



**Department of Energy**  
Western Area Power Administration  
Sierra Nevada Region  
114 Parkshore Drive  
Folsom, California 95630-4710

OCT 30 2015

BDCP/WaterFix Comments  
P.O. Box 1919  
Sacramento, CA 95812

To whom it may concern:

The Western Area Power Administration (Western) submits the following comments for the Partially Recirculated Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement (RDEIR/SDEIS) for the Bay Delta Conservation Plan Water Fix.

**General Comments:**

1. The following statement (or one very like it) should be added to the document at the appropriate location:

**Western's Proposed Federal Action:**

At DWR's request, Western began an evaluation of the feasibility of providing permanent and temporary transmission services to the proposed project. The "System Impact Study" (SIS) evaluates the effects to Western's transmission system if Western were to provide transmission service to DWR.

A SIS typically includes the evaluation of capacity and reliability of the system. In this case, it includes potential effects of providing permanent and temporary transmission services to construction equipment (i.e. tunneling machines) as well as additional pump loads demanded by the proposed Alternatives 4 and 4a. If DWR decides to move forward with their request for transmission service from Western for these facilities, a Facilities Study will be completed to identify specific facilities and structures that may need to be constructed, upgraded, relocated, or modified to provide any requested transmission services.

Western's Proposed Federal Action is to complete the SIS and Facilities Studies, and if requested, to support Reclamation's pending decision by performing the necessary construction, upgrades, relocations, or modifications of facilities and structures necessary, and to provide transmission service.

2. Two acronyms for Western Area Power Administration are used throughout the document and appendices: "WAPA" and "Western". We prefer "Western" and this acronym should be used consistently throughout.
3. Western requests that its EIS number (**DOE/EIS-0515**) be placed on the cover page of the document.

**Specific Comments:**

In addition to the comments provided by Western under cover letter dated May 19, 2014, Western hereby submits the following specific comments on the BDCP Draft EIR/EIS as they relate to the evaluation of impacts to the Western transmission system as set forth in Chapters 20 and 21.

1. The proposed expansion of the Clifton Court Forebay will directly impact Western's existing Hurley-Tracy No. 1 and 2 double circuit 230-kilovolt (kV) transmission line (HUR-TRY 1&2), Tracy-Contra Costa/Tracy-Los Vaqueros 69-kV transmission lines (TRY-CC/LV Lines) and the Transmission Agency of Northern California's (TANC) Olinda-Tracy 500-kV transmission line (TANC Line) as part of the California-Oregon Transmission Project. Western operates, maintains, and holds the land easement rights for this impacted segment of the TANC Line. When developing new transmission corridors, Western selects alignments that avoid crossing over or through open bodies of water unless required in order to span over rivers and/or canals. Reasonable access to maintain these transmission lines is critical to the operational reliability of Western's electric network and the TANC Line. An alignment of a Western transmission line over/through the proposed Clifton Court Forebay expansion is unacceptable to Western.

If the proposed expansion of the Clifton Court Forebay is necessary as part of the BDCP, then the HUR-TRY 1&2, TRY-CC/LV Lines and TANC Line will need to be relocated/rerouted as required by Western and TANC. As these lines are part of the bulk electric system and critical to the reliability of the network, it should be noted that acquiring the necessary outages to relocate these lines may be limited or restricted under certain system operating conditions. Due to the close proximity of these lines and the critical role they serve in the reliability of the northern California bulk electric system, the planning associated with the relocation, design configuration, construction, and outage scheduling for these lines must be closely coordinated between Western and TANC. It is Western's preference to work directly with TANC to acquire the resources and perform these evaluations. The BDCP will enter into an agreement with Western which will include terms and conditions for advance funding and payment of all of Western's costs to relocate/reroute Western transmission lines.

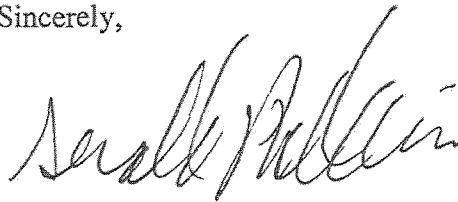
2. For the proposed temporary and permanent transmission lines necessary to serve the BDCP temporary construction activities and ongoing BDCP pumping loads when the tunnels are placed in-service, Western recommends an increase to the width of the proposed transmission line corridors from 150 feet to not less than 300 feet. Evaluating a wider corridor will allow for engineering flexibility during design and final alignment of the temporary construction and permanent easements that are expected to range between 100 and 150 feet for the transmission line segments.
3. Western expects the lead federal agency for the EIS will be the lead federal agency for Section 106 National Historic Preservation Act compliance and all other consultation requirements required by the National Historic Preservation Act and all other laws, orders, and legislation regarding Native American consultation, including appropriate Government-to-Government consultation with federally recognized tribes. The lead agency for Section 106 requirements would be responsible for all appropriate consultation with California State Historic Preservation Office (SHPO), Advisory Council on Historic Preservation, and any other agency requirements. Western recommends that it be a signatory on any Programmatic Agreement and/or other appropriate agreements regarding Section 106 compliance for the BDCP. Western would review all cultural resource documents to ensure adequacy for Western's requirements as appropriate.
4. Western recommends that the transmission line portion of the BDCP be included in the project Endangered Species Act (ESA) and Section 106 (NHPA) consultation and mitigation. If the transmission portion of the project is not sufficiently covered under the project ESA or NHPA consultation and mitigation, then it could cause delays and Western will need to complete additional ESA and NHPA consultation. If Western needs to relocate/reroute existing transmission lines to support the BDCP project, it is likely that Western would need to arrange for a separate ESA and NHPA consultation.
5. One of the BDCP proposed soil spoils area is located in the vicinity of Western's TRY-CC/LV Lines, towers 4/1 through 5/2, west of Clifton Court Forebay. Typically, the Western easement agreement restricts the landowner from piling or placing materials within the easement area. This restriction is needed to insure ground to conductor clearance of not less than 35 feet for the 69-kV circuits. In addition, 30 feet of unobstructed maintenance access is required around the towers.
6. In general, plans for all tunnel crossings, spoil areas and any other use of Western's rights-of-way or easements shall be reviewed and approved by Western during the design phase and prior to construction.

7. Western requires an entity working in or around Western electrical power lines to abide and comply with the National Electric Safety Code and Occupational Safety and Health Administration (OSHA) standards. Equipment within a Western easement area shall not exceed (14) feet in height when the transmission line is energized.
8. During construction activities, BDCP must prevent or minimize the proliferation of dust from contaminating and building up on insulators of nearby Western transmission lines.
9. All BDCP efforts must abide by Western's General Guidelines for the Use of Electric Transmission Line Rights-of-Way that can be found on our website at <https://www.wapa.gov/regions/SN/Operations/Pages/right-of-way.aspx>.
10. Coordination with Western throughout the NEPA process is appropriate and necessary to ensure that any action taken by Western to construct, remove, replace, install, acquire land, acquire easements, perform environmental reviews, etc. associated with the Western transmission system in support of the BDCP project is covered under the BDCP NEPA documentation (including required mitigation).

Please add the following emails to all mailing lists for the BDCP/California Water Fix Program; grobbins@wapa.gov, waldear@wapa.gov, and kelly@wapa.gov.

If you have any questions regarding these comments, please contact Jerry Robbins at (916) 353-4032, or email grobbins@wapa.gov.

Sincerely,

A handwritten signature in dark ink, appearing to read "Gerald Robbins", written in a cursive style.

Gerald Robbins

Supervisory Environmental Protection Specialist

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**From:** Robbins, Gerald <GRobbins@WAPA.GOV>  
**Sent:** Friday, October 30, 2015 3:33 PM  
**To:** BDCPcomments  
**Subject:** Western Area Power Administration Comments on the California Water Fix - Bay Delta Conservation Plan EIS/EIR  
**Attachments:** 151030 BDCP WaterFix Comments - Western Submitted.pdf

Good afternoon,

Attached are the Western Area Power Administration Comments on the California Water Fix - Bay Delta Conservation Plan EIS/EIR. If there are any questions regarding these comments, contact Jerry Robbins at the phone number or email listed below.

Thanks

Jerry Robbins

**Gerald (Jerry) Robbins RG | Natural Resource Supervisor**  
Western Area Power Administration | Sierra Nevada Region  
(O) 916.353.4032 | (M) 916.847.5312 | [grobbs@wapa.gov](mailto:grobbs@wapa.gov)



October 30, 2015

BDCP/California WaterFix Comments  
PO Box 1919  
Sacramento CA 95812

Re: California Waterfowl Association Comments on the Bay Delta Conservation Plan Recirculated Draft Environmental Impact Statement/Environmental Impact Report

Thank you for the opportunity to comment on the Recirculated BDCP EIS/EIR. The California Waterfowl Association is a statewide nonprofit organization whose principal objective is the conservation of the state's waterfowl, wetlands, and hunting heritage. California Waterfowl believes hunters have been the most important force in conserving waterfowl and wetlands. California Waterfowl biologists are leading experts on designing, operating, and maintaining managed wetlands throughout California, including the Sacramento/San Joaquin River Delta and the Suisun Marsh.

California Waterfowl previously commented on the Draft BDCP EIS/EIR in a letter dated July 29, 2014. The comments made in that letter still stand with respect to the contents of the EIS/EIR generally. The comments in this letter are intended to address the additional alternatives covered by the Recirculated Draft EIS/EIR.

Since 1945, California Waterfowl has been active in creating and maintaining managed wetlands habitats for migratory waterfowl, including ducks and geese. Because of the loss of 95 percent of the historical wetlands in California, the remaining wetlands, two-thirds of which are in private ownership, have to be intensively managed to provide the optimum habitat value for migratory waterfowl. While not listed under the state or federal endangered species acts, migratory waterfowl are protected by legislation or treaty, including the North American Wetlands Conservation Act (NACWA) and the international Migratory Bird Treaty.

The state and federal governments and private landowners such as farmers and duck clubs have invested millions of dollars in managed wetlands for the primary benefit of migratory waterfowl. These managed wetlands also benefit a variety of other bird species, as well as reptiles, fish, and mammals. They use natural and artificial water flows to flood wetlands, and then use developed infrastructure to hold and drain floodwaters as appropriate to provide food resources and suitable seasonal habitat.

In its previous comments, California Waterfowl recommended the adoption of Alternative 5, and objected to the adoption of Alternative 4. Although the new preferred alternative, Alternative 4A,


removes many of the impacts that would have been caused by the previous Alternative 4, we are concerned that the analysis and mitigation of salinity impacts in the Suisun Marsh are insufficient. As stated in the comments of the Suisun Resource Conservation District, with which California Waterfowl agrees and incorporates into its comments by reference, the Recirculated EIR/EIS acknowledges that the project will cause increases in salinity in the Western Suisun Marsh, but does not adequately analyze or mitigate the impacts of the increase in salinity.

Increases in salinity could, and most likely would, have severe impacts on the habitat values and food resources for migratory birds and other wetlands-dependent species in the Marsh. The loss of habitat would not only affect the migratory birds and other species as a public resource, but would negate the investments that California Waterfowl has made to improve the wetland habitat, as well as the state and federal governments and private landowners.

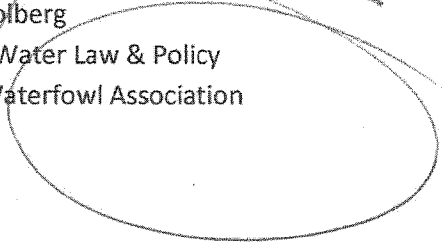
The comments of the Suisun Resource Conservation District describe the deficiencies of the recirculated EIR/EIS in detail, as it relates to the Suisun Marsh. California Waterfowl adopts and incorporates those comments by reference. Due to the insufficiency of analysis and mitigation of salt-related impacts on wetlands on waterfowl habitat in the Suisun Marsh, California Waterfowl cannot support the adoption of Alternative 4A, and again urges adoption of Alternative 5.

Thank you for your consideration of these comments.

Sincerely,



Jeffrey A. Volberg  
Director of Water Law & Policy  
California Waterfowl Association



**From:** Jeff Volberg <jvolberg@calwaterfowl.org>  
**Sent:** Friday, October 30, 2015 3:52 PM  
**To:** BDCPcomments  
**Cc:** Mark Hennelly; Jake Messerli; John Carlson; Ryan Broddrick  
**Subject:** California Waterfowl comments on BDCP/WaterFix  
**Attachments:** Comments WaterFix.pdf

Here are California Waterfowl Association's comments on the Recirculated Draft EIR/EIS for the BDCP/WaterFix.

