From:

Tim Stroshane <spillwayguy@gmail.com>

Sent:

Monday, July 28, 2014 3:53 PM

To:

BDCP. Comments@noaa.gov

Cc:

Conner Everts

Subject:

Environmental Water Caucus Supplemental Comments on BDCP

Attachments:

EWC BDCP Supplemental Comments FINAL.pdf

Mr. Wulff:

On behalf of EWC co-facilitator Conner Everts, the Environmental Water Caucus (EWC) has prepared and now submits additional supplemental comments on the Bay Delta Conservation Plan documents. These remarks supplement what we submitted to you previously on June 11, 2014, then under signature of Nick Di Croce. We continue to oppose the Bay Delta Conservation Plan.

We request that you treat our June 11th comments and these attached comments as one submittal and respond to them as one submittal.

We request a reply email confirming your receipt of these supplemental comments from the EWC. Please do not hesitate to contact Conner Everts or myself should you have questions.

Sincerely,

Tim Stroshane Consultant to the Environmental Water Caucus 510.524.6313

ENVIRONMENTAL WATER CAUCUS SUPPLEMENTAL COMMENT LETTER BAY DELTA CONSERVATION PLAN, EIR/EIS, AND DRAFT IMPLEMENTING AGREEMENT JULY 28, 2014



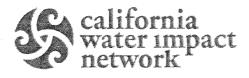
























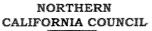








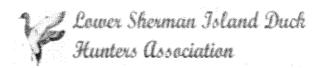












CA Save Our Streams Council

Tuolumne River Trust







Santa Clarita Organization f orPlanning and the Environment (SCOPE)







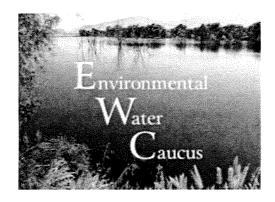




Unite, Protect, Restore.







July 28, 2014

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

Via Email to: BDCP.Comments@noaa.gov

Subject:

Supplemental Comments on the Draft Bay Delta Conservation Plan, Its Draft

EIR/EIS, and Its Draft Implementing Agreement

Dear Mr. Wulff:

The Environmental Water Caucus (EWC) has prepared and now submits additional comments on the above-referenced Bay Delta Conservation Plan documents to supplement the remarks we supplied to you previously on June 11, 2014. We continue to oppose the Bay Delta Conservation Plan.

Our comments incorporate by reference comments from San Joaquin County, and the California Sportfishing Protection Alliance (made separately and in addition to those they join with the California Water Impact Network and AquAlliance), in addition to those incorporated comments we cited in our June 11th letter to BDCP on page 12, footnote 4. We request that you treat our June 11th comments and these attached comments as one submittal and respond to them as one submittal.

The topics our letter covers include, but are not limited to:

- A brief summary of the main points of EWC's June 11th comment letter.
- The Bay Delta Conservation Plan seeking to revive a version of the failed Environmental Water Account of the CalFED-era. This is unacceptable. That program sought to purchase "environmental water" to benefit listed fish species in the Delta, but instead presided over the Pelagic Organism Decline that has put Delta ecosystems on the brink of collapse.
- Additional documentation that increased cross-Delta water transfers are a central purpose of the Twin Tunnels project and must be analyzed in the EIR/EIS.

Ryan Wulff, NOAA July 28, 2014 Page 2 of 2

- Identifying additional flaws in the BDCP habitat restoration conservation measures.
- Demonstrating that BDCP's weak formulation of "rough proportionality" fails to comply with a plain reading of the term's meaning in the absence of established criteria for evaluating the appropriate relationship between water project impacts and water project mitigations.
- Describing and criticizing how property tax levies may be used to help finance the Twin Tunnels project and potentially overcome agricultural and urban water agencies' concerns with the project's overall affordability.
- Other comments about the EIR/EIS.

Numerous inadequacies in the BDCP EIR/EIS are identified in our June 11th comments and these comments submitted today. The Draft EIR/EIS on the Bay Delta Conservation Plan should be revised and recirculated.

We said on June 11th and we reiterate here that BDCP is a bad deal for California and an even worse deal for the Delta. Fish and people need both habitat and flows to recover and restore the Delta to good health. BDCP will accomplish neither for the people of the Delta nor the people of California.

Thank you for considering these comments. If you have questions or require clarification, please do not hesitate to contact EWC consultant Tim Stroshane, (510) 524-6313 and spillwayguy@gmail.com, or Conner Everts, EWC co-facilitator, (310) 394-6162 x111 and connere@gmail.com.

Sincerely,

Conner Everts

David Nesmith

Co-Facilitators
Environmental Water Caucus

Attachment: Supplemental BDCP Comments

Supplemental Comments of the Environmental Water Caucus on the Bay Delta Conservation Plan, EIR/EIS and Draft Implementing Agreement July 29, 2014

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¹ Comment preparation and consultation managed by Tim Stroshane for the Environmental Water Caucus. Contributors to these supplemental comments include Bill Jennings (California Sportfishing Protection Alliance), Doug Obegi (Natural Resources Defense Council), Patricia Schifferle (Pacific Advocates), and Osha Meserve (Local Agencies of the North Delta).

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Supplemental Comments of the Environmental Water Caucus on the Bay Delta Conservation Plan, EIR/EIS and Draft Implementing Agreement July 29, 2014

I. Supplemental Comments on the Bay Delta Conservation Plan

The Environmental Water Caucus (EWC) wishes to incorporate by reference the comments of San Joaquin County, as approved by the County Board of Supervisors on July 8, 2014.² The County's comments contain perceptive and detailed criticisms of the Draft Bay Delta Conservation Plan, its Draft EIR/EIS and its Draft Implementing Agreement. Many of the County's comments parallel comments provided by the Environmental Water Caucus on June 11, 2014.³ The following comments supplement the EWC's earlier comments and we request that both documents be considered and responded to as a single submittal.

Synopsis of EWC Comments, June 11th

The EWC provides first a synopsis of key comments we have already made for the sake of clarity and brevity.

- We believe the Bay Delta Conservation Plan is fundamentally flawed because it has incorporated the North Delta diversion intakes and tunnels project erroneously as a "conservation measure" that will demonstrably fail, as the Plan's own Effects Analysis shows, to conserve the species and resources its BDCP Applicants claim the project will benefit.
- The BDCP fails utterly to uphold federal principles of environmental justice that are to be implemented under not only the National Environmental Policy Act of 1969, but also federal and state civil rights law. BDCP's failure to provide adequate public outreach and key documents translated into other languages describing the process, the project, and its impacts on the Delta and environmental justice communities in several translations is an egregious failures of the Applicants' public outreach plan, and consequently a civil rights violation. The BDCP Applicants have yet to indicate how they intend to rectify this error in the conduct of its entire BDCP planning process.
- The BDCP is premised on a flawed ecological hypothesis that habitat restoration can substitute for flow and appreciably contribute to the survival and recovery of listed species. Our comments demonstrate, using BDCP data, that this hypothesis is very likely to fail for inadequate scientific disclosure and analysis, lack of management experience, and a lack of funding for adaptive management.
- The Tunnels project is to be operated in general independently of the biological goals and objectives of BDCP and will be regulated primarily through real-time operational actions

² San Joaquin County Office of the County Counsel, *Presentation Regarding the Public Draft Bay Delta Conservation Plan (BDCP)*, Adoption of a Resolution Reaffirming San Joaquin County's Opposition to the BDCP, Approving the County's Comments to the BDCP and the Related EIR/EIS and Implementing Agreement for BDCP, and Authorizing the Submission of those Comments to the Appropriate State and Federal Agencies, presented to the San Joaquin County Board of Supervisors, June 23, 2014, 101 pages. Accessible online July 9, 2014, at http://www.sigov.org/board/board%20meetings/Agendas/070814/MG99041/AS99066/AI101933/D0101934/D0101934.PDF.

³ Environmental Water Caucus Comment Letter, Bay Delta Conservation Plan and EIR/EIS, June 11, 2014, 259 pages. Accessible online at http://ewccalifornia.org/reports/bdcpcomments6-11-2014-3.pdf. Hereafter, EWC June 11th BDCP Comment Letter.

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performed by unaccountable scientific and engineering professionals—a kind of BDCP "priesthood." Neither the Plan nor the EIR/EIS provide a role for regulation by the State Water Resources Control Board, but merely assumes it will have water right permit authorization to operate once constructed.

- The Tunnels project will reduce lower Sacramento River inflows, decrease water quality (with increased salinity and other constituents), increase residence times of water in ways that will contribute to toxic conditions stemming from disturbed mercury and selenium sediments and deposits as well as poor hydrologic conditions that will facilitate bioavailability of these toxins.
- The Tunnels project will subject listed resident and migratory fish species to grave dangers at the North Delta intakes in addition to the ongoing dangers at the South Delta export pumps. This is due to untried and untested fish screen technology, and poor scientific understanding of both flow conditions and fish movement decisions within their Delta habitat, which could redistribute entrainment problems from the Old and Middle River corridors to the lower Sacramento River reach above and below the North Delta intakes. This would increase, not decrease, the potential for extinction of these species, particularly of Delta smelt and longfin smelt, by increasing not only the number of locations where state/federal diversions occur from two to five but would increase the capacity diversion rate from the current 6,680 cfs most of the time to over 9,000 cfs. The Tunnels project is therefore *not* a conservation measure and detracts dramatically from the overall potential for success of the rest of the BDCP conservation strategy.
- The "underlying purpose" of the Tunnels project and the BDCP are concealed from the public. Its purpose is not only to increase water supply reliability of contractual water commitments within the state and federal projects, but also to increase the potential size and activity of California's cross-Delta water transfers market (that is, using groundwater substitution transfers from sellers of surface water in the Sacramento Valley across the Delta [facilitated by the Tunnels project] to south of Delta water buyers. BDCP's failure to disclose this purpose is thoroughly improper under both NEPA and CEQA. The EIR/EIS strongly implies that in below normal years the Tunnels project will see less usage, but this is unlikely. It would be a highly inefficient plan for using such an expensive capital facility. Instead, the Tunnels are more likely to be used to accommodate state and federal projects' contractual demand in the wet/above normal years AND supplemental water transfer demand in below normal/dry/drought years. This will keep the Tunnels in frequent and even constant use. The EIR/EIS fails completely to address these likely impacts of the Tunnels project.
- The BDCP is contrary to numerous laws, including the Delta Reform Act of 2009, Public Trust Doctrine, the California Natural Communities Conservation Planning Act, the federal Endangered Species Act, water quality control and protection laws, and the California Constitution's ban on wasteful and unreasonable methods of diversion and use of water.
- The EIR/EIS's deficiencies flow from these and other more detailed problems with the Plan, the execution of the EIR/EIS's 30,000+ pages, and the absence of any analysis whatsoever of the Draft Implementing Agreement in the EIR/EIS.

Water Transfers and the Supplemental Adaptive Management Fund

The BDCP would bring back the failed Environmental Water Account, a failed CalFED program that enabled key brokers of state water to game the system, buying water at low cost from the

Supplemental Comments of the Environmental Water Caucus on the Bay Delta Conservation Plan, EIR/EIS and Draft Implementing Agreement July 29, 2014

state or other willing sellers ostensibly to benefit fish with increased Delta flow, then selling the same water at high prices to others once it was exported from the Delta. The pot of money for this BDCP program would be called the "Supplemental Adaptive Management Fund." Its purpose would be to purchase water from willing sellers for instream flows in the event that BDCP's habitat restoration hypotheses fail. This money would come largely from taxpayers who would in effect be charged for the state and federal government's own failure to enforce public trust protections.

As we commented to BDCP previously, the Plan and its EIR/EIS failed to disclose to the public and decision makers the underlying purpose of the Twin Tunnels project to increase the capacity of Delta conveyance to support cross-Delta water transfers. The EIR/EIS also improperly fails to disclose cumulative impacts of the proposed Twin Tunnels project when taken together with well-known and long-planned water storage projects throughout California, and water transfer plans and programs that are closely related past, present, and reasonably foreseeable future projects. Most importantly, storage projects BDCP omits from the EIR/EIS include the raising of Shasta Dam, Sites Reservoir and Temperance Flat on the upper San Joaquin River above Friant Dam and Millerton Lake.

In continuing our review of BDCP documents, we find that the Draft IA reveals at Section 10.3.7.3, "The Supplemental Adaptive Management Fund," which is further described in BDCP's conservation strategy in Chapter 3.4.23. This section of the Plan appears well-hidden and innocuously placed in a section entitled "Resources to Support Adaptive Management." Here BDCP summarizes the Applicants' strategies for "making adaptive management changes to the conservation strategy" which include the following general approaches:

- Changing approaches to the implementation of the conservation measures.
- Shifting resources from less effective to more effective conservation measures.
- Adding new conservation measures.
- · Revising biological objectives.
- Utilizing the Supplemental Adaptive Management Fund (Section 3.4.23.5).4

Every five years, BDCP states that "water facility operating criteria will be comprehensively reevaluated as part of the program-level assessment conducted by the Implementation Office..." Should changes to the Twin Tunnels operating criteria be adopted, "the resources to implement such changes will be drawn from the following sources and in the order of priority":

- 1. Interannual adjustments in operations.⁵
- 2. Sharing of water supply improvements (on a 50-50 basis between the SWP and the CVP).6

⁴ Bay Delta Conservation Plan, Chapter 3, Conservation Strategy, Section 3.4.23, p. 3.4-354, lines 23-27.

⁵ "Under this approach, adjustments would be water-neutral. A number of water management tools, such as use of available stored reservoir or groundwater, source shifting, and borrowed water allocable to SWP or CVP water contractors, would be used to allow for these adjustments to occur." *Ibid.*, p. 3.4-355, lines 15-18.

⁶ "Adaptive management changes to CM1 may result in increased water supplies for SWP/CVP purposes beyond prior annual or long-term projections. If this occurs, the additional water supply will be divided equally between the SWP/CVP water contract deliveries and the conservation strategy through supplemental flows or other approaches designed to enhance aquatic conditions." *Ibid.*, p. 3.4-356, lines 2-5.

Supplemental Comments of the Environmental Water Caucus on the Bay Delta Conservation Plan, EIR/EIS and Draft Implementing Agreement July 29, 2014

- 3. Funding shifts to the most effective conservation measures.⁷
- 4. Enhanced environmental flows.8
- 5. Supplemental Adaptive Management Fund.⁹

In other words, we seem to have here BDCP's "plan B" for Delta outflow. In our June 11th comments, we summarized a presentation to the Delta Independent Science Board by water operations modeler Walter Bourez of MBK Engineers on January 17, 2014. In that presentation—and in a subsequent report we incorporate by reference to these comments¹0—Mr. Bourez stated that for the High Outflow Scenario of BDCP, the state and federal projects would not have enough water in their reservoirs to meet spring outflow while also providing sufficient water for diversions at the North Delta Intakes. BDCP modeling apparently assumes that the outflows will not be met by reducing exports (as application of the Public Trust Doctrine would require), but by releasing water from Lake Oroville in the State Water Project. This would result in state and federal water contractors getting "less water than they would otherwise get without BDCP."¹¹¹ However, according to the 1986 Coordinated Operation Agreement between DWR and the Bureau, responsibility for meeting Delta outflow would be shared, and therefore Lake Oroville's "water debt" would be repaid.¹² BDCP anticipates using water transfers, as we pointed out in our June 11th letter, to provide a source of water for the Delta outflows needed in the High Outflow Scenario, but. states MBK Engineers,

⁷ "Conservation measures that have been funded and implemented properly and, nonetheless, are not achieving their intended outcomes may be considered less than effective and not worth continuing to implement (or continuing at a reduced effort)....This approach could be used to support adaptive management changes not only to CM1 but to any of the conservation measures." *Ibid.*, lines 10-12, 15-16.

