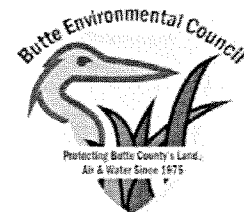
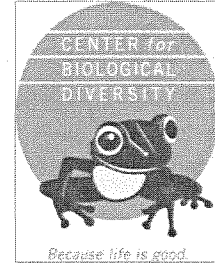
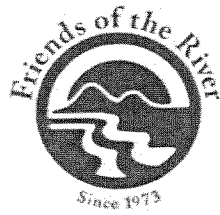
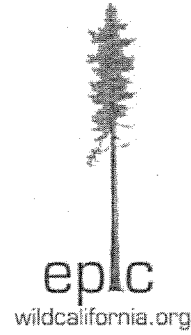
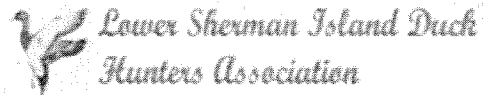
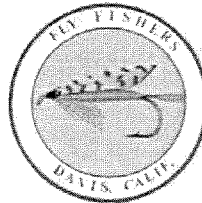


*ENVIRONMENTAL WATER CAUCUS COMMENTS
ON THE PARTIALLY RECIRCULATED DRAFT ENVIRONMENTAL IMPACT REPORT/
DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT FOR THE
BAY DELTA CONSERVATION PLAN / "CALIFORNIA WATERFIX"
OCTOBER 30, 2015*





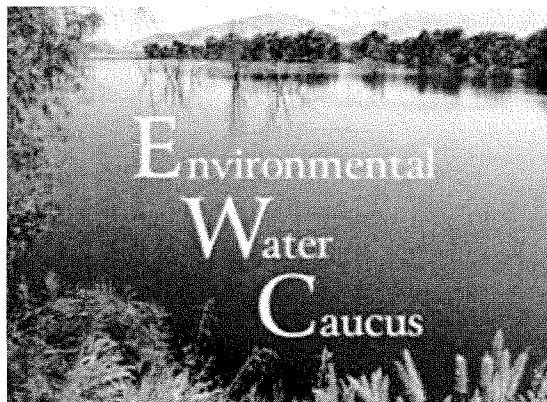
NORTH
COAST
RIVERS
ALLIANCE



Santa Clarita Organization
for Planning and the
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CA Save Our
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October 30, 2015

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Subject: Comments on Bay Delta Conservation Plan/"California WaterFix" Tunnels Project Recirculated Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement (RDEIR/SDEIS)

Dear Secretaries Jewell, Pritzker and Laird; Administrator McCarthy; Regional Director Murillo; Director Cowin, and other addressees below:

We thank you for the opportunity to comment on the above-referenced documents concerning what the Environmental Water Caucus call the Tunnels Project. The mission of the Environmental Water Caucus is to achieve comprehensive, sustainable water management solutions for all Californians. EWC and its members employ political, legal and economic strategies to restore ecological health, improve water quality and protect public trust values throughout the San Francisco Bay-Sacramento-San Joaquin Delta Estuary and the Central Valley/Sierra Nevada watersheds. The

Caucus coalesces over thirty diverse environmental water, fishing, and justice groups (including two Indian tribes) around these issues.

EWC continues to object to the Tunnels Project: it should be neither approved, financed, built, nor operated. The Tunnels Project will accelerate deterioration of the Bay-Delta Estuary by starving it of freshwater flow badly needed for the health of both the Delta and the Bay. It will starve California cities, counties, and local water agencies of badly needed tax base that could fund local and regional water self reliance projects including investments in water use efficiency, water recycling, advanced water technologies, local and regional water supply projects, and improved regional coordination of local and regional supply efforts and decades of detrimental aquatic ecosystem impacts. It will unwisely encourage continued mismanagement of California's state and federal water systems that have already failed to steward its water resources through four years of drought. The RDEIR/SDEIS violates the California Environmental Quality Act and the National Environmental Policy Act by failing to disclose impacts and evaluate a reasonable range of alternatives, and for promoting "myth-information" on behalf of project advocacy, rather than provide a science-driven analysis of Tunnels Project effects.

Myth 1: California WaterFix tries to sell itself as a sustainable water project that will improve the water supply reliability of the state and federal water export systems.

Fact: The Tunnels Project will achieve this by taking more water from Delta and Sacramento Valley water users and ecosystems, replacing this fresher water with more polluted and saline flows from the San Joaquin River. Sustainability for whom? (See our Sections II and V comments, attached.)

Myth 2: California WaterFix will improve flows through the Delta so they reflect a more natural east-to-west flow direction rather than the current north-to-south direction of flow under the influence of the south Delta export pumps.

Fact: The Tunnels will reduce Sacramento River flows by 20 to 24 percent, making permanent drought-like conditions throughout the Bay-Delta Estuary. Delta waters will stagnate, accumulating pollutants and toxins from harmful algal blooms. (See our Section II comments, attached.)

Myth 3: California WaterFix will mitigate the seismic and sea level rise risks in the Delta.

Fact: The Tunnels project does nothing to protect the Delta; it will only protect state and federal water exports from seismic and sea level rise risks to unsustainable farming in the San Joaquin Valley and suburban development in southern California.

Myth 4: The California WaterFix will be affordable to Californians because beneficiaries will pay for it.

Fact: Funding and financing plans for the Tunnels Project are stalled. Farmers balk at the high cost of Tunnels water, while urban ratepayers balk at the prospect of much higher water bills, urban property tax bills climbing to cover agriculture's water costs, and fear that other more drought-proof water supply investments would be foregone, having been spoken for by the Tunnels Project. Just because there may be a beneficiary to pay for the project is no reason to undertake it. (See our Section III comments, attached.)

Regarding this last fact we note that Mark Cowin, director of the California Department of Water Resources, stated at a recent event:

It really comes down to how we are going to pay for it. What's the most equitable way to invest in the projects and the strategies that we know we need? We've seen less federal investment in California water projects and that has left us in a lurch. Should we continue to press Congress?

Hope Congress is going to provide money through the Corps of Engineers or the Bureau of Reclamation? Or other agencies? Or are we ready to take the bull by the horns and find different funding sources? Obviously every project comes down to a different equation, but trying to solve that riddle I think is probably one of the biggest linchpins in moving California water forward.

The enclosed comment document goes into detail about these and other problems with the Tunnels Project.

Should you have questions about our comments, do not hesitate to contact either Conner Everts (connere@gmail.com; 310/804-6615), or Tim Stroshane (spillwayguy@gmail.com; 510/524-6313).



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Attachments: EWC Comments on Bay Delta Conservation Plan/California WaterFix RDEIR/SDEIS

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**Environmental Water Caucus Comments on
Recirculated Draft EIR/Supplemental Draft EIS
for Bay Delta Conservation Plan and Tunnels Project**

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¹ Comment preparation and consultation managed by Tim Stroshane for the Environmental Water Caucus. Contributors include Colin Bailey and Esther Min (Environmental Justice Coalition for Water), Barbara Barrigan-Parrilla (Restore the Delta), Chelsea Tu (Center for Biological Diversity), Tom Stokely and Michael B. Jackson (California Water Impact Network), Linda Sheehan and Grant Wilson (Earth Law Center), Bob Wright (Friends of the River), Patricia Schifferle (Pacific Advocates), and Bill Jennings (California Sportfishing Protection Alliance).

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**Environmental Water Caucus Comments on
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Executive Summary

Did 18 months make a difference that matters in the Tunnels Project?

No, not really.

The Environmental Water Caucus (EWC) objects to approval of the Bay Delta Conservation Plan² (BDCP)/California WaterFix project including the Tunnels Project.³ We also object to approval of a Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the Tunnels Project. The definite lead agencies for the project continue to be the U.S. Bureau of Reclamation and the California Department of Water Resources (DWR), although there may be doubts in the minds of other Tunnels Applicants.⁴

² BDCP, the Bay Delta Conservation Plan, here describes all 22 measures (CMs) of the habitat conservation plan. That plan consisted of what we referred to in last year's comment letter as "the Twin Tunnels" (CM1) and measures 2 through 22, consisting of the Yolo Bypass Fish Facilities Improvement Project of CM 2, habitat restoration measures 3 through 11, measures addressing several ecosystem "stressors" (like methylmercury, invasive aquatic vegetation, dissolved oxygen, predation hotspots) in measures 12 through 17, a smelt refuge in measure 18, and human behavior management measures (including urban stormwater management, boating imports of invasive species, non-project in-Delta diversions, and avoidance and minimization measures for construction activity) 19 through 22.

³ "California WaterFix" is a misnomer; it will not fix California water issues. The EWC calls the project what it appears to be, a Tunnels Project. We think it best not to dignify the Project's self-consciously transparent "branding" effort since it rhetorically applies ideological lipstick to a metaphorical pig.

⁴ Last year, according to Bay Delta Conservation Plan, Chapter 1, *Introduction*, p. 1-1, the "authorized entities" for the Bay Delta Conservation Plan included:

- California Department of Water Resources, which would own the Tunnels Project described in Conservation Measure 1
- US Bureau of Reclamation (whose authorization for take is sought under Section 7 of the ESA)
- Kern County Water Agency
- Metropolitan Water Agency of Southern California
- San Luis & Delta Mendota Water Authority
- Santa Clara Valley Water District
- State and Federal Contractors Water Agency
- Westlands Water District
- Alameda County Flood Control and Water Conservation District (Zone 7 Water Agency)

This year, EWC will continue to refer to the "Authorized Entities" as simply "the Applicants," "the BDCP Applicants," "Tunnels Applicants," or "Tunnels Project proponents." However, we cannot with confidence say we know any longer which entities constitute the Tunnels Applicants. None except DWR and the Bureau are identified in the 2015 RDEIR/SDEIS. Assuming the absence of the others' names from the RDEIR/SDEIS is significant it suggests, first, that they did not wish to be associated with the recirculated documents in 2015, and second, that they may be conflicted about continuing overt support for a project with such difficulties as the Tunnels Project. Not identifying all applicants associated with the project is, however, contrary to CEQA Guidelines § 15051. The existing BDCP financing plan of Chapter 8, November 2013, assumes that the above "authorized entities" would be paying for most Tunnels capital facilities investments. This role contributes to their being lead agencies, yet their names are not disclosed in sections of the RDEIR/SDEIS involving agency review processes.

**Environmental Water Caucus Comments on
Recirculated Draft EIR/Supplemental Draft EIS
for Bay Delta Conservation Plan and Tunnels Project**

We provide our comments on the Recirculated Draft EIR/Supplemental Draft EIS (RDEIR/SDEIS) as both observations, legal and policy analysis, and criticisms in Sections I through V of this document, and conclude with specific comments on the RDEIR/SDEIS in Section VI. The structure of this document roughly parallels that of our June 11, 2014, comments on the Draft EIR/EIS then under review for the Bay Delta Conservation Plan and its Tunnels Project.⁵

Last year, the Bay Delta Conservation Plan was certainly challenging to grasp. It contained both a strategic plan for habitat restoration and a quasi-project description of the proposed Tunnels Project export facility. The Tunnels project was considered as a “conservation measure,” due to hyped reduction of harm to listed species at the federal and state South Delta export pumps. Its “conservation strategy” contained 21 other specific “conservation measures.” The strategy also puts forward detailed biological goals and objectives, yet states that none of these goals and objectives would be used to measure compliance of the Plan with respect to the Endangered Species Act.⁶ Among the Plan’s other conservation measures was a “reserve system” containing dispersed “restoration opportunity areas” in the legal Delta region and Suisun Marsh. Also among its conservation measures were actions aiming to address “other stressors” to covered aquatic species. Unfortunately, some stressors, like selenium toxicity and nonnative invasive clams like *Potamocorbula amurensis*, are ignored altogether.

This year, the 2015 Tunnels Project is shorn of its restoration trappings, revealing its essence as a water conveyance scheme. The RDEIR/SDEIS details specific changes to Tunnels Project facilities and operations, and proposes retaining “environmental commitments” to be drawn from last year’s conservation strategy through Section 7 consultation. These environmental commitments could consist of “portions of actions previously contemplated” under Conservation Measures 3 (natural communities protection and restoration), 4 (tidal natural communities), 6 (channel margin enhancement), 7 (riparian natural community), 8 (grassland natural community), 9 (vernal pool and alkali seasonal wetlands), 10 (nontidal marsh restoration), 11 (natural communities enhancement and management), 12 (methylmercury management), 15 (localized predatory fish reduction), and 16 (non-physical fish barriers). Instead of nearly 165,000 acres of habitat restoration under BDCP, there would be at most up to 13,300 acres of natural communities protection and restoration, just 59 acres of tidal natural community restoration, and up to 2,300 acres of restoration work in environmental commitments 6 through 11 under Alternative 4A, the preferred California WaterFix alternative.⁷ This is barely one-tenth (1/10) the area of restoration effort contemplated 18 months ago by the Bay Delta Conservation Plan.

⁵ The Environmental Water Caucus incorporates by reference comments of Restore the Delta, Local Agencies of the North Delta, North Delta Water Agency, Central Delta Water Agency, and South Delta Water Agency, San Francisco BayKeeper, Friends of the River, Earth Law Center, the Environmental Justice Coalition for Water, Friends of the San Francisco Estuary, California Water Impact Network, California Sportfishing Protection Alliance, and AquAlliance, the Bay Institute, Natural Resources Defense Council, Pacific Coast Federation of Fishermen’s Associations, Institute for Fishery Resources, the Greater Stockton Chamber of Commerce, and the San Joaquin Council of Governments.

⁶ Environmental Water Caucus, *Comments on the Draft BDCP and Draft BDCP EIR/EIS*, June 11, 2014, addressed to Ryan Wulff, National Marine Fisheries Service, Sacramento, pp. 37-38. Hereafter cited EWC Comments, June 11, 2014. Accessible online at <http://ewccalifornia.org/reports/bdcpcomments6-11-2014-3.pdf>, (and <http://ewccalifornia.org/reports/ewcbdcpssupplementalcomments7-30-2014.pdf>).

⁷ Bay Delta Conservation Plan/California WaterFix, *Recirculated Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement, Executive Summary*, 2015, p. ES-18, and Table ES.2.2-2, p. ES-19. Hereafter cited as RDEIR/SDEIS. Accessible online at <http://baydeltaconservationplan.com/Home.aspx>.

**Environmental Water Caucus Comments on
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for Bay Delta Conservation Plan and Tunnels Project**

Last year we provided several broad reasons why BDCP was a bad deal for California. The Tunnels Project is worse.

BDCP relied on a scientifically flawed hypothesis that habitat restoration can substitute for river flows as the chief strategy for “fixing the Delta,” and its implementation would be catastrophic for the Delta’s aquatic ecosystems, because it used science to market the Tunnels Project, not to solve Delta problems. The habitat restoration hypothesis for BDCP could be saved by providing more freshwater flows to and through the Delta **and** restoring additional habitats of various types.

This year’s Tunnels Project sheds the pretense of restoration and opts openly for constructing and operating conveyance pipelines that would divert excessive fresh water from the lower Sacramento River in the north Delta. This contradicts scientists and regulators’ views that **more** fresh water flows into and through the Delta, **not less**, are essential to recovery of Delta ecosystems and listed fish species.⁸

Tunnels Project's proponents just want the water.

If BDCP was implemented, we found last year that its hyper-bureaucratic organization would result in “paralysis by analysis” to the detriment of the Delta ecosystem it purported to “fix,” particularly because water agencies would have veto power over changes to BDCP’s non-water project conservation measures. In the absence of any description of governance alternatives in the RDEIR/SDEIS and Section 7 consultation process and biological opinion that details reasonable and prudent alternatives for protecting listed species, the EWC finds no plan in the RDEIR/SDEIS that the Bureau of Reclamation and the Department of Water Resources expect to develop the respective capacities internally to conduct adaptive management, real-time operations, research and monitoring priorities, and other matters that would have been otherwise delegated to the BDCP Implementation Office. We find no such attempt at independent scientific monitoring of the Tunnels Project effects, where at least before there was a pretense of doing so, now only a “collaborative science and adaptive management program.”

Section I introduces our broad policy concerns that shape our comments on the Tunnels Project. These include our fundamental objection to the Tunnels Project; the need broadly to apply the precautionary principle to state, local, and federal actions governing the Delta; free speech and transparency problems with the Tunnels Project and the RDEIR/SDEIS; protection of Bay-Delta Estuary public trust resources; environmental justice effects of the project; its necessary exclusion from the Delta Plan; the need on the part of the state Water Resources Control Board to prioritize water policy decisions over major plumbing decisions in and for the Delta; and the Tunnel Project’s violation of the constitutional requirement that water be used reasonably and not wastefully.

Section II of our comments focuses on major environmental issues that raised by BDCP (willingly or not) and that remain to be faced by the Tunnels Project. These include the RDEIR/SDEIS’s deficit of reasonable alternatives that address broader water policy issues in the Delta and statewide, not just narrow reliability and water quality redistribution planned through tunnels designs; the ecological and endangered species issues that continue this year from last; and the water quality impacts of

⁸ Ellen Hanak, Caitrin Phillips, Jay Lund, John Durand, Jeffrey Mount, Peter Moyle, *Scientist and Stakeholder Views on the Delta Ecosystem*, Public Policy Institute of California, April 2013, Figure 1, p. 13. “A majority of scientists believe that all five stressors have had at least a moderate impact on the decline of the Delta’s native fishes, with flow regime changes especially harmful (“high impact”) in the case of pelagics (76%) and anadromous fish [e.g., salmonids and sturgeon] (72%), and physical habitat loss especially harmful for all three types of fish (73% for anadromous fish, 70% for resident natives, and 57% for pelagics).”

