



## FRIENDS OF THE RIVER

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Dear [BDCPComments@icfi.com](mailto:BDCPComments@icfi.com) : (via email)

Re: Comment Letter on BDCP/California Water Fix RDEIR/SDEIS including violations of NEPA, CEQA, the ESA and the CWA

Friends of the River (FOR) *objects* to approval of the Bay Delta Conservation Plan BDCP/California Water Fix including preferred alternative 4A, all other variants of the Delta Water Tunnels and any new upstream conveyance for exporting water south. Our 15 prior comment letters of: January 14, 2014 including our earlier comment letters of June 4, August 13, September 25, and November 18, 2013 that were attached to the January 14, 2014 letter; January 28, March 6, May 15, May 21, May 28 (joint letter with the Environmental Water Caucus (EWC)), June 11 (w/EWC), July 24, July 29, September 4 (w/ EWC, C-WIN, CSPA), September 10 (w/ EWC, C-WIN, CSPA), and November 12, 2014 (w/EWC, C-WIN, CSPA), and July 22, September 9, October 6, and October 7, 2015 (w/EWC, C-WIN, CSPA, CBD, RTD), and October 26, 2015 (w/EWC and RTD) are adopted and incorporated herein by FOR by this reference.

On the one hand, the 48,000 pages of BDCP drafts violate the NEPA regulation, 40 C.F.R. 1502.7, specifying that Draft EIS text shall normally not exceed 150 pages and “for proposals of unusual scope or complexity shall normally be less than 300 pages.” Here, the volume was calculated to overwhelm the public while evading or obscuring the real issues.

On the other hand, there was silence on the profound issue of whether to increase the capacity to divert more water from the Sacramento River, sloughs, and the San Francisco Bay Delta or instead begin to reduce exports. The BDCP agencies ignored and refused to consider any alternatives that would reduce exports. Consequently, there was no alternatives section “sharply” defining the issues as required by 40 C.F.R. 1502.14, and no rigorous exploration and objective evaluation of “all reasonable alternatives” required by that regulation and the similar CEQA Guideline. Moreover, the project has gone through drastic change, no longer being a habitat conservation plan. As one example, providing “65,000 acres of tidal wetland restoration” has been sliced down to “59 acres.” (RDEIR/SDEIS ES-17). Consequently, the Water Tunnels are now even more of a threat to fish species and their habitat than previously stimulated so many critical comments. Our detailed comments follow:

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***THE BAD FAITH EVASION OF ENVIRONMENTAL FULL DISCLOSURE BY  
THE LEAD AGENCIES IS ASTONISHING IN ITS SCOPE AND PERSISTENCE***

***Summary***

The BDCP agencies received a total of 18,532 separate comments on the original draft documents. (RDEIR/SDEIS 1-3, 1-4). Those comments included 1518 unique letters from individual members of the public and 432 letters from agencies, organizations, and stakeholder groups. (*Id.*) Those comments are vital to learning the views of organizations and public agencies that are not Water Tunnels boosters and contractors. For example, the U.S. Environmental Protection Agency (EPA) declared last August that: “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.*” (EPA letter August 26, 2014, p.2) (emphasis added). For another example, on July 16, 2014, the United States Army Corps of Engineers issued comments that: “I have determined 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.” (Letter p. 1).

Despite repeated requests, the BDCP agencies have continued to refuse ever since December 2013 to post any of the comments by organizations or public agencies on the BDCP website. *Not one of the federal or state addressees of our detailed letter of January 28, 2014 requesting that the BDCP agencies resume the posting of public comments on the BDCP website even had the courtesy to acknowledge our letter or explain their refusal to post public comments.*

This deliberate concealment of independent and contrary views and information from the public also now makes it more difficult for the public to prepare meaningful comments on the new RDEIR/SDEIS. In effect, the BDCP agencies require everyone to start from ground zero in an effort to understand the project and its environmental impacts by concealing the independent and contrary views and information provided by previous comments. Moreover, comments such as those from the EPA and Army Corps constitute critical new information that would be the foundation for many informed comments at this time. The comments from agencies and the public in 2014 on the original Drafts were so important that the BDCP agencies say they modified the documents and the alternatives based on the input. (RDEIR/EIS ES 2, 9, 15;1-2).

This has been and continues to be a bad faith effort to hide from the public the bad things that go along with the Water Tunnels including adverse environmental impacts and the existence of reasonable alternatives that would avoid the adverse impacts.

Thus the RDEIR/SDEIS fails to even disclose the numerous past calls for alternatives increasing flows by reducing exports made by the EWC (Environmental Water Caucus) and others including public agencies. The RDEIR/SDEIS likewise fails to disclose calls for modern, less harmful alternatives by others such as the EPA.<sup>1</sup> The RDEIR/SDEIS fails to even explain why such alternatives are not included and why they are not discussed or disclosed.

Instead, the RDEIR/SDEIS states that additional alternatives 4A, 2D, and 5A were developed in response to comments “that DWR should pursue permit terms shorter than 50 years due to the levels of uncertainty regarding both the long-term effectiveness of habitat restoration in recovering fish populations and the future effects of climate change on the Delta and the Sacramento River watershed.” (RDEIR/SDEIS 4.1-1).

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<sup>1</sup> EPA Detailed Comments on the Draft Environmental Impact Statement for the Bay Delta Conservation Plan; August 26, 2014, p. 13.

Claims that taking more water away from the fish will be good for the fish and that taking more freshwater away from the Delta would be good for the Delta are lies and false propaganda intended to deceive and confuse the public. This pattern and practice of viewpoint discrimination by the BDCP proponent agencies is the strongest self-indictment that could be made of the folly, environmental destruction and economic waste threatened by the Water Tunnels project. The lead agencies would not be hiding the views and information furnished by public agencies, neutrals and project opponents if they actually believed their claims about the asserted benefits of the project.

***The Viewpoint Discrimination on the BDCP Website Violates the First Amendment***

The First Amendment of the United States Constitution provides in pertinent part that there shall be no law “abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances.” Similarly, the California Constitution commands that “A law may not restrain or abridge liberty of speech or press” and the people have the right to “assemble freely to consult for the common good.” Cal. Const., Art. 1, § 2(a); § 3(a). “In a public forum, by definition, all parties have a constitutional right of access and the state must demonstrate compelling reasons for restricting access to a single class of speaker, a single viewpoint, or a single subject. When speaker and subject are similarly situated, the state may not pick and choose.” *Perry Educ. Assn. v. Perry Local Education Assn*, 460 U.S. 37, 55 (1983). “Any access barrier must be reasonable and viewpoint neutral [citations].” *Christian Legal Soc. Chapter of the University of California, Hastings College of the Law v. Martinez*, 130 S.Ct. 2971, 2984 (2010). “When the government targets not subject matter, but particular views taken by speakers on a subject, the violation of the First Amendment is all the more blatant. [Citation.] Viewpoint discrimination is thus an

egregious form of content discrimination. The government must abstain from regulating speech when the specific motivating ideology or the opinion or perspective of the speaker is the rationality for the restriction.” *Rosenberger v Rector and Visitors of University of Virginia*, 515 U.S. 819, 829 (1995).

Under the current regime, only those viewpoints that the government chooses have been posted on the BDCP website. The government posts its now 48,000 pages of Tunnels advocacy in the form of the Draft EIR/EIS and RDEIR/SDEIS but not any of the comments that were submitted on the Draft in 2014. The website continues to include blogs purporting to debunk alleged “Myths” about the BDCP, and other materials written to promote BDCP and discount public concerns. (See, e.g., [http://baydeltaconservationplan.com/news/blog/14-01-10/Correcting\\_Stubborn\\_Myths\\_Part\\_II.aspx](http://baydeltaconservationplan.com/news/blog/14-01-10/Correcting_Stubborn_Myths_Part_II.aspx).) This blog suggests that a comment on the blog may be provided by clicking on a link. (“Click here to contact us with your questions or comments about the BDCP Blog.”) Yet that link is the same link to the email address for submitting formal public comments on the Plan and EIR/EIS (BDCP.comments@noaa.gov). As explained clearly on the BDCP website, such comments will not be posted. The exclusion of critical comments from the BDCP website at the same time as the government agency proponents continue to post materials that promote their viewpoint that BDCP is a worthwhile project violates the First Amendment prohibition of viewpoint discrimination in forums created by the government.

***The Denial of the Right of Access to Critical Comments Violates the California Constitution***

The California Constitution provides in pertinent part that “The people have the right of access to information concerning the conduct of the people’s business, and, therefore, the



meetings of public bodies and the writings of public officials and agencies shall be open to public scrutiny.” Cal. Const. Art. 1, § 3(b)(1). Moreover, any authority “shall be broadly construed if it furthers the people’s right of access, and narrowly construed if it limits the right of access.” Cal. Const. Art. 1, § 3(b)(2).

“Given the strong public policy of the people’s right to information concerning the people’s business (Gov.Code, § 6250), and the constitutional mandate to construe statutes limiting the right of access narrowly (Cal. Const., art. 1, § 3, subd. (b)(2), all public records are subject to disclosure unless the Legislature has *expressly* provided to the contrary.” *Sierra Club v. Superior Court*, 57 Cal.4<sup>th</sup> 157, 166 (2013) (internal quotation marks deleted).

The complexity of the BDCP and the volume of documents being circulated for public review to explain that complexity make review challenging even for professionals. For an individual member of the public, the job is virtually impossible. The public’s ability to be informed regarding this project is facilitated by having access to comments being made by others during the review process, including non-profit environmental groups and other public agencies. The refusal to publish comment letters on the website as they come in denies the public the right of access to the comments in violation of the California Constitution.

***The Exclusion of Environmental Information Contrary to the Opinions of the Project Proponents Violates NEPA and CEQA***

NEPA and CEQA are both “environmental full disclosure laws.” *Silva v. Lynn*, 482 F2d 1282, 1284 (1<sup>st</sup> Cir. 1973)(NEPA); *Communities for a Better Environment v. City of Richmond*, 184 Cal.App.4th 70, 88 (2010)(CEQA). Both laws require that an agency “use its best efforts to find out all that it reasonably can” about the subject project and its environmental impacts. *Barnes v. U.S. Dept. of Transp.* 655 F.3d 1124, 1136 (9<sup>th</sup> Cir. 2011)(NEPA); *Vineyard Area*

*Citizens for Responsible Growth, Inc. v. City of Rancho Cordova*, 40 Cal. 412, 428 (2007)(CEQA).

Interfering with review by members of the public of comments made by other members of the public is environmental concealment, not disclosure, and is calculated to prevent the public from finding out all that it reasonably can about the subject project and its impacts.

CEQA provides that “notwithstanding any other provision of law” the record of proceedings “shall include, but is not limited to,” written documents submitted by any person relevant to findings and all written correspondence submitted to the respondent public agency with respect to compliance with CEQA or the project. Public Resources Code § 21167.6(e)(3), (7).

The NEPA Regulations require that federal agencies make comments received under NEPA available to the public pursuant to the provisions of the Freedom of Information Act and that they shall be provided without charge to the extent practicable. 40 C.F.R. § 1506.6(f).

The CEQA Regulations provide that:

Public participation is an essential part of the CEQA process. Each public agency should include provisions in its CEQA procedures for wide public involvement, formal and informal consistent with its existing activities and procedures, in order to receive and evaluate public reactions to environmental issues related to the agency’s activities. *Such procedures should include, whenever possible, making environmental information available in electronic format on the Internet, on a web site maintained or utilized by the public agency.* 14 Code Cal. Regs § 15201(emphasis added).

Instead, the BDCP proponent agencies have selectively published environmental information favorable to the project on their website while concealing what they consider to be unfavorable information that they would rather not share with the public. The comments made by such public agencies as the EPA, Army Corps, State Water Resources Control Board and Delta Independent Science Board during 2014 certainly constitute environmental information about the

project. Making the comments available only *after* the comment period has closed makes a mockery of the promise of a fair, transparent and open process. Members of the public will have no opportunity to learn information provided by those with concerns about the BDCP in time to help them develop their own timely comments, including suggested alternatives to the project. The exclusion of comments from the website violated the environmental full disclosure purposes of both NEPA and CEQA, and the CEQA regulation requiring the posting of environmental information on the agency's website.

There is only one possible remedy for these violations, including violations of the environmental full disclosure required by NEPA and CEQA. That is for the lead agencies to post at minimum all comments made by organizations and public agencies on the Draft Plan and Draft EIR/EIS in 2014, and on the RDEIR/SDEIS in 2015, on the BDCP/Water Fix website and then establishing a new public review and comment period on the Draft EIR/EIS and RDEIR/SDEIS so that the public can meaningfully review these documents informed by the views and information furnished by those who are neutral or project opponents.

### ***Bad Faith Conclusion***

The exclusion of public comments from the BDCP website makes the claim that the BDCP encourages public participation a lie, and violated the First Amendment, California Constitution, NEPA and CEQA.

## ***THE LEAD AGENCIES CONTINUE TO FAIL TO CONSIDER THE REQUIRED RANGE OF REASONABLE ALTERNATIVES***

### ***Summary***

The lead agencies for the project are the U.S. Bureau of Reclamation and the California Department of Water Resources (DWR).

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 Endangered Species Act (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.

The alternatives section (Chapter 3) of the Draft EIR/EIS and the ESA-required Alternatives to Take section (Chapter 9) of the BDCP Draft Plan failed to include even one alternative that would increase water flows through the San Francisco Bay-Delta by reducing exports, let alone the National Environmental Policy Act (NEPA), California Environmental Quality Act (CEQA), and ESA required range of reasonable alternatives. Instead, all BDCP alternatives including new Recirculated Draft EIR (RDEIR)/ Supplemental Draft EIS (SDEIS) alternatives 4 modified, 4A, 2D and 5A would do the opposite of increasing flows, by reducing flows through the Delta by way of new upstream diversion of enormous quantities of water for the proposed Water Tunnels. These intentional violations of law require going back to the drawing board to prepare a new Draft EIR/EIS that would include a range of real alternatives, instead of just replicating the same conveyance project dressed up in different outfits. To be clear, 14 of the so-called 15 "alternatives" in the Draft EIR/EIS, 10 of the so-called 11 "take alternatives" in the Draft Plan (Chapter 9) and the 4 "alternatives" in the new RDEIR/SDEIS are all peas out of the same pod. They would create different variants of new upstream conveyance to divert enormous quantities of freshwater away from the lower Sacramento River, sloughs, and San Francisco Bay-Delta for export south.

Organizations including FOR have already communicated several times over the years with BDCP officials about the failure to develop a range of reasonable alternatives in the BDCP process.<sup>2</sup>

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 Delta Water Tunnels, upstream from the Delta.<sup>3</sup> 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.

Reclamation and DWR have ignored our repeated calls over the past several years to develop and consider alternatives increasing freshwater flows through the Delta by reducing exports. They do so to stack the deck making it easier for them to adopt the Water Tunnels alternative because they do not consider any alternatives other than new, upstream conveyance. This deficient BDCP California Water Fix alternatives analysis is not something that can be

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<sup>2</sup> This letter follows previous comments including our Friends of the River comment letter of May 21, 2014, our joint May 28, 2014 and joint September 4, 2014 comment letters focused on the failure of the BDCP Draft plan and Draft EIR/EIS to identify and evaluate a range of reasonable alternatives that are 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>.

<sup>3</sup> Though the Delta Water Tunnels alternative is a broad policy alternative, the Tunnels alternative is infeasible in terms of being actually adopted because it is not permissible under the ESA, Clean Water Act, Delta Reform Act and the public trust doctrine. Consequently, Alternative 4, DWR’s original preferred alternative, and new Alternative 4A, Reclamation and DWR’s new preferred alternative, are not actually feasible because they are not lawful. What is puzzling at this Draft EIR/EIS stage of the NEPA and CEQA process is why would the BDCP agencies refuse to consider lawful alternatives increasing Delta flows while both considering and giving preferred alternative status to alternatives that are at least arguably unlawful? 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 ES-2).

“fixed” by responses to comments in a Final EIR/EIS. Instead, Reclamation and DWR need to prepare and circulate a new Draft EIR/EIS that will include alternatives increasing Delta flows for consideration by the public and decision-makers.

***Deliberate Agency Refusal to Consider Alternatives Increasing Delta Flows***

The BDCP’s omission of alternatives reducing exports to increase flows has been deliberate. A claimed purpose of the BDCP is “Reducing the adverse effects on certain listed [fish] species due to diverting water.” (BDCP Draft EIR/EIS Executive Summary, p. ES-10). “[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.” (RDEIR/SDEIS 1-10). “There is an urgent need to improve the conditions for threatened and endangered fish species within the Delta.” (Draft EIR/EIS ES-10; RDEIR/SDEIS ES-6). 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.” (RDEIR/SDEIS ES-1). 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.” Cal. Water Code § 85021 (emphasis added). 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.” Cal. Water Code § 85320(b)(2)(A). And, the Act requires: “A reasonable range of Delta conveyance alternatives, including through-Delta,” as well as new dual or isolated conveyance alternatives. Cal. Water Code § 85320(b)(2)(B). 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.” Cal. Water Code § 85023.

Reclamation and DWR<sup>4</sup> have now marched along for over four years in the face of “red flags flying” deliberately refusing to develop and evaluate a range of reasonable 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.” (National Academy of Sciences, Report in Brief at p. 2, May 5, 2011).

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]

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<sup>4</sup> BDCP Applicants include San Luis Delta Mendota Water Authority, Westlands Water District, Kern County Water Agency, Zone 7 Water Agency, Metropolitan Water District of Southern California, and Santa Clara Valley Water District.

project. (Letter, p. 1). Most of the letter dealt with the consideration of alternatives. The penultimate paragraph of 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. (Letter, p. 2).*

The EWC provided its “Reduced Exports Plan” to BDCP agency officers back in December 2012 and again in person on February 20, 2013. EWC Co-Facilitator Nick DiCroce 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 DiCroce 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 tunnel 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. (FOR November 18, 2013 comment letter at p. 3, Attachment 4 to FOR January 14, 2014 comment letter).

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 differences among the alternatives are slight. “The 15 action alternatives are variations of conservation plans that differ primarily in the location of intake structures and conveyance alignment, design, diversion capacities (ranging from 3,000 to 15,000 cfs), and operational scenarios of water conveyance facilities that would be implemented under CM1.” (Draft EIR/EIS, ES p. 26).

The Water Tunnels would divert enormous quantities of water from the Sacramento River near Clarksburg--waters that presently flow through designated critical habitats for the host of imperiled species in the Sacramento River and sloughs to and through the Bay-Delta. Should the Tunnels be completed, these waters would instead be exported through the northern intakes upstream from the Delta. And this would be done 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).

***The Agencies Must Consider Alternatives That Will Increase Delta Flows***

We yet again request development of a range of reasonable alternatives increasing Delta flows and reducing exports. The BDCP agencies must take this opportunity as part of preparing 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> ). These actions include: reducing exports to no more than 3,000,000 acre-feet in all years in keeping with State Water Resources Control Board (SWRCB) Delta flow criteria (for inflow as well as outflow);

water efficiency and demand reduction programs including urban and agricultural water conservation, recycling, storm water recapture and reuse; reinforced levees above PL 84-99 standards; installation of improved fish screens at existing Delta pumps; elimination of irrigation water applied on up to 1.3 million acres of drainage-impaired farmlands south of the Bay-Delta; return the Kern Water Bank to State control; restore Article 18 urban preference; restore the original intent of Article 21 surplus water in SWP contracts; conduct feasibility study for Tulare Basin water storage; provide fish passage above and below Central Valley rim dams for species of concern; and retain cold water for fish in reservoirs. We also request that the range of reasonable alternatives include reducing exports both more and less than the 3,000,000 acre feet limit called for by the Responsible Exports Plan.<sup>5</sup>

Responsible Exports Plan 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.” (RDEIR/SDEIS 1-11). 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 . . .” Cal. Water Code § 85054. Providing “a more reliable water supply” means real water actually available, not paper water, and reflecting water available for

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<sup>5</sup> EWC’s new *A Sustainable Water Plan for California* (May 2015) is an updated EWC alternative to the BDCP California Water Fix 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. The new plan is at <http://ewccalifornia.org/reports/ewcwaterplan9-1-2015.pdf>, and is attached to the EWC (Environmental Water Caucus) comments submitted about October 29, 2015.

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 Water Tunnels--which in reality will amount to \$30 billion or more including capital cost (and costs normally being greater than when under estimated by self-interested project consultants)--represents an “opportunity cost.” The enormous sums spent on the Water Tunnels would be opportunity lost to making modern water quality and quantity improvements including recycling, conservation, and technical improvements such as drip -irrigation. In other words, the sums spent on outdated concepts – the Water Tunnels--would be lost to effective modern measures actually increasing water availability. The only true benefit cost study prepared on the Water Tunnels concluded that the costs are 2 to 3 times higher than the benefits. Dr. Jeffrey Michael, *Benefit-Cost Analysis of Delta Water Conveyance Tunnels* (Eberhardt School of Business, University of the Pacific, July 12, 2012). Now that the project has dropped the features of habitat conservation while keeping only the Water Tunnels 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 Water Tunnels, also increases the already negative cost benefit ratio. The change also leaves the taxpaying public to be stuck with all costs to mitigate the adverse impacts of the Water Tunnels.

***BDCP Agencies 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-maker and the public. 40 C.F.R. § 1502.14. 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.” § 1502.9(a). The Responsible Exports Plan and variants on it must be among those alternatives in a new Draft EIR/EIS for BDCP that helps to disclose, sharpen and clarify the issues.<sup>6</sup>

Reclamation and DWR have failed to produce an alternatives section 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. Again, those issues must include producing more Delta inflow and outflow through the estuary as habitat for listed fish species, and documenting the impacts on Delta ecosystems as called for in Water Code § 85021. 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.<sup>7</sup>

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<sup>6</sup> 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).

<sup>7</sup> In *California v. Block*, 690 F.2 753, 765-769 (9<sup>th</sup> 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

Instead of sharply defining the issues and providing a clear basis for choice among options, the BDCP consultants have now produced 48,000 pages of conclusory Water Tunnels advocacy.

The failure to include a range of reasonable alternatives also violates CEQA. An EIR must “describe a range of reasonable 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.” 14 Code Cal. Regs (CEQA Guidelines) § 15126.6(a). “[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.” § 15126.6(b).

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 range of reasonable alternatives. Moreover, there has been complete failure to identify and make the required findings of infeasible as to environmentally superior alternatives.<sup>8</sup>

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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 (9<sup>th</sup> 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.

<sup>8</sup> Before an agency “may approve a project with a significant environmental impact, it is required to make findings identifying . . . the specific . . . considerations that make infeasible the environmentally superior alternatives . . .” *Flanders Found. v. City of Carmel-by-the-Sea*, 202 Cal.App.4th 603, 620-21 (2006). The statute provided a definition of “feasible” as “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.” Cal. Pub. Res. Code §21061.1. As to a project’s economic feasibility, “the fact that an alternative may be more expensive or less profitable is not sufficient to show that the alternative is financially infeasible. What is required is evidence that the additional costs or lost profitability are sufficiently severe

The RDEIR/SDEIS concedes that the project would have a number of significant and unavoidable adverse environmental impacts. (RDEIR/SDEIS Table ES-9, ES-41 through ES-105; Appendix A, Ch. 31, Table 31-1, 31-3 through 31-8). When the project would have significant adverse environmental effects, agencies are “required to consider project alternatives that might eliminate or reduce the project’s significant adverse environmental effects.” *Friends of the Eel River v. Sonoma County Water Agency*, 108 Cal.App.4<sup>th</sup> 859, 873 (2003). Instead of complying with CEQA by considering such alternatives, the lead agencies have refused to do so.

With respect to the ESA, we have repeated several times in 2013 and 2014 that the failure of the federal agencies to prepare the ESA required Biological Assessments and Opinions concerning the US Bureau of Reclamation’s activities with the BDCP violates both the ESA Regulations (50 C.F.R. § 402.14(a) “at the earliest possible time” requirement and the NEPA Regulations (40 C.F.R. § 1502.25(a) “concurrently with” and “integrated with” requirements. (FOR January 14, 2014 comment letter and its four attachments). The Biological Assessments and Biological Opinions, still missing (RDEIR/SDEIS 1-15), are essential to any meaningful public review and comment on a project claimed to be responsive to declining fish populations.

As conceded by BDCP Chapter 9, Alternatives to Take, the analysis of take alternatives must explain “why the take alternatives [that would cause no incidental take or result in take levels below those anticipated for the proposed actions] were not adopted.” (BDCP Plan, Chapter 9, pp. 9-1, 9-2). Here, the lead agencies failed to even develop let alone adopt alternatives reducing exports and increasing flows to eliminate or reduce take. Reclamation and

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as to render it impractical to proceed with the project.” *Pres. Action Council v. City of San Jose*, 141 Cal.App.4<sup>th</sup> 1336, 1352 (2012).