Best regards,  
*Jeff Volberg*

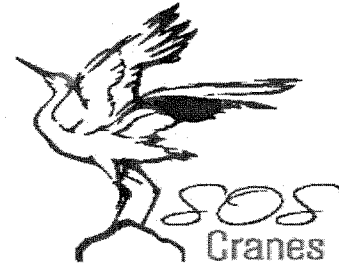


**Jeff Volberg**  
**Director of Water Law & Policy**  
Cell: (916) 217-5117

California Waterfowl Association  
1346 Blue Oaks Boulevard  
Roseville, CA 95678

[jvolberg@calwaterfowl.org](mailto:jvolberg@calwaterfowl.org)  
[www.calwaterfowl.org](http://www.calwaterfowl.org)





www.soscranes.org

P.O. Box 22192, Sacramento, CA 9582

BDCP/WaterFix Comments  
P.O. Box 1919  
Sacramento, CA 95812

SENT VIA EMAIL (bdcpccomments@icfi.com)

RE: Draft Bay Delta Conservation Plan/California WaterFix and Associated Partially Recirculated  
Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement

Dear Lead Agencies:

These comments are submitted by Save Our Sandhill Cranes on the proposed Bay Delta Conservation Plan ("BDCP")/California WaterFix ("Project" or the newly conceived "Alt. 4A") and associated public review Partially Recirculated/Supplemental Draft Environmental Impact Report/Statement ("RDEIR/S"). Save Our Sandhill Cranes is a 501 (c) 3 non profit organization that formed ten years ago to protect Sandhill Crane wintering habitat in the Sacramento region through outreach, education, and direct engagement in both policy and projects that effect that habitat.

Save Our Sandhill Cranes was involved in numerous meetings during the preparation of the last iteration of the BDCP in an effort to improve mitigation and avoidance and minimization measures in the Stone Lakes area and on Staten Island. Throughout that process we were reminded that the BDCP would be providing huge benefits to crane conservation beyond the mitigations contemplated in CM 1. This is clearly not the case in the new iteration of California WaterFix and all we are left with is the huge tunnels project with inadequate mitigations for the impacts to Sandhill Cranes.

Save Our Sandhill Cranes wants to go on the record as agreeing with the concerns and issues brought up in the ECOS/Habitat 2020 and the Friends of Stone Lakes letters regarding the various iterations of the EIR/S (including the DEIR/DEIS and now the RDEIR/SDEIS). We are also in agreement with the concerns expressed in the Delta Independent Science Board letter, dated September 30, 2015, that identified scientific deficiencies in the California Water fix recirculated DEIR/DEIS.

Sincerely,



Mike Savino

President, Save Our Sandhill Cranes.

October 30, 2015

cc: David Murillo, Regional Director, Mid Pacific Region, U.S. Bureau of Reclamation

(dmurillo@usbr.gov)

Susan Fry, Manager, Bay-Delta Office, U.S. Bureau of Reclamation

(bdo@usbr.gov)

Ren Lohofener, San Francisco Bay-Delta Fish and Wildlife Office, U.S. FWS

(ren\_lohofener@fws.gov)

Chuck Bonham, California Department of Fish and Wildlife

(chuck.bonham@wildlife.ca.gov)

Bart McDermott, Manager, Stone Lakes NWR (Bart\_mcdermott@fws.gov)

Dale Claypool, Friends of Stone Lakes NWR (claypoole@sbcglobal.net)

Osha Meserve, Counsel for FSL (osha@semlawyers.com)

ECOS Membership List

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**From:** yogoombah <yogoombah@yahoo.com>  
**Sent:** Friday, October 30, 2015 3:26 PM  
**To:** BDCPcomments  
**Cc:** dmurillo@usbr.gov; bdo@usbr.gov; ren\_lohofener@fws.gov;  
chuck.bonham@wildlife.ca.gov; Bart\_mcdermott@fws.gov; claypoole@sbcglobal.net;  
osha@semlawyers.com  
**Subject:** comments of SOS Cranes re new BDCP  
**Attachments:** SOSC BDCP Comment letter.pdf

Attached please find the comments submitted by Save Our Sandhill Cranes on the proposed Bay Delta Conservation Plan now referred to as the California WaterFix ("Project" or the newly conceived "Alt. 4A") and associated public review Partially Recirculated/Supplemental Draft Environmental Impact Report/Statement.

Thank you.

Mike Savino, President  
Save Our Sandhill Cranes

# *Tehama-Colusa Canal Authority*

P.O. BOX 1025 • 5513 HWY 162, WILLOWS, CA 95988 • Phone: (530) 934-2125 • Fax: (530) 934-2355

October 30, 2015

**Via U.S. Mail and E-mail (BDCPComments@icfi.com )**

BDCP/Water Fix Comments  
P.O. Box 1919  
Sacramento, CA 95812

**Subject:** Comments of the Tehama-Colusa Canal Authority on the Bay Delta Conservation Plan/California WaterFix Partially Recirculated Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement

**To Whom It May Concern:**

The Tehama-Colusa Canal Authority ("TCCA") is a joint exercise of powers agency comprised of 17 water districts that receive water from the federal Central Valley Project ("CVP"). The TCCA service area is made up of 150,000 acres of irrigated farmland located along the west side of the Sacramento Valley that is located in the counties of Colusa, Glenn, Tehama and Yolo. TCCA was formed in part to secure a reliable water supply that would meet the needs of our member agencies, as well as exercising their rights to water originating in the Sacramento Valley.

TCCA has reviewed the Bay Delta Conservation Plan/California WaterFix ("BDCP/Fix") Partially Recirculated Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement ("Plan documents") that were made available for Public Review, and provides the following comments in response to the new and recirculated documents. TCCA previously commented on the Bay Delta Conservation Plan and the accompanying Draft Environmental Impact Report/Environmental Impact Statement ("EIR/EIS") that were released for public review in December of 2013. TCCA hereby incorporates by reference and restates all of our previously submitted comments to the original Plan documents into this set of comments (said comments are dated July 29, 2014).

Further, TCCA hereby incorporates by reference and again joins both the previously submitted comments and additional comments submitted on these Plan documents by the North State Water Alliance (including all attachments and reports accompanying those comments) as though fully stated herein.

TCCA must underscore several of the comments made in the North State Water Alliance comments, which are of particular importance to TCCA. First, TCCA is gravely concerned that the proposed operations of the BDCP/Fix will have the impact of draining north of Delta CVP reservoirs on a much more frequent basis than presently, thereby diminishing greatly the water supply reliability for both the Sacramento River Settlement Contractors and the TCCA water users. Water users in the Sacramento Valley are protected by California's "area of origin" statutes. The BDCP/Fix and the accompanying EIR/EIS are filled with statements to the effect that the BDCP/Fix will not interfere with these uses of water. TCCA requests that the BDCP/Fix conduct the necessary modeling, by utilization of the best available science, to redefine and reconfigure its proposed operations to address the impacts to upstream water supplies. Such legally required assurances do not exist, despite the voluminous documentation that has occurred as part of the Plan documents. The operations proposed by the BDCP/Fix must comport with water rights law and avoid both regulatory and water supply impacts to upstream water users and fish and wildlife concerns. Absent these assurances, TCCA cannot support the BDCP/Fix as currently formulated. Moreover, without such guarantees, TCCA believes that the State Water Resources Control Board will not be able to approve the changes in point of diversion needed to effectuate the BDCP/Fix, due to both the injury to other legal users of water, and due to impacts caused to fish and wildlife resources in the Sacramento Valley and the Delta.

Additionally, the resulting water supply shortages would have two direct negative impacts on North state agriculture and local economies. First, it would result in the greatly enhanced reliance on groundwater within the agricultural areas north of the Delta that would see a resulting reduction in their surface water supply. This impact could be magnified greatly in light of the newly enacted Groundwater Sustainability Management Act. Further, many areas within the TCCA service area do not have reliable or adequate groundwater supplies. These factors would lead to significant economic impacts in the form of increased irrigation costs, fallowing of significant acreage, the loss of investment in permanent crops and annual cropping opportunities, and the resulting third party economic impacts that would reverberate through the regional economy, where agriculture is the foundation. None of these groundwater or economic impacts are sufficiently identified or analyzed in the Plan documents.

Any financing plan must adhere to the principle of "beneficiary pays." At present, this project lacks any details on dependable and/or viable plan to finance this Project. Of direct concern to TCCA is the fact that Reclamation has indicated that the costs associated with providing water to south of Delta refuges would be treated as an operations and maintenance cost, and so would be invoiced to all federal contractors on an annual basis. TCCA objects strongly to this proposed charge, on the ground that the proposed tunnels (and their associated capital and operations and maintenance costs) are not needed in order to move water to south of Delta refuges. If it is Reclamation's desire to move such water through the proposed tunnels, then that charge is properly paid for by the proponents of the Project, not North of Delta federal water contractors who do not benefit from, and are not pursuing the implementation of, the BDCP/Fix.

The BDCP/Fix EIS/EIR has many fatal flaws that do not meet the statutory requirements of NEPA and/or CEQA. The primary and overwhelming shortcoming is the complete lack of an adequate project description. This shortcoming makes it impossible to provide comments on a project that is not readily identifiable. Not to be completely flippant, but when the project proponents figure out what exactly the project is, and how it will be operated, we will then be

prepared to provide more tangible comments. Instead, we are left filling in the blanks and guessing at the project, its operations, and having to assume the impacts that are not sufficiently analyzed. As such, the document is wholly inadequate in meeting the requirements of NEPA and/or CEQA, not to mention concerns with its compliance with the Federal and California ESAs and California water rights law. Other shortcomings with the Plan documents include the following:

1. The operations and baseline assumptions are not accurately or sufficiently portrayed or defined;
2. the description of the operations is vague and uncertain;
3. the underlying impact analysis is wholly insufficient;
4. the modeling and impact analysis relies on assumptions from the BDCP timeframe that are no longer valid or reliable in regard to the amount of restoration and other conservation measures that are no longer certain to occur;
5. the decision tree/adaptive management process is completely undefined and inadequate for analysis;
6. the modeling is reliant on outdated data;
7. the analysis used the wrong version of the CALSIM model;
8. the operations described are unrealistic and employ modeling gimmicks that cannot occur in the real world;
9. the described operations rely on water from upstream users at times when that water is unavailable;
10. the documents fail to address or analyze the relied upon water transfers, that must be (yet have not been) voluntarily agreed to by upstream sellers to make this operation work;
11. the project is not economically viable;
12. the document is now so convoluted that it is hard to follow, confusing, misleading, and has so many errors and references to the wrong place or supporting documents that don't exist or can't be located that it is undecipherable at many times;
13. modeling underestimates exports and overestimates Delta outflow;
14. modeling fails to accurately describe climate change;
15. the Plan fails to adequately protect ESA listed fish species;

16. the Plan documents fail to sufficiently analyze the impacts on ESA listed fish species, particularly coldwater pool needs of winter run salmon and habitat needs of Delta smelt;
17. the Plan documents continue to assume restoration of a greater quantity than now committed to, as well as other conservation measures that are no longer certain or part of the project, and therefore can no longer be counted on to offset impacts;
18. the plan fails to rely upon the best available science regarding the fishery ESA concerns;
19. the Plan documents consistently utilize an optimistic approach related to any uncertainty of the benefits of the proposed actions, yet minimizes the impacts at every turn at the same time;
20. the Plan lacks any tangible description of a sufficient or acceptable monitoring program;
21. the Plan documents only look at tunnel alternatives, instead of truly examining other alternative options such as increased storage and/or other methods to meet the goals of the project;

Despite the extensive critical comments and concerns voiced herein, TCCA does wish to highlight that we continue to be committed to working collaboratively with all statewide water interests in the effort to find balanced and equitable solution for the Delta. We have made this sentiment clear throughout the proceeds to the BDCP project proponents, as well as to DWR and USBR. Despite the incredible volume of material produced and numerous meetings held, no real collaborative process has yet to take place. As a result, this process has yielded a set of documents, alternatives and a plan that is viewed with skepticism and concern. The north state is receptive to and supportive of finding solutions to these problems, we just do not want to be the solution. The resulting Plan documents have merely served to solidify our concerns and criticisms. It is the sincere belief of the upstream stakeholders that a collaborative effort that takes into account our needs and concerns would result in a much more balanced, achievable and supportable solution. TCCA is committed to such a collaboration should the opportunity present itself.

