLT.

Figure B-4 shows the corresponding Beldon's Landing salinity data (EC) for the period October 1984 through October 1991.



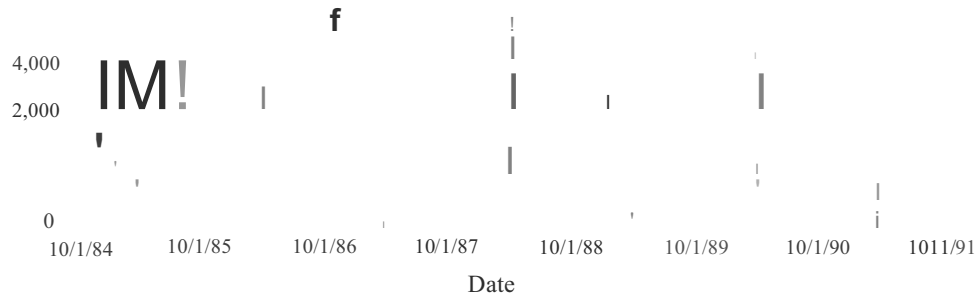


Figure 8-4: Variation in daily EC data for the Montezuma Slough at Beldon's Landing from October 1984 to October 1991 from the BDCP water quality modeling. Three simulations are shown; No Action at late long term, proposed project Low Outflow Scenario at LLT, and proposed project High Outflow Scenario at LLT.

These increased EC levels in Suisun Marsh are substantial and will have adverse impacts on marsh beneficial uses, and must be mitigated.