DWR have ignored the EWC's alternative that was handed to them on a silver platter back in December 2012, almost three years ago.

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." 40 C.F.R. § 1502.9(a).

***Expert Federal and California Agencies have also Found the Current BDCP Alternatives Analysis Deficient***

There is more. 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. (*Id.*, p.2).

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." (p. 10). "We recommend that the Supplemental Draft EIS 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." (*Id.*). "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.” (*Id.* p. 3).

EPA explained that: “Other reasonable alternatives could be developed by incorporating a suite of measures, including water conservation, levee maintenance, and decreased reliance on the Delta. Such alternatives would be consistent with the purpose and need for the project, as well as with the California Bay-Delta Memorandum of Understanding among federal agencies and the Delta Reform Act of 2009.” (*Id.* at p. 13). EPA noted that “The ‘Portfolio Approach’ developed by a diverse set of stakeholders is one attempt to place Delta water management into the larger context of facilities investments and integrated operations.” (*Id.*, p. 13 fn. 20).<sup>9</sup>

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.” (*Id.* p.3).

On July 29, 2014, the State Water Resources Control Board (SWRCB) issued its 38 page 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 environmental effects.” (Letter, comment 9 pp. 11-12). 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

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<sup>9</sup> The BDCP agencies had unlawfully dismissed consideration of the Portfolio Approach in a Draft EIR/EIS appendix claiming "Although there is much merit in this Portfolio-Based Proposal" such things as water recycling and conservation to improve water supply reliability in areas that use water diverted from the Delta are "beyond the scope of the BDCP." (Draft EIR/EIS appendix 3A at p. 81). The lead agencies simply ignore the Delta Reform Act including Water Code § 85021 and the EPA as well as the alternatives requirements of NEPA and CEQA.



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.” (*Id.* comment 10 p. 12).

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.” (Letter p. 1). Additional Corps comments include the absence in the EIR/EIS of “an acceptable alternatives analysis” (comment 4), no showing on which alternative may contain the Least Environmentally Damaging Practicable Alternative (LEDPA) for section 404, Clean Water Act purposes (Comment 5), “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” (comment 19), 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?” (Comment 22).

Finally, Reclamation and DWR had to drop the attempt to deceive the public that the Water Tunnels are 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 Water Tunnels would not be harmful to endangered species of fish and their habitat. The RDEIR/SDEIS calls this “difficulties in assessing species status and issuing assurances over a 50 year period . . .” (RDEIR/SDEIS 1-2). In fact, the federal scientists have been issuing “red flag” warnings that the Water Tunnels 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.

***The RDEIR/SDEIS Amounts to Environmental Cover Up rather than the Environmental Full Disclosure required by NEPA and CEQA***

The RDEIR/SDEIS fails to even disclose the numerous past calls for alternatives increasing flows by reducing exports as made by the EWC and others including public agencies. The RDEIR/SDEIS fails to even explain why such alternatives are not included and why they are not discussed or disclosed.

Instead, the RDEIR/SDEIS states that additional alternatives 4A, 2D, and 5A were developed in response to comments “that DWR should pursue permit terms shorter than 50 years due to the levels of uncertainty regarding both the long-term effectiveness of habitat restoration in recovering fish populations and the future effects of climate change on the Delta and the Sacramento River watershed.” (RDEIR/SDEIS 4.1-1).

There is complete absence of any alternatives increasing flows through the Delta, as well as the absence of any explanation, discussion, or disclosure that such alternatives have been presented for consideration by organizations and agencies. This is a deliberate, bad faith evasion of the alternatives development and analysis required by NEPA and CEQA and hiding of such alternatives and their existence from the public and from the decision-makers. The lead agencies have violated the NEPA requirement 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.” 40 C.F.R. § 1502.14(a).

***Alternatives Conclusion***

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. The lead agencies must either drop the Water Tunnels project or finally prepare and issue for public review and comment and decision-maker review a new Draft EIR/EIS that includes the required range of reasonable alternatives.

### ***THE LEAD AGENCIES CONTINUE TO VIOLATE THE ESA***

#### ***Summary***

Under the BDCP, three large new intakes would divert vast amounts of water from the Sacramento River between Clarksburg and Courtland through two tunnels roughly 35 miles south for export from the Central Valley and State Water Projects' pumping plants. As a result of this massive new diversion, enormous quantities of freshwater which now flow through the Sacramento-San Joaquin Delta before being diverted would never even reach the Delta. *The BDCP Delta Water 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.*

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.<sup>10</sup> ***Second***, the reaches of the Sacramento River, sloughs, and

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<sup>10</sup> 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.

the Delta that would lose significant quantities of freshwater flows through operation of the proposed Water Tunnels 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 Water Tunnels project. **Fourth**, ESA Section 7 consultations have not occurred and no Biological Opinion has been prepared by the USFWS or NMFS with respect to the effects of the operation of the Water Tunnels 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 Water 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 Water 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 Water Tunnels project would violate the procedural requirements of NEPA because the BDCP Draft EIR/EIS and Water Fix 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 exist.

These are not deficiencies that can be “fixed” by responses to comments in a Final EIR/EIS. Instead, Reclamation and DWR must prepare a new Draft EIR/EIS to be circulated for public review and comment. The new public Draft EIR/EIS document must include the range of reasonable alternatives including alternatives increasing flows by reducing exports as set forth above. 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.

***The Water Tunnels Threaten Jeopardy and Adverse Modification of Designated Critical Habitat of Endangered and Threatened Fish Species in Violation of the Substantive Prohibitions of the ESA***

The Sacramento River Winter-Run Chinook Salmon is listed as an endangered species under the ESA. 50 C.F.R. § 17.11. 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. 50 C.F.R. § 226.204. The Water 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 for the Tunnels.<sup>11</sup>

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<sup>11</sup> 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 -

“The ESA provides ‘both substantive and procedural provisions designed to protect endangered species and their habitat.’” *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). 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. . . .” 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). “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.” *San Luis & Delta-Mendota Water Auth. v. Locke* (*Locke*), 776 F.3d 971, 987 (9th Cir. 2015).

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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](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.

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 Water Tunnels project will literally 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 Water Tunnels 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.” (Plan, ch. 5, 2-13).

The BDCP identifies key hydrologic and hydrodynamic changes that reduce or adversely modify habitat of these listed fish species. (See below) These changes will exacerbate threats and stressors already known to affect these fish. BDCP modeling in the RDEIR/SDEIS finds that through-Delta survival rates of winter-run, spring-run, and fall-run Chinook salmon all decrease relative to the No Action Alternative from Water Tunnels operation. (RDEIR/SDEIS Tables 11-4A-23, 51, and 74).

Specifically, the BDCP identifies reduced habitat due to water storage and water conveyance systems as a stressor and threat to Winter- Run Chinook Salmon. BDCP EIR-EIS Administrative Draft, 11A-47 (March 2013). 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 flows (Plan, ch. 5, 5.3-23; RDEIR/SDEIS p. 4.3.7-48), reduced Sacramento River attraction flows for migrating adult winter-run Chinook salmon (Plan, ch. 5, 5.3-29), 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. (Plan, ch. 5, 5.3-32). 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.” (Plan, ch. 5, 5.3-45; BDCP Appendix 5C, Tables C.A-41 and C.A-42; RDEIR/SDEIS Figures 4.3.2-7 and 4.3.2-8.) The reduced outflow along with the possible change in olfactory signals due to change in the flow mixture “could affect upstream migration.” (*Id.*). The RDEIR/SDEIS states: “when compared to the CEQA baseline, [Alternative 4A, the Water Tunnels], 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.” (RDEIR/SDEIS, 4.3.7-58.)<sup>12</sup>

The BDCP likewise identifies similar threats and stressors to the Spring-Run Chinook Salmon, Steelhead, Green Sturgeon, and Delta Smelt that would result from the Water Tunnels.

The BDCP identifies several threats and stressors to the Central Valley Spring-Run Chinook Salmon, which include flow reductions causing increased water temperature and habitat elimination or degradation due to water conveyance systems. (BDCP EIR-EIS Administrative Draft, 11A-83, 11A-76 (March 2013)). The BDCP Plan admits that adverse effects of the proposed north Delta diversions on juvenile Spring-Run Chinook Salmon include near-field

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<sup>12</sup> See Erica Goode, Troubled Delta System Is California’s Water Battleground, N.Y. Times, 6/24/15, available at <http://www.nytimes.com/2015/06/25/science/troubled-delta-system-is-californias-water-battleground.html> (discussing, inter alia, how increased river temperatures killed 95% of California salmon eggs in 2014, and pointing out that California’s salmon population has dropped precipitously over the last several decades).



(physical contact with the screens and aggregation of predators) and far-field (reduced downstream flows). (Plan, ch. 5, 5. 4-16; see also RDEIR/SDEIS, p. 4.3.7-79, lines 15-17). “Plan Area flows have considerable importance for downstream migrating juvenile salmonids and will be affected by the proposed north Delta diversions . . . Because of the north Delta diversions, salmonids migrating down the Sacramento River generally will experience lower migration flows compared to existing conditions. . . As with winter-run Chinook salmon, it was assumed with high certainty that Plan Area flows have critical importance for migrating juvenile spring-run Chinook salmon.” (Plan, ch. 5, 5. 4-17; BDCP Appendix 5C, Tables C.A-41 and C.A-42; see also RDEIR/SDEIS, Figures 4.3.2-7 and 4.3.2-8). Other admitted adverse effects caused by operations of the north Delta diversions include reduced attraction flows in the Sacramento River for migrating adult spring-run Chinook salmon. (Plan, ch. 5, 5. 4-19). “Lower river flow downstream of the north Delta intakes under the BDCP may reduce survival of juvenile spring-run Chinook salmon during downstream migration along the Sacramento River and also could negatively affect upstream migration of adult spring-run Chinook salmon by changing attraction flows/olfactory cues.” (Plan, ch. 5, 5. 4-20). The RDEIR/SDEIS again delivers bleak prospects for the survival of this federally-protected species: “Under Alternative 4A (including climate change effects), there are flow and storage reductions, as well as temperature increases in the Sacramento River that would lead to biologically meaningful increases in egg mortality rates and overall reduced habitat conditions for spawning spring-run and egg incubation.” (RDEIR/SDEIS, 4.3.7-98).

The BDCP states that threats and stressors to the Steelhead include water storage and conveyance systems as well as flow reductions contributing to increased water temperatures. (BDCP EIR-EIS Administrative Draft, 11A-129, 11A-133 (March 2013)). The Plan admits near-

field (physical contact with the screens and aggregation of predators) and far-field (reduced downstream flows leading to greater probability of predation) effects of the north Delta diversions on juvenile Sacramento River Region Steelhead. (Plan, ch. 5, 5. 6-11; see also RDEIR/SDEIS, p. 4.3.7-199, lines 1-6). The plan also admits that “Sacramento River attraction flows for migrating adult Sacramento River region steelhead will be lower from operations of the north Delta diversions under the BDCP.” (Plan, ch. 5, 5. 6-13; BDCP Appendix 5C, Tables C.A-41 and C.A-42; see also RDEIR/SDEIS, Figures 4.3.2-7 and 4.3.2-8). The Plan admits that with respect to the Feather River, “the reduction in flows in the high-flow channel due to BDCP would reduce conditions in an already unsuitable habitat.” (Plan, ch. 5. 6-16). The RDEIR/SDEIS states: “In general, Alternative 4A would degrade the quantity and quality of rearing habitat for steelhead relative to Existing Conditions.” (RDEIR/SDEIS, 4.3.7-22).

The BDCP identifies increased water temperatures and habitat loss as threats and stressors to the Green Sturgeon. BDCP EIR-EIS Administrative Draft, 11A-162 – 65 (March 2013). With respect to admitted adverse effects, the Plan admits that flow changes will reduce transport and migration flows in the Feather River and Plan area. (Plan, ch. 5. 8-17 through 8-24). “As such [reduction in early fall releases], average in stream flows during some months of the three periods identified above (June-September, August-October, August-June) are expected to substantially decline in the Feather River at Thermalito and moderately decline in the Sacramento River at Verona under the BDCP, especially for the LOS [low-outflow scenario] (Appendix 5.C, flow, passage, salinity, and turbidity, section 5.C.5.3.3, High Outflow and Low Outflow Scenarios).” (Plan, ch. 5. 5. 8-18). Also, the plan admits that “there is [on the Feather River] the potential for appreciable change in the Feather River as a result of operational differences between the BDCP scenarios and future conditions without the BDCP

(EBC2\_LL1T).” (Plan, ch. 5, 5. 8-24). The RDEIR/SDEIS states: “In general, Alternative 4A would reduce the quantity and quality of rearing habitat for larval and juvenile green sturgeon relative to Existing Conditions.” (RDEIR/SDEIS, 4.3.7-296).

The BDCP identifies several threats and stressors to the Delta Smelt, including water exports and increased water temperature. (BDCP EIR-EIS Administrative Draft, 11A-8-11 (March 2013)). Admitted adverse effects caused by the BDCP north Delta intakes include reducing the quantity of sediment entering the Plan Area thus increasing water clarity and negatively affecting delta smelt. (Plan, ch. 5, 5. 1-30; see also RDEIR/SDEIS, p. 4.3.7-26, 4.3.7-29). Greater water residence time from changes in water operations will likely increase the toxic blue-green alga *Microcystis* having both direct and indirect effects on the smelt. (Plan, Chapter 5, 5. 1-32; BDCP, Appendix 5C, p. 5.4-14; RDEIR/SDEIS, Chapter 8, Table 8-60a). North Delta intakes' operations will introduce and increase entrainment and impingement of Delta smelt as well as introduce and increase predation hotspots in and around the new intakes (RDEIR/SDEIS, p. 4.3.7-24, lines 4-7).

In 2013, NMFS reiterated its previous “Red Flag” comment that the Water Tunnels project threatens the “potential extirpation of mainstem Sacramento River Populations of winter-run and spring-run Chinook salmon over the term of the permit . . . .” (NMFS Progress Assessment and Remaining Issues Regarding the Administrative Draft BDCP Document, Section 1.17, 12, April 4, 2013). As we pointed out in our July 22, 2015 letter, the EPA has called for alternatives addressing “the need for water availability and greater freshwater flow through the Delta.” (EPA Letter, August 26, 2014, p. 2). Likewise, the Army Corps of Engineers, State Water Resources Control Board, and USFWS scientists also raised concerns regarding the BDCP’s impacts on water quality and impacts to endangered and threatened species. However,

comments from other federal agencies were ignored. In April 2015, the claimed habitat conservation elements of the BDCP have been dropped or drastically pared back in the switch from the BDCP to the “California Water Fix.” As just one example, the plan to provide “65,000 acres of tidal wetland restoration” has been eviscerated to merely “59 acres of tidal wetland restoration.” (RDEIR/SDEIS ES–17 (emphasis added)). Consequently, the current Water Tunnels project is *even more of a threat* to fish species and their habitat compared to the previous version that resulted in the concerns raised then by the EPA, Army Corps of Engineers, State Water Resources Control Board, and NMFS and USFWS scientists.

“The goal of the ESA is not just to ensure survival but to ensure that the species recover to the point it can be delisted.” *Alaska v. Lubchenko*, 723 F.3d 1043, 1054 (9th Cir. 2013), citing *Gifford Pinchot Task Force v. U.S. Fish and Wildlife Service*, 378 F.3d 1059, 1070 (9th Cir. 2004). Pursuant to the commands 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 . . .*” 16 U.S.C. § 1536(a)(2) (emphasis added). “[T]he purpose of establishing ‘critical habitat’ is for the government to carve out territory that is not only necessary to the species’ survival but also essential for the species’ recovery.” *Gifford Pinchot*, 378 F.3d 1059, 1070. Also, “existing or potential conservation measures outside of the critical habitat cannot properly be a substitute for the maintenance of critical habitat that is required by Section 7 [of the ESA, 16 U.S.C § 1536].” *Gifford Pinchot*, 378 F.3d 1059, 1076.

Taking the fresh water flows and safe refuge away from the endangered and threatened fish species would neither insure their survival nor insure their recovery and delisting. On-the-

ground habitat restoration is not a lawful substitute under the ESA for maintaining the critical habitat of and in the waters of the Sacramento River, sloughs, and Delta. The reduction of water and flows, increased residence times of water, and increased water temperature are adverse modifications of their critical habitat. Approval of the BDCP would violate the ESA. The Water Tunnels project is thus not permissible under the ESA.<sup>13</sup>

***Reclamation is Presently Violating both NEPA and ESA Procedure by Failing to Issue a Draft EIR/EIS Concurrently with and Integrated with ESA Required Biological Assessments and Biological Opinions***

Extinction is forever. Fortunately, the ESA obligates federal agencies “to afford first priority to the declared national policy of saving endangered species,” *Tennessee Valley Authority v. Hill*, 437 U.S. 153, 185 (1978). Despite that, Reclamation has failed to prepare a Biological Assessment pertaining to its action and has failed to initiate consultation with USFWS and NMFS even though Biological Assessment preparation and initiation of consultation are required by the ESA. (See RDEIR/SDEIS 1-15 (under “Section 7 of the Endangered Species Act”)). The RDEIR/SDEIS concedes that “formal consultation under ESA Section 7” will be necessary. (*Id.*).

Section 7 of the ESA (16 U.S.C. § 1536(a)(4) requires that “Should the agency find that its proposed action *may* affect a listed species or critical habitat, it must formally or informally consult with the Secretary of the Interior, or his or her delegate [USFWS and/or NMFS].” *Jewell*, 747 F.3d 581, 596 (emphasis in decision). “Formal consultation is required when the acting agency or consulting agency determines that the proposed action is *likely* to adversely affect a

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<sup>13</sup> We have brought the impermissibility of the Water Tunnels project given the substantive prohibitions of the ESA and the related procedural ESA and NEPA violations to the attention of Reclamation and DWR on numerous occasions for more than two years now. These prior communications include the FOR letters of June 4, September 25 and November 18, 2013, January 14, March 6, May 21, and July 29 (including pp. 10-11), 2014, EWC letter of June 11, 2014 (including pp. 29-30) and our recent joint letters of July 16 (requesting an extension of time to comment), and July 22 (alternatives), 2015. We also addressed these issues in our meeting with federal agency representatives in Sacramento on November 7, 2013.

listed species or critical habitat. 50 C.F.R. §§ 402.13, 402.14. Formal consultation requires the consulting agency . . . , to issue a biological opinion stating whether the proposed action is likely to jeopardize such species or habitat. 16 U.S.C. § 1536(b); 50 C.F.R. § 402.14.” *Jewell*, 747 F.3d at 596 (emphasis in decision).

ESA Regulations (50 C.F.R. § 402.14(a)) require that “Each Federal agency shall review its actions *at the earliest possible time* to determine whether any action may affect listed species or critical habitat. If such a determination is made, formal consultation is required. . . .” *Karuk Tribe of California v. U.S. Forest Service*, 681 F.3d 1006, 1020 (9th Cir. 2012) (en banc)(emphasis added), *cert. denied*, 133 S.Ct. 1579 (2013). The Ninth Circuit Court of Appeals has repeatedly held that: “Any possible effect, whether beneficial, benign, adverse or of an undetermined character, triggers the formal consultation requirement.” *Western Watersheds Project v. Kraayenbrink*, 620 F.3d 1187, 1210 (9<sup>th</sup> Cir. 2010). *Accord*, *Karuk Tribe*, 681 F.3d 1006, 1027; *Cal. ex rel. Lockyer v. U.S. Dep’t of Agric.*, 575 F.3d 999, 1018 (9th Cir. 2009).

Even the ardent advocates for the Water Tunnels project who prepared the 48,000 pages of BDCP advocacy documents do not contend that taking large quantities of water away from the Sacramento River, sloughs, and Delta will not have “any possible effect, whether beneficial, benign, adverse or of an undetermined character” on the endangered and threatened fish species or their habitat. Not surprisingly, no preposterous claim of “no possible effect” is made in the Draft EIR/EIS or RDEIR/SDEIS. But instead of reviewing the proposed Water Tunnels at the earliest possible time, Reclamation is delaying ESA review until some unspecified and unacknowledged future time.

The NEPA regulations require that “To the fullest extent possible, agencies shall prepare draft environmental impact statements concurrently with and integrated with environmental

impact analyses and related surveys and studies required by the . . . Endangered Species Act. . . .” 40 C.F.R. § 1502.25(a). “The [ESA] regulations also acknowledge that the agencies are expected to concurrently comply with both Section 7 of the ESA and NEPA. *See* 50 C.F.R. § 402.06 (“Consultation, conference, and biological assessment procedures under section 7 may be consolidated with interagency cooperation procedures required by other statutes, such as the National Environmental Policy Act (NEPA).”).” *Jewell*, 747 F.3d 581, 648. “ESA compliance is not optional,” and “an agency may not take actions that will tip a species from a state of precarious survival into a state of likely extinction.” *Nat’l Wildlife Fed’n v. Nat’l Marine Fisheries Serv.*, 524 F.3d 917, 929-30 (9th Cir. 2008). Consequently, against this threat of extinction, conducting the draft EIS public review and comment stage without Biological Assessments or Biological Opinions leaves the public in the dark and violates both the ESA and NEPA. In the absence of the ESA required analyses, the draft EIS/EIR is “so inadequate as to preclude meaningful analysis” in violation of NEPA. 40 C.F.R. § 1502.9(a).<sup>14</sup>

Reclamation has violated the “at the earliest possible time” ESA mandate and the “concurrently with and integrated with” NEPA mandate by prematurely issuing the Draft EIR/EIS and now the REDIR/SDEIS attempting to hide from the reviewing public the critical pertinent information and analyses that would be supplied by the missing Biological Assessments and Biological Opinions. New upstream diversions of large quantities of water from the Sacramento River will undeniably “affect” the listed fish species and their critical habitats.

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<sup>14</sup> The CEQA rule is the same. Recirculation is required where feasible project alternatives were not included in the Draft EIR. CEQA Guidelines, 14 Cal. Code Regs., § 15088.5(a), or when “The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.” CEQA Guidelines, § 15088.5(a)(4).

*The public now has what it does not need:* unsupported advocacy from the consultants speculating that the adverse effects will be offset or that the effects will not really be all that adverse. *The public does not have what it does need:* the federal agency Biological Assessments and Biological Opinions required by the ESA and NEPA.<sup>15</sup>

The evasion of ESA obligations by Reclamation is both extreme and deliberate. Reclamation has on August 26, 2015 joined with DWR in submitting a petition to the State Water Resources Control Board for a change in the point of diversion necessary for the Water Tunnels. The petition recites that “The proposed project reflects the culmination of a multiyear planning process that began in 2006 . . .”(Petition cover letter, p. 1). The passage of nine years makes a mockery of the ESA requirement to commence ESA review “at the earliest possible time.” Because of the absence of the ESA-Required Biological Assessments and Biological Opinions, Reclamation feels free to make the demonstrably false representation in the petition that “The California WaterFix would result in substantially improved conditions in the Delta for endangered and threatened species and afford greater water supply reliability for the state.” (Petition cover letter, p. 2).

Red flag comments and the Record so far have made it clear that there is at minimum significant uncertainty about whether the Water Tunnels project is even permissible under the ESA. This critical issue cannot be resolved until the Biological Assessments and Opinions have been prepared. Reclamation has not obtained the determination pursuant to ESA-required consultation whether the “preferred alternative”— the Water Tunnels— is even lawful or feasible.

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<sup>15</sup> “The ESA requires an agency to use ‘the best scientific and commercial data available’ when formulating a BiOp.” *Locke*, 776 F.3d 971, 995. “The purpose of the best available science standard is to prevent an agency from basing its action on speculation and surmise.” *Locke*, 776 F.3d at 995.



Against this threat of extinction from known stressors and negative effects on the critical habitat, conducting the NEPA environmental draft process prior to and in a vacuum from the ESA consultation process violates the ESA command to carry out the ESA process “at the earliest possible time” and violates the NEPA command to conduct the NEPA and ESA processes “concurrently” and in an “integrated” manner. This also constitutes unlawful piecemealing or segmenting of the NEPA process from the ESA required analyses of the jeopardy and habitat threats posed by the proposed Water Tunnels.

***Reclamation is Proceeding in the Absence of the “Reasonable and Prudent Alternatives” that Must be Developed and Identified pursuant to the ESA***

Our July 22, 2015 letter to you set forth the NEPA violations resulting from the failure of the BDCP documents including the Draft EIR/EIS and the new RDEIR/SDEIS to include a range of reasonable alternatives increasing freshwater flows through the Delta by reducing exports and not including new upstream conveyance. We pointed out how Reclamation and DWR have ignored repeated warnings and suggestions made to them over the years by public agencies including the EPA, U.S. Army Corps of Engineers, and State Water Resources Control Board, by the National Academy of Sciences and by the Environmental Water Caucus (EWC).