**Environmental Water Caucus Comments on
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the Tunnels Project that will violate federal Clean Water Act beneficial uses, pollutant criteria, and the absence of a "least environmental damaging practicable alternative." We think the looming Section 7 consultation process needs to address this issue squarely since it relates directly to both food supplies for listed species, reasonable and prudent flow management in Delta channels, incidental take statement levels, and reduction of toxic contamination from harmful algal blooms, selenium, and other criteria pollutants.

Moving forward habitat restoration *and Delta inflow and outflow increases together* are as important as ever. But for the Tunnels Project proponents, the whole point of last year's BDCP is to avoid having to increase river inflow and Delta outflow to achieve real ecosystem improvements in the Delta, while still claiming to have tried to help the Delta. The pretense of claiming to help is now gone with the Tunnels Project of "California WaterFix."

We also address other issues such as adaptive management and real-time operations in Section II.

Last year, we found that BDCP's financial and economic risks exceed the benefits on offer. Far more cost-effective water supply solutions are available to California and at far lower cost. Since no updated economic and financial analysis was provided for Alternative 4A in 2015, this remains true for the Tunnels Project. Since no new study of economic and financing aspects of the Tunnels Project is provided in the RDEIR/SDEIS, we fall back on EWC's evaluation last year of BDCP's financing plan and economic justification. As far as we surmise, no meaningful progress has been made by the principals involved in planning Tunnels Project financing. Section III of these comments addresses continuing funding and financing problems of the Tunnels Project. Its financing remains sketchy at best.

Last year, EWC commented that BDCP's governance approach would give as much control to the Applicants as possible over CM1 Tunnels operations and consequently over the Delta itself. While much lip service was given to limiting the presence of political concerns in deciding important water operations and management and protection of listed fish species in the Delta, BDCP's proposed governance structure would provide veto power to the Applicants, the same folks and the same water projects already ushering these same listed fish species to the brink of extinction.

We comment in Section IV this year that such a governance process has been abandoned for the window dressing we thought it was. DWR and the Bureau (and, we presume, the other Tunnels Project proponents) would prefer to manage the project and the Delta with as little transparency as possible, since no provisions for these processes are identified in the RDEIR/SDEIS.

Last year, we outlined a long list of statutes BDCP would violate, including the state and federal endangered species acts, the Delta Reform Act of 2009, state and federal clean water acts, the California water code, the California Constitution's ban on wasteful and unreasonable use and method of diversion of water, and the Public Trust Doctrine, among other statutes.

This year, we comment in Section V that DWR and the Bureau have done little, if anything, to bring the Tunnels Project as California WaterFix into conformance with numerous state and federal laws, including environmental justice legal standards.

Finally, specifics of the RDEIR/SDEIS are examined in Section VI, including US Army Corps of Engineers permitting issues (including impacts to wetlands, navigation and federal flood control and other facilities); supplemental modeling done for the State Water Board for the impacts of increasing Delta outflows at the expense of SWP and CVP exports; failure to mitigation north Delta intake impacts; absence of baseline information on predation in the vicinity of the north Delta intakes and other baseline data needs; failure to disclose and evaluate the potential of project pumping failure on the tunnels and back-flow effects.

**Environmental Water Caucus Comments on
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for Bay Delta Conservation Plan and Tunnels Project**

I. Introduction

The EWC objects to the Tunnels Project.

After nine years, the Bay Delta Conservation Plan applicants have delivered a Tunnels Project even more flawed than its expensive and monstrous predecessor.

The Tunnels Project would divert more of the Delta common pool to benefit state and federal water contractors at a time when the state has over-promised, wasted, and inequitably distributed scarce water resources; when the Delta is deteriorating from State Water Project and federal Central Valley Project mismanagement during the current four-year (and perhaps counting) drought; listed fish species are even closer to the brink of extinction; and low-income communities of color who rely on the Delta for subsistence fishing, jobs, and recreation continue to struggle to survive and thrive.

The Tunnels project would be a new facility providing the State Water Project (SWP) with three new diversion points (or “north Delta intakes”) for water along the lower Sacramento River. These new intakes would divert the river into two gigantic tunnels that would isolate river water from salty tidal flows in the Bay-Delta Estuary for direct delivery to Harvey O. Banks Pumping Plant for export to the California Aqueduct of the SWP. The Tunnels Project would expand California’s cross-Delta water transfers market, and enable the US Bureau of Reclamation to receive Sacramento River flow diversions not only via the intertie between the state’s California Aqueduct and the Bureau’s Delta Mendota Canal or via the intermingling of stored water at San Luis Reservoir south of the Delta, but also through new connectors among the new north cell of Clifton Court Forebay and Banks (State Water Project) and Jones (Central Valley Project) pumping plants.⁹

Last year we asked of the BDCP: Why should BDCP Applicants be granted such legal privilege from the federal Endangered Species Act as the “regulatory stability” of the “No Surprises Rule” that would favor their conveyance investments over the “regulatory stability” of senior water right holders and a huge array of human and non-human beneficial users of water and land in the Central Valley and the Delta?

This year we ask: what makes the Tunnels Project proponents this year worthy of special treatment in the form of a massive Tunnels system, just because they already divert water from the Delta? Why should their desire to export water more reliably from the Delta trump the prior water rights and protected beneficial uses in the Bay Delta Estuary to have a waterscape of improved conditions for all Delta residents and ecosystems, and all people of California choosing to visit the Delta now and in the future?

Historically, the Bay-Delta Estuary has been enormously productive, a magnet for many aquatic species to reproduce in and migrate through. Its native species evolved to take advantage of the Estuary’s annual and seasonal variations in water quality and flow. As the seasons change, the Bay Delta Estuary cycles through such ecological roles as aquatic nursery, restaurant, and crossroads. The Delta’s communities and economy were built on this ecological foundation. The health of this diverse ecosystem depends on having variable and good water quality that benefits each of these roles.

⁹ This is possible in part under State Water Resources Control Board approval in March 2000 of “joint points of diversion” in Water Rights Decision 1641. See also RDEIR/SDEIS, July 2015, Section 3.2, p. 3-5; see also RDEIR/SDEIS, Appendix A, Section 3.6.1.4, *Forebays*, p. 3-51, “Expanded Clifton Court Forebay,” lines 21-29; and Section 3.6.1.5, “Connections to Banks and Jones Pumping Plants,” p. 3-52, lines 23-27.

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Development and implementation of the Tunnels Project must be accountable to the federal Clean Water Act (CWA). Sound planning dictates that implementation of the CWA's requirements should begin **now**, to prevent violations by the Tunnels Project. One CWA requirement that will arise during Tunnels Project implementation is CWA Section 401 certification, which is necessary for any "[f]ederal license or permit to conduct any activity ... [that] may result in any discharge into navigable waters."¹⁰

This year as well as last year, our comments focus on two hydrodynamic nightmares the Tunnels Project will create and worsen in the Delta: First, the massive disruption of the flow regime of the lower Sacramento River used seasonally and inter-annually by several distinct salmonid populations, two of which are highly vulnerable to the threat of extinction; and second, further reduction of Delta outflows and the eastward-moving position of X2 worsening the risks of entrainment, ***this time in the North Delta to go along with continuing drier year entrainment risks in the South Delta***. This second nightmare threatens longfin smelt, Delta smelt, and migrating juvenile salmonids with entrainment and extinction.

Four million people in the five Delta counties depend on good water quality in the Delta for their livelihoods and quality of life. Nearly one million Delta residents depend on the Delta as their primary drinking water supply. To improve the Delta as a fishable, swimmable, drinkable, and farmable region will require protecting and enhancing the Estuary's water quality, pure and simple. If we are to leave generations to come an Estuary with sustained and diverse ecological fertility, the Estuary deserves and needs more flowing water, cleansed of the pollutants that now plague it. State and federal rejection of the Tunnels Project will only help in realizing this goal.

Apply the precautionary principle to water policy.

The uncertainties facing the Bay Delta Estuary match up well with reliance on the precautionary principle. The precautionary principle has the following characteristics applicable to evaluating risk and uncertainty in environmental (and other kinds of) decision making. Environmental writer Peter Montague describes the essence of the precautionary principle this way:

In all formulations of the precautionary principle, we find three elements: 1) When we have a reasonable suspicion of harm, and 2) scientific uncertainty about cause and effect, then 3) we have a duty to take action to prevent harm.

The precautionary principle does not tell us what action to take. However, proponents of a precautionary approach have suggested a series of actions: (1) Set goals; (2) Examine all reasonable ways of achieving the goals, intending to adopt the least-harmful way; (3) Assume that all projects or activities will be harmful, and therefore seek the least-harmful alternative. Shift the burden of proof—when consequences are uncertain, give the benefit of the doubt to nature, public health and community well-being. Expect responsible parties (not governments or the public) to bear the burden of producing needed information. Expect reasonable assurances of safety for products before they can be marketed—just as the Food and Drug Administration expects reasonable assurances of safety before new pharmaceutical products can be marketed. (4) Throughout the decision-making process, honor the knowledge of those who will be affected by the decisions, and give them a real "say" in the outcome. This approach naturally allows issues of ethics, right-and-wrong, history, cultural appropriateness, and justice to become important in the decision. 5) Assume that humans will make mistakes and that decisions will sometimes turn out badly. Therefore, monitor results, heed early warnings, and be prepared to make mid-course corrections as needed; this implies that we will avoid irreversible decisions and irretrievable commitments.

¹⁰ 33 U.S.C. § 1341(a)(1).

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Instead of asking the basic risk-assessment question—"How much harm is allowable?"—the precautionary approach asks, "How little harm is possible?" In sum: Faced with reasonable suspicion of harm, the precautionary approach urges a full evaluation of available alternatives for the purpose of preventing or minimizing harm.¹¹

Last year, we commented critically that the BDCP sought to apply adaptive management and real-time operations as sure-fire solutions to the profound biological, geochemical, toxicological, and public health uncertainties involved with constructing and operating such a complex project in such a complex environment as the San Francisco Bay-Delta Estuary.¹² As with last year's overly optimistic BDCP, the Tunnels Project described and evaluated in the RDEIR/SDEIS overflows with over-confidence in adaptive management and real-time monitoring as providing timely and real solutions to Tunnels Project uncertainties.

We are not alone in detecting excessive optimism throughout last year's and this year's Tunnels Project environmental documentation; the Delta Independent Science Board (DISB) commented on this pervasive characteristic in 2014 and again this fall. "Many of the impact assessments hinge on overly optimistic expectations about the feasibility, effectiveness, or timing of the proposed conservation actions...." And: "In essence, it is often argued that Conservation Measures (CM) 2-22 will have sufficient positive benefits for covered species to counterbalance any negative impacts of water diversions and changes in flow caused by proposed alternatives (CM 1). ***This is an implausible standard of perfection for such a complex problem and plan***, as noted in our reviews of Chapters 11 and 12....It would be better to begin with more realistic expectations that include contingency or back-up plans."¹³

This year, time was much shorter for reviewing 8,000 pages of the RDEIR/SDEIS, but the DISB still found that "the [RDEIR/SDEIS] retains unwarranted optimism..." and that "uncertainties and their consequences remain inadequately addressed, improvements notwithstanding. Uncertainties will be dealt with by establishing "a robust program of collaborative science, monitoring, and adaptive management. No details about this program are provided, so there is no way to assess how (or whether uncertainties will be dealt with effectively," they conclude.¹⁴ DISB also notes that Tunnels Project modeling efforts did not adequately conduct "modeling that would help to bracket the ranges of uncertainties or (more importantly) assess propagation of uncertainties."¹⁵

Substantive BDCP Revisions (Appendix D) contained in this year's recirculated documents indicate increasing grasp of the number, kind, and degree of uncertainties to be faced with construction and operation of the Tunnels Project.¹⁶ One table reveals 17 "key uncertainties and potential research actions relevant" to Conservation Measure 1—and hence to the Tunnels Project of 2015—of which

¹¹ Peter Montague, accessed online 11 September 2015 at http://www.precaution.org/lib/pp_def.htm.

¹² Environmental Water Caucus, *Comments on the Draft BDCP and Draft BDCP EIR/EIS*, June 11, 2014, addressed to Ryan Wulff, National Marine Fisheries Service, Sacramento, pp. 89-92.

¹³ Delta Independent Science Board, *Review of the Draft EIR/EIS for the Bay Delta Conservation Plan*, May 15, 2014, pp. 3, 5. Emphasis added.

¹⁴ RDEIR/SDEIS, *Executive Summary*, Section ES.4.2, "Collaborative Science and Adaptive management Program," p. ES-37 to ES-39.

¹⁵ Delta Independent Science Board, *Review of environmental documents for California WaterFix*, September 30, 2015, pp. 10-11.

¹⁶ RDEIR/SDEIS, 2015, Appendix D, *Substantive BDCP Revisions*, Table 3.4.1-5, p. D.3-24 through D.3-28.

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six (6) are new and eight (8) are significantly revised from the first public draft of the BDCP conservation strategy.

The status and utility of these and a vast number of other substantive BDCP revisions is in considerable doubt since Section 7 consultation with the federal fisheries agencies is still in process, and the exact content of environmental commitments, incidental take statements, and reasonable and prudent alternatives are also highly uncertain.

Free Speech, Transparency, and Tunnels Project Commentary

In late 2013, the Bay Delta Conservation Plan web site was reorganized and redesigned. The site's "Correspondence" page contains the statement: "The BDCP encourages public participation. Below is a list of correspondence and public comments that have been received in regards to the BDCP from 2007-2013." In the EWC's June 11, 2014, letter on BDCP, we criticized the BDCP web site for clamping down on the free flow of information and opinion about the Tunnels Project. We remain concerned, with these new documents, about how public comments about the Project will be handled. In the RDEIR/SDEIS, Tunnels Project proponents explain they chose "not to republish complete revisions to the original Draft EIR/EIS, but rather to prepare materials focusing on new contents of the Draft EIR/EIS."¹⁷ These "new contents" appear to include changes to Alternative 4, describing and analyzing "changes to conveyance facility design; revisions to proposed operations; changes to the proposed conservation strategy and habitat mitigation approach; and revisions and corrections to the analysis of certain impacts."¹⁸

Alternative 4A, a new alternative, would have "the same conveyance facility design changes, but it would not include the same kinds of changes to Alternative 4 related to" all the other conservation measures of BDCP; it would not include a habitat conservation plan.¹⁹

Given these changes in light of CEQA Guidelines, the Tunnels Project proponents "direct that public comments be restricted to the newly circulated information contained in the RDEIR/SDEIS. In other words," they continue, "*the partial recirculation is not an opportunity to resubmit comments on the previously published topics, or to add additional comments on previously published topics.* The comments previously submitted on the Draft EIR/EIS remain a part of the record and will be responded to in the Final EIR/EIS."²⁰ The Tunnels Project proponents cite CEQA Guidelines Section 15088.5(f)(2) in support of their "directive" to the public.

We are deeply concerned this seeks illogically, arbitrarily, capriciously, and unnecessarily to restrain the scope of public comment when it comes to the obvious matter of drawing comparisons between analyses and alternatives of the RDEIR/SDEIS with alternatives and analyses found in the Draft EIR/EIS. To make sense of the relative merits of one alternative to others across the two massive sets of documents, the public, governmental and other reviewers must be able to compare and analyze them. EWC finds the Tunnels Project proponents' "directive" untenable.

CEQA Guidelines section 15088.5(f)(2) states in full:

¹⁷ RDEIR/SDEIS, Section 1.2, p. 1-30, lines 4-7.

¹⁸ RDEIR/SDEIS, Section 1.2, p. 1-29, lines 8-10.

¹⁹ RDEIR/SDEIS, Section 1.2, p. 1-29, line 10; and p. 1-30, lines 1-2.

²⁰ RDEIR/SDEIS, Section 1.2, p. 1-30, lines 24-29. Emphasis in original.

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When the EIR is revised only in part and the lead agency is recirculating only the revised chapters or portions of the EIR, *the lead agency may request that reviewers limit their comments to the revised chapters or portions of the recirculated EIR*. The lead agency need only respond to (i) comments received during the initial circulation period that relate to chapters or portions of the document that were not revised and recirculated, and (ii) comments received during the recirculation period that relate to the chapters or portions of the earlier EIR that were revised and recirculated. The lead agency's request that reviewers limit the scope of their comments shall be included either within the text of the revised EIR or by an attachment to the revised EIR.²¹

The Tunnels Project proponents' "directive" in the RDEIR/SDEIS improperly exceeds the standard for comments under CEQA Guidelines. The plain language of 15988.5(f)(2) does not support the directive precluding "comments on previously published topics." The Guidelines' restriction is for "comments received...that relate to chapters or portions" of the recirculated document. This limitation does not extend to the level of detail implied by the Tunnels Project proponents' use of the word "topics" in the RDEIR/SDEIS. So long as our comments relate to material in chapters or portions of the RDEIR/SDEIS—even if they compare or contrast or contextualize with material from the Draft EIR/EIS—the Tunnels Project proponents must, under CEQA Guidelines, respond to such comments.

The Public Trust, the Delta Common Pool, and the ESA

The Bay-Delta Estuary is an over-appropriated common pool plagued by California's abject failure to protect all beneficial uses of water—human and non-human alike—according to the needs of its most sensitive beneficial uses.²² This failure violates the state's public trust obligations, and the Tunnels Project would continue this record of failure. It fails to plan for "improved conveyance" through and in the Delta (and called for in the Delta Reform Act) by ignoring the over-arching framework of state water policy:

- Achieving the coequal goals of Water Code Section 85054 of enhanced ecosystem health and water supply reliability.
- Water Code Section 85023, stating: "The longstanding constitutional principle of reasonable use and the public trust doctrine shall be the foundation of state water management policy and are particularly important and applicable to the Delta."
- Water Code Section 85021 requiring reduced reliance on the Delta in meeting California's future water supply needs (and whose strategy specifies "investing in improved regional supplies, conservation, and water use efficiency").

²¹ Emphasis added.

²² State Water Resources Control Board, *Water Rights Within the Bay-Delta Watershed*, September 26, 2008, presented to Delta Vision Blue Ribbon Task Force, October 17, 2008. Accessible at http://deltavision.ca.gov/BlueRibbonTaskForce/Oct2008/Response_from_SWRCB.pdf; California Water Impact Network, California Sportfishing Protection Alliance, and AquAlliance, *Testimony on Water Availability Analysis for Trinity, Sacramento, and San Joaquin River Basins Tributary to the Bay-Delta Estuary*, submitted by Tim Stroshane, October 26, 2012, accessible at http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/docs/comments111312/tim_stroshane.pdf; and Theodore E. Grantham and Joshua H. Viers, "100 Years of California's water rights system: patterns, trends and uncertainty," *Environmental Research Letters*, 9(2014), accessible at https://watershed.ucdavis.edu/files/biblio/WaterRights_UCDavis_study.pdf.

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- Water Code Section 12200 *et seq.*, (the Delta Protection Act of 1959) requiring that neither state nor federal water projects should divert water from the Delta to which Delta users are entitled.
- Achieving the fish and specifically salmonid abundance goals of California Fish and Game Code Sections 5937, 5946, and 6902(a); and the Central Valley Project Improvement Act of 1992, Section 3406(b)(1).
- The federal Clean Water Act requiring protection of the chemical, physical and biological integrity of the nation's waters (including those of the Bay-Delta Estuary), that the navigable waters of the United States (including those of the Estuary) not be degraded, and that the regulation of water quality standards for the Estuary be based on the "most sensitive" beneficial use among those occurring in a particular water body.

And the RDEIR/SDEIS fails to evaluate the Tunnels Project in light of this policy framework. Listed fish species are the most sensitive beneficial uses in the Bay-Delta Estuary. The most sensitive *human* beneficial uses are subsistence fishers taking nutrition directly from Delta waters. The EWC is deeply concerned that the Tunnels Project's switch to reliance on a Section 7 ESA standard of preventing mere "jeopardy" rather than the overall ESA goal of "recovery" will lead to continued deterioration of the Bay-Delta Estuary, made all the easier by construction and operation of the Tunnels Project.

Restoring the Delta for All

The Tunnels Project RDEIR/SDEIS fails to consider fully project impacts, including and not limited to public health, water quality, subsistence fishing, land use, flood risk, affordable housing, public participation, and language accessibility for environmental justice communities. The lead agencies violate Civil Rights and Environmental Laws and fail to meet Environmental Justice legal standards. For the reasons listed above, the BDCP/Tunnels Project presents an environmental injustice and should not proceed as proposed. We comment further on environmental justice issues with the Tunnels Project in Section V of these comments.

The Tunnels Project must be excluded from the Delta Plan.

Last year, when the Bay Delta Conservation Plan was considered and presented as a habitat conservation plan under federal ESA Section 10 and a natural community conservation plan under the California ESA, it could qualify for eventual incorporation as such into the Delta Plan, originally prepared by the Delta Stewardship Council, provided the BDCP met specific criteria stated in the Delta Reform Act of 2009. EWC members commented that BDCP could not meet those criteria, specifically that:

BDCP cannot demonstrate compliance with, and the Department of Fish and Wildlife will be unable to sustain, this required finding [of Water Code Section 85320(b)(2)] without abusing its discretion to interpret this law. BDCP modeling results show decreased salmonid survival rates, increased Delta smelt entrainment risk (including at the North Delta intakes), eastward migration of X2, reduced Delta outflow, and longer residence times of water passing through the Delta. The trend of each of these indicators is away from the criterion in Water Code Section 85320(b)(2)(A), which calls for flows necessary for recovering the Delta ecosystem and restoring fisheries under a reasonable range of hydrologic conditions.²³

²³ EWC Comments, June 11, 2014, pp. 119-120. Emphasis in original.

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The legal trigger for whether BDCP may be incorporated by the Delta Stewardship Council on recommendation of the California Department of Fish and Wildlife is whether the Tunnels Project is part of an HCP/NCCP. This year, it is not. Therefore the Tunnels Project must be considered as a "covered action" in which the Delta Stewardship Council (DSC) is asked to confirm the Project's proponents assertion that the proposed project is consistent with the Delta Plan.

The Delta Plan is itself currently the subject of litigation about whether the Plan is consistent with the policies of the Delta Reform Act of 2009.²⁴ This complicates the covered action status of the Tunnels Project. If the Court vacates the DSC's approval of the Delta Plan as non-compliant with Delta Reform Act policies, then there would be no Delta Plan to which the Tunnels Project can legally be found to conform, until such time as the DSC approves a plan that complies with the Act.

(The causes of action in the Delta Plan litigation are entirely relevant to the prospect of Tunnels Project operation. In formulating Delta Plan policies and recommendations, plaintiffs argue that the Council:

- Formulated a "reduced reliance on the Delta" policy that does not actually reduce reliance.
- Failed to observe the Act's mandate to rely on "best available science" in formulating the Plan.
- Promoted BDCP in violation of the Act, since the Tunnels Project conflicts with the coequal goals, and misinterpreted the meaning of "improving conveyance."
- Failed to perform its duties to protect public trust resources in formulating the Delta Plan.²⁵)

This year, we again find that through-Delta salmonid survival rates, Delta smelt entrainment risk at the North Delta intakes, eastward migration X2, longer residence times and reduced Delta outflow are all endemic to the preferred alternative of the RDEIR/SDEIS. (See our Section II comments.)

EWC was pleased to learn that the DSC recognizes that the new preferred alternative, the Tunnels Project, cannot be incorporated into the Delta Plan and must be considered as a "covered action."

Although WaterFix is shown as a new alternative in the environmental documents for the BDCP, for practical purposes the BDCP as it has been envisioned for the past eight years no longer exists. Unlike BDCP, the new WaterFix project is not a conservation plan aiming to improve species recovery in exchange for a long-term operational permit. Rather, the objectives of WaterFix are much more narrow — "to make physical and operational improvements to the State Water Project (SWP)/Central Valley Project (CVP) systems in the Delta necessary to restore and protect ecosystem health, water supplies of the SWP and CVP south of the Delta, and water quality within a stable regulatory framework, consistent with statutory and contractual obligation"Because WaterFix will not be a NCCP, nor a habitat conservation plan..., the Council is not required to incorporate the WaterFix alternative into the Delta

²⁴ There were numerous complaints filed by both water contractor, community, municipal, and environmental water parties. They are sometimes described as "the Delta Plan cases." A trial court decision is not expected until perhaps mid-2016.

²⁵ *Petitioners Central Delta Water Agency et al and California Water Impact Network et al's joint opening brief on the merits in support of first amended verified petitions for Writ of Mandate and Complaints for Declaratory and Injunctive Relief*, October 15, 2014.

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*Plan. WaterFix instead will be subject to the Council's authority over covered actions, meaning that it must be consistent with the regulatory portions of the Delta Plan.*²⁶

It appears that DWR and the Tunnels Project proponents more or less accept this interpretation of the Tunnels Project status with respect to the Delta Plan. Section 1 of the RDEIR/SDEIS contains no description of the Department of Fish and Wildlife's role in making the findings specified in Water Code Section 85320(b)(2).²⁷

But Tunnels Project proponents actually see *two other possibilities*: Section 1 of the RDEIR/SDEIS states later that "Delta Reform Act compliance" for its alternatives (including the Tunnels Project) "would be achieved through either the Delta Plan Consistency certification process or through a possible future amendment to the Delta Plan." This "future amendment" option reflects the Tunnels Project proponents' belief that the inclusion/incorporation pathway for HCP-type facilities has no limitation in time.

This ambiguity is confusing. The ambiguity goes to the heart of what is meant by a "preferred alternative." The RDEIR/SDEIS states that the Tunnels Project is the preferred alternative. And none of the other RDEIR/SDEIS alternatives put forward in July 2015 have HCP/NCCP organization and substance associated with them. It follows logically ***the RDEIR/SDEIS errs in stating that the Delta Reform Act still provides a pathway for one of these specific alternatives to be incorporated into the Delta Plan. This error needs to be corrected.***²⁸

The RDEIR/SDEIS also contains Appendix G, which is "intended to discuss an approach that may be considered for Alternative 4A...to met the Delta Plan consistency requirements." The Appendix represents the Tunnels Project proponents' view of the Delta Reform Act, the Delta Stewardship Council, and the Delta Plan.

Appendix G contains no listing of Delta Plan policies and recommendations that it believes would be the policy framework against which it would be evaluated for consistency. This seems deferred to a listing of "consistency requirements" contained in the Plan's implementing regulations. This list includes mitigation measures, best available science, adaptive management, "reduce reliance on the Delta through Improved Regional Water Self-Reliance," delta flow objectives, and a number of other regulations. ***The listing omits the regulation's definition describing "coequal goals,"*** something we are certain the Tunnels Project proponents find challenging to address.

We note too that the Delta Plan implementing regulations contain no definition of what "consistency" with Delta Plan policies and recommendations means. The RDEIR/SDEIS Appendix G avoids this topic too.

²⁶ See *Bay Delta Conservation Plan Draft EIR Review Check-in*, August 27-28, 2015, Delta Stewardship Council staff report, pp. 1-2. <http://deltacouncil.ca.gov/docs/delta-stewardship-council-august-27-28-2015-meeting-agenda-item-17-bay-delta-conservation-plan>. Emphasis added.

²⁷ RDEIR/SDEIS, Section 1.1.5.5, California Department of Fish and Wildlife, p. 1-18 to 1-20.

²⁸ But in committing the error, EWC recognizes that the Tunnels Project proponents pine for that degree of policy certainty on behalf of their project and find it psychologically difficult to let go of such a legal and policy advantage for the project.

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When it comes to reducing reliance on the Delta, RDEIR/SDEIS Appendix G relies on analysis of "Demand Management Measures" described in Appendix 1C of last year's Draft EIR/EIS.²⁹ As we stated last year, the reduced-reliance-on-the-Delta policy of the Act goes to the heart of whether the Tunnels Project's purpose and need is valid or capable of being found consistent with Delta Reform Act policies and the Delta Plan. We contend that the RDEIR/SDEIS fails completely to demonstrate need for the proposed project in light of analysis of other water supply options for importers of Delta water (such as those specified in Water Code Section 85021) and the potential for increased water conservation throughout California. (We remark elsewhere in these comments about the water conservation achievements of California's population during the last two years of this four-year drought. Appendix 1C, we commented last year (since the RDEIR/SDEIS brings it up again), "fails to consider cost and price issues associated with water usage. And its characterization of the limitations of conservation is an argument employing a straw man: no one seriously believes that we can conserve our way out of the state's future water demand issues, just as no one seriously believes that we can build enough storage and conveyance to eliminate those same issues."³⁰

Instead, the point is that we have remaining potential to achieve greater conservation savings by changing how California culture views its water supplies. California would be seriously remiss in failing to tap this potential regardless of whether it solves the entire future water demand problem; it is simply a no-regrets step that needs to be taken, and the RDEIR/SDEIS ignores this step in developing and stating the purpose and need for the Tunnels Project. The Tunnels Project seeks to protect a status quo of water behavior and assumptions that cannot be sustained, regardless.

The Demand Management Measures of Appendix 1C are not part of any of the alternative descriptions, whether associated with the Draft EIR/EIS last year or this year's RDEIR/SDEIS. In last year's BDCP, there is no conservation measure devoted to demand reduction in the service of reducing reliance on the Delta. This year's purpose and need statement in the RDEIR/SDEIS reiterates the Tunnels Project's intention (like last year) to (as much as possible) increase water supply reliability to maximize contractual deliveries using the Tunnel Project. Demand management measures are not only NOT included as part of the alternatives' purpose and need, they divert reader attention from the Tunnels Project and its inability to comply with Water Code Section 85021. The Tunnels Project must be able to certify consistency with Delta Reform Act policies reflected in a lawful Delta Plan. It cannot.

The essential point of the mandate in Water Code Section 85021 is to reduce reliance on the Delta. This is not just a water conservation issue; it is also a coequal goals issue. The Delta Plan litigation addresses as one of its central points of argument whether the Delta Stewardship Council formulated a Plan and implementing regulations that achieve what the Legislature required of it. The RDEIR/SDEIS fails to demonstrate that the project contributes to reduced reliance on the Delta, and fails to demonstrate that it can achieve the co-equal goals of the Act for the Delta, whether the Delta Plan can be said to achieve them or not.

The State Water Resources Control Board's Bay-Delta Plan

²⁹ Here is just one of many instances where the Section 1 directive concerning topics makes no sense. When the RDEIR/SDEIS refers to or even incorporates the content of the Draft EIR/EIS from last year, then it becomes necessary and logical for reviewers to review, verify, and analyze both documents.

³⁰ EWC Comments, June 11, 2014, p. 147. Since the RDEIR/SDEIS applies this appendix from last year's Draft EIR/EIS now, we reiterate our comments about it from last year, with some additional commentary.

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A large but wholly implicit assumption through the Tunnels Project and its EIR/EIS is that any one of these alternatives would require wholesale revision to how water quality is regulated in the Bay Delta estuary, in order for the Tunnels Project to move forward. This year, the RDEIR/SDEIS announces "proposed new flow criteria" for north and south Delta SWP and CVP export facilities, and the proposed new head of Old River operable barrier.³¹

Such changes to Delta flows and hydrodynamics must be evaluated through public review before the State Water Resources Control Board, the only state body authorized to change water quality standards. We are concerned that the Tunnels Project proponents hope to circumvent the process by making Tunnels operational criteria seem inevitable and necessary; they are neither, and must be the subject of careful and critical review in the Board's Bay-Delta Plan update process, *before* the Tunnels Project receives permit approvals for new diversions. ***Put simply: water quality policy must come before plumbing decisions are made. What is best for the Bay-Delta Estuary, and the Delta's economy and communities comes first.***³²

Reasonable Use of Water

California's constitution recognizes water rights only to the extent they are reasonable. (California Constitution, Article X, Section 2) Moreover, the state constitution also states that "such right does not and shall not extend to the waste or unreasonable use or unreasonable method of use or unreasonable method of diversion of water." No one has a right in California to use or divert water unreasonably, not even the state and federal governments. The EWC believes that because lack of water availability and the precarious conditions of listed fish species go unaddressed, the Tunnels Project would be an unreasonable method of diversion of water, and that continued provision of a supposedly more reliable irrigation water supply to the drainage impaired lands of the western San Joaquin Valley, as is implied but not disclosed in the Bay Delta Conservation Plan and its EIS/EIR, would continue to be a wasteful and unreasonable use of water.

The Tunnels Project would violate the California Constitution's ban on wasteful and unreasonable use of water and method of diversion of water because it:

- Fails to demonstrate and disclose its purpose and need,
- Reduces Delta outflow by increasing exports contrary to a mandate to reduce reliance on Delta exports,
- Reduces rather than increases the likelihood that listed species can survive and recover in the Delta under operating conditions of the Tunnels Project in violation of the public trust doctrine.
- Degrades rather than protects and enhances water quality in Delta channels including violation of water quality pollutant criteria and beneficial uses, degradation of a public water source without mitigation of treatment costs.

³¹ RDEIR/SDEIS, Section 4.1, pp. 4.1-11 through 4.1-13.

³² This stance is also consistent with the Delta Protection Act of 1959.

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II. Major Environmental Issues

This section presents the major environmental and ecological issues provoked by the Tunnels Project and its RDEIR/SDEIS. It is organized around four major themes:

- The complete policy failure of the Tunnels Project proponents through the RDEIR/SDEIS to confront whether there is a real need for the project.
- The resulting absence of a reasonable range of alternatives to address need for the project, including meaningful direct comparisons of environmental impacts of the project.
- Specific ways in which the Tunnels Project will violate the Endangered Species Act.
- Various ways in which the Tunnels Project will violate beneficial uses and criteria flow and pollutant water quality objectives, and therefore violate the federal Clean Water Act.

Introduction

A reasonable range of alternatives still are not considered. Development of alternatives increasing flows through the Delta has always been a direct and obvious first step to complying with California's public trust doctrine protecting Delta water quantity and quality. Instead of complying with the Delta Reform Act, the ESA, the Clean Water Act and applying the public trust doctrine, all of the so-called BDCP alternatives involve new conveyance as opposed to consideration of any through-Delta conveyance alternatives reducing exports.