⁸ "Through the implementation of various strategies such as water use efficiency programs, reservoir reoperations, water system improvements, and other incentive-based measures, BDCP participants may realize additional yields or otherwise acquire from voluntary sellers long-term access to water for the purposes of, among other things, enhancing environmental conditions in the Delta and improving water supply reliability. Water used for environmental enhancement could be used to augment outflow established through the decision-tree process, as reflected in CM1, for the benefit of longfin smelt or delta smelt or south Delta operating criteria." If not needed for either smelt species, these enhanced environmental flows could be used to benefit other covered species or other adaptive changes to CM1, or "to serve other environmental purposes." *Ibid.*, lines 20-29.

⁹ "In the event that the resources necessary to support an adaptive management change cannot be secured through any of the foregoing approaches, funding to accommodate the change will be available from the Supplemental Adaptive Management Fund. *This fund will be at least \$450 million*, will be used to support adaptive management changes to CM1, as well as to other conservation measures, determined to be necessary during Plan implementation." *Ibid.*, lines 31-36. Emphasis added.

¹⁰ EWC June 11th BDCP Comment Letter, see pp. 65, 67-68. MBK Engineers and Daniel Steiner, Report on Review of Bay Delta Conservation Program Modeling, funded by Contra Costa Water District, East Bay Municipal Utility District, Friant Water Authority, Northern California Water Association, North Delta Water Agency, San Joaquin River Exchange Contractors Water Authority, San Joaquin Tributaries Authority, and Tehama Colusa Canal Authority. Hereafter cited as Review of BDCP Modeling.

¹¹ Review of BDCP Modeling, p., 16.

 $^{^{12}}$ *Ibid.* "If the increases in outflow were met based on COA, there would likely be reductions in Shasta and Folsom storage that would likely cause adverse environmental impacts, which have not been modeled in the BDCP EIR/S."

Supplemental Comments of the Environmental Water Caucus on the Bay Delta Conservation Plan, EIR/EIS and Draft Implementing Agreement July 29, 2014

...this approach is unrealistic. During most of the spring, when BDCP proposes that Delta outflow be increased, agricultural water users are not irrigating. This means that there is not sufficient transfer water available to meet the increased Delta outflow requirements without releasing stored water from the reservoirs. 13

If the conservation measures as a whole are not working to repair damage done to the Delta and its listed species or to meet Delta outflow obligations called for in the High Outflow Scenario, Chapter 3.4.23 of BDCP says it will take actions to improve conditions. If items 1 through 4 above fail, use of the Supplemental Adaptive Management funds from this program would, in theory, only be authorized once reallocation of existing BDCP funds to the failing Plan element failed to improve conditions for covered species (but especially listed fish species) in the Delta. Such adaptive management changes could include:

- Acquiring supplemental flows
- More natural community restoration
- Other actions, or
- A combination of approaches.

At least \$450 million would be placed in this account by "the Authorized Entities, the State of California, and the United States." To access these funds, BDCP sets up a series of actions to be taken or determinations to be made before use of the Supplemental Adaptive Management Fund. While there are a number of steps required for the Implementation Office to access these funds, it is likely that they would be realized early and quickly, hastening the BDCP Applicants' use of the supplemental funds.

Given the problems MBK Engineers has identified just with the High Outflow Scenario's lack of water for meeting Delta outflow targets, it should be pretty easy for BDCP to hurdle these criteria to access the Supplemental Adaptive Management Fund.

There is also a great deal of murk and potential mischief associated with BDCP's "plan B." Creation and management of this Fund raise many questions, depending in part on the success or the failure of BDCP's conservation strategy and adaptive management processes. First, what happens to the funds if they are not needed? How will the funds be reabsorbed by their original contributors and by what decision process will it be determined that they are no longer needed? BDCP at Section 3.4.23 does not consider this logical possibility. By its silence on this matter, *it would seem that BDCP is implying failure is inevitable, that it will need and intend to use the funds set aside in the Supplemental Adaptive Management Fund.*

- Periodic review of biological objectives shows they are unlikely to be achieved by the existing conservation measure(s).
- Biological objective(s) have been assess and adjustments made in an attempt to achieve the objectives.
- Lack of progress toward the biological objective(s) is related to or caused by BDCP covered activities or conservation measures.
- Adjustments to one or more conservation measures (e.g., more flow, and/or changes in habitat restoration targets or locations) are likely to address the problem.
- "To the extent appropriate," existing BDCP assets have been reallocated to support "adequate changes" to conservation measures. And
- "Measures that do not affect water supply, if any, have been implemented."

¹³ Ibid.

¹⁴ BDCP, op. cit., p. 3.4-356.

¹⁵ *Ibid.*, p. 3.4-357, lines 9-22. These actions or determinations would include:

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Second, and more likely: what happens if the funds are used but become depleted? The Bay Delta Conservation Plan, in section 3.4.23 does not consider this possibility. How will responsibility among the BDCP Applicants be allocated so that replenishment of this fund is equitably handled? Does the fund as described in the BDCP become the upper limit because of the ESA regulatory policy of No Surprises?

Third, a pot of funds worth at least \$450 million (and maybe more since it would have to be invested and not simply sit idle!) is a large target for abuse and corrupt management. If the Supplemental Adaptive Management Fund "confirms the need to use the fund" the BDCP Implementation Office "would initiate actions to deploy the money available" to fund the adaptive management change(s). Neither BDCP nor the Draft IA describe where this pot of money would reside and thus who would manage access to it. Would it be deposited with a state agency? An escrow account held by some neutral third party? If held in a state account elsewhere, what would prevent the State of California from plundering these funds as had certain state employees at the State Department of Parks and Recreation abused idle funds set aside for park system management in recent years? How would the funds be kept off limits from a state legislature or Governor's office seeking to balance a budget and finding otherwise unused funds seemingly available for closing the gap on a budget deficit?

Fourth, BDCP fails to disclose in its EIR/EIS's cumulative impacts analysis that the proposed Sites Reservoir would seek to increase water supply reliability "especially during dry years." Sites has objectives that parallel BDCP's: water supply reliability, improve conditions for anadromous fish and other aquatic species, and to improve drinking and environmental water quality. Among the "opportunities" that Sites is intended to take advantage of is "accomplishing...emergency water objectives." This phrase is a euphemism for water project operator actions like drought water banks, meeting "supplemental demand" beyond annual contractual water allocations, water transfers, and establishing a pool of water in Sites Reservoir from which purchases could provide what BDCP calls "enhanced environmental flows" using funds, potentially, from a "Supplemental Adaptive Management Fund."

Fifth, the most likely reason for conservation measures failing to recover listed species under BDCP is the continual lack of sufficient flowing water to and through the Delta. We document that deficiency in our June 11th comments. Therefore, the most likely purpose of the supplemental adaptive management funds will be to purchase water from "voluntary sellers." This is where the proposed fund appears to us to resemble CalFED's Environmental Water Account, which was operated in an uneven manner at best between 2000 and 2007, and with unimpressive benefit to

¹⁶ CalFED Surface Storage Investigations Progress Report, November 2010, p. 3-4. Accessible online 14 July 2014 at http://www.dwr.water.ca.gov/storage/docs/Progress%20Report%202010/a_Full%20Report_Surface%20Storage%20Progress%20Report.pdf.

¹⁷ *Ibid.*, p. 3-5 to 3-6. Emphasis added.

¹⁸ EWC June 11th BDCP Comment Letter, see pp. 166-184.

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listed species.¹⁹ During this same period, the "Pelagic Organism Decline" was identified and measured by scientists studying the Delta.²⁰ By 2008 one review of EWA concluded in 2008 that,

The EWA was successful in reducing uncertainty in water supply; however, its contribution to the recovery of listed fishes was unclear. We estimated the effectiveness of the EWA to be modest, increasing the survival of winter-run Chinook salmon by 0-6% (dependent on prescreen mortality), adult delta smelt by 0-1%, and juvenile delta smelt by 2-4%. Allocating EWA water for a single life stage of one species could provide larger gains in survival. An optimally allocated EWA of equal size to the median of the first 5 years increase abundance of juvenile delta smelt up to 7 percent in the springs of dry years....If the program is to be held accountable for quantitative increases in fish populations, it will be necessary to integrate scientific, possibly experimental, approaches.²¹

From 2000 to 2007, the "environmental water account" was set up and spent nearly \$200 million in public funds as Delta and anadromous fish species populations crashed and the State Water Project over-pumped the Delta, creating huge profits for private landowners. Such intended recovery programs always run the risk of focusing on program implementation at the expense of actually achieving recovery of the listed species.

The actual need for instream purchases for legitimate environmental purposes is limited, and that significant funding through BDCP or a water bond is not necessary, certainly not for the **Delta**. Instead the Public Trust Doctrine and the California constitutional prohibition against waste and unreasonable use and method of diversion of water must be enforced to supply water necessary for public trust resources.

BDCP's proposed fund would corrupt the Public Trust Doctrine to benefit BDCP Applicants. Inclusion of the Supplemental Adaptive Management Fund makes clear that if BDCP is issued incidental take permits with 50-year terms, then for the next 50 years, BDCP Applicants offer in the Supplemental Adaptive Management Fund a way for protection of the public trust to be paid for, rather than enforced on the state and federal water agencies and their contractors, since they would have no other source of water.

This is a scam. In one definition of a scam, the scammer gets the victim to pay for something the victim already owns. BDCP's preferred method to this point appears to be to use wishes and prayers

¹⁹ Mike Taugher, "Harvest of Cash: Kern County agency buys public water low, sells high," *Contra Costa Times* August 8, 2009. Accessible online 13 July 2014 at http://www.contracostatimes.com/ci 10152127.

²⁰ The idea of the Environmental Water Account originated in the late 1990s during the CalFED Bay Delta Program. It was implemented under the CalFED Record of Decision. It was to provide a buffer for endangered fish species by acquiring water that would be immediately available for fish protection while long-term arrangements were made between fishery agencies and water project operators, according to the Bay Institute's first review of EWA in 2001. The EWA was a "supply of water and water management tools" managed by the three fishery agencies (NMFS, USFWS, and CDFG) to modify water project operations to reduce impacts on fishes in the Delta and improve instream and Delta habitat conditions.

²¹ Larry R. Brown, Wim Kimmerer, and Randall Brown, "Managing Water to Protect Fish: A Review of California's Environmental Water Account, 2001-2005," *Environmental Management* 43(2008): 357–368. Emphasis added. See also the Bay Institute's two reports on the EWA accessible online at http://thebayinstitute.blob.core.windows.net/assets/EWA01-4.pdf.

²² Mike Taugher, "Pumping water and cash from the Delta," *Contra Costa Times*, May 23, 2009. Accessible online 14 July 2014 at http://www.revivethesanjoaquin.org/content/pumping-water-and-cash-delta.

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that \$450 million is enough funds for the public to pay for public trust protection of public trust resources that government already has the fiduciary duty to protect for the public.²³

In our June 11th comment letter, we showed that BDCP's underlying purpose includes creation of additional cross-Delta water transfer capacity for California's water market. How much of the "supplemental demand" analyzed in the BDCP EIR/EIS is strictly for water supply demand, and how much would include water purchases for "enhanced environmental flows"? How much water for enhanced environmental flows could be purchased with \$450 million, and how long would that fund last? Is \$450 million enough to sustain EEF water purchases for 50 years? We doubt it. Purchases could not exceed on average \$9 million per year for that duration.

If water prices in the market average \$500 per acre-foot²⁴, the Supplemental Adaptive Management Fund could buy no more than an average of 18,000 acre-feet per year, a pittance for assisting listed fish with restorative flows in and through the Delta. If the Implementing Office purchased more than that amount of water continually, the fund would get depleted that much sooner. If these funds are used for other non-water purchases, then even less water would be obtainable through the fund. Does this \$450 million, or whatever amount is committed to the Supplemental Adaptive Management Fund at the time the Draft IA is executed and the incidental take permits are issued, represent the upper bound of the application of the No Surprises policy in federal ESA regulations?

Would the Supplemental Adaptive Management Fund resources compete with market-based water transfers sought for meeting water contractor supplemental demands? BDCP's water transfer analysis indicates that on average supplemental water transfer activity in its 600,000 acre-feet and 1 million acre-feet supplemental demand scenarios would range between 275,000 to 408,000 acre-feet. Water transfers at a price of \$500 per acre-foot would cost \$137.5 million to \$204 million per year. To compete with the water transfer market, the supplemental adaptive management fund would have to have at least \$13.75 to \$20.4 billion to be sustained over the life of the 50-year term of the incidental take permits. This of course assumes the Supplemental Adaptive Management Fund would be needed at some level every year that the Twin Tunnels and the rest of BDCP are in operation. Many smaller and more rural water districts in the San Joaquin Valley and southern California have complained in the past about the high cost of transferred water.

Our point with this analysis is that neither BDCP, its EIR/EIS, nor its Draft Implementing Agreement address whether the Supplemental Adaptive Management Fund is sufficiently capitalized. Our questions are intended to elicit more careful study about the Fund's scope, purposes, and operation. While the Environmental Water Caucus does not think this fund would be adequately capitalized at this level, BDCP provides no analysis to justify the "at least \$450 million" starting amount for the

²³ National Audubon Society et al v. Superior Court of Alpine County, 658 P.2d 709 (Cal 1983). Also known as the California Supreme Court's "Mono Lake Decision."

²⁴ An acre-foot is about 326,000 gallons, or the amount of water that covers one acre of land to a depth of one foot. \$500 per acre-foot may seem high, but it is actually a conservatively suggested price assumption to illustrate the paltry sum suggested by BDCP for the Supplemental Adaptive Management Fund. Metropolitan Water District of Southern California charges its member agencies in excess of \$800 per acre-foot in 2014 for imported water through their contracts. MWD's current rates are accessible online 14 July 2014 at <a href="http://www.mwdh2o.com/mwdh2o/pages/finance/financ

²⁵ Bay Delta Conservation Plan, EIR/EIS, Appendix 5D, Water Transfer Analysis Methodology and Results. Range for Alternative 4, H4 supplemental demand combined for SWP and CVP in the late long term, as shown in Tables 5D-4, p. 5D-11, and 5D-7, p. 5D-14.

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Fund, nor is any quantitative or qualitative sensitivity analysis performed to estimate the likelihood that the Fund will be adequately capitalized.

In fact, this whole line of reasoning about how much money would be enough for the Supplemental Adaptive Management Fund gets us closer to what is truly needed for the Delta: a study of the real benefits and costs of ecosystem services that instream flows provide into and through the Delta and to the people and ecosystems of California. If the real cost of providing Enhanced Environmental Flows through the Supplemental Adaptive Management Fund that would actually help listed fish species in the Delta survive and recover was known, it is likely to prove cheaper to Californians to enforce the public trust doctrine and the state's constitutional ban on waste and unreasonable use and method of diversion of water in the Delta instead of subsidizing the public trust scam contemplated through the auspices of BDCP. The savings to BDCP Applicants could then be reinvested in water supply actions other than BDCP that would actually comply with the Delta Reform Act of 2009, particularly California Water Code Section 85021.²⁶

The fishery agencies need to do an economic analysis of the value of the public trust resources at stake in the issuance of 50-year incidental take permits in order to decide whether \$450 million will be enough to purchase water over that period of time so that BDCP's goals and objectives might be met. Without such an analysis, the fishery agencies will be unable to make required statutory findings that the Bay Delta Conservation Plan contains neither adequate funding assurances nor adequate ecological assurances that its conservation strategy will contribute appreciably to the survival and recovery of listed species in the Plan Area.

Use of the SWP Property Tax Levy and Water Transfers

As EWC indicated in our comments in Section IV of our June 11^{th} comments on BDCP, it is likely the Twin Tunnels project of "Conservation Measure 1" is too expensive for agricultural water agencies to afford, especially if capital construction and operating costs are all loaded onto water rates paid by their customers.

From public records of BDCP analyses our members have obtained in recent months from the Metropolitan Water District of Southern California and the Kern County Water Agency, we are learning that the state water contractors are considering ways of addressing their desire to obtain as many contractors' participation in BDCP while making it as affordable as possible. Two methods have emerged that water contractors hope will fill BDCP's financing gap: use of the State Water Project property tax levy (which predates Proposition 13 property tax limitations) and water transfers.

A State Water Project property tax levy is at the heart of their deliberations Santa Clara Valley Water District staff reported to their board of directors that

Article 34 of the District's State Water Project contract obligates the District to levy a tax upon all property in the District not exempt from taxation if other funding sources are insufficient. This decision rests within the discretion of the Board. In addition, section 11652 of the Water Code provides that

²⁶ EWC June 11th BDCP Comment Letter, footnote 218, p. 105.

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districts with water contracts "shall whenever necessary, levy upon all property in the state agency not exempt from taxation, a tax or assessment sufficient to provide all payments under the contract..."²⁷

The State Water Project Tax is an "override tax", which means that it is a tax in excess of the one-percent cap imposed by Proposition 13 to pay for voter-approved indebtedness. ...The State Water Project tax is restricted to paying for State Water Project contractual obligations and cannot be used for any other purpose.

The District states that currently there are not sufficient other funding sources to pay its SWP costs. The District's report also mentions other State Water Project contractors that rely on the tax. Several rely on the tax levy for 100 percent of their agency's contractual obligations (Antelope Valley East Kern Water Agency, Coachella Valley Water District, San Bernardino Valley Municipal Water District, and Castaic Lake Water Agency. Other agencies rely on the tax levy to pay for less than 100 percent of their agency's SWP contractual obligations, including Metropolitan Water District of Southern California (8 to 10 percent), Kern County Water Agency (10 to 14 percent), Mojave Water Agency (84 percent), and Zone 7 Water Agency (in the Livermore-Amador Valley area of eastern Alameda County, 50 percent).²⁸

The Santa Clara Valley Water District estimates that its tax levy under BDCP will increase from \$36 per year to \$60 per year by Fiscal Year 2023-24 for the average single family residence (assuming an average valuation of \$500,000). This is a 66 percent increase. (It also may underestimate the average value of single family homes in the District's jurisdiction.) The District's report suggests that about one-third of its share of Twin Tunnels costs would be paid for by relying on the State Water Project tax. This would of course reduce the Twin Tunnels financing burden the District may otherwise impose on water rate increases charged to its various retailing customers throughout Silicon Valley. This tax increase could be accomplished without a vote of the District's 1.8 million customers.

Coachella Valley Water District (which uses the SWP tax levy for 100 percent of its SWP financing) projected in December 2013 that *Twin Tunnels costs will quadruple its SWP property tax levy from \$0.10/\$100 of assessed valuation to \$0.42/\$100. On a \$500,000 property valuation in that district, this would increase the SWP tax levy bill from \$500 per year to \$2,100, a fourfold increase.* CVWD's total annual fixed charge for the Twin Tunnels project would *nearly double*, from \$29.6 million per year to \$50.7 million, *a 71 percent increase.*³⁰

One State Water Contractors' presentation from November 2013 describes three principal cost allocation alternatives for state water contractors: one based on Table A allocations "with management provisions"; one that depends on contractors' level of participation providing for "variable capacity amount for level of participation"; and one that examined alternative water

²⁷ Santa Clara Valley Water District, *Board Agenda Memo: State Water Project Tax Discussion*, July 8, 2014, p. 1. Accessible online 14 July 2014 at http://cf.valleywater.org/About_Us/Board_of_directors/Board_meetings/2014_Published_Meetings/MG54655/AS54668/AI54680/D054795/D0_54795.pdf. This staff report also provides a historic account of how the District came to adopt its SWP tax levy.

²⁸ *Ibid.*, p. 4. Some state water contractors, like Tulare Lake Basin Water Storage District do not use the SWP tax levy to pay for its contractual obligations, according to the Santa Clara Valley Water District report.

²⁹ *Ibid.*, p. 3.

³⁰ Coachella Valley Water District, *Bay Delta Conservation Plan Cost Impacts*, presentation to Board of Directors Meeting, December 10, 2013, slide 7, "CVWD Rate Impact of BDCP." Powerpoint presentation on file with the Environmental Water Caucus.

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supply sliding scales, called the "hybrid approach." This presentation recommends the Table A "with management provisions" method which would provide contractors the opportunity to use short-term and long-term agreements to "maintain flexibility," "respond annually to needs," and "could sell additional DHCCP supply to other SWP contractors" when a contractor's supply needs are not critical.³¹

None of these cost allocation options are to be found in the Bay Delta Conservation Plan, the EIR/EIS, or the Draft Implementing Agreement despite being under consideration as early as the fall of 2013. And neither are they any kind of finished product. They represent noodlings-about by various agencies weighing their options independently and together with the State Water Contractors to figure out if they can afford this beast of a water project.

Use of the SWP tax levy by each water district hides the real cost to customers of their additional Twin Tunnels supply because it delinks the cost of Tunnels water supply from use of that supply. The EWC finds that those state water contractors authorized under state law to issue SWP tax levies as an override of the Proposition 13 one-percent rule are likely to use it to help finance Twin Tunnels construction and operation, unless their customer base and property tax payers object. This method of financing thus excises one environmental benefit of marginal cost pricing: you learn from the pricing what it costs you to add an additional unit of reliability or supply.

More generally, using property taxes in addition to water rates, and even water "flipping" might finance the project, but it would greatly increase, not decrease the incentive of water contractors to import Delta water relying on the Tunnels with little regard for whether and how much imported water they need for beneficial use of water. Such a scheme reflects an unwillingness or an inability of water contractors to assess whether they really need the water they seem to want. Documents originating with Kern County Water Agency staff, provided to the Urban Bakersfield Advisory Committee, reveal this kind of scheming. "What can a Member Unit [of KCWA] do with their SWP supplies?...It is expected that many of the MUs would like to develop water management programs utilizing their SWP supplies that would help offset the costs of their participation in the *Project.* What programs would be permissible for MUs is an important question to be answered." Among the related questions staff noted were: "Will SWP supplies be allowed to be transferred outside of Kern County on a short term, long term or permanent basis? If allowed, what are the terms for such transfers? What role will the Agency [KCWA] play in administering and facilitating such transfers? Will Table A and Article 21 supplies be treated the same?" These questions of course have less to do with whether KCWA member units need to import surface supplies from the Delta and more to do with whether they can profit off such a delivery. Again, this is contrary to Water Code Section 85021 of the Delta Reform Act of 2009. It is a cynical approach water policy for the 21st century, but it can be prevented.

³¹ State Water Contractors, DHCCP SWP Cost Allocation Work Group, *Management Briefing: DHCCP SWP Cost Allocation Alternatives*, November 8, 2013. Powerpoint presentation on file with the Environmental Water Caucus.

³² By the term "water flipping" we wish to convey the idea of a contractor purchasing Twin Tunnels water (either through its Table A amount or from a cross-Delta water transfer) only to sell it subsequently at a higher price to another contractor or even beyond the SWP service area, enabling that contractor to recover the incremental cost of Tunnels water and an increment of otherwise unearned profit. KCWA report from October 23, 2013 to the Urban Bakersfield Advisory Committee, Agenda items 5b and 5c, p. 2. Emphasis added. On file with the Environmental Water Caucus.

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We note that historically urban California was the origin, the epicenter of the 1970s property tax revolt. Raising people's property taxes to pay for a boundoggle water project like the Twin Tunnels is likely unwise, especially if the taxpayers have not been consulted and then find out later they will pay for it anyway.

BDCP's Natural Reserve: Taking Undeserved Credit

Apart from the flawed scientific hypotheses propounded by BDCP that we identified and commented on in our June 11th comments, there is also the matter of whether sufficient lands exist in the Delta whose restoration would function to ease recovery of listed species. Establishment of BDCP's "natural reserve"—the object of Conservation Measure 3— would create a system of "protected lands in the Plan Area...by acquiring lands for protection, and, in some cases, restoration. Such a system is needed to meet natural community and species habitat protection objectives...." To make this restoration omelet will require breaking some eggs, and for its impacts readers are directed to Chapter 6.1.2 of BDCP to learn about natural community loss as part of the Plan's process.

The reserve system is to be constructed within the first 40 years of the 50-year term of the Incidental Take Permits for critical habitat protection and habitat connectivity, according to BDCP's Chapter 6.³⁴ The reserve system at completion would contain some 153,000 acres. Of this acreage in the reserve, 69,275 acres would be acquired (it appears from Table 6-2 for protection by the reserve) while nearly 84,000 acres would be (apparently acquired and) restored. (Table 6-2 is unclear about whether restored lands are actually possessed already by BDCP Applicants or that most or all of those lands to be restored must first be acquired too.

The reserve, we learn, may be partly assembled by allowing the BDCP Implementation Office to "purchase credits from" approved mitigation or conservation banks for incorporation into the reserve system. Credits used to address conservation targets must be from approved banks that include all or part of the Plan Area."³⁵ This means that the BDCP Implementation Office can take credit for restoration work done by others for mitigating impacts of the Twin Tunnels Project.

It also seems obvious to us from even a quick review of Table 3.4.3-1 of BDCP that little of the restoration work is intended to benefit covered fish and listed fish species described in the table's first two pages (out of 13 total pages). Most of this table's description of habitat restoration work is devoted to benefiting terrestrial covered species. As we have pointed out, along with other commenters, the effort for tidal habitat restoration is not likely to provide sufficient export of food and nutrients to the mainly open water habitat that Delta smelt and longfin smelt prefer. Nor will it be attractive to most out-migrating salmon and steelhead smolts that are headed to the Pacific Ocean. Table 3.4.3-5 provides little solace for this, despite offering "results" from other restoration efforts across central California. Many results, however, are not available, or they are presented anecdotally. No attempt is made in the BDCP analysis of Conservation Measure 3 to systematically and realistically assess what restoration projects have gone before either in the Plan Area or around it. Many in this latter table are located well beyond the BDCP Plan Area, thereby reducing their relevance to BDCP. Considerable acreages of habitat restoration has already been attempted in the

³³ BDCP, Chapter 3, Conservation Strategy, p. 3.4-66, lines 4-6.

³⁴ *Ibid.*, Chapter 6, *Plan Implementation*, Table 6-2, pp. 6-5 to 6-6.

³⁵ *Ibid.*, p. 3.4-66, lines 26-28.

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Delta, with at best mixed outcomes.³⁶ We share the conclusion of EWC-member group California Sportfishing Protection Alliance that "Habitat restoration cannot be successful if it doesn't meet the flow and water quality needs of native species that evolved over millennia. The history of habitat restoration in the Delta is that it hasn't met those needs, and BDCP will not meet those needs."³⁷

An engineering report done for the California Department of Water Resources in 2012 casts further doubt on the prospects for BDCP habitat restoration effectiveness. The study aims to "determine the feasibility" of restoring "large areas of interconnected habitat—on the order of 100,000 acres—within the Delta and its watershed by 2100." The report finds that sufficient lands exist in the Delta, even allowing for sea level rise; but the effort will not be easy.

- 1.[S]ufficient lands exist to create over 100,000 acres of intertidal and associated subtidal habitat over time and include an allowance for sea level rise. However, a change in use...will be needed before its conversion can occur to contribute to conserving aquatic species.
- 2. Other considerations will directly affect both the quantity of land available for conversion and quality of 'to be' created intertidal and associated subtidal habitat. Key elements include:
 - a. Proximity of existing communities and critical infrastructure in the Delta that are also within the elevation zones deemed suitable for the creation of intertidal and associated subtidal habitat.
 - b. The extent of public lands available within the target range of elevation is less than 30,000 acres and is currently being used for other, typically non-aquatic, public purposes than for as intertidal and associated subtidal habitat.
 - c. Environmental considerations, such as the tidal energy available and the need for spatial distribution and connectivity to existing populations will influence where effective as intertidal and associated subtidal habitat can be created.
 - d. The footprint associated with BDCP's proposed conveyance facility, which will also utilize lands within the elevation zones deemed suitable...will also reduce the acres of land available for as [sic] intertidal and associated subtidal habitat creation.
- 3. Using a reasonable range of land acquisition strategies, acquiring sufficient acreage has a low probability of success within the BDCP's 50-year planning horizon. However, future changes in the real estate market conditions and/or ability to find creative land acquisition strategies, could lead to a higher probability of success.³⁸

Despite this final summary point, the body of the Black & Veatch report is primarily discouraging. A majority of lands would have to be acquired from the private sector because of other competing uses for land in the Delta generally. In addition, such lands that could both be restored would also have to be assessed for their capacity to accommodate sea level rise.

The Black & Veatch report found that "there are substantial challenges associated with restoring this amount of acreage." The assessment uncovered 13 additional factors that would influence the

³⁶ We incorporate by reference California Sportfishing Protection Alliance's report, *An Overview of Habitat Restoration Successes and Failures in the Sacramento-San Joaquin Delta*, submitted as part of CSPA's comments on the Bay Delta Conservation Plan.

³⁷ *Ibid.*, p. 40.

³⁸ Black & Veatch Corporation, Water Division, *Draft Delta Habitat Conservation & Conveyance Program:*Creation of Up to 100,000 Acres of Intertidal and Associated Subtidal Habitat: Feasibility Level Assessment Based on Elevation & Land Acquisition Considerations, Technical Memorandum prepared for Department of Water Resources, Sacramento, CA, July 4, 2012, p. 3. Copy on file with the Environmental Water Caucus.

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report's results, but which were not incorporated (and thereby undermining the value of the report's more upbeat conclusion #3 above). We excerpt the more salient factors here:

- Find a way to increase the percent of land acquisitions where agreement is reached at a rate greater than 35 percent of the time, especially in the early years of BDCP.
- "Change the definition of "subtidal" to allow increased water depth to be considered suitable. This would allow lands that have experienced greater subsidence to be considered suitable." Changing that definition, however, would likely reduce the ecological effectiveness of lands acquired for restoration, or force greater cost on restoration projects for having to fill in lands to create sufficient depth to substrate (or other habitat values) for successful subtidal habitat restoration.
- Do more small restoration actions (smaller than 800 acres assumed in the report), allowing for greater ease of acquisition of incremental sites.
- Choose water conveyance options that require less, rather than more, land acquisition, which would compete with acquisitions for habitat restoration.
- "Waiting until an 'optimum shape' [for suitable habitat restoration] can be achieved further reduces the probability of success." In other words, the shape of a parcel of land for restoration matters, especially when the restoration goal might be for riparian corridor restoration, where linear river frontage is essential.
- "It is likely that restoration in Suisun Marsh could reduce the tidal energy budget available to create meaningful intertidal habitat in the southern and Northern most areas of the Delta."
- Even acquiring already-restored lands for protection might still involve conversion if the goal of the acquisition is different from the habitat value originally created.
- "Locating restoration areas farthest from known invasive species populations...minimizing the suitability of new habitats for invasives, and controlling harmful invasive species around and within restoration areas, is essential to success."
- "Escalating land prices greater than the return on other investments will reduce the amount of acres that can be acquired for the dollar invested. There are a number of 'drivers' that make this event a plausible outcome."³⁹

The Black & Veatch report modeled the acquisition process as best it could and found additional challenges. First, sellers would have to be highly motivated to make the restoration plan work. Second, significant "(greater than 50%)" use of public lands would be needed "in order to obtain sufficient acreage from the private sector," but only 30,000 acres of suitable land is currently publicly owned. Third, adding restoration-functional assumptions to the model "would further reduce the amount of intertidal and associated subtidal habitat than could be created to increase it." Finally, their research found that

The larger parcels tend to be associated with more seasonal crops and less development. They also tend to be closer or bordering tidally-influenced waterways and/or floodplains. Larger parcels are also

³⁹ *Ibid.*, pp. 31-33. Emphasis in original.

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expected to result in fewer real estate transactions needed to obtain a sizable restoration project similar to the size of the proposed Dutch Slough restoration project.⁴⁰

This means that Delta landowners have leverage over the restoration process. And any time the BDCP Implementation Office might overpay for a parcel for intertidal or subtidal habitat creation and protection, that inflated value would get capitalized into the next transaction. The land market logic at work is similar to the challenges faced any time government attempts to purchase right of way for an infrastructure project, like a freeway or a rail project. BDCP makes no attempt in its 10,000 pages to analyze or address this problem.

These huge uncertainties over the ability of the BDCP Implementation Office to assemble the reserve system of Conservation Measure 3 call into question the ecological assurances marketed in BDCP documents. They fail federal Endangered Species Act and state Natural Communities Conservation Planning Act requirements for ecological assurances that the habitat conservation plan will not appreciably reduce the likelihood of survival and recovery of listed species. The BDCP application for incidental take permits should be rejected by the fishery agencies.

We will evaluate in Section III concerning the Draft Implementing Agreement whether BDCP as planned passes the Natural Community Conservation Planning Act's "rough proportionality" test between project development and project mitigation.

⁴⁰ *Ibid.*, p. 29.

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II. Supplemental EIR/EIS Comments

Delta Exports, Water Transfers, and Cumulative Impacts

In our June 11th comments, the Environmental Water Caucus maintained that the EIR/EIS was inadequate in part because an important purpose of the Twin Tunnels Project of Conservation Measure 1 in BDCP went unacknowledged. This is the purpose of increasing the conveyance capacity through the Delta for water transfers. We recognize that the BDCP Applicants do not ignore this purpose, but it is discounted as "speculative." The result is that the EIR/EIS setting and impacts analyses of most chapters ignore the context and potential impacts of water transfers.⁴¹

Water transfers have been occurring in recent years.⁴² They are therefore not speculative. Water quality and groundwater impacts were ignored in BDCP documents, and that the true underlying purpose and need for BDCP is "not only to increase diversions for Delta export from the North Delta Intake diversions in wet and above normal years, but also to increase the supply reliability of cross-Delta water transfers (i.e., from north of Delta to south of Delta locations) in drier and drought years."⁴³ We also pointed out that, among other ways in which BDCP is legally contrary to the Delta Reform Act of 2009, that BDCP would increase, not reduce, reliance on the Delta for imported water supplies as required by the Water Code Section 85021. There we cite information from BDCP sources that "the Twin Tunnels is to expand California's cross-Delta water transfer market. This transfer activity will occur typically in years when State Water Project contractual allocations are 50 percent or lower, and Central Valley Project contractual allocations are 40 percent or lower."⁴⁴

Appendix 5B of the EIR/EIS addresses "Responses to Reduced South of Delta Water Supplies." Consistent with the rest of the EIR/EIS, Appendix 5B fails to analyze the BDCP Applicants' need to expand their reliance on Delta imports as part of their present and future supplies. They interpret their need, as described elsewhere in this letter, as that of reducing reliance on south Delta exports. This line of reasoning flagrantly disregards the plain meaning of California Water Code Section 85021. Appendix 5B describes potential responses by export service area water agencies to reductions in Delta deliveries (i.e., their Delta imports) in the event of reductions from earthquake, flooding, and regulatory action.

We commented in our June 11th comments that the BDCP Applicants tend to moan, groan, bluster, and hand-wave about the effects of regulation on their water supplies while simultaneously failing to do the necessary demand analysis to support their claims that additional water supply reliability are needed for the SWP and CVP.⁴⁵ Appendix 5B continues this ironic behavior by state, federal, and local government agencies complaining about government regulation and judicial fiat.

⁴¹ EWC June 11th BDCP Comment Letter., pp. 145-149, 166-184, and 192-200.

⁴² *Ibid.*, pp. 197-198. Many cross-Delta water transfers are among those that are subjects of petitions for transfer and temporary urgency changes to water rights filed with the State Water Board. Such petition activity dates back to 2003 in the State Water Board's online records. Accessible online 28 July 2014 at http://www.waterboards.ca.gov/waterrights/water issues/programs/applications/transfers tu notices/index.shtml. They have been enabled by statute since the late 1980s.

⁴³ *Ibid.*, p. 192.

⁴⁴ *Ibid.*, pp. 121-122.

⁴⁵ *Ibid.*, p. 146.

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The 2009 SWP Delivery Reliability Report...differed from those prepared in 2003, 2005, and 2007 because it included revised estimates of reductions to SWP delivery reliability due to future climate changes and sea level rise and also due to restricted operations to comply with the USFWS and NMFS biological opinions (reductions due to prior legislative and regulatory actions already were accounted for in the 2003 and subsequent reports)....The 2009 report showed a continuing decrease in the ability of the SWP to deliver water and concluded that for current conditions, a substantial factor for these reductions is the restrictive operational requirements contained in the federal biological opinions.⁴⁶

Of the poor beleaguered Central Valley Project, this appendix complains:

...CVP operations have been affected by various legislative, regulatory and judicial decisions. These include the CVPIA, Bay-Delta Plan, D-1485, and D-1641. In the 2006 Westside Integrated Water Resources Plan, [San Luis Delta Mendota Water Authority] estimated that these legislative and regulatory actions, in addition to state and federal ESA provisions, had resulted in an approximately 30 percent reduction of their long-term average delivery allocation. Previously, Westside agricultural contractors had received 100 percent of their CVP contracted supply in almost every year since deliveries to the region began in June 1951, except during severe drought conditions [citation]. The 30 percent reduction estimate does not include the effects of the 2008 USFWS Delta smelt biological opinion and 2009 NMFS salmonid biological opinion. The assumed additional effects of those opinions to CVP agricultural allocations could be assumed to be similar to the estimated additional reduction to the SWP contractors (approximately 15 percent).⁴⁷

This is un-self-conscious whining by government agencies about government regulation because it fails to place the reasons for their water supply reductions in context.

California water rights case law guarantees water rights for beneficial uses only to reasonable levels of diversion and use. It is unreasonable (in the senses of both fairness and rationality) to divert water for human use beyond the capacity of ecosystem-related beneficial uses to continue to survive. Where the SWP, CVP and their contractors have been on the wrong side of court decisions and regulatory actions it is because their use or method of use of water was found through weight of evidence to be unreasonable: for example, their export actions were jeopardizing the continued existence of listed fish species including Delta smelt and winter-run and spring-run Chinook salmon.

These regulatory actions were and are neither arbitrary nor capricious. These regulatory actions are at least minimally protecting other beneficial uses at least minimally consistent with the Public Trust Doctrine, the state and federal endangered species acts, and the state's constitutional reasonable use doctrine. Yet BDCP Applicants tell tall tales about government regulation that fail to put their own illegal actions into a more complete context.

After briefly describing the State Water Board's deliberations, BDCP Applicants state that

Although neither the BDCP scoping comments nor the report on Delta Flow objectives represents a specific action, if the BDCP process fails, the SWRCB may act to further reduce exports of Delta water supplies via the Delta flow objectives or revisions to the Bay-Delta Plan.⁴⁸

⁴⁶ BDCP EIR/EIS, Appendix 5B, *Responses to Reduced South of Delta Water Supplies*, p. 5B-5, lines 6-17. Emphasis added.

⁴⁷ *Ibid.*, p. 5B-5, lines 35-39, and p. 5B-6, lines 1-7.

⁴⁸ *Ibid.*, p. 5B-9, lines 19-21. Emphasis added.

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At a minimum no one knows how the State Water Board will rule on Delta water quality objectives and flow criteria—whether or not BDCP fails. If nothing else, it is an argument for the State Water Board to have acted first, to have led the whole process by setting water quality objectives that will help restore and recover the Delta. This would have given BDCP Applicants targets to aim for. The Applicants have nonetheless charged forward, preferring instead to set the State Water Board's agenda and skew its policy narrative toward a government-bashing vendetta against regulatory reductions of Delta water exports.

This complaint in Appendix 5B, however, comes in the context of analyzing responses of export service area water agencies to reductions in Delta export supplies. BDCP notes that for urban water agencies "the potential for water to be transferred from areas that are north of the Delta to areas south of the Delta could decline sharply in some years. Such water transfers might no longer be feasible in some cases." For agricultural water agencies, the picture is different, but transfers are hardly out of the question. While they do resort to water transfers now,

...given the historic costs of transferred water, likely competition from urban agencies and infrastructure limitations [e.g., a lack of Delta conveyance capacity?], the potential for transfers between agricultural suppliers is assumed to be low. Moreover, all agricultural agencies that use Delta exports will be subject to similar limitations. While there have been some transfers among agricultural water agencies based on the willingness of farmers in the service areas to fallow land and not utilize the water which would otherwise be allocated to irrigate the land, that does not represent a viable long-run source of supply. The Westlands Water District estimates that fallowed land will increase from approximately 55,000 acres in 2006 to 125,000 acres in 2020, due to reductions in water supplies as a result of the reallocation of water supplies and other regulatory restrictions [citation].⁵¹

No reason for Westlands Water District's fallowing is provided in Appendix 5B. These vague allusions to dire times ahead are belied later in the same appendix when it seems there will be stiff competition for conveyance capacity in the future:

...[T]here is competition for conveyance capacity [in the existing Delta conveyance system of south Delta export pumps] between project water supplies [i.e., contractual allocations] and water transfers. However, project water has priority and thus, the conveyance of water transfers becomes uncertain.

The impacts on water transfers have been in general in tandem with the impacts on CVP and SWP water supplies.⁵²

This narrative from Appendix 5B confirms our analysis in our June 11th comments that BDCP Applicants, who are among the most active users of cross-Delta water transfers in California, that they see contractual allocations ("project water supplies") in a zero-sum relationship ("have been...in tandem") with cross-Delta water transfers (which they call "supplemental demand" in Appendix 5C and 5D, and in Appendix 5B refer to as simply "water transfers").

⁴⁹ Were this the case, the EWC anticipates that DWR, the Bureau, and the water contractors would put intense pressure on the State Water Board *not* to regulate reductions in Delta exports through its water quality control planning authority.

⁵⁰ *Ibid.*, p. 5B-19, lines 33-35.

⁵¹ *Ibid.*, p. 5B-22, lines 35-43.

⁵² *Ibid.*, p. 5B-35, lines 35-39. Emphasis added.

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Section 5B.4 of Appendix 5B addresses "environmental effects of potential responses on reduced south of Delta water exports. Here in Section 5B.4.4 can be found the outline of the scope of water transfer impacts that should have been analyzed in the BDCP EIR/EIS to deal with the cross-Delta water transfers purpose of the Twin Tunnels project of BDCP. We believe BDCP Applicants intend this roster of horribles to represent conditions that would occur in the absence of the Twin Tunnels in Appendix 5B and Delta exports reduced by regulatory action. But we note that Chapter 30 states:

Because California law (specifically Water Code section 1810) requires DWR to make excess conveyance capacity for bona fide water transferors, provided that certain environmental, water supply, and economic effects can be avoided, DWR could not preclude the use of available capacity in the new north Delta conveyance facilities for transfers where the appropriate findings can be made. Thus, should additional transfers occur as a result of capacity at the new facilities, the construction of such new facilities would be a factor in the facilitation of transfers.⁵³

Adding the Twin Tunnels to the facilities of the state and federal water projects would increase conveyance capacity, particularly in below normal, dry and drought years. We have already pointed this out in our June 11th comments.⁵⁴ This acknowledgement in Chapter 30 points up the importance of revising the EIR/EIS to include this purpose among those already cited for BDCP, and then recirculating all the BDCP documents together, including the Draft Implementing Agreement: *Provide the conveyance capacity and cross-Delta water market transfers are very likely to follow. DWR has to allow use of any excess capacity. As we showed in our June 11th comments, this capacity would not likely be seasonally limited as water transfers subject to the biological opinions are now.⁵⁵*

The roster of horribles (by which we mean unconsidered but reasonably expected impacts) would include:

- Increased greenhouse [gas] emissions (GHG), which are substantial, from the export of water to southern California.
- Additional energy consumption and GHG emissions from pumping of groundwater for irrigation that would otherwise be supplied by mostly gravity-flowing surface water.
- Falling water table caused by the enhanced groundwater pumping for water transfers will require additional energy consumption and GHG emissions. This is the incremental energy and GHG emissions caused by pumping not related to water transfers.
- Depletion of surface water caused by stream recharge of groundwater in response to the additional groundwater pumping for water transfers. The magnitude of this impact depends on the location of the wells from surface water, the aquifer being tapped, the water year type proceeding [sic, probably means "preceding"], during, and following the transfer....
- Groundwater pumping that occurs in smaller watersheds and near important fishery rearing streams can deplete these small streams of flow. Although, these depletions may be small, these streams may already be deficient in flows to support the native fisheries and the incremental loss of flows may be biologically significant.

⁵³ Chapter 30, Growth Inducement and Other Indirect Effects, p. 30-123, lines 23-28. Emphasis added.

⁵⁴ EWC June 11th BDCP Comment Letter, p. 168, including footnote 390.

⁵⁵ *Ibid.*, p. 197, and see footnote 464.

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- Potential impacts on the threatened giant garter snake which uses flooded rice land as important habitat. The impacts have not been documented but potentially the giant garter snake could be harmed by reduced habitat, additional expenditure of energy relocating to suitable habitat, enhanced predation in relocating to alternative habitat, and reduced fecundity.
- Potential impacts of fallowing or changing crop type fields that provide wildlife habitat for other species, including Swainson's hawks, and Greater Sandhill cranes.
- Potential impacts on economies of water transfer source areas due to reduced crop production and economic output.
- Potential impacts due to loss of topsoil of the water transfer source area due to fallowed or nonirrigated land.⁵⁶

These are each important environmental impacts to be expected from adding cross-Delta conveyance capacity to the state and federal water projects to increase water transfer activity. All have been ignored throughout the 30,000+ pages of the BDCP EIR/EIS. We have already commented that discussion of such impacts are missing from the EIR/EIS and render it at present completely inadequate. The EIR/EIS should be revised to correct this deficiency and then recirculated.

Then comes BDCP Applicants' understatement that, "Growth-inducing impacts from water transfers would be minimal *if the project is implemented as proposed. This is primarily due to the higher cost of transfer water.*" The higher cost of transfer water gets us back to the ability and willingness of agricultural water contractors to sell water obtained via the Twin Tunnels to bidders elsewhere in the state and federal Delta exports service areas. They will be able and willing to seek sellers north of the Delta provided they can re-sell such supplies for a higher price that would cover what they paid to north-of-Delta water sellers. The Twin Tunnels gives them the conveyance capacity to do that.

The hope of having water transfer rules in place to facilitate resales south of the Delta also helps explain these contractors' great interest in constructing the Temperance Flat reservoir above Millerton Lake on the upper San Joaquin River and in raising San Luis Dam to increase the capacity of San Luis Reservoir. If the Twin Tunnels capacity increases Delta export yields (that is, more water in wet years as well as more water transfers in drier years), the agricultural water agencies would need some place(s) to put contractual water they don't use (but could re-sell) and cross-Delta water transfer supplies that they could obtain for resale any time of year (such as Article 21 surplus deliveries from the Delta, which are supposed to increase according to BDCP EIR/EIS's water supply chapter. And the profit margin from water transfer resales would help agricultural water contractors afford the Twin Tunnels.

This water marketing scheme would augment the subsidy provided by urban property tax payers who would subsidize the urban water agencies for these resales from agricultural water contractors.

By having somewhere to store transferable water, the San Joaquin Valley agricultural water contractors, like Kern County Water Agency (and their numerous member units) and Westlands Water District, can expand their roles as brokers of water sales during dry years for the urban water districts in their midst: Santa Clara Valley Water District, Zone 7 Water Agency, and Metropolitan

⁵⁶ BDCP EIR/EIS, Appendix 5B, Responses to Reduced South of Delta Water Supplies, p. 5B-36, lines 10-36.

⁵⁷ Ibid.

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Water District. The Twin Tunnels thus would be an essential piece of the infrastructure (i.e., conveyance capacity) needed to make a larger cross-Delta water transfer market possible, together with:

- · Expanded Shasta Reservoir,
- Sites Reservoir north of the Delta,
- Expanded San Luis Reservoir,
- Temperance Flat reservoir, and
- Liberal water transfer rules (in the economic sense of "let a free water market work") in place (both north and south of the Delta) within both the state and federal water projects.

This water market transfer system would primarily benefit the San Joaquin Valley and southern California water agencies. Only senior water rights holders of the Sacramento Valley who would be willing to strike deals with these other agencies would benefit in the north State. Their decisions would put intense economic and ecological pressure on the Sacramento Valley, impacts of which were only hinted at in Appendix 5B of the EIR/EIS, and which are ignored in the larger EIR/EIS.

In our June 11th comments, the EWC found that BDCP's cumulative impact analysis is deficient because it omits many storage, restoration, and levee remediation and improvement studies and plans that are reasonably well-known and foreseeable.⁵⁸ To this we add that *the EIR/EIS* is deficient because it fails to include the Twin Tunnels' purpose of expanding cross-Delta conveyance capacity which would in turn benefit the urban and agricultural contractors who participate in California's cross-Delta water transfers market, and fails to include the cumulative role of proposed Sites, Shasta and San Luis expansion, and Temperance Flat reservoir projects in evaluating cumulative impacts of the Twin Tunnels project.

We have also commented on the absence of a credible water transfer modeling effort in BDCP's EIR/EIS.⁵⁹ The BDCP Applicants that such modeling would be "speculative," but this is misleading. BDCP reproduces water transfer market data from 1995 to 2010 in Appendix 5D of the EIR/EIS, data which could easily provide the foundation for a plausibly reasonable analysis, given all the other modeling work done by BDCP for climate change, contractual water supply operations, and more.

Water Quality Impacts

We incorporate here the water quality comments of the California Sportfishing Protection Alliance, which provides BDCP with extensive comments on Chapter 8 of the EIR/EIS addressing water quality issues.

We also take note of recent research on selenium fate in the Bay-Delta estuary by a team of researchers led by the United States Geological Survey. This note is intended to supplement our June 11th comments. This research tracked selenium bioavailability in northern San Francisco Bay (which for most scientists includes the Bay-Delta estuary encompassing the Plan Area of BDCP) between May 1995 and February 2012, particularly in the invasive clam species, *Potamocorbula*

⁵⁸ EWC June 11th BDCP Comment Letter, p. 224-225.

⁵⁹ *Ibid.*, pp. 197-198.

⁶⁰ A.R. Stewart, S.N. Luoma, K.A. Elrick, J.L. Carter, M. van der Wegen, "Influence of estuarine processes on spatiotemporal variation in bioavailable selenium," *Marine Ecology Progress Series* 492: 41-56, 2013.

⁶¹ EWC June 11th BDCP Comment Letter, pp. 36-44.

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amurensis. The researchers found that proximity to Carquinez Strait had a significant impact on Se concentrations in the clams. They found spatial differences among clams at different locations in this region depending on proximity to oil refineries downstream at Martinez, Benicia, Rodeo and San Pablo Bay. But the differences could not be accounted for simply by residence time of water. The researchers found that:

The discrepancies between the model and the observations raise the possibility of additional sources of enriched Se [selenium] that is bioavailable in the northern estuary. The most likely sources would be occasional inputs from the San Joaquin River.

The San Joaquin River historically provided~20% of the estuarine flow. In not receives agriculture irrigation drainage elevated in Se and has total dissolved Se concentrations...nearly 10 to 50 times that of the Sacramento River [citation]. However, the influence on the bay of the Se-enriched inflows from the San Joaquin River to the bay are mostly limited to high-flow months, since net flows during the summer and fall are almost always negative because of water diversions [citation]; and (2) the delta that lies between the San Joaquin River and the bay is probably a sink for Se removal, but the magnitude of that removal remains uncertain [citation]. These factors suggest that if inputs from the San Joaquin River have a detectable influence on Se bioavailability in the bay, it would be temporally complex and unlikely to explain the seasonal patterns of fluctuation in Se concentrations....[A]spects of the long-term patterns of change in fall and spring Se concentrations could be influenced by aperiodic inputs from the San Joaquin River, superimposed on the dominant effects of inflows in diluting Se bioavailability in high-flow years and allowing greater overall bioaccumulation in low-flow years. If inflows of San Joaquin River to the bay were to increase (e.g., under some of the water management scenarios being proposed for the future), it seems feasible that this source of contamination could become more important.⁶²

The researchers concluded that

Processes other than just dilution could affect inflow-linked seasonal or interannual fluctuations in *Potamocorbula amurensis*. Although tidal currents in the estuary are strong, most models suggest that longer residence times are likely as inflows recede in the summer and fall. *Longer residence times would allow greater transformation of dissolved Se to particulate Se (via phytoplankton uptake) without, necessarily, large changes in Se concentrations in the total particulate mass [citation]. This could create a larger pool of bioavailable Se during the fall season, in particular.* This effect could superimpose temporal variability upon the spatial pattern, but the lack of spatial correlation with existing indicators of nutritional sources and quality show that it did not drive the spatial pattern. Further, the fact that monthly chl a [chlorophyll a] concentrations were significantly correlated to monthly clam Se concentrations without incorporating a lag suggests that phytoplankton biomass did not have an effect on seasonal clam Se, but rather that variations in both chl a and Se concentrations were coincident with changes in freshwater inflow.⁶³

We reiterate from our June 11^{th} comments that BDCP errs in assuming decreasing selenium loads during the 50-year term of the incidental take permits.⁶⁴

⁶² Ibid., p. 53. Emphasis added.

⁶³ *Ibid.*, p. 54. Emphasis added.

⁶⁴ EWC June 11th BDCP Comment Letter, pp. 71-76.

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Energy Impacts

EIR/EIS Chapter 21, *Energy*, presents an opaque analysis of the energy context of the Twin Tunnels project and its impacts. It gets the reader immediately off on the wrong foot in its first sentence, which states: "The section describes potential effects to these energy resources from construction and operation of the action alternatives in the study area (the area in which impacts may occur)." Which section? Which energy resources? What study area? The Chapter's opening sentence presages much mystery to come.

Moreover, this section points readers back to Chapter 3 (some several thousand pages earlier) to six pages and a separate map book if one wishes to receive a description of how the Twin Tunnels project, or any other BDCP alternative would have electrical power delivered. As well, Chapter 21 warns that "the ever changing regulatory environment that the SWP and CVP projects operate under is a challenge for planning tools, such as CalSIM-II. Energy calculations based on CalSIM II represent *a reasonable, though overstated*, scenario based on historic monthly flows and reservoir storage." We are never told how the degree to which energy calculations are overstated in the EIR/EIS. EIS. 67

We noticed in Figure 21-1 that for 2010 SWP power resources included 13 percent contribution from Reid Gardner No. 4, a coal-fired power plant in northern Arizona of which DWR is part owner. Figure 21-2, showing DWR's 2020 forecasted power resources shows no contribution from Reid Gardner Nov. 4 at all, but the narrative of this section provides no explanation as to what happens to this resource. What happens to DWR's relationship with Reid Gardner No. 4?

Basic energy context is missing from Chapter 21: how much energy use now occurs by SWP and CVP systems? What have the historic trends in energy usage been, and where is the largest energy consumption in each system occurring and why? Tables 21-1 through 21-6 get a little ways down the road of answering these questions, but figures mapping each system and tables showing facility energy usage and generation (to the extent there are dual use facilities) would be helpful. Tables depicting monthly decile distributions of energy head, flow, and generation prove to be of little assistance to readers and decision-makers trying to understand how the SWP and CVP use energy, where, and under what conditions. Tables 21-7 et al and 21-8 et al are of little help in conveying the meaning we ask for here. They obfuscate rather than inform readers of this chapter.

In Section 21.1.3.2, we find mention again of how "the energy calculations...presented in this chapter represent a reasonable, though overstated, assessment of actual energy requirements for the BDCP alternatives." Please explain this mysterious statement, and explain why "overstatement" is not somehow corrected or bracketed to give readers and decision-makers some sense of what the actual reasonable range of such calculations might be. And to which calculations does this statement apply? Energy generation? Energy usage? Transmission? All of the above?

Energy impact criteria of significance are omitted, or go unrecognized for their significance in enabling proper assessment of energy impacts of the Twin Tunnels project and its cumulative effects. The only plausibly available criterion reported in Section 21.2, *Regulatory Setting*, appears

⁶⁵ BDCP, Chapter 21, *Energy*, p. 21-1, lines 4-5.

⁶⁶ BDCP, Chapter 3, pp. 3-107 to 3-112; Figure M3-4 consisting of an index and 15 figures.

⁶⁷ BDCP, Chapter 21, p. 21-2, lines 1-3.

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to be the CEQA Guidelines, where the evaluative criterion of "avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy" is quoted.⁶⁸

As in Chapter 31 (see below our comments on the Environmentally Superior Alternative), here too BDCP Applicants choose to interpret the CEQA Guidelines only very narrowly. They ignore the fact that the State Water Project is a net user (consumer) of energy to move water from Lake Oroville across the Delta, up to the head of the California Aqueduct; lifting it into San Luis Reservoir; lifting it again at Dos Amigos Pumping Plant; and lifting it again up and over the Tehachapi Range to southern California. And this is a large net consumption of energy, on average over 7,200 gigawatthours per year in 2010. This is forecasted by BDCP Applicants to increase by 2020 to 7,900 gigawatthours. While the BDCP Applicants do not state that CEQA is silent on the question of energy efficiency, they construe this as meaning merely that all aspects of construction and operation of the Twin Tunnels project would be as energy efficient as possible.⁶⁹

The prior question of whether *the project itself* is possibly itself an inefficient, wasteful and unnecessary consumption of energy" is never considered, let alone justified with overriding considerations. To do such an evaluation means doing the hard but important work for decision-makers of assessing whether the water that this expenditure of energy would make possible (via both construction and operation) would be a reasonable use and method of diversion of water; whether supplies of water needed to meet future demand in the current Delta export service areas could be met with alternative methods of water supply; whether the project complies with the Water Code Section 85021 requirement that regions importing water supplies from the Delta must reduce their reliance on Delta supplies; whether the public trust resources affected by the diversion of project water would be protected or not. In other words, criteria from beyond CEQA Guidelines could and should be applied to the question of whether the Twin Tunnels project represents an inefficient, wasteful and unnecessary consumption of energy. The EIR/EIS is deficient from this lack of analysis. It should be revised and recirculated.

We note too that the energy analysis in Chapter 21 fails to incorporate any analysis of the likelihood that water transfers would increase during drier years when hydroelectric power is less available. The same unwillingness to apply BDCP's abundant modeling capability is on display in this passage:

In the event that Delta water deliveries could not meet south of Delta water supply, alternative water sources for south of the Delta service areas could be accessed to supplement deliveries [i.e., cross-Delta water transfers]. New south of Delta surface water storage, groundwater pumping, and desalination plants could provide some of the necessary supplies and would create additional energy demands. While it is important to acknowledge this possibility, it is difficult to quantify and analyze the variety of supplemental water sources in a meaningful way. The uncertainty around additional water supplies would need to be addressed and analyzed on a case by case basis as they become feasible alternatives. 70

Someone within the project management structure of the EIR/EIS should have apprised the author of Chapter 21 of the analyses and likelihood of water transfers discussed in EIR/EIS appendices 5B, 5C, and 5D. Simply plugging in to CalSIM II the supplemental demand figures contained in Appendix 5D in particular should have enabled the EIR/EIS to report what the potential energy impact of delivering water at least across the Delta would be. More water transfers are not speculative should the Twin Tunnels be constructed and operated. They are likely.

⁶⁸ *Ibid.*, p. 21-25, line 13, from Appendix F, *Energy Conservation*, of the CEQA Guidelines.

⁶⁹ Specific areas where the EIR/EIS's energy analysis exhibits this narrow interpretation of the CEQA Guidelines are found at p. 21-41, lines 11-12 and lines 17-18; and at p. 21-50, lines 13-17 and 24-25.

⁷⁰ *Ibid.*, p. 21-36, lines 1-7.

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Finally, we appreciate that the BDCP Applicants conclude in Chapter 21 that "the cumulative effects on energy use are adverse because many of the other projects would also increase energy use in the three BDCP regions." We note that this qualitative conclusion should be quantitatively increased by the fact that the BDCP Applicants have inappropriately and improperly omitted from their cumulative impacts projects list major and reasonably foreseeable new reservoir projects (i.e., Sites and Temperance Flat) and reservoir expansion projects (i.e., Shasta and San Luis Reservoir) at least some of which would result in cumulative increases in energy usage to move water through the state and federal water projects. For all these reasons relating to energy, the EIR/EIS is inadequate as a result, and needs to be revised and recirculated.

Environmentally Superior Alternative

The EIR/EIS in Chapter 31 declines to determine an environmental superior alternative from among the BDCP alternatives. BDCP blames CEQA for this, stating:

Unlike many other environmental laws, CEQA does not treat any category of environmental effect as being more important than any other category. Thus, the process for reaching an overall determination under CEQA as to the environmental superiority of a particular alternative action requires the balancing of different sets of environmental benefits and impacts against each other. There is no clear direction under CEQA for how to engage in such balancing to identify an environmental superior alternative in a draft EIR.⁷²

The BDCP Applicants do not look hard enough for criteria to evaluate environmental superiority. This is important precisely because BDCP Applicants reject the possibility that the No Project Alternative (or in BDCP's case, the No Action Alternative) would be the environmentally superior alternative. BDCP's rejection is unfounded. It is based on a truncated and improperly described set of purposes and needs for the Twin Tunnels project; its habitat restoration plans are based on flawed hypotheses for habitat replacing flow for listed fish species; its habitat restoration strategy is premised in large part on taking credit for restoration sites and projects that other parties have already undertaken; and the supposed environmental benefits of the BDCP are premised on "reduced reliance on the south Delta pumps" while soft-peddling the introduction of new hydrodynamic nightmares created by the north Delta intakes. Increased flexibility of diversion options for the state and federal water projects does not and will not equate to environmental superior performance of the action alternatives over the No Action Alternative.

⁷¹ *Ibid.*, p. 21-59, lines 33-35.

⁷² BDCP, Chapter 31, *Other CEQA/NEPA Required Sections*, Section 31.3, *CEQA Environmentally Superior Alternative*, p. 31-4, lines 33-38.

⁷³ *Ibid.*, p. 31-5, lines 5-6. "...[T]he BDCP No Project Alternative (described in this document as the No Action Alternative) is not the environmentally superior alternative, as compared to the action alternatives."

⁷⁴ We note that "reducing reliance on south Delta pumps" is a BDCP criterion that has no basis in law or regulation. California Water Code Section 85021 requires importers to reduce their reliance on Delta exports, and does not specify the location from whence those exports are or would be taken. This is the kind of conceptual sleight of hand BDCP employs to characterize the Twin Tunnels project and BDCP as somehow complying with the Delta Reform Act and justify the Twin Tunnels project as a "conservation measure" under the federal ESA and the state NCCPA.

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BDCP further argues in Chapter 31 that the No Action Alternative would continue the supposed vulnerability of the state and federal water projects to seismic disruption from levee failures and to the creeping effects of climate change and sea level rise. The action alternatives, claims BDCP, would make the state and federal water systems less vulnerable to both of these long-term effects.

But it is significant that BDCP does not argue that this makes any of the action alternatives somehow an environmentally superior alternative. The Applicants cannot reasonably make such a claim and have it stand up to scrutiny. For instance, the action alternatives would increase the seismic and sea-level rise vulnerability *of the Delta* over and above the condition of the No Action Alternative because it would reduce the policy incentive among state water officials to protect the Delta. Resources invested in BDCP action alternatives would divert essential resources away from protection of Delta islands and the Delta economy and ecosystems over the long term.

Our point is not to speculate about future levee repair and sea-level rise adaptation budgets, but that some of the future public finding resources not spent on BDCP could be readily spent on Delta levee-setback restoration and levee-raising projects without any Twin Tunnels development. Such projects could expand habitat without creating hydrodynamic nightmares in the north Delta, and would help protect south Delta exports from the Banks and Jones pumping plants.

BDCP Applicants shrug their collective shoulders and say in Section 31.3 of the EIR/EIS, "how could we possibly decide such a complicated question as the environmentally superior alternative when there are so many alternatives, so many variables, and it's all *so complex!*" As is their preferred tendency, the Applicants construe its obligations to make this finding of an environmentally superior alternative as narrowly as they possibly can, by looking only to CEQA for criteria on which to judge this requirement and finding none. CEQA compliance however does not depend solely on finding the criteria solely within that law's terms, but on the whole array of laws with which the BDCP must comply.

Evaluative criteria abound elsewhere than CEQA, in laws that also apply to BDCP. The EIR/EIS's discussion of the environmentally superior alternative fails utterly to take into account the NCCPA's requirement of "rough proportionality" between project development and project impact mitigation; of the Delta Reform Act's requirement to balance co-equal goals; of the requirement in Water Code Section 85320 to account for flows regimes needed to restore Delta fisheries (when such regimes were provided by the State Water Board pursuant to Water Code Section 85086 in 2010 with its Delta Flow Criteria Report); and the ESA's requirement to provide ecological assurances that the BDCP and its Twin Tunnels project would improve the likelihood that listed species could survive and recover.

The EWC finds that the No Action Alternative is the environmentally superior alternative in BDCP. When the No Action Alternative is considered environmentally superior, CEQA requires that the BDCP Applicants "shall also identify an environmentally superior alternative among the other alternatives." We ask of the BDCP Applicants: Applying the law-based criteria we offer in the previous paragraph, what would be the environmentally superior alternative that the BDCP Applicants would choose from among the action alternatives?

In the meantime, because discussion of the environmental superior alternative is woefully deficient, the Draft EIR/EIS is inadequate and must be revised and recirculated.

⁷⁵ *Ibid.*, p. 31-4, lines 20-21; and CEQA Guidelines Section 15126.6(e)(2).

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Summary of Significant and Unavoidable Adverse Impacts

Continuing a lengthy track record of ineptitude at summarizing BDCP EIR/EIS content, Section 31.4, *Summary fo Significant and Unavoidable Adverse Impacts*, fails to provide a full and complete summary of significant, unavoidable and adverse impacts. Table 31-1 omits all of the numerous adverse impacts to fish and aquatic species, terrestrial species, and many of the water quality impacts identified in the EIR/EIS's Executive Summary, Table ES-9.

The differences between these two summary tables should be reconciled as part of a revised and recirculated Draft EIR/EIS.

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III. The Draft BDCP Implementing Agreement

The Environmental Water Caucus has made numerous substantive comments in its June 11th comments on the Bay Delta Conservation Plan and its Environmental Impact Report/Environmental Impact Statement (EIR/EIS) that directly relate to the Implementing Agreement and its relationship to BDCP documents. Suffice it to say that to the extent that the Implementing Agreement would execute a flawed habitat conservation plan, it would merely reproduce the same deficiencies and failures we have already identified in our comments here and in our June 11th comments.⁷⁶

We have read through the Draft Implementing Agreement for BDCP released Friday, May 30th, and compared it with the July 2013 Draft of the IA.

Statutory Findings

Section 4.0 addresses the statutory finding issues for the Fishery agencies. Mr. Ren Lohoefner has stated that the FWS and NMFS section 4.1 on their findings is still in negotiation. CDFW director Charlton Bonham indicated (perhaps overconfidently) there would only be slight wording changes to Section 4.2 where CDFW's findings are provided. Again, it appears that the substance for the findings apparently must wait until the stage of incidental take permit issuance, and public review of the findings will be attenuated at best; the BDCP Applicants prefer to skirt the ESA's requirements that an adequate NEPA review shall have been conducted as part of a completed habitat conservation planning application package in advance of the incidental take permits.

"The Implementing Agreement Controls" BDCP

Section 6 of the Draft IA incorporates BDCP "and each of its provisions" into the Draft IA, and further clarifies that,

wherever possible, the terms of this Agreement and the terms of the BDCP shall be interpreted to be supplementary to each other; provided further, in the event of a direct conflict between the terms of this Agreement and the BDCP, the terms of this Agreement shall control.⁷⁷

This language renders the BDCP EIR/EIS immediately inadequate and subject to revision and recirculation in order to comply with the National Environmental Policy Act and the California Environmental Quality Act. The EIR/EIS, while containing merest mentions of the Implementing Agreement fails to analyze its impact. Now that the Draft IA is said to "control" with respect to interpreting BDCP terms, the EIR/EIS is additionally inadequate by failing to analyze for and identify any potential conflicts between BDCP and its Draft IA so that the public and decision makers are made aware of any such differences.

⁷⁶ EWC June 11th BDCP Comment Letter, see pages 16, 22, 32, 37, 86-88, 91, 110-118, 139-143, 161, and 203 for comments relating to the Draft Implementing Agreement of May 30, 2014.

⁷⁷ Implementing Agreement for the Bay Delta Conservation Plan by and among the United States Fish and Wildlife Service, the National Marine Fisheries Service, the California Department of Water Resources, the California Department of Fish and Wildlife, and State Water Project/Central Valley Project Contractors, Draft, issued May 30, 2014, p. 15. Accessible online at http://baydeltaconservationplan.com/Libraries/ Dynamic Document Library/Draft Implementing Agreement 5-30-14.sflb.ashx. Hereafter cited as Draft IA.

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Covered Actions and Take Authorizations

Take authorizations will apparently be described in Section 8.0, and covered activities in Section 9.0. But Mr. Lohoefner of USFWS announced in late May 2014 that the take numbers will not be considered until the stage of issuing incidental take permits. This appears to us to violate CEQA, NEPA, and sensible habitat conservation planning practices that incorporate adequate public review.

Legally Required Findings

There appears in Section 8 language about the legally required findings that justify issuance of incidental take permits from the fishery agencies to BDCP, but this section needs parenthetical clarification. Currently, this language reads as prejudicial assertions that are not based in the reality of profoundly flawed BDCP documents . We have already commented on numerous ways in which statutory ESA findings cannot be met with the documents on BDCP now at hand. There should be a "Note to Readers" that clarifies the language holds the place of findings that remain to be written, since it is clear to our review that these "findings" do not represent a fact-based evaluation of BDCP and its EIR/EIS.

Decision Tree

The decision tree process discussion (Section 10 of the Draft IA) is expanded over last summer's Draft IA. Unfortunately it contains language stating "the parties agree that a key area of scientific uncertainty concerns the volume of Delta Outflow...necessary to advance the biological goals and objectives for both delta smelt and longfin smelt." As discussed in our June 11th comments on the Bay Delta Conservation Plan and its EIR/EIS, the source of this "key area of scientific uncertainty" appears to be the BDCP Applicants themselves. Scientists with the US Fish and Wildlife Service, the National Marine Fisheries Service and the State Water Resources Control Board have issued findings and determinations in recent years that more Delta outflow, more Delta inflow, and flows that mimic the timing and variability of the natural hydrograph of the Delta's Central Valley watershed are vital to recovery of listed fish species in the Delta. Moreover, as we observed in Section I of this letter, even BDCP seems to expect its hypotheses may not be supported once they are implemented.

Under issuance of the incidental take permits BDCP we understand that would start tunnels operation with the high outflow scenario approach to protect Delta smelt. The HOS is considered precautionary (though in reality they are but a fraction of flows called for in the State Water Board's 2010 Delta flow criteria). If the scientific experiments done under the Decision Tree process indicate cause for relaxing the outflow criteria, then the Draft IA allows that on page 25. They will test the habitat over flow hypothesis for 10 years "using the best available scientific information."

⁷⁸ EWC June 11th BDCP Comment Letter, see Sections II, III, IV, IV, and VII.

⁷⁹ EWC June 11th BDCP Comment Letter, pp. 38-44.

⁸⁰ See the BDCP comments of California Water Impact Network, California Sportfishing Protection Alliance, and AquAlliance, incorporated into these comments by reference. Relevant scientific studies include the State Water Board's 2010 Delta flow criteria report, the 2009 NMFS salmonid biological opinion, the 2008 USFWS Delta smelt biological opinion, the 2010 CDFW biological objectives and flow criteria report, and the 2009 NMFS salmonid recovery plan.

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One new item appears to be that there will be a four-step process for the decision tree: hypothesis design, implementation of a science plan to test the hypotheses, completion of a peer-reviewed report that interprets results from the science plan's tests, and delivery of the report to the Authorized Entity Group and the Permit Oversight Group for decision. So, with the Decision Tree affecting the two smelt species, we get a test of the governance structure of BDCP and adaptive management's relationship to it.

Any change to Delta outflows resulting from the Decision Tree process will require neither plan nor incidental take permit amendments. The spectrum of Delta outflow, the Draft IA argues, is spanned by the BDCP Plan document, although the exact pages the Draft IA relies on are not specified.

Relationship of Decision Tree process to other covered fish, Section 10.2.1.5: "the outflow needs of these species [including salmon and sturgeon] will also be investigated as part of the scientific research and analysis that will be conducted prior to the new conveyance system becoming operational." (p. 27). But nothing so comparatively rigorous as the Decision Tree process is provided in the Draft IA for these other species. Not all listed species issues are created equal in the eyes of BDCP and its Draft IA. How will BDCP equalize this disparity in treatment for salmonids and sturgeon relative to the smelts, especially if the fishery agencies find themselves listing more Delta fish species in the next five decades?

Real-Time Operations: Institutionalizing the Inability to Act

Their "real-time operations" (RTO) section specifies that the RTO group will consist of fishery agency, Bureau and DWR representatives (one each for a total of five members). They must make decisions by consensus on real-time adjustments. This is an extremely high bar for real-time exercising of professional judgment; it prejudicially precludes meaningful action that might benefit covered and listed fish species. The real-time rules provide for "no net loss to exports," the water management (i.e., supply reliability) mantra of the water contractors, DWR and the Bureau during the CALFED Bay-Delta planning process of the late 1990s. The consensus requirement means essentially that the water project operators (Bureau and DWR) have veto power over major RTO adjustments, even though the fishery agencies outnumber the water project operators 3 to 2 on the RTO team. "Appeals" of the lack of consensus are handled by moving it up to the regional directors of all the agencies, and it appears consensus among them is required. It will be difficult if not impossible to get consensus on some action that could protect a 2-inch fish. This represents a BDCP governing process victory for the water project operators and their contractors, of course.

No Net Loss to Exports Through Adaptive Management

The principle of No Net Loss to Exports is also alive and well in the Adaptive Management section of the Draft IA as well. On p. 37, top, the Draft IA states that changes to Conservation Measure 1 (i.e., the Tunnels project) adopted through the adaptive management process "shall be drawn from the following sources, to the extent available, and in the order of priority set out below:

- "o Adjusting operations on an inter-annual basis.
- o Sharing resources derived from water supply improvements.
- o Re-allocating resources from less effective Conservation Measures.
- o Drawing funds from the Supplemental Adaptive Management Fund."

See our comments above in Section I of these supplemental EWC comments concerning the Supplemental Adaptive Management Fund. It appears that the Draft IA merely reproduces much of this section's language from BDCP Chapter 3.4.23, and therefore its egregious corruption of the Public Trust Doctrine as well as its likely undercapitalization of the Fund.

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As we point out above in Section I of this letter, these sources are all contained within the scope and sphere of the Bay Delta Conservation Plan (e.g., in Chapter 8), bounded by the No Surprises assurances that alterations to conservation measures and biological goals and objectives will not require further infusions of land, water or money to enable BDCP to achieve biological goals and objectives. They represent zero-sum means of addressing changes to CM 1 that are fully contained within the Plan and within water supply parameters.

After the smelts' Decision Tree process has run its decade-long course, how much adaptive management research funds will be left over for other pressing research needs? We are concerned that the decision tree process would "suck all the oxygen out of the room" of adaptive management funding. The final decision tree authority is ostensibly given to the fishery agencies (all three, state and federal) but the "final decision about criteria...[gets] implemented when the conveyance facilities become operational" subject to "real-time operations" (see below), and the bureaucratic review process BDCP establishes to thwart effectiveness on behalf of fish and minimize sudden and substantial changes to water exports. This is an area where the fishery agencies effectively contract away their power and authority under ESA Section 10 (and parallel consequence for CDFW, in our view).

Redirecting BDCP Impacts to Upstream Senior Water Rights Holders

Adaptive Management (Section 10.3) appears to be handled much the way the plan calls for—this section makes direct reference to BDCP chapter sections as the basis for AM actions and process. For example, the IA makes clear that the Decision Tree process (Section 10.2.1) will be handled through the Plan's processes for adaptive management and monitoring.

Anything beyond what's in the Plan when the ink dries on the Draft IA and the incidental take permits, the Authorized Entities will be off the hook from going beyond what is in the Plan—unless for some unforeseeable reason the Authorized Entities would consent to providing any water, money, or land to improve conditions for the habitat conservation plan.

The Draft IA continues BDCP's behavior of failing to acknowledge explicitly and openly that the Tunnels project will likely fail to perform as advertised as a supposed "conservation measure" and that public funds will likely be needed to buy water to bail out its activities and operations in the North Delta. This likely failure will put more pressure on the State Water Board to follow through on its tentative plans to require proportional contributions of flow from upstream reservoirs on major Delta watershed tributaries in the Sierra foothills. The Draft IA states, "In the event that additional outflow was determined to be necessary [for the Delta], supplemental water may be acquired from voluntary sellers." We find this sentence disconcerting. This supplemental water purchase fund (for that is what it really is) appears to be one of the few instances where BDCP has equipped itself with a "Plan B" in the event of some kind of failure. We ask, what then is "Plan C" in BDCP if there are either no voluntary sellers, or the supplemental adaptive management (i.e., "water purchase") fund runs out of money?81 It could be an illegal redirection of project impacts if this circumstance led the State Water Board to require such proportional flows from the major tributaries to benefit a pair of junior water right holders (the State Water Project and the federal Central Valley Project). Such an action by the Board would fly in the face of California's reliance on the legal doctrines of prior appropriation and of reasonable use and method of diversion of water. For the Board to decide this way would serve unjustly to impose provision of Delta inflows on senior upstream water right holders, thereby benefiting junior State Water Project and Central Valley Project contractors. This would be a perversion of California water rights doctrine.

⁸¹ See our comments in Section I above, pp. 4-10.

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Nonetheless, there is precedent by which the State Water Board has acted to protect Delta outflows, which suggests this scenario for redirected water supply impacts on the Sierra foothills communities is not merely imaginary. In Water Rights Decision 1622, and again in Water Rights Decision 1641, the State Water Board has required the Bureau to guarantee flows from its New Melones Reservoir on the Stanislaus River in Tuolumne County for the purpose of meeting water quality objectives in the Delta. Senior water rights were not abridged in the process. The chronic water quality objective violations we cited in our June 11th letter strongly suggest that the Board has already not required enough of such flows from the state and federal projects who are junior in priority to meet the Board's objectives for the Delta. The danger in the future could be that the State Water Board might reach upstream to adjust the rights of seniors to provide additional flow without requiring the same or more of the state and federal water projects first.

Due in part to endangered fish species concerns and water quality concerns, the State Water Board is already considering proportional flow requirements to meet Delta water quality objectives as it proceeds to develop its next Bay-Delta water quality control plan. Its 2010 Delta Flow Criteria Report, required by the Delta Reform Act of 2009, also recommended for aggregate Delta inflows amounting to 75 percent of unimpaired flow from the Sacramento River and 60 percent of unimpaired flow from the San Joaquin River to the Delta.⁸⁴

Absence of Nexus Between Tunnels Financing and Operations

BDCP ostensibly is a Twin Tunnels water conveyance project wrapped in a habitat restoration plan. But the Draft IA (as the controlling document in the panoply of BDCP verbiage) is careful to sever that nexus, enabling a completed project to function unfettered by accountability to its supposed mitigations. The Draft IA's funding section (Section 13.0) is at least populated with words now, compared with the July 2013 draft. But the words say little more than what we already know from Chapter 8 of BDCP. The language used in the Agreement is intended to support what's in Chapter 8. We agree here with the San Diego County Water Authority that the draft BDCP economic and financial analysis provides nothing more than what was on offer back in 2012 when the Authority wrote to BDCP about financing problems and contractual step-up provisions. We agree, too, that there needs to be more such analysis that is credible. As of January 28, 2014, the State Water Contractors acknowledged no clear consensus on cost allocation and financing of BDCP

⁸² Those rights belong to Oakdale Irrigation District and South San Joaquin Irrigation District.

⁸³ Nor was our analysis in the June 11th letter intended to suggest that more releases from New Melones is the solution to the water quality objective violations.

⁸⁴ State Water Resources Control Board, *Developing Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem*, prepared pursuant to the Sacramento-San Joaquin Delta Reform Act of 2009, August 2010, 178 pages. Accessible online at http://www.swrcb.ca.gov/waterrights/water-issues/programs/bay-delta/deltaflow/final-rpt.shtml.

⁸⁵ EWC June 11th BDCP Comment Letter, Section IV, pp. 105-107.

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among state and federal water contractors.⁸⁶ So there remains no clear path to financing the Twin Tunnels project of Conservation Measure 1.⁸⁷

Parties acknowledge that [adequate funding assurances required to implement an HCP and/or an NCCP] such assurances do not require that all necessary funds be secured at the time of permit issuance, but rather establish that such funding is reasonably certain to occur during the course of Plan implementation.

The Parties acknowledge that the sources of funding identified in the Plan, including bonds for infrastructure, have historically proven to be reliable means by which public projects may be funded.

The Parties agree that the assessment of funding requirements for the BDCP, the viability of the sources identified for such funding, and the commitments made by the Parties in the Plan and this Agreement provide an adequate basis for a finding by the State and federal Fish and Wildlife Agencies that sufficient assurances of funding have been provided pursuant to the ESA and the NCCPA.⁸⁸

These passages from Section 13.0 essentially endorse "faith-based funding" for BDCP despite the fact that nothing in the draft IA or in other BDCP documents specifies how that funding will be secured, now and in the uncertain future. Specific questions remaining to be answered include:

- How many and which of the state and federal water contractors will make enforceable commitments to pay?
- What, exactly, will they pay for?
- By when will those commitments be made (by a calendar date, or some kind of performance milestone with regard to project planning)?
- What remedies will be applied should contractors default on their enforceable commitments?
- How will costs to be funded by the contractors be allocated among the contractors, and when will this become publicly known?

In their May 30th comments on BDCP, the San Diego County Water Authority noted that "Firm commitments to ensure state and federal funding for CM 2-22 are lacking....The uncertainty that voters and Congress would approve the water bonds and federal appropriation, respectively, leads to the question as to whether, and how much, the contractors will be expected to help pay for the costs to obtain the envisioned water supply benefits. If the public funding envisioned does not

⁸⁶ Letter from Terry Erlewine, General Manager, State Water Contractors, and the general managers of Coachella Valley Water District, Kern County Water Agency, Alameda County Water District, Alameda County Zone 7 Water Agency, Mojave Water Agency, Santa Clara Valley Water District, San Bernardino Valley Municipal Water District, and the Metropolitan Water District of Southern California, to Mark Cowin, Director of the California Department of Water Resources, January 28, 2014. Copy on file with the Environmental Water Caucus.

⁸⁷ EWC June 11th BDCP Comment Letter, pp. 100-109.

⁸⁸ Draft IA, p. 45.

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materialize will the contractors be expected to fund these costs? If funding is unavailable for restoration, would CM1 operations be changed from those presented in the BDCP?"89

These are our questions too. The EWC believes that the Draft IA contains the answer to San Diego's last question above: there would be no impact on Twin Tunnels operation should no or insufficient public funding for CMs 2 through 22 occur. The draft Implementing Agreement provides language that appears intended to preserve operation of the Twin Tunnels under *unspecified rules* whether or not state and federal incidental take permits or Reclamation's Section 7 take statement are valid:

In the event of a shortfall in State or federal funding, a Fish and Wildlife Agency(ies) shall not suspend or revoke the State and/or Federal Permits or invalidate Reclamation's take statement if the shortfall in funding is determined to be likely to have no more than a minimal effect on the capacity of the Plan to advance the biological goals and objectives. 90

Actions that may be considered to address such shortfalls include *adjusting the scope of the Plan in proportion to the public funding shortfall.*⁹¹

While this last quote does not preclude shutting down the Tunnels if incidental take permits are revoked, it strongly implies through the term "in proportion" that the Tunnels project operations would be immune from considerations of what to do about funding shortfalls. Exactly what is the nexus of funding loss and operational curtailment to be enforced by the Draft IA in the phrase "if the shortfall in funding is determined to be likely to have no more than a minimal effect on the capacity of the Plan to advance the biological goals and objectives"? In short, what threshold does BDCP propose be considered "minimal" in this context? And what would be the proportional relationship, what fraction, what ratio would be applied for purposes of adjusting BDCP's plan scope to fit the budget? No criteria for addressing this threshold issue are provided in the Draft IA. The Draft IA is the exact document where such criteria should be found for effective project implementation.

No state or federal funds apply to construction or operation of the Tunnels in CM1 of BDCP's funding plan (it's all to be paid for by the state and federal water contractors), but they apply instead to the habitat restoration and "other stressor" conservation measures. Thus, there would be no functional legal nexus between, nor accountability of the performance of the Tunnels to, funding shortfalls in applicable to other elements or measures of BDCP. Do other HCPs have this lack of nexus between the developer's financing of the project and the project's mitigation funding? Where that nexus is actually invested by the developer, there is some rationale for limiting regulatory risk to developers. But that nexus is absent in BDCP. The BDCP Applicants (developers) pay less than 15 percent of the mitigation cost, an amount insufficient to give them incentive to make the whole plan really work and justify the "No Surprises" benefit of "regulatory stability." The fishery agencies approve the incidental take permits and the water project operators and contractors are free from habitat restoration responsibilities. Imagine: an HCP with out the H (for habitat) or the C (for conservation): that is too great a risk for the California public with BDCP.

The challenges for achieving reserve system assembly of Conservation Measure 3, along with this lack of a nexus between project development and project mitigation funding, compound

⁸⁹ Letter of Maureen A. Stapleton, General Manager, San Diego County Water Authority, to Ryan Wulff, National Marine Fisheries Service, Re: Draft EIR/EIS for the Proposed Bay Delta Conservation Plan, Alameda, Contra Costa, Sacramento, Solano, and Yolo counties, May 30, 2014, p. 13. Hereafter, *SDCWA Comment Letter*.

⁹⁰ *Draft IA*, Section 13.2, *Inadequate Funding*., p. 47. Emphasis added.

⁹¹ *Ibid.*, p. 48. Emphasis added.

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BDCP's inability to meet the test in the NCCPA of providing "rough proportionality" between project development and project mitigation of impacts.⁹²

The State Natural Communities Conservation Planning Act states in pertinent part, that the California Department of Fish and Wildlife

shall include a provision requiring notification to the plan participant of a specified period of time to cure any default prior to suspension or revocation of the permit in whole or in part. These terms and conditions shall address, but are not limited to, provisions specifying the actions the department shall take under all of the following circumstances:

- (A) If the plan participant fails to provide adequate funding.
- (B) If the plan participant fails to maintain the *rough proportionality* between impacts on habitat or covered species and conservation measures.
- (C) If the plan participant adopts, amends, or approves any plan or project without the concurrence of the wildlife agencies that is inconsistent with the objectives and requirements of the approved plan.
- (D) If the level of take exceeds that authorized by the permit. 93

Thus, rough proportionality is important to whether the project is meeting its mitigation obligations and therefore meeting its permit compliance obligations. The law also states, "Measurements to determine if mitigation and conservation measures are being implemented roughly proportional in time and extent to the impact on habitat or covered species authorized under the plan." Despite this "rough proportionality" criterion in the NCCPA, there is no definition in law about what this means.

BDCP tacitly recognizes that this "rough proportionality" requirement means that project phasing must be aligned with project mitigation efforts. But a reasonably direct reading of BDCP's schedule of actions reveals that no such alignment is planned. BDCP is misleading when Chapter 6 states:

Although most of these conservation measures [CM 2 and CM13 through CM21] are intended to contribute to the conservation of the covered species, their implementation schedule provides for their implementation concurrent with or prior to the effects associated with the construction and operation of the water conveyance facility. In this respect, the implementation schedule is consistent with the rough proportionality standard and ESA requirements.⁹⁵

These conservation measures largely deal with "stressor" issues, and yes, most of them would occur within the first 10 years of BDCP implementation. But the reserve system, represented by conservation measures 3 through 10, would take place according to the schedule in Table 6-2. **BDCP's schedule of development and restoration/reserve system assembly is on its face unbalanced. It may be construed as "roughly proportional" in only the grossest and most elastic manner.** The Plan schedules development of 100 percent of the entire Twin Tunnels water project in the first 10 years of the Plan's timeline. A total of 153,000 acres is anticipated to be assembled into BDCP's reserve system. Just 24,395 acres are scheduled for acquisition/protection and only 19,960 acres (comprised of seasonally inundated floodplain, channel margin enhancement, and riparian natural communities) would be targeted for tidal habitat acquisition/

⁹² See our comments on the BDCP reserve system in Section I of this letter, pp. 13-16 above.

⁹³ California Fish and Game Code Section 2820(b). Emphasis added.

 $^{^{94}}$ California Fish and Game Code Section 2805(f)(3)(C). This provision is part of making annual progress reports on the Plan's monitoring program.

⁹⁵ BDCP, Chapter 6, *Plan Implementation*, p. 6-11, lines 1-5.

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restoration during the first 10 years. Nontidal habitat restoration would account for another 850 acres in the first 10 years. *In other words, while 100 percent of the water project is completed in 10 years, just 14 percent of the aquatic habitat lands slated for aquatic tidal restoration will be acquired; and it must be remembered that acquisition does not equate with actual successful restoration outcomes.* The acquisition/protection lands are largely upland habitat, managed wetlands, or cultivated lands to be converted to habitat of some unspecified type. This is a rough proportionality of about one massive water project to one-seventh (1/7th) of a mitigation plan over 10 years, half of which would come from what is already done in the Delta (and therefore does not represent newly restored habitat).

Unfortunately, the NCCPA is silent on what is meant by the supposed "standard" of "rough proportionality." Is it like pornography, where one might know it when one sees it? Exactly what is the interpretation of the BDCP Applicants of "rough proportionality" and how do they see it exhibited in the relationship between development of the Twin Tunnels and the habitat restoration efforts called for in CM3 through CM10?

Rough proportionality for CM3 will be measured by comparing actual preservation of natural communities, as measured from the date of recordation of fee title or conservation easement, against the permanent impacts to each natural community....CM4 through CM10 require restoration of natural communities that provide habitat. For these conservation measures, rough proportionality will be determined through a comparison of the amount of natural communities constructed (i.e., restoration is counted toward the requirement once construction is completed) with the permanent impacts on the same species habitat....For the purposes of compliance with the rough proportionality standards, the pace of conservation measure implementation may not fall behind the pace of covered activity impacts by more than 10 percent. 96

We object to this interpretation of rough proportionality. First, successful restoration is assumed by BDCP to commence with the constructed completion of the redesigned habitat. However, successful restoration is determined not by meeting operational or construction schedule milestones but through monitoring of the site or waterway to see whether listed and covered species actually benefit from the site in the near and long terms. Are Delta smelt or longfin smelt using the site for any part of their life histories? Are steelhead smolts taking a moment on their way to the ocean to rear, rest, or feed? Do these species grow in abundance year after year? Etc.

Second, while BDCP applies this "standard" of rough proportionality to BDCP actions, it does not itself apply the standard to the schedules it purveys in Tables 6-1, 6-2, 6-3, and 6-4. This is somewhat understandable, since the standard BDCP invokes offers no rationale for relating measurement units of a Twin Tunnel project with those of acres of habitat acquired or restored. And besides, none of these measures would provide any sense of whether actual success with project mitigation was occurring as a result of the actions taken. "...[T]he pace of conservation measure implementation may not fall behind the pace of covered activity impacts by more than 10 percent." Ten percent of what, exactly?

Assurances and Protections

In Section 14.0, most of this section has been revised somewhat from the July 2013 draft. Most of the edits appear to be technical in nature. Some add clarifying language that FWS or NMFS has the burden of demonstrating that unforeseen circumstances exist (i.e., requiring some kind of change to

⁹⁶ *Ibid.*, p. 6-11, lines 17-30.

⁹⁷ *Ibid.*, line 30.

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the BDCP) using the best scientific and commercial data available. Others simplify language describing the factors that go into determining the effects of unforeseen circumstances.

One important new section addresses the event that a Fishery Agency makes findings of an unforeseen circumstance⁹⁸:

If a Fish and Wildlife Agency finds that an Unforeseen Circumstance has occurred with regard to a Covered Species and that additional measures are required for the Covered Species as a result, during the period necessary to determine the nature, scope and location of any additional measures, the Permittees will avoid causing an appreciable reduction in the likelihood of survival and recovery of the affected species. The Permittees will not be responsible for implementing any additional measures unless the Permittees consent to do so. 99

Of course this is entirely consistent with the No Surprises regulations implementing ESA Section 10. No Surprises gives veto power to the Permittees over actions to protect species facing jeopardy with BDCP in place. We cannot imagine a more perfect policy for the group of "Authorized Entities" that comprise the "Permittees" in this instance. One problem with this wording, however, is that it leaves unclear what threshold of action the Permittees will employ to "avoid causing an appreciable reduction" in jeopardy risk for covered species. What, exactly, does "appreciable" mean here? Will the fishery agencies through the Permit Oversight Group have a say in choosing that threshold if it is not specified in BDCP before the incidental take permits are issued?

What threshold of reduction becomes "appreciable"? It is also ambiguous whether the Fishery Agencies have a role in determining how and what action would be appropriate to "avoid causing an appreciable reduction." Finally, it is unclear with this wording whether once an unforeseen circumstance has occurred the Permittees have the right to consent to any action to "avoid causing an appreciable reduction" even before they have the right to consent to any additional measures? Could "avoiding causing an appreciable reduction" be the trigger they seek to reject an "additional measure" to be implemented by the Permittees?

Implementing Structure

In Section 15.0, much of this section is retained with minor edits from the July 2013 draft, but substantial new language has been introduced in sections 15.3.3 and 15.8.2.

Section 15.3.3 has new and vague language indicating that the Authorized Entity Group meetings will make gestures in the direction of being publicly accessible through noticing and web postings announcing BDCP meetings through the BDCP web site. On a periodic basis, the [AEG] will hold meetings that are open to the public. The [AEG] will institute procedures with respect to public notice of and access to these meetings and to any public meetings it holds with the Permit Oversight

⁹⁸ EWC June 11th BDCP Comments Letter, pp. 86-89.

⁹⁹ Draft IA, Section 14.4.2.1, p. 53. Emphasis added.

¹⁰⁰ San Diego County Water Authority, the largest member customer of the Metropolitan Water District, is keenly concerned about BDCP implementation of public meetings. "...the BDCP is silent with respect to the requirements under California's open meeting and records laws, the Federal Advisory Committee Act, the California Public Records Act and the Federal Freedom of Information Act (FOIA), and the applicability of those statutes to the activities and undertakings of the Adaptive Management Team. The Final BDCP should clearly delineate the state and federal statutes relevant to the activities of the Adaptive Management Team." *SDCWA Comment Letter*, p. 9.

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Group." This is ambiguous as to whether the AEG will itself hold public meetings, or whether the only public meetings it holds are those where "appeals" are to be jointly decided with the Permit Oversight Group. They say they'll give a minimum 10 days public notice prior to "such meetings." Which meetings? "The meetings will be held at locations within the City of Sacramento or the legal Delta." Which meetings, all of them or just joint meetings with POG? The Environmental Water Caucus believes that the final Bay Delta Conservation Plan, Chapter 7, should clearly delineate the state and federal statutes relevant to the activities of AEG and POG meetings as well as those of the Adaptive Management Team.

Section 15.8.2 deals with the review process for resolving disputes between the Authorized Entity Group and the Permit Oversight Group over "implementation matters." Any member of either group may challenge a "final decision by the entity with decision-making authority" (for which Table 7-1 of BDCP is indispensable for navigating—within 14 days of the announcement of a tentative decision "by the entity with decision-making authority." The process that ensues maps out as this timeline—14 days within which to challenge, plus 14 days for the "parties" to form a three-person expert review panel, followed by 30 days from the notice of dispute ("request," that is, resulting from the first 14 day period) to "submit rebuttals or responses."

Submittal of the responses/rebuttals triggers a 60-day period at the end of which the expert panel publishes a written "non-binding recommendation" by a panel majority (2 to 1) which will include a statement explaining the basis for the recommendation. If the panel fails to present its recommendation within that time frame, "the entity with decision making authority may make its final decision."

Otherwise, within 30 days of the panel's non-binding recommendation, the entity with decision-making authority "shall consider those recommendations as well as any other relevant information concerning the issue at hand and convey its final decision regarding the matter to" the AEG and the POG. Section 15.8.3 subsequently states "the recommendations of the panel are not intended to be given special deference by a reviewing court relative to the expert judgment of the agency making final decision." The Soviets specialized in such theatrics: they were called show trials. Here, scientists would function as window-dressing.

From beginning to end a challenged decision triggers a 28 + 30 + 60 day process = about 120 days or four months' delay in a decision that involves a dispute. Sounds more than a bit bureaucratic, apart from the vetoes available to the AEG, and the adherence to the politicians, rather than the scientists of the state and federal bureaucracies. We agree with San Joaquin County's comment that this process is certainly "cumbersome."

Water Operations Plan

In Annual Delta Water Operations Plan, Section 17.2.2, new language describes the contents of this plan. The plan is to address operational priorities for fish and water supplies, expected operations (including consideration of real-time operational adjustments), monitoring, data collection, research efforts and potential adaptive management actions associated with water operations, and "the potential need for the Supplemental Resources Fund to assist in achieving the overall goals of the BDCP for the coming year due to anticipated operating conditions." ¹⁰¹

The content of the operations plan must be found by the POG to be consistent with the BDCP. If it's not, then the review process that can go as high as cabinet secretaries is invoked; again, this too is

¹⁰¹ *Draft IA*, p. 72. We assume "Supplemental Resources Fund" is an older name for the Supplemental Adaptive Management Fund. See our comments on this fund in Section I of this letter.

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highly cumbersome, and delay in such matters always works to the advantage of *status quo* water operations and south of Delta export deliveries—whose beneficiaries are the BDCP Applicants..

Specific [Lack of] Obligations

The Draft IA released on May 30th has new sections (Sections 20.1.3, 20.1.4, and 20.1.5) concerning the "re-initiation of consultation on integrated biological opinions", re-initiation of consultation on other CVP/SWP related biological opinions and the process for reviewing the Reclamation Section 7 BA and BOs prepared during "re-initiation of consultation on the foregoing BOs." How will these reinitiation provisions of the Draft IA interact with "No Surprises" requirements in ESA regulations applied to BDCP?

In addition, Section 20.1.6 states that "if critical habitat is designated within the BDCP Plan Area subsequent to issuance of the permits, no compensation, mitigation, or minimization measures will be required of the Permittees as a result of the designation." This means that the act of designating new critical habitat would not apply, would be meaningless during BDCP incidental take permits' 50-year term. We believe this extent of applying the No Surprises regulations is legally contrary to the purpose of the federal Endangered Species Act, which is to recover listed species to sustainable levels of abundance.

Authorized Entity Group under No Surprises: Membership carries privileges.

Further No Surprises language is evident in Section 20.1.7 (p. 77) on "future recovery plans for Covered Species." Here the Parties agree that: Recovery plans cannot require any additional land or financial compensation or otherwise diminish the take authorization for Covered Species granted to the Authorized Entities pursuant to the Federal Permits or the Integrated Biological Opinion." (Integrated Biological Opinion is defined in Section 3.32, p. 8.)

Sections 20.1.8 and 20.1.9 (p. 77) are NEPA-related, and 20.1.9 says "to the maximum extent possible...USFWS and NMFS shall rely on and use relevant portions of the EIS and NEPA findings when conducting future environmental review of Covered Activities and Associated Federal Actions." There is similar language in 20.2.1.2 (p. 78) for CDFW to use the CEQA findings in the EIS/EIR when conducting future environmental review of covered activities. In the current state of the EIR/EIS, however, these Draft IA provisions, if challenged in court, would likely be invalidated.

The BDCP and its IA and incidental take permits substitute for lake and streambed alteration permits under state law. Section 20.2.2 (p. 78) has CDFW agreeing that these documents together "shall be deemed to provide an equivalent level of protection for wildlife, habitat, or other biological resources as the measures that would otherwise be required or recommended to address the impacts of Covered Activities on Covered Species pursuant to" Fish & Game Code sections 1600-1616. As with the CEQA/NEPA documents, such a finding is at best premature.

Remedies and Compliance

All new material is added to Section 22.0, dealing with *force majeure* (acts of God) mainly. Section 22 lays out the cumbersome elevation process for resolving disputes, and for determining whether incidental take permits may be suspended or revoked at both state and federal levels.¹⁰²

The size of the Tunnels project (both in its physical size as well as the extent to which it reaches into state and federal governing authorities) and its BDCP go far beyond the scope of the

¹⁰² *Ibid.*, p. 80.

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policy, planning, and implementation tools that are provided by both Section 10 of the federal Endangered Species Act and the California Natural Communities Conservation Planning Act. It is a complete legal, technological, and governance mismatch, a round peg attempting to fit into a square hole. Other means must be found for the projects to comply with endangered species laws and habitat conservation planning.

The following Environmental Water Caucus affiliated organizations support the comments and recommendations of this letter.

Cecily Smith
Executive Director
Foothill Conservancy

Foothill Conservancy

Craig Tucker Karuk Tribe

Sara Aminzadeh Policy Director California Coastkeeper

Dan Bacher Editor Fish Sniffer

Colin Bailey Executive Director

Environmental Justice Coalition for Water

Barbara Barrigan-Parrilla Executive Director Restore the Delta

Lloyd Carter President

California Save Our Streams Council

Jennifer Clary Water Policy Analyst Clean Water Action

Bob Wright Senior Counsel Friends of the River

Jim Cox President

California Striped Bass Association

Esmeralda Soria Legislative Advocate

California Rural Legal Assistance

Foundation

Barbara Vlamis Executive Director AguAlliance

Marty Dunlap Citizens Water Watch

Conner Everts

Conner Everts Executive Director Southern California Watershed Alliance

Chief Caleen Sisk Spirtual Leader Winnemen Wintu Tribe

Konrad Fisher Executive Director Klamath Riverkeeper

Zeke Grader President

Pacific Coast Federation of Fisherman's

Associations

Diana Jacobs

Chair, Board of Directors

Sacramento River Preservation Trust

Bill Jennings Executive Director

California Sportfishing Protection Alliance

Carolee Krieger Executive Director

California Water Impact Network

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Robyn DiFalco
Executive Director

Butte Environmental Council

Siobahn Dolan Director Desal Response Group

Roger Mammon
President

Lower Sherman Island Duck Club

Jonas Minton Senior Water Policy Advisor Planning and Conservation League

Gary Graham Hughes Executive Director Environmental Protection Information Center

Kathryn Phillips Director Sierra Club California

Linda Sheehan Executive Director Earth Law Center Adam Keats Senior Attorney Center for Biological Diversity

Patrick Koepele Executive Director Tuolumne River Trust

Pietro Parravano President Institute for Fisheries Resources

Lynne Plambeck Executive Director Santa Clarita for Planning and the Environment

Lowell Ashbaugh Vice President, Conservation Northern California Council Federation of Fly Fishers

Adam Scow California Campaign Director Food and Water Watch