Beyond ignoring the NEPA alternatives mandate, expert government agencies, the Academy and the EWC, Reclamation is also ignoring the crystal clear prohibitions and mandates of the ESA and NEPA. The previous section set forth the procedural ESA requirements for consultation “at the earliest possible time” and the procedural NEPA requirements for the NEPA Draft EIS to be prepared “concurrently with and integrated with” the analyses required by the ESA.

There is more. Under Section 7 of the ESA, 16 U.S.C. § 1536(b)(3)(A), after consultation “If it appears that an action may affect an endangered or threatened species, the consulting

agency must provide a biological opinion to the action agency explaining how the action ‘affects the species or its critical habitat.’ *Id.* § 1536(b)(3)(A). When a biological opinion concludes that the action is likely to jeopardize an endangered or threatened species, or adversely modify its habitat, then the consulting agency must suggest ‘reasonable and prudent alternatives [RPA].’ *Id.*” *Cottonwood Env’tl. Law Ctr. v. U.S. Forest Serv.*, 789 F.3d 1075, 1085 (9th Cir. 2015). *Accord, Jewell*, 747 F.3d 581, 596; *Locke*, 776 F.3d 971, 988. The consulting agency “in the course of proposing an RPA, must insure that the RPA does not jeopardize the species or its habitat.” *Jewell*, 747 F.3d 581, 636.

We pointed out in our July 22, 2015 letter (at p. 10) that Reclamation and DWR had to drop the attempt to sell the Water Tunnels as part of a habitat conservation plan. The USFWS and NMFS scientists were unwilling to find falsely that the Water Tunnels would not be harmful to endangered species of fish and their habitat. The RDEIR/SDEIS calls this “difficulties in assessing species status and issuing assurances over a 50 year period . . .” (RDEIR/SDEIS, 1-2). In fact, for more than three years, the federal scientists have been issuing “Red Flag” warnings that the Water Tunnels threaten the “potential extirpation of mainstem Sacramento River populations of winter-run and spring-run Chinook salmon over the term of the permit,” contrary to publicity claims made for the project.

The Draft EIR/EIS and RDEIR/SDEIS alternatives and alternatives analyses are of no value whatsoever to either decision-makers or the public. This appears to be a deliberate effort on the part of Reclamation and DWR to unlawfully evade the obligation to develop in a Draft EIR/EIS for public review and comment a range of reasonable alternatives including alternatives that would increase freshwater flows through the Delta by reducing exports and that would not include new upstream conveyance. A central feature of this intentional violation of the

procedural requirements of both NEPA and the ESA is premature issuance by Reclamation of the Draft EIR/EIS and RDEIR/SDEIS on the one hand, while with the other hand, Reclamation has deliberately failed to prepare a Biological Assessment and initiate formal ESA consultation with USFWS and NMFS.

As a result of these violations, *reasonable and prudent alternatives* have not been prepared by USFWS and NMFS and are not available to the public during the BDCP and Water Fix public review and comment periods. Reclamation and DWR wish to approve the Water Tunnels *in spite of* their adverse impacts on Delta water quality and quantity and on endangered and threatened fish species. In contrast, the ESA requires that the project *must not* jeopardize endangered species or their habitat. In essence, the current Water Tunnels project/Water Fix is an unlawful attempt by Reclamation and DWR to approve the Water Tunnels in a vacuum, in the absence of reasonable and prudent alternatives that they wish to avoid but which are required by the ESA. Reasonable and prudent alternatives are also necessary to provide the NEPA required analysis of a range of reasonable alternatives. The range of *reasonable alternatives* required by NEPA will necessarily include the *reasonable and prudent alternatives* required by the ESA. We are pleased to offer EWC's *A Sustainable Water Plan for California*, discussed in our July 22, 2015 letter, as one example of a reasonable and prudent alternative to the Water Tunnels.<sup>16</sup>

One remedy for this unlawful process is for Reclamation to proceed to prepare a Biological Assessment and request consultation with USFWS and NMFS, and then issue a new Draft EIR/EIS for public review and comment concurrently with and integrated with the resulting Biological Opinions prepared under the ESA. The only other lawful remedy open to Reclamation and DWR is also eminently sensible: drop the Water Tunnels proposed action and

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<sup>16</sup> <http://ewccalifornia.org/reports/ewcwaterplan9-1-2015.pdf>.

focus on intelligent 21<sup>st</sup> century water solutions such as recycling, drip-irrigation, conservation, and retirement of drainage impaired lands in the San Joaquin Valley from production.

### ***ESA Conclusion***

In the absence of answers to basic questions including ESA questions about jeopardy of listed fish species and adverse modifications of designated critical habitats, the Draft BDCP EIR/EIS and RDEIR/SDEIS are not sufficient for informed review by the public and the decision-makers. It will be necessary at minimum under the ESA, NEPA and CEQA for the federal and state agencies to prepare, issue, and circulate for public review a *new Draft* EIR/EIS concurrently with and integrated with Biological Assessments and Biological Opinions. 40 C.F.R. §§ 1502.9(a); 1502.25(a) (NEPA); 14 Cal. Code Regs., §§ 15065(a)(1); 15088.5(a)(CEQA). Then, and only then, would the public and the decision-makers have the opportunity to engage in meaningful analysis of a preferred project alternative and informed comparison with other alternatives, including the reasonable and prudent alternatives required by the ESA.

## **THE ENVIRONMENTAL REVIEW OF THE WATER FIX HAS BEEN UNLAWFULLY SEGMENTED FROM ENVIRONMENTAL REVIEW OF LONG-TERM CVP AND SWP OPERATIONS**

### ***Summary***

It is difficult if not impossible to imagine a closer relationship for NEPA and CEQA purposes than that between the proposed Delta Water Tunnels and the long-term operations of the CVP (Central Valley Project) and SWP (State Water Project). Planned long-term operations of the CVP and SWP system determine whether the Delta Water Tunnels might arguably make any sense for water supply purposes. In turn, whether or not the new conveyance proposed by the

BDCP/Water Fix is approved will make a major difference in the actual long-term operations of the CVP and SWP system.

Despite this extremely close relationship, separate environmental review processes for the Water Fix Delta Water Tunnels on the one hand, and the long-term CVP and SWP operations on the other hand, are underway. A Draft EIS was issued in July on the Coordinated Long-Term Operation of the CVP and SWP, and the comment period closed September 29, 2015.<sup>17</sup> A separate Draft EIR/EIS and Recirculated Draft EIR/Supplemental Draft EIS (RDEIR/SDEIS) have been prepared for the Water Fix Tunnels with the comment period closing October 30, 2015. The Bureau of Reclamation is the federal lead agency for both of these NEPA processes. The California Department of Water Resources (DWR) is the State lead agency for the Water Fix NEPA/CEQA process.

This deliberate separation of the Water Tunnels NEPA and CEQA process from the NEPA compliance process for the Coordinated Long-term Operation of the CVP and SWP is segmentation –also referred to as piecemealing --of environmental review. That segmentation violates NEPA and CEQA.

***The Proposed Delta Water Tunnels are Connected to Long-Term CVP and SWP Operations***

There would be no proposal to develop the massive and expensive Delta Water Tunnels if there were not to be long-term CVP and SWP operations. Likewise, long-term CVP and SWP long-term operations will be vastly different depending on whether or not the Delta Water Tunnels are developed. The Introduction to the Water Fix RDEIR/SDEIS includes among the Water Tunnels project objectives:

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<sup>17</sup> FOR submitted supplemental comments that same day raising the NEPA segmentation violation issue raised by this letter. The FOR and EWC letters were submitted to Mr. Ben Nelson of the Bureau of Reclamation, Bay-Delta Office, 801 I Street, Suite 140, Sacramento, California, as directed by the instructions for commenting on that Draft EIS.

Restore and protect the ability of the SWP and CVP to deliver up to full contract amounts, when hydrologic conditions result in the availability of sufficient water, consistent with the requirements of state and federal law and the terms and conditions of water delivery contracts held by SWP contractors and certain members of San Luis Delta Mendota Water Authority, and other existing applicable agreements. (Water Fix RDEIR/SDEIS Introduction, p. 1-9).

The RDEIR/SDEIS for the Water Fix states:

Generally, Delta hydrodynamics are defined by complex interactions between tributary inflows, in-Delta diversions, and *SWP and CVP operations, including conveyance, pumping plants, and operations of channel barriers and gates*. The degree to which each variable impacts the overall hydrology of the Delta varies daily, seasonally, and from year to year, depending on the magnitude of inflows, the tidal cycle, and *the extent of the pumping occurring at the SWP and CVP pumping plants*. (Water Fix RDEIR/SDEIS Introduction, p. 1-11) (emphasis added).

It is clear that the California Water Fix will cause changes in SWP and CVP operations—since the very point of the California Water Fix is to feed more water into the SWP and CVP network. The foregoing statement on the Water Fix RDEIR/SDEIS, establishes that these changes in SWP and CVP operations will affect, among other natural habitats, Delta hydrodynamics—i.e., they will have an environmental impact.

The Draft EIS for the Long-Term Operation of the CVP and SWP states: The purpose of the Coordinated Operation Agreement (COA) (Public Law 99-546) is to ensure that the CVP and SWP each manage respective water rights from the Delta and share the obligations to protect other beneficial uses of water in the Sacramento Valley and the Delta. The State Water Resources Control Board (SWRCB) has placed conditions on the CVP and SWP water right permits and licenses to meet water quality and operational criteria within the Delta. Reclamation and DWR coordinate the operation of the CVP and SWP to meet these and other operating requirements pursuant to COA. (Draft EIS Long-Term Operations, p. ES-2).

The Water Fix RDEIR/SDEIS describes the need for Reclamation to ultimately “adjust CVP operations and/or flow requirements, in coordination with SWP operations.” (Water Fix RDEIR/SDEIS at 1-13). Similarly, the SWP/CVP DEIS states that: “There are numerous water supply and water quality projects and actions that could be potentially affected by changes in the coordinated long-term operation of the CVP and SWP, or could affect the CVP and SWP

operations.” SWP/CVP DEIS at 3-45. The Water Fix is one these “numerous” projects. *See Id.* at 3-46.

Consequently, the interconnection between the Delta Tunnels and the State’s water system is readily apparent. Again, a primary purpose of the Water Fix is to deliver higher quality water to the CVP and SWP while resulting in lower water quality in the Delta. Additionally, the future adjustments that will have to be made in the CVP and SWP as a result of increased inflow “will likely change” the project’s environmental effects, since CVP and SWP flow schedules affect wildlife and natural habitat throughout the State.

The EPA commented last year during the BDCP environmental review process that:

Upstream/Downstream Impacts

The Federal and State water management systems in the Delta are highly interconnected, both functionally and physically. 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. (EPA comments on Draft Environmental Impact Statement for the Bay Delta Conservation Plan, San Francisco Bay Delta, California (CEQ# 20130365), p. 3, August 26, 2014)(emphasis added).<sup>18</sup>

In communications about BDCP funding needs for ESA §7 analysis, NMFS has stated:

EFFECTS ANALYSIS AND SUBSEQUENT ANALYSES

Analysis of Upstream Flow Changes

While the “operational constraints” of the project reservoirs may not be altered under BDCP, the actual operations-- that is, how those constraints are met-- are expected to be. Therefore, reservoir releases for BDCP will differ from what releases for the same time would have been if BDCP had not been implemented. This can result in changes to physical and thermal habitat conditions that affect Chinook salmon spawning, incubation,

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<sup>18</sup> In its detailed comments attached to the letter, EPA further explained that:

The Draft EIS does not include a comprehensive description of the CVP and SWP with and without new North Delta intake facilities or through-Delta operations. Such information as needed to assist the reader in understanding how the water delivery system operates under Existing Conditions and how it would change under CM1 [Delta Water Tunnels] alternatives. (Detailed Comments, p. 22).

and rearing. NMFS has identified issues with current analyses of upstream conditions as presented in the Public Draft BDCP and EIS/R since results are often grouped by month and water year type, masking any real changes caused by project implementation. (NMFS Draft, BDCP FUNDING NEEDS FOR ESA SECTION 7 ANALYSIS, March 18, 2015 at p. 3)(obtained pursuant to FOIA, Document ID: 0.7.669.5336.3, REL\_INTERIM 1 0015478).

The subjects of the two separate processes are connected.<sup>19</sup> They are inextricably intertwined.

***The Segmentation of Environmental Review of Long-Term Operations from the Proposed Delta Water Tunnels Violates NEPA and CEQA***

The NEPA Regulations specify that “Agencies shall make sure the proposal which is the subject of an environmental impact statement is properly defined. . . . Proposals or parts of proposals which are related to each other closely enough to be, in effect, a single course of action shall be evaluated in a single impact statement.” (40 C.F.R. § 1502.4(a).<sup>20</sup>

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<sup>19</sup> As explained by the Delta Independent Science Board in its comments of September 30, 2015, The operating guidance for the new [Water Fix] alternatives seems isolated from the many other water management and environmental activities in and upstream of the Delta likely to be important for managing environmental and water supply resources related to Delta diversions. (DISB Review of BDCP/Water Fix Partially Recirculated Draft EIR/Supplemental Draft EIS at. p. 14).

<sup>20</sup> In *City of Rochester v. U.S. Postal Serv.*, 541 F.2d 967, 972-73 (2d Cir. 1976), the court explained that:

To permit noncomprehensive consideration of a project divisible into smaller parts, each of which taken alone does not have a significant impact but which taken as a whole has cumulative significant impact would provide a clear loophole in NEPA. [citations omitted]. The guidelines of the Council on Environmental Quality make it clear that the statutory term “major Federal actions” must be assessed “with a view to the overall, cumulative impact of the action proposed, related Federal action and projects in the area, and further actions contemplated.” 40 C.F.R. s 1500.6(a) (1975). The transfer decision is plainly a consequential, if not an inseparable, feature of the construction project.



Pursuant to NEPA Regulation 40 C.F.R. § 1508.25(a), multiple federal actions must be evaluated in the same environmental impact statement if they are connected, cumulative, or similar. Here, the long-term operations on the one hand, and proposed Delta Water Tunnels on the other hand, are all three. They are connected, cumulative, and similar.

When two proposals or parts of proposals are so closely connected that they effectively constitute a single course of action, an agency must analyze both proposals in a single EIS. *Id.* A three-part test determines whether two proposals are so connected:

Actions are connected if they: (i) [a]utomatically trigger other actions which may require environmental impact statements, (ii) [c]annot or will not proceed unless other actions are taken previously or simultaneously, and (iii) are interdependent parts of a larger action and depend on the larger action for their justification. 40 C.F.R. § 1508.25(a)(1).

The Water Fix and the coordinated operation of the SWP and CVP are clearly connected. Under (i), the Water Fix, which describes as a primary purpose “restor[ing] and protect[ing] the ability of the SWP and CVP to deliver up to full contract amounts,” will automatically trigger increased flow diversions to the SWP and CVP. (Water Fix RDEIR/SDEIS at ES-6). Close to a decade’s worth of litigation has indicated that alterations to flow levels in the SWP and CVP will likely necessitate environmental impact statements. *See* BUREAU OF RECLAMATION, *Coordinated Long-Term Operation of the CVP and SWP* (Aug. 2, 2015, 1:50 PM), <http://www.usbr.gov/mp/BayDeltaOffice/Documents/lto.html>.

Under (ii), the water diversions proposed in the Water Fix cannot occur unless SWP and CVP operations adjust flow levels. Indeed, the Water Fix RDEIR/SDEIS states: “SWP operation of new conveyance facilities and/or flow patterns proposed under the [California Water Fix] would *require changes in existing CVP operations.*” Water Fix RDEIR/SDEIS at 1-11 (emphasis added). For (iii), the California Water Fix and the coordinated operation of the SWP

and CVP are clearly “interdependent parts of a larger action.” Namely, they are both part of the same effort to manage the CVP and SWP.

The inextricable connection between the projects thus requires that both be analyzed in the same EIS. Reclamation and DWR’s ongoing failure to do this constitutes a violation of NEPA. 40 C.F.R. § 1502.4(a); 40 C.F.R. § 1508.25(a)(1).<sup>21</sup>

The rules under CEQA are similar to those under NEPA in prohibiting segmenting environmental review. CEQA requires that “an agency must use its best efforts to find out and disclose all that it reasonably can” about a project being considered and its environmental impacts. *Vineyard Area Citizens v. City of Rancho Cordova*, 40 Cal.4<sup>th</sup> 412, 428 (2007). Under CEQA a “project” is defined as “the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment. . .” 14 Code Cal. Regs (CEQA Guidelines) § 15378(a). The courts have explained that:

Theoretical independence is not a good reason for segmenting environmental analysis of the two matters. Doing so runs the risk that some environmental impacts produced by the way the two matters combine or interact might not be analyzed in the separate environmental reviews. *Tuolumne County Citizens for Responsible Growth v. City of Sonora*, 155 Cal.App.4<sup>th</sup> 1214, 1230 (2007).

It should come as no surprise that the diversion of millions of acre-feet of fresh water from the north to the south has the potential to affect a number of the State’s sensitive fish

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<sup>21</sup> The NEPA Regulations also require that agencies “Integrate the requirements of NEPA with other planning and environmental review procedures required by law or by agency practice so that all such procedures run concurrently rather than consecutively.” § 1500.2(c). *See also* § 1501.2 (“Agencies shall integrate the NEPA process with other planning at the earliest possible time to insure that planning and decisions reflect environmental values, to avoid delays later in the process, and to head off potential conflicts.”).

species.<sup>22</sup> For this very reason, Reclamation and DWR cannot lawfully segment two interrelated actions into separate environmental analyses. The coordinated operation of the CVP/SWP and the Water Fix are both part and parcel of the same project because they both combine to cause “a direct physical change in the environment.” 14 Code Cal. Regs. § 15378. Thus, the current Water Fix RDEIR/SDEIS violates CEQA and will continue to violate CEQA until a new Draft EIR/EIS for the Water Fix analyzes both the environmental impact of the Water Tunnels and the operation of SWP and CVP.

To proceed in the manner required by NEPA and CEQA, the Bureau of Reclamation must cease these two separate environmental review processes. Reclamation and DWR must instead prepare and issue for public review one new Draft EIR/EIS comprehensively analyzing in one environmental review process and one Draft EIR/EIS the environmental impacts of both the Coordinated Long-Term Operation of the CVP and SWP and the proposed BDCP/Water Fix Delta Water Tunnels. Because of the segmentation, the Draft EIR/EIS and RDEIR/SDEIS is “so inadequate as to preclude meaningful analysis,” in violation of NEPA. 40 C.F.R. § 1502.9(a).” Likewise, it is “so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded,” in violation of CEQA, 14 Code Cal. Regs § 15088(a)(4).

### *Segmenting Conclusion*

The Bureau of Reclamation and DWR, in order to comply with NEPA and CEQA, must prepare and issue for public and decision-maker review and comment one Draft EIR/EIS on both

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<sup>22</sup> See, e.g. Felicity Barringer, *Effort Falters on San Francisco Bay Delta*, N.Y. TIMES, Dec. 14, 2010, <http://www.nytimes.com/2010/12/15/science/earth/15delta.html?src=me> (“environmentalists and fishermen note that the years of abundant water for farms and Southern California cities corresponded to years when fish populations crashed—in the case of the smelt, almost to the vanishing point”).

the coordinated long-term operation of the CVP and SWP, and the proposed BDCP Water Fix Delta Water Tunnels.

***THE CALIFORNIA RDEIR/SDEIS VIOLATES BOTH NEPA AND CEQA BECAUSE IT FAILS TO ADEQUATELY ANALYZE THE PROJECT'S CUMULATIVE IMPACTS***

A number of organizations previously warned that the BDCP EIR/EIS failed to consider and evaluate cumulative project impacts.<sup>23</sup> The California Water Fix RDEIR/SDEIS offered an opportunity for DWR and Reclamation to remedy these deficiencies, yet only minor changes were made. Consequently, the California Water Fix RDEIR/SDEIS preserves the shortcomings of the BDCP EIR/EIS, which means that it, too, is inadequate as a matter of law.

Under both NEPA and CEQA, an agency must assess a project's cumulative impacts using the best information and technology available. *See* 14 Code Cal. Regs. § 15355; 40 C.F.R. § 1508.7. The concern here is that an agency will fail to consider the environmental impacts that come as a consequence of the primary project. When one project will likely combine with other past, present or future projects to cause a cumulative environmental impact, that impact must be analyzed in a single EIR/EIS. Failure to address cumulative impacts in a single EIR/EIS leads to inaccurate and inadequate environmental reports. Such reports often make a “project sound more feasible that [it] truly [is]” because they are “based on assumptions of need and utility that are questionable and may be ... ‘delusions’ or perhaps ‘deceptions.’” *See* Bent Flyvberj, *Delusions and Deceptions in Large Infrastructure Projects*, 51 California Management Review 170 (2009).

As currently presented, the California Water Fix RDEIR/SDEIS consists of a number of delusions and a number of deceptions, which combine to make the project sound less infeasible.

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<sup>23</sup> *See, e.g.* FOR, Comment Letter 7/29/14 at 51 (“The [BDCP EIR/EIS] is inherently incomplete since it fails to include numerous connected actions and other impacts from the project.”); Delta Wetlands Project, Comment Letter 7/29/14 at 2 (“[T]he Delta Wetlands Project is a reasonably foreseeable probable future project that must be included in the cumulative impacts analysis of the Draft EIR/EIS.”); NMFS, Comment Letter 7/29/14 at 43 (“In several respects, the DEIS/DEIR’s analysis of cumulative impacts is significantly flawed, understating the potential environmental impacts of the BDCP in combination with other state and federal projects and programs.”).

***Failure to adequately describe the cumulative impact of the California Water Fix in conjunction with other geographically-related projects***

“[G]eneral statements about [other] projects affecting environmental conditions are insufficient; ‘quantified or detailed data’ about the effects of specific projects is necessary.” *Or. Natural Res. Council Fund. v. Brong*, 492 F.3d 1120, 1134 (9th Cir. 2004). Detailed data is necessary because “[t]he purpose of the cumulative impact analysis is to provide readers with a complete understanding of the environmental effects a proposed action will cause, [and] [s]eparating the cumulative effects discussion into discrete environmental impact statements eliminates the context necessary for readers to comprehend fully the project’s overall environmental effects.” *North Carolina Alliance for Transp. Reform, Inc. v. U.S. Dept. of Transp.*, 151 F.Supp.2d 661, 698 (2001). An EIR cannot simply set forth a conclusory statement that cumulative impacts will be insignificant or minor. *Delaware Riverkeeper Network v. F.E.R.C.*, 753 F.3d 1304, 1319 (D.C. Cir. 2014). An EIR must provide a meaningful analysis of “the overall impact that can be expected if the individual impacts are allowed to accumulate.” *Id.* at 1320.

Similarly, under CEQA, an EIR must discuss a related project when “it [is] reasonable and practical to include the project and...without [its] inclusion, the severity and significance of the cumulative impacts” could not be adequately stated. *Gray v. County of Madera*, 167 Cal. App. 4th 1099, 1127 (2008). Discussion of cumulative impacts “must reflect the severity of the impacts and the likelihood of their occurrence.” *Preserve Wild Santee v. City of Santee*, 210 Cal. App. 4th 260, 277 (2012).

The Delta Wetlands Project provides one example of the failure of the California Water RDEIR/SDEIS to thoroughly discuss the cumulative impact of other projects. As described in the California Water Fix RDEIR/SDEIS:

“[T]he Delta Wetlands project includes the conversion of two Delta islands into reservoir islands that would store water for future supplies. This additional water storage might affect shallow groundwater levels and agricultural drainage patterns and present a potential for groundwater seepage onto adjacent islands or tracts in the Delta.”  
RDEIR/SDEIS 5-67.

More specifically, the Delta Wetlands Project would store approximately 215, 000 acre-feet of fresh water to increase the availability of high-quality water in the Delta for export or outflow. Delta Wetlands Project, Comment Letter 7/29/14 at 3. In combination with the conveyance facilities proposed in the California Water Fix RDEIR/SDEIS, this means that a vast quantity of water that would ordinarily flow naturally into the Delta would instead be diverted into man-made storage and transport systems. These artificial diversions will harm the environment.

Indeed, the California Water Fix RDEIR/SDEIS recognizes that operating the Delta Wetlands Project in conjunction with the proposed conveyance facilities

“would likely result in changes in existing land use in the study area by *permanently* converting land to new uses for purposes such as restoration projects, or water storage. *These changes would be adverse* because of the substantial amount of land likely to be converted to other uses that would create incompatibilities with numerous land use designations, goals and policies set forth by these general plans.” RDEIR/SDEIS 5-139 (emphasis added).