Our organizations have already communicated several times over the years with BDCP officials about the failure to develop a reasonable range of alternatives in the process.³³

The direct and obvious way to increase flows through the Delta is to take less water out. The broad policy alternatives that should be highlighted in the BDCP NEPA and CEQA documents are to: 1) reduce existing export levels and thereby increase Delta flows; 2) maintain existing export levels and Delta flows; and 3) further reduce Delta flows by establishing a massive new diversion, the Tunnels Project, upstream from the Delta.³⁴ The BDCP agencies and the new RDEIR/SDEIS continue to ignore the direct and obvious broad policy alternative of reducing existing export levels to thereby increase Delta flows—which is mandated by section 85021 of the California Water Code.

³³ See also previously submitted Friends of the River comment letter of May 21, 2014, joint May 28, 2014 and September 4, 2014 comment letters focused on the failure of BDCP Draft plan and Draft EIR/EIS to identify and evaluate a reasonable range of alternatives as the declared "heart" of both the NEPA and CEQA required EISs and EIRs. A detailed evaluation of the Draft EIR/EIS's inadequate alternatives analysis was provided by the EWC in its comment letter of June 11, 2014, accessible online at <http://ewccalifornia.org/reports/bdcpcomments6-11-2014-3.pdf>, followed by a letter of July 22, 2015, regarding the continuing lack of a reasonable range of alternatives in the RDEIR/SDEIS. Accessible at <http://restorethedelta.org/wp-content/uploads/2015/09/7-22-15-BDCP-alt-ltr-pdf.pdf>.

³⁴ The Tunnels Project alternative is infeasible because it is not lawful under the ESA, Clean Water Act, Delta Reform Act and the public trust doctrine. It is puzzling at this Draft EIR/EIS stage of the NEPA and CEQA process that the BDCP agencies would refuse to consider lawful alternatives increasing Delta flows while both considering and giving preferred alternative status to unlawful alternatives. As the RDEIR/SDEIS admits, "Many commenters argued that because the proposed project would lead to significant, unavoidable water quality effects, DWR could not obtain various approvals needed for the project to succeed (e.g., approval by the State Water Resources Control Board of new points of diversion for North Delta intakes)." RDEIR/SDEIS, Executive Summary, p. ES-2.

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The Endangered Species Act continues to be violated. The Tunnels Project is not a permissible project under the Endangered Species Act (ESA) because it would adversely modify critical habitat for at least five endangered and threatened fish species. We previously addressed the failure of the BDCP agencies to develop and consider a reasonable range of alternatives increasing Delta flows by reducing exports in our July 22, 2015, letter to you.

To summarize, ***first***, the Sacramento River Winter-Run Chinook Salmon is listed as an endangered species under the Endangered Species Act, 16 U.S.C. § 1531 et seq. Likewise, the Central Valley Spring-Run Chinook Salmon, Central Valley Steelhead, Southern Distinct Population Segment of North American Green Sturgeon, and Delta smelt, are listed as threatened species under the ESA.³⁵ ***Second***, reaches of the Sacramento River, sloughs, and the Delta that would lose significant quantities of freshwater flows through operation of the proposed Tunnels Project are designated critical habitats for each of these five listed endangered and threatened fish species. ***Third***, no Biological Assessment has been prepared and transmitted to the U.S. Fish and Service (USFWS) or National Marine Fisheries Service (NMFS) by Reclamation with respect to the Tunnels Project. ***Fourth***, ESA Section 7 consultations are not completed and no Biological Opinion has been released by either USFWS or NMFS with respect to the effects of the operation of the Tunnels Project on the five federally listed species of fish or their designated critical habitats. ***Fifth***, no “reasonable and prudent alternatives” (RPAs) have been developed or suggested by the USFWS or NMFS to avoid species jeopardy or adverse modification of designated critical habitat for inclusion in either the RDEIR/SDEIS or the Draft EIR/EIS last year.

Approval of the Tunnels Project in the form of preferred Alternative 4A or otherwise would violate the substantive prohibitions of Section 7 of the ESA by adversely modifying designated critical habitat as well as by jeopardizing the continued existence of the endangered and threatened fish species.

Approval of the Tunnels Project would violate the procedural requirements of the ESA because Reclamation has not evaluated its proposed action “at the earliest possible time” to determine whether its action may affect listed species or critical habitat and has not entered into formal consultation with USFWS and NMFS.

Approval of the Tunnels Project would violate the procedural requirements of NEPA because the Draft EIR/EIS and RDEIR/SDEIS have not been prepared “concurrently with and integrated with” Biological Assessments and Biological Opinions required by the ESA. Again, the Biological Assessments and Biological Opinions, though required, remain unavailable.

These are not deficiencies that can be “fixed” by responses to comments in a Final EIR/EIS. Instead, the RDEIR/SDEIS must be circulated for public review and comment. The new document must include a reasonable range of alternatives including alternatives increasing flows by reducing exports. The new public Draft NEPA document must also be prepared concurrently with and integrated with the ESA required Biological Assessments, Biological Opinions, and include

³⁵ Each of these species is listed under the California Endangered Species Act as well, with most of them considered threatened. Bay Delta Conservation Plan, Section 1.4.3, Covered Species, Table 1-3, p. 1-24. This table shows that under the California Endangered Species Act, Delta smelt is listed as threatened; however, the BDCP species account for Delta Smelt states that the California Fish and Game Commission elevated delta smelt to the status of endangered on March 4, 2009. (BDCP, Appendix 2A, section 2A.1.2, p. 2A.1-2, lines 21-24.) Longfin smelt is considered threatened, winter-run Chinook salmon is considered endangered, spring-run Chinook salmon threatened, fall- and late fall-run Chinook salmon are considered species of special concern; and green sturgeon (southern DPS) is also considered a species of special concern. Longfin smelt is at this time a candidate species for listing under the federal Endangered Species Act.

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reasonable and prudent alternatives, developed by the USFWS and NMFS. The required reasonable and prudent alternatives would include alternatives increasing flows through the Delta to San Francisco Bay by reducing exports.

The project is not permissible under the Clean Water Act. The Tunnels Project would reduce flows to and through and degrade water quality in the San Francisco Bay-Delta Estuary. This in turn will adversely impact numerous recognized beneficial uses and public health.

First, the Tunnels Project will violate water quality standards. ***Second***, because the state cannot issue a 401 certification to a Tunnels Project that does not meet water quality standards and objectives, the Corps of Engineers cannot legally issue a 404 permit regulating dredge and fill in waters of the United States. ***Third***, the Tunnels Project has antidegradation analysis in either the Draft EIR/EIS or the Recirculated Draft EIR/Supplemental Draft EIS (RDEIR/SDEIS), which is required for compliance with the Clean Water Act. And the lack of an adequate antidegradation analysis is yet another reason the state will be unable to issue the 401 certification. ***Fourth***, the Tunnels Project threatens to dictate water quality objectives and prejudice ongoing State Water Resources Control Board's Bay-Delta Water Quality Control Plan Phase 1 and 2 processes, in violation of the Clean Water Act.³⁶ ***Finally***, the proposed project fails to meet the Clean Water Act's requirement for the Least Environmentally Damaging Practicable Alternative (LEDPA).

Project Objectives, Purposes and Needs

The Tunnels Project's framework for policy evaluation must be broadened. To Tunnels Project proponents, the reasonable range of alternatives consists of variations among engineering solutions to the problems of how to stabilize reliable exports (defined to maximize contractual amounts from annual allocations) from the Delta and improve the quality of those water exports at the same time. This is far too narrow a definition and helps account for why Californians turned against the Peripheral Canal in 1982, and why they should reject the Tunnels Project now.

The state faces a policy crossroads, of which the narrower engineering solution of the Tunnels Project must be seen as just one part. The policy problems were defined and addressed directly by key policies of the Delta Reform Act of 2009: protecting, enhancing, and restoring the Delta's ecosystem, economy, and value as a unique place in California; improving water supply reliability generally; and reducing reliance on the Delta as part of achieving such goals. The RDEIR/SDEIS fails to demonstrate California's need for the Tunnels Project in the grand sweep of this policy framework.

To achieve reliable water supplies for the Tunnels Project we must recognize that both supply and demand should be balanced at some level that does not prejudice or undermine California's water policy framework. The failure of the umpteenth alternatives (of the Draft EIR/EIS last year and the RDEIR/SDEIS this year) is that they assume that the need for water from the Delta is accurately and reasonably represented by state and federal water contract amounts. The Tunnels Project proponents fail to demonstrate the reasonableness of this assumption. We have previously called

³⁶ The project may, on one hand, receive conditional permits for the north Delta intakes of the Tunnels Project, including gaping exemptions from water quality standards (masquerading as permit conditions) that undermine beneficial that should be protected by the water quality control plan. On the other hand, the Tunnels project will prejudice the Phase 1 and 2 processes with premature diversion and 404 permit requests, potential Delta island purchases by the Metropolitan Water District of Southern California, as well as the inadequate Tunnels environmental review process. Under both of these circumstances, the Tunnels Project tail threatens to wag State Water Board and Army Corps dog.

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into question the contracts for and uses of water.³⁷ Last year, we presented analysis of many urban water agencies in southern California that are increasingly investing in local and regional self-sufficiency of their water supplies, becoming more efficient users of water through re-use, recycling, stormwater capture, groundwater remediation, and other means.³⁸

The EWC has presented clear alternatives for achieving water supply reliability and Delta ecosystem restoration (Responsible Exports Plan, 2015 Sustainable Water for California Plan³⁹) but our alternative was not considered in the Draft EIS/EIR, nor is it considered in the RDEIR/SDEIS. The EWC alternatives rely on strict enforcement of water quality laws, adoption of the State Water Resources Control Board and Fish and Game (now Wildlife) flow and biological recommendations, shoring up existing levees, ceasing unreasonable use of water to irrigate toxic soils (primarily in the western San Joaquin Valley) that return pollution to the estuary, while also providing for modest Delta export water supply with statewide water conservation, efficiency, and recycling measures to ensure existing supplies are extended to meet demand.

Need for the Tunnels Project must be analyzed directly against water conservation potential. This year, Californians have responded to a fourth year of drought by surpassing water conservation goals established by Governor Brown for the third straight month this summer. "For June, July, and August the cumulative statewide savings rate was 28.7 percent," the State Water Resources Control Board said in an October 2015 press release. "That equates to 611,566 acre-feet of water saved—51 percent of the overall goal of saving 1.2 million acre-feet from June 2015 to February 2016," as the governor had sought in his April 1 executive order. While this is a statewide figure, many of the largest conserving jurisdictions were located within the hydrologic regions where major state and federal water contractors have seen substantial decreases in residential water use.⁴⁰ Making water conservation a way of life will be increasingly important as drought recurs throughout California under rising greenhouse gas emissions and climate change conditions. None of this is disclosed or analyzed in determining the need for the Tunnels Project.

The need for the Tunnels Project is poorly specified. A new paragraph in the Objective section of the RDEIR/SDEIS states that:

The ecological health of the Delta continues to be at risk, the conflicts between species protection and Delta water exports have become more pronounced, as amply evidenced by the continuing court decisions regarding the intersection of the ESA, the CESA, and the operations criteria of the SWP and the CVP. Other factors, such as the continuing subsidence of lands within the Delta, increasing seismic risks

³⁷ For example, Environmental Water Caucus, *Response Letter to the US Bureau of Reclamation for the Shasta Lake Water Resources Investigation DEIS*, September 30, 2013, pp. 6-8. Accessible at <http://ewccalifornia.org/reports/shastadeiscomments.pdf>.

³⁸ EWC Comments, June 11, 2014, pp. 104-105.

³⁹ EWC's Responsible Exports Plan accessible at <http://ewccalifornia.org/reports/responsibleexportsplanmay2013.pdf>, and our Sustainable Water Plan for California, accessible at <http://ewccalifornia.org/reports/ewcwaterplan9-1-2015.pdf>.

⁴⁰ While statewide average residential gallons per capita per day (R-GPCD) for August 2015 rose slightly from July (102 versus 98 R-GPCD), it was 17 percent lower than August 2014, San Joaquin River basin R-GPCD has fallen from 173.9 to 135.0 R-GPCD this August over last, a 22 percent decline; Tulare Lake basin's fell from 189.9 to 164.2 R-GPCD, a 13 percent decrease; and South Coast basin levels fell from 112.7 to 94.8 R-GPCD, a decline of nearly 16 percent, according to State Water Board conservation reporting data. Accessible at http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/docs/fs100115_conservation.pdf.

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and levee failures, and sea level rise associated with climate change, serve to further exacerbate these conflicts. Simply put, the overall system as it is currently designed and operated does not appear to be sustainable from an environmental perspective, *and so a proposal to implement a fundamental, systemic change to the current system is necessary.* This change is necessary if California is to '[a]chieve the two coequal goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem.' (California Public Resources Code Section 29702 subd.[a]).⁴¹

This passage uses lawsuit defeats for DWR and the Bureau combined with climate change, earthquake risk, sea level rise, and worsening conditions for Delta exports south of the Delta to justify "systemic change" apparently in the form of the Tunnels Project. While arguing for "fundamental, systemic change" to achieve the two coequal goals of the Delta Reform Act, the Tunnels Project ("the change" offered) would do nothing of the sort. ***The Tunnels Project is simply a water grab, intended to boost "water supply reliability" and water quality for south of Delta exports and no other user or the environment.*** The Tunnels Project proponents engage in a truncated misreading of the Delta Reform Act and its coequal goals. But the Delta Reform Act has a far broader, more encompassing policy framework with which the Tunnels Project falls far short of consistency.

The Bay-Delta Estuary is an over-appropriated common pool plagued by California's abject failure to rein in water rights and contractual commitments that exceed the capacity of Central Valley watershed to supply them. The Tunnels Project includes no adjustments to contractual service area commitments of either the State Water Project or the Central Valley Project in order to align supply with demand and prevent jeopardy to listed Delta fish species and enhance Delta ecosystems for the long term. No analysis of need and alternative sources of supply for south of Delta water contractors is provided in the RDEIR/SDEIS to demonstrate and justify need for the proposed Tunnels Project. This is contrary to CEQA and NEPA and defeats the purpose of full disclosure documents to reveal why a project is truly needed beyond the usual DWR, Bureau and contractor talking points concerning their own "water supply reliability," their own "improved water quality," and supposed "ecosystem health and productivity benefits" of additional huge diversion and redirection points.

The failure to adequately define and quantify "increased water supply reliability" renders these documents legally inadequate. The RDEIR/SDEIS fails to inform the public and decision-makers about adverse consequences of the Tunnels Project. ***Absent a thorough documentation of the purpose and need for the Tunnels Project with respect to water supply reliability including reasonable alternative sources of supply for state and federal water contractors, decision makers cannot understand what type and level of reliability might be achieved and by what means. The National Environmental Policy Act and the California Environmental Quality Act are both violated as a result.***

Cross-Delta Water Transfers inhere in the Tunnels Project purpose, but are ignored in the RDEIR/SDEIS statements of Objective, Purpose and Need. Last year, we commented that the Tunnels Project will function to increase the Central Valley Project and State Water Project's ability to arrange and facilitate cross-Delta water market transfers in drier and drought years. The RDEIR/SDEIS argues that the Project will increase the reliability of contractual deliveries relative to the present time.⁴² This finding is at best arguable since climate change may neutralize gains in

⁴¹ RDEIR/SDEIS, Section 1.1.4, *Project Objectives and Purpose and Need*, p. 1-7, lines 31-35, and p. 1-8, lines 1-6. Emphasis added.

⁴² RDEIR/SDEIS, Section 4.3.1, p. 4.3.1-9, lines 9-11 for Alternative 4A. This reasoning is also applied to Alternative 2D at Section 4.4.1, p. 4.4.1-9, lines 20-33; and to Alternative 5A at Section 4.5.1, p. 4.5.1-9, lines 20-33.

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contractual reliability with reductions in precipitation, snowpack and runoff that otherwise would support such a finding. However, the Tunnels Project proponents view the Project as a hedge against climate change impacts on contractual allocation deliveries.

The RDEIR/SDEIS attempts to provide some perspective given the different CEQA and NEPA baselines, but appears to suffer from poor, confused editing. As we understand the concept, the Tunnels Project would increase overall reliability of contractual deliveries relative to current conditions and relative to the No Action Alternative (the future condition without the Tunnels Project in place). To accomplish this, it would increase overall conveyance capacity crossing the Delta (due to its vaunted opportunities for flexible dual diversion operations), which in the view of Tunnels Project proponents, is presently a limiting factor on consummating water transfers (understood regardless of their contractual or market basis).⁴³ Contrary to the NEPA conclusion of the RDEIR/SDEIS for Alternative 4A, Alternative 4A would still *increase* (not decrease, as is stated therein, which does not make sense, since what are the Tunnels but additional conveyance capacity?) conveyance capacity overall, enabling cross-Delta water transfers that could lead to increases in Delta exports when compared to the No Action Alternative.

The CEQA conclusion appears logically stated to us (though we disagree with its objective):

Alternative 4A would increase water transfer demand compared to existing conditions. Alternative 4A would increase conveyance capacity, enabling additional cross-Delta water transfers that could lead to increases in Delta exports when compared to existing conditions.⁴⁴

These conclusions make clear that increased conveyance capacity boosts not just contractual water supply reliability, but also market-based water supply reliability, the latter of which is not disclosed in the RDEIR/SDEIS's statement of objectives, purpose and need in Section 1.

Plus, the very existence of the water transfer market is due to this lack of water available to fulfill SWP and CVP water right claims, and the contractual demands of their south of Delta customer agencies. The Tunnels Project is intended to facilitate ***both*** more reliable contractual deliveries ***and*** a water transfer market that moves senior water right holders' supplies through the Delta for compensation. The Tunnels Project assumes that contractual allocations are the Delta's primary purpose, but this improperly places market-based water transfers in the background and causes the RDEIR/SDEIS to fail as a full disclosure document under CEQA and NEPA. In both cases, water is conveyed under the Delta through the Tunnels. The only question in the long-term with a Tunnels Project in place (from the standpoint of objectives, purpose and need) is when the water moves—under contract terms, or under market-based terms?

The purpose of the Tunnels' water transfer role is to gain access to north of Delta exported supplies for south of Delta importers in the State and Federal water project service areas. The RDEIR/SDEIS also fails to evaluate the water transfer purposes of the Tunnels Project with respect to the source(s) of market-based transfer water. Last year, we commented that BDCP Draft EIR/EIS claimed that the Sacramento Valley is the main source of supplies for the water transfer market and

⁴³ The RDEIR/SDEIS does a poor job of clarifying the difference between contractual allocation-based water transfers across the Delta - the normal, preferred course of exportation from the Delta - and market-based, extra-contractual acquisitions of temporary supplies of water that are moved across the Delta primarily when project allocations reach as low as 50 percent for the SWP and 40 percent for the CVP. See EWC's comments on water transfers in EWC Comment Letter, June 11, 2014, pp. 192-200.

⁴⁴ RDEIR/SDEIS, Section 4.3.1, p. 4.3.1-9, lines 34-36.

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that it is "full" in most areas and many years.⁴⁵ We noted too that groundwater substitution water sales would be likely to increase in a future with the Tunnels Project in place, which we further argued, would likely be catastrophic for the Sacramento Valley's comparatively healthy connection of groundwater resources to extant rivers, streams and sloughs there. In remarks to the Delta Stewardship Council on September 24, 2015, State Water Resources Control Board Executive Director Tom Howard said of groundwater substitution water transfers:

I think we need to do some work on this issue. I have a hard time understanding quite how the stream depletion factors [applied by DWR and the Bureau of Reclamation to water transfer proposals] were established and I think there is ongoing work associated with them. Right now there's a streamflow depletion factor of 12 to 13%. I keep advising people to read USGS Publication Number 1376 as *the basic thesis of that USGS publication is that groundwater pumping is just another way to divert surface water. It's just another method of diversion of surface water that essentially, except in very limited circumstances, any groundwater pumping eventually becomes a depletion upon the nearest surface water body.*⁴⁶

We concluded last year that BDCP has failed to identify, disclose, and analyze the potential impacts of cross-Delta groundwater substitution water transfers on the Sacramento Valley and its groundwater resources, and that this is a serious deficiency of the Draft EIR/EIS. This year we conclude that the Tunnels Project proponents provide no analysis of these impacts, and it remains a serious deficiency of the RDEIR/SDEIS.

This year, the RDEIR/SDEIS continues to ignore water transfers as a crucial purpose of the Tunnels Project. They fail to describe it as a purpose in violation of CEQA and NEPA. In sum, the project would increase reliance on the Delta in flagrant defiance of the Delta Reform Act, and fails utterly to justify why the Tunnels Project is needed, a violation of NEPA and CEQA.

A reasonable range of alternatives is still not considered.

Rationales for Modifications to the Tunnels Project. The Bay Delta Conservation Plan and its accompanying Draft EIR/EIS in 2014 drew 12,204 comment letters with 1,518 unique letters from individuals and another 432 from public agencies, organizations, and stakeholder groups.⁴⁷ This is an overwhelming response to such an important set of documents. We can glean from RDEIR/SDEIS narrative some reasons its proponents had for modifying Alternative 4 and coming up with three new "sub-alternatives" 4A, 2D, and 5A, and why 4A is now the "preferred alternative."

⁴⁵ Draft EIR/EIS, November 2013, Chapter 7, p. 7-13, line 10-16. "Applied annual agricultural water irrigation totals approximately 7.7 MAF in the Sacramento Valley Groundwater Basin [citation]. A portion of this applied water, and the remaining 13.9 MAF of runoff, is potentially available to recharge the basin and replenish groundwater storage depleted by groundwater pumping. *Therefore, except during drought, the Sacramento Valley groundwater basin is 'full,' and groundwater levels recover to pre-irrigation season levels each spring.* Historical groundwater level hydrographs suggest that even after extended droughts, groundwater levels in this basin recovered to pre-drought levels within 1 or 2 years following the return of normal rainfall quantities." Emphasis added.

⁴⁶ *Maven's Notebook*, "Water Transfers and the Delta Plan, part 2: The agency view," October 13, 2015, accessible online at <http://mavensnotebook.com/2015/10/13/water-transfers-and-the-delta-plan-part-2-the-agency-view/>. Emphasis added. See also Paul M. Barlow and Stanley A. Leake, *Streamflow Depletion by Wells—Understanding and Managing the Effects of Groundwater Pumping on Streamflow*, U.S. Geological Survey Circular 1376, 84 p. (Also available at <http://pubs.usgs.gov/circ/1376/>).

⁴⁷ RDEIR/SDEIS, Section 1, p. 1-3, lines 40-42.

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The Lead Agencies⁴⁸ list "four examples of disclosure" from CEQA Guidelines Section 15088.5 that list instances by which significant new information dictates the need to recirculate a Draft EIR. The Lead Agencies coyly decline to state which example or examples was the basis for their decision to recirculate.

But of these, the EWC notes that the reason supplied in example 4 in the CEQA Guidelines seems the most germane: Last year's draft EIR on BDCP was so fundamentally inadequate and conclusory in nature that meaningful public review and comment were precluded and full disclosure of project attributes and impacts were defeated. A key reason for this was the sheer size and complexity of the documents involved. What commenters could glean from the enormous mass of verbiage last year nonetheless revealed a project so flawed by boosterism and magical thinking that the Lead Agencies must have felt that only new alternatives could help salvage an effort in the making since 2006.

The Lead Agencies claim that project revisions were needed because it became clear from agencies' comments that they could not meet the requirements needed for issuance from the fisheries agencies of "long-term assurances associated with Section 10 of the ESA [and comparable sections of the state's Natural Communities Conservation Planning Act]." They fail to disclose what specific requirements could not be met. The public is entitled to know, but these are not summarized in the RDEIR/SDEIS. We certainly hope they will be stated in the Final EIR/EIS prominently. All that is provided in this regard is a vague acknowledgement that:

These challenges related to the difficulties in assessing species status and issuing assurances over a 50 year period, in light of climate change, and accurately factoring in the benefits of long term conservation in contributing to the recovery of the species. There were also questions raised as to the ability to implement large-scale habitat restoration and an interest in exploring multiple regulatory approaches that could facilitate expeditious progress on Delta solutions.⁴⁹

Suffice to say, perhaps, that the public's and agencies' comments on the massive modeling effort revealed to the Lead Agencies that their grasp of future conditions with and without the proposed alternatives of BDCP were not up to meeting Section 10 HCP requirements that are normally applied to smaller, simpler development projects than BDCP and its habitat restoration proposals.

The second sentence of this passage also suggests strongly that "multiple regulatory approaches" meant jettisoning the habitat restoration components altogether in favor of just making the Tunnels Project a Tunnels Project. Given the now 14-year time period for Tunnels Project construction (increased from 10 years last year), can you please explain what is meant by Alternative 4A and its other sub-alternatives offering supposed "expeditious progress on Delta solutions"? After all, a year has elapsed since the last opportunity to comment on the Tunnels Project concluded. What does "expeditious" mean then? What constitutes a "solution"? And what was the problem the Tunnels is intended to solve again?

The Lead Agencies settle on two "allowance" rationales: First, to avoid their failure to meet the regulatory requirements to obtain 50-year assurances from the fishery agencies "and due to the desire to explore alternative regulatory approaches that could facilitate expeditious progress on

⁴⁸ The Lead Agencies, again, appear to be the California Department of Water Resources and the US Bureau of Reclamation for RDEIR/SDEIS purposes. It is not clear whether the other Tunnels Project proponents mentioned above are engaged in this process as lead agencies, responsible agencies or merely subordinate investors.

⁴⁹ RDEIR/SDEIS, Section 1, p. 1-2, lines 37-42.

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Delta solutions" they revised the project to "**allow** for an alternative implementation strategy for the new alternatives in the RDEIR/SDEIS," related to achieving project goals and objectives. The second "allowance" in the implementation strategy "**allows** for other state and federal programs to address the long term conservation efforts for species recovery in programs separate from the proposed project."⁵⁰

Simply put, the Lead Agencies wanted to consider a new water project shorn of the vast majority of its habitat restoration pretenses, and to try to meet Section 7 consultation process standards rather than Section 10 standards. It is a naked water grab and they are externalizing the habitat restoration program of BDCP (which was in part an attempt to mitigating past damage from water exports without actually doing so) onto society the way they had always intended anyway.

This kind of vague, euphemistic, and tortured reasoning reflects the general atmosphere of bureaucratic cluelessness, and desire by the Tunnels Project proponents to escape responsibility for the destructive character of the Tunnels Project. At a minimum, their obfuscating discussion of the reasoning behind new alternatives and recirculating the EIR/EIS obscures much and fails to meet the full disclosure purposes of both the California Environmental Quality Act and the National Environmental Policy Act.

It appears to the EWC that key rationales were developed to modify the Tunnels Project from the volume and content of critical comments received by the Tunnels Project proponents last summer.

- Modify Alternative 4 to reduce its on-the-ground impacts.
- Develop a wholly new alternative without much habitat restoration.
- Develop among the Tunnels Project proponents a rationale for employing the Section 7 consultation process over the Section 10 habitat conservation planning process for complying with the federal and state endangered species acts.

Modifying Alternative 4. The RDEIR/SDEIS states that in December 2014, Governor Jerry Brown's administration and "its federal partners" (we presume that means in California WaterFix-speak "the US Bureau of Reclamation") "announced several substantial changes to the proposed water conveyance portion of the proposed Bay Delta Conservation Plan..." (Is it so difficult to be clear in disclosing who participated in reformulating Conservation Measure 1 of BDCP? This kind of language is for hortatory press releases and triumphal web sites, not environmental full-disclosure documents like the RDEIR/SDEIS.)

The changes included: fish screens for each of three north Delta intake structures, access roads, fencing, security gates, control buildings, a single-bore tunnel between Intakes 2 and 3 (28-foot diameter) and the intermediate forebay, various vertical shafts at intervals, a single-bore tunnel from Intake 5 to the intermediate forebay (28-foot diameter), the intermediate forebay with outlets to the two 40-foot diameter tunnels enabling gravity flow to the area of expanded Clifton Court Forebay where a pumping plant would be constructed to lift water from the tunnels into Clifton Court for delivery to the south Delta state and federal pumping plants.

These changes to Alternative 4 are claimed to have the following benefits: eliminating three pumping plants (one from each north Delta intake); minimizing construction on Staten Island where sandhill crane critical habitat exists; relocating project features to DWR-owned property to reduce acquisitions from private land owners; eliminating permanent power lines through Stone Lakes National Wildlife Refuge; removing an underground siphon that would have affected Italian Slough, reducing overall electricity requirements of the Tunnels Project by enabling Tunnels water

⁵⁰ RDEIR/SDEIS, Section 1, p. 1-3, lines 1-14. Emphasis added.

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to flow almost entirely by gravity except for the final hoist from beneath Clifton Court Forebay; and overall, "reduc[ing] tunnel operation and maintenance costs."⁵¹

EWC notes that nowhere in this list of benefits do the Lead Agencies claim that the changes in the Tunnels Project (Alternative 4) were made to benefit fish species, water quality, or public health. The changes mainly appear to reduce Tunnels' operation and maintenance costs, and in a secondary fashion reduce impacts to Delta human residents (such as through elimination of certain visual impacts of transmission lines and power plant buildings from intake sites). Even the fish screens at the north Delta intakes are not claimed to provide fish benefits in this context. Instead, the rationale is justified for reducing "the amount of construction activity required at each intake site and would eliminate the temporary relocation of State Route (SR) 160 by realigning the highway over widened levee sections prior to commencing construction of the intake structures."⁵²

Construction related impacts to fish would be the same for modified Alternative 4 as for Alternative 4A because "the proposed physical water conveyance facilities are the same for both alternatives."⁵³ In this sense, the changes represent distinctions without important policy or environmental differences.

Developing new alternatives with little habitat restoration. The RDEIR/SDEIS states that the "desire to explore alternative regulatory approaches that could facilitate expeditious progress on Delta solutions" is the main reason for developing the new "sub-alternatives."⁵⁴ It is not disclosed what "Delta solutions" means and what expeditious progress toward them entails. Moreover, it fails to address broader statewide water policy goals enacted in the Delta Reform Act of 2009. This statement should be clarified with respect to the stated objectives, purposes and needs the Lead Agencies employ (discussed below) to justify the Tunnels Project. They vaguely focus on the "conveyance facilities necessary for the SWP and CVP to address more immediate water supply reliability needs in conjunction with ecosystem improvements to reduce reverse flows and direct fish species impacts associated with the existing south Delta intakes." We take this to mean that since ecosystem improvements are externalized to other agencies, Alternative 4A is free to be a Tunnels Project, a water pipeline, pure and simple.

Our conclusion is confirmed in Section 3 of the RDEIR/SDEIS. The only tangible environmental benefits of the "alternative implementation strategy" is reducing reverse flows in Old and Middle River and direct fish impacts from continued exclusive operation of the south Delta pumping plants and fish facilities. The RDEIR/SDEIS supposes that the "alternative implementation strategy *allows* for other state and federal programs to address the long term conservation efforts for species recovery in programs separate from the proposed project."⁵⁵

In plain terms, the Lead Agencies continue to believe that adding north Delta intakes with tunnels to the south Delta pumps represents an improvement over existing conditions because the north Delta intakes supposedly provide operational flexibility for avoiding impacts to fish using and residing in north Delta waters. Removal of pumps from the north Delta intakes, they argue later, is alleged to reduce potential problems with the north Delta intakes, and ballyhooed fish screens at these intakes

⁵¹ RDEIR/SDEIS, Section 3, p. 3-1, lines 14-33.

⁵² RDEIR/SDEIS, Section 3, p. 3-2, lines 9-11.

⁵³ RDEIR/SDEIS, Section 3, p. 3-7, lines 31-32.

⁵⁴ RDEIR/SDEIS, Section 1, p. 1-4, lines 15-17.

⁵⁵ RDEIR/SDEIS, Section 1, p. 1-3, lines 7-8.

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will keep small fish like Delta smelt, longfin smelt, and juvenile salmon from harm. (See Section VI below for more on fish screens.)

In reality, flexible operations through dual conveyance means that at any given moment reverse flows and fish entrainment and water quality problems can continue to occur somewhere in the Delta. This does not in any way mean there are net aquatic benefits from the Tunnels Project; dual conveyance simply doubles the number of places such effects would occur.

"These changes are necessary," claims the description of the new alternatives, "for the SWP and CVP to address more immediate water supply reliability needs while reducing the severity of existing ongoing environmental impacts. The strategy would achieve the latter objective and purpose in part by reducing reverse flows and direct fish impacts associated with the existing south Delta intakes."⁵⁶ ***This formulation is intended to stop readers from thinking about whether reverse flows might happen in the north Delta as long as those pesky reverse flows in Old and Middle Rivers are reduced. It is a framing exercise, a linguistic shell game through which the Lead Agencies peddle the Tunnels Project to the public.***

Thus the RDEIR/SDEIS grandly exaggerates:

Implementing the conveyance facilities alone, as now proposed under Alternatives 4A, 2D, and 5A, would help resolve many of the concerns with the current south Delta conveyance system, and would help reduce threats to endangered and threatened species in the Delta. For instance, implementing a dual conveyance system would align water operations to better reflect natural seasonal flow patterns by creating new water diversions in the north Delta equipped with state-of-the-art fish screens, thus reducing reliance on south Delta exports.

The existing operation of the SWP and CVP pumps in the south Delta can cause reversals in river flows, potentially altering salmon migratory patterns and contributing to the decline of sensitive species such as delta smelt. The new system would reduce the ongoing physical impacts associated with sole reliance on the southern diversion facilities and allow for greater operational flexibility to better protect fish. Minimizing south Delta pumping would provide more natural east-west flow patterns. The new diversions would also help protect critical water supplies against the threats of sea level rise and earthquakes.⁵⁷

These two passages are about stopping thought, not informing it. You cannot have the improvements in potential downstream flow on Old and Middle Rivers without the likely reverse flows and flow reductions inherent in operating the north Delta intakes. You cannot operate the north Delta intakes without threats to migrating juvenile salmon smolts and Delta smelt at key times of year. If real-time operations are invoked to return operations flexibly to the south Delta pumping plants to protect fish in the north Delta, the projects will resume creating reverse flows in Old and Middle rivers with attendant threats and stresses to fish there. It is a zero-sum hydrodynamic Delta in the absence of clogging most key channels with barriers and gates. For now, at least, the Delta remains primarily a common water pool, and no amount of happy talk from the RDEIR/SDEIS or "California WaterFix" publicity can wish it away.⁵⁸

⁵⁶ RDEIR/SDEIS, Section 4.1, p. 4.1-1, lines 18-21.

⁵⁷ RDEIR/SDEIS, Section 4.1, p. 4.1-1, lines 38-41 and p. 4.1-2, lines 1-9.

⁵⁸ We are aware of the annual installation of temporary barriers at interior south Delta locations to help with water levels and at the head of Old River to steer migrating salmonids away from entrainment to Jones Pumping Plant in the San Joaquin River mainstem.

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"However," the Lead Agencies state, in an effort to keep at least a fig leaf of green over their naked Tunnels Project, "habitat restoration is still recognized as a critical component of the State's long-term plans for the Delta, and such endeavors will likely be implemented over time under actions separate and apart from the chosen."

At this writing, no additional documentation of the likelihood California EcoRestore (CER) will be funded let alone implemented has been provided at the California WaterFix web site. At this juncture, CER is described as being less than one-fifth the size of the natural reserve planned originally under BDCP as Conservation Measure 3.⁵⁹ If one of the new alternatives is selected, then "restoration of habitat in the Delta...will instead occur through California EcoRestore, and these activities will be further developed and evaluated independent of the water conveyance facilities."⁶⁰

The RDEIR/SDEIS fails to make detailed comparisons among alternatives. Table 1 provides a direct comparison of the three BDCP and California WaterFix preferred alternatives. This direct comparison shows, first, that there are only minor differences between these versions of the preferred alternative, and second, that to make this direct comparison, it was necessary use three different documents: the Bay Delta Conservation Plan, the RDEIR/SDEIS, and the *Conceptual Engineering Report* (dated July 2015), which was obtained only through a Public Record Act request. No such comparison was provided that we could find readily in the RDEIR/SDEIS, as is shown in Table 1.

Last year, we noted that even BDCP's Draft EIR/EIS observed there were just "slight differences" among alternatives when it came to operational attributes.⁶¹ The RDEIR/SDEIS fails to provide comparisons of Delta outflow and exports with all other alternatives, defeating readers' ability to easily and directly gauge for themselves the relative differences among the alternatives. We present a comparison drawn from both the Draft EIR/EIS and the RDEIR/SDEIS, in Table 2. This table helps illustrate the cumbersome complexity even of summarizing the "slight differences" in operational complexities associated with analyzing and grasping the BDCP's and TP's alternatives. But it also points up the continuing deficiency of the RDEIR/SDEIS in fostering useful and meaningful comparisons among its too-numerous alternatives. All that is really provided are comparisons

⁵⁹ "California EcoRestore's initial goal is to advance (i.e. complete or break ground on) 30,000 acres of Delta habitat restoration:

- 25,000 acres associated with existing mandates for habitat restoration, pursuant to federal biological opinions. These projects will be funded exclusively by the state and federal water contractors that benefit from the State Water Project and the Central Valley Project systems.
- 5,000 acres of habitat enhancements. Proposition 1 grants to local governments, non-profit organizations, and other entities will support these habitat enhancements throughout the Delta. Funding will come primarily from the Delta Conservancy, the California Department of Fish and Wildlife, and the California Department of Water Resources.

California EcoRestore is unassociated with any habitat restoration that may be required as part of the construction and operation of new Delta water conveyance (California WaterFix)." Accessed 14 September 2015 at <http://resources.ca.gov/ecorestore/>.

There is no timeline, schedule of phasing or planning document for California EcoRestore. California EcoRestore represents DWR's cherry-picking of restoration projects it likes from BDCP, especially those with "existing mandates" and which could be funded from the recently passed 2014 Water Bond.

⁶⁰ RDEIR/SDEIS, Section 4.1, p. 4.1-2, lines 15-17.

⁶¹ EWC June 11th Letter, pp. 150-152.

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between the modified Alternative 4 and each of the three other sub-alternatives incrementally shorn of the BDCP conservation strategy.⁶²

Table 1 Summary Comparing BDCP and California WaterFix Alternatives 2013 through 2015			
Feature Description/Surface Area	Alternative 4 (2013)	Modified Alternative 4 (2014)	Alternative 4A ("California WaterFix")
Conveyance capacity (cfs)	9,000	9,000	9,000
Intake facilities (acres per site)	90	90	122
Six pumps per intake, pump capacity (cfs)	500		
Total dynamic head (feet)	59-73		
Tunnel 1a connecting intakes 2 and 3 to Intermediate Forebay (Alternative 4 only)			
Tunnel length (feet)	47,400	46,100	
Number of tunnel bores; number of shafts (total)	1; 4	1; 3	
Tunnel finished inside diameter (feet)	20	28	
Tunnel 1b connecting Intake 5 to Intermediate Forebay			
Tunnel length (feet)	24,900	25,200	
Number of tunnel bores; number of shafts (total)	1; 3	1; 3	
Tunnel finished inside diameter (feet)	20	28	
North Tunnels from Intake 2 to Intake 3 (Alternative 4A only)			
Maximum Flow (Intake Flow, cfs)			3,000
Tunnel length (feet)			10,507
Number of Tunnel bores; number of shafts (total)			1; 1
Tunnel Finished Inside Diameter (feet)			28
North Tunnels from Intake 3 to Intermediate Forebay (Alternative 4A only)			
Maximum Flow (Intake Flow, cfs)			6,000
Tunnel length (feet)			35,587
Number of Tunnel bores; number of shafts (total)			1; 3

⁶² RDEIR/SDEIS, Section 4.1, Tables 4.1-1, 4.1-4, and 4.1-6.

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Table 1 Summary Comparing BDCP and California WaterFix Alternatives 2013 through 2015			
Feature Description/Surface Area	Alternative 4 (2013)	Modified Alternative 4 (2014)	Alternative 4A ("California WaterFix")
Tunnel finished inside diameter (feet) ¹			40
North Tunnel from Intake 5 to Intermediate Forebay			
Maximum Flow (Intake Flow, cfs)			3,000
Tunnel length (feet)			25,186
Number of Tunnel bores; number of shafts (total)			1; 3
Tunnel finished inside diameter (feet)			28
Intermediate Forebay (acres)	245	243	243
Water surface area (acres)	41	37	37
Active storage volume (acre-feet)	710	750	750
Main Tunnels (connecting Intermedia Forebay to Clifton Court Forebay)			
Maximum Flow (cfs)	9,000	9,000	9,000
Tunnel length (feet)	159,000	159,000	159,000
Number of Tunnel bores; number of shafts (total)	2; 9	2; 9	2; 9
Tunnel finished inside diameter (feet)	40	40	40
Clifton Court Pumping Plant			
Total Number of Pumps (both pumping plants)	None	12	12
8 large pumps, capacity per pump (cfs)	None	1,125	1,125
4 small pumps, capacity per pump (cfs)	None	563	563
Total dynamic head (feet)	None	37	37
Expanded Clifton Court Forebay (total finished area, acres)	2,950	2,600	1,691
Forebay dredging area (acres)	2,030	2,010	2,121
Expanded water surface area (acres)	690	590	806

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Table 1 Summary Comparing BDCP and California WaterFix Alternatives 2013 through 2015			
Feature Description/Surface Area	Alternative 4 (2013)	Modified Alternative 4 (2014)	Alternative 4A ("California WaterFix")
Active storage volume (acre-feet)	9,260 (north cell), 8,110 (south cell)	4,300 to 10,200 (north cell), 14,000 (south cell)	4,970 to 8,100 (north) 12,050 (south)
Power requirements - Estimated pumping electric load (MW)	50-60	36	36
<p>Notes: cfs = cubic feet per second; MW = megawatts. Acreage estimates represent the permanent surface footprints of selected facilities. Characteristics of other areas including temporary work areas and those designated for borrow, spoils, and reusable tunnel material are reported in Appendix 3C (in Appendix A of the Recirculated DEIR/SDEIS, 2015). Overall project acreage includes some facilities not listed, such as permanent access roads.</p> <p>¹ Intake 3's tunnel to the Intermediate Forebay (IF) will have 40-foot diameter because it will carry both intake flows from Intakes 2 and 3 to the IF, a total flow capacity of 6,000 cfs.</p> <p>Sources: Bay Delta Conservation Plan, November 2013, Chapter 4, <i>Covered Activities and Associated Federal Actions</i>, Table 4-3, p. 4-11; BDCP Recirculated Draft EIR/Supplemental Draft EIS, July 2015, Section 3, <i>Conveyance Facility Modifications to Alternative 4</i>, Table 3.2-1, p. 3-3; California Department of Water Resources, Delta Habitat Conservation and Conveyance Program, <i>Conceptual Engineering Report, Dual Conveyance Facility, Modified Pipeline/Tunnel Option—Clifton Court Forebay Pumping Plant (MPTO / CCO)</i>, July 1, 2015, Table ES-1, pp. ES-4 to ES-5; Environmental Water Caucus.</p>			

EWC's Plan Alternatives are reasonable alternatives. We repeat the EWC's demand for consideration of the Responsible Exports Plan and the Sustainable Water Plan for California as alternatives and reasonable variants. EWC's similar requests started back on April 16, 2012 but have to date been ignored in the BDCP and "California WaterFix" process.

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Table 2

Scenario	Applies to Alternatives	North Delta Bypass & Diversions	South Delta Exports	Yolo Bypass Diversions	Delta Cross Channel	Red Vista Instream Flows	Delta Inflow & Outflow
A	1A, 1B, 1C, 1	Dec - June (Crudd) make use of initial and post-pulse operational criteria; July - Sep min bypass flow increase to 7,000 cfs; Oct - Nov diversions <= 10 cfs of Sacramento flow at Fremont such that North Delta Bypass flows are <= 5,000 cfs; Initial pulse trigger; post pulse operations using Table 3-16 in EIS/EIR.	Biological Opinions' (BOA) actions, consistent with the No Action Alternative.	Sacramento Weir: No changes; Lagoon Weir: No changes; Fremont Weir: 17.5' notch with operable gates between Dec 1 and April 30 providing Yolo Bypass inundation of 3,000 to 6,000 cfs.	Oct - Nov: DEC: closed 15 days per month; Dec - June: DEC gates closed; July - Sep: DEC gates open.	Dec - Dec: D-1641 minimum of 1,000 cfs.	D-1641
B	2A, 2B, 2C	Same as Scenario A.	Derived from Table 3-18 of EIS/EIR to NAA operational criteria, select larger # for OMR criterion; April-May-June OMA flows in Table 3-19; Oct - Nov: No South Delta exports during D-1641 pulse flows; after D-1641 pulse flows operate to 1,000 cfs through November.	Same as Scenario A.	D-1641	D-1641	Dec - Aug: D-1641; Sep - Nov: Fall X2 from Delta smelt help in Wet and Above Normal Years
B	2D (2015)	Same as Scenario A.	Same as Scenario B.	None - Fremont Weir not included.	Same as Scenario B.	Same as Scenario B.	Operational Scenario B without Fremont Weir modifications, evaluated at Early Long Term (about 2025).
C	3	Same as Scenario A.	Same as Scenario A. Exports/Inflow ratio limited in April and May.	Same as Scenario A.	Same as Scenario A.	Same as Scenario A.	Same as Scenario B.
C	5A (2015)	Same as Scenario A.	Same as Scenario A. Exports/Inflow ratio limited in April and May.	None - Fremont Weir not included.	Same as Scenario A.	Same as Scenario A.	Operational Scenario C without Fremont Weir modifications, evaluated at Early Long Term (about 2025).
D	6A, 6B, 6C	Same as Scenario A.	None.	Same as Scenario A.	Same as Scenario A.	Same as Scenario A.	Same as Scenario B.
E	7	Scenario A does apply; Dec - June, Table 3-16 would apply closely, unlike in Scenario A. Initial pulses similar to Scenario A. Post pulse operations handled by Table 3-15.	OMA flows >= 4,100 cfs in Dec - May; OMA flows in June <= 4,300 cfs; OMR flows in April, May and Oct - Nov would have no south Delta exports.	Sacramento and Lagoon Weirs same as in Scenario A; Fremont Weir, same notch, operated to inundate Yolo Bypass with 3,000 to 8,000 cfs with duration governed by conditions in the Sacramento River.	Same as Scenario A.	Dec - Dec: D-1641 minimum of 1,000 cfs.	Same as Scenario B.
F	8	Same as Scenario E.	Same as Scenario E.	Sacramento & Lagoon Weirs same as in Scenario A; Fremont Weir, same notch, operated to inundate Yolo Bypass with 3,000 to 8,000 cfs with duration set for 10-45 days.	Same as Scenario A.	Same as Scenario E.	Jan - June: outflow <= 55% of UP at Fremont or D-1641 flow requirements minimum; July - Aug, Dec: D-1641; Sep - Oct - Nov: Fall X2: Feather River flow to be proportional amount of 55% of UP at Fremont.
G	9	None.	Similar to Scenario A; E/I ratio follows NMFS salmonid BO 2009.	Same as Scenario A.	Flows <= 11,000 cfs, DEC is closed; Flows >= 11,000 cfs and <= 25,000 cfs, DEC open to divert up to 25% of Sacramento River flow.	Same as Scenario A.	Same as Scenario B.
H	4 (2013)	Same as Scenario A.	Derived from ROPs - Compare Table 3-21 of EIS/EIR to NAA operational criteria; select larger # for OMR criterion; April-May-June OMA flows in Table 3-22; A1.	Same as Scenario A.	Dec-14: NMFS BO 2009, consistent with No Action Alternative modeling.	Same as Scenario A.	Decision Tree Outcomes: H1 - spring and fall outflows as per D-1641; H2 - Spring outflow for Lagoon smelt and fall outflow from D-1641; H3 - Fall X2 outflows for Delta smelt and spring outflow from D-1641; H4 - Fall X2 for Delta smelt and spring outflow for Lagoon smelt.
H	4 (2014 modified)	Same as Scenario A.	Same as Scenario H.	Same as Scenario A.	Same as Scenario H.	Same as Scenario A.	Operational Scenarios H1-H4 with Decision Tree of Chapter 3, Section 3.6.4.2 of Draft EIR/EIS, evaluated at Early Long Term.
H	4a (2015)	Same as Scenario A.	Same as Scenario H.	None - Fremont Weir not included.	Same as Scenario H.	Same as Scenario A.	Operational Scenario H1: (a new operational scenario which includes a criterion for spring outflow bounded by the criteria associated with Scenarios H3 and H4 of Chapter 3, Section 3.6.4.2 of Draft EIR/EIS, evaluated as Scenarios H3 and H4 at early long-term, around 2025.

Source: Bay Delta Conservation Plan Draft EIS, November 2013, Chapter 3, pp. 181-202; NMFS/ISD/S, Section 3.1, Table 4.1.1, 4.1.4, 4.1.6.

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Deliberate BDCP Refusal to Consider Alternatives Increasing Delta Flows. The BDCP's omission of alternatives reducing exports and increasing flows has been deliberate. A claimed purpose of the BDCP is "Reducing the adverse effects on certain listed [fish] species due to diverting water."⁶³ "[H]igher water exports" are among the factors the RDEIR/SDEIS admits "have stressed the natural system and led to a decline in ecological productivity."⁶⁴ "There is an urgent need to improve the conditions for threatened and endangered fish species within the Delta."⁶⁵ The new RDEIR/SDEIS admits that "the Delta is in a state of crisis" and that "Several threatened and endangered fish species . . . have recently experienced the lowest population numbers in their recorded history."⁶⁶ Alternatives reducing exports are the obvious direct response to claimed BDCP purposes of "reducing the adverse effects on certain listed [fish] species due to diverting water" and "to improve the conditions for threatened and endangered fish species within the Delta." The way to increase Delta flows is to take less water out.

Reclamation and DWR must develop and consider *an* alternative that would increase flows by reducing exports in order to satisfy federal and California law. The Delta Reform Act establishes that "The policy of the State of California is to *reduce reliance on the Delta in meeting California's future water supply needs* through a statewide strategy of investing in improved regional supplies, conservation, and water use efficiency."⁶⁷ The Act also mandates that the BDCP include a comprehensive review and analysis of "A reasonable range of flow criteria, rates of diversion, and other operational criteria . . . necessary for recovering the Delta ecosystem and restoring fisheries under a reasonable range of hydrologic conditions, which will identify the remaining water available for export and other beneficial uses."⁶⁸ And, the Act requires: "A reasonable range of Delta conveyance alternatives, including through-Delta," as well as new dual or isolated conveyance alternatives.⁶⁹ In addition, the Act mandates that "The long-standing constitutional principle of reasonable use and the public trust doctrine shall be the foundation of state water management policy and are particularly important and applicable to the Delta."⁷⁰

Reclamation and DWR have now marched along for over four years in the face of "red flags flying" deliberately refusing to develop and evaluate a reasonable range of alternatives, or indeed, any real alternatives at all, that would increase flows by reducing exports. Four years ago, the National Academy of Sciences declared in reviewing the then-current version of the draft BDCP that: "[c]hoosing the alternative project before evaluating alternative ways to reach a preferred outcome would be post hoc rationalization—in other words, putting the cart before the horse. Scientific reasons for not considering alternative actions are not presented in the plan."⁷¹

⁶³ BDCP Draft EIR/EIS, Executive Summary, p. ES-10.