Thank you for the opportunity to provide these comments, and your attention to the same.

Very truly yours,



Jeffrey P. Sutton  
General Manager

cc: TCCA Board of Directors  
J. Mark Atlas, General Counsel

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**From:** Jeff Sutton <[jsutton@tccanal.com](mailto:jsutton@tccanal.com)>  
**Sent:** Friday, October 30, 2015 3:57 PM  
**To:** BDCPcomments  
**Cc:** J. MARK ATLAS  
**Subject:** TCCA Comments on CA Water Fix/BDCP  
**Attachments:** bdcpc comments.pdf

Please accept the attached comments submitted by the Tehama-Colusa Canal Authority to the California Water Fix/BDCP Plan documents and accompanying Recirculated EIS/EIR.

They have also been sent by US Mail.

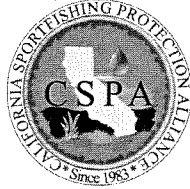
Thank you,

Jeffrey P. Sutton  
General Manager  
Tehama-Colusa Canal Authority  
P.O. Box 1025  
Willows, CA 95988  
Phone: (530) 934-2125  
Cell: (530) 301-1030

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No virus found in this message Wheeler IT / AVG Technologies, Inc. [ryan@wheelerit.com](mailto:ryan@wheelerit.com)  
Checked by AVG - [www.avg.com](http://www.avg.com)  
Version: 2015.0.5961 / Virus Database: 4450/10917 - Release Date: 10/30/15





**AQUALLIANCE**  
DEFENDING NORTHERN CALIFORNIA WATERS

30 October 2015

BDCP/WaterFix Comments  
P.O. Box 1919  
Sacramento, CA 95812  
BDCPComments@icfi.com

VIA: Electronic Submission  
Hardcopy if Requested

RE: Comments On Recirculated Draft EIR/Supplemental Draft EIS for Bay Delta  
Conservation Plan/California WaterFix and Tunnels Project

To Whom it May Concern,

The California Water Impact Network (C-WIN), California Sportfishing Protection Alliance (CSPA), and AquAlliance, appreciate the opportunity to comment on the revised draft of the California Water Fix EIR/EIS (RDEIR/SDEIS). C-WIN is a 501(c)(3) non-profit corporation that advocates for equitable and environmentally sensitive use of California's water, including instream uses and accomplish this mission through research, planning, public education, and litigation. The California Sportfishing Protection Alliance (CSPA) is a 501(c)(3) non-profit public benefit conservation and research organization established in 1983 for the purpose of conserving, restoring, and enhancing the state's water quality, wildlife and fishery resources and their aquatic ecosystems and associated riparian habitats. To further these goals, CSPA actively seeks federal, state, and local agency implementation of environmental regulations and statutes and routinely participates in administrative, legislative and judicial proceedings. Where necessary, CSPA directly initiates enforcement actions on behalf of itself and its members to protect public trust resources. AquAlliance is a 501(c)(3) public benefit corporation that exists to challenge threats to the hydrologic health of the northern Sacramento River watershed.

This letter also responds to the Notice of Extension of Public Comment Period, which extends the time period for commenting on the Water Fix to October 30, 2015. Our comment letter also identifies violations of the federal Clean Water Act (hereinafter "CWA"), the Porter-Cologne Water Quality Control Act (hereinafter "Porter-Cologne"), the Delta Reform Act of 2009, the California Environmental Quality Act, the National Environmental Policy Act, and the Public Trust Doctrine.

With the exception of the relocated pumping plant to the South Delta, elimination of the Ecosystem Restoration component and minor changes in the alignment of the water conveyance tunnels, the RDEIR/SDEIS analyses are little different than those previously circulated Bay Delta Conservation Plan and associated EIR/EIS. The analyses are virtually identical and the

environmental impacts of diverting additional millions of acre-feet of water around the Bay-Delta Estuary remain essentially the same as those identified in the BDCP EIR/EIS.

Consequently, we do not reiterate *ad nauseam* the thousands of pages of detailed comments others and we have heretofore submitted on the BDCP EIR/EIS, which remain germane to the present RDEIR/SDEIS. We incorporate by reference the previous BDCP EIR/EIS comments submitted by CSPA, CWIN, AquAlliance, Dr. G. Fred Lee and Michael Jackson into these comments, as well as the previously submitted comments by the Environmental Water Caucus, County of San Joaquin, South Delta Water Agency, Central Delta Water Agency, Restore the Delta, Earth Law Center, NRDC/The Bay Institute et al., Planning and Conservation League, Friends of the River and the U.S. Environmental Protection Agency. We further incorporate by reference the current submittals on the RDEIR/SDEIS for the Bay Delta Conservation Plan/California Water Fix Tunnels Project by these agencies/organizations, insofar as they are consistent with these comments.

We reiterate that these comments on the RDEIR/SDEIS should be considered in conjunction with our earlier and still pertinent comments on the BDCP EIR/EIS.

### **Introduction**

The RDEIR/SDEIS weaves an artificial reality: an omelet of distortion and half-truth crafted to support a preordained conclusion. It is the most deficient EIR/EIS we have reviewed in more than three decades of analyzing environmental documents. As the Delta Independent Science Board (DISB) more charitably characterized it in its review, “we find the Current Draft sufficiently incomplete and opaque to deter its evaluation and use by decision-makers, resource managers, scientists, and the broader public.” (Delta Independent Science Board review of the RDEIR/SDEIS, 30 September 2015, page 1)

The RDEIR/SDEIS is needlessly complex, is based upon outdated and incomplete information, is internally inconsistent in its analyses and its conclusions are irreconcilable with the facts and analyses. It fails to provide comprehensible summaries of environmental impacts. It ignores U.S. EPA’s request to analyze an alternative that would comply with water quality standards, as it ignores the State Water Resources Control Board’s (SWRCB) request to analyze an alternative with higher Delta outflows. Indeed, it hides the modeling results requested by the State Water Board in Appendix C, without subsequent discussion or analysis because those modeling results demonstrate that fisheries criteria and water quality standards can be significantly met by reductions in water exports.

The RDEIR/SDEIS fails to analyze and discuss alternatives that include higher Delta flows coupled with reduced exports. The 2009 Delta Reform Act required the SWRCB to conduct an extensive public proceeding to determine flow criteria necessary to protect public trust resources and the California Department of Fish and Wildlife (CDFW) to conduct a public proceeding to determine quantifiable biological objectives and flow criteria to protect Delta species of concern. Both the SWRCB and CDFW found that, based upon best available science, significant increases in Delta flows are necessary to protect public trust resources. Given the accelerating collapse of Delta fisheries since release of those reports, it is likely that increased

flows will be required to protect fisheries. The failure of the RDEIR/SDEIS to analyze and discuss alternatives requiring increased flow/reduced exports because such an alternative would not meet project goals renders the document legally inadequate and virtually useless for decision-makers and the public.

The RDEIR/SDEIS disingenuously represents that already degraded fisheries and impaired water quality can be protected by diverting additional millions of acre-feet of water from an estuary whose environmental tapestry has already been shredded by the diversion of half its inflow. By diverting prodigious quantities of the least contaminated water around the Delta, the California WaterFix will increase the concentration of pollutants in the estuary and lead to significantly increased violations of water quality standards. Consequently, WaterFix is inconsistent with the Delta Reform Act's requirements to "improve water quality" and achieve "water quality objectives in the Delta. Further, these additional diversions will degrade critical habitat for endangered species already tottering on the precipice of extinction by depriving it of crucially needed inflow identified as necessary for species survival. WaterFix is, therefore, inconsistent with the Delta Reform Act's requirements to "restore the Delta ecosystem." Additional degradation of Delta water quality and the failure to include a defensible antidegradation analysis ensures that both WaterFix and the RDEIR/SDEIS are inconsistent with Porter-Cologne and the federal Clean Water Act.

The RDEIR/SDEIS provides few details of how the state and federal projects will operate to protect fisheries and water quality under California WaterFix, leaving the details to an undefined future adaptive management program. However, adaptive management has been the professed principle of water operations since CalFed. The National Research Council's 2011 report titled *A Review of the Use of Science and Adaptive Management in California's Draft Bay Delta Conservation Plan*, describes adaptive management as a marvelous idea that frequently fails because of variety of enumerated reasons.<sup>1</sup> All of these identified reasons exist on steroids in the management of water resources in the Delta. The lack of identified specificity in the RDEIR/SDEIS adaptive management program is a CEQA/NEPA fatal flaw.

The RDEIR/SDEIS ignores and fails to adequately analyze the trend, extent and magnitude of continuing declines in pelagic and anadromous fisheries. Since 1967, the CDFW's Fall Midwater Trawl abundance indices for striped bass, Delta smelt, longfin smelt, American shad, splittail and threadfin shad have declined by 99.7, 97.8, 99.9, 91.9, 98.5 and 97.8 percent, respectively.<sup>2</sup> Every single survey of Delta smelt in late 2014 through mid-2015 identified new historic lows in species abundance.<sup>3</sup> The U.S. Fish and Wildlife's (USFWS) Anadromous Fisheries Restoration Program (AFRP) documents that, since 1967, in-river natural production of

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<sup>1</sup> The list of reasons for failure of adaptive management programs include: lack of resources; unwillingness of decision makers to admit to and embrace uncertainty; institutional, legal, and political preferences for known and predictable outcomes, the inherent uncertainty and variability of natural systems; the high cost of implementation; and the lack of clear mechanisms for incorporating scientific findings into decision making.  
<http://www.nap.edu/catalog/13148/a-review-of-the-use-of-science-and-adaptive-management-in-californias-draft-bay-delta-conservation-plan>.

<sup>2</sup> <http://www.dfg.ca.gov/delta/projects.asp?ProjectID=FMWT>

<sup>3</sup> See Bibliography: <https://www.wildlife.ca.gov/Conservation/Delta/20mm-Survey>;  
<https://www.wildlife.ca.gov/Conservation/Delta/Spring-Kodiak-Trawl>;  
<https://www.wildlife.ca.gov/Conservation/Delta/Townet-Survey>.

Sacramento winter-run Chinook salmon and spring-run Chinook salmon have decline by 98.2 and 99.3 percent, respectively, and are only at 5.5 and 1.2 percent, respectively, of doubling levels mandated by the Central Valley Project Improvement Act, California Water Code and California Fish & Game Code.<sup>4</sup> For example, population year classes of naturally reproducing Sacramento River winter-run, spring-run and fall-run Chinook salmon were virtually destroyed by lethal temperatures in 2014<sup>5</sup> and, as of 15 October, the 2015 winter-run year class numbers are 22% below last years decimated levels.<sup>6</sup>

The RDEIR/SDEIS's analyses are predicated upon assumptions of compliance with existing water quality standards contained in State Water Resources Control Board's (SWRCB) D-1641 and the reasonable and prudent measures contained in the biological opinions issued by the USFWS and National Marine Fisheries Service (NMFS). However, it grievously fails to acknowledge, discuss or analyze the fact that the SWRCB has adopted a pattern and practice of serially weakening compliance with adopted water quality standards or to analyze or discuss the failure of the biological opinions to reverse or reduce the continued decline of listed species.

The RDEIR/SDEIS fraudulently claims that fish screens on the new diversion will be protective of aquatic life but fails to acknowledge and discuss that the proposed screens are highly experimental and that many of the studies required to determine if the screens will actually work are proposed post-construction. As the DISB observed, these "measures are assumed to function as planned, with no evidence to support the assumptions." (Delta ISB review of the RDEIR/SDEIS, 30 September 2015, page 17) Nor does the RDEIR/SDEIS discuss or analyze the fact that the new screens will be located in close proximity to critical spawning and rearing habitat areas and will not prevent entrainment of eggs or larval Delta smelt, longfin smelt, Sacramento splittail and smaller lamprey ammocetes that will be present during periods of diversion or that the new screens will not prevent the massive entrainment of primary production and lower trophic orders that form the base of the food web. And the RDEIR/SDEIS is silent on the need to retrofit the obsolete South Delta fish screens to state-of-the-art standards, despite the fact that half of Delta exports (more in drier periods) will continue to be diverted via those inadequate facilities.

The RDEIR/SDEIS erroneously assumes that habitat losses can be simply mitigated by purchases of additional habitat acreage. This betrays a fundamental misunderstanding of aquatic habitat. Aquatic habitat comprises the physical and chemical parameters necessary for renewable fisheries. Present habitat restoration efforts have largely failed and have become habitat for invasive species because they failed to reproduce the conditions necessary for native species to thrive. The RDEIR/SDEIS also ignores the historical record of habitat mitigation:

<sup>4</sup> See, <http://www.fws.gov/lodi/afrp/>.

<sup>5</sup> State Water Resource Control Board, *Order Conditionally Approving a Petition for Temporary Urgency Changes in License and Permit Terms and Conditions Requiring Compliance with Delta Water Quality Objectives in Response to Drought Conditions*, 3 July 2015, pp. 15,16:

[http://www.waterboards.ca.gov/waterrights/water\\_issues/programs/drought/docs/tucp/2015/tucp\\_order070315.pdf](http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/docs/tucp/2015/tucp_order070315.pdf)  
And

NRDC, TBI, *Drought Operations Will Cause Additional Unreasonable Impacts on Fish and Wildlife in 2015*, 20 May 2015, slide 2:

[http://www.waterboards.ca.gov/waterrights/water\\_issues/programs/drought/docs/workshops/nrdc\\_tbi\\_pres.pdf](http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/docs/workshops/nrdc_tbi_pres.pdf)

<sup>6</sup> <http://www.sacbee.com/news/state/california/water-and-drought/article41684160.html>.

required habitat mitigation in the CalFed Record of Decision and the various biological opinions has never been completed and there are no assurances that the tunnel project's promised habitat mitigation will not suffer a similar fate.

The RDEIR/SDEIS is an illegitimate orphan in search of a parent. The BDCP EIR/EIS was the product of an almost decade-long effort to develop a program to both restore the Delta and provide enhanced water supply security. The Delta Reform Act of 2009 created the Delta Stewardship Council (Council) to develop a Delta Plan that would approve BDCP if it qualifies as a habitat conservation plan (HCP). The Delta Reform Act also directed the SWRCB to develop flow criteria protective of public trust resources and directed the CDFW to develop flow criteria and quantifiable biological goals protective of species of special concern. These criteria were to inform the Council in development of the Delta Plan. The Council, in developing the Delta Plan, left the incorporation of specific flow criteria and quantifiable biological goals to BDCP. Unfortunately, BDCP failed to incorporate flow criteria and quantifiable biological goals into its project and the BDCP EIR/EIS failed to analyze alternatives that included such criteria/goals. When BDCP was informed that it could not qualify as a habitat conservation Plan (HCP), it quickly morphed into a single purpose water export delivery plan. However, the BDCP EIR/EIS analyses were predicated on the existence of a massive habitat restoration program that no longer exists. Consequently, the BDCP EIR/EIS is not only internally inconsistent; it is inconsistent with requirements in the Delta Reform Act and the Delta Plan.

The RDEIR/SDEIS is fundamentally deficient because, as noted above, it failed to identify, discuss or analyze flows necessary to protect public trust resources as required by the Delta Reform Act. Beyond requiring the SWRCB to develop flow criteria to inform the Delta Plan process, the Delta Reform Act also required the SWRCB to include appropriate Delta flow criteria in any order approving a change in the point of diversion of the state and federal projects from the southern Delta to a point on the Sacramento River. The Act specifies that the flow criteria shall be informed by the earlier analysis conducted by the SWRCB regarding flows necessary to protect public trust resources. The Department of Water Resources (DWR) and U.S. Bureau of Reclamation (Bureau or Reclamation) submitted a joint application for a change in point of diversion on 26 August 2015 (it should be noted that the Delta Reform Act requires a change in point of diversion be completed before any construction is initiated). Other petitions for a 401 certification and 404 permit have been submitted. Both the SWRCB and CDFW's flow criteria reports recommended substantial increases in both Delta inflow and outflow to the Bay. The SWRCB requested that BDCP model a significantly higher outflow alternative. Since the SWRCB has already declared that existing flow are inadequate to protect public trust resources, it is more than likely that flows higher than considered in the RDEIR/SDEIS will be required in any change in point of diversion. The inexplicable failure of the RDEIR/SDEIS to analyze any alternative that includes significantly higher outflows, including flow modeling requested by the SWRCB, deprives decision-makers, resources managers, scientists and the public of crucially needed information on which to base informed comments on the WaterFix and RDEIR/SDEIS. It also squanders limited resources of agencies and the public in having to review an environmental document and process various applications that will have to be significantly revised and recirculated.

The RDEIR/SDEIS is incomplete in failing to include the results from the U.S. Bureau of Reclamation's Biological Assessment (BA) for WaterFix. WaterFix operations will require consultation with USFWS and National Marine Fisheries Service (NMFS) pursuant to the federal Endangered Species Act and a Section 7 incidental take permit including reasonable and prudent alternatives/measures. Reclamation is required to prepare an BA as part of the permitting process. We're informed that consultation has begun but that the BA has not been completed. Failure to include the BA in the RDEIR/SDEIS deprives decision-makers and the public of crucially needed information regarding impacts to fish and wildlife that are necessary for preparing informed comments on WaterFix and the RDEIR/SDEIS.

The RDEIR/SDEIS is focused on maximizing water contract deliveries but neglects to include adequate discussion and analyses of California's over-appropriated water rights system, the fact that Delta exports are limited to water surplus to the needs of the Delta and areas of origin and the implications of impending climate change. For example, reduced runoff caused by climate change will draw the critical low salinity zone eastward necessitating an increase in Delta outflow to prevent extinction of Delta and longfin smelt and other estuarine species. But any increased outflow would decrease exports turning the economic analysis of the project on its head.

The RDEIR/SDEIS fails to comport with an array of state and federal laws governing environmental review, water quality, protection of fisheries, water rights, etc. As we discuss below and in referenced comments, its fantasy conclusion that additional diversions of water around the Delta will not significantly harm the estuary's aquatic ecosystem and water quality and can receive legally required permits reflects an arrogant assumption that the broad suite of promulgated environmental statutes simply does not apply to project proponents. Reality is likely to provide a different answer.

The RDEIR/SDEIS is an analysis of a project in search of a sponsor. It is simply astonishing that WaterFix has reached this stage of development without a realistic, defensible benefit-cost analysis or the commitment of a single party to bear the costs of construction and operation. The entire project rests on the prayer that: somehow, someone will agree to pay for it; the SWRCB will not require higher flows to protect the estuary now or in the future; water quality will not continue to deteriorate; the experimental fish screens will somehow work, climate change will not bring extended periods of drought (and dry tunnels) and will not significantly reduce instream flow or increase salinity intrusion; listed species will not continue to decline and additional species will not be listed necessitating additional restrictions on exports, the prophesied catastrophic earthquake doesn't destroy the water delivery systems in the more earthquake-prone areas south of the Delta; future groundwater regulations will not prevent substantial quantities of Tuscan aquifer water to be substituted for surface water and exported; opponents will not succeed in a single one of myriad legal actions against the project; and that agricultural contractors can somehow absorb the extravagant cost of tunnel-delivered water and remain in business. Should WaterFix go forward and any one or several of the aforementioned prayers not be answered, the project becomes a colossal disaster, a financial nightmare and the largest stranded asset in human history. The failure of the RDEIR/SDEIS to adequately analyze and discuss these risks is an indictment of state and federal planning processes.

## Legal Framework Governing the Water Fix Environmental Documents

California law is clear that the Sacramento-San Joaquin Delta is “a natural resource of statewide, national, and international significance, containing irreplaceable resources, and it is the policy of the state to recognize, preserve, and protect those resources of the delta for the use and enjoyment of current and future generations.” (Public Resources Code Section 29701)

The 2009 California legislature enacted the Delta Reform Act that declared, among other pertinent sections, “The Delta is a distinct and valuable natural resource of vital and enduring interest to all the people and exists as a delicately balanced estuary and wetland ecosystem of hemispheric importance. (Water Code Section 85022(c)(1)) It also declared “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. Each region that depends on water from the Delta watershed shall improve its regional self-reliance for water through investment in water use efficiency, water recycling, advanced water technologies, local and regional water supply projects, and improved regional coordination of local and regional water supply efforts. (85021)

Water Code 85022 (c) lays out the state interest in the Bay/Delta as follows:

The Legislature finds and declares all of the following:

- (1) The Delta is a distinct and valuable natural resource of vital and enduring interest to all the people and exists as a delicately balanced estuary and wetland ecosystem of hemispheric importance.
- (2) The permanent protection of the Delta's natural and scenic resources is **the paramount concern** to present and future residents of the state and nation.
- (3) To promote the public safety, health, and welfare, and to protect public and private property, wildlife, fisheries, and the environment, it is necessary to protect and enhance the ecosystem of the Delta and prevent its further deterioration and destruction.
- (4) Existing developed uses, and future developments that are carefully planned and developed consistent with the policies of this division, are essential to the economic and social well-being of the people of this state and especially to persons living and working in the Delta.”

The California Water Fix EIR/EIS fails to disclose or analyze fairly or completely the necessary facts to determine whether the tunnel project will meet state interests in the Delta or will instead continue state and federal water management that has resulted in a steady decadal decline in the Bay/Delta estuarine condition. The environmental review also fails the requirement of enabling the public and future decision-makers to determine whether the Water Fix is compatible with the “longstanding constitutional principle of reasonable use and the

**public trust doctrine** {which} shall be the foundation of state water management policy and are particularly important and applicable to the Delta.’ W.C.85023

The California Supreme Court last visited public trust law in the seminal case of National Audubon Society v. Superior Court of Alpine County, 33 Cal.3d 419 (1983) in which the court said: “The state has an affirmative duty to take the public trust into account in the planning and allocation of water resources, and to protect public trust whenever feasible.” The Supreme Court also said, quoting now Justice of the 3<sup>rd</sup> Appellate District Ron Robie, that “the requirements of the California Environmental Quality Act (Public Resources Code 21000 et seq.) imposes a similar obligation.”

We can find no credible analysis of whether or not Article 10, Section 2 (the reasonable use, and unreasonable method of diversion provisions) was analyzed for consistency with the Water Fix tunnel project or with the public trust doctrine. We request that you do so before approving the tunnels and the new diversions that will lessen presently inadequate flows in the rivers and Bay/Delta. This is surprising because the Delta Reform Act also required the State Water Board to provide the Delta Stewardship Council with recommendations as to the amount of flow necessary to recover the estuary:

For the purpose of informing planning decisions for the Delta Plan and the Bay Delta Conservation Plan [BDCP], the board shall, pursuant to its public trust obligations, develop new flow criteria for the Delta ecosystem necessary to protect public trust resources. In carrying out this section, the board shall review existing water quality objectives and use the best available scientific information. The flow criteria for the Delta ecosystem shall include the volume, quality, and timing of water necessary for the Delta ecosystem under different conditions. The flow criteria shall be developed in a public process by the board within nine months of the enactment of this division. The public process shall be in the form of an informational proceeding...and shall provide an opportunity for all interested persons to participate. The flow criteria shall not be considered pre-decisional with regard to any subsequent board consideration of a permit, including any permit in connection with a final BDCP. (Water Code § 85086)

The State Board, after extensive hearing, found that the public trust needs of the Bay/Delta required increased outflow from the Delta into Suisun Bay and then into the San Francisco Bay. The State Board recommended that 75% of unimpaired flow be required in the winter and spring months for this purpose. Among the key points made regarding necessary Delta environmental flows for the State Water Board hearing in 2010, the Delta Environmental Flows Group (DEFG) testified that the recent flow regimes both harm native species and encourage non-native species and provided the following justification for that scientific opinion:

The major river systems of the arid western United States have highly variable natural flow regimes. The present-day flow regimes of western rivers, including the Sacramento and San Joaquin, are highly managed to increase water supply reliability for agriculture, urban use, and flood protection. Recent Delta inflow and outflow regimes appear to both harm native species and encourage non-native species. Inflow patterns from the Sacramento River may help riverine native species in the north Delta, but inflow patterns



from the San Joaquin River encourage non-native species. Ecological theory and observations overwhelmingly support the argument that enhancing variability and complexity across the estuarine landscape will support native species. High winter-spring inflows to the Delta cue native fish spawning migrations, improve the reproductive success of resident native fishes, increase the survival of juvenile anadromous fishes migrating seaward, and disperse native fishes spawned in prior years.

### **Need for additional Freshwater Flows and Outflow**

High freshwater outflows (indexed by X2) during winter and spring provide benefits to species less tolerant of saltwater including starry flounder, bay shrimp, and longfin smelt.<sup>7</sup> Freshwater flows provide positive benefits to native fishes across a wide geographic area through various mechanisms including larval-juvenile dispersal, floodplain inundation, reduced entrainment, and increased up-estuary transport flows. Spring Delta inflows and outflow have declined since the early 20th century, but average winter-spring X2 has not had a time trend during the past 4-5 decades.<sup>8</sup> The estuary's fish assemblages vary along the salinity gradient and along the gradient between predominantly tidal and purely river flow. In tidal freshwater regions, fish assemblages also vary along a gradient in water clarity and submerged vegetation.<sup>9</sup>

Generally, native fishes have their highest relative abundance in Suisun Marsh and the Sacramento River side of the Delta, which are more spatially and temporally variable in salinity, turbidity, temperature, and nutrient concentration and form than other regions. This is exactly the location where the Water Fix plans to build its new diversions. In both Suisun Marsh and the Delta, native fishes have declined faster than non-native fishes over the past several decades. These declines have been linked to persistent winter, spring and low fall outflows and the proliferation of submerged vegetation in the Delta.<sup>10</sup>

However, many other factors also may be influencing native fish declines including differences in sensitivity to project entrainment as productivity declines, and greater sensitivity to combinations of food-limitation and contaminants, especially in summer- fall when many native fishes are near their thermal limits. The weight of the circumstantial evidence summarized above strongly suggests flow stabilization harms native species and encourages non-native species, possibly in synergy with other stressors such as nutrient loading, contaminants, and food limitation.<sup>11</sup>

<sup>7</sup> Dahm, C., T. Dunne, W. Kimmerer, D. Reed, E. Soderstrom, W. Spencer, S. Ustin, J. Wiens, and I. Werner. 2009. Bay Delta Conservation Plan Independent Science Advisors' Report on Adaptive Management. Prepared for BDCP Steering Committee. February 2009. 33 pages.

<sup>8</sup> Sommer, T.R. W.C. Harrell, A. Mueller-Solger, B. Tom, and W. Kimmerer. 2004. Effects of flow variation on channel and floodplain biota and habitats of the Sacramento River, California, USA. *Aquatic Conservation: Marine and Freshwater Ecosystems* 14: 247-261.

<sup>9</sup> Sommer, T.R., W.C. Harrell, and M.L. Nobriga. 2005. Habitat use and stranding risk of juvenile Chinook salmon on a seasonal floodplain. *North American Journal of Fisheries Management* 25: 1493-1504.

<sup>10</sup> Feyrer, F., and Healey, M.P. 2003. Fish Community Structure and Environmental Correlates in the Highly Altered Southern Sacramento-San Joaquin Delta. *Environmental Biology of Fishes* 66: 123-132.

<sup>11</sup> Feyrer et al. 2007) Feyrer, F., M. Nobriga, and T. Sommer. 2007. Multi-decadal trends for three declining fish species: habitat patterns and mechanisms in the San Francisco Estuary, California, U.S.A. *Canadian Journal of Fisheries and Aquatic Sciences* 64: 723-734.

### **The Cause of the Fishery and Bay/Delta Estuarine Decline**

The major surface water supply developments of the Central Valley include the CVP, other federal projects built by the USBR and the U.S. Army Corps of Engineers (USACE), the SWP, and numerous local projects (including several major diversions). The big rim dams, developed mostly since the 1940s, dramatically changed river flow patterns. The dams were built to provide flood protection and a reliable water supply. Collection of water to storage decreased river flows in winter and spring, and changed the timing of high flow periods (except for extreme flood flows).

The San Joaquin River has lost most of its natural summer flows because the majority of the water is exported via the Friant project or diverted from the major tributaries for use within the basin. Even though natural flows have been substantially reduced, agricultural return flows during the summer have actually resulted in higher flows than would have occurred under unimpaired conditions at times during the summer. Winter and spring flows collected to storage by the State and federal projects in the Sacramento Basin are released in the late spring and throughout the summer and fall, largely to be re-diverted from the Delta for export. The federal pumping plants in the southern Delta started operating in the 1950s, exporting water into the Delta-Mendota Canal. The State pumps and the California Aqueduct started operating in the late 1960s, further increasing exports from the Delta.<sup>12</sup>

Irrigation is the primary use of water in the Sacramento and San Joaquin river watershed. Water is used to a lesser extent to meet municipal, industrial, environmental, and instream needs. Water is also exported from the Central Valley Basin for many of these same purposes. Local irrigation districts, municipal utility districts, county agencies, private companies and corporations, and State and federal agencies have developed surface water projects throughout the basin to control and conserve the natural runoff and provide a reliable water supply for beneficial uses. Many of these projects are used to produce hydroelectric power and to enhance recreational opportunities. Flood control systems, water storage facilities, and diversion works exist on all major streams in the basin, altering the timing, location, and quantity of water and the habitat associated with the natural flow patterns of the basin.

### **When Will Necessary State-Of-The-Art Fish Screens Be Required On South Delta Export Pumps?**

New fish screens at the existing South Delta state and federal export pumps would drastically reduce entrainment of virtually all of the pelagic and salmonid listed pursuant to state and federal endangered species acts. The screening project was mothballed after MWD and the State Water Contractors, the beneficiaries of the SWP and CVP, stated that they would not pay for them. The BDCP/Water Fix RDEIR is required to disclose and analyze the impacts of the continued use of the South Delta project pumps since they will be used in low water years to

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<sup>12</sup> Fleenor, W., Bennett, W., Moyle, P.B., and Lund, J. 2010. On developing prescriptions for freshwater flows to sustain desirable fishes in the Sacramento-San Joaquin Delta.

provide the largest amount of water diverted from the Bay/Delta under the new project operational plans. The RDEIR/SDEIS should disclose and analyze the following facts:

- a. New state-of-the-art fish screens were required mitigation measures in the CalFed ROD. Evaluation of the success of the INSTALLED new fish screens was to occur BEFORE further consideration of a peripheral canal.
- b. Screening of agricultural diversions accomplishes little if the CVP/SWP pumps subsequently destroy fish that bypass agricultural screens.
- c. The new screens at the Contra Costa intake have only taken a couple of smelt since they were constructed (much different than the 26,000 Delta smelt killed by the project pumps between June 1 and June 24 of 2007).
- d. The first units of the new screens would have been in place today had the water contractors not refused to pay for them.
- e. The required state-of-the-art screen project also encompassed improved new salvage facilities, transportation methods and improved release methods and new release areas. The new screens would have significantly reduced the approach velocity of water and new screen openings would have been reduced from the present one-inch to a couple of millimeters (thereby preventing most smelt from going down the DMC to Los Angeles).
- f. The mandated new fish screens would have been in front of Clifton Court Forebay, which would have eliminated most of the current predation occurring in the Forebay (Forebay predation is the largest cause of mortality for most species "taken" by the pumps).
- g. A component of the new screen project would have been an accelerated and intensified effort in improving survivability of smelt. Indeed, survival rates of salvaged Delta smelt are improving. Recent results from Pit-tag (passive integrated transponder tags) monitoring show that approximately 33.3% of Delta smelt salvaged survives collection, transport and release back into the Delta (14% at the CVP). Unfortunately, most smelt that reach the present screens pass through them and are never diverted to the salvage buckets.
- h. The Fish Facilities Team effort was probably the finest multidisciplinary interagency study, with high synergies, that he witnessed in his decades with DFG/NOAA.
- i. Had the new screens been installed, as mandated, they would also have largely eliminated Clifton Court predation and significantly improved salvage and survivability of many other species presently in precipitous decline, including salmon, steelhead, splittail, threadfin, American shad, longfin, striped bass, etc.
- j. As previously noted, under CalFed, an evaluation of the success of the installed new fish screens was to occur before further consideration of a

peripheral canal. Clearly, it cannot be claimed that money is an obstacle to construction of new screens, considering the estimated costs of proposed new reservoirs and peripheral tunnels, respectively.

### **What New Conditions On Export Pumping Will Be Implemented In Light Of Increased Water Exports And Resulting Reverse Flows To Protect The Bay/Delta Ecosystem?**

The average of SWP and CVP exports in the 1970s were 1.430 MAF and 2.141 MAF, respectively. Exports in the 1980s averaged 2.425 MAF (SWP) and 2.519 MAF (CVP). During the 1990s, average exports were 2.305 MAF (SWP) and 2.219 MAF (CVP). Exports dramatically increased between 2000 and 2007 to an annual average of 3.251 SWP and 2.590 MAF (CVP). Additionally, average annual exports to Contra Costa Water District and the North Bay Aqueduct significantly increased from 90 TAF and 0 TAF, respectively, in the 1970s to 120 TAF and 48 TAF in the 2000s. In other words, total average annual exports from the South Delta increased from 3.662 MAF during the decade following approval of the subject water rights to an annual average of approximately 6.008 MAF between 2000 and 2007. The dramatic increase in the level of exports, beginning in 2003, coincided with the crash in pelagic species populations. For example, exports in 2003, 2004, 2005 and 2006 were 6.323 MAF, 6.145 MAF, 6.470 MAF and 6.315 MAF, respectively.

### **What Is to Be Done about Current Salt Loading to the San Joaquin River and Delta?**

The State Board assigned DWR and the Bureau the responsibility for meeting salinity objectives in the 1979 Delta Plan, D-1485 and the 1995 Delta Plan and D-1641. Salinity standards continue to be routinely violated. The San Joaquin River Salinity and Boron TMDL assigns responsibility for controlling salt delivered to the San Joaquin Valley from the Delta to the Bureau. The Bureau's salt load reductions are to be addressed through a joint Management Agency Agreement with the Central Valley Board. Unfortunately, the Bureau is claiming sovereign immunity and, while promising some level of cooperation, refuses to accept specific enforceable load limits that will actually lead to reductions in salt loading to the San Joaquin River. Since the BDCP/Water Fix project will continue to use the South Delta pumps in most years and will use them heavily in low water years, the RDEIR/SDEIS must adequately assess what is likely to happen when the North Delta diversions go into effect, depriving the Bay/Delta estuary of approximately half of its present freshwater flow. The RDEIR/DEIS does not, thereby violating both NEPA and CEQA.

### **The RDEIR/SDEIS Fails to Adequately Disclose and Analyze the Impacts to Water Quality and Contaminant Control by Diverting Large Amounts of Water in the North Delta.**

The Water Fix environmental documents pay lip service to the control of the largest sources of water quality impairment and controllable pollutant loading into the Delta and its tributaries. While recent information has, perhaps, refined our understanding of these issues, the causes and sources of these problems and the actions necessary to reduce or eliminate them have been known for decades. Many years ago, the State and Regional Water Boards identified salt

and selenium impairment of the San Joaquin River and Delta, organophosphorus (OP) pesticides in the Sacramento and San Joaquin Rivers and Delta, low dissolved oxygen in the Stockton Ship Channel, agricultural pollution and the problems of municipal wastewater and stormwater discharges. The sources and actions necessary to address and eliminate them have also been long known. The statutory authority and regulatory tools to address them have existed since the 1970s. Unfortunately, what has been absent is the political will to meaningfully attack these problems, and the Water Fix will make solutions to these problems impossible by decreasing freshwater flows into most of the Delta.

The Delta and San Francisco Bay are listed under section 303(d) of the Federal Clean Water Act as impaired for a variety of toxic contaminants that may contribute to reduced population abundance of important fish and invertebrates. The contaminants include: organophosphate and pyrethrin pesticides, mercury, selenium and unknown toxicity. In addition, low DO levels periodically develop in the San Joaquin River in the Stockton Deep Water Ship Channel (DWSC) and in Old and Middle Rivers. The low DO levels in the DWSC inhibit the upstream migration of adult fall-run Chinook salmon and adversely impact other resident aquatic organisms. The Central Valley and San Francisco Regional Boards are systematically developing Total Maximum Daily Loads (TMDLs) for all listed pollutants and adopting programs to implement control actions.

The Bay-Delta Estuary is one of the largest, most important estuarine systems for fish and waterfowl production on the Pacific Coast of the United States. The Delta provides habitat for a wide variety of freshwater, estuarine, and marine fish species. Channels in the Delta range from dead-end sloughs to deep, open water areas that include several flooded islands that provide submerged vegetative shelter. The complex interface between land and water in the Delta provides rich and varied habitat for wildlife, especially birds. The Delta is particularly important to waterfowl migrating via the Pacific Flyway as these birds are attracted to the winter- flooded fields and seasonal wetlands.

A wide variety of fish are found throughout the waterways of the Central Valley and the Bay-Delta Estuary. About 90 species of fish are found in the Delta. Some species, such as the anadromous fish, are found in particular parts of the Bay-Delta Estuary and the tributary rivers and streams only during certain stages of their life cycle. The Delta's channels serve as a migratory route and nursery area for Chinook salmon, striped bass, white and green sturgeon, American shad, and steelhead trout. These anadromous fishes spend most of their adult lives either in the lower bays of the estuary or in the ocean, moving inland to spawn. Resident fishes in the Bay-Delta Estuary include delta smelt, longfin smelt, threadfin shad, Sacramento splittail, catfish, largemouth and other bass, crappie, and bluegill. Most of these fish are in steep decline and a number of them are listed under federal and state endangered statutes.

Food supplies for Delta fish communities consist of phytoplankton, zooplankton, benthic invertebrates, insects, and forage fish. The entrapment zone, where freshwater outflow meets and mixes with the more saline water of the Bay, concentrates sediments, nutrients, phytoplankton, some fish larvae, and other fish food organisms. Biological standing crop (biomass) of phytoplankton and zooplankton in the estuary has generally been highest in this zone. However, the overall productivity at the lower trophic levels has decreased over time.

Flow is important to sustaining the ecological integrity of aquatic ecosystems, including the public trust resources that are potentially impacted by the Water Fix and the three new diversions proposed above the great majority of the Bay/Delta. Flow affects water quality, food resources, physical habitat, and biotic interactions. Alterations in the natural flow regime affect aquatic biodiversity and the structure and function of aquatic ecosystems. Delta outflows and the position of X2 are closely and inversely related, with a time lag of about two weeks.<sup>13</sup> X2 is defined as the horizontal distance in kilometers up the axis of the estuary from the Golden Gate Bridge to where the tidally averaged near-bottom salinity is 2 practical salinity units (psu). The position of X2 roughly equates to the center of the low salinity zone (defined as salinity of 0.5 to 6 psu). The X2 objectives in the 2006 Bay-Delta Plan were designed to restore a more natural hydrograph and salinity pattern by requiring maintenance of the low salinity zone at specified points and durations based on the previous month's Eight River Index. The relationships between outflow and several measures of the health of the Bay-Delta Estuary have been known for some time and are the basis for the current X2 objectives.<sup>14</sup>

DWR and the Bureau have failed to formulate the California Water Fix in such a manner that analyzes the competing demands of all beneficial uses, and instead have devised a plan that puts maintenance of yield to the water rights of the federal Central Valley Project and the State Water Project over all other beneficial uses, whether propertied or not. In essence, the Water Fix proposal conducts its water quality control planning for the outcome of "no net loss to exports" and ignored its responsibilities to evaluate the competing needs of all beneficial uses in the process of developing water quality and flow objectives. This failure violates numerous requirements of state and federal environmental laws and is not completely disclosed or analyzed fairly by the RDEIR/SDEIS in terms of impacts on the Bay/Delta.

The adequacy of the Water Fix environmental documentation is governed by many different laws, including state CEQA guidelines, federal NEPA guidelines, water code section 13241, the Public Resources Code (21159), Porter-Cologne, and the Clean Water Act (as it applies to water quality standards promulgated by the Board). Further, portions of water quality control plans that fall under the jurisdiction of the CWA require approval by the U.S. Environmental Protection Agency. These various laws charge the Water Fix agencies (DWR and the U.S. Bureau of Reclamation) with, among other things, reasonably describing and analyzing potentially significant direct and indirect environmental impacts of a project; describing and analyzing reasonably foreseeable methods of compliance with the regulatory requirements of each alternative, analyzing potentially feasible mitigation measures and the economic considerations of establishing objectives in water quality control plans; and analyzing related indirect and induced impacts on the regional economy including estimating the total cost of implementing their project.

In addition to the various laws mentioned above, governments have a permanent fiduciary responsibility and obligation to protect the public trust. In *National Audubon Society*

<sup>13</sup> Jassby, A.D., W.J. Kimmerer, S.G. Monismith, C. Armor, J.E. Cloern, T.M. Powell, J.R. Schubel, and T.J. Vendlinski. 1995. Isohaline position as a habitat indicator for estuarine populations. *Ecological Applications* 5(1): 272-289, February 1995.

<sup>14</sup> Ibid., Jassby et al. 1995.

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*v. Superior Court*, the California Supreme Court held that “the public trust is more than an affirmation of state power to use public property for public purposes. It is an affirmation of the duty of the state to protect the people’s common heritage of streams, lakes, marshlands and tidelands, state, the Board is charged with ensuring the state of California carries out its fiduciary responsibility to protect air, running water, the sea, and the seashore, ‘these things that are common to all’.”

The State has invoked its public trust responsibilities in regulating the waters of California and acknowledges that the public trust is one of its ongoing regulatory responsibilities. The State has also adopted regulations governing how it treats the public trust in matters of the appropriation of water in California. The Public Trust Doctrine provides that no one has a vested right to appropriate water in a manner harmful to the interests protected by the public trust. In accordance with this doctrine, California’s constitution promises water rights only up to what is a reasonable use. No one has a right in California to use water unreasonably, not even the federal government. The courts, in *United States v. State Water Resources Control Board* (1986, 182 Cal.App.3d 82), determined that the Board had the authority to modify an appropriative water right permit once it had been issued, and that it could reduce the US Bureau of Reclamation’s Central Valley Project permits to gain compliance from the Bureau.

Proponents of the Bay Delta Conservation Plan (BDCP) and its peripheral tunnels suggest that only by diverting water from the Sacramento River can the Delta be restored because of immense fishery losses at the South Delta export pumps. This is simply **incorrect!** **Fish losses could even increase** with the addition of a North Delta diversion point.

### **The Water Fix RDEIR/SDEIS Does Not Comply with NEPA or CEQA**

The Water Fix plans for construction and operation of a new water supply project, including new water diversions beginning in the northern Delta and tunnels under the Delta to transport water to the south as first proposed by the BDCP. The Water Fix suffers from all of potential for causing major impacts to the Delta estuary as were disclosed during the previous BDCP comment period, including but not limited to, reduced flow into Suisun and San Francisco bays, removal of millions of ac/ft. of fresh, cold, clean water from the Bay/Delta estuary, and new obstructions for listed species that are presently suffering population collapse from state and federal water mismanagement. The main difference between BDCP and the Water Fix is that the Fix has dropped the elements of BDCP that were ostensibly designed to restore the declining health of the Bay/Delta estuary. The Fix document is not a full disclosure document as required by NEPA and CEQA, and it forecloses alternatives that would not require new conveyance and/or would increase Delta flows by reducing exports.

For many years, environmental and fishing groups (including CSPA, CWIN, and AquAlliance) have advocated a simple alternative to the tunnels, the Environmental Water caucus alternative. The EWC alternative responds to the purpose and need for the tunnel project in conformance with the existing law. A modified version of those ideas, presented to the Water Fix proponents by the State Water Board is contained in Appendix C of this document. We believe that the alternative, partially modeled in Appendix C, must be included as one of the

alternatives analyzed in the RDEIR/EIS so that at least one alternative would meet required legal standards. So far, the agencies in charge of the project have refused to consider following existing law, which would require them to find alternative water supplies for their needs. The Appendix C alternative, as will be made clear below, can be crafted to be compatible with the EWC alternative repeatedly submitted to state and federal agencies for analysis.

This RDEIR/EIS, however, fails to properly analyze the impacts of implementing the state and federal government Water Fix in conformance with NEPA and CEQA. Specifically, it fails to establish an adequate “baseline”, improperly defers and segments environmental analysis, and fails to provide an accurate, stable, and finite description of the project, which includes the Water Tunnels. As a direct result of this failure to properly define the project, the RDEIR also cannot properly analyze the impacts of implementing the project, including the project’s cumulative impacts, and fails to formulate adequate mitigation. The RDEIR also fails to develop or consider the required range of reasonable alternatives to reduce or at least minimize the project’s impacts on the environment.

### **The RDEIR/SDEIS Established an Inadequate and Inaccurate Baseline**

The RDEIR/SDEIS’ formulation of baseline environmental conditions is fundamentally flawed and deceptive because, among other flaws, it fails to provide accurate information regarding existing surface water and groundwater supply and demand. Additionally, the RDEIR/SDEIS falsely cites ongoing unsustainable and illegal Delta water exports to establish a baseline for future exports when DWR has known at least since 1960 that they could not deliver more than 3.1 million acre/ft. of water without additional water sources. (DWR Bulletin 76) The vague and inaccurate environmental baseline established in the RDEIR/SDEIS violates NEPA and CEQA and makes any analysis of the project’s impacts impossible. The RDEIR/SDEIS’ omission of the required information in its baseline analysis violates the foundational NEPA/CEQA mandate for informed decision-making. (*California Native Plant Soc. v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 987.)

Existing physical conditions in the vicinity of a project “normally” serve as the “baseline” for determining the significance of the project’s environmental impacts – that is, the set of conditions against which the scope and severity of the project’s effects are compared. (Guidelines, § 15125(a); *Communities for a Better Environment v. South Coast Air Quality Management District* (2010) 48 Cal.4th 310, 315 (*CBE SCAQMD*).) If an “EIR does not adequately apprise all interested parties of the true scope of the project for intelligent weighing of the environmental consequences of the project, informed decision-making cannot occur under CEQA and the final EIR is inadequate as a matter of law.” (*Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.4th 70, 82-83 (*CBE Richmond*)) (citation omitted).) An adequate baseline thus serves the “fundamental goal” of an EIR: “to inform decision makers and the public of any significant adverse effects.” (*Neighbors for Smart Rail v. Exposition Metro Line Construction Authority* (2013) 57 Cal.4th 439, 447 (*Neighbors*); *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 953 (without an “adequate baseline description ... analysis of impacts, mitigation measures and project alternatives becomes impossible”).) An adequate baseline is one against which predicted effects can be described and quantified. (*Neighbors, supra*, 57 Cal.4th, at 447 (citing *CBE SCAQMD*,



*supra*, 48 Cal.4th, at 315).) The Water Fix RDEIR/SDEIS, however, erred in failing to include a quantified analysis of the availability of water flowing into the Delta and the demand for that water. According to the RDEIR/SDEIS, annual Delta exports vary from 3 to 6.5 MAF. However, without detailed information on flows in and out of the Delta (after consumptive use is calculated), the RDEIR/SDEIS fails to provide sufficient information to allow agencies and the public to assess the impacts of implementing the Water Fix project on Bay/Delta habitat, public trust resources and responsible exports in a quantified manner. (*Neighbors, supra*, 57 Cal.4th at 447) (“an EIR must delineate environmental conditions prevailing absent the project, defining a “baseline” against which predicted effects can be described and quantified”, citing *CBE SCAQMD*, 48 Cal.4th, at 315).)

The Water Resources chapter of the RDEIR/SDEIS provides a qualitative summary of various hydrological conditions, water resources and water uses for various watersheds within the Delta and those outside of the Delta that import Delta water. This qualitative assessment, however, fails to holistically recognize the critical importance of Delta water flow, and Bay/Delta outflow, to the health of the ecosystem. Even the Delta Independent Science Board Lead Scientist has explained that restoring more natural flow regime is critical goal for Delta ecosystem. Though it was possible to conduct an analysis of water availability and disclose that information as part of baseline conditions (example water availability analysis that shows that the Central Valley watershed is over-appropriated by up to 5 times), the Water Fix proponent agencies deferred the development of water availability analysis to the SWRCB. Thus, the RDEIR/SDEIS fails to provide the public with a basic analysis of how much Delta water is available for various uses, including Bay/Delta export.

The RDEIR/SDEIS also fails to discuss over-allocated water entitlements that create unrealistic demands for Delta water, or “paper water.” In fact, the SWP/CVP only supplies approximately half of the entitlements of water per year. (*PCL v. DWR* (2000) 83 Cal.App.4th 892, 908.) The California courts have criticized paper water, recognizing the “huge gap between what is promised and what can be delivered.” (*PCL v. DWR, supra*, 83 Cal.App.4th at 903 (“‘Entitlements’ is a misnomer, for contractors surely cannot be entitled to water nature refuses to provide or the body politic refuses to harvest, store and deliver”).)

The Water Fix agencies acknowledge that “[e]xisting configurations of Delta water conveyance and associated conveyance facilities do not provide adequate long-term reliability to meet current and projected water demands for SWP and CVP water exports from the Delta watershed. However, the RDEIR/SDEIS avoids addressing the paper water issue in favor of more cursory treatment, referring to the failure to construct a peripheral canal in 1982 and passage of federal and State laws to protect wild rivers has resulted in water supply shortages such that “full amount of water originally envisioned when the SWP was planned is no longer visible.” Similarly, the RDEIR/SDEIS admits that the CVP/SWP’s ability to convey water from the Delta is further reduced by the capacity of conveyance and storage facilities in areas outside of the Delta that use Delta water. The RDEIR/SDEIS also notes that continued reliability of CVP and SWP water supplies in the Delta has been reduced over the past 20 years through the implementation of water quality objectives, water rights decisions, and biological opinions.

The RDEIR/SDEIS fails to provide information that allows the decision-makers for the project permits that are required in the future (Change in Point of Diversion, new water quality standards, Corps of Engineers wetland permit, etc.) and for the public to quantify the difference between Delta water supply and demand, which is part of baseline conditions, and therefore necessary to assess the impacts of implementing the Water Fix. The exact quantification of the gap between supply and demand is necessary in order for the many decision-makers expected to rely on this document to make informed decision-making that evaluate all actions that could be taken in order to meet the legally required goals. Only through quantifying water supply, entitlements, and demand would decision-makers and the public be able to realistically assess the environmental impacts of the Water Fix's approach to water reliability, whereby it is expected that "[w]ater exported from the Delta will more closely match water supplies available to be exported while providing the fullest possible protection for the Delta ecosystem."

The RDEIR/SDEIS' failure to include realistic water supply data in its environmental baseline is prejudicial because it undermines the statutory goals of an EIR/EIS to inform decision makers and the public of potentially significant adverse effects on the physical environment. (See *Neighbors*, *supra*, 57 Cal. 4th at 516 (citing *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 712).) The vague and cursory water supply and demand conditions as described by the RDEIR/SDEIS without support by quantitative data does not provide sufficient baseline information that would allow decision-makers or the public to evaluate significant adverse water resources and biological impacts (among others) the tunnel and diversions will have on the environment. (Guidelines, §15125(a); *CBE SCAQMD*, *supra*, 48 Cal.App.4th, at 315.)

### **The RDEIR/SDEIS Failed to Include an Accurate, Stable and Finite Project Description**

According to the RDEIR/SDEIS, the Water Fix is a stand alone project that no longer includes most of the environmental restoration that the proponent agencies believed would be necessary to qualify for "safe harbor" under ESA Section 10 as a federal HCP or a state NCCP. Since the Bureau of Reclamation is one of the proponent agencies and is no longer applying for protection from the ESA for federal contractors, the Fix project needs to go through the normal process for project approval. The Water Fix RDEIS/SDEIS cannot be adequate without the Bureau of Reclamation preparing the first step in an ESA Section 7 process, that of preparing and submitting a Biological Assessment of the impacts and effects on the environment of their proposed project. This step has not been done at the present time. The inclusion of the normal Biological Assessment would provide the public and later decision-makers with operational parameters that would enable a more complete analysis of this project. A Biological Assessment of the proposed project's likely impacts on listed species and a complete assessment of the existing aquatic habitat needs of the listed species would give a more complete picture that would enable members of the public to better understand and evaluate all of the issues that need to be considered, including (1) reliable water supply; (2) Delta ecosystem restoration; (3) protection and enhancement of the Delta as an evolving place; (4) water quality improvement; and (5) flood risk reduction.

Adequate information regarding the Water Fix and its potential impacts on the environment has been lacking throughout this long, ever-changing process. The passage of the Delta Reform Act was based on a BDCP process that would qualify as a federal ESA Section 10 Habitat Conservation Plan and a state Natural Communities Conservation Plan. However, the information that was available to the DSC throughout the environmental review of the Delta Plan has now been changed. The voluntary discarding of the BDCP will potentially have grave impacts on the Delta Stewardship Council's Delta Plan. So many of the assumptions of both the Council and the state legislature that resulted in the dual goals of the DRA have been eliminated, leaving the Delta Plan with major holes in it that cannot be closed. The DRA left the questions of storage and conveyance, flows, biological targets, amount of restoration, and species viability up to the BDCP program. Now that the project description has changed so substantially, eliminating the restoration portion of the dual goals, who is now to determine whether or not the project can accomplish the DRA's statutory requirements? Specifically, DSC had access to then reliable information that the BDCP planned divert up to 15,000 cfs of water from the Delta, and that the Resources Agency maintained that "a conveyance capacity ranging in size from 12,000 to 15,000 cfs would best accommodate the dual objectives" of the Delta Reform Act. (2010 BDCP Highlights) In July 2012, the Governor and the DWR Deputy Director described the BDCP project as consisting of two 33-foot diameter tunnels 35 miles long with the capacity to convey 15,000 cfs of water under the Delta to the pumping plants at the south end of the Delta. The location of the upstream diversion would be near Clarksburg on the Sacramento River.

The DSC's RDEIR released for public review in November 2012, however, continued to define the project by a vague and misleading reference to plans to encourage "conveyance facilities (pipelines and pumping plants)" as if there was still some question as to what those projects entailed. In fact, the location and size of the new conveyance project--the Water Tunnels--had been announced by the Governor four months earlier. Moreover, by March 2013, prior to the certification of the FEIR in May, Administrative Drafts of the BDCP Plan had been released showing more specific details about the project including placement of three intakes for the Water Tunnels "between River miles 37 and 41 (near Clarksburg)." (March 2013 Admin. Draft BDCP. The Council certified its FEIR based on an existing understanding that BDCP would be a Habitat Conservation Plan and a state NCCP. It relied on the completion of the BDCP process for resolution of most of the thorny issues that have plagued the Bay/Delta estuary for decades. In mid-2015, the BDCP project failed. The Water Fix was rolled out by DWR and the Bureau and BDCP was nothing more than a preliminary pile of 44,000 pages used to confuse and exhaust reviewers in the Water Fix BDEIR/SDEIS. The Delta Plan required by the DRA was prepared for a different reality, and the Fix was truly in. The project was now completely different from before and the attempt to save and restore the Bay/Delta estuary was no longer the responsibility of the proponents of the Water Fix.

CEQA requires that "an agency must use its best efforts to find out and disclose all that it reasonably can" about the project being considered and its environmental impacts." (*Vineyard Area Citizens v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 428 (*Vineyard*).) "CEQA requires full environmental disclosure." (*CBE Richmond* 184 Cal.4th 70, 88.) A primary goal of CEQA is "transparency in environmental decision-making." (*Save Tara v. City of West Hollywood* (2008) 45 Cal.4th 116, 136.) Specifically, "An accurate, stable and finite project description is the *sine qua non* [absolutely indispensable requirement] of an informative and

legally sufficient EIR.” (*San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 655 (project description unstable and misleading statements that no increases in production were being sought).) “However, a curtailed, enigmatic or unstable project description draws a red herring across the path of public input.” (*Ibid.*). “Only through an accurate view of the project may the public and interested parties and public agencies balance the proposed project’s benefits against its environmental cost, consider appropriate mitigation measures, assess the advantages of terminating the proposal and properly weigh other alternatives.” (*Ibid.*, citations and internal quotation marks deleted; *accord*, *CBE Richmond, supra*, 184 Cal.4th 83-86.)

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. . .’ Guidelines, § 15378, subd. (a). . .” (*Tuolumne County Citizens for Responsible Growth, Inc. v. City of Sonoma* (2007) 155 Cal.App.4th 1214, 1222.) Moreover, “The term project refers to the activity which is being approved and which may be subject to several discretionary approvals by governmental agencies. The term project does not mean each separate governmental approval.” (*Ibid.*, internal quotation marks deleted.)

Here, it would be difficult to construct a closer relationship than that of the BDCP/Water Fix Water Tunnels and the Delta Plan. The specific location, size, and a variety of the Delta Water Tunnels factors had already been described in the BDCP process by DWR and others. For instance, the chair of the DSC presented testimony to the Legislature regarding the BDCP and the Delta Plan and commented extensively on administrative drafts of the BDCP as a responsible agency. Pursuant to the 2009 DRA, the BDCP Plan was to be considered for inclusion in the Delta Plan (WC, § 85320(a)), and it was the DSC’s position that it had no discretion over the inclusion of the BDCP in the Plan if certain conditions precedent were met (DSC Role Regarding Conveyance)). The Delta Fix is not a HCP as allowed under the federal endangered species act (ESA) or a Natural Communities Conservation Plan (NCCP). Because of the changes in the project caused by the proponent’s inability to design a project that could meet the requirements for a qualifying program, the Water Fix will need approvals from numerous federal and state agencies, including the DSC, before the tunnel project can be approved. In this circumstance, the requirements of the Delta Reform Act mandating achievement of the dual goals of restoring and enhancing the Bay/Delta have not be met by the state and federal agencies now proposing the Delta Water Fix. The Water Fix RDEIR/EIS project description and federal purpose and need fail to meet the requirements of the DRA and the DSC’s Delta Plan.

Thus, the proponents failure to provide an “accurate, stable, and finite” description of the project, by improperly excluding requirements of existing state and federal law, and a real review of what would be possible if existing law were followed. Despite the proponents’ claims to the contrary, the vague description of the science and law governing implementation of actions or development of projects, including construction and operations of facilities or infrastructure misleads the public into believing that there was some uncertainty about what conveyance projects were allowed to accomplish. Contrary to the excuses offered by the proponents, information is readily available from the earlier comments gathered during the BDCP process which allow the quantification of water to be diverted from the Bay/Delta and analysis of the resulting environmental impacts. It is also necessary to analyze whether the present Water Fix

tunnels and diversions can meet the dual goals of the DRA. By killing the BDCP and the NCCP, and moving forward with an altered project containing the same infrastructure project, and requiring the public to digest the 44,000 pages of the BDCP DEIR/EIS along with 8,000 pages of Water Fix RDEIR/EIS, DWR and the Bureau make it impossible to follow the details of this project. By failing to provide the required accurate, stable, and finite project description, the tunnel proponents failed to proceed in the manner required by state and federal law.

The RDEIR attempted to justify the absence of much environmental analysis of the Revised Project by distancing the probable effects of implementing the Water Fix, instead of the BDCP. The Delta Stewardship Council (DSC) is a responsible agency for the BDCP/Water Fix environmental review and has been consulting with DWR during the development of the BDCP. Accordingly, the Water Fix proponents must completely evaluate the potential environmental consequences of all BDCP/Water Fix alternatives and analyze their ability to meet the new dual goal standards now embedded in the California Water Code.

The DSC FEIR denied that “both the Delta Plan and the PEIR must include quantitative measures of the Plan’s effect on the environment.” According to the DSC FEIR, “There is no basis on which to provide additional, project-specific analyses as suggested by commenters, including quantification of changes in the amount of water supply available from the Delta. . .” DSC claims that “Without specific details of future projects, it is not possible for the [DSC] to develop quantitative thresholds of significance, conduct site-specific quantitative analyses, and design site-specific mitigation measures.”

Based on this approach, in that FEIR the DSC stated that it did “not evaluate the potential environmental consequences of various BDCP options that DWR may be considering.” In responding to comments on that document, the DSC denied that its EIR “must include quantitative measures of the Plan’s effect on the environment” and that it could not provide “additional, project-specific analyses as suggested by commenters, including quantification of changes in the amount of water supply available from the Delta. . .”

The DSC’s approach to punt the clear requirements of the DRA in its review was without merit. They relied on the project description of the BDCP in making their erroneous decision. They are now, in a sense, victims like the rest of the public. This unstable, shifting attempt to change horses in mid-stream on this project results in a bait and switch by DWR and the Bureau that will result in grave environmental damage to the Bay/Delta estuary. So too is the Water Fix proponents’ approach to prepare an RDEIR/EIS that allows environmental, legal, and scientific questions like flow, water quality, and water availability to continue to be passed into the future to be decided by others. In 2013, the DSC segmented and deferred environmental analysis of the new conveyance to the ongoing and future BDCP process. The new Water Fix proponents propose in this RDEIR/EIS to defer these environmental requirements to other agencies. The change of point of diversion, the amount and quality of water diverted miles upstream of the present system and necessary cold water pools in DWR and Bureau storage facilities are left to the State Water Board; and water quality, water temperature and other wetland issues are left to the Army Corps of Engineers. EIR Guideline § 15004(b) states the fundamental CEQA rule that EIRs “should be prepared as early as feasible in the planning process to enable environmental considerations to influence project program and design and yet late enough to provide

meaningful information for environmental assessment.” Consequently, “public agencies shall not undertake actions concerning the proposed public project that would have a significant adverse effect or limit the choice of alternatives or mitigation measures, before completion of CEQA compliance.” § 15004(b)(2). As an example, “agencies shall not. . . otherwise take any action which gives impetus to a planned or foreseeable project in a manner that forecloses alternatives or mitigation measures that would ordinarily be part of CEQA review of that public project.” § 15004(b)(2)(B).

Deferral of analysis in the context of EIR preparation is only permissible if (1) obtaining more detailed useful information is not meaningfully possible at the time of EIR preparation and (2) such information is not necessary at an earlier stage in determining whether or not to proceed with the project. (*County Sanitation Dist. No. 2 of Los Angeles County v. County of Kern* (2005) 127 Cal.App.4th 1544, 1599.) That other agencies have CEQA obligations pertaining to what they are or will be doing does not relieve the first agency from conducting environmental review including feasible alternatives. (127 Cal.App.4th at 1602-3.) (*See also Fullerton Joint Union High School Dist. v. State Bd. of Education* (1982) 32 Cal.3d 779, 794-797 (an essential step “culminating in action which may affect the environment” requires CEQA environmental review).)

In summary, the presence of a CEQA/NEPA process in the BDCP/Water Fix process does not absolve the other state and federal agencies from their duties under CEQA to perform comprehensive and detailed environmental analysis. Nor does the fact of past and future environmental processes relieve the Water Fix of its responsibility to obtain detailed useful information about Bay/Delta hydrology, necessary Delta inflow and outflow, water quality and water availability for their project.

**Potential Impacts from New Conveyance and Restoration Projects Included in the Water Fix Were Not Disclosed, and the Ones that Were Disclosed are not Fairly Analyzed**

The RDEIR/SDEIS for the Water Fix contains simple admissions of obvious and significant environmental impacts without accompanying exploration and analysis of those significant impacts. The RDEIR/SDEIS admits: “Operations of new water supply facilities whether . . . tunnels, . . . water intakes or diversions may create long-term changes in local mixtures of source waters within water bodies, . . . Operation of facilities within the rivers and streams upstream of the Delta or in the Delta could result in changes in salinity in the Delta by reducing Delta freshwater inflows during some periods of the year.” The RDEIR/SDEIS admits that the “Revised Project” would have significant and unavoidable environmental impacts including violation of water quality standards or substantial degrading of water quality and substantial adverse effects on special status species and on fish or wildlife species and their habitat and movement. Similarly, the cumulative impacts analysis for the Water Fix document states that the Project could lead to “changes in instream flow or water quality conditions” without providing adequate details on the damage that might cause the Bay/Delta estuary. This cursory analysis does not, however, describe what the changes and their environmental impacts might be and/or the full consequences of those impacts. The Water Fix CEQA Findings label certain environmental impacts as significant without exploring and analyzing the significant

impacts. The Findings concede numerous substantial adverse effects likely to be caused by the construction and “operation of reliable water supply” projects that cannot be avoided and that cannot be mitigated to a “less-than-significant level.” These admitted substantial adverse effects include: effects on “special status species”, “sensitive natural communities, including wetlands and riparian habitat”, “substantial degradation of visual qualities”, “scenic vistas and scenic resources”, and exposure of “sensitive receptors to substantial pollutant concentrations.”

With respect to the effect of new conveyance in the north Delta altering flows, the Water Fix proponents acknowledged that:

Water flow in the Delta is critically important because *flow affects the reliability of water supplies and the health of the Delta ecosystem*. The best available science demonstrates that *flow management is essential to restoration of the Delta ecosystem*.

Altered flows in the Sacramento and San Joaquin rivers and their tributaries change flows within and out of the Delta and affect salinity and sediment in the Delta. Fish and other aquatic species native to the Delta are adapted to natural flow, salinity, and sediment regimes. Current flow, salinity, and sediment regimes harm native aquatic species and encourage non-native species. *The best available science suggests that the currently required flow objectives within and out of the Delta are insufficient to protect the Delta ecosystem*. (Nov. 12, 2012 Initial Statement of Reasons) for the BDCP project.)

But adequate information and analysis on what the significant adverse impacts are or how severe they are is absent from the BDCP previous RDEIR and Findings. Now the Water Fix RDEIR/SDEIS continues to pass the above issues forward, while relying on their incomplete and incomprehensible environmental document to justify their approval of the state and federal proponent’s own project in the meantime. We do not believe that other agencies further down the permitting line will supply the information necessary to justify final approval of this devastating project. We are entitled to see revised and more complete information in the Water Fix RDEIR/EIS before approval of the project.

To this end, comments on this RDEIR/SDEIS will echo our previous comments on the BDCP draft documents. We stated:

Recent ‘Red Flag’ issues raised by the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service concerning the Delta Water Tunnels are many, and include as just one example ‘potential extirpation of mainstream 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, p. 12, April 4, 2013). Those species of salmon are listed endangered species under the Endangered Species Act, 16 U.S.C. § 1531 et seq. (NOAA fisheries Red Flag comments on BDCP))

The DSC ‘s Delta Plan previously conceded that “[t]he perilous condition of salmon, Delta smelt, and other species remains a key limit on project operations.” Those CEQA Findings also acknowledged cumulatively considerable impacts include: projects that “in combination

with the cumulative projects, could violate water quality standards,” and that “[t]hese cumulative biological resources impacts could be significant, and the Project could have a considerable contribution.” None of these identified issues were adequately analyzed by the Water Fix environmental document, even with the totally confusing incorporation of the BDCP to the Water Fix documents. No human being can fully review and comprehend 50,000 pages of material that is claimed to be relevant to the Water Fix decision. This volume of material is one of the most confusing and frustrating things about the changes from the BDCP to the Water Fix. One has to search both documents to attempt to find answers to the simplest questions like “How can BDCP fail on environmental grounds, and yet the Water Fix be approved when the only real difference in the two projects is that the Water Fix project proponents have eliminated more than 70% of the restoration activity?”

CEQA requires that each EIR shall include “[a]ll significant effects on the environment of the proposed project.” (PRC, §21000(b)(1).) “‘Significant effect on the environment’ means a substantial, or potentially substantial, adverse change in the environment.” (PRC, §21068.) Effects can be direct, indirect, or cumulative. (Guidelines, §§15358, 15355.) When “assessing the impact of a proposed project on the environment, the lead agency normally examines the ‘changes’ in existing environmental conditions in the affected area that would occur if the proposed activity is implemented.” (*San Joaquin Raptor Rescue Center*, 149 Cal.App.4th 645, 660; Guidelines, §15126.2(a).)

Before adopting the Water Fix, DWR and the Bureau are required to assess the environmental impacts resulting from the changes called for by the Project, including those related to issues of hydrology, water flows, water quality, ecosystem restoration and water availability with which the tunnels and new diversions are so inescapably intertwined. Instead of disclosing the likely impacts from these actions, the Fix proponents elected to defer such analyses to others at a time *after* the Water Fix was approved. Consequently, decision-makers and the public cannot be apprised of the possible environmental impacts of the Water Fix, which includes conveyance without most of the ecosystem restoration. (*California Clean Energy Com. v. City of Woodland* (2014) 225 Cal.App.4th 173, 200 (*Woodland*) (“CEQA’s demand for meaningful information ‘is not satisfied by simply stating information will be provided in the future’”))

This attempt to avoid disclosure of impacts runs counter to the proponent’s duty to discover, disclose, and analyze impacts in good faith, and not sweep stubborn problems “under the rug.” (*Kings County, supra*, 221 Cal.App.3d at 733.) A lead agency may not simply label certain impacts as significant and then find that overriding considerations warrant proceeding with the project; that approach is “backward and allows the lead agency to travel the legally impermissible easy road to CEQA compliance.” (*Berkeley Keep Jets Over the Bay Com.v. Board of Port Comrs.*(2001) 91 Cal.App.4th 1344, 1371 (*Berkeley*).) The RDEIR/EIS and the CEQA Findings conceded that implementation of the Water Fix would have numerous significant adverse impacts ranging from violation of water quality standards, conversion of agricultural land, and substantial adverse effects on special status species and their habitat. However, the RDEIR/EIS failed to analyze how severe those impacts would or might be, thereby violating NEPA and CEQA.



### **The RDEIR/SDEIS Fails to Properly Analyze the Cumulative Impacts of Implementing the BDCP/Water Fix Plan, the EcoRestore Plan, the DSC Delta Plan and Numerous Other Parts of Governor Brown's California Water Plan**

The RDEIR/SDEIS fails to properly analyze cumulative impacts of the project in that it does not sufficiently analyze the BDCP/Water Fix as a cumulative project; provides an unduly limited cumulative projects list; fails to include all the elements of Governor Brown's California Water Plan and fails to include upcoming SWRCB proceedings as a cumulative project. It also fails to sufficiently analyze cumulative impacts on Delta, upstream and downstream water and biological resources; and fails to properly analyze cumulative impacts regarding changing storm patterns, sea level rise, and other impacts of climate change.

An EIR must discuss cumulative impacts, or the collectively significant changes in the environment resulting from the incremental impact of the project "when added to other closely related past, present, and reasonably foreseeable probable future projects." (Guidelines, §§ 15355(b), 15130(a)(1).) An agency must use standards of practicality and reasonableness as well as its best efforts to fully disclose cumulative impacts of a project. (Guidelines, §§ 15130(b), 15144, 15151; see also *CBE Richmond, supra*, 184 Cal.4th at 96; *Banning Ranch Conservancy v. City of Newport Beach* (2012) 211 Cal.App.4th 1209, 1228; *Vineyard, supra*, 40 Cal.4th at 428; *Citizens to Preserve the Ojai v. County of Ventura* (1985) 176 Cal.App.3d 421, 432 (citation omitted); *San Franciscans For Reasonable Growth v. City and County of San Francisco* (1984) 151 Cal.App.3d 61, 81) (*San Franciscans*).) While the absence of information in an EIR is not a prejudicial abuse of discretion *per se*, it must not "minimize[] or ignore[] cumulative impacts." (*Al Larson Boat Shop, Inc. v. Board of Harbor Comrs.* (1993) 18 Cal.App.4th 729, 749 (citations omitted); *Kings County, supra*, 221 Cal.App.3d at 712.) Absent meaningful cumulative analysis, there would be no control of development and "piecemeal development would inevitably cause havoc in virtually every aspect of the [] environment." (*Kings County, supra*, 221 Cal.App.3d, at 720; *San Franciscans, supra*, 151 Cal.App.3d, at 61.)

### **The RDEIR/SDEIS fails to Adequately Analyze BDCP/WaterFix as a Cumulative Project**

Section 15130(b) of CEQA Guidelines require an EIR's cumulative impact analysis to include either a list of past, present, and reasonably anticipated future projects that . . . are have produced or likely to produce" related or cumulative impacts or include a summary of projections contained in a general plan or related planning document. (Guidelines, §15130(b).) While the RDEIR/EIS includes the Council's Delta Plan, the BDCP and the California Water Plan in its list of related actions, programs, and projects considered in the cumulative impact assessment, the cumulative impact analysis regarding the BDCP/Water Fix fails to meet minimum requirements.

CEQA Guidelines §15130(b) requires an EIR to include "a summary of [a related project's] expected environmental effects, with specific reference to additional information stating where such information is available." The cumulative analysis in the EIR provides only a cursory paragraph summarizing the elements of Governor Brown's California Water Plan. In Section 23 of the Delta Plan EIR, the chapter of that EIR devoted to BDCP, the Stewardship

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Council avoided discussing the BDCP's expected cumulative environmental effects by stating that "specific details of BDCP have not been defined," that the project does "not make recommendations for specific BDCP facilities or operations," and that "the agencies pursuing BDCP are best positioned to develop and evaluate possible options and decide on the best Delta conveyance concept."

Although an EIR is not required to speculate about cumulative impacts that might occur, specific information regarding cