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October 30, 2015

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David Murillo, Regional Director  
U.S. Bureau of Reclamation

BDCP/WaterFix Comments  
P.O. Box 1919  
Sacramento, CA 95812  
Via Email: [BDCPComments@icfi.com](mailto:BDCPComments@icfi.com)

Re: Partially Recirculated Draft Environmental Impact Report/Supplemental  
Draft Environmental Impact Statement for the Bay Delta Conservation  
Plan/California WaterFix

Dear Mr. Cowin and Mr. Murillo:

The Kern County Water Agency (Agency) appreciates the opportunity to comment on the Partially Recirculated Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement (RDEIR/SDEIS) for the Bay Delta Conservation Plan/California WaterFix (Project).

The Agency was created by the California Legislature in 1961 to contract with the California Department of Water Resources (DWR) for delivery of State Water Project (SWP) water. The Agency has long-term contracts with local water districts in Kern County to deliver SWP water, and is also involved in several groundwater banking programs in the region. The Agency is one of several Public Water Agencies (PWAs) that is expected to provide funding for the Project.

The Agency is supportive of the Project and believes it has the potential to help achieve California's co-equal goals of improving water supply reliability and enhancing the ecosystem of the Sacramento-San Joaquin Delta (Delta). Recent analysis indicates that the Project will not only increase water supply reliability, but will reduce the risk of levee failure, improve water quality, result in economic benefits to the State and nation, and generally improve the Delta ecosystem and environment. The Agency supports the proposed conveyance system, which will isolate and protect water supplies and help restore natural flow patterns in the Delta for the benefit of native species. The Agency also

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supports DWR and U.S. Bureau of Reclamation's (USBR) recognition that changing conditions in the Delta will require ongoing scientific review and real-time monitoring so water operations can be effectively adapted over time in response to emerging science and the evolving ecosystem, while providing water supplies necessary to support the economy of the State.

The alternatives in the RDEIR/SDEIS serve as an important initial step in developing a workable solution to the challenges facing California's water resources and the Delta. The alternatives, however, do not currently provide the Agency and the farmers and residents it serves with a Project that is economically feasible. As described in further detail below, additional efforts need to be taken to reduce the cost of the Project, protect the Project's yield, and improve the likelihood that the Project will be constructed and implemented in a manner that improves water supplies at an affordable cost. In addition, the RDEIR/SDEIS should be revised to improve the readability of the document.

#### **1. Operational Criteria.**

The Agency is concerned that the operational criteria currently set forth in the RDEIR/SDEIS result in a Project that is not economically viable for the Agency. In particular, the Agency is concerned with the water supply and cost implications of the fall and spring outflow requirements (RDEIR/SDEIS at 4.1-8).

Decisions relating to implementation of the fall and spring outflow requirements should be based solely on a comprehensive and critical appraisal of the best available scientific information. While there is some evidence that there is a correlation between longfin smelt abundance and freshwater outflow in the spring, other evidence calls into question this correlation between flow and abundance (RDEIR/SDEIS at 4.3.7-36). Furthermore, it is possible that to the extent the correlation exists, it is not demonstrative of a causal relationship. A more compelling case may be made that there is a causal relationship between abundance and local precipitation events, which is being masked by the abundance/outflow correlation due to the tight relationship between local precipitation and outflow. Given these scientific uncertainties, the operational criteria should be revised to be less stringent and to provide for additional flexibility.

For example, the operational criteria for April, May and June currently set forth specific allowable Old and Middle River (OMR) flows that have a linear relationship with flows measured at Vernalis (RDEIR/SDEIS at 4.1-8). These criteria effectively preclude the Real Time Operations team or the Adaptive Management Program from determining that, in certain circumstances when the risk of entrainment of listed fish is low, it may be appropriate for OMR flows to differ from those prescribed by the criteria. The criteria should be revised to not preclude the relaxation of operational requirements when the potential for take of listed fish is low.

Similarly, the operational criteria for June provide that, if Vernalis flows exceed 3,500 cfs, then OMR flows must be at least zero cubic feet per second (cfs), and could be required to reach 2000+ cfs (RDEIR/SDEIS at 4.1-8). These requirements are much more stringent than any requirement imposed pursuant to the 2008 and 2009 biological opinions, or any other regulatory scheme. These requirements should be revised to provide for less stringent operating criteria.

It is also important to note that the requested revisions to the operational criteria are appropriate because of the new regulatory scheme contemplated by the RDEIR/SDEIS. Specifically, the RDEIR/SDEIS reflects the fact that the three new alternatives would not serve as Habitat Conservation Plans/Natural Community Conservation Plans under section 10 of the Endangered Species Act (ESA) and the Natural

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Community Conservation Planning Act (NCCPA), respectively. Under the new alternatives, DWR and USBR would not seek 50-year permits under the ESA/NCCPA, but rather would obtain incidental take coverage under Section 7 of the ESA and Section 2081(b) of the California Endangered Species Act (CESA). This difference is significant because Section 7 and Section 2081(b) involve lower regulatory standards than Section 10 and the NCCPA. More specifically, Section 10 requires a permit applicant to fully comply with Section 7, as well as satisfy additional issuance criteria. Similarly, the NCCPA requires affirmative conservation, whereas Section 2081(b) requirements only specify that mitigation must be roughly proportional to project impacts. Due to these relaxed regulatory standards, the operational criteria in the RDEIR/SDEIS are not required to be as stringent as if proceeding under the original regulatory scheme (i.e., Section 10/NCCPA). Thus, the requested revisions to the operational criteria are fully consistent with the new alternatives set forth in the RDEIR/SDEIS.

Finally, in addition to revising the operational criteria, the Agency requests that the description of the alternatives in the RDEIR/SDEIS be revised to clarify that the spring outflow criteria will be satisfied in accordance with the following hierarchy:

- a. Available State and federal public funding will be used to purchase water necessary for spring outflow (e.g., through Proposition 1 funding).
- b. State and federal agencies will attempt to obtain additional water to satisfy the spring outflow criteria if it becomes available.
- c. The California Department of Fish and Wildlife, the U.S. Fish and Wildlife Service and the National Marine Fisheries Service will include spring outflow requirements in their permitting decisions on all issues related to water in the Delta watershed.
- d. All other available sources of water will be considered by the Real Time Operations and/or Adaptive Management Program teams prior to reducing SWP and Central Valley Project (CVP) exports.
- e. Water should be made available by the SWP and CVP only in amounts determined to be necessary by the Real Time Operations and/or Adaptive Management Program processes.
- f. No spring outflow contributions should be required from the SWP or CVP for the first 10 years of Project operations.

In summary, revising the operational criteria to increase flexibility and to reflect the other changes described above will lower the cost of the Project and protect the Project's yield. Thus, the Agency requests the foregoing changes to the operational criteria.

**2. Scientific Processes.**

In order for the Project to ultimately be successful, it must be implemented in a transparent, neutral and science-driven manner. It is particularly important for the Collaborative Science and Adaptive Management Program (CSAMP) to advance both the state of the science and the level of agreement on the conclusions reached based on that science.

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To that end, the interplay between the CSAMP and the operational criteria set forth in Table 4.1-2 is currently unclear. For example, the RDEIR/SDEIS provides that the “collaborative science effort is expected to inform operational decisions...” (RDEIR/SDEIS at 4.1-19). But the criteria set forth in Table 4.1-2 do not reflect the fact that the CSAMP could cause the criteria to be modified and adjusted. This appears to be the intent, but the document needs to be revised to clarify this relationship. Similarly, while the RDEIR/SDEIS acknowledges that new science may ultimately require consultation to be reinitiated or a Section 2081(b) permit amendment, this process should be more thoroughly explained (RDEIR/SDEIS at 4.1-19-20). The final EIR should clarify that prior to commencement of north Delta operations, the agencies will reinitiate consultation in order to evaluate each of the operational criteria set forth, and determine whether one or more of them can be relaxed without violating the requirements of the CESA and ESA.

In addition, the CSAMP should be revised to ensure that the various adaptive management tools and programs have defined limits that protect water supply. For example, the CSAMP should specify that operations cannot be such that exports fall below a certain amount, as determined by the best available scientific information, for purposes of protecting human health and safety. Furthermore, the RDEIR/SDEIS should clearly state that the CSAMP will be implemented in a manner that maximizes water supplies.

The RDEIR/SDEIS also needs to provide further details regarding funding for the CSAMP. The RDEIR/SDEIR states that “[p]roponents of the collaborative science and monitoring program will agree to provide or seek additional funding when existing resources are insufficient to complete the goals and tasks outlined above.” (RDEIR/SDEIS at 4.1-20). The meaning of this sentence is unclear. This section needs to be revised to clearly specify how this process is expected to take place, which agencies are expected to fund the CSAMP, and to include a cap on the liability of the PWAs.

Finally, the RDEIR/SDEIS should also take into account pertinent, available literature on the adaptive management process, including the recent paper by Dennis D. Murphy and Paul S. Weiland, *Science and Structured Decision-Making: Fulfilling the Promise of Adaptive Management for Imperiled Species*, JOURNAL OF ENVIRONMENTAL STUDIES AND SCIENCES (2014) 4:200–207.

### **3. Environmental Commitments.**

The RDEIR/SDEIS must clearly articulate the environmental commitments that PWAs are required to implement to address the construction-related impacts of the proposed Project. In other words, it is important that all environmental commitments be limited to addressing only those impacts that relate to the construction footprint.

The Agency recognizes that several tables in the RDEIR/SDEIS detail the environmental commitment currently contemplated by the new alternatives (Tables 4.1-3 [page 4.1-15], 4.1-4 [page 4.1-22], 4.1-5 [page 4.1-26], and 4.1-6 [page 4.1-30]). It is difficult to determine, however, the extent to which these commitments relate to the construction footprint. Thus, the Agency requests that the RDEIR/SDEIS be revised to more fully explain how the environmental commitments address construction-related Project impacts.

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#### 4. Organization.

Environmental documents should be well-organized and written in plain language so that decision-makers and the public can understand them (*e.g.*, 40 C.F.R. Section 1502.8). As is, the RDEIR/SDEIS does not lend itself to being easily understood by the public.

The complexity of the RDEIR/SDEIS makes it difficult for the average reader to understand the relationship between the various BDCP alternatives and the new alternatives, with respect to the proposed conveyance structures, operations, environmental commitments and other conservation measures. The Agency recommends including an Executive Summary in the final EIR/EIS that summarizes both the Draft EIR/EIS issued in December 2013 and the current RDEIR/SDEIS. This would involve consolidating and synthesizing the two existing Executive Summaries into a more comprehensive document to be included in the final EIR/EIS. This will enable a reader to more readily determine the key features of each alternative and will facilitate a more meaningful review.

In addition, the Agency requests that the RDEIR/SDEIS be organized in a way that is easier for a reader to keep track of the various Sections of the document. For example, Section 4.3-7, which relates to "Fish and Aquatic" resources, is 442 pages long. Remarkably, there are no numbered subsections within this lengthy Section. See also Section 4.3-8, which is 363 pages long. As such, a reader is unable to determine upon a quick review what Sections relate to which species. Thus, the Agency requests that the Sections be revised to include numbered subheadings.

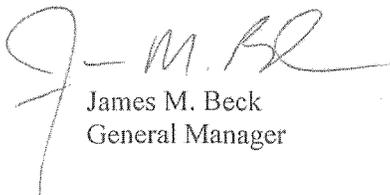
#### 5. Conclusion.

The Agency is supportive of the ongoing Project efforts and is encouraged by the progress made in the SDEIS/RDEIR. As described above, the Agency has concerns regarding certain aspects of the SDEIS/RDEIR, and believes the document would benefit from the specific recommendations described above.

Thank you for the time and effort expended on the Project stakeholder and public participation process. The Agency looks forward to working with the involved State and federal agencies as the Project moves forward.

The Agency appreciates the opportunity to provide these comments. If we can provide additional information on any of the issues described above, please do not hesitate to contact Brent Walthall of my staff at [bwalthall@kcwa.com](mailto:bwalthall@kcwa.com), or (916) 325-1600.

Sincerely,



James M. Beck  
General Manager

RZCRL2569

**From:** Blakslee, Taylor <tblakslee@kcwa.com>  
**Sent:** Friday, October 30, 2015 10:44 AM  
**To:** BDCPcomments  
**Cc:** Walthall, Brent  
**Subject:** KCWA BDCP/WaterFix Comment Letter  
**Attachments:** 151030 - KCWA BDCP-WaterFix Comment Letter.pdf

To Whom It May Concern:

Please find attached the Kern County Water Agency's comment letter for the BDCP/California WaterFix. A hard copy will follow in the mail.

Thank you,  
>Taylor Blakslee

Management Assistant  
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October 28, 2015

Thank you for the opportunity to comment on the Bay Delta Conservation Plan/California WaterFix Partially Recirculated Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement (RDEIR/SDEIS).

Friends of the San Francisco Estuary (Friends) has reviewed the RDEIR/SDEIS for changes that address and correct the inadequacies noted in our July 29, 2014 comment letter on the Public Draft of the Bay Delta Conservation Plan (Draft Plan) and its associated draft Environmental Impact Report/Environmental Impact Statement (DEIR/S) and Draft Implementing Agreement (Draft IA). The RDEIR/SDEIS also includes some new analyses that are addressed below; however, the additional information does not improve the serious flaws of the plan. Friends is deeply concerned that, if implemented, this plan will fail to improve the degraded state of the Bay-Delta Estuary.

It is our recommendation that the project proponents develop a Water “Fix” that better balances protection and restoration of the ecosystem with reliability of water supply, as commanded by state law.<sup>1</sup> Under the Preferred Alternative (4A), water quality and water supply reliability improve for the State Water Project and Central Valley Project water users at the expense of threatened and endangered species and other beneficial uses of the San Francisco Bay and Delta. These negative impacts, in some cases, have been arbitrarily deemed insignificant by the RDEIR/SDEIS authors without clear scientific basis; in other cases, science has been selectively used to support determinations of no adverse or significant impact. Overall, as noted by the Delta Independent Science Board, “The Current Draft lacks key information, analyses, summaries, and comparisons. The missing content is needed for evaluation of the science that underpins the proposed project. **Accordingly, the Current Draft fails to adequately inform weighty decisions about public policy**” [emphasis added].<sup>2</sup>

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This letter transmits our comments on those sections of the RDEIR/SDEIS that relate to our July 29, 2014 letter. Relevant comments from the July 2014 letter are summarized as follows:

- 1. The Draft Plan does not improve Delta outflows over current degraded conditions.**
- 2. The Draft Plan may contribute to significant declines and potential extinction of several salmon runs and other native fisheries.**
- 3. Impacts to areas downstream of the Plan Area, e.g., San Francisco Bay, are potentially significant and must be analyzed in the DEIR/S.**

<sup>1</sup> Delta Reform Act, Chapter 2, Section 85320.

<sup>2</sup> Delta Independent Science Board, p. 4.

4. **Certain water quality impacts within the entire Bay-Delta Estuary have been determined to be significant and unavoidable, yet no mitigation is proposed for these impacts.**
5. **The Draft Plan does not make an equitable commitment to the co-equal goals required under Delta Reform Act.**
6. **The BDCP does not reduce reliance on the Delta, as mandated by state law.**

**1. The Draft Plan does not improve Delta outflows over current degraded conditions.**

As noted previously, state and federal regulatory agencies have acknowledged that Delta outflows provided by current operations and water quality plans are not adequate to maintain, recover or restore ecosystem processes and declining fish species in the San Francisco Bay-Delta Estuary. The large-scale alterations to freshwater flows affect the quality and quantity of low-salinity habitats essential to fisheries in the Estuary, the movement of sediment through the system, and the productivity of food webs. The recently released State of the San Francisco Estuary Report states that “Freshwater flows from the Delta to the Bay for most of the last 35 years (since the 1980s) have been poor, impacting the estuarine ecosystem and the plants and animals that depend on it.”<sup>3</sup> The previous preferred alternative did not address this problem, nor does the revised Alternative 4A, also known as the California WaterFix (CA WaterFix). The new Alternative 4A in the RDEIR/SDEIS maintains or even increases State Water Project (SWP) and Central Valley Project (CVP) exports over current export levels: “Delta exports and SWP and CVP deliveries south of the Delta would increase under BDCP Alternatives 1A, 1B, 1C, 2A, 2B; 2C, 2D, 3, 4 (H1-H4), 4A, 5, 5A, and 9 as compared to Existing Conditions and No Action Alternative.”<sup>4</sup> A plan to increase exports fails to improve the current degraded conditions that result from inadequate freshwater flows through the Estuary.

In addition, the RDEIR/SDEIS makes the presumption that the north Delta diversions of the CA WaterFix will not be subject to the current Export:Inflow ratio, by appearing to exclude the proposed diversion points from the measurement of Delta inflow.<sup>5</sup> The quantity of freshwater flows from the Delta to the Bay is effectively determined by the Export:Inflow ratio. The Export:Inflow ratio places limitations on the amount of water that can be exported by the SWP and CVP based on a fraction of Delta inflows; the redefinition of this ratio by the plan proponents results in significantly higher exports while appearing to comply with D-1641 standards.<sup>6</sup> The RDEIR/SDEIS must be revised to comply with D-1641 standards by including the north Delta diversions in the Export:Inflow ratio.

A higher Delta outflow scenario has been modeled and analyzed at the request of the State Water Resources Control Board (SWRCB). The SWRCB requested supplemental modeling from the plan proponents in order to evaluate a higher Delta outflow scenario than is offered by Preferred Alternative 4A. Analysis of this scenario showed more favorable conditions for Delta smelt and longfin smelt habitat, a shift of pelagic fish away from the export pumps, better conditions for out-migrating salmonids, and benefits to native estuarine species that have evolved under conditions of seasonally fluctuating salinity. The higher outflows in winter would push fresh water through the Delta and into San Francisco Bay, to the benefit of Bay ecosystems. Additionally, the specified quantity of Delta outflow in summer could provide for adaptive management of Delta smelt when a strong cohort is present.<sup>7</sup> In other words, this outflow scenario provides substantial improvements to public trust resources that Alternative 4A fails to provide. The speculative statement that “an alternative that included this operational scenario would likely

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<sup>3</sup> San Francisco Estuary Partnership 2015.

<sup>4</sup> RDEIR/SDEIS, Chapter 5, p. 5-8.

<sup>5</sup> RDEIR/SDEIS, Chapter 4, p. 4.1-10.

<sup>6</sup> Denton 2015.

<sup>7</sup> RDEIR/SDEIS, Appendix C, p. C-2.

not meet the project objectives or purpose and need statement”<sup>8</sup> is not sufficient justification to fail to develop an alternative with the potential to provide both water supply and ecosystem benefits, as called for by the Delta Reform Act.

The results of this supplemental modeling showed a scenario that produces both higher Delta outflows and yields better average end-of-month storage in California’s major reservoirs, even under the impacts of climate change. Results showed substantially higher long-term average end-of-month storage for Lake Oroville in all water year types, slightly higher for Folsom Lake, and approximately the same for Lake Shasta and Trinity Lake. This provides benefits to both fish and people under the more frequent drought conditions expected in the future. As the current drought has demonstrated, a portfolio of other methods exist to replace the lower Delta exports. This higher Delta outflows approach also achieves the goal of reducing reliance on the Delta. This should be developed into a project alternative, incorporating other methods—both existing and proven but not yet implemented technologies—to provide water supply.

**2. The Draft Plan may contribute to significant declines and potential extinction of several salmon runs and other native fisheries.**

If implemented, the increase of exports and reduction of Delta outflows over current levels would have significant adverse impacts on the Bay-Delta Estuary’s fish and wildlife, particularly threatened and endangered species. Increased exports and reduced Delta outflows result in decreased turbidity in the Delta, which contributes to the increased mortality of anadromous fish like Chinook salmon; increased residence time of water in the Delta, which contributes to negative water quality impacts such as potential harmful algae blooms; and declines in longfin smelt and related estuarine species (American shad, bay shrimp) that form an important link in the estuarine food web between micro-organisms and predators, including birds, marine mammals, and other fish. The U.S. Environmental Protection Agency (US EPA) stated in its August 26, 2014 comment letter on the DEIR/S, “Data and other information provided in the Draft EIS indicate that that all CM1 alternatives may contribute to declining populations of Delta smelt, Longfin smelt, green sturgeon, and winter-run, spring-run, fall-run and late-fall run Chinook salmon. Impact analyses in Chapter 11 show that entrainment, rearing, and migration conditions for these species are estimated, for many of the action alternatives, to be similar to, or worse than, existing conditions and sometimes worse than the future no action condition.”<sup>9</sup> The revisions presented in Preferred Alternative 4A do not represent a substantial improvement to this assessment.

Furthermore, proposed project construction is expected to have significant impacts on Delta smelt, longfin smelt, steelhead trout, Sacramento splittail, green sturgeon, white sturgeon, Pacific lamprey, river lamprey, and spring-, fall-, late fall-, and winter-run Chinook salmon from noise associated with pile driving.<sup>10</sup> Plan operations under Alternative 4A are expected to deliver additional significant and adverse impacts to fall-run and late fall-run Chinook salmon.<sup>11</sup> Indirect impacts on shorebirds and waterfowl are also expected.<sup>12</sup> Many of these species are endangered; some are on the verge of extinction in the wild. Even negative impacts that are considered “small” by the project proponents could have disproportionate effects on these vulnerable species. In comparison, the benefits of plan operation to fish and wildlife are uncertain. For example, the Delta Independent Science Board (Delta ISB) has noted that the data provided

<sup>8</sup> RDEIR/SDEIS, Appendix C, p. C-1.

<sup>9</sup> US Environmental Protection Agency, p. 10.

<sup>10</sup> RDEIR/SDEIS pp. ES-48, ES-49, ES-51-54, ES-56-58.

<sup>11</sup> RDEIR/SDEIS pp. ES-23 and ES-54.

<sup>12</sup> RDEIR/SDEIS pp. ES-80-81.

on fish screens may be outdated, and has questioned how well the proposed fish screens on the new diversions will work, particularly on fish and larvae less than 20mm.<sup>13</sup> Finally, the RDEIR/SDEIS both inadequately addresses and uses outdated models for the possible influence of climate change and sea level rise, which may reduce assumed benefits and exacerbate negative impacts.<sup>14</sup>

The RDEIR/SDEIS presents a plan with substantial known adverse impacts and uncertain benefits to fish and wildlife. Under the current degraded conditions of the Bay-Delta Estuary, with the decline of many native fish and bird species, the Proposed Project presents an unacceptable risk to the health of the Bay-Delta Estuary.

### **3. Impacts to areas downstream of the Plan Area, e.g., San Francisco Bay, are potentially significant and must be analyzed in the DEIR/S.**

In Friends of the San Francisco Estuary's previous comment letter, we requested an analysis of the impacts of the proposed project on San Francisco Bay aquatic species, water quality, and the impacts of reduced sediment delivery to the Bay. Some of these analyses have been included in the RDEIR/SDEIS; however, essential information is missing or questionable where included.

#### Sediment

Total sediment loading to the Delta as the result of the new north Delta diversions will be reduced by approximately 9%, according to the RDEIR/SDEIS.<sup>15</sup> This reduction has been deemed by the plan proponents to be less than significant because it is under 10%, and could be reduced further through restoration actions and the reuse of dredged material.<sup>16</sup> The criteria for use of 10% as a benchmark for significance is not clear, particularly given the acknowledged potential to increase water clarity at areas downstream of the new north Delta diversions at certain times of the year.

The majority of sediment inputs to the San Francisco Bay Area comes from the Sacramento River and San Joaquin River watersheds. A reduction in 9% sediment loading for areas downstream of the new diversions will equate to a similar reduction in sediment loading to the Bay. Work by the U.S. Geological Survey (USGS) shows direct correlation between suspended sediment concentrations at the Bay Bridge and flows from the Delta,<sup>17</sup> and a number of tracer studies have shown that sediment from the Delta reaches the South Bay.<sup>18</sup> Suspended sediment delivery to the San Francisco Bay has been declining for the past sixty years, and scientists have determined all parts of the Bay except for the South Bay to be net erosional in recent years.<sup>19</sup> With climate change and associated sea level rise, further reductions in sediment delivery could have significant impacts that would reduce the ability to restore wetlands, resulting in reduced shoreline flood protection and increased erosion. According to the recently released report *The Baylands and Climate Change: What We Can Do*, lack of sediment is a major threat to San Francisco Bay wetlands and the potential for climate change adaptation in the Bay.<sup>20</sup> Reduced sediment delivery will also reduce turbidity and increase the risk of nutrient loading problems and toxic algae blooms, including *Microcystis*. These potential impacts have not been adequately analyzed in the RDEIR/SDEIS.

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<sup>13</sup> Delta Independent Science Board, p. 17.

<sup>14</sup> Delta Independent Science Board, pp. 11-13.

<sup>15</sup> RDEIR/SDEIS, Appendix A, Ch. 11, p. 11-184.

<sup>16</sup> RDEIR/SDEIS, Chapter 2, p. 2-2.

<sup>17</sup> Shellenbarger et al. 2011.

<sup>18</sup> McGann et al. 2013.

<sup>19</sup> Barnard et al. 2013.

<sup>20</sup> State Coastal Conservancy 2015.

### Microcystis

According to the RDEIR/SDEIS, “water temperatures and hydraulic residence times in the Delta are expected to increase under all operational scenarios of Alternative 4, resulting in an increase in the frequency, magnitude and geographic extent of *Microcystis* blooms in the Delta.”<sup>21</sup> However, the authors conclude that this adverse impact to the Delta will not increase risk of *Microcystis* blooms in the San Francisco Bay. This conclusion is not supported by current research, which has shown that microcystins, found throughout the Bay, are clearly coming from the Delta in addition to other sources.<sup>22</sup> For years, researchers have been noting a declining resistance to harmful algae blooms (HABs) in the San Francisco Bay, caused in part by reductions in sediment delivery from the Delta. More recent research indicates that there is cause for serious concern regarding the levels of toxins present in Bay algae blooms.<sup>23</sup>

The recent *Microcystis* blooms in the Delta, caused by increased residence time and higher water temperatures related to the drought, indicate that any increase in frequency, magnitude, and geographic extent of such blooms could have significant and adverse impacts to downstream areas, including Suisun Marsh and the San Francisco Bay. These impacts include the production of HABs toxic to fish, wildlife, and humans. Endangered species of fish, shorebirds, and mammals, as well as humans who use the Bay for recreation and the western Delta for sources of drinking water, could suffer from these impacts.

The oversight of recent research into *Microcystis* interactions between the Bay and Delta, and the San Francisco Bay’s potential vulnerability to HABs caused by *Microcystis*, is a fundamental failure of the RDEIR/SDEIS to comply with CEQA. The threat posed by increased *Microcystis* blooms must be adequately addressed through more extensive analysis and full and appropriate offset of impacts.

#### **4. Certain water quality impacts within the entire Bay-Delta Estuary have been determined to be significant and unavoidable, yet no mitigation is proposed for these impacts.**

Although an effort has been made to reduce water quality impacts under Alternative 4A, significant impacts remain as noted in the RDEIR/SDEIS: “the cumulative condition would be adverse, or have reasonable potential to be adverse, for the following constituents: bromide, chloride, electrical conductivity, mercury, organic carbon, pesticides and herbicides, and selenium.”<sup>24</sup> Furthermore, as noted above, *Microcystis* blooms in the Delta are expected to increase in frequency, magnitude, and geographic extent. These impacts will degrade water quality in the Bay-Delta Estuary beyond current degraded conditions and represent grave shortcomings to a plan intended to meet the co-equal goals of both improved water supply and Delta ecosystem. The following water quality impacts have been inadequately addressed in the RDEIR/SDEIS and must be minimized through mitigation measures or changes to the plan.

#### Chloride and Electrical Conductivity (EC)

The potential for increased chloride levels in Suisun Marsh, noted in our comment letter on the DEIR/S, remains unresolved in the RDEIR/SDEIS. Bay-Delta WQCP objectives for chloride and EC are exceeded in Suisun Marsh under CA WaterFix. Additional analysis and modeling links increased chloride and EC levels to the design and siting of restoration measures; however, increases could be substantial and may not be feasibly controlled through restoration design and siting. Proposed mitigation measures are to conduct additional evaluation and modeling to determine the feasibility of preventing or offsetting

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<sup>21</sup> RDEIR/SDEIS, Appendix A, Ch. 8, pp. 8-304-305.

<sup>22</sup> University of California Santa Cruz 2015.

<sup>23</sup> Kudela et al. 2014.

<sup>24</sup> RDEIR/SDEIS, Chapter 5, p. 5-74.

chloride and EC increases, as stated in the RDEIR/SDEIS: “Together, findings from [Mitigation Measures] WQ-11a and WQ-11b will indicate whether sufficient flexibility to prevent or offset EC increases is feasible under Alternative 4.”<sup>25</sup> These actions, however, do not offer much reassurance without the dedication of funding or other resources to these measures, and do not commit the plan proponents to any action beyond studies and evaluations.

Under all operating scenarios (H1-H4) of Alternative 4, Bay-Delta WQCP objectives for EC will be exceeded more frequently throughout the Delta for agriculture and fish and wildlife. These impacts are considered to be adverse and significant, as stated in the RDEIR/SDEIS: “The increased frequency of exceedance of the San Joaquin River at Prisoners Point EC objective and long-term and drought period average EC could contribute to adverse effects on fish and wildlife beneficial uses”<sup>26</sup> and “The increased frequency of exceedance of the fish and wildlife objective at Jersey Point and Prisoners Point could contribute to adverse effects on aquatic life.”<sup>27</sup> In addition, the western and southern Delta are listed under the Clean Water Act 303(d) impairment list for elevated EC. “The water quality degradation that could occur in these portions of the Delta could make beneficial use impairment measurably worse.”<sup>28</sup> Proposed mitigation measures, as above, do not provide assurance that EC impairment will be successfully addressed and minimized. Not only fish and wildlife but also Delta agriculture and western Delta drinking water sources could be adversely and significantly impacted by elevated EC.

#### Mercury and Methylmercury

According to the RDEIR/SDEIS, estimates of mercury and methylmercury concentrations in water and fish tissue as the result of CMI operations were found to exceed Total Maximum Daily Load (TMDL) guidelines for the Delta. No mitigation for these exceedances is proposed, under the justification that the exceedances are small and therefore the likely result of modeling error. Due to the capacity of methylmercury to bioaccumulate in the environment and recognizing its toxicity to humans, the potential for these water quality impacts must be addressed through proposed mitigation. As noted in our previous comment letter, any potential exceedance of a TMDL should be addressed through mitigation that includes avoidance strategies or additional resources.

#### Selenium

The refined selenium analysis in the RDEIR/SDEIS shows an increase in green sturgeon fish tissue to levels above the toxicity threshold of 5 mg/kg for all project alternatives. Because this is the lower toxicity threshold, the plan proponents have determined that the impact is not significant or adverse. Again, the scientific criteria for this determination is unclear, particularly since selenium also bioaccumulates in fish and the aquatic ecosystem and is toxic to humans, and since green sturgeon are federally listed as a threatened species. Therefore, actions must be taken to eliminate this impact. Instead of commitment, however, the RDEIR/SDEIS maintains the same Avoidance and Minimization Measure as in the prior DEIR/S, AMM27. AMM27 essentially consists of the commitment to manage water and vegetation levels as feasible, to reduce selenium concentrations, and to define adaptive management strategies that can be implemented as feasible. These measures fall short of specific actions to mitigate for this adverse impact.

#### Microcystis

As noted above, the RDEIR/SDEIS finds that, “in summary, operations and maintenance under the four operational scenarios of Alternative 4, relative to the No Action Alternative, would result in long-term increases in hydraulic residence time of various Delta sub-regions during the summer and fall *Microcystis*

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<sup>25</sup> RDEIR/SDEIS, Appendix A, Ch. 8, p. 8-245.

<sup>26</sup> Ibid, p. 8-241.

<sup>27</sup> Ibid, p. 8-242.

<sup>28</sup> Ibid, p. 8-242.

bloom period.”<sup>29</sup> These impacts to the Delta increase the risk of a microcystin outbreak, which would have widespread negative impacts to fish and wildlife and people. Higher Delta outflows would reduce residence time and water clarity in the Delta, leading to a reduced risk of a microcystin outbreak.

In sum, where measurable water quality degradation is a potential outcome, the RDEIR/SDEIS should define specific and definite environmental commitments to mitigate for negative impacts. At the very minimum, the TMDL exceedances work against the attainment of TMDL objectives and as such do not contribute to the improved condition of the San Francisco Bay-Delta Estuary. Reduced water quality in the San Francisco Bay-Delta Estuary, and potential adverse impacts to human health and threatened and endangered species, are not an acceptable tradeoff for increased reliability of water supplies.

**5. The Draft Plan does not make an equitable commitment to the co-equal goals required under Delta Reform Act.**

The original purpose of the Bay Delta Conservation Plan (BDCP) was to make significant progress toward the coequal goals of the 2009 Delta Reform Act: *“‘Coequal goals’ means the two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place.”*<sup>30</sup>

With the separation of the BDCP into California WaterFix and California EcoRestore—and even earlier—the plan has drifted away from its stated purpose. The potential benefits to the Delta ecosystem offered by the CA WaterFix are overshadowed by significant adverse impacts to water quality and threatened and endangered species. The benefits to water supply, by comparison, are much more certain. In the separation of the two elements of BDCP into two programs, the CA WaterFix has maintained its previous scale, while CA EcoRestore has reduced the proposed acreage of habitat restoration by over fifty percent. This trajectory seems to indicate that, in fact, the coequal goals are not being given coequal priority.

As noted above, the adverse impacts to water quality, fish and wildlife, and the ecosystem provide a cumulative picture of further damage to the Bay-Delta Estuary while CVP and SWP water supplies improve in both quantity and quality. The supplemental modeling provided in Appendix C, however, demonstrates that a more reliable water supply is available while also benefiting endangered fish and wildlife, through a reasonable reduction in exports.

**6. The BDCP does not reduce reliance on the Delta, as mandated by state law.**

By maintaining or increasing current CVP and SWP exports from the Delta, the BDCP fails to reduce reliance on the Delta as mandated by the Delta Reform Act, Section 85021, which states, “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.”<sup>31</sup> Subsequently, the California Water Action Plan has developed a suite of priority actions that implement this policy. The RDEIR/SDEIS does not contribute to a reduced reliance on the Delta, and thus does not comply with state policy.

<sup>29</sup> RDEIR/SDEIS Appendix A, Ch. 8, p. 8-304.

<sup>30</sup> Delta Reform Act, Section 29702.

<sup>31</sup> Delta Reform Act, Section 85021.

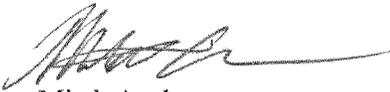
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As demonstrated in the above comments, the proposed project poses substantial risks to the health of the Bay-Delta Estuary. The most tangible benefits accrue to those who benefit from higher and more reliable exports. A more reliable water supply is needed, but not at the price of possible species extinction and threats to human health and safety for those who live in the San Francisco Bay and Delta. The supplemental modeling requested by the State Water Resources Control Board points the way toward a more balanced approach, one in which fish and wildlife benefit from higher Delta outflows, while exporters benefit from better water quality and a more reliable, though smaller, water supply. This type of approach would better reflect state policy and should be offered as a fully developed project alternative. By maintaining or increasing current exports, the current Preferred Alternative 4A fails to take the necessary steps to address the consensus from regulatory agencies and scientists that improved Delta outflows are essential to recovery of the health of the Bay-Delta Estuary.

Friends of the San Francisco Estuary is an incorporated 501(c)(3) non-profit organization and a partner of the San Francisco Estuary Partnership, which is a program of the Association of Bay Area Governments and one of 28 National Estuary Projects. We are dedicated to the restoration and management of a healthy San Francisco Bay-Delta Estuary through the development of public involvement, education, communication, and advocacy programs. Friends also serves as an advocate for the implementation of the Comprehensive Conservation Management Plan for the San Francisco Estuary (CCMP), developed and approved in 1993 by the Governor and the U.S. EPA and revised and adopted in 2007. The mission of Friends of the San Francisco Estuary is to restore, protect, and enhance the San Francisco Bay-Delta Estuary.

Information on sources cited in this letter follows. If you have any questions about the comments in this letter, please contact Darcie Luce at (510) 282-1254 or [friendsofsfestuary@gmail.com](mailto:friendsofsfestuary@gmail.com).

Sincerely,



Mitch Avalon  
President

Cc: Felicia Marcus, Chair, State Water Resources Control Board  
Mark Cowin, Director, California Department of Water Resources  
John Laird, Secretary, California Natural Resources Agency

Att: July 29, 2014 BDCP comment letter

## References

- Barnard, P.L., Schoellhamer, D.H., Jaffe, B.E., McKee, L.J., 2013. Sediment transport in the San Francisco Bay Coastal System: An overview. *Marine Geology* 345, pp. 3–17.
- State Coastal Conservancy, 2015. The Baylands and Climate Change: What We Can Do. Bay Area Ecosystems Climate Change Consortium (BAECCC); available at <http://baylandsgoals.org>.
- California Water Code Division 35: The Sacramento-San Joaquin Delta Reform Act of 2009, accessed October 27, 2015;  
[http://deltacouncil.ca.gov/sites/default/files/documents/files/dsc\\_legislative\\_booklet\\_0.pdf](http://deltacouncil.ca.gov/sites/default/files/documents/files/dsc_legislative_booklet_0.pdf).
- Delta Independent Science Board, 2015. Review by the Delta Independent Science Board of the Bay Delta Conservation Plan/California WaterFix Partially Recirculated Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement.
- Denton, Richard 2015. E-mail to Les Grober, Diane Riddle, and Rich Satkowski, State Water Resources Control Board, September 23, 2015, accessed October 28;  
[http://www.waterboards.ca.gov/waterrights/water\\_issues/programs/bay\\_delta/california\\_waterfix/early\\_petition\\_comments/](http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/early_petition_comments/).
- Kudela, R., Meoni, C., Peacock, M., and Senn, D., 2014. San Francisco Bay Acts as a Reservoir and Mixing Bowl for Both Marine and Freshwater Toxins. San Francisco Estuary Institute. Richmond, CA.
- McGann, M., Erikson, L., Wan, E., Powell, C., Maddocks, R.F., 2013. Distribution of biologic, anthropogenic, and volcanic constituents as a proxy for sediment transport in the San Francisco Bay Coastal System. *Marine Geology, Special Issue San Francisco Bay* 345, 113-142.
- Shellenbarger, G.G., Wright, S.A., Schoellhamer, D.H., 2013. A sediment budget for the southern reach in San Francisco Bay, CA: Implications for habitat restoration. *Marine Geology, Special Issue San Francisco Bay* 345, 281-293.
- San Francisco Estuary Partnership, 2015. The State of the Estuary 2015, accessed October 27, 2015;  
<http://maps.californiawetlands.net/soter2015/freshwaterflows/meananderror.php>.
- U.S. Environmental Protection Agency, 2014. Letter to the National Oceanic and Atmospheric Administration, the United States Fish and Wildlife Service, and the Bureau of Reclamation Regarding Draft Environmental Impact Statement for the Bay Delta Conservation Plan, San Francisco Bay Delta, California (CEQ# 20130365), August 26, 2014.
- University of California Santa Cruz, 2015. Assessing SPATT in San Francisco Bay: SFEI Contract 1051 Final Report, accessed October 23, 2015;  
[http://sfbaynutrients.sfei.org/sites/default/files/SPATT\\_Final\\_Report\\_May2015.pdf](http://sfbaynutrients.sfei.org/sites/default/files/SPATT_Final_Report_May2015.pdf)

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BDCP Comments  
Ryan Wulff, NMFS  
650 Capitol Mall, Suite 5-100  
Sacramento, CA 95814

July 29, 2014

Dear Mr. Wulff:

Thank you for the opportunity to comment on the Public Draft of the Bay Delta Conservation Plan (Draft Plan) and its associated draft Environmental Impact Report/Environmental Impact Statement (DEIR/S) and Draft Implementing Agreement (Draft IA). Friends of the San Francisco Estuary appreciates the enormity of this undertaking by the federal and state regulatory agencies, the California Department of Water Resources (DWR), the United States Bureau of Reclamation (USBR), and the California Natural Resources Agency. This letter transmits our comments on the Draft Plan, DEIR/S and the Draft IA.

Friends of the San Francisco Estuary (Friends) supports the original purpose of the Bay Delta Conservation Plan as a comprehensive conservation strategy aimed at protecting dozens of species of fish and wildlife while permitting the reliable operation of California's two biggest water delivery projects. The current drafts of the BDCP and DEIR/S, however, are fundamentally flawed in both their assumptions of benefits to the Bay-Delta Estuary and their failure to address impacts to the estuarine system. We ask the state and federal partners to withdraw and revise these documents to address the following deficiencies:

1. **The Draft Plan does not improve Delta outflows over current degraded conditions. This inadequacy must be addressed in the Draft Plan and the DEIR/S.**
2. **The Draft Plan fails to fulfill the requirements of an NCCP/HCP to achieve conservation in the Plan Area, and instead may contribute to significant declines and potential extinction of several salmon runs and other native fisheries. The DEIR/S should be revised to reduce significant impacts to listed fish species, and include effective, proven measures to mitigate or reduce the significance of these impacts.**
3. **Impacts to areas downstream of the Plan Area, e.g., San Francisco Bay, are potentially significant and must be analyzed in the DEIR/S; mitigation measures should be identified as well.**
4. **Certain water quality impacts within the entire Bay-Delta Estuary have been determined to be significant and unavoidable, yet no mitigation is proposed for these impacts. The DEIR/S should include changes to operational proposals and other feasible mitigation measures to reduce or avoid these significant water quality impacts.**
5. **The Draft Plan fails to ensure funding for the conservation plan, as required by the Endangered Species Act and Natural Communities Conservation Planning Act, and it does not make an equitable commitment to the co-equal goals required under Delta Reform Act. These commitments must include financing, representative governance, and assurances for the completion of the non-facility conservation measures (CM2-CM22). The DEIR/S should be revised to ensure compliance with the Delta Reform Act through definite and specific commitments to protect, restore, and enhance the Delta ecosystem.**

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**6. The BDCP does not reduce reliance on the Delta, as mandated by state law. The Draft Plan and DEIR/S should be revised to develop and analyze a proposed project and one or more alternatives that comply with this mandate.**

**1. The Draft Plan does not improve Delta outflows over current degraded conditions. This inadequacy must be addressed in the Draft Plan and the DEIR/S.**

A broad range of federal and state agencies, including the United States Environmental Protection Agency (EPA), National Academy of Sciences' Natural Resource Council Committee on Sustainable Water Management in California's Bay-Delta, U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), State Water Resources Control Board (SWRCB), and California Department of Fish and Wildlife (CDFW) have stated that current Delta outflows are not adequate to maintain, recover or restore ecosystem processes and declining fish species in the San Francisco Bay-Delta Estuary. As recently stated by the EPA:

*"There is broad scientific agreement that existing Delta outflow conditions are insufficient for protecting the aquatic ecosystem and multiple fish species, and that both increased freshwater flows and aquatic habitat restoration are needed to restore ecosystem processes in the Bay Delta and protect threatened & endangered fish populations."*<sup>1</sup>

Yet the BDCP does not propose to increase Delta outflows, and in fact decreases total outflows under certain operating scenarios.<sup>2</sup> Nor does the DEIR/S adequately address this significant adverse impact. The entire premise of the BDCP and DEIR/S is based on the assumption that extensive habitat restoration will successfully replace the need for increased freshwater flows to improve listed species. As noted in the DEIR/S, the benefit of this assumption to listed species is highly uncertain. The DEIR/S should provide an alternative with higher certainty of the benefit to listed species.

In addition, because Fall X2 requirements from the 2008 USFWS Biological Opinion were excluded from the existing baseline conditions (EBC1 and EBC2), the comparison of EBC1 and EBC2 to the High-Outflow Operating Scenario or HOS (preferred project Alternative 4, scenarios H3 and H4) is skewed. The DEIR/S must incorporate Fall X2 requirements, upheld in March of this year, into existing baseline conditions and re-analyze these in comparison to the proposed operating scenarios. One of the primary claims of the BDCP is that spring and fall outflow would be higher under HOS than under current conditions; this may not be the case if the existing baseline conditions are adjusted to include Fall X2. The Low-Outflow Operating Scenario or LOS (preferred project Alternative 4, scenarios H1 and H2) does not include the Fall X2 requirements. These operating scenarios should be removed from consideration, or revised to include Fall X2.

The Delta Reform Act and the Delta Plan call for updated flow objectives for the Delta.<sup>3</sup> These objectives are intended to be established through the State Water Resources Control Board's updates to the San Francisco Bay-Sacramento/San Joaquin Delta Estuary Water Quality Control Plan (Bay-Delta WQCP), and should be used to guide the operating scenarios for Delta outflow in the BDCP. The DEIR/S needs to address how natural resources protection can be assured if the project is constructed prior to updating flow objectives.

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<sup>1</sup> Federal Agency Comments Received on the Bay Delta Conservation Plan (BDCP) Second Administrative Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS), July 18, 2013.

<sup>2</sup> BDCP DEIR/S Chapter 6, Figures 6-8 through 6-23 and Mount et al. 2013, pp. 118-122.

<sup>3</sup> Delta Stewardship Council October 2011 e-newsletter.

- 2. The Draft Plan fails to fulfill the requirements of an NCCP/HCP to achieve conservation in the Plan Area, and instead may contribute to significant declines and potential extinction of several salmon runs and other native fisheries. The DEIR/S should be revised to reduce significant impacts to listed fish species, and include effective, proven measures to mitigate or reduce the significance of these impacts.**

BDCP's premise is to restore more natural flows to the Delta, but: 1) as mentioned above, it fails to increase Delta outflows and in fact increases exports under certain operating scenarios; and 2) creates new reverse flows in the North Delta and increases or maintains reverse flows in the South Delta during the critical spring period (April-May) and in drier years.<sup>4</sup>

As analyzed by the independent expert review panel convened in 2013 by the Nature Conservancy and American Rivers, export reliability for the HOS is not substantially different from the No Action Alternative (NAA) while changes in outflow, even under the HOS, provide little ecological benefit: The NAA outperforms the HOS fifty percent of the time, and the HOS appears to only provide significant water supply benefits over the NAA in the wettest years.<sup>5</sup>

One of the objectives of the BDCP is to decrease exports during dry periods when impacts on the ecosystem are greatest. In comparison to the no project alternative, however, the new facility does not appear to significantly reduce pressure on the Delta during drier periods. If the BDCP's premise is to contribute to recovery of listed smelt and salmonids, how much improvement can be expected given the continued reliance on South Delta export facilities in drier years? The Draft Plan proposes no solution to the South Delta facility entrainment problem other than reducing overall frequency of use.<sup>6</sup> Entrainment on the South Delta pumps must be addressed in the BDCP as a condition of the permits.

The new North Delta facility is predicted to have significant negative impacts on out-migrating juvenile winter-run and spring-run Chinook salmon through impingement, predation, increased transit time to the Delta, and increased risk of diversion into the interior Delta.<sup>7</sup> The reduction in suspended sediment delivery may also have a negative impact on Delta smelt, which prefers sediment-laden waters.<sup>8</sup> The potential for success of the proposed mitigation strategies is highly uncertain and have been characterized by scientific experts as "unlikely to contribute significantly to recovery of these species".<sup>9</sup> The DEIR/S should address and justify the inclusion of this facility as a component of an HCP/NCCP in the light of these findings.

- 3. Impacts to areas downstream of the Plan Area, e.g., San Francisco Bay, are potentially significant and must be analyzed in the DEIR/S; mitigation measures should be identified as well.**

The Delta Independent Science Board's review of the DEIR/S has found the document falls short of the "good enough" scientific standard, specifically in the neglect of possible impacts to such

<sup>4</sup> Mount et al. 2013; BDCP DEIR/S Chapter 6, pp. 6-100

<sup>5</sup> Mount et al. 2013, p. 25.

<sup>6</sup> Environmental Water Caucus Comment Letter on the Bay Delta Conservation Plan and EIR/EIS, 2014, p. 56.

<sup>7</sup> Mount et al. 2013.

<sup>8</sup> Wilcox and Gibbons, [http://www.usgs.gov/blogs/features/usgs\\_top\\_story/travels-with-sediment-in-the-san-francisco-bay-delta-and-coastal-system/](http://www.usgs.gov/blogs/features/usgs_top_story/travels-with-sediment-in-the-san-francisco-bay-delta-and-coastal-system/).

<sup>9</sup> Mount et al. 2013, p. 2.

downstream areas as the San Francisco Bay.<sup>10</sup> The justification for exclusion of the San Francisco Bay offered in the DEIR/S is questionable or missing.<sup>11</sup> The Bay is hydrologically connected to the Delta, and the Bay and Delta together function as one estuarine system. Some possible impacts are identified but not analyzed; other impacts are absent from the document altogether as discussed below:

#### Sediment

The BDCP DEIR/S has estimated a potential reduction of suspended sediment delivery to San Francisco Bay of approximately eight to ten percent.<sup>12</sup> As stated by the Delta Independent Science Board, this is a potentially significant change that must be analyzed in the DEIR/S.<sup>13</sup> Suspended sediment delivery to the San Francisco Bay has been declining for the past sixty years, and scientists have determined all parts of the Bay except for the South Bay to be net erosional in recent years.<sup>14</sup> With climate change and associated sea level rise, further reductions in sediment delivery could have significant impacts on wetland restoration efforts, flood and erosion protection. Reduced sediment delivery will also reduce turbidity and increase the risk of nutrient loading problems and toxic algae blooms.<sup>15</sup> The DEIR/S should address the importance of sediments in the Bay-Delta ecosystem and must include an analysis of how the proposed operations might affect sediment transport, delivery, and rate of deposition downstream.

#### San Francisco Bay Aquatic Species

Aquatic species that use the lower salinity of San Francisco Bay as a nursery, such as Dungeness crab, Pacific herring, northern anchovy, and Bay shrimp, are not included in the DEIR/S analysis. In addition, freshwater inflows from the Delta are rich in nutrients and other food sources for fish in the Bay. San Francisco Bay inflows create brackish water habitats, provide transport flows for eggs, larvae and juveniles, and carry nutrients and other materials important for ecosystem productivity. The amount of nutrients in the Bay drives the food web and affects abundance of aquatic species.<sup>16</sup> Large freshwater pulses through the estuary and Golden Gate help support the productivity of nearshore waters for Pacific Coast marine mammal and waterbird populations. An analysis of potential impacts to these species must be included in the Final EIR/S.

#### San Francisco Bay Water Quality

The further reduction of freshwater flows, particularly under the Low Outflow Scenario of the preferred project alternative, may increase the concentration and residence time of contaminants such as selenium in the North Bay.<sup>17</sup> Analysis of this potential impact has not been provided in the DEIR/S and must be included in the Final EIR/S.

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<sup>10</sup> Delta Independent Science Board 2014, p. 3.

<sup>11</sup> BDCP Draft Plan Chapter 4, p. 4-7 states: "Areas downstream of the Delta (e.g., San Pablo Bay, San Francisco Bay south to Golden Gate and Bay Bridge) were considered and were not included as a part of the BDCP's analysis. For additional discussion on this, see Appendix 5.C of the BDCP, Flow, Passage, Salinity, and Turbidity, Section 5C.5.2 Upstream Habitat Results." However, the referenced Appendix and its related documents contain no mention of San Francisco Bay.

<sup>12</sup> Helliker, Paul. Presentation to the San Francisco Bay Conservation and Development Commission (BCDC), February 20, 2014 and BCDC Staff Recommendation on Comments on the Bay Delta Conservation Plan Environmental Documents, May 23, 2014.

<sup>13</sup> Delta Independent Science Board 2014, p. 3.

<sup>14</sup> Barnard et al. 2013.

<sup>15</sup> Cloern et al. 2007.

<sup>16</sup> CDFW 1987, p. 25.

<sup>17</sup> Linville et al. 2002.

- 4. Certain water quality impacts within the entire Bay-Delta Estuary have been determined to be significant and unavoidable, yet no mitigation is proposed for these impacts. The DEIR/S should include changes to operational proposals and other feasible mitigation measures to reduce or avoid these significant water quality impacts.**

As mentioned previously, the Bay-Delta WQCP provides objectives for water quality under the direction of the Clean Water Act. The State Water Resources Control Board is in the midst of updating this plan and determining updated flow and salinity objectives that balance all beneficial uses of the system. Any management plan that violates current objectives must not proceed without adequate and specific mitigation measures.

One of the most significant impacts to water quality results from decreased Delta outflow, either as the direct result of project operations or as the result of project operations combined with sea level rise. Decreased Delta outflow degrades water quality in the form of increases in chloride concentrations, salinity, and electrical conductivity (EC):

*Particularly in the west Delta, sea water intrusion as a result of sea level rise or decreased Delta outflow can increase the concentration of salts (bromide, chloride) and levels of electrical conductivity. Conversely, increased Delta outflow (e.g., as a result of Fall X2 operations in wet and above normal water years) will decrease levels of these constituents.*<sup>18</sup>

A straightforward solution exists by reducing the level of diversions proposed during dry or below normal years. We request that the DEIR/S be revised to include an alternative that would avoid significant adverse impacts by ensuring higher Delta outflows.

#### Chloride (WQ-7)

Under the Preferred Alternative, chloride concentrations, as an indication of tidal intrusion, are anticipated to increase substantially in the Delta in violation of Bay-Delta Plan objectives, as stated in Chapter 8 of the DEIR/S:

*“Relative to Existing Conditions, all of the Alternative 4 H1–H4 Scenarios would result in substantially increased chloride concentrations in the Delta such that frequency of exceeding the 150 mg/L Bay-1 Delta WQCP objective would approximately double.”*<sup>19</sup>

Additionally, chloride is projected to increase in Suisun Marsh, with possible negative impacts to such aquatic wildlife as benthic macroinvertebrates and amphibians. No mitigation measures have been proposed for impacts to fish and wildlife in the Delta; those mitigation measures that have been proposed for impacts to Suisun Marsh remain uncertain and primarily consist of monitoring and consultation. No substantial, feasible, committed mitigation has been proposed to address these problems; as a result, these adverse impacts remain significant and unavoidable. These adverse impacts could be avoided with the release of higher Delta outflows.

#### Salinity and Electrical Conductivity (WQ-11)

The changes in Delta water export operations proposed by the preferred project alternative will result in violations of the Bay-Delta WQCP.

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<sup>18</sup> BDCP DEIR/S Chapter 8, p. 8-226.

<sup>19</sup> BDCP DEIR/S Chapter 8, p. 8-428.

*Long-term average annual Delta outflow is anticipated to decrease under Alternative 4 by between 864 (scenario H1) and 5 TAF (scenario H4) relative to the No Action Alternative, due only to changes in operations.*

*Relative to Existing Conditions, Alternative 4, Scenarios H1–H4, would result in an increase in the number of days the Bay-Delta WQCP EC objectives would be exceeded in the Sacramento River at Emmaton, San Joaquin River at San Andreas Landing and Prisoners Point, and Old River near Middle River and at Tracy Bridge (Appendix 8H, Table EC-4). The percent of days the Emmaton EC objective would be exceeded for the entire period modeled (1976–1991) would increase from 6% under Existing Conditions to 23–25%, depending on the operations scenario, and the percent of days out of compliance would increase from 11% under Existing Conditions to 35–38%, depending on the operations scenario.<sup>20</sup>*

The DEIR/S proposes to address this impact by requesting a move of the EC objective from Emmaton to Three Mile Slough, approximately 2.5 miles upstream.<sup>21</sup> Moving the compliance point to a more easily achieved location is not an acceptable means of addressing this degradation in water quality. Furthermore, this move requires approval from the State Water Resources Control Board, a substantial assumption given the multitude of factors that must be considered in making such a change. The DEIR/S should address the potential adverse impacts of this increase and provide a scenario that would reduce the number of days the objectives are exceeded without moving the compliance point.

#### Methylmercury (WQ-13 and WQ-14)

According to the DEIR/S, estimates of methylmercury concentrations in water and fish tissue as the result of CM1 (North Delta facility) operations were found to exceed Total Maximum Daily Load (TMDL) guidelines for the Delta.<sup>22</sup> Total Maximum Daily Load guidelines are established through the Clean Water Act as a means to protect beneficial uses of water bodies. Any exceedance of a TMDL should be addressed through mitigation and in particular the cumulative impacts of exceeding TMDL standards should be addressed in the DEIR/S. Mitigation should be discussed and include avoidance of the impact or additional measures. It is unacceptable that the DEIR/S analysis considers the change in concentrations to be small and therefore not an adverse impact.

#### Selenium (WQ-18)

As noted in the DEIR/S, the restoration of tidal wetland, freshwater marsh, and floodplain habitat is projected to degrade water quality by measurable levels on a long-term basis, causing the impairment of beneficial uses to be made worse.<sup>23</sup> Yet the conclusion is drawn that, relative to baseline conditions, all operational scenarios under the preferred project alternative would result in essentially no change in selenium concentrations throughout the Delta.<sup>24</sup> These conflicting statements are confusing at best, and indicate either a lack of sufficient analysis or adequate explanation of the potential degradation caused by the conservation measures. Selenium impacts are addressed in the Environmental Commitments through Avoidance and Minimization Measure 27 (AMM27), Selenium Management. AMM27 essentially consists of the commitment to manage water and vegetation levels as feasible, to reduce selenium concentrations, and to define adaptive management strategies that can

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<sup>20</sup> BDCP DEIR/S Chapter 8, p. 8-436.

<sup>21</sup> BDCP DEIR/S Chapter 8, p. 3-188.

<sup>22</sup> BDCP DEIR/S Chapter 8, p. 8-444.

<sup>23</sup> BDCP DEIR/S Chapter 8, p. 8-768.

<sup>24</sup> BDCP DEIR/S Chapter 8, p. 8-474.

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be implemented as feasible.<sup>25</sup> These types of activities are vague and provide little assurance that further water quality degradation will not occur. Where measurable water quality degradation is a potential outcome, the DEIR/S should define specific and definite environmental commitments to mitigate for this negative impact.

**5. The Draft Plan fails to ensure funding for the conservation plan, as required by the Endangered Species Act and Natural Communities Conservation Planning Act, and it does not make an equitable commitment to the co-equal goals required under Delta Reform Act. These commitments must include financing, representative governance, and assurances for the completion of the non-facility conservation measures (CM2-CM22). The DEIR/S should be revised to ensure compliance with the Delta Reform Act through definite and specific commitments to protecting, restoring, and enhancing the Delta ecosystem.**

The stated premise of the BDCP is to meet the coequal goals of the Delta Reform Act by increasing water supply reliability and protection and restoration of the Delta ecosystem.<sup>26</sup> Without an equitable commitment to financing and assurances, however, the likelihood of success of restoration efforts in the BDCP is highly uncertain. We acknowledge the inherent tension between the state-mandated coequal goals of water supply reliability and restoration; but the key to achieving balanced progress toward these goals is an equitable commitment of funding, governance, and assurances. We do not see that represented in the current draft of the BDCP or DEIR/S, nor does the DEIR/S provide convincing evidence that the BDCP will achieve the coequal goals.

Funding

Under the federal Endangered Species Act (ESA) and the state Natural Community Conservation Planning Act (NCCPA), Habitat Conservation Plans and Natural Community Conservation Plans must ensure that adequate funding is provided to carry out the conservation actions identified in the plan, including the sufficiency of mechanisms for long-term funding of all components of the plan and contingencies.<sup>27</sup> Funding is not ensured for habitat restoration actions for the lifetime of the permit under the Public Draft of the BDCP. The Draft IA identifies three primary sources of funding for the project: state and federal water contractors, state water bonds, and federal appropriations.<sup>28</sup> These sources are far from ensured: reliance on voter approval of water bonds and the continuation of federal appropriations to fund the habitat restoration components of the project is highly uncertain in comparison to the funding identified for the construction of the new North Delta facilities (CM1). The DEIR/S must address this deficiency and its effect on the feasibility and certainty of the proposed measures to protect species.

Finally, the California Water Action Plan released in January 2014 takes a vital step toward a sustainable, twenty-first century approach to water resources management. Yet the Public Draft BDCP does not reliably implement any of the priorities<sup>29</sup> identified in the California Water Action Plan,

<sup>25</sup> BDCP DEIR/S Chapter 8, pp. 8-473-474.

<sup>26</sup> BDCP DEIR/S Executive Summary, p. ES-10.

<sup>27</sup> *National Wildlife Federation v. Babbitt*, 128 F.Supp.2d 1274, District Court, ED California 2000, 1294-95; *Sierra Club v. Babbitt*, 15 F.Supp.2d 1274, 1282; *Sierra Club v. Marsh*, 816 F.2d 1376 (9<sup>th</sup> Cir. 1987). Habitat Conservation Planning Handbook, pp. 3-33 to 3-34. Natural Communities Conservation Planning Act of 2003, Section 2820 (a)(10).

<sup>28</sup> Draft IA p. 45.

<sup>29</sup> The priority actions identified in the California Water Action Plan are: 1. Make conservation a California way of life; 2. Increase regional self-reliance and integrated water management across all levels of government; 3. Achieve the co-equal goals for the Delta; 4. Protect and restore important ecosystems; 5. Manage and prepare for dry periods; 6. Expand water storage capacity and improve groundwater management; 7. Provide safe water for

indicating that the BDCP is neither a responsible management plan for the state's resources nor a wise investment of public funds.

#### Governance

Agencies, local governments, and advocates for natural resources need to have meaningful roles in the proposed governance structure to ensure that ecosystem restoration has coequal status under the BDCP. According to the Draft IA, the Adaptive Management Team will consist of the following voting members: representatives of DWR, USBR, a single representative each from Central Valley Project (CVP) and State Water Project (SWP) contractors, California Department of Fish and Wildlife, National Marine Fisheries Service, and US Fish and Wildlife Service.<sup>30</sup> This appears to total seven voting members, with the majority held by water suppliers. Thus, in difficult operational decisions, the structure of the Adaptive Management Team is weighted in favor of the water suppliers. The DEIR/S should address how this proposed governance structure can assure the protection of the state's water, species and other natural resources. We suggest adding a non-governmental representative for wildlife and natural resources.

#### Assurances

The "no surprises" rule in a Habitat Conservation Plan (HCP) provides the applicants with regulatory assurance that applicants will not have to devote additional land, water, or money to the project should unforeseen circumstances arise. In contrast, the assurance of Rough Proportionality provided in the Draft IA is vague and lacks a schedule to test for Rough Proportionality. Given the uncertainty of estuarine conditions over the next 50 years, specific regulatory assurances need to be provided to the public that mitigation and restoration will take place. Scenarios that would provide such assurances should be addressed. For example, if funding is not secured for needed habitat restoration, construction of the North Delta facilities must be suspended until funding is secured.

Additionally, the BDCP relies too heavily on adaptive management as a tool to address uncertainty. This has the effect of further reducing assurance that project management and implementation will adequately protect natural resources. The adaptive management program needs further development and specificity, as noted by the Delta Independent Science Board (DISB)'s Review of the Draft DEIR/S, dated May 15, 2014: "The reviewed documents posit adaptive management of an uncertain future without examining plausible outcomes. The Draft BDCP presents adaptive management more as a notion than as a tested, problematic practice."<sup>31</sup>

#### **6. The BDCP does not reduce reliance on the Delta, as mandated by state law. The Draft Plan and DEIR/S should be revised to develop and analyze a proposed project and one or more alternatives that comply with this mandate.**

By maintaining or increasing current CVP and SWP exports from the Delta, the BDCP fails to reduce reliance on the Delta as mandated by the Delta Reform Act, Section 85021, which states, "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."<sup>32</sup> We commend the authors of the California Water Action Plan for developing a suite of priority actions that implement this strategy. The current BDCP Draft Plan and DEIR/S do not

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all communities; 8. Increase flood protection; 9. Increase operational and regulatory efficiency; 10. Identify sustainable and integrated financing opportunities (p. 4 of California Water Action Plan 2014).

<sup>30</sup> Draft IA p. 30 and Ebbin, personal communication.

<sup>31</sup> Delta Independent Science Board 2014, Appendix A, p. 1.

<sup>32</sup> Delta Reform Act, Section 85021.

contribute to these priority actions. Why should Californians dedicate substantial public funds to a plan that does not reduce reliance on the Delta and does not encourage the priority actions of the California Water Action Plan? The DEIR/S should provide a project alternative that reduces reliance on the Delta as part of the larger portfolio of actions that will help implement the California Water Action Plan.

## Conclusion

The BDCP is an ambitious attempt to address the Delta problem; however, the deficiencies identified here indicate that substantial improvement is needed. Many of these deficiencies are caused by the failure of the BDCP to improve timing and quantity of freshwater Delta outflows. A reduction in diversions would lessen many of the negative impacts of the proposed project. We look to the EIR/EIS revisions to provide additional information, alternatives, mitigation measures and water supply solutions that will maintain and improve our public trust resources.

By choosing to maintain an unsustainable reliance on the Delta over developing alternative water supply solutions, the BDCP proponents are creating a plan that is risky, financially unsupported, unlikely to succeed in meeting the coequal goals of the Delta Reform Act, and further threatens our already degraded natural resources. The collaborative capacity of the BDCP has not yet been used to find water supply solutions among the prospective permit-holders that would enable higher Delta outflows. Although Friends understands that this is technically outside the required scope of an HCP/NCCP, we believe that this is a lost opportunity to create a broadly supported plan.

The Friends of the San Francisco Estuary (Friends) is an incorporated 501(c)(3) non-profit organization and a partner of the San Francisco Estuary Partnership (SFEP), which is a program of the Association of Bay Area Governments (ABAG) and one of 28 National Estuary Projects. We are dedicated to the restoration and management of a healthy San Francisco Bay-Delta Estuary through the development of public involvement, education, communication, and advocacy programs. The Friends also serve as an advocate for the implementation of the Comprehensive Conservation Management Plan for the San Francisco Estuary (CCMP), developed and approved in 1993 by the Governor and the U.S. EPA and revised and adopted in 2007. The mission of Friends of the San Francisco Estuary is to restore, protect, and enhance the San Francisco Bay-Delta Estuary.

Information on sources cited in this letter follows. If you have any questions about the comments in this letter, please contact Darcie Luce at (510) 282-1254 or [friendsofsfestuary@gmail.com](mailto:friendsofsfestuary@gmail.com).

Sincerely,



Barbara Salzman  
President

cc: Felicia Marcus, Chair, State Water Resources Control Board  
Mark Cowin, Director, Department of Water Resources  
John Laird, Secretary, California Natural Resources Agency

att: References

## References

Barnard, P.L., Schoellhamer, D.H., Jaffe, B.E., McKee, L.J., 2013. Sediment transport in the San Francisco Bay Coastal System: An overview. *Marine Geology* 345, pp. 3–17.

California Department of Fish and Game, 1987. Summary of Delta Outflow Effects on San Francisco Bay Fish and Invertebrates. Exhibit 59, entered by the California Department of Fish and Game for the State Water Resources Control Board 1987 Water Quality/Water Rights Proceeding on the San Francisco Bay/Sacramento-San Joaquin Delta.

California Water Action Plan, 2014. Prepared by the California Natural Resources Agency, California Department of Food and Agriculture, and the California Environmental Protection Agency.

California Water Code Division 35: The Sacramento-San Joaquin Delta Reform Act of 2009, accessed July 28, 2014; [http://deltacouncil.ca.gov/sites/default/files/documents/files/dsc\\_legislative\\_booklet\\_0.pdf](http://deltacouncil.ca.gov/sites/default/files/documents/files/dsc_legislative_booklet_0.pdf).

Cloern, J.E., Jassby, A.D., Thompson, J.K., Heib, K.A., 2007. A cold phase of the East Pacific triggers new phytoplankton blooms in San Francisco Bay. *Proceedings of the National Academy of Science* 104, pp. 18561–18565.

Delta Independent Science Board, 2014. Review of the Draft BDCP EIR/EIS and Draft BDCP.

Delta Stewardship Council, October 2011 e-newsletter: State Water Board explains flow criteria and flow objectives; accessed July 18, 2014; <http://deltacouncil.ca.gov/enewsletter/stories/october-2011/state-water-board-explains-flow-criteria-and-flow-objectives>.

Ebbin, Marc. Personal communication, June 30, 2014.

Environmental Water Caucus Comment Letter on the Bay Delta Conservation Plan and EIR/EIS, June 11, 2014.

Federal Agency Comments Received on the Bay Delta Conservation Plan (BDCP) Second Administrative Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS), July 18, 2013, accessed July 28, 2014; <http://baydeltaconservationplan.com/Library/Correspondence.aspx>.

Habitat Conservation Planning Handbook, 1996 and 2000. United States Fish and Wildlife Service, accessed July 28, 2014; <http://www.fws.gov/midwest/endangered/permits/hcp/hcphandbook.html>.

Helliker, Paul. Presentation to the San Francisco Bay Conservation and Development Commission (BCDC), February 20, 2014.

Linville, R.G., Luoma, S.N., Cutter, L., Cutter, G.A., 2002. Increased selenium threat as a result of invasion of the exotic bivalve *Potamocorbula amurensis* into the San Francisco Bay-Delta. *Aquatic Toxicology* 57, pp. 51–64

Mount, J., Fleenor, W., Gray, B., Herbold, B., Kimmerer, W., 2013. Panel Review of the Draft Bay Delta Conservation Plan: Prepared for the Nature Conservancy and American Rivers.

Natural Communities Conservation Planning Act of 2003, as amended through January 2013. Available online at <https://www.dfg.ca.gov/habcon/nccp/>.

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Public Draft Bay Delta Conservation Plan, Draft Environmental Impact Report/Environmental Impact Statement, and Draft Implementing Agreement, <http://baydeltaconservationplan.com>.

San Francisco Bay Conservation and Development Commission (BCDC), 2014. Staff Recommendation on Comments on the Bay Delta Conservation Plan Environmental Documents, May 23, 2014.

Wilcox, Barbara and Helen Gibbons, "Travels with Sediment in the San Francisco Bay, Delta and Coastal System," USGS Science Features. [http://www.usgs.gov/blogs/features/usgs\\_top\\_story/travels-with-sediment-in-the-san-francisco-bay-delta-and-coastal-system/](http://www.usgs.gov/blogs/features/usgs_top_story/travels-with-sediment-in-the-san-francisco-bay-delta-and-coastal-system/).

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**From:** Darcie Luce <friendsofsfestuary@gmail.com>  
**Sent:** Friday, October 30, 2015 10:30 AM  
**To:** BDCPcomments  
**Subject:** RDEIR/SDEIS comment letter  
**Attachments:** Friends of the SF Estuary WaterFix Comment FINAL.pdf; BDCP Comment ltr FINAL 7.29.14.pdf

Please accept the attached comment letter on the BDCP/CA Water Fix RDEIR/SDEIS, along with our previous comment letter from July 29, 2014.

Thank you,  
Darcie Luce

**Friends of the San Francisco Estuary**  
[www.friendsofsfestuary.weebly.com](http://www.friendsofsfestuary.weebly.com)  
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## San Diego County Water Authority

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October 30, 2015

### BDCP/WaterFix Comments

P.O. Box 1919

Sacramento, California 95812

#### MEMBER AGENCIES

Carlsbad  
Municipal Water District

City of Del Mar

City of Escondido

City of National City

City of Oceanside

City of Poway

City of San Diego

Fallbrook  
Public Utility District

Helix Water District

Lakeside Water District

Oliverheim  
Municipal Water District

Otay Water District

Padre Dam  
Municipal Water District

Camp Pendleton  
Marine Corps Base

Rainbow  
Municipal Water District

Ramona  
Municipal Water District

Rincon del Diablo  
Municipal Water District

San Diego Water District

Santa Fe Irrigation District

South Bay Irrigation District

Vallecitos Water District

Valley Center  
Municipal Water District

Vista Irrigation District

Yuma  
Municipal Water District

#### OTHER REPRESENTATIVE

County of San Diego

**Re: Partially Recirculated Draft Environmental Impact Report/Supplemental Environmental Impact Statement for the Proposed Bay Delta Conservation Plan/California Water Fix**

**Dear Sir/Madam:**

The San Diego County Water Authority (Water Authority) submits the following comments on the Partially Recirculated Draft Environmental Impact Report (EIR)/ Supplemental Draft Environmental Impact Statement (EIS) prepared by the U.S. Department of Interior, Bureau of Reclamation (Reclamation), and U.S. Department of Interior, Fish and Wildlife Service (USFWS); the U.S. Department of Commerce, National Oceanographic and Atmospheric Administration, National Marine Fisheries Service (NMFS); and the California Department of Water Resources (DWR) for the proposed Bay Delta Conservation Plan (BDCP)/California Water Fix.

While these comments are directed to the Partially Recirculated Draft EIR/Supplemental Draft EIS dated July 10, 2015, this letter should be considered a supplement to the previous Water Authority comment letters dated May 30, 2014 and July 28, 2014.

### COMMENTS

1. The BDCP was portrayed as a Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) that implements certain conservation actions to benefit sensitive species and habitats while increasing water supply reliability for millions of Californians. The wildlife agencies and participating water contractors would memorialize their commitments to undertake these conservation actions in an Implementing Agreement that provided assurances that as long as the conservation measures were being implemented per the BDCP, the water contractors would receive increased water reliability.

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While the shift to an alternative approach to federal and state endangered species permitting is understandable, this change will result in less supply certainty for federal and state water contractors. Without the assurances provided by the federal Section 10 and state Section 2835 incidental take permits, the continued availability of sufficient water for export is questionable.

*Comment:* With abandonment of the BDCP approach, the Final EIR/EIS should more clearly identify how the new permitting approach maintains and enhances water supply reliability to the same levels anticipated under the BDCP, and quantify the annual amounts expected to be available for each water contractor compared to the BDCP approach.

2. The commitment of individual State Water Project (SWP) or Central Valley Water (CVP) contractors to participate financially in implementing the proposed project remains undetermined and it is likely that some contractors will decline given the reduced level of certainty resulting from the alternative permitting approach.

*Comment:* With abandonment of the BDCP approach, the Final EIR/EIS should specify the criteria to be used by DWR and Reclamation in determining how to coordinate and allocate water between the SWP and CVP, and among the funding and non-funding participants. While typically not an issue for CEQA, the importance of funding to overall project viability cannot be overstated. The water contractors are Responsible Agencies under CEQA and will need accurate cost and allocation information for each project component to make an informed decision regarding participation. The Final EIR/EIS should include details on how DWR and Reclamation intend to guarantee that each participating water contractor provides the revenue necessary to pay for the proposed project, including any necessary provisions for "step-up" should one or more water contractors default on funding obligations, and a legal analysis of relying on property taxes as a back-up security for debt. In addition, the Final EIR/EIS should evaluate the potential for indirect environmental effects associated with various proposed funding types and sources.

3. Page 4.1-1, lines 32 through 34 state that: "Alternatives 4A... would not serve as... (HCPs/NCCPs)... but rather would achieve incidental take authorization under ESA Section 7 and CESA Section 2081(b)."

*Comment:* While ESA Section 10/Section 2835 (HCP/NCCP) permits are no longer preferred, the Water Authority is concerned that continuing the current management approach using Section 7/Section 2018 permits lack sufficient assurances to ensure a reliable water supply for millions of Californians. The Water Authority is also concerned over the lack of collaborative decision-making inherent in implementing adaptive management and real time water operational changes under traditional Section 7/Section 2081 permits. The Water Authority encourages the lead agencies

to pursue innovative permitting approaches with the federal and state wildlife agencies (e.g., hybrid Section 7/10 permits, incorporating all or parts of Candidate Conservation Agreements with assurances and Safe Harbor Agreements, along with a similar innovative approach on the state 2081 permit) that provide as much certainty as legally possible for participating water contractors. The complexity of the Bay-Delta ecosystem and the large human dependence on exported water supplies warrant consideration of inclusive, cooperative, and flexible permitting approaches.

4. Page 4.1-15, Table 4.1-3 lists the environmental commitments for preferred Alternative 4A. The total mitigation acreage shown for all habitat types appears to be around 15,548 acres.

*Comment:* BDCP Conservation Measure 1 (CM1) was defined as the conveyance facility (intakes and tunnels). The proportional direct and indirect mitigation acreage and costs for CM1 to be borne by the participating state and federal contractors is shown in Table 8-41 of the Draft EIR/EIS (pages 8-74 through 8-76). However, it is unclear how the required mitigation acreage and costs for CM1 in Alternative 4 compare to the required mitigation acreage and costs for the new Alternative 4A. Further, it is unclear if the modeling performed for Alternative 4, which included a different baseline for impact analysis, is appropriate and accurately reflects expected impacts for Alternative 4A. An improper/inconsistent baseline will result in an inaccurate impact analysis, yielding mitigation requirements that do not reflect actual impacts. The Final EIR/EIS should provide a table showing a side-by-side comparison of the expected direct and indirect impacts, required mitigation acreage (whether conservation measure or environmental commitment), and mitigation costs for CM1 and Alternative 4A. The Final EIR/EIS should also include a table that compares the baseline assumptions used in the impact analysis for Alternative 4 and Alternative 4A. This will aid in clarifying how the new preferred alternative has lessened potential impacts and required mitigation, and reduced costs for participating state and federal water contractors.

In addition, the relationship between the environmental commitments (i.e., project mitigation) for preferred alternative 4A and the separate ecosystem restoration efforts anticipated under California EcoRestore, as well as current obligations contained in existing state and federal permits (e.g., Biological Opinions), needs additional clarification. The participating water contractors need to clearly understand where the "bright line" is between project mitigation obligations and general ecosystem restoration. The Final EIR/EIS should provide more detail on how the "environmental commitments" of Alternative 4A relate and contribute to the associated, but separate, California EcoRestore effort, as well as how those commitments contribute to meeting obligations in existing permits.

5. Page 4.1-21, lines 2 through 6 state that: "Commitments to adaptive management... will be secured through a MOA... Details... including adaptive management decision-making, an organizational structure for... decisions, and funding... will be developed through the MOA..."

*Comment:* Adaptive management is highlighted as the mechanism through which construction and operation of the new conveyance facilities will be managed. Freshwater outflows (and corresponding export flows) will be determined through current and future scientific studies, monitoring, and a yet to be developed Memorandum of Agreement (MOA) between the lead agencies, public water agencies, and wildlife agencies. In other words, the MOA will govern future operation of the conveyance facility. Given the crucial nature of this document, it is especially disappointing that the additional details to be provided in the MOA are not yet available. These details will certainly be required for potential participating water agencies to decide whether to commit the funds and resources necessary to implement the preferred alternative. The Final EIR/EIS should provide greater clarity on the adaptive management "details" expected to be included in the MOA and provide a schedule and process for MOA development and implementation. Further, the Final EIR/EIS should include additional details on the extent of authority for participating entities, i.e., the water contractors need assurances that their interests will be incorporated in all operational actions.

6. Page 9-269, Table 9-32 of the Draft BDCP Plan identifies the total average water deliveries to the contractors under various take alternatives. As shown, water supplies available under the BDCP range from 4.7 to 5.6 million acre feet per year (MAFY) depending on high or low outflow scenarios, respectively. Average annual flows for the existing conveyance scenarios (defined as the "without BDCP" scenario on page 9-39) ranged from 3.4 to 3.9 MAFY for the high and low outflows, respectively. The "without BDCP" scenario contemplated continuing fish population declines and imposition of additional operational constraints that would reduce water supply availability.

*Comment:* With abandonment of the BDCP approach, the Final EIR/EIS should clarify and explain how the new permitting approach will prevent available water supplies from being reduced to the existing conveyance scenario volumes (e.g., 3.4 to 3.9 MAFY) shown in Table 9-32. In other words, how would the new permitting approach prevent available supplies from being further reduced to 3.4 to 3.9 MAFY, if fish population continues to decline even after preferred Alternative 4A is constructed?

The Water Authority appreciates the opportunity to review and provide comments on the Partially Recirculated Draft EIR/Supplemental Draft EIS. As noted above and in two prior comment letters, the intention of our comments is to obtain additional

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information and clarification in the Final environmental documents to determine if the Proposed Action/Preferred Project is a cost-effective, long-term solution to Delta water supply and ecosystem conflicts.

Please retain the Water Authority on your mailing list to receive future notifications or documents regarding this project. If you have questions or wish to discuss any of the above concerns in greater detail, please contact Larry Purcell, Water Resources Manager at (858) 522-6752, or by email at [lpurcell@sdewa.org](mailto:lpurcell@sdewa.org).

Sincerely,



Maureen A. Stapleton  
General Manager

RELCIRC2(F)

**From:** Purcell, Larry <LPurcell@sdcwa.org>  
**Sent:** Friday, October 30, 2015 10:16 AM  
**To:** BDCPcomments  
**Subject:** BDCP/Water Fix PRDEIR/SEIS Comments  
**Attachments:** BDCP\_WaterFix Comments 10-30-15.pdf

**Importance:** High

Attached are the San Diego County Water Authority's comments on the Partially Recirculated Draft EIR/Supplemental EIS for the proposed BDCP/California Water Fix. The original letter is being transmitted via U.S. Mail. If you have any questions, please contact me.

**Larry Purcell**  
*Water Resources Manager*  
*San Diego County Water Authority*  
*4677 Overland Avenue*  
*San Diego, CA 92123*  
*Office: (858) 522-6752*

# County of Placer Board of Supervisors

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District 4

JENNIFER MONTGOMERY  
District 5



October 30, 2015

Cassandra Enos, California Department of Water Resources  
Michelle Banonis, U.S. Bureau of Reclamation  
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Sacramento, CA 95812  
[BDCPComments@icfi.gov](mailto:BDCPComments@icfi.gov)

**Subject: Comments on Draft Bay Delta Conservation Plan (BDCP)/California WaterFix (CalWaterFix) Partially Recirculated Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement**

Dear BDCP/Waterfix Project team:

Thank you for providing Placer County the opportunity to comment on the Partially Recirculated Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement (RDEIR/SDEIS) for the Bay Delta Conservation Plan (BDCP)/California WaterFix (CalWaterFix) Project (Project). By letter dated July 22, 2014, Placer County provided comments on what was then the proposed draft BDCP, the draft Implementing Agreement and the Draft Environmental Impact Report/Environmental Impact Statement. In reviewing the RDEIR/SDEIS, it is apparent that none of the issues and concerns raised by the County or the other Placer County and American River watershed stakeholders are addressed in the RDEIR/RDEIS.

Placer County offers the following comments on the RDEIR/SDEIS. Placer County has an overarching concern with and sees flaws in the RDEIR/SDEIS in that it completely fails to adequately address or answer basic questions regarding short - and long-term impacts to the American River region and its water supplies. The improper narrow focus of the RDEIR/SDEIS ignores the reasonably foreseeable and inevitable changes to upstream operations, including changes in operation of Folsom Lake reservoir and the impacts associated with those changes; and, including water supply impacts and impacts to environmental resources in the Lower American River.

By failing to provide and analyze: 1) a full without-project (WOP) conditions analysis; 2) a full range of alternatives; 3) disclosure of the full scope of impacts of the actual "project"; and 4) identification of all feasible mitigation, these documents do not fulfill the statutory obligations of the California Environmental Quality Act or the National Environmental Protection Act.

Placer County's recommendations for revisions to address the above deficiencies are provided as follows:

1. The without-project (WOP) conditions should focus on water supply and habitat in the future in all of the affected physical areas: 1) each of the watersheds feeding the Delta; 2) the Delta itself; and 3) export areas. WOP conditions should be based on the present

set of operating rules, regulations, agreements and water rights, and in the presence of climate change and growth projections. As written, the WOP analysis in the public review draft ignores a number of senior and area of origin water rights, Federal Energy Regulatory Commission (FERC) permit conditions, and fisheries flow and temperature requirements on the American River, the Yuba River and Bear River where Placer County has both participatory license obligations (American) and water contracts (Yuba and Bear via Pacific Gas & Electric water rights).

2. As currently drafted, the WOP analysis is presented in such a way that it is not possible to understand the impacts of the project alternatives. A full range of project alternatives that would meet the revised Purpose & Need Statement should be investigated. This must include one or more alternatives that would reduce exports, and one alternative that would eliminate exports in favor of regional supply development (including ocean desalting), and right-sizing agricultural operations to their water availability. Exports are supported by junior water rights on the system, so it is not unreasonable to expect them to be cut back in shortage situations. In fact, long-standing appropriative water rights law would demand that. As presented, the range of alternatives is inadequate.
3. Impacts to *all* affected areas should be identified and analyzed. Specifically, for Placer County's interests and concerns, all potential impacts to the American River watershed and its jurisdictions, including Placer County and the cities and water agencies within Placer County, should be identified and analyzed. The RDEIR/SDEIS continues not to analyze impacts to the American River watershed, its stakeholders or its ecosystems. Because of the lack of an analysis and disclosure of potentially significant impacts, the County does not know the scope of impacts to Placer County. The County does know that its water rights, FERC covenants, and fisheries requirements have not been considered in the WOP analysis.

Once impacts are identified to the Placer County region, all feasible mitigation measures must be identified and implemented. These mitigation measures need to be developed for affected watersheds and affected parties.

These changes warrant a comprehensive re-write and re-circulation of the entire EIR/EIS for this Project.

The County of Placer also provides the following specific comments on the proposed Project:

1. If, upon re-formulation of this project, the Proponents still must not transfer habitat impacts to other regions. On the American River, for example, the document demonstrates that Folsom Reservoir will reach dead pool in 10 percent of the years under the BDCP/WaterFix operating assumptions (Appendix 29C-17a Folsom Reservoir storage). This would dry and over-warm the Lower American River and imperil salmon and steelhead runs.
2. The Folsom Reservoir "dead pool" issue must be addressed. It is presented in the RDEIR/SDEIS as a WOP condition, which is flawed. Senior water rights, FERC permit conditions, and American River ecosystem requirements trump Delta and export

requirements under both WOP and with-project conditions. Many of the water agencies reliant on those senior water rights do not have a second supply of water, so continually running Folsom Reservoir to dead pool would threaten the health and safety of a substantial population; over 250,000 in Placer County alone. Several of the agencies in Placer County are underlied by solid bedrock, so groundwater is not available or sustainable in many parts of Placer County. Long-standing area of origin water rights protections provide for increased diversions to American River stakeholders, gradually decreasing the amount available for others on the State Water Project (SWP) and Central Valley Project (CVP) systems, including exporters. That has always been the understanding under which the CVP and SWP were constructed and licensed.

3. Other alternatives exist which result in a sustainable water supply for exporters. Agricultural interests can and should right-size their operations to the sustainable water yield available to them. In addition, urban exporters have affordable alternatives, including recycled water, conjunctive use of local storm and floodwater, and seawater desalting. Export curtailment is a reasonable alternative and must be investigated to meet the intent of CEQA and NEPA.
4. Placer County and the incorporated cities within Placer County have approved General Plans that reflect the current conditions and projected growth that also meets the Sacramento Area Council of Governments (SACOG) Blueprint conditions as the accepted balance of growth for the region's future. Numerous legal agreements that reflect those growth plans have been executed based on the assumed accessibility of the senior water rights and capabilities to deliver water during all types of years. The BDCP/WaterFix objectives and the environmental analysis are inconsistent with these adopted plans and agreements. If the BDCP/WaterFix water conveyance facilities are built as proposed in the RDEIR/SDEIS, it is likely to be very detrimental to the quality of life, economic vitality and public health conditions of Placer County.
5. The effect of draining Folsom Reservoir would place Placer County in the position of using more groundwater than expected where it is available in the western part of the County. The County has, for decades, relied upon the use of treated surface water for urban and suburban development, even in the western portion of the County. With the County's available water rights, the County could continue to grow by primarily relying upon surface waters. The results of more groundwater use would be to overdraft the County's basin. With the newly adopted Sustainable Ground Water Management Act (SGMA), the groundwater basin, which serves Placer County and several other County regions, new regulations are being imposed on that resource. The BDCP/WaterFix may place agencies in direct conflict with those regulations, which must be analyzed by the Project as well. In addition, other adjacent regional groundwater basins would also have to pump more groundwater, which would increase the likelihood of the potential for contaminated groundwater at the former McClellan AFB site to leak into Placer's healthy basin.
6. Also, missing from the list of impacts is 1) the loss of the Middle Fork American River Project's (MFP) ability to generate power during times required by the California Independent System Operator, such as peak times in summer; and 2) the loss of power revenues needed to ensure operations of the MFP are stable during low water years.

Cassandra Enos, California Department of Water Resources  
Michelle Banonis, U.S. Bureau of Reclamation  
BDCP/Waterfix Comments  
October 30, 2015  
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RECIRC 2572

The County has coordinated the scope of its comments with other Placer County and American River watershed stakeholders. The County specifically incorporates by reference the comments submitted by the Placer County Water Agency on the BDCP/WaterFix RDEIR/SDEIS. The County also reserves the right to reference any and all comments submitted by other Placer County and American River watershed stakeholders in subsequent Placer County correspondence on this matter.

Once again, Placer County appreciates the opportunity to provide comments on the RDEIR/SDEIS. The County looks forward to working cooperatively with the Proponents, stakeholders, and regulatory agencies to resolve the County's concerns stated herein.

If there are questions regarding the County's position or if additional information is required, please contact Brett Storey, Management Analyst @ [bstorey@placer.ca.gov](mailto:bstorey@placer.ca.gov)

Sincerely,

COUNTY OF PLACER



Kirk Uhler,  
Chairman, Placer County Board of Supervisors

cc. Placer County Board of Supervisors  
David Boesch, County Executive Officer  
Holly L. Heinzen, Chief Assistant County Executive Officer  
Gerald O. Carden, County Counsel  
Einar Maisch, General Manager, Placer County Water Agency  
Michael Johnson, Director, Community Development Resource Agency  
Karin Schwab, Senior Deputy County Counsel  
Brett Storey, Senior Management Analyst

REF: RC2572

**From:** Beverly Roberts <BRoberts@placer.ca.gov>  
**Sent:** Friday, October 30, 2015 12:45 PM  
**To:** BDCPcomments  
**Subject:** FW: BDCP/Waterfix Comments From Supervisor Kirk Uhler, Chairman...  
**Attachments:** CA Dept of Water CEnos Comments on BDCP 2015Oct30 KUhler BStorey br.pdf

*My apologies. My first send had ".gov" vs. ".com".*

*Please accept this e-mail and attachment as noted below and within the required comment period.*

*Respectfully,*

**Beverly A. Roberts**

Executive Assistant to the CEO  
County Executive Office | Administration  
(530) 889-4031 | (530) 889-4025 fax | [broberts@placer.ca.gov](mailto:broberts@placer.ca.gov)



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**From:** Beverly Roberts  
**Sent:** Friday, October 30, 2015 12:06 PM  
**To:** 'BDCPComments@icfi.gov'  
**Cc:** David Boesch; Kirk Uhler; Holly Heinzen; Gerald Carden; Einar Maisch; Michael Johnson; Karin Schwab; Brett Storey; Bekki Riggan; Teri Ivaldi; Linda Brown; Joel Joyce; Debbie Hawkins; Susie Lauderdale; Adrienne Barber  
**Subject:** BDCP/Waterfix Comments From Supervisor Kirk Uhler, Chairman...

*Good afternoon.*

*Attached you will find a scanned letter as noted above from Supervisor Kirk Uhler, Chairman of the Board of Supervisors and on behalf Placer County. The original was sent out today via USPS.*

*Respectfully,*

**Beverly A. Roberts**

Executive Assistant to the CEO  
County Executive Office | Administration  
(530) 889-4031 | (530) 889-4025 fax | [broberts@placer.ca.gov](mailto:broberts@placer.ca.gov)