⁶⁴ RDEIR/SDEIS, Section 1, p. 1-10.

⁶⁵ Draft EIR/EIS, Executive Summary, p. ES-10; RDEIR/SDEIS, Executive Summary, p. ES-6.

⁶⁶ RDEIR/SDEIS, Executive Summary, p. ES-1.

⁶⁷ Cal. Water Code § 85021. Emphasis added.

⁶⁸ Cal. Water Code § 85320(b)(2)(A).

⁶⁹ Cal. Water Code § 85320(b)(2)(B).

⁷⁰ Cal. Water Code § 85023.

⁷¹ National Academy of Sciences, Report in Brief at p. 2, May 5, 2011.

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More than three years ago, on April 16, 2012, the Co-Facilitators of the EWC transmitted a letter to then-Deputy Secretary of the California Natural Resources Agency Gerald Meral. The letter stated EWC's concerns with BDCP's current approach and direction of the [BDCP] project, particularly its treatment of alternatives.⁷² The letter specifically states:

*The absence of a full range of alternatives, including an alternative which would reduce exports from the Delta. It is understandable that the exporters, who are driving the project, are not interested in this kind of alternative; however, in order to be a truly permissible project, an examination of a full range of alternatives, including ones that would reduce exports, needs to be included and needs to incorporate a public trust balancing of alternatives.*⁷³

The EWC provided its "Reduced Exports Plan" to BDCP agency officers back in December 2012 and again in person on February 20, 2013. Then-EWC Co-Facilitator Nick Di Croce stated in his December 2012 message to Deputy Secretary Meral that:

Now that the project is nearing its EIR/EIS stage, we feel it is important to formally present it [Reduced Exports Plan] to you and request that you get it on the record as an alternative to be evaluated. . . . As you know, CEQA and NEPA both require a full range of reasonable alternatives to be evaluated. (December 15, 2012 email Di Croce to Meral).

On November 18, 2013, FOR submitted a comment letter in the BDCP process urging those carrying out the BDCP to review the "Responsible Exports Plan," an update of the previous "Reduced Exports Plan" proposed by the EWC: as an alternative to the preferred Tunnels Project. This Plan calls for reducing exports from the Delta, implementing stringent conservation measures but no new upstream conveyance. This Plan additionally prioritizes the need for a water availability analysis and protection of public trust resources rather than a mere continuation of the status quo that has led the Delta into these dire circumstances. Only that alternative is consistent with the EPA statements indicating that more outflow is needed to protect aquatic resources and fish populations. The EWC Responsible Exports Plan is feasible and accomplishes project objectives and therefore should be fully analyzed in a Draft EIS/EIR.⁷⁴

All of the so-called project alternatives set forth in the Draft Plan, Draft EIR/EIS, and new RDEIR/SDEIS create a capacity to divert more water from the Delta far upstream from the present diversion, which will undoubtedly decimate Delta-reliant species already on the brink of extinction, including the Delta smelt, chinook salmon, steelhead, San Joaquin kit fox, and tricolored blackbird, among dozens of others. The Draft EIR/EIS itself describes differences among the alternatives as "slight." Should the Tunnels Project be completed, this critical aquatic habitat would instead be exported through the north Delta intakes along the lower Sacramento River. And they would do so contrary to ESA Section 10 (prohibiting reduction of the likelihood of survival and recovery of listed species), ESA Section 7 (prohibiting federal agency actions that are likely to jeopardize the continued existence of any endangered species or that "result in the destruction or adverse modification of [critical] habitat of [listed] species" 16 U.S.C. § 1536 (a)(2)), and California Water Code Section 85021 (requiring that exporters reduce reliance on the Delta for water supply).

BDCP Agencies Must Consider Alternatives That Will Increase Delta Flows As Proposed Under the Responsible Exports Plan. We yet again request development of a reasonable range of alternatives that increasing Delta flows while reducing exports. Tunnels Project proponents must

⁷² Letter, p. 1.

⁷³ Letter, p. 2.

⁷⁴ FOR November 18, 2013 comment letter at p. 3, Attachment 4 to FOR January 14, 2014 comment letter.

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prepare a new, legally sufficient, Draft EIR/EIS that incorporates actions called for by the Responsible Exports Plan (attached to our previous comment letters and also posted at <http://www.ewccalifornia.org/reports/responsibleexportsplanmay2013.pdf>).⁷⁵

EWC-type alternatives could vary by how much time is allotted to phase in export reductions over time. For instance, they could range from 10 to 40 years, which would comparatively span the same range of timelines provided for Tunnels construction.

The RDEIR/SDEIS admits the existence of paper water, “quantities totaling several times the average annual unimpaired flows in the Delta watershed could be available to users based on the face value of water permits already issued.”⁷⁶ The BDCP agencies misuse the Delta Reform Act’s definition of the coequal goals: “Coequal goals’ means the two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem . . .”⁷⁷ Providing “a more reliable water supply” means real water actually available, not paper water, and reflecting water available for export while meeting the needs for Delta water quantity, quality, freshwater flows, fisheries, public trust obligations, the ESA, the Clean Water Act, and senior water rights holders. It does not mean moving the exporters who are junior water rights holders—including 1.3 million acres of drainage impaired lands—to the front of the line ahead of everyone and everything else. It also does not mean putting the exporters in the front of the line during a lengthy extreme drought, crashing fish populations, and reductions in water use being made by millions of Californians.

The estimated \$15 billion cost of the Tunnels Project—which will amount to as much as \$60 billion or more including debt service and inevitable cost over-runs represents an “opportunity cost.” The only true benefit cost study prepared on the Tunnels Project concluded that the costs are 2 to 3 times higher than the benefits.⁷⁸ Now that the project has dropped the features of habitat conservation, the exporters would not have the benefit of 50 year permits and virtually guaranteed water deliveries. That change, in addition to worsening the adverse environmental impacts of the Tunnels Project, also worsens the already negative cost benefit ratio (see Section III below). The change also leaves the taxpaying public to be stuck with all costs to mitigate the adverse impacts of the Tunnels Project.

BDCP Agencies Should Examine an Instream Water Rights Program. An additional important, yet unexamined, path forward lies in use of a comprehensive, instream water rights program that protects ecosystems and species as a reasonable alternative. If water rights continue to be the legal system by which water is allocated, then a reasonable alternative should reflect the science and ethics of our integration with our environment: legal water rights for waterways must be developed,

⁷⁵ We attach for the BDCPComments@icfi.com addressee a copy of EWC’s new *A Sustainable Water Plan for California* (May 2015) as an updated EWC alternative to the BDCP California WaterFix Delta Tunnels. The features of the new plan are similar in pertinent part to the previous Responsible Exports Plan recommendations and features set forth above. We also attach a letter sent by EWC member groups to state and federal officials about alternatives issues this past summer.

⁷⁶ RDEIR/SDEIS, Section 1, p. 1-11. The RDEIR/SDEIS refers to the State Water Resources Control Board’s memorandum we cited earlier on Delta watershed water rights, and tries to downplay its findings by stating, “However, the hydrology, the SWP and CVP water contracts, and environmental regulations control actual quantities that could be made available for use and diversion.”

⁷⁷ Cal. Water Code § 85054.

⁷⁸ Dr. Jeffrey Michael, *Benefit-Cost Analysis of Delta Water Conveyance Tunnels*, Eberhardt School of Business, University of the Pacific, July 12, 2012.

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allocated, and enforced to support water needs for healthy aquatic ecosystems and a healthy California. The alternatives analysis of the Draft EIR/EIS and the new RDEIR/SDEIS should include consideration of this important legal and policy avenue. Alternatives describing “all appropriate methods of accomplishing the aim of the action”⁷⁹—which includes restoration of Delta habitats and species and a reliable water supply for California—must be considered, “including those without the area of the agency’s expertise and regulatory control as well as those within it.”⁸⁰

Formalizing and effectuating water rights for ecosystems will ensure that waterway and fish needs are considered up front, that planning is effective, and that expectations of implementation and enforcement are clear. California is undertaking various processes now that could set state water policy for decades. These must include consideration of water rights for waterways, to ensure the mutual well-being of the state’s people and environment.

Strategies for “finding” water in such an alternative could include: (1) applying the waste and unreasonable use provisions of the state Constitution and California Water Code⁸¹; (2) increasing fees on diversions to encourage voluntary release of unneeded rights; (3) determining and acting on public trust violations; (4) conducting initiatives to convince existing water rights holders to donate all or a portion of their water rights voluntarily; (5) adjudicating surface and/or groundwater water rights; and (6) other specific approaches to acquiring water rights as appropriate for reassignment to instream flows.⁸² If successful, an instream water rights program in California would better ensure that we can meet the water needs of both humans and the environment both now and in the long term.

The RDEIR/SDEIS must meaningfully present and evaluate alternatives that will increase Delta flows in order to comply with NEPA and CEQA. Under NEPA Regulations, “This [alternatives] section is the heart of the environmental impact statement.” The alternatives section should “sharply” define the issues and provide a clear basis for choice among options by the decision-

⁷⁹ *Environmental Defense Fund v. Corps of Engineers of United States Army*, 492 F.2d 1123, 1135 (5th Cir. 1974); 40 C.F.R. § 1502.14(c).

⁸⁰ *Id.*; 40 C.F.R. § 1502.14(c). Again, “legislative action” (such as that which may be needed to establish a program of instream water rights) “does not automatically justify excluding [the alternative] from an EIS.” *City of Sausalito v. O’Neill*, 386 F.3d 1186, 1208 (9th Cir. 2004) (citing *Methow Valley Citizens Council v. Regional Forester*, 833 F.2d 810, 815 (9th Cir. 1987), *overruled on other grounds by Robertson v. Methow Valley Citizens Council*, 490 U.S. 332 (1989) (quoting *City of Angoon*, 803 F.2d at 1021); *see also Kilroy v. Ruckelshaus*, 738 F.2d 1448, 1454 (9th Cir.1984) (“In some cases an alternative may be reasonable, and therefore required by NEPA to be discussed in the EIS, even though it requires legislative action to put it into effect”).

⁸¹ *See* CA Water Code Water Code § 100; *see also* Article X, Section 2 of the California Constitution.

⁸² Oregon’s Instream Water Rights Act (IWRA) recognizes a broad array of instream uses as beneficial uses (O.R.S. §§ 537.332 - 537.334 (recognizing that public uses that are valid instream uses include “conservation, maintenance and enhancement of aquatic and fish life, wildlife, fish and wildlife habitat and any other ecological values”)). The IWRA converted minimum flow requirements to instream rights under the 1955 Minimum Perennial Streamflow Act to instream water rights. O.R.S. § 537.346. It also established a stream system to convert water rights to instream uses (O.R.S. § 537.348). Not only did the IWRA create instream water rights for waterways throughout Oregon, but it also began to create a “culture” of flow restoration” in which conservation groups, regional land trusts, state agencies and other became partners for waterway health. *See Janet Neuman et al., Sometimes a Great Notion: Oregon’s Instream Flow Experiments*, 36 ENVTL. LAW 1125 (2006).

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maker and the public.⁸³ Moreover, if "a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion. The agency shall make every effort to disclose and discuss at appropriate points in the draft statement all major points of view on the environmental impacts of the alternatives including the proposed action."⁸⁴ The EWC's plans and an instream flow variant must be among those alternatives in a recirculated EIR/EIS that helps to disclose, sharpen and clarify the issues.⁸⁵

Reclamation and DWR have failed to produce an alternatives analysis that "sharply" defines the issues and provides a clear basis for choice among options as required by the NEPA Regulations, 40 C.F.R. § 1502.14. The choice presented must include increasing flows by reducing exports, not just reducing flows by increasing the capacity for exports as is called for by *all* of the so-called "alternatives" presented in the BDCP Draft Plan, Draft EIR/EIS, and RDEIR/SDEIS.⁸⁶

The failure to include a reasonable range of alternatives also violates CEQA. An EIR must "describe a reasonable range of alternatives to the project . . . which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives."⁸⁷ "[T]he discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly."⁸⁸ Recirculation of a new Draft EIR/EIS will be required by CEQA Guidelines section 15088.5(a)(3) because the Responsible Exports Plan alternative and other alternatives that would reduce rather than increase exports have not been previously analyzed but must be analyzed as part of a reasonable range of alternatives.

⁸³ 40 C.F.R. § 1502.14.

⁸⁴ § 1502.9(a).

⁸⁵ The EIS alternatives section is to "Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated." § 1502.14(a).

⁸⁶ In *California v. Block*, 690 F.2d 753, 765-769 (9th Cir. 1982), the project at issue involved allocating to wilderness, non-wilderness or future planning, remaining roadless areas in national forests throughout the United States. The court held that the EIS failed to pass muster under NEPA because of failure to consider the alternative of increasing timber production on federally owned lands currently open to development; and also because of failure to allocate to wilderness a share of the subject acreage "at an intermediate percentage between 34% and 100%." 690 F.2d at 766. Like the situation here where the BDCP agencies claim a trade-off involved between water exports and Delta restoration (RDEIR/SDEIS ES 4-6), the Forest Service program involved "a trade-off between wilderness use and development. This trade-off however, cannot be intelligently made without examining whether it can be softened or eliminated by increasing resource extraction and use from already developed areas." 690 F.2d at 767. Here, likewise, trade-offs cannot be intelligently analyzed without examining whether the impacts of alternatives reducing exports can be softened or eliminated by increasing water conservation, recycling, and eventually retiring drainage-impaired agricultural lands in the areas of the exporters from production. *Accord, Oregon Natural Desert Assn. v. Bureau of Land Management*, 625 F.3d 1092, 1122-1124 (9th Cir. 2010) (EIS uncritical alternatives analysis privileging of one form of use over another violated NEPA). Here, the BDCP alternatives analysis has unlawfully privileged water exports over protection of Delta water quality, water quantity, public trust values, and ESA values.

⁸⁷ 14 Code Cal. Regs (CEQA Guidelines) § 15126.6(a).

⁸⁸ § 15126.6(b).

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In short, the fundamental flaws in the alternatives sections in the BDCP Draft EIR/EIS, Chapter 9 of the BDCP plan and the RDEIR/SDEIS have led to NEPA and CEQA documents “so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.”⁸⁹

Expert Federal and California Agencies have also Found the Current BDCP Alternatives Analysis Deficient. On August 26, 2014, the U.S. Environmental Protection Agency (EPA) issued its 40-page review of the Draft BDCP EIS finding in BDCP’s case that:

operating any of the proposed conveyance facilities . . . would contribute to increased and persistent violations of water quality standards in the Delta, set under the Clean Water Act, measured by electrical conductivity (EC) and chloride concentrations. We recommend that the Supplemental Draft EIS include one or more alternatives that would, instead, facilitate attainment of all water quality standards in the Delta. Specifically, we recommend that an alternative be developed that would, at minimum, not contribute to an increase in the magnitude or frequency of exceedances of water quality objectives, and that would address the need for water availability and greater freshwater flow through the Delta. Such an alternative should result in a decrease in the state and federal water projects’ contributions to the exceedance of any water quality objectives in the Delta.⁹⁰

EPA further stated that “Data and other information provided in the Draft EIS indicate that all CM1 [Tunnels project] alternatives may contribute to declining populations of Delta smelt, Longfin smelt, green sturgeon, and winter-run, spring-run, fall-run and late-fall run Chinook salmon.”⁹¹ “We recommend that the Supplemental Draft EIS [now the RDEIR/SDEIS] consider measures to insure freshwater flow that can meet the needs of those [declining fish] populations and ecosystem as a whole, and is supported by the best available science. We recommend that this analysis recognize the demonstrated significant correlations between freshwater flow and fish species abundance.”⁹² “Other reasonable alternatives could be developed by incorporating a suite of measures, including Integrated Water Management, water conservation, levee maintenance, and decreased reliance on the Delta.”⁹³ In addition, EPA concluded that “The Draft EIS does not address how changes in the Delta can affect resources in downstream waters, such as San Francisco Bay, and require changes in upstream operations, which may result in indirect environmental impacts that must also be evaluated. We recommend that the Supplemental Draft EIS include an analysis of upstream and downstream impacts.”⁹⁴

On July 29, 2014, the State Water Resources Control Board (SWRCB) issued its review of the Draft BDCP EIS/EIR. The SWRCB declared that the “environmental documentation prepared for the project must disclose the significant effects of the proposed project and identify a reasonable range of interim and long-term alternatives that would reduce or avoid the potential significant

⁸⁹ 40 C.F.R. § 1502.9(a).

⁹⁰ Letter of Jared R. Blumenfeld, Regional Administrator, Region IX, USEPA, to Will Stelle, Regional Administrator, West Coast Region, National Marine Fisheries Service, *Draft Environmental Impact Statement for Bay Delta Conservation Plan, San Francisco Bay Delta, California (CEQ# 20130365)*, p. 2.

⁹¹ *Id.*, p. 10.

⁹² *Id.*

⁹³ *Id.* p. 3.

⁹⁴ *Id.*

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environmental effects.”⁹⁵ Further, “The justification for this limited range of Delta outflow scenarios is not clear given that there is significant information supporting the need for more Delta outflow for the protection of aquatic resources and the substantial uncertainty that other conservation measures will be effective in reducing the need for Delta outflow. For this reason a broader range of Delta outflows should be considered for the preferred project.”⁹⁶

On July 16, 2014, the U.S. Army Corps of Engineers found that: “the EIS/EIR is not sufficient at this time in meeting the Corps’ needs under the National Environmental Policy Act (NEPA) . . . in particular with regard to the incomplete description of the proposed actions, alternatives analysis . . . and impacts to waters of the United States and navigable waters, as well as the avoidance and minimization of, and compensatory mitigation for, impacts to waters of the United States.”⁹⁷ Additional Corps comments include the absence in the EIR/EIS of “an acceptable alternatives analysis”⁹⁸, no showing on which alternative may contain the Least Environmentally Damaging Practicable Alternative (LEDPA) for section 404, Clean Water Act purposes⁹⁹, “the document needs a clear explanation of a reasonable range of alternatives and a comparison of such, including a concise description of the environmental consequences of each”¹⁰⁰, and “new conveyance was not a part of the preferred alternative for CalFed. Does this EIS/EIR describe why the reasons for rejecting new conveyance in CalFed are no longer valid?”¹⁰¹

Finally, Reclamation and DWR had to drop the attempt to deceive the public that the Tunnels Project is part of a habitat conservation plan because of the refusal of U.S Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) scientists to falsely find that the Tunnels Project would not be harmful to endangered species of fish and their habitat. The RDEIR/SDEIS refers to their rejection as “difficulties in assessing species status and issuing assurances over a 50 year period . . .”¹⁰² In fact, federal scientists issued “red flag” warnings that the Tunnels Project threaten the “potential extirpation of mainstem Sacramento River populations of winter-run and spring-run Chinook salmon over the term of the permit” for more than three years.

Reclamation and DWR in their RDEIR/SDEIS have ignored what the EPA, SWRCB, Army Corps, USFWS and NMFS had to say, just as they have ignored the National Academy of Sciences and the EWC for the past four years.

⁹⁵ Letter of Diane Riddle, Environmental Program Manager, State Water Resources Control Board, to Ryan Wulff, National Marine Fisheries Service, *Comments on the Draft Bay Delta Conservation Plan, Draft Environmental Impact Report/Environmental Impact Statement for the Bay Delta Conservation Plan, and the Implementing Agreement for the Bay Delta Conservation Plan*, July 29, 2014, comment 9, pp. 11-12.

⁹⁶ *Id.* comment 10 p. 12.

⁹⁷ Letter of Colonel Michael J. Farrell, District Commander, US Army Corps of Engineers, to Ryan Wulff, National Marine Fisheries Service, July 16, 2014, p. 1.

⁹⁸ *Id.*, comment 4.

⁹⁹ *Id.*, comment 5.

¹⁰⁰ *Id.*, comment 19.

¹⁰¹ *Id.*, comment 22.

¹⁰² RDEIR/SDEIS, Section 1, p. 1-2.

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The Tunnels Project is not permissible under the Endangered Species Act.

Section 9 of the Federal Endangered Species Act (ESA) prohibits the take of any listed species.¹⁰³ The alternatives considered in the RDEIR/SDEIS do not involve a habitat conservation plan under Section 10, but instead assume the Bureau will lead Section 7 consultation on behalf of DWR and other Tunnels Project proponents in seeking a new biological opinion from the fisheries agencies (NMFS and USFWS). It is our understanding that consultation is already under way, but it is unclear what the Bureau has submitted to qualify as a biological assessment for this process, or at what stage the process is now.¹⁰⁴

The California Endangered Species Act (CESA) contains similar take prohibitions followed by a path for permitted incidental take of listed species.¹⁰⁵ Regarding state endangered species laws, the RDEIR/SDEIS states only that CDFW would be a responsible agency for determining CESA compliance for the project. The RDEIR/SDEIS fails to state which of the Tunnels Project proponents would apply for this incidental take permit.

EWC objects to the adverse modification of critical habitat for five threatened and endangered fish species, which would occur under the Bay Delta Conservation Plan (BDCP)/California WaterFix/Tunnels Project.¹⁰⁶

The Tunnels Project is not a permissible project under the ESA because it would adversely modify critical habitat for at least five endangered and threatened fish species. We previously addressed the failure of the BDCP agencies to develop and consider a reasonable range of alternatives increasing Delta flows by reducing exports in our July 22, 2015 letter to you.

First, the Sacramento River Winter-Run Chinook Salmon is listed as an endangered species under the Endangered Species Act, 16 U.S.C. § 1531 *et seq.* Likewise, the Central Valley Spring-Run Chinook Salmon, Central Valley Steelhead, Southern Distinct Population Segment of North American

¹⁰³ Section 9(a)((1)(B) prohibits anyone subject to the jurisdiction of the United States to “take...any such species within the United States or the territorial sea of the United States”. “Take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or to attempt to engage in any such conduct, according to Section 3 of the Endangered Species Act, subsection (19). The act is accessible online at <http://www.nmfs.noaa.gov/pr/pdfs/laws/esa.pdf>.

¹⁰⁴ US Fish and Wildlife Service and National Marine Fisheries Service, *Endangered Species Consultation Handbook: Procedures for Conducting Consultation and Conference Activities Under Section 7 of the Endangered Species Act*, March 1998, Final. Accessible online at http://www.nmfs.noaa.gov/pr/pdfs/laws/esa_section7_handbook.pdf.

¹⁰⁵ California Fish and Game Code Section 86 defines “take” to mean “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill” a listed species. Section 2080 of the Fish and Game Code prohibits take of listed species, Section 2081(b) authorizes the California Department of Fish and Wildlife to authorize incidental take permits under which incidental take of a listed species is “minimized and fully mitigated, and 2081(c) specifies that no incidental take permit may be issued if its issuance would “jeopardize the continued existence of the species.” The California equivalent of a habitat conservation plan is called a “natural community conservation plan” or NCCP. NCCPs are authorized under the state’s Natural Community Conservation Planning Act (NCCPA) in California Fish and Game Code Section 2800 *et seq.*, provided they meet the statutory standards provided in Section 2820 of the act.

¹⁰⁶ The lead agencies for the project are the federal Bureau of Reclamation and the California Department of Water Resources.

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Green Sturgeon, and Delta Smelt, are listed as threatened species under the ESA.¹⁰⁷ **Second**, the reaches of the Sacramento River, sloughs, and the Delta that would lose significant quantities of freshwater flows through operation of the Tunnels Project are designated critical habitats for each of these five listed endangered and threatened fish species. **Third**, no Biological Assessment has been prepared and transmitted to the U.S. Fish and Service (USFWS) or National Marine Fisheries Service (NMFS) by Reclamation with respect to the Tunnels Project. **Fourth**, ESA Section 7 consultations have begun but no Biological Opinion has been completed by the USFWS or NMFS with respect to the effects of the operation of the Tunnels Project on the five federally listed species of fish or their designated critical habitats. **Fifth**, because of Reclamation's failure to prepare Biological Assessments and failure to initiate ESA consultation, no "reasonable and prudent alternatives" (RPAs) have been developed or suggested by the USFWS or NMFS to avoid species jeopardy or adverse modification of designated critical habitat.

Approval of the Tunnels Project would violate the substantive prohibitions of Section 7 of the ESA by adversely modifying designated critical habitat as well as by jeopardizing the continued existence of the endangered and threatened fish species.

Approval of the Tunnels Project would violate the procedural requirements of the ESA because Reclamation has not evaluated its proposed action "at the earliest possible time" to determine whether its action may affect listed species or critical habitat and has not entered into formal consultation with USFWS and NMFS.

Approval of the Tunnels Project would violate the procedural requirements of NEPA because the Draft EIR/EIS and RDEIR/SDEIS have not been prepared "concurrently with and integrated with" Biological Assessments and Biological Opinions required by the ESA. Again, the Biological Assessments and Biological Opinions, though required, do not yet exist. These are not deficiencies that can be "fixed" by responses to comments in a Final EIR/EIS. Instead, Reclamation and the Department of Water Resources (DWR) must recirculate another Draft EIR/EIS for public review and comment. The new public Draft NEPA document must also be prepared concurrently with and integrated with the ESA required Biological Assessments, Biological Opinions, and include reasonable and prudent alternatives, developed by the USFWS and NMFS. The required reasonable and prudent alternatives would include alternatives increasing flows through the Delta to San Francisco Bay by reducing exports.

No Quantified Incidental Take Estimates. This year, the Tunnels Project alternatives (2D, 4A and 5A) fail to provide clear, direct analysis and findings of effects on take of listed species, as a result of the Tunnels Project' effects on population abundance, distribution, and critical habitat and whether those effects could result in jeopardy to listed species.

What are the sizes of the population of each covered species involved? What are the locations, status, and alternative effects on their critical habitats in the Bay-Delta Estuary? What are the permissible levels of take for each covered species for each life stage that occurs in the Delta that can be managed by actions organized under BDCP and its conservation strategy? Which alternatives would not appreciably reduce the likelihood and recovery of any of the listed species among those

¹⁰⁷ Each of these species is listed under the California Endangered Species Act as well, with most of them considered threatened. Bay Delta Conservation Plan, Section 1.4.3, *Covered Species*, Table 1-3, p. 1-24. This table shows that under the California Endangered Species Act, Delta smelt is listed as threatened; however, the BDCP species account for Delta Smelt states that the California Fish and Game Commission elevated delta smelt to the status of endangered on March 4, 2009. (BDCP, Appendix 2A, section 2A.1.2, p. 2A.1-2, lines 21-24.) Longfin smelt is considered threatened, winter-run Chinook salmon is considered endangered, spring-run Chinook salmon threatened, fall- and late fall-run Chinook salmon are considered species of special concern; and green sturgeon (southern DPS) is also considered a species of special concern. Longfin smelt is at this time a candidate species for listing under the federal Endangered Species Act.

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that are covered by BDCP? We were unable to locate this vital information in the Bay Delta Conservation Plan.

The Tunnels Project Threatens Jeopardy and Adverse Modification of Designated Critical Habitat of Endangered and Threatened Fish Species in Violation of the ESA. The Sacramento River Winter-Run Chinook Salmon is listed as an endangered species under the ESA.¹⁰⁸ Critical habitat for the species was designated to include the Sacramento River extending from River Mile 0 near the Delta to River Mile 302, which is far north of the proposed BDCP diversion near Clarksburg.¹⁰⁹ The Tunnels Project would divert enormous quantities of freshwater from the Winter-Run Chinook Salmon's designated critical habitat. The four threatened fish species mentioned above would likewise lose enormous quantities of freshwater from their designated critical habitats because of diversion of water resulting from the project.¹¹⁰

"The ESA provides 'both substantive and procedural provisions designed to protect endangered species and their habitat.'"¹¹¹ Pursuant to the commands of Section 7 of the ESA, each Federal agency "shall . . . insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of [critical] habitat of such species. . . ."¹¹² "ESA section 7 prohibits a federal agency from taking any action that is 'likely to jeopardize the continued existence' of any listed or threatened species or 'result in the destruction or adverse modification' of those species' critical habitat."¹¹³

¹⁰⁸ 50 C.F.R. § 17.11.

¹⁰⁹ 50 C.F.R. § 226.204.

¹¹⁰ The Central Valley Spring-Run Chinook Salmon is listed as a threatened species under the ESA. 50 CFR § 17.11. Critical habitat for the species was designated to include the Sacramento River from Lat 38.0612, Long -121.7948, near Mile 0, upstream to Elk Slough (38.4140, -121.5212) in Clarksburg, California. 50 C.F.R. § 226.211(k)(5)(i). The Central Valley Steelhead is listed as threatened under the ESA. 50 CFR § 17.11. Critical habitat for the species was designated to include the Sacramento River from Lat 38.0653, Long -121.8418, near Mile 0, upstream to Elk Slough in Clarksburg. 50 CFR § 226.211(l)(5). The Southern Distinct Population Segment of North American Green Sturgeon is listed as threatened under the ESA. 50 CFR § 17.11. Critical habitat for this species is designated to include the Sacramento-San Joaquin Delta including all waterways up to the elevation of mean higher high water within the area defined in California Water Code Section 12220. 50 CFR § 226.219(a)(3). The National Marine Fisheries Service's website provides a map displaying Green Sturgeon critical habitat: <<http://www.nmfs.noaa.gov/pr/pdfs/criticalhabitat/greensturgeon.pdf>>. The map indicates that the critical habitat includes the Sacramento River from Mile 0 near the Delta to upstream beyond the proposed intake site near Clarksburg. The Delta Smelt is listed as threatened under the ESA. 50 CFR § 17.11. Critical habitat for the species was designated to include "all contiguous waters of the legal Delta." 50 CFR § 17.95-e-Fishes-Part 2. The US Fish and Wildlife Service's website provided a map displaying some of the Delta Smelt's critical habitat: <http://www.fws.gov/sfbaydelta/maps/delta_smelt_critical_habitat_map.pdf>. The map indicates that the Delta Smelt's critical habitat includes the Sacramento River near Mile 0 upstream to the proposed BDCP intake site near Clarksburg.

¹¹¹ *San Luis & Delta-Mendota Water Auth. v. Jewell (Jewell)*, 747 F.3d 581, 596 (9th Cir. 2014), *cert. denied*, 135 S.Ct. 948 and 950 (2015).

¹¹² 16 U.S.C. § 1536(a)(2). "Actions" include "actions directly or indirectly causing modification to the land, water, or air." 50 C.F.R. § 402.02 (Emphasis added).

¹¹³ *San Luis & Delta- Mendota Water Auth. v. Locke (Locke)*, 776 F.3d 971, 987 (9th Cir. 2015).

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The BDCP itself identifies stressors and threats to each of the five species. Common threats and stressors to the five species include habitat loss due to the operation of water conveyance systems, increasing water temperatures and predation hotspots. By installing gigantic diversion intakes in at least three locations between Clarksburg and Courtland, and by diverting massive amounts of water from the Sacramento River, the Tunnels Project will literally and directly reduce the amount of aquatic habitat available to these five species in their critical habitats. Additionally, the massive diversion will reduce flow in the critical habitat and contribute to a further increase in water temperature. The Effects Analysis chapter (Chapter 5) of the Draft BDCP Plan (November 2013) admits that significant adverse effects could result from the Tunnels Project on the covered fish and their habitat including: "Change in entrainment of fish in water diversions. Change in predation as a result of new structures. Modification of river flow. Change in habitat. Change in food and foraging. Permanent indirect and other indirect losses. Disturbances related to construction and maintenance."¹¹⁴

The BDCP identifies key hydrologic and hydrodynamic changes that reduce or adversely modify habitat of these listed fish species. (See below, this section.) These changes will exacerbate threats and stressors already known to affect these fish. Modeling results in the RDEIR/SDEIS reveal that through-Delta survival rates of winter-run, spring-run, and fall-run Chinook salmon all decrease relative to the No Action Alternative from Tunnels Project operation.¹¹⁵

Specifically, *the BDCP identifies reduced habitat due to water storage and water conveyance systems as a stressor and threat to Winter- Run Chinook Salmon.*¹¹⁶ There will be adverse effects on juvenile winter-run Chinook salmon including near-field (contact with screens and aggregation of predators) and far-field (reduced downstream flows¹¹⁷, reduced Sacramento River attraction flows for migrating adult winter-run Chinook salmon¹¹⁸, possible reduction of survival of juvenile winter-run Chinook salmon during downstream migration and possible negative effect on upstream migration of adult winter-run Chinook salmon by changing attraction flows/olfactory cues.¹¹⁹ The BDCP also admits that "A potential adverse effect of the BDCP on adult winter-run Chinook salmon will be the reduction in flow downstream of the north Delta diversions on the Sacramento River, reducing river flow below the north Delta intakes."¹²⁰ The reduced outflow along with the possible change in olfactory signals due to change in the flow mixture "could affect upstream migration."¹²¹ The RDEIR/SDEIS states: "when compared to the CEQA baseline, [Alternative 4A], including climate change, would substantially reduce the quantity and quality of spawning and egg incubation habitat for winter-run Chinook salmon relative to existing conditions."¹²² The BDCP likewise identifies

¹¹⁴ Bay Delta Conservation Plan, Chapter 5, pp. 2-13.

¹¹⁵ RDEIR/SDEIS, Chapter 11, Tables 11-4A-23, -51, and -74.

¹¹⁶ BDCP EIR-EIS Administrative Draft, p. 11A-47 (March 2013).

¹¹⁷ Bay Delta Conservation Plan, Chapter 5, p. 5.3-23; RDEIR/SDEIS p. 4.3.7-48.

¹¹⁸ Bay Delta Conservation Plan, Chapter 5, p. 5.3-29.

¹¹⁹ Bay Delta Conservation Plan, Chapter 5, p. 5.3-32.

¹²⁰ Bay Delta Conservation Plan, Chapter 5, p. 5. 3-45; BDCP Appendix 5C, Tables C.A-41 and C.A-42; RDEIR/SDEIS, Section 4.3, Figures 4.3.2-7 and 4.3.2-8.

¹²¹ *Id.*

¹²² RDEIR/SDEIS, Section 4.3, p. 4.3.7-58.