Courts emphasize the importance of discussing cumulative impacts in detail in environmental assessments. *See Kern v. United States BLM*, 284 F.3d 1062, 1075 (9th Cir. 2002). But rather than provide detailed discussion, the California Water Fix RDEIR/SDEIS chooses instead to intersperse brief comments throughout the remainder of this 8,000-plus page

document. This attempt to delude the public renders the RDEIR/SDEIS per se inadequate. DWR and Reclamation cannot offhandedly comment that the California Water Fix will adversely and permanently alter the environment without offering a more complete discussion. The public must be fully apprised of project risks. An “EIR must contain facts and analysis, not just the bare conclusions of the agency.” *Gray v. County of Madera*, 167 Cal. App. 4th 1099, 1109 (2008). EIRs require detail for a very commonsense reason. Without a complete understanding of a project, decision-makers cannot determine whether it would make sense.

“An EIR must include detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project.” *Gray*, 167 Cal. App. 4th at 1109. The current RDEIR/SDEIS lacks the requisite detail. Indeed, it essentially lacks all detail. The issues associated with projects like the Delta Wetlands Project cannot be meaningfully considered because the RDEIR/SDEIS omits all substantive discussion of what those issues are. As a result, readers are left solely to ponder the ominous implications of phrases like —“These changes would be adverse...”

An adequate EIR should not leave the reader with questions. It should provide the reader answers. “To make an informed decision about how or whether to proceed with the proposed projects and to comply with NEPA, an agency must identify their potential combined environmental impacts and make that information available to the public.” *Klamath-Siskiyou Wildlands Center. v. Bureau of Land Management.*, 387 F.3d 989, 991 (9th Cir. 2004). As mentioned above, the RDEIR/SDEIS identifies a number of projects that will have impacts—“flood protection projects, habitat and ecosystem restoration projects, and water conveyance projects”—but gives no indication of what the impacts of those projects will be. RDEIR/SDEIS

at 5-139. This failure to provide required information violates both NEPA and CEQA. Only upon release of a revised Draft EIR/EIS can these defects be cured.

***Failure to describe the cumulative impacts of the Cal Water Fix in conjunction with the SWP and CVP violates CEQA.***

“Cumulative impacts’ refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” Cal. Code Regs. Tit. 14 § 15355. “The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable future projects.” *Id.* An analysis of cumulative impacts is necessary because “[t]he full environmental impact of a proposed...action cannot be gauged in a vacuum.” *Whitman v. Board of Supervisors*, 88 Cal. App. 3d 397, 408 (1978).

DWR and Reclamation are currently attempting to gauge the full environmental impact of the California Water Fix in a vacuum. As described above, the California Water Fix is a project closely connected with SWP and CVP. The California Water Fix will divert more water into each of these projects thereby altering flow schedules and reservation levels. These alterations will require operational adjustments that have the potential to adversely affect a number of threatened habitats and species. *See* [www.usbr.gov/mp/BayDeltaOffice/Documents/lto.html](http://www.usbr.gov/mp/BayDeltaOffice/Documents/lto.html). These foreseeable operational adjustments constitute cumulative impacts that the California Water Fix RDEIR/SDEIS completely fails to address.

“It is vitally important that an EIR avoid minimizing the cumulative impacts. Rather, it must reflect a conscientious effort to provide public agencies and the general public with adequate and relevant detailed information about them.” *Citizens to Preserve the Ojai v. County*



*of Ventura*, 176 Cal. App. 3d 421, 431 (1985). Both public agencies and the general public must know how the projects described in the California Water Fix RDEIR/SDEIS will impact the environment. The need for this information is pressing because SWP and CVP operations have already been shown to adversely affect protected species and critical habitats. *See* Coordinated Long-Term Operation of the Central Valley Project and State Water Project, Draft EIS, ES-3-ES-6. Until the cumulative effects of these three projects are fully analyzed in a single report, public decision-makers will be unable to understand the project's long-term effects.

Courts require that an EIR display a “conscientious effort to provide public agencies and the general public with adequate and relevant detailed information” about cumulative impacts. *San Franciscans for Reasonable Growth v. City and County of San Francisco*, 151 Cal. App. 3d 61, 79 (1984). As a consequence of the projects proposed in the California Water Fix, Reclamation would need to “adjust CVP operations and/or flow requirements, in coordination with SWP operations.” California Water Fix RDEIR/SDEIS at 1-13. Likewise, the California Water Fix is one of the numerous projects “that could be potentially affected by changes in the coordinated long-term operation of the CVP and SWP, or could affect the CVP and SWP operations.” Coordinated Long-Term Operation of the Central Valley Project and State Water Project, Draft EIS at 3-45 and 3-46.

### ***Cumulative Impacts Conclusion***

Though acknowledging the effects these projects will have on one another, the California Water Fix RDEIR/SDEIS conspicuously omits the required “adequate and relevant detailed information” on what these effects will be. This omission is unsurprising. Since day one, the California Water Fix has been driven by water exporters eager to construct the infrastructure necessary to divert more water south. Performing the required analysis of the project's

cumulative impacts would quite clearly frustrate this aim because it would increase the likelihood of rejecting the Water Tunnels project. However exporter interests do not supersede the law. This project requires analysis of the cumulative impacts of the California Water Fix in conjunction with the CVP and SWP in a new Draft EIR/EIS. Until this necessary analysis occurs, any EIR/EIS issued for the California Water Fix will be legally inadequate.

## ***THE LEAD AGENCIES VIOLATE THE CWA***

### ***Summary***

As a result of this massive new diversion ("Water Tunnels project"), enormous quantities of freshwater which now flow through the Sacramento-San Joaquin Delta before being diverted would never even reach the Delta. *The BDCP Delta Water Tunnels project is not a permissible project under the federal Clean Water Act (CWA) because it would degrade water quality in the San Francisco Bay-Delta Estuary. This in turn will adversely impact numerous recognized beneficial uses and public health. The Water Tunnels project will require a Clean Water Act Section 401 certification, it cannot legally be given one since it will not comply with established water quality standards.* We addressed above the failure of the BDCP agencies to develop and consider a range of reasonable alternatives increasing Delta flows by reducing exports

To summarize<sup>24</sup>, ***first***, the Delta Water Tunnels project will violate water quality standards. ***Second***, because the state cannot issue a 401 certification to a Water Tunnels Project

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<sup>24</sup> This letter draws on previous comments in letters submitted timely on the Bay Delta Conservation Plan by Earth Law Center, July 28, 2014, accessible at [http://www.friendsoftheriver.org/site/DocServer/xBDCP\\_Comments\\_Aug\\_2014\\_0003949.pdf?docID=9362](http://www.friendsoftheriver.org/site/DocServer/xBDCP_Comments_Aug_2014_0003949.pdf?docID=9362); California Sportfishing Protection Alliance, No. 2 on Water Quality, July 28, 2014, accessible at [http://www.friendsoftheriver.org/site/DocServer/xBDCP\\_Comments\\_Aug\\_2014\\_0002679.pdf?docID=9241](http://www.friendsoftheriver.org/site/DocServer/xBDCP_Comments_Aug_2014_0002679.pdf?docID=9241); and

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 Water Tunnels project has no defensible antidegradation analysis in either the Draft EIR/EIS or the RDEIR/SDEIS, which is required for compliance with the CWA. And the lack of an adequate antidegradation analysis is yet another reason the State will be unable to issue the 401 certification. **Fourth**, the Water Tunnels project threatens to dictate water quality objectives and prejudice ongoing State Water Resources Control Board's (SWRCB) Bay-Delta Water Quality Control Plan Phase 1 and 2 processes, in violation of the Clean Water Act.<sup>25</sup> **Finally**, the proposed project fails to meet the Clean Water Act's requirement for the Least Environmentally Damaging Practicable Alternative (LEDPA).

It deserves special mention that 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, and state and federal rejection of the Water Tunnels Project will help in realizing this goal.

***The Delta Water Tunnels project will violate water quality standards for flow and other parameters, preventing necessary Clean Water Act Section 401 certification.***

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Environmental Water Caucus, June 11, 2014, accessible at [http://www.friendsoftheriver.org/site/DocServer/xBDCP\\_Comments\\_Aug\\_2014\\_0006165.pdf?docID=9585](http://www.friendsoftheriver.org/site/DocServer/xBDCP_Comments_Aug_2014_0006165.pdf?docID=9585), as well as preliminary review of the Bay Delta Conservation Plan/California WaterFix 2015 RDEIR/SDEIS.

<sup>25</sup> The project on one hand, seeks conditional permits for the north Delta intakes of the Tunnels Project, including gaping exemptions from water quality standards that undermine beneficial uses 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.

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.

Development and implementation of the Water Tunnels project must be accountable to the CWA. Sound planning dictates that implementation of the CWA's requirements should begin *now*, to prevent violations by the Water Tunnels project. One CWA requirement that will arise during Water 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.”<sup>26</sup>

The California Department of Water Resources and the United States Bureau of Reclamation filed an application for a CWA Section 404 dredge and fill permit with the US Army Corps of Engineers on August 24, 2015, and they filed an application for a 401 certification on September 23, 2015 with the State Water Resources Control Board (SWRCB).<sup>27</sup> The 404 permit will be needed from the Army Corps of Engineers because construction of the Water Tunnels project will result in discharges of dredge or fill material into waters of the United States.<sup>28</sup> Section 401 requires that the SWRCB certify that the Corps' Section 404 permit meets

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<sup>26</sup> 33 U.S.C. § 1341(a)(1).

<sup>27</sup> Accessed September 15, 2015, at

<http://www.spk.usace.army.mil/Media/RegulatoryPublicNotices/tabid/1035/Article/616568/spk-2008-00861-california-waterfix-project.aspx>.

<sup>28</sup> “Many of the actions that will be implemented under the Water Tunnels project will result in the discharge of dredged or fill materials into waters of the United States and will need to be authorized by USACE.” Public Draft Plan § 1.3.7.1 (Nov. 2013), available at:

CWA requirements before the permit may be legally issued.<sup>29</sup> State and federal agencies have long recognized the importance of this requirement, meeting several times to discuss it in the context of the preparation of the Water Tunnels project EIR/EIS.<sup>30</sup>

***The project reduces Delta freshwater flow conditions in violation of CWA requirements to fully protect the most sensitive beneficial uses.***

The inadequate flow proposals of the Water Tunnels project EIR/EIS alternatives will ensure that its implementation trips over mandatory compliance with the CWA. Flow regimes that fully protect Delta ecosystems and aquatic species are necessary to avoid this result.

CWA regulations dictate that adopted criteria must protect the “most sensitive” beneficial use.<sup>31</sup> The SWRCB's August 2010 flow criteria report used science to identify the *minimum* amount of unimpaired flow that would protect Delta fish species and habitats. That report thus reflects flows needed to comply with CWA mandates. A new Bay-Delta Plan adopting the Water Tunnels project's proposed flow regimes would fall significantly short of this benchmark, and thereby would fail to protect the most sensitive beneficial uses as required by the CWA.

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[http://baydeltaconservationplan.com/Libraries/Dynamic\\_Document\\_Library/Public\\_Draft\\_BDCP\\_Chapter\\_1\\_-\\_Introduction.sflb.ashx](http://baydeltaconservationplan.com/Libraries/Dynamic_Document_Library/Public_Draft_BDCP_Chapter_1_-_Introduction.sflb.ashx). This is no less true of intake construction of the "California WaterFix" version (Alternative 4A) of the Water Tunnels project.

<sup>29</sup> “No license or permit shall be granted until the certification required by this section has been obtained or has been waived as provided in the preceding sentence. No license or permit shall be granted if certification has been denied by the State, interstate agency, or the Administrator, as the case may be.” 33 U.S.C. § 1341(a)(1).

<sup>30</sup> As reflected by U.S. EPA in its comments on these discussions: “[a]lthough there is no statutory requirement that the NEPA document prepared for an HCP under the Endangered Species Act be used as the basis for permits and certifications required under CWA §404 to authorize and implement the project, EPA recognizes the importance of coordination in federal review. Toward this end, EPA and the Corps have met with the project proponent on numerous occasions over the past several years in the interest of using the BDCP EIS/EIR to inform the Corps’ 404 regulatory decisions. Despite these efforts, significant unresolved issues remain about the scope of analysis for the proposed project, the level of detail required to trigger the consultation process and federal permitting, and the structure of a comprehensive permitting framework for the proposed project.” U.S. EPA, “EPA's Comments on BDCP ADEIS,” p. 6 (July 03, 2013), available at: [www2.epa.gov/sites/production/files/documents/july3-2013-epa-comments-bdcp-adeis.pdf](http://www2.epa.gov/sites/production/files/documents/july3-2013-epa-comments-bdcp-adeis.pdf).

<sup>31</sup> 40 CFR § 131.11 (“For waters with multiple use designations, the criteria shall support the most sensitive use”); see also 40 CFR §131.6.

Indeed, instead of improving flow conditions in the Delta, the Water Tunnels project will actually *increase* average exports<sup>32</sup> and *reduce* already inadequate Delta outflow in many months. Specifically, on average for February through June, the Water Tunnels project would *decrease* Delta outflow by about 1,000 cubic feet per second and also *decrease* the median Delta outflow by about 2,000 cfs.<sup>33</sup> For the period of January through June (the time period during which the August 2010 Flow Criteria from the SWRCB called for an increase of outflow to 75 percent of unimpaired Delta outflow), the BDCP *decreases* outflow. Water Tunnels project modeling shows that long-term average Sacramento River flows below the north Delta intake diversions would *decrease* between 6 to 38 percent from current and future flows without the Tunnels project, and in wet years river flows would decrease between 7 and 42 percent. Overall, monthly lower Sacramento River flows are projected by "California WaterFix" to decrease between 20 and 24 percent. (See Attachments 1, 2, and 3 to this letter.)<sup>34</sup>

Decreased flows and increased residence times will cause the designated beneficial uses of migratory and rare fish species to decline, according to Water Tunnels Project RDEIR/SDEIS modeling results. Through-Delta survival rates of the juvenile and smolt life stages of winter-run, spring-run, fall-run and late-fall-run Chinook salmon are all expected to decrease relative to both existing conditions and the No Action Alternative. (See Attachment 4 to this letter.) These fish

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<sup>32</sup> See Public Draft Plan, App. 5B, Fig. 5.B.4- 4, available at: [http://baydeltaconservationplan.com/Libraries/Dynamic\\_Document\\_Library/Public\\_Draft\\_BDCP\\_EIREIS\\_Appendix\\_5B\\_-\\_Responses\\_to\\_Reduced\\_South\\_of\\_Delta\\_Water\\_Supplies.sflb.ashx](http://baydeltaconservationplan.com/Libraries/Dynamic_Document_Library/Public_Draft_BDCP_EIREIS_Appendix_5B_-_Responses_to_Reduced_South_of_Delta_Water_Supplies.sflb.ashx). See also BDCP/California WaterFix, RDEIR/SDEIS, 2015, Section 4.3.1, Figures 4.3.1-15, -16, -18, -19, -20, and -21.

<sup>33</sup> See Public Draft Plan, App. 5C, Attachment 5.C.A, Table C.A- 41, available at: [http://baydeltaconservationplan.com/Libraries/Dynamic\\_Document\\_Library/Public\\_Draft\\_BDCP\\_Appendix\\_5C\\_-\\_Part\\_5\\_-\\_Flow\\_Passage\\_Salinity\\_and\\_Turbidity.sflb.ashx](http://baydeltaconservationplan.com/Libraries/Dynamic_Document_Library/Public_Draft_BDCP_Appendix_5C_-_Part_5_-_Flow_Passage_Salinity_and_Turbidity.sflb.ashx).

<sup>34</sup> Estimates derived by Restore the Delta from graphical analysis interpolating data in Figures 4.3.2-7 and 4.3.2-8 from the Recirculated Draft EIR/EIS, Section 4.3. See Attachment 1 to this letter. See also Appendix B, Tables B.7-28 (downstream of north Delta intakes), B.7-30 (Sacramento River at Rio Vista), B.7-32 (Delta outflow), and B.7-34 (San Joaquin River at Vernalis), pp. B-357 to B-370. These tables show that most changes are *decreases* in flow of 5 percent or more compared with Existing Conditions *and* the No Action Alternative (especially along the Sacramento River downstream of the north Delta intakes). Only slight improvements occur in just a handful of months and water year types. Most San Joaquin River flows at Vernalis between February and September in most water year types decrease greater than 5 percent relative to existing conditions as well.

species are "rare and endangered species" beneficial uses as well as "migration of aquatic organisms" beneficial uses. These reduced flows will decrease the size of critical open water estuarine habitat beneficial uses for state and federally-listed species like Delta smelt and longfin smelt, both of which count also as rare and endangered beneficial uses under the current Bay-Delta Water Quality Control Plan.<sup>35</sup> The U.S. EPA expressed serious concerns about the EIR/EIS Administrative Draft's (ADEIS) proposed decrease in outflow "despite the fact that several key scientific evaluations by the federal and State agencies indicate that *more* outflow is necessary to protect aquatic resources and fish populations."<sup>36</sup> The Water Tunnels project's flow regime will violate the beneficial uses of affected waterways and therefore violate water quality objectives. DWR and the Bureau of Reclamation must drop the Water Tunnels project to protect all designated beneficial uses.

***The project increases Delta contamination, resulting in violations of pollutant criteria.***

Reduced through-Delta flows will stagnate water conditions and cause Delta water quality to deteriorate badly. (See Attachment 5 to this letter, citing model results supporting this analysis.) RDEIR/SDEIS modeling documents find that the project will violate standards for boron, bromide, chloride, electrical conductivity, nitrate, dissolved organic carbon, mercury, and selenium.<sup>37</sup> While these constituents' concentrations will *increase* in western and central Delta locations, as well as Contra Costa Water District's Pumping Plant No. 1, their concentrations are expected to *decrease* in export waters of the North Bay Aqueduct in Barker Slough, and Jones Pumping Plant and Banks Pumping Plant in the south Delta. These results hold for both changes

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<sup>35</sup> State Water Resources Control Board, *Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary*, December 13, 2006, p. 9.

<sup>36</sup> U.S. EPA, "EPA Comments on Administrative Draft EIR/EIS, III Aquatic Species and Scientific Uncertainty, Federal Agency Release," p. 4 (July 18, 2013) (emphasis added), available at: <http://www2.epa.gov/sites/production/files/documents/july3-2013-epa-comments-bdcp-adeis.pdf>.

<sup>37</sup> RDEIR/SDEIS, Appendix B.

compared with existing conditions as well as the No Action Alternative, the latter of which factors out most sea level rise and climate change impacts.

***Because it cannot meet water quality standards, the Water Tunnels Project cannot obtain the required Clean Water Act 401 Certification it needs for a 404 permit to build the project.***

To obtain CWA Section 401 certification, the project at issue must meet several CWA requirements, including the requirement to meet water quality standards under CWA Section 303.<sup>38</sup> If these requirements are met, then either the Regional Water Quality Control Boards (RWQCB) or the SWRCB may grant Section 401 certification.<sup>39</sup>

As implementing EPA regulations assert,<sup>40</sup> Section 401 certification “shall” include “a statement that there is a reasonable assurance that the activity will be conducted in a manner which will not violate applicable water quality standards.”<sup>41</sup> In other words, the state *cannot* grant Section 401 certification to a project if there is no reasonable assurance that it will meet water quality standards. The examination of whether a project violates water quality standards does not include “balancing” factors such as economic considerations – a project either meets water quality standards, or it does not.<sup>42</sup> Furthermore, as confirmed by the 1994 U.S. Supreme Court decision in *PUD No. 1 of Jefferson County v. Washington Department of Ecology* (*PUD*

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<sup>38</sup> 33 U.S.C. § 1341(a)(1), (d). A state agency may also condition, deny or waive certification under certain circumstances. See also 33 U.S.C. § 1341(a)(1)- (2), and 33 U.S.C. § 1341(d). According to § 401(d), certification “shall set forth any effluent limitations and other limitations ... necessary to assure that any applicant” complies with certain provisions of the CWA. The Supreme Court in *PUD No. 1 of Jefferson County v. Washington Department of Ecology* held that this includes CWA §303, since § 301 incorporates it by reference. *PUD No. 1 of Jefferson County v. Washington Department of Ecology*, 511 U.S. 700, at 713- 715 (1994) (PUD No. 1).

<sup>39</sup> In California, the Regional Water Quality Control Boards are responsible for granting water quality certification, unless the project occurs in two or more regions, in which case the SWRCB is responsible. See SWRCB, “Instructions for Completing the Clean Water Act Section 401 Water Quality Certification Application” (Jan. 2005), available at: [www.swrcb.ca.gov/centralcoast/water\\_issues/programs/401wqcert/docs/instruct\\_401\\_wq\\_cert\\_app.pdf](http://www.swrcb.ca.gov/centralcoast/water_issues/programs/401wqcert/docs/instruct_401_wq_cert_app.pdf).

<sup>40</sup> The Supreme Court held that the EPA’s interpretation is consistent with the CWA in *PUD No. 1*.

<sup>41</sup> 40 CFR § 121.2(a)(3); *PUD No. 1* at 712.

<sup>42</sup> 40 CFR § 131.11 (“For waters with multiple use designations, the criteria shall support the most sensitive use”); see also 40 CFR §131.6. As noted by the state Supreme Court, Porter- Cologne “cannot authorize what federal law forbids”; that is, California cannot allow for the “balancing away” of the most sensitive beneficial uses in a reliance on Porter- Cologne rather than the Clean Water Act. *City of Burbank v. State Water Resources Control Bd.*, 35 Cal.4th 613, 626, 108 P.3d 862 (2005).



*No. 1*), CWA Section 401 certification considers the impacts of the *entire* activity – not just impacts of any particular discharge that triggers Section 401.<sup>43</sup> For the Water Tunnels project to receive Section 401 certification, the *entire project* must show it can be built and operated so as to meet all water quality standards. This it will not do, as we show in this letter and its attachments, because water quality standards cannot be met under the currently-proposed Water Tunnels project flow regimes and related effects on estuarine water quality and beneficial uses.

The CWA states that water quality standards “shall consist of the designated uses of the navigable waters involved *and* the water quality criteria for such waters based upon such uses.”<sup>44</sup> In other words, “a project that does not comply with a designated [*i.e.*, beneficial] use of the water does not comply with the applicable water quality standards.”<sup>45</sup> This fundamental CWA mandate does not change when the impact on beneficial uses arises from altered flow. The CWA was established specifically to “restore and maintain the chemical, *physical*, and biological integrity of the Nation’s waters” – not solely to regulate “pollutants.”<sup>46</sup> The U.S. Supreme Court addressed this issue directly in *PUD No. 1*, stating that:

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<sup>43</sup> *PUD No. 1*, 511 U.S. 700 (1994). *PUD No. 1* established that so long as there is a discharge, the state can regulate an activity as a whole under §401. *PUD No. 1* at 711- 712.

<sup>44</sup> 33 U.S.C. 1313(c)(2)(A) (emphasis added); *PUD No. 1* at 704. In addition to the uses to be protected and the criteria to protect those uses, water quality standards include an antidegradation policy to ensure that the standards are “sufficient to maintain existing beneficial uses of navigable waters, preventing their further degradation.” *PUD No. 1* at 705; 33 U.S.C. 1313(d)(4)(B); 40 CFR § 131.6. EPA regulations add that “[e]xisting instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.” 40 CFR §131.12.

<sup>45</sup> *PUD No. 1*, 511 U.S. at 715. *See also* 40 CFR § 131.3(b) (U.S. EPA stating that “[w]hen criteria are met, water quality will *generally* protect the designated use,” [emphasis added] indicating that numerical criteria do not always by themselves protect a designated use). Recognized beneficial uses in the Bay-Delta Estuary include, but are not limited to, agricultural supply (AGR), groundwater recharge (GWR), Water Contact Recreation (REC-1), Non-Contact Water Recreation (REC-2), Migration of Aquatic Organisms (MIGR), Spawning, Reproduction, and/or Early Development (SPWN), Estuarine Habitat (EST), and Rare, Threatened, or Endangered Species (RARE).

<sup>46</sup> 33 U.S.C. § 1251(a). Emphasis added.

Petitioners also assert more generally that the Clean Water Act is only concerned with water 'quality,' and does not allow the regulation of water 'quantity.' This is an artificial distinction.<sup>47</sup>

The Court specifically took note of CWA Sections 101(g) and 510(2), which address state authority over the allocation of water as between users. The Court found that these provisions “do not limit the scope of water pollution controls that may be imposed on users who have obtained, pursuant to state law, a water allocation.”<sup>48</sup> This conclusion is supported by the “except as expressly provided in this Act” language of Section 510(2), which conditions state water authority; and by the legislative history of Section 101(g), which allows for impacts to individual water rights as a result of state action under the CWA when “prompted by legitimate and necessary water quality considerations.”<sup>49</sup> Accordingly, these CWA provisions are not impediments to California’s implementation of its CWA mandate to ensure compliance with water quality standards, *including* within the context of flows.

As noted above, in its August 2010 flow criteria report, the Water Board found that “[t]he best available science suggests that current flows are insufficient to protect public trust resources,” and that “[r]ecent Delta flows are insufficient to support native Delta fishes for

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<sup>47</sup> *PUD No. 1*, 511 U.S. at 719. In *PUD No. 1*, the U.S. Supreme Court took up the question of whether Washington state had properly issued a CWA Section 401 certification imposing a minimum stream flow requirement to protect fish populations. The Supreme Court held that conditioning the certification on minimum stream flows was proper, as the condition was needed to enforce a designated use contained in a state water quality standard. *Id.* at 723. In reaching this decision, the court noted that the project as proposed did not comply with the designated use of “[s]almonid [and other fish] migration, rearing, spawning, and harvesting,” and so did not comply with the applicable water quality standards. *Id.* at 714.

<sup>48</sup> *Id.* at 720.

<sup>49</sup> *Id.* “See 3 Legislative History of the Clean Water Act of 1977 (Committee Print compiled for the Committee on Environment and Public Works by the Library of Congress), Ser. No. 95–14, p. 532 (1978) (‘The requirements [of the Act] may incidentally affect individual water rights. . . . It is not the purpose of this amendment to prohibit those incidental effects. It is the purpose of this amendment to insure that State allocation systems are not subverted and that effects on individual rights, if any, are prompted by legitimate and necessary water quality considerations’).” See also Memorandum from U.S. EPA Water and Waste Management and General Counsel to U.S. EPA Regional Administrators, “State Authority to Allocate Water Quantities – Section 101(g) of the Clean Water Act” (Nov. 7, 1978), available at: [http://water.epa.gov/scitech/swguidance/standards/upload/1999\\_11\\_03\\_standards\\_waterquantities.pdf](http://water.epa.gov/scitech/swguidance/standards/upload/1999_11_03_standards_waterquantities.pdf).

today's habitats.”<sup>50</sup> However, flow regimes proposed by the current Water Tunnels project rely on water quality (including flow) objectives that have been failing to protect Delta ecosystem and aquatic species beneficial uses for the last 15 years or more. These include: Water Right Decision 1641 (D-1641)<sup>51</sup>; the 2006 San Francisco Bay/Sacramento-San Joaquin Delta Estuary Water Quality Control Plan; the 2009 NMFS Biological Opinion (BiOp); and the 2008 USFWS BiOp.

Further, the Water Tunnels project notably incorporates “bypass flows” that ostensibly establish the minimum amount of water that must flow downstream of the planned north Delta intake. Rather than protecting Delta flow, the Water Tunnels project reduces average annual Sacramento River flow downstream of the North Delta intakes.<sup>52</sup> Reduced flows downstream of the north Delta intakes extend all the way past Rio Vista as well.<sup>53</sup> Because it fails to put needed flows back into failing waterways, the Water Tunnels project will violate water quality standards by failing to protect sensitive beneficial uses. These include “rare, threatened or endangered species habitat,” “estuarine habitat,” “spawning, reproduction, and/or early development,” and other sensitive beneficial uses.<sup>54</sup> Chinook salmon, Central Valley steelhead, sturgeon and lamprey all migrate and spawn in this area, with Delta smelt and longfin smelt likely spawning in the lower Sacramento River, or in hydraulically connected adjacent channels. Factoring out climate change effects, juvenile and salmon smolt survival rates through the Delta to Chipps

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<sup>50</sup> SWRCB, 2010 Delta Flow Criteria Report, pp. 2, 5. Accessible at

[http://www.swrcb.ca.gov/waterrights/water\\_issues/programs/bay\\_delta/deltaflow/docs/final\\_rpt080310.pdf](http://www.swrcb.ca.gov/waterrights/water_issues/programs/bay_delta/deltaflow/docs/final_rpt080310.pdf).

<sup>51</sup> D- 1641 requires the SWP and CVP to meet flow and water quality objectives, including specific outflow requirements, an export/import ratio, spring export reductions, salinity requirements, and, in the absence of other controlling restrictions, a limit to Delta exports of 35 percent total inflow from February through June and 65 percent inflow from July through January.

<sup>52</sup> See Attachment 1 in this letter, above, and Public Draft Plan § 5.3.1.1, available at:

[http://baydeltaconservationplan.com/Libraries/Dynamic\\_Document\\_Library/Public\\_Draft\\_BDCP\\_Chapter\\_5\\_-\\_Effects\\_Analysis.sflb.ashx](http://baydeltaconservationplan.com/Libraries/Dynamic_Document_Library/Public_Draft_BDCP_Chapter_5_-_Effects_Analysis.sflb.ashx). See Also BDCP Draft EIR/EIS Chapter 3, *Description of Alternatives*, Table 3-17, p. 3-186.

<sup>53</sup> See RDEIR/SDEIS, 2015, Appendix B, Table B.7-30, pp. B-361 to B-362.

<sup>54</sup> State Water Resources Control Board, *Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta*, December 13, 2006, p. 9.

Island decrease for each run of salmon under the flow regimes put forward by proponents of the Water Tunnels project.<sup>55</sup> The Water Tunnels Project will thus fail as a set of flow regimes that could support Section 401 certification for necessary Section 404 permits.

Actions that “reasonably protect”<sup>56</sup> rather than “protect” the beneficial use are insufficient. If multiple beneficial uses are at stake, adopted flow criteria must protect the *most sensitive* beneficial use (*i.e.*, they cannot “balance” away uses) and must be based on science.<sup>57</sup> As the state Supreme Court found, Porter-Cologne balancing provisions<sup>58</sup> that provide only “reasonable” protection “cannot authorize what federal law forbids.”<sup>59</sup> The more protective CWA water quality standard requirements take precedence over weaker Porter-Cologne language; ecosystem and species needs cannot—and must not—be balanced away.

EPA commented last year on the Bay Delta Conservation Plan and its draft EIR/EIS that “[b]ecause the location of X2 [the estuarine habitat water quality objective] is closely tied to freshwater flow through the Delta, the proposed project would have a strong influence on this parameter, yet the Draft EIS does not analyze each alternative's impacts on aquatic life in the context of this relationship.”<sup>60</sup> The Bay-Delta Water Quality Control Plan's estuarine habitat

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<sup>55</sup> By “factoring out climate change effects,” we refer to the Water Tunnels project proponents' preference for environmental impact comparisons between the No Action Alternative and Alternative 4A (either Scenarios H3 or H4). This comparison reflects the future migration prospects of these fish with and without the proposed Water Tunnels Project. Even by their preferred comparison of the Water Tunnels project with the No Action Alternative, juveniles and smolts have lower survival rates through the Delta to Chipps Island.

<sup>56</sup> SWRCB, “Comments on the Second Administrative Draft Environmental Impact Report/Environmental Impact Statement for the Bay Delta Conservation Plan,” p. 1 (July 05, 2013), available at: [baydeltaconservationplan.com/Libraries/Dynamic\\_Document\\_Library/State\\_Water\\_Resouces\\_Control\\_Board\\_Comments\\_on\\_BDCP\\_EIR- EIS\\_7- 5- 2013.sflb.ashx](http://baydeltaconservationplan.com/Libraries/Dynamic_Document_Library/State_Water_Resouces_Control_Board_Comments_on_BDCP_EIR- EIS_7- 5- 2013.sflb.ashx) (emphasis added).

<sup>57</sup> EPA regulations state that “criteria must be based on sound scientific rationale and must contain sufficient parameters or constituents to protect the designated use. For waters with multiple use designations, the criteria shall support the most sensitive use.” See 40 CFR §131.11; see also 40 CFR §131.6.

<sup>58</sup> Calif. Water Code § 13000.

<sup>59</sup> *City of Burbank v. State Water Resources Control Bd.*, 35 Cal.4th 613, 626, 108 P.3d 862 (2005) (citing the Supremacy Clause).

<sup>60</sup> USEPA, “Draft Environmental Impact Statement for the Bay Delta Conservation Plan, San Francisco Bay Delta, California (CEQ# 20130365), August 26, 2014, p. 5. Accessible at [http://www.friendsoftheriver.org/site/DocServer/8-26-14\\_EPA\\_Cmmnt\\_on\\_BDCP.pdf?docID=9539](http://www.friendsoftheriver.org/site/DocServer/8-26-14_EPA_Cmmnt_on_BDCP.pdf?docID=9539).

water quality objective will likely be violated by the Water Tunnels Project as well. In the RDEIR/SDEIS and the Draft EIR/EIS there is no modeling of how changes in X2, the Delta's estuarine habitat water quality objective may affect a variety of estuarine species. X2, which measures the approximate center of the estuary's low salinity zone relative to the Golden Gate, was shown last year in BDCP modeling to migrate upstream under the Tunnels' influence relative to existing conditions and the No Action Alternative.<sup>61</sup> The modeled upstream migration of X2 means that critical habitat for estuarine species will shrink, especially relative to the No Action Alternative. Species abundance and X2 are negatively related: when X2 moves further from the Golden Gate, species abundances typically decrease as the size of the Low Salinity Zone decrease (with lower flows), with few exceptions.<sup>62</sup> This remains true of the RDEIR/SDEIS, in which no new modeling is conducted.

The SWRCB has indicated tentative interest in designating subsistence fishing as a beneficial use statewide, including in the Delta.<sup>63</sup> We would certainly welcome such a beneficial use designation in the Delta as elsewhere because protection of the most sensitive ecological and estuarine beneficial uses will also protect subsistence fishing as a beneficial use. Humans are connected to these other beneficial uses, no less so in the Bay-Delta Estuary.

The Water Tunnels Project will also violate numerous pollutant criteria mentioned above with drastic consequences for public health and vitality of the region's ecosystems and water-dependent economic sectors like tourism, recreation, agriculture, and subsistence fishing. On this

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<sup>61</sup> See Figure 7, p., 66 of Environmental Water Caucus comments on Bay Delta Conservation Plan, June 11, 2014; accessible online at <http://ewccalifornia.org/reports/bdcpcomments6-11-2014-3.pdf>.

<sup>62</sup> Panel Summary Report on Workshop on Delta Outflows and Related Stressors, May 5, 2014. Accessible online at <http://deltacouncil.ca.gov/sites/default/files/documents/files/Delta-Outflows-Report-Final-2014-05-05.pdf>. This report identifies "key papers" in which the relationships of X2, Delta outflow, and species abundances are anchored.

<sup>63</sup> Email from Esther Tracy of State Water Resources Control Board, Office of Public Participation, to Andria Ventura, Clean Water Action, "State Water Resources Control Board Beneficial Uses," May 6, 2014, forwarded to Colin Bailey of Environmental Justice Coalition for Water, thence to Tim Strohane, Environmental Water Caucus consultant. Tracy's message primarily concerns subsistence fishing by California Indian Tribes.

score, the Water Tunnels Project will further violate water quality standards, precluding the SWRCB from certifying the project under Clean Water Act Section 401.

In summary: implementation of the Water Tunnels project will require a CWA Section 404 permit from the Army Corps of Engineers, which it cannot receive unless the state issues a CWA Section 401 certification. The certification in turn cannot be legally issued unless the project as a whole (*i.e.*, rather than the individual discharge mandating the 404 permit) meets water quality standards, which includes meeting beneficial uses designed to protect Delta species and ecosystems. The Water Tunnels project fails across the board; we provide more details of this failure in Attachment 5 to this letter.

***There is no defensible anti-degradation analysis.***

A cornerstone of the State Water Board and Regional Water Board's regulatory authority is the Antidegradation Policy (Resolution 68-16), which is included in the Basin Plans as an appendix. However, the Water Tunnels project Draft EIR/EIS and RDEIR/SDEIS fail to discuss or analyze constituents which will "degrade" water quality. These documents do not evaluate whether the designated beneficial use is degraded and what it means for CWA compliance.

Section 101(a) of the CWA, the basis for the antidegradation policy, states that the objective of the Act is to "restore and maintain the chemical, biological and physical integrity of the nation's waters." Section 303(d)(4) of the CWA carries this further, referring explicitly to the need for states to satisfy the antidegradation regulations at 40 CFR § 131.12 before taking action to lower water quality. These regulations (40 CFR § 131.12(a)) describe the federal antidegradation policy and dictate that states must adopt both a policy at least as stringent as the federal policy and implementing procedures.

The CWA requires the *full* protection of identified beneficial uses. The Federal Antidegradation Policy, as required in 40 CFR 131.12 states, “The antidegradation policy and implementation methods shall, at a minimum, be consistent with the following: (1) Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.” The Delta is classified as a Tier II, “high quality,” waterbody by US EPA and the SWRCB. EPA Region 9’s guidance on implementing antidegradation policy states, “All actions that could lower water quality in Tier II waters require a determination that existing uses will be fully maintained and protected.”<sup>64</sup>

California's antidegradation policy is described in the State Antidegradation Guidance, SWRCB Administrative Procedures Update 90-004, 2 July 1990 (“APU 90-004”) and EPA Region IX, (“Region IX Guidance”), as well as Water Quality Order 86-17.<sup>65</sup>

California’s Antidegradation Policy (Resolution 68-16) requires that:

- Existing high quality water will be maintained until it has been demonstrated that any change will be with the maximum benefit to the people of the State.
- The change will not unreasonably affect present and anticipated beneficial uses.
- The change will not result in water quality less than prescribed in the policies.
- Any activity which produces a waste or increased volume or concentration will be required to meet waste discharge requirements using the best practicable treatment or control of the discharge necessary to assure that neither pollution nor nuisance will occur

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<sup>64</sup> EPA, Region 9, Guidance on Implementing the Antidegradation Provisions of 40 CFR 131.12, page 7.

<sup>65</sup> “Guidance on Implementing the Antidegradation Provisions of 40 CFR 131.12” (3 June 1987).

and the highest water quality with maximum benefit to the people of the state will be maintained.

While California's Antidegradation Policy requires that, "[t]he change will not unreasonably affect present and anticipated beneficial uses and the change will not result in water quality less than prescribed in the policies," the Federal Antidegradation Policy requires a "determination that existing uses will be fully maintained and protected."<sup>66</sup>

The Water Tunnels project will reduce flows and result in poorer water quality for a number of constituents, including boron, bromide, chloride, electrical conductivity, nitrate, organic carbon, some pesticides, mercury and selenium. The Delta is currently impaired for many of the constituents that will increase under the proposed alternative. Several water quality constituents are detailed in Attachment 5 where degradation is expected should the Water Tunnels project be constructed and operated.

Even if DWR and the Bureau of Reclamation provide an adequate antidegradation analysis of the Water Tunnels project, the point remains that they cannot move forward on a 401 certification from the State Water Resources Control Board if any water quality standards are not met. The antidegradation analysis is supposed to ensure they comply with any and all water quality standards, but there is clear evidence they cannot and will not do so.

***Water Tunnels project operational modeling criteria scenarios prejudice potential new water quality objectives for the Bay-Delta Estuary from the State Water Resources Control Board.***

A large but wholly implicit assumption through the Water Tunnels project and its Draft 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 Water Tunnels project to move

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<sup>66</sup> Draft BDCP EIR/EIS, 2013, page 8-408.



forward. The setting sections of Chapter 5, 6, 7, and 8 (comprising water supply, surface water, groundwater, and water quality) contain no descriptions of the existing water quality objectives as they apply to flow and operational actions by the state and federal water facilities in the Delta. The Draft EIR/EIS Executive Summary last year only hints at this matter, titling one section “New Rules for North Delta Diversions,” but does not address this matter, making no mention of the regulatory regime change that would apparently be required of the SWRCB.<sup>67</sup> 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.<sup>68</sup>

Such changes to Delta flows and hydrodynamics must be evaluated through public review before the SWRCB, the only state body authorized to change water quality standards. We are concerned that the Tunnels 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 Water 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.<sup>69</sup>

Further complicating this picture is the role and regulation by SWRCB of “Real-Time Operations [RTOs].”<sup>70</sup> Water Tunnels proponents acknowledge that RTOs cannot be modeled.<sup>71</sup>

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<sup>67</sup> Bay Delta Conservation Plan, Draft EIR/EIS, November 2013, *Executive Summary*, Section ES.9.1.4, “New Rules for North Delta Diversions,” pp. ES-52 to ES-53.

<sup>68</sup> RDEIR/SDEIS, Section 4.1, pp. 4.1-11 through 4.1-13.

<sup>69</sup> This stance is also consistent with the Delta Protection Act of 1959.

<sup>70</sup> Real-time operational decisions "are expected to be needed during at least some part of the year at the Head of Old River gate and the north and south Delta diversion facilities." *RDEIR/SDEIS*, p. 4.1-13, lines 17-18. Real-time operations are defined in Conservation Measure 1 of the Bay Delta Conservation Plan, November 2013, Section 3.4.1.4.5, *Real-Time Operational Decision-Making Process*, p. 3.4-26, lines 14-18: "[R]eal-time operational decision-making process (real-time operations [RTOs]) allows for short-term adjustments in operations within the range of CM1 [that is, Water Tunnels operating] criteria..., in order to maximize water supply for SWP and CVP relative to the [BDCP] Annual Operating Plan and its quarterly updates subject to providing the necessary

Not only can they not be modeled, RTOs themselves will be difficult, if not impossible to regulate and monitor by state authorities when the most sensitive beneficial uses have admittedly uncertain threshold conditions that should not be exceeded.

But the Water Tunnels proponents push use of RTOs as "silver bullets" for gaps in mitigation that ought to protect listed fish species but which come up short. This implies that project operators will be given broad discretion over project operations to make "short-term adjustments"—possibly to the usurpation of established laws and regulations in the name of optimizing or maximizing Delta exports relative to Delta inflows, water quality objectives, and Delta outflow, and potentially contrary to the SWRCB's role as the sole body with authority to change and enforce water quality objectives.

For example, real-time operations and modeling were employed in 2014 and 2015 along the upper Sacramento River by the Bureau of Reclamation to manage and control temperature conditions, but failed to prevent large scale losses of winter-run and spring-run Chinook salmon while SWRCB staff and officials could only stand by helplessly. Real-time operations can create situations in which project operators can behave as they see fit, and apologize later. That is

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protections for covered species." The Water Tunnels project's documents expect retention of BDCP's use of RTO teams focused on each Delta facility and coordinating with each other. We note that the RDEIR/SDEIS does not specify that post hoc descriptions of RTOs would be made public through such an Annual Operating Plan.

<sup>71</sup> This is most explicitly noted in BDCP Appendix 5.C, Attachment 5C.A, *CALSIM II and DSM2 Modeling Results for the Evaluated Starting Operations Scenarios*, pp. 5C.A-157 to 162. Old and Middle River flow real-time operations are an example, p. 5C.A-157, lines 31-44. "The magnitude of the export restrictions [relating to Old and Middle River flows] cannot be simulated accurately with CALSIM because the limits will be adaptively specified by the USFWS smelt working group, based on real-time monitoring of fish and turbidity and temperature conditions. The assumed restrictions provide a representative simulation compared to D-1641 conditions without any OMR restrictions." Moreover, real-time operations pose dramatic uncertainties for South Delta export operations with real-time adaptive operations in place. "If the least restrictive OMR flow of -5,000 cfs were allowed for 6 months (January-June), a maximum of 1,800 taf per year could be pumped (assuming the San Joaquin River diversion to Old River satisfied the 35% of the net Delta depletion that is south of the OMR flow stations. But because of the 1,500 cfs limit on exports in April and May (2009 NMFS BiOp), the maximum exports would be 1,400 taf per year. If the OMR restriction was reduced to -2,500 cfs for the 6 months (with 1,500 cfs in April and May), a total of 780 taf could be pumped from the South Delta. This is a very dramatic reduction for the CVP and SWP exports which historically have exported about half (45%) of the total exports during these months. This uncertainty in the potential south Delta exports is a consequence of the adaptive management framework for the 2008 USFWS BiOp and 2009 NMFS BiOp actions regarding OMR flow." Since BDCP contemplates real-time operations in several other Delta and Yolo Bypass locations, uncertainties will compound for planning operations, exports, and outflows.

unacceptable now that listed fish species are so close to extinction. We doubt that real-time operations will have sufficient margins of error to prevent catastrophe.

Instead, adjustments to water quality flow objectives should err on the side of precaution. Designated beneficial uses should be protected as required under the CWA and its implementing regulations. The most sensitive of them will be endangered further by Water Tunnels project operating criteria that reduce and reverse Sacramento River flows, and bring more polluted San Joaquin River water to Delta channels. The precautionary principle must come to the fore in state and federal fisheries and water project operations management.<sup>72</sup> *Sound policy preventing extinction and restoring and enhancing the integrity of Bay-Delta Estuary waters must come before new plumbing and south of Delta export deliveries.*

This is an appeal to state and federal officials that they realistically assess how to protect fully all beneficial uses under the CWA before reasonable quantities of Delta exports can be determined and permitted. The Water Tunnels project as proposed would put plumbing and exports first, which is not an acceptable, lawful or reasonable prioritization.

***The Proposed Project is not the Least Environmentally Damaging Practicable Alternative (LEDPA)***

Finally, the Tunnels Project also fails to meet another Section 404 requirement, “[t]he requirement [under CWA § 404(b)(1)...that the project proponent must demonstrate that the project is the [Least Environmentally Damaging Practicable Alternative] LEDPA.”<sup>73</sup> “A proposed action is not the LEDPA simply because a federal agency is a partner and chooses that proposed action as its preferred alternative.”<sup>74</sup> The Tunnels Project appears to be the *most*

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<sup>72</sup> Peter Montague, accessed online 11 September 2015 at [http://www.precaution.org/lib/pp\\_def.htm](http://www.precaution.org/lib/pp_def.htm).

<sup>73</sup> USEPA, Preliminary Administrative Draft Comments for the Bay Delta Conservation Plan DEIR/S p. 2, April 26, 2012.

<sup>74</sup> EPA, BDCP DEIS Corrections and Additional Editorial Recommendations, p. 1, August 27, 2014.

environmentally damaging alternative possible. It most definitely is not the least damaging, and therefore, it is not the LEDPA.

Over two years ago, EPA pointed out that “Chapter 8 of the [Administrative Draft EIS] ADEIS indicates that, as proposed, all project alternatives of the BDCP would result in adverse effects to one or more beneficial uses within the affected water bodies.”<sup>75</sup> EPA also explained that “The DEIS should sharply distinguish between alternatives and evaluate their comparative merits, consistent with 40 CFR 1502.14(b).”<sup>76</sup>

Over one year ago, EPA explained to state agencies that:

Other reasonable alternatives could be developed by incorporating a suite of measures, including water conservation, levee maintenance, and decreased reliance on the Delta. Such alternatives would be consistent with the purpose and need for the project, as well as with the California Bay-Delta Memorandum of Understanding among Federal Agencies and the Delta Reform Act of 2009.<sup>77</sup>

The “alternatives” of the Water Tunnels project presented in the Draft EIR/EIS and the RDEIR/SDEIS are nothing more than peas out of the same pod. As we explained in our joint letter of July 22, 2015, there has been a complete failure on the part of the Water Tunnels proponents to develop and consider a reasonable range of alternatives. That failure also includes refusal to consider and develop the Environmental Water Caucus *Responsible Exports Plan*, updated to *A Sustainable Water Plan for California*, that the Caucus provided to Water Tunnels proponents on a silver platter almost 3 years ago—as well as failure to consider and develop “The ‘Portfolio Approach’ developed by a diverse set of stakeholders . . . one attempt to place

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<sup>75</sup> EPA’s Comments on BDCP ADEIS, p. 3, July 3, 2013.

<sup>76</sup> *Id.* p. 2.

<sup>77</sup> EPA Detailed Comments on the Draft Environmental Impact Statement for the Bay Delta Conservation Plan; August 26, 2014, p. 13.

Delta water management into the larger context of facilities investments and integrated operations.”<sup>78</sup>

There is more. As we explained in our joint letter of September 9, 2015 (pp. 9-10), there has been a complete failure on the part of Water Tunnels proponents to obtain and present the Reasonable and Prudent Alternatives (RPA) required under the Endangered Species Act.

Under the NEPA Regulations, “This [alternatives] section is the heart of the environmental impact statement.” The alternatives section should “sharply” define issues and provide a clear basis for choice among options by the decision-maker and the public. 40 C.F.R. § 1502.14. 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.”<sup>79</sup>

Operation of the Water Tunnels would have enormous adverse environmental impacts causing and worsening violations of water quality standards. We understand that the exporters and their supporters wish to take enormous quantities of water away from the Delta upstream. But we have a government of laws, not of persons. It is time either to drop this horrendously damaging and expensive project or follow the law whether certain interests want to do so or not. If the project is not dropped, it is time to prepare a new Draft EIR/EIS for public and decision-maker review that presents some actual—alternatives—that would not include the Water Tunnels and that would finally begin to increase flows through the Delta. The range of reasonable alternatives required by NEPA in the new Draft EIR/EIS must include the Reasonable and Prudent Alternatives (RPA) produced pursuant to the ESA and the Least Environmentally Damaging Practicable Alternative (LEDPA) pursuant to the CWA.

### ***CWA Conclusion***

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<sup>78</sup> *Id.*

<sup>79</sup> 40 C.F.R. § 1502.9(a).

The long-term decline of the San Francisco Bay Delta Estuary is a story of our lost connection with nature. Once a pristine ecosystem and the West Coast's largest estuary—a rich, biodiverse habitat of unspoiled grasslands, riparian forests, willow thickets, and other features, with an abundance of native fish species such as salmon—the Delta has suffered tremendously from the misguided belief that nature can be endlessly exploited and degraded. As a first step towards recovery, we must enhance flow, which is essential for aquatic species populations, the larger health of the Delta, and Delta communities.

The Water Tunnels project instead reinforces the objective of increasing Delta exports, while reducing Delta outflow and San Francisco Bay inflow. As such, it fails to achieve its purpose of conserving the Delta ecosystem and recovering threatened and endangered species. The Water Tunnels project also will violate the CWA, by harming designated beneficial uses of water (especially the most sensitive uses like migrating and spawning rare fish) and violating pollutant numeric criteria. The Water Tunnels will lead to the degradation of water for human use by millions in the region of the San Francisco Bay-Delta Estuary.

Fortunately, we can still restore and enhance the integrity and health of the Bay-Delta Estuary by adopting (at a minimum) sufficient flows to support healthy fish species and Delta habitats. Moreover, the time is overdue to establish a comprehensive instream water rights program that ensures the longevity of the Delta ecosystem and species, and serves as a model for the state as a whole.

***THE REFUSAL OF THE LEAD AGENCIES TO DISCLOSE IN THE BDCP/WATER FIX DRAFTS OBVIOUS SIGNIFICANT ADVERSE ENVIRONMENTAL IMPACTS ON WATER QUALITY, WATER QUANTITY, FISH, FISH HABITAT AND PUBLIC HEALTH IS ARBITRARY AND RENDERS THE DRAFTS USELESS FOR INFORMING THE PUBLIC ABOUT THE ADVERSE IMPACTS OF THE PROJECT***

***Summary***

The Delta Water Tunnels would divert enormous quantities of freshwater that presently flow through the Sacramento River, sloughs, and the Delta before being diverted for export from the South Delta. Due to the new points of diversion north of the Delta, freshwater that presently contributes to water quality, water quantity, fish, fish habitat, and public health by flowing through the Delta would instead flow through massive Tunnels no longer providing benefits within the lower river, sloughs, and the Delta. *This is obvious.*

But the RDEIR/SDEIS actually claims there would be no adverse impacts under NEPA or CEQA from the Delta losing all that freshwater flow on water supply or water quality (with almost no exceptions), or on fish and aquatic resources. (RDEIR/SDEIS Table ES-9, pp. ES-41-60; Appendix A, ch. 31, Table 31-1, pp. 31-3 through 31-8). The BDCP/Water Fix Drafts are supposed to be environmental full disclosure documents. Whether from project-consultant bias or orders from above, it is arbitrary and unreasonable to falsely claim that taking significant quantities of freshwater flows away from the Delta does not have significant adverse environmental impacts on Delta water supply, water quality, fish, and fish habitat. The freshwater *is* the water supply for the Delta and *is* the habitat for the endangered and threatened species of salmon and other fish.

The sole exceptions to the blanket denial of numerous and obvious adverse environmental impacts on water quality from the operation of the preferred Alternative 4A Water Tunnels are WQ-11 “effects on electrical conductivity concentrations resulting from facilities operations and maintenance,” and WQ-32 “effects on Microcystis Bloom Formation Resulting from Facilities Operations and Maintenance.” (RDEIR/SDEIS Appendix A, ch. 31, Table 31-1, pp. 31-3, 31-4). However, in the Executive Summary, even these two water quality impacts are not admitted to be adverse. (RDEIR/SDEIS Table ES-9, pp. ES-44, 45). Two tiny bits of truth

survived in the Appendix but were eliminated from the Executive Summary. In any event, the Draft EIR/EIS and RDEIR/SDEIS are completely worthless in terms of providing accurate information and analyses for informed public and decision-maker review.

To be blunt, denial of the adverse impacts of taking freshwater flows away from the Delta for the Water Tunnels is even more absurd than denial of human-caused climate change. *Fish need water.*

***The Draft EIR/EIS and RDEIR/SDEIS are so Inadequate and Conclusory in Nature that Meaningful Public Review and Comment were Precluded***

An interested person or organization, or decision-maker has been furnished 48,000 pages of documents with central features being the false, arbitrary, and unreasonable denial instead of honest admission of obvious environmental impacts resulting from Water Tunnels operations on Delta water quality, water quantity, fish, and fish habitat. Earlier sections of these comments have summarized some of the adverse impacts on water quality, water quantity, endangered fish species, and fish habitat either admitted in other portions of the environmental documents or pointed out by expert public agencies such as the EPA and environmental organizations.

CEQA defines “significant effect on the environment” to mean “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, *water* . . . flora, fauna . . . and objects of historic or aesthetic significance.” CEQA Guidelines, 14 Cal. Code Regs §15382. To anyone but a self-interested project booster or one following orders from above, taking away substantial freshwater flows from a Delta already in crisis is an adverse change in the physical conditions within the area affected by the project.



Also under CEQA, “substantial evidence” does not include: “Argument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate . . .” 14 Cal. Code Regs § 15384. In addition to the false RDEIR/SDEIS findings being obviously argument and clearly inaccurate, there have also been such findings as the EPA expert determination that the Water Tunnels “would not protect beneficial uses for aquatic life, thereby violating the Clean Water Act. Total freshwater flows will likely diminish in the years ahead as a result of drought and climate change. Continued exports at today’s prevailing levels would, therefore, result in even lower flows through the Delta in a likely future with less available water.” (EPA Review of Draft BDCP EIS at p. 2, August 26, 2014). There is only argument, narrative, and clearly inaccurate statements in the RDEIR/SDEIS about these impacts. There is not the supporting substantial evidence required by law.

Under CEQA, “Decision-makers must, under the law, be presented with sufficient facts to ‘evaluate the pros and cons of supplying the amount of water that the [project] will need.’” *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova*, 40 Cal.4<sup>th</sup> 412, 432 (2007). Here, in violation of law, the decision-makers and also the public have been provided with claimed pros but virtually none of the cons involved in supplying the enormous amounts of water that would be diverted away from the Sacramento River and Delta into the Water Tunnels.

The NEPA Regulations also provide help in determining whether an impact “significantly” affects the environment. “Significantly as used in NEPA requires considerations of both context and intensity . . .” 40 C.F.R. § 1508.27. Considerations of context include “the affected region, the affected interests, and the locality.” § 1508.27(a). The Delta is recognized already as being threatened by reductions in freshwater flows through the Delta and the Delta

includes at least five listed endangered or threatened fish species and designated critical habitats for each of these crashing fish populations.

Considerations of intensity refer to the “severity of impact.” § 1508.27(b). Each of the ten subsections in § 1508.27(b) cry out that the impacts falsely denied by the lead agencies are significant, severe, and adverse. These ten subsections are addressed as follows:

“Impacts that may be both beneficial and adverse . . .” § 1508.27(b)(1). The claim that developing the new northern conveyance would reduce adverse impacts from the existing southern pumps on fish furnishes no excuse to evade disclosing the significant adverse impacts of the new conveyance on water quality, water quantity, fish, and fish habitat.

“The degree to which the proposed action affects public health or safety.” § 1508.27(b)(2). As shown above in the Clean Water Act/water quality portion of these comments, the worsening of CWA violations would adversely affect public health and safety.

“Unique characteristics of the geographic area such as proximity to . . . prime farmlands, wetlands . . . or ecologically critical areas.” § 1508.27(b)(3). The taking away of significant quantities of freshwater flows upstream from the Delta would pull in greater salinity from San Francisco Bay adversely impacting the prime farmlands of the Delta. The Delta has already been declared to be an ecologically critical area and, again, consist of designated critical habitats for no fewer than five endangered and threatened fish species. California has determined by law in the Delta Reform Act that the Delta is “in crisis and existing Delta policies are not sustainable.” Water Code, § 85001(a).

“The degree to which the effects on the quality of the human environment are likely to be highly controversial.” § 1508.27(b)(4). The Water Fix Delta Water Tunnels are the most controversial public works project in the history of the state of California. This project in its

previous form as the “peripheral canal” was voted down by a statewide referendum in June 1982. One reason the environmental documents falsely deny obvious adverse environmental impacts, hide alternatives increasing flows by reducing exports, and refuse to post contrary information and views from the public and other public agencies is *because* this project is so controversial.

“The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.” § 1508.27(b)(5). The experts, for example, of the Delta Independent Science Board have commented extensively on the degree of uncertainty in the environmental documents.

"The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.” § 1508.27(b) (6). Whether the Delta Tunnels are approved will in significant part determine future CVP and SWP operations and also represents a decision in principle that flows through the Delta will not be increased by reducing exports. Billions of dollars would not be spent to build the massive Water Tunnels unless the intent is to use them for the purpose for which they are intended.

"Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided determining an action temporary or by breaking it down into small component parts." § 1508.27(b) (7). In other words, the impacts resulting from the Water Tunnels must be considered together with impacts resulting from future CVP and SWP operations.

“The degree to which the action . . . may cause loss or destruction of significant scientific . . . resources.” § 1508.27(b)(8). Endangered species are addressed in the next paragraph. One does not know ahead of time what species may contain a cure for cancer or dementia.

"The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973." § 1508.27(b)(9). In *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova*, 40 Cal. 412, 449 (2007), the California Supreme Court determined that “We do not consider this response [similar to the denials of the obvious here] substantial evidence that the loss of stream flows would have no substantial effect on salmon migration. Especially given the sensitivity and listed status of the resident salmon species, the County’s failure to address loss of Cosumnes River stream flows in the Draft EIR ‘deprived the public . . . of meaningful participation [citation omitted] in the CEQA discussion.’”<sup>80</sup> The Court required recirculation of the Draft EIR. We have summarized above in the ESA and CWA/water quality portions of these comments some of the impacts Water Tunnels operations would have on at least five endangered or threatened fish species and their designated critical habitats. Of course these impacts are significant adverse impacts. Yet the Executive Summary falsely concludes in all cases that they are not. (RDEIR/SDEIS Table ES-9, pp. ES-47 through 60, Aqua-NAA-1 through 16, Aqua-1 through 217).<sup>81</sup> Until about April 2015, the claim being made in the Draft EIR/EIS had been that while there would be adverse impacts of Water Tunnels operations on the fish and their habitat,

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<sup>80</sup> The Court noted that a "potential substantial impact on endangered, rare or threatened species is per se significant." 40 Cal.4<sup>th</sup> at 449 citing Guidelines section 14 Cal. Code Regs §15065(a).

<sup>81</sup> CEQA requires that a lead agency of a project “should reduce paperwork by emphasizing the portions of the environmental impact report that are useful to decision-makers and the public and reducing emphasis on background material.” 14 C.C.R. § 15006(s) (1983). The BDCP/Cal WaterFix is in excess of 48,000 pages and the entire report fails to explain the inconsistencies between the information provided in the detail explanatory sections (ie. Section 4.3.3) and the information produced on the information tables (ie. Table ES-9).

much of that would be mitigated by the provision of wetland restoration. Now however, the "65,000 acres of tidal wetland restoration" has been eviscerated down to "59 acres." (RDEIR/SDEIS p. ES-17). Yet impacts previously either determined to be adverse or undetermined are now determined to not be significant or adverse. What has happened is that with NMFS and USFWS no longer being co-lead agencies, Reclamation and DWR have not been restrained from turning out environmental documents reeking with false denials of numerous significant adverse environmental impacts.

"Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment." § 1508.27(b)(10). As shown above, the action threatens violation of several laws imposed for protection of the environment including the ESA, CWA, and the Delta Reform Act.

We understand that the exporters want to take the water away from the Delta and that their captive agencies, Reclamation and DWR, want to give them the water. But these desires afford no license to churn out Draft environmental documents under NEPA and CEQA that arbitrarily, unreasonably, and falsely deny the numerous, severe, adverse impacts that diversion of water for the Water Tunnels would have on Delta water quality, water quantity, endangered and threatened fish species, designated critical habitat, water quality violations, and public health.

The NEPA Regulations require that:

The draft statement must fulfill and satisfy to the fullest extent possible the requirements established for final statements in section 102(2)(C) of the Act. 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. 40 C.F.R. § 1502.9(a).

The Draft EIR/EIS and RDEIR/SDEIS with their arbitrary, unreasonable, and false denials of numerous, severe adverse environmental impacts resulting from Water Tunnels operations on the Delta are so inadequate as to preclude meaningful analysis. To comply with NEPA the lead agencies must either drop the Water Tunnels project or prepare and circulate a revised draft of the impacts analysis portions of the documents as well as the alternatives portions.

The CEQA guidelines require that:

‘Significant new information’ requiring recirculation include, for example, a disclosure showing that:

- (1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
- (2) . . .
- (3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project’s proponents decline to adopt it.
- (4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded. 14 Code Cal. Regs § 15088.5(a)(1), (3), and (4).

As is the case with NEPA, CEQA requires that unless the Water Tunnels project is dropped, a new Draft EIR/EIS sufficient to provide for meaningful public review and comment must be prepared and circulated.

### ***Preclusion of Meaningful Public Review Conclusion***

The lead agencies must either drop the Water Tunnels project or provide an informative and honest Draft EIS/EIR that will afford a basis for meaningful public review and comment and decision-maker review.

***THE AGENCIES VIOLATED CEQA BY FAILING TO PROVIDE ADEQUATE INFORMATION REGARDING THE ENVIRONMENTAL IMPACTS OF WATER SUPPLY CHANGES IN THE SWP AND CVP DELIVERIES***

CEQA states that “the lead agency must consider the whole of an action, not simply its constituent parts, when determining whether it will have a significant environmental effect.” 14 C.C.R. § 15003(h). The information pertaining to the effects of changes in SWP and CVP deliveries is pertinent for assessing the environmental impacts associated with all ecosystems along and in the Sacramento River and Delta Watershed.

According to the BDCP table labeled “ES-9 Summary of BDCP/California WaterFix RDEIR/SDEIS Impacts and Mitigation Measures,” the effects of water transfers on water supply are unknown. BDCP /Cal WaterFix RDEIR/SDEIS ES-41(2015). The previous version of the project, specifically the project issued in November 2013, contained information indicating that the impacts after mitigation would be “no impact” under CEQA and “no effect” under NEPA. Bay Delta Conservation Plan DEIR/DEIS ES-61 (2013). However, both the CEQA and NEPA impact analyses are now deemed to be “not applicable” and the reasoning supporting that finding was that the “findings were not made for these due to the approach in this analysis.” Bay Delta Conservation Plan /Cal WaterFix RDEIR/SDEIS ES-41(2015).

There is no evidentiary support to uphold sections WS-2 and WS-3; the sections dedicated to describing the effects of water supply. See Id. WS-1 through WS-3 are absent in section 5.2.2.1 of the RDEIR/SDEIS 2015 BDCP and consequently a reference is only made to water supply beginning at test WS-4 (which continues to WS-6), sections that were not referenced whatsoever in the executive summary Table ES-9, but are present in the BDCP’s water supply section (starting on section 5 page 5-43). Bay Delta Conservation Plan/Cal WaterFix RDEIR/SDEIS Section 5.2.2.1 5-43 -5-46 (2015). The only information referencing section WS-2 and WS-3 are in sections 4.3.1, 4.4.1, and 4.5.1 (one section for each of the new alternatives); however, these sections are broad and not very descriptive and are written nearly

identically to one another. Reference to the data for section 4.3.1, 4.4.1, and 4.5.1 is located in Appendix 5A, *BDCP EIR/S Modeling Technical Appendix* of the Draft EIR/EIS. The original draft BDCP would not cover plans 4A, 2D, or 5A since those specific plans were not in existence at the time *of the draft EIR/EIS*.

***THE CALIFORNIA WATER FIX VIOLATES CEQA BY FAILING TO PROVIDE  
ADEQUATE MITIGATION MEASURES IN THE RDEIR/SDEIS***

CEQA requires projects to “identify ways that environmental damage can be avoided or significantly reduced” and assists “to prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.” (Cal. Code Regs., tit. 14, § 15002(a)(2)-(3) (LexisNexis, Lexis Advance through Reg. 2015). Within the RDEIR/SDEIS, CEQA requires each public agency to “...indicate the manner in which those significant effects can be mitigated or avoided.” Cal. Pub. Res. Code § 21002.1(a) (LexisNexis, Lexis Advance through Chapter 807 of the 2015 Legis. Sess.).

The RDEIR/SDEIS Executive Summary provides all of the mitigation measures proposed, and lack thereof. The RDEIR/SDEIS violates this requirement because they do not provide mitigation measures for every “significant” avoidable damage to the environment that they have identified. For instance, the Executive Summary Table ES-9 Summary of BDCP/California WaterFix RDEIR/SDEIS Impacts and Mitigation Measures lists potential significant impacts not having a proposed mitigation measure: three significant impacts do not have proposed mitigation (page ES-42), two significant impacts (ES-47), one significant impact (ES-48), one significant impact (page ES-51), one significant impact (page ES-59), nine significant impacts (page ES-61 – ES-63), 10 significant impacts (page ES-64), nine significant



impacts (page ES-65), nine significant impacts (page ES-66), 10 significant impacts (page ES-67), to name a few.

Although many significant effects have a mitigation proposal, CEQA requires the agency to “indicate the manner in which *those* significant effects can be mitigated or avoided.” Cal. Pub. Res. Code § 21002.1(a) (LexisNexis, Lexis Advance through Chapter 807 of the 2015 Legis. Sess.). Although it does not explicitly say “all” significant effects, the word “those” would have the same effect. In common usage, we would read that to the effect of every subject. Thus, the agency has not identified a mitigation measure for *every* significant environmental effect.

### ***CONCLUSION***

The BDCP/Water Fix NEPA and CEQA processes have so far been useless to the citizens, taxpayers, and ratepayers of California as well as abandonment of the responsibilities of trustees and stewards for our future. The process started nine years ago in 2006. Standing out among the numerous violations of law are the continued refusal to present for public review and comment, and decision-maker review, the required range of reasonable alternatives in a Draft EIR/EIS and to honestly disclose the adverse environmental impacts of the Water Tunnels. A range of reasonable alternatives would include alternatives that would finally began to increase flows through the Delta by reducing exports and that would not include new upstream conveyance. If you have any questions, please call or email Robert Wright at (916) 442-3155x207 or [bwright@friendsoftheriver.org](mailto:bwright@friendsoftheriver.org) .

Sincerely,

/s/ E. Robert Wright  
Senior Counsel

/s/William A. Foster  
Summer Law Intern

/s/ Rath “Mony” Chim  
Summer and Fall Law Intern

/s/Neil Negrete  
Summer Law Intern

## Attachment 1 Modeled Flow Reductions below the North Delta Intakes on the Lower Sacramento River

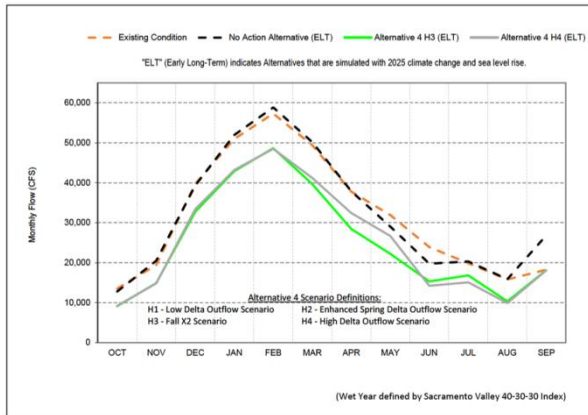


Figure 4.3.2-7  
Sacramento River Flow downstream of North Delta Intakes for Alternative 4A, Average Wet Years

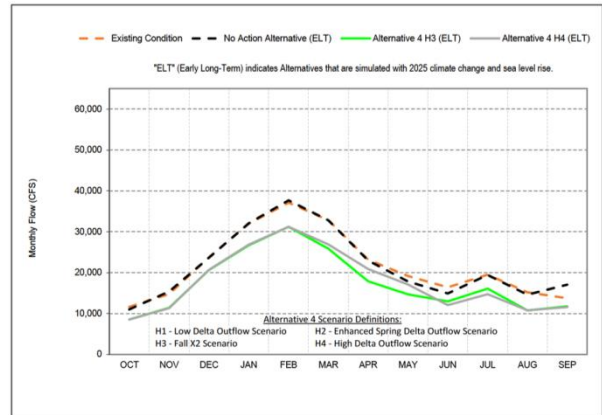


Figure 4.3.2-8  
Sacramento River Flow downstream of North Delta Intakes for Alternative 4A, Long-Term Average

Source: Bay Delta Conservation Plan/California Water Fix, Recirculated Draft EIR/Supplemental Draft EIS, July 2015.

### Monthly Long-Term Average Estimates of Flow for Lower Sacramento River Downstream of North Delta Intakes Interpolated from Figure 4.3.2-8

	Existing Condition s	No Action Alternativ e	Alt 4A - Operational Scenario H3	Alt 4A - Operational Scenario H4	Percent Change from EC to H3	Percent Change from EC to H4	Percent Change from NAA to H3	Percent Change from NAA to H4
October	11,667	11,333	8,667	8,667	-26%	-26%	-24%	-24%
November	15,333	16,000	11,667	11,667	-24%	-24%	-27%	-27%
December	23,333	23,333	20,667	20,667	-11%	-11%	-11%	-11%
January	36,000	36,000	25,667	25,667	-29%	-29%	-29%	-29%
February	37,000	37,667	31,333	31,333	-15%	-15%	-17%	-17%
March	33,000	33,000	26,333	27,333	-20%	-17%	-20%	-17%
April	23,333	23,667	14,667	21,000	-37%	-10%	-38%	-11%
May	19,000	18,000	14,667	17,000	-23%	-11%	-19%	-6%
June	16,667	15,000	13,000	12,000	-22%	-28%	-13%	-20%
July	19,333	19,333	16,000	14,667	-17%	-24%	-17%	-24%
August	15,333	15,000	11,000	11,000	-28%	-28%	-27%	-27%
September	14,000	17,000	11,667	11,667	-17%	-17%	-31%	-31%

**Monthly Long-Term Average Estimates of Flow for Lower Sacramento River Downstream of North Delta Intakes  
Interpolated from Figure 4.3.2-8**

	<b>Existing Condition s</b>	<b>No Action Alternativ e</b>	<b>Alt 4A - Operational Scenario H3</b>	<b>Alt 4A - Operational Scenario H4</b>	<b>Percent Change from EC to H3</b>	<b>Percent Change from EC to H4</b>	<b>Percent Change from NAA to H3</b>	<b>Percent Change from NAA to H4</b>
Average	22,000	22,111	17,111	17,722	-22%	-20%	-23%	-20%

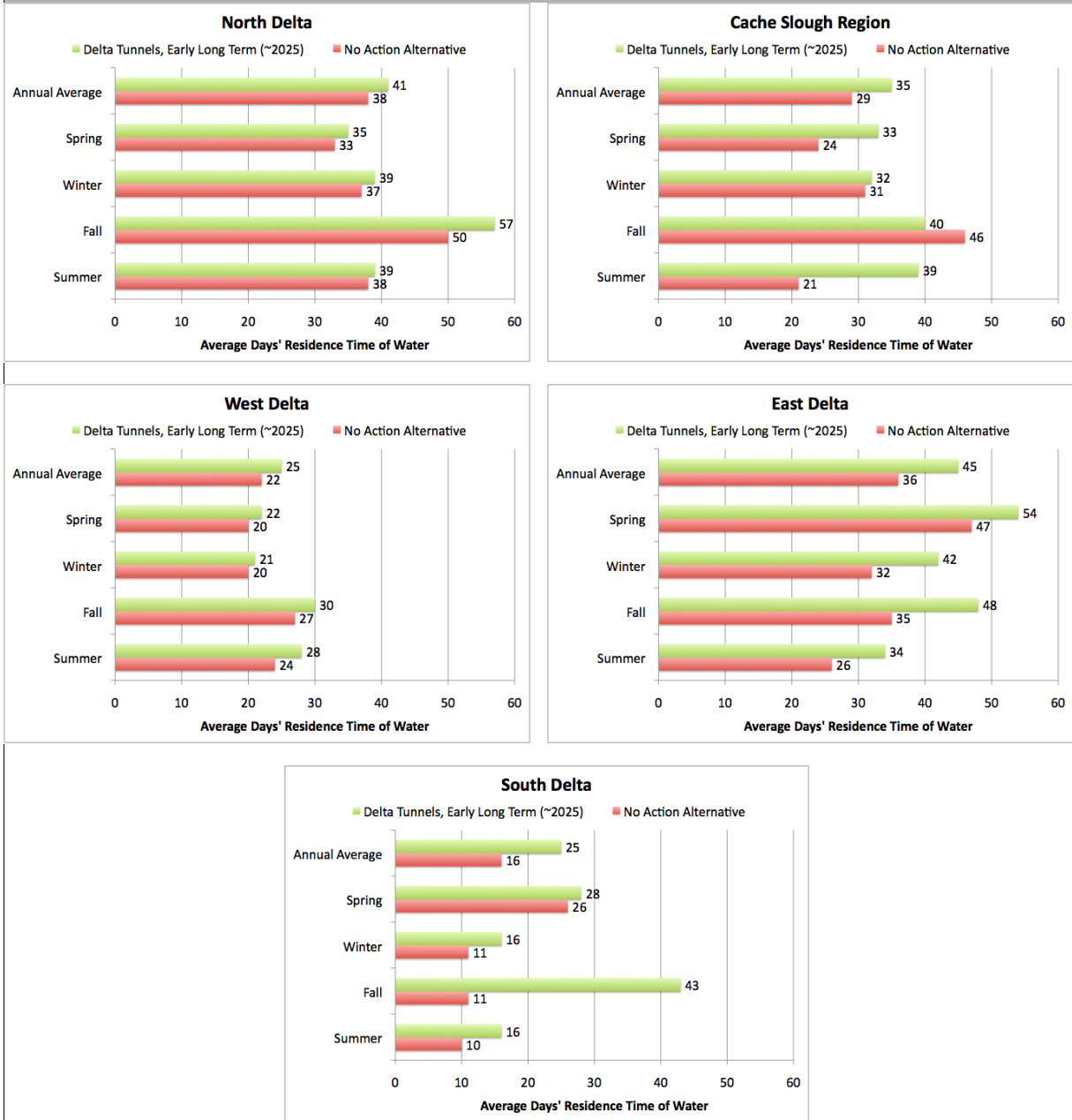
Source: Bay Delta Conservation Plan/California Water Fix Recirculated Draft EIR/EIS, Section 4.3, Figure 4.3.2-8; Restore the Delta.

**Monthly Wet Year Average Estimates of Flow for Lower Sacramento River Downstream of North Delta Intakes  
Interpolated from Figure 4.3.2-7**

	<b>Existing Condition s</b>	<b>No Action Alternativ e</b>	<b>Alt 4A - Operational Scenario H3</b>	<b>Alt 4A - Operational Scenario H4</b>	<b>Percent Change from EC to H3</b>	<b>Percent Change from EC to H4</b>	<b>Percent Change from NAA to H3</b>	<b>Percent Change from NAA to H4</b>
October	13,333	12,667	9,000	9,000	-33%	-33%	-29%	-29%
November	20,000	21,000	14,667	14,667	-27%	-27%	-30%	-30%
December	40,000	40,000	33,333	34,000	-17%	-15%	-17%	-15%
January	51,333	52,000	42,667	43,333	-17%	-16%	-18%	-17%
February	56,667	55,333	48,000	48,000	-15%	-15%	-13%	-13%
March	49,333	50,000	39,333	41,333	-20%	-16%	-21%	-17%
April	38,333	38,333	28,667	32,667	-25%	-15%	-25%	-15%
May	32,000	28,667	22,000	26,667	-31%	-17%	-23%	-7%
June	24,000	20,000	14,667	14,000	-39%	-42%	-27%	-30%
July	20,000	20,333	16,667	15,000	-17%	-25%	-18%	-26%
August	16,000	16,000	10,667	10,000	-33%	-38%	-33%	-38%
September	18,000	25,333	18,000	18,000	0%	0%	-29%	-29%
Average	31,583	31,639	24,806	25,556	-23%	-21%	-24%	-22%

Source: Bay Delta Conservation Plan/California Water Fix Recirculated Draft EIR/EIS, Section 4.3, Figure 4.3.2-7; Restore the Delta.

## Attachment 2 Average Residence Time of Water in Delta Regions, Alternative 4 (and 4A) and No Action Alternative, 2015 Analysis

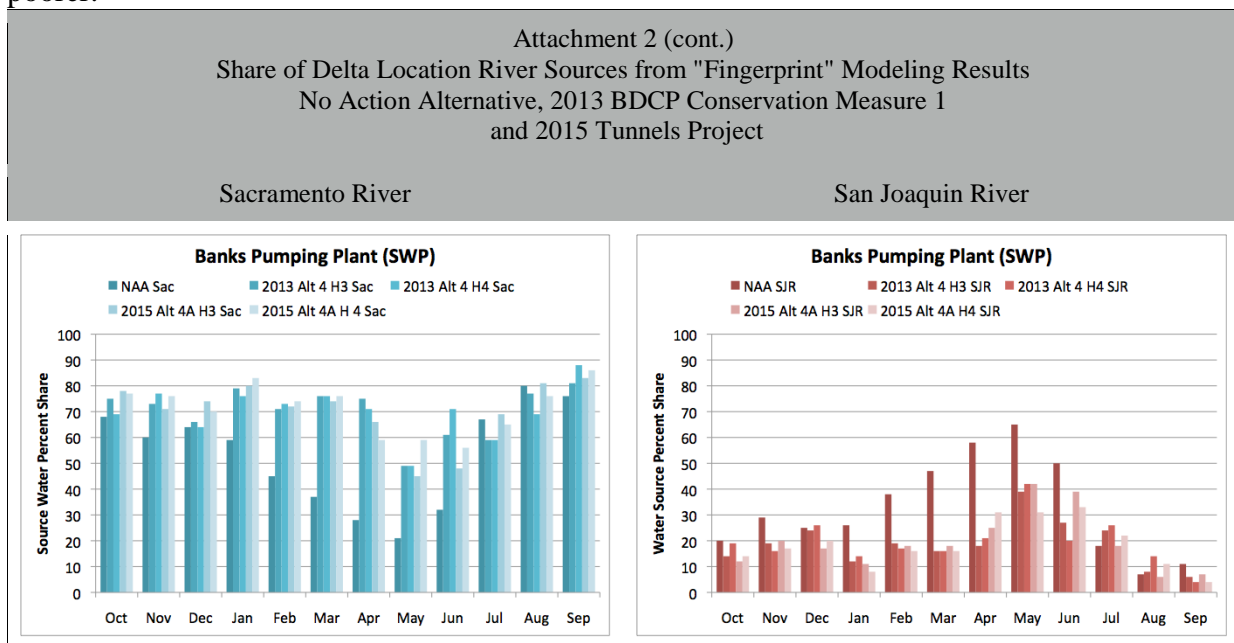


Source: Bay Delta Conservation Plan RDEIR/SDEIS, 2015, Table 8-60a, p. 8-82.

Reducing flows in the Sacramento River is not a "waterfix," certainly not for the Bay-Delta Estuary. This will increase residence time of water in the Bay-Delta Estuary relative to current conditions and to a future without the Tunnels; salinity violations and will increase with

the Water Tunnels Project as well.<sup>82</sup> (See Attachments 2 and 3.) DWR and its partners opted not to model residence time behavior for Alternative 4A and the other "California WaterFix" alternatives (2D and 5A). However, the water source "fingerprinting" analyses in both last year's and this year's modeling appendices show replacement of good quality Sacramento River water with lower-flow and poorer quality San Joaquin River water, so it is reasonable, in the absence of more definitive modeling, that relative to existing conditions residence times will increase with the Tunnels project under both Alternatives 4 and 4A. This is borne out in our analysis of criteria pollutants in Attachment 5.

The lower-flowing and more polluted San Joaquin River will make up greater fractions of water flowing into the western Delta, Franks Tract, and at Contra Costa Water District's Rock Slough intakes.<sup>83</sup> Meanwhile, better quality Sacramento River water diverted into the Tunnels will improve state and federal export water quality, making Delta water quality elsewhere the poorer.<sup>84</sup>



<sup>82</sup> RDEIR/SDEIS, Section 4.3.4, p. 4.3.4-67, lines 4-12.

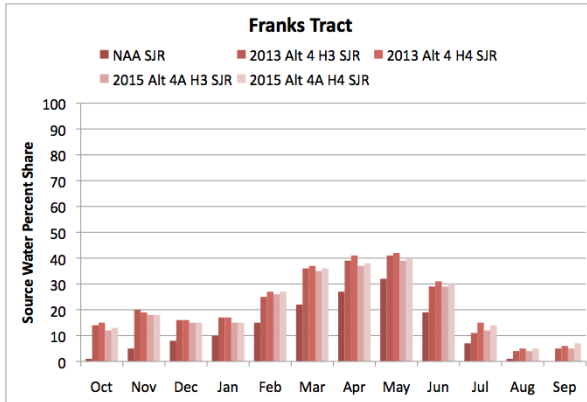
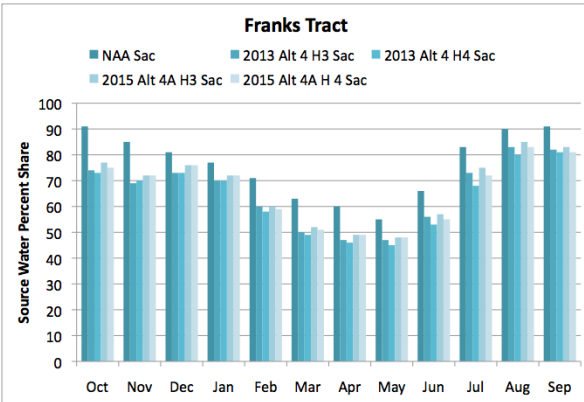
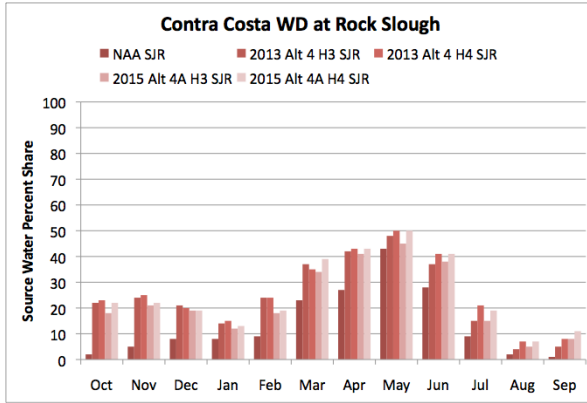
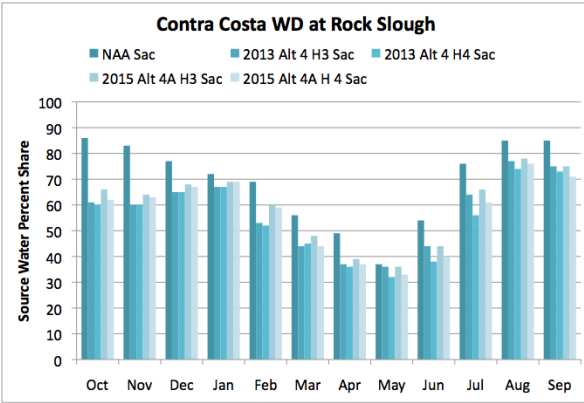
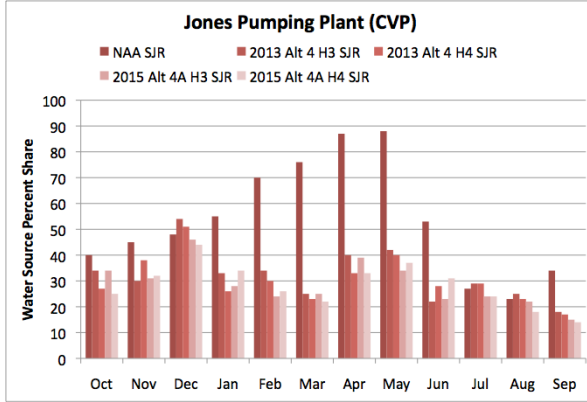
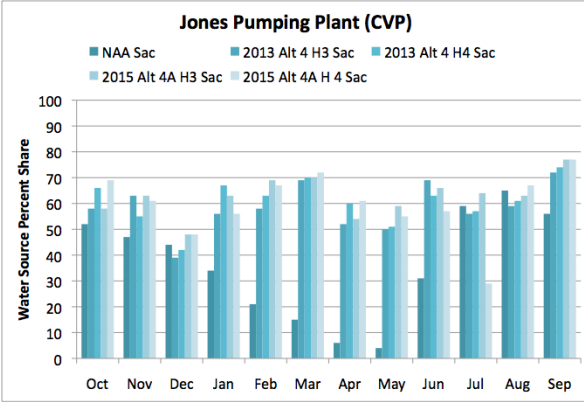
<sup>83</sup> This reasoning is confirmed by source-water fingerprint modeling provided in both the 2013 Draft EIR/EIS and the 2015 RDEIR/SDEIS. The source water fingerprint modeling results are found in Bay Delta Conservation Plan, Draft EIR/EIS/ November 2013, Appendix 3D, pp. 147-168, 8D-171 to 8D-192; and in Bay Delta Conservation Plan, Recirculated Draft EIR/Supplemental Draft EIS, Appendix B, pp. B-191 to B-256.

<sup>84</sup> Bay Delta Conservation Plan Draft EIR/EIS, November 2013, Appendix 8D (figures for Alternative 4, Scenarios H3 and H4), 2013; BDCP/California WaterFix, Recirculated Draft EIR/Supplemental Draft EIS, Appendix B, Section B.4.2 (figures for No Action Alternative, Alternative 4A, Scenarios H3 and H4), 2015; analyzed by Restore the Delta.

Attachment 2 (cont.)  
 Share of Delta Location River Sources from "Fingerprint" Modeling Results  
 No Action Alternative, 2013 BDCP Conservation Measure 1  
 and 2015 Tunnels Project

Sacramento River

San Joaquin River



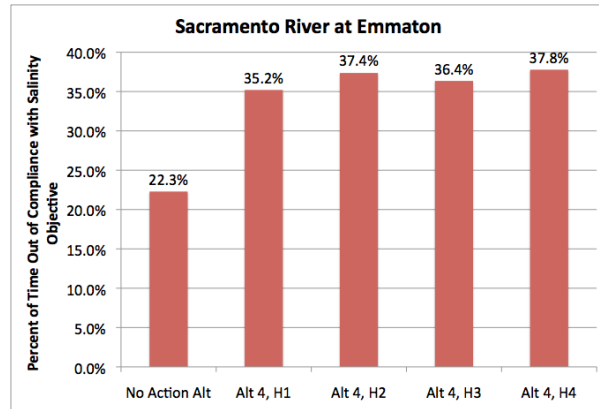
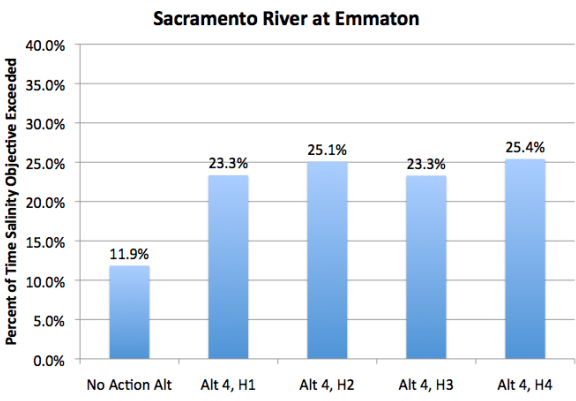
Sources: BDCP Draft EIR/EIS, Appendix 8D (figures for Alternative 4, Scenarios H3 and H4); BDCP/California WaterFix, Recirculated Draft EIR/Supplemental Draft EIS, Appendix B, Section B.4.2 (figures for No Action Alternative, Alternative 4A, Scenarios H3 and H4); Restore the Delta.

**Attachment 3**  
**Projected Salinity Effects by 2060**  
**of the Tunnels Project/Bay Delta Conservation Plan**  
**Percentage of Time Salinity Exceedances and Violations Would Occur**

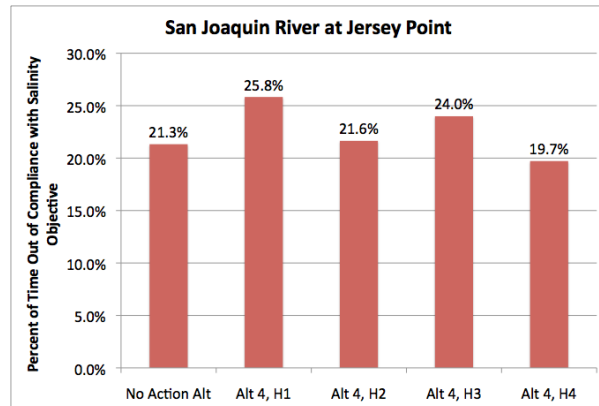
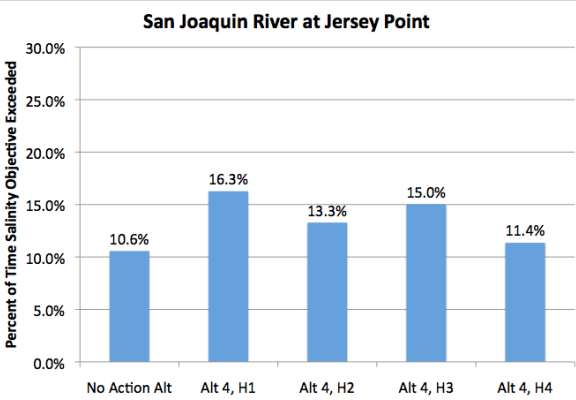
**Exceeding Water Quality Objectives**

**Out of Compliance with Water Quality Objectives**

**Delta Agricultural Beneficial Use Water Quality Objectives**



- Sacramento River at Emmaton:** Exceedances increase over the No Action Alternative by nearly to over 100 percent of the time in the Alt 4 scenarios, while noncompliance with the objective increases by over 50 percent of the time over the No Action Alternative.

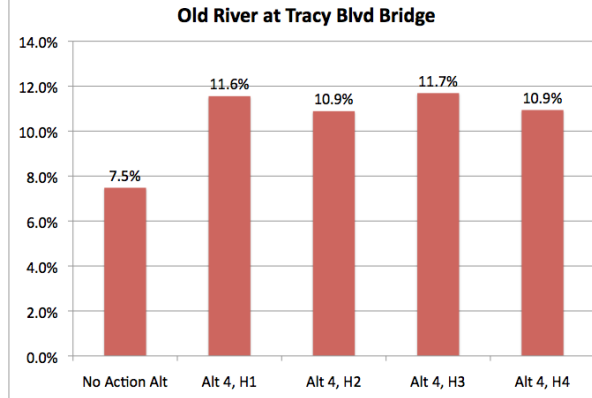
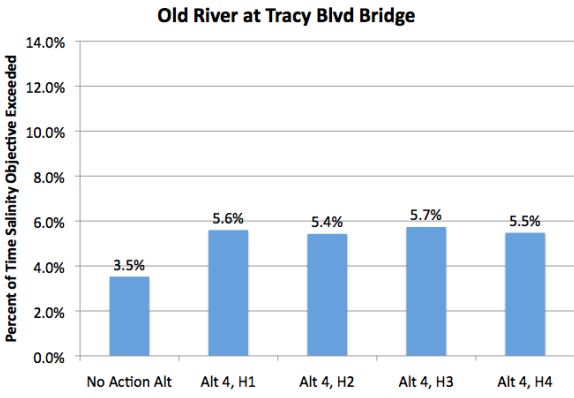


- San Joaquin River at Jersey Point:** exceedances increase over the No Action Alt by nearly 15 to 80 percent, while non compliance with the objective increases similarly, and decreases slightly in the High Outflow Scenario (where both Spring and Fall X2 apply).

**Attachment 3**  
**Projected Salinity Effects by 2060**  
**of the Tunnels Project/Bay Delta Conservation Plan**  
**Percentage of Time Salinity Exceedances and Violations Would Occur**

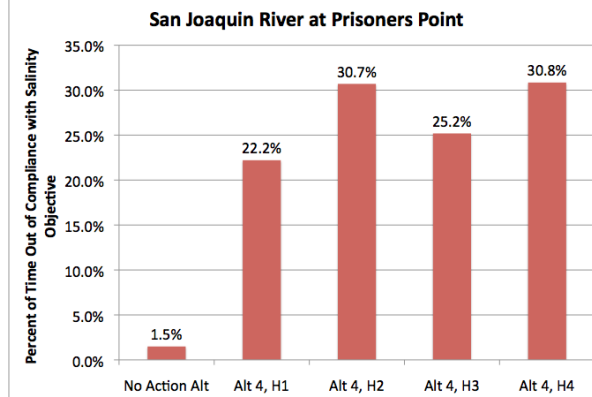
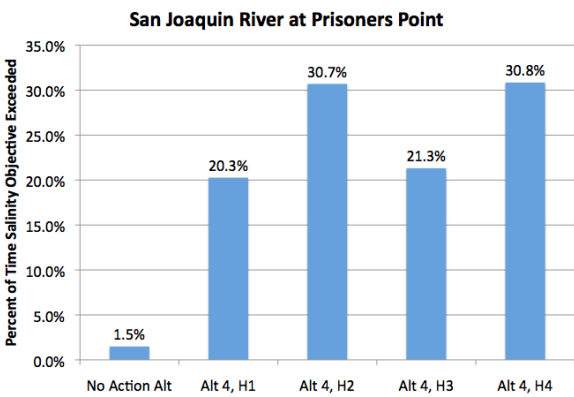
**Exceeding Water Quality Objectives**

**Out of Compliance with Water Quality Objectives**



- Old River at Tracy Blvd Bridge:** Exceedances increase by about two-thirds typically over the No Action Alternative. Noncompliance with the objective would increase by one-third to 40 percent. These percents are lower because as shown above (Table 2) the existing rate of violations is already high.

**Delta Fish and Wildlife Water Quality Objective**



- San Joaquin River at Prisoners Point:** The percent of time exceedances would occur increases sharply—1200 to 1900 percent increase in exceedances and a similar range for noncompliance. This is a fish and wildlife-related salinity objective, while the other three are agricultural beneficial use salinity objectives.

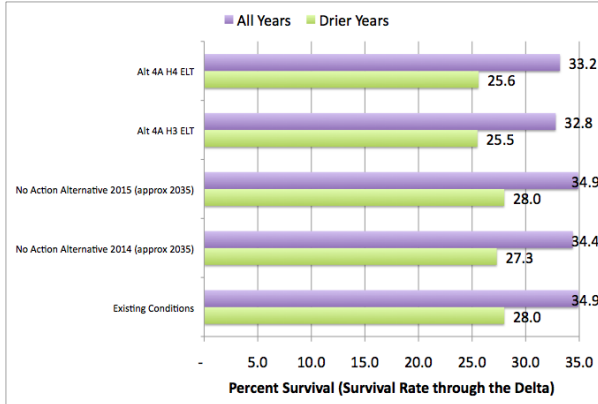
Source: Bay Delta Conservation Plan EIR/EIS, Appendix 8H, *Electrical Conductivity*, Table EC-4, p. 8H-5.

Note: Percentage of time is based on a 16-year hydrology modeled using DSM2 in Appendix 8H. Being “out of compliance” is the number of days that the 30-day running average at the monitoring site registers violations of the salinity objective. “Exceeding Water Quality Objective” refers to the number of days that the monitoring equipment actually registers salinity exceeding the threshold level the objective.<sup>224</sup>

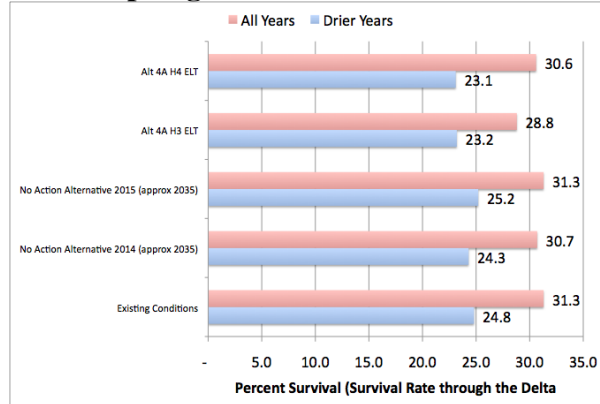


**Attachment 4**  
**Through-Delta Survival Rates of Emigrating Juvenile Salmon Races**  
**Under Alternative 4A ("California WaterFix")**

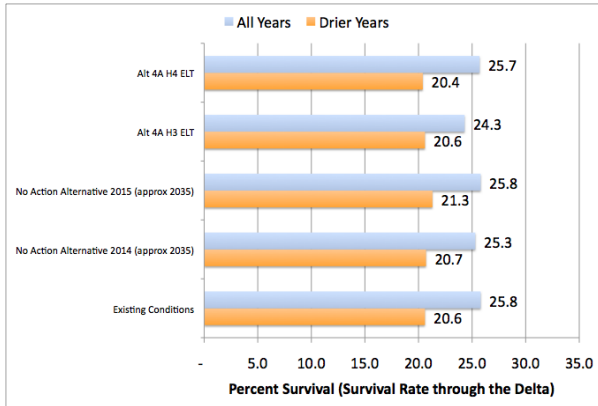
**Winter Run Chinook Salmon**



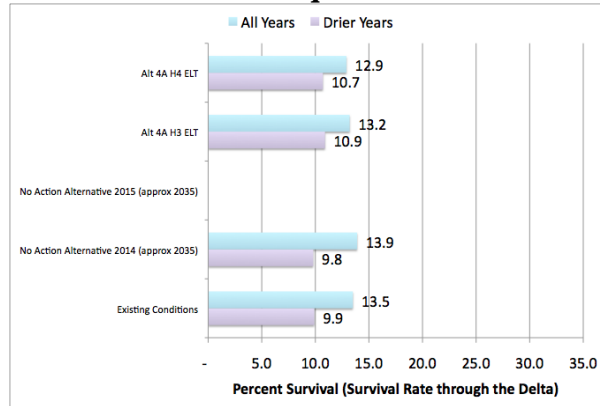
**Spring-Run Chinook Salmon**



**Fall Run Chinook Salmon**  
**- Sacramento River**



**Fall Run Chinook Salmon**  
**- San Joaquin River**



Source: Bay Delta Conservation Plan/California WaterFix RDEIR/SDEIS, 2015, Tables 11-4A-23, -51, and -74; Environmental Water Caucus.

## Attachment 5

### Water Quality Constituents for which "California WaterFix" Would Violate Designated Beneficial Uses and/or Numeric Criteria

#### Boron

Although period average concentrations decrease with Tunnels operations (except for Sacramento River at Emmaton and Contra Costa Water District's Pumping Plant No. 1), agricultural (that is, crop sensitivity) threshold of 500 micrograms per liter ( $\mu\text{g/L}$ ) would see exceedances a substantial percentage of the time at San Joaquin River at Antioch and Sacramento River at Mallard Island.<sup>85</sup> The Tunnels Project will increase boron concentrations throughout the year at the south fork of the Mokelumne River, as well as at Franks Tract and Old River at Rock Slough, relative to both existing conditions and No Action Alternative.<sup>86</sup> In the western Delta, boron concentrations increase with Tunnels operation relative to existing conditions and No Action Alternative between February and September, most months of the year. Finally, boron concentrations increase at the Contra Costa Water District's Pumping Plant No. 1, while boron concentrations decrease the North Bay Aqueduct intakes at Barker Slough and at Banks and Jones pumping plants of the state and federal water projects.

#### Bromide

For both human health and aquatic life criteria, the Tunnels project would increase the frequency of criteria violations in the interior and western Delta, but would decrease bromide violations 25 to 305 percent of the time at Banks and Jones pumping plants. Western Delta bromide concentrations are a problem for Antioch diversions as well. One method of evaluating the Tunnels Project's bromide concentrations suggests that wet years may see increases rather than decreases.<sup>87</sup>

#### Chloride

The Mokelumne River south fork at Staten Island sees significant increases in chloride concentrations all year, every year. This is closely influenced by reduced flow through Georgiana Slough downstream of the north Delta intakes. Other interior and western Delta areas will see increased chloride concentrations relative to both existing conditions and No Action Alternative by the Tunnels during

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<sup>85</sup> RDEIR/SDEIS, Appendix B, Table Bo-3, p. B-71.

<sup>86</sup> RDEIR/SDEIS, Appendix B, Table Bo-4 and Bo-5, pp. B-73 and B-74.

<sup>87</sup> RDEIR/SDEIS, Appendix B, Table Br-1 and Table Br-2, pp. B-84, and Tables Br-5 and Br-6, p. B-87.

March through June (for interior locations) and March through August for Sacramento River at Emmaton, San Joaquin River at Antioch and Sacramento River at Mallard Island.<sup>88</sup>

### **Salinity**

The “California WaterFix” Tunnels will more than triple the number of spikes in excess of salinity objectives along the Sacramento River downstream of the Tunnels, and along the San Joaquin River at Prisoners Point. Outright violations of salinity objectives are expected to more than double with the Tunnels in place.<sup>89</sup> These violations will degrade water quality for Delta agriculture and for fish and wildlife beneficial uses. This means that the State Water Resources Control Board cannot issue a 401 certification regardless of whether it has adequately assessed the project's propensity to degrade water quality.

Along the lower Sacramento River, salinity violations will more than double, and will occur about a quarter of the time that salinity objectives are in effect, up from about 11 percent of the time now and with the "California WaterFix" Tunnels in place. These conditions will worsen relative to current and future conditions between May and September, especially in drought years (which are expected to increase in frequency). Interior Delta salinity will also worsen between March and September (such as along the South Mokelumne River and at San Andreas Landing on the San Joaquin), as well as between February and June at Prisoners Point along the San Joaquin.<sup>90</sup>

The Tunnels will be the opposite of a “WaterFix” for Suisun Marsh. “California WaterFix” modeling results show that every month’s average salinity will increase about 56 percent over present conditions and about 60 percent over future conditions in the Beldon Landing area, 28 percent over present conditions and 27 percent over future conditions near Sunrise Duck Club, and 27 percent over present conditions and 26 percent over future conditions along Suisun Slough near Volanti Slough.<sup>91</sup> This altered salinity regime will result in less habitat for fish and other aquatic species native to the Bay-Delta Estuary, as well as affect agricultural soils and vegetation in Suisun Marsh.

### **Nitrates**

Tunnels Project modeling results indicate increases of nitrates relative to the No Action Alternative of 19 to 34 percent for interior Delta locations in all years (except for San Joaquin River at Buckley Cove near Stockton). Similar modeling results are shown for the western Delta as well, 16 to 30 percent increases in salinity. And Contra Costa Water District's Pumping Plant No. 1 is projected to see a 25 percent increase in nitrates. This would likely result in significant increases in water treatment costs for the District. In all of these locations the monthly period average changes were almost all increases in the range of 10 to 30 percent. As with other

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<sup>88</sup> RDEIR/SDEIS, Appendix B, Tables CI-6 through CI-9 for two estimation methods and the two operational scenarios (H3 and H4), pp. B-93 and B-96.

<sup>89</sup> RDEIR/SDEIS, Appendix B, Table EC-1, p. B-129. “Spikes” here means daily exceedances of a salinity objective, while compliance with objectives is determined by comparing multi-day running averages with an objective. When the running average is exceeded, a violation is then deemed to occur by regulators.

<sup>90</sup> RDEIR/SDEIS, Appendix B, Tables EC-8A and EC-8B, pp. B-134 to B-135.

<sup>91</sup> RDEIR/SDEIS, Appendix B, Tables EC-5, EC-6, and EC-7, pp. B-131 to B-132.

pollutants, nitrate concentrations are expected in Tunnels modeling results to decrease significantly at Barker Slough, Jones and Banks.<sup>92</sup>

### **Harmful Algal Blooms**

Algae occur naturally in all fresh and marine water environments. Most species are harmless under normal circumstances, but some “cyanobacteria” (also known as “blue-green algae”) which use photosynthesis can “bloom” or undergo a rapid population boom during periods of slack flow, nutrient pollution conditions (such as from nitrates, nitrogen and phosphorus), and rising temperatures. Their sheer biomass can cause, according to the USEPA, a dramatic reduction or complete consumption of all dissolved oxygen in the water, suffocating oxygen-respiring organisms like fish, and can produce “cyanotoxins” that pose a significant potential threat to human and ecological health and affect taste, odor and safety of drinking water. They can degrade water ways used for recreation and as drinking water supplies.<sup>93</sup>

When these conditions combine, harmful algal blooms can result. These conditions are ripest in August and September in the Estuary, but drought can increase harmful algal bloom activity. The most common blue-green algae species in the Bay-Delta Estuary is called *Microcystis*. In 2014, *Microcystis* algal blooms lasted beyond October into December due to low flows and warm temperatures—water residence time was that long.<sup>94</sup> Its toxin is deadly to wildlife, dogs, and human beings, and exposure can cause liver cancer in humans. It is a dangerous ecological and public health threat.

The Tunnels are likely to increase residence times and slow flows in the western and central Delta. The recirculated Draft EIR/S this year acknowledges that “it is possible that increases in the frequency, magnitude, and geographic extent of *Microcystis* blooms in the Delta would occur relative to Existing Conditions”<sup>95</sup> as well as compared with the “no action alternative” (or the future condition of the Delta without "California WaterFix" Tunnels).

### **Pesticides**

The San Joaquin River is an impaired water body for chlorpyrifos, diazinon, diuron, DDT, and Group A pesticides (human carcinogens) under the Clean Water Act.<sup>96</sup> Increasing that river’s fraction of water contributed to the Delta will result in more concentrated pesticides reaching central and western Delta water ways from the San Joaquin, and with longer residence times, its pesticide burdens stay longer. The Bay-Delta Estuary will be left with a worsening pesticide “cocktail” supplied by the San Joaquin River’s agricultural effluent.

### **Mercury**

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<sup>92</sup> RDEIR/SDEIS, Appendix B, Tables N-4 and N-5, pp. B-162 and B-163.

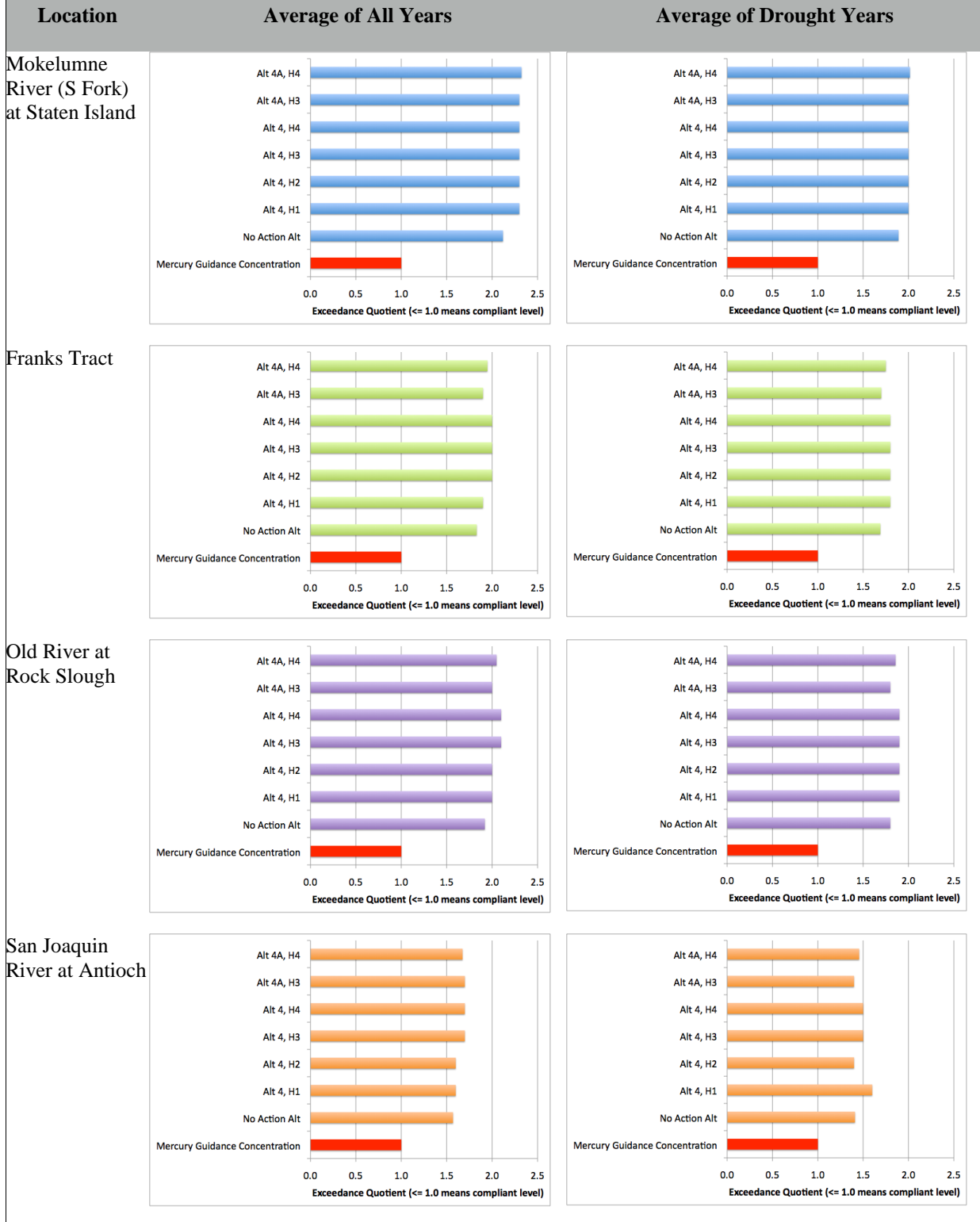
<sup>93</sup> USEPA Region 9, *Frequently Asked Question and Resources for Harmful Algal Blooms and Cyanobacterial Toxins*, Version 1, July 2015. Accessible at [http://www2.epa.gov/sites/production/files/2015-07/documents/habs\\_faqs-and-resources\\_v1-july2015.pdf](http://www2.epa.gov/sites/production/files/2015-07/documents/habs_faqs-and-resources_v1-july2015.pdf).

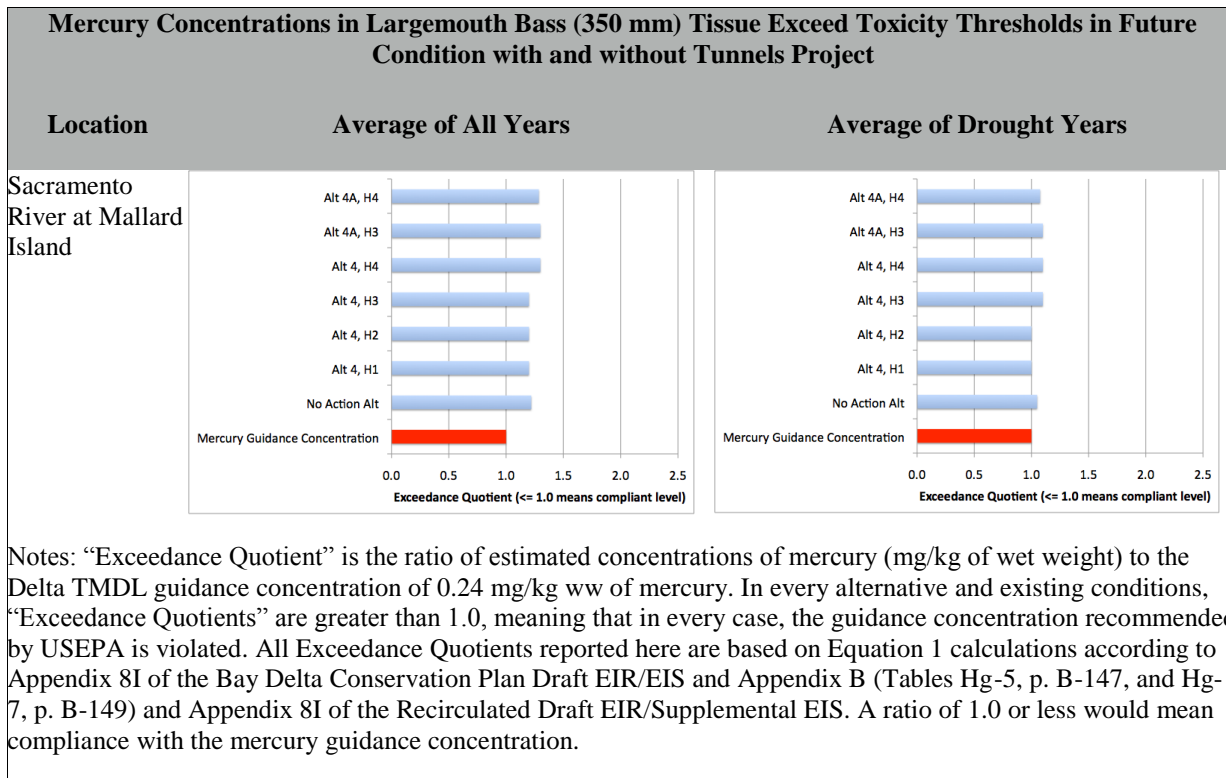
<sup>94</sup> Peggy Lehman, Staff Environmental Scientist, California Department of Water Resources, presentation to IEP 2015 Workshop, Folsom, California, "Response of Microcystis to Drought," , March 20, 2015.

<sup>95</sup> RDEIR/SDEIS, Section 4.3, p. 4.3.4-67.

<sup>96</sup> US EPA, 2010 California 303(d) List of Water Quality Limited Segments. Accessible online at [http://gispublic.waterboards.ca.gov/pub/303d/2010\\_USEPA\\_approv\\_303d\\_List\\_Final\\_122311wsres.xls](http://gispublic.waterboards.ca.gov/pub/303d/2010_USEPA_approv_303d_List_Final_122311wsres.xls).

## Mercury Concentrations in Largemouth Bass (350 mm) Tissue Exceed Toxicity Thresholds in Future Condition with and without Tunnels Project





As shown in the table of charts above, the ratio of mercury concentrations in largemouth bass tissue was for Alternative 4 Tunnels scenarios well over 1.5 to *twice or more* the toxicity threshold.<sup>97</sup> (DWR and its partners try to divert attention from the toxicity threshold by comparing these levels to continuation of the status quo No Action Alternative<sup>98</sup>, but the important comparison is to the toxicity threshold for ecological and public health protection.)

Alternative 4A modeling in 2015 shows that the Tunnels project despite having less habitat restoration and no Yolo Bypass improvements would have only slightly less effect on fish tissue concentrations of mercury. Moreover, fish tissue concentrations at several Estuary locations would still be more than 1.5 to 2 times the USEPA’s mercury guidance concentration. This analysis, however does not reflect “California EcoRestore’s” habitat restoration efforts, which cumulatively can be expected to have impacts similar to the Tunnels and the Bay Conservation Plan last year.<sup>99</sup>

The Bay Delta Conservation Plan states that “at this time... there is no proven method to mitigate methylation and mobilization of mercury into the aquatic system resulting from

<sup>97</sup> Environmental Water Caucus, *Comment Letter on Bay Delta Conservation Plan and Draft Environmental Impact Report/Statement*, June 11, 2014, Figure 9, pp. 85-86. Accessible online at <http://ewccalifornia.org/reports/bdcpcomments6-11-2014-3.pdf>

<sup>98</sup> Bay Delta Conservation Plan/California WaterFix, Recirculated Draft EIR/Supplemental EIS, 2015, Section 4.3.4, p. 4.3.4-33, lines 15-45.

<sup>99</sup> Based on Equation 1 calculations according to Appendix 8I of the Bay Delta Conservation Plan Draft EIR/EIS in 2013-2014 and Appendix B (Tables Hg-5 and Hg-7) and Appendix 8I of the Recirculated Draft EIR/Supplemental EIS in 2015. See also Environmental Water Caucus, *Comment Letter*, June 11, 2014, above.

inundation of restoration areas. *The mitigation measures...are meant to provide a list of current research that has indicated potential to mitigate mercury methylation.*"<sup>100</sup>

The Water Tunnels project provides no mitigation method at all, just a list of "adaptive management" research issues to be handled later.<sup>101</sup> *Calling the Tunnels project "California WaterFix" plus DWR's premature application to the Corps of Engineers are not real adaptive management, but political prejudging of scientific outcomes.*

For both tunnels construction and habitat restoration work in and around the Bay-Delta Estuary, DWR and its partners would have to handle MeHg on a case by case basis.<sup>102</sup>

## Selenium

Selenium concentrations in water are expected to change only slightly under the Tunnels Project's flow regimes, annual average selenium concentrations in whole-body sturgeon are expected to increase substantially, according to Tunnels Project modeling results in the RDEIR/SDEIS. These results are summarized in the table below. In addition, the RDEIR/SDEIS reports that protective toxicity thresholds recommended by Presser and Luoma will be exceeded under Tunnels Project flow regimes relative to No Action Alternative conditions. In particular, their "low" threshold of 5 mg/kg, dry weight would see an exceedance quotient of 1.1 for both operational scenarios of the Tunnel Project, relative to the No Action Alternative condition of 0.95 for the San Joaquin River at Antioch. Under the higher protective threshold they recommend, the exceedance quotient would not rise above 1.0, but would nonetheless increase from 0.59 to about 0.7. For Sacramento River at Mallard Island, average annual exceedance quotients under Tunnels Project flow conditions would increase over the No Action Alternative from 0.88 to 0.99, very close to exceedance. Modeling results do not report the error rate for the modeling here performed, so these results could represent exceedance, since they are so close to 1.0.<sup>103</sup>

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<sup>100</sup> Charles N. Alpers, et al, *Sacramento-San Joaquin Delta Regional Ecosystem Restoration Implementation Plan, Ecosystem Conceptual Model: Mercury*, prepared January 24, 2008, pp. 12-13. Accessible online at <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=6413>. "The net formation of...(MeHg) in sediment and/or water is the result of competing microbiological and abiotic reactions..."

<sup>101</sup> These research approaches include: Characterize soil mercury concentrations and loads on a project-by-project basis; sequester MeHg using low-intensity chemical dosing techniques using metal-based coagulants like ferric sulfide or poly-aluminum chloride. These flocculants bind with dissolved organic carbon and MeHg to flocculate and deposit mercury out of solution; minimize microbial methylation activity in restored wetlands; design restored wetland habitat to enhance photodegradation of MeHg; remediate sulfur-rich sediments with iron to prevent the biogeochemical reactions that methylate mercury; cap mercury-laden sediments (essentially entomb and bury them permanently to keep from mobilizing and methylating mercury). The research "measures" that BDCP proposes do not include basic toxicological research into mercury's effects on these and other fish and aquatic species found in the Delta.

<sup>102</sup> Bay Delta Conservation Plan Environmental Impact Report/Environmental Impact Statement, Chapter 8, *Water Quality*, p. 8-260, lines 30-35; p. 8-446, lines 39-42, and p. 8-447, lines 1-2. "Because of the uncertainties associated with site-specific estimates of methylmercury concentrations and the uncertainties in source modeling and tissue modeling, the effectiveness of methylmercury management...would need to be evaluated separately for each restoration effort, as part of design and implementation. Because of this uncertainty and the known potential for methylmercury creation in the Delta this potential effect...is considered adverse."

<sup>103</sup> RDEIR/SDEIS, Appendix B, Table Se-7, p. B-186.

Retirement of the drainage impaired lands of the western San Joaquin Valley has been found time and again to be the most cost-effective solution to the problem of selenium-tainted irrigation drainage.<sup>104</sup> Land retirement is the best and cheapest option for slowing the rate at which selenium loads and concentrations reach the Delta, and for sequestering selenium in its source rock and soils longer into the future. The natural reservoir of selenium has been documented to hold up to at least another 300 years' worth of tainted drainage at current rates.<sup>105</sup> The National Research Council's 2012 report on Bay-Delta sustainable water management cited this selenium reservoir as well, stating in part:

*Irrigation drainage, contaminated by selenium from those soils, is also accumulating in western San Joaquin Valley groundwaters. The problem is exacerbated by the recycling of the San Joaquin River when water is exported from the delta. While control of selenium releases has improved, how long those controls will be effective is not clear because of the selenium reservoir in groundwater.*

*...Other aspects of water management also could affect selenium contamination. For example, infrastructure changes in the delta such as construction of an isolated facility could result in the export of more Sacramento River water to the south, which would allow more selenium-rich San Joaquin River water to enter the bay. The solutions to selenium contamination must be found within the Central Valley and the risks from selenium to the bay are an important consideration in any infrastructure changes that affect how San Joaquin River water gets to the bay.<sup>106</sup>*

Of course, ending application of Delta waters to irrigate western San Joaquin Valley drainage impaired lands could reduce the need for deliveries to the San Luis Unit of the Central Valley Project by up to a million acre-feet per year. ***This reduction could provide by itself dramatically improved reliability for all other CVP contractors' allocations, without the investment of billions for the Tunnels project and "California WaterFix."***

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<sup>104</sup> Presser, T.S. and S.E. Schwarzbach. 2008. *Technical Analysis of In Valley Drainage Management Strategies for the Western San Joaquin Valley*, US Geological Survey Open File Report 2008-1210. Accessible online at <http://pubs.usgs.gov/of/2008/1210/>.

<sup>105</sup> T.S. Presser and S.N. Luoma, 2006. *Forecasting Selenium Discharges to the San Francisco Bay-Delta Estuary: Ecological Effects of a Proposed San Luis Drain Extension*, United States Geological Survey Professional Paper 1646, cited in: T. Stroshane, *Testimony on Recent Salinity and Selenium Science and Modeling for the Bay-Delta Estuary*, plus appendices, prepared for the California Water Impact Network, August 17, 2012, for Workshop #1, Ecosystem Changes and the Low Salinity Zone, before the State Water Resources Control Board.

<sup>106</sup> National Research Council, Committee on Sustainable Water and Environmental management in the California Bay-Delta, *Sustainable Water and Environmental Management in the California Bay-Delta*, Washington, DC: The National Academies Press, 2012, p. 94. Accessible online 8 May 2014, at [http://www.nap.edu/catalog.php?record\\_id=13394](http://www.nap.edu/catalog.php?record_id=13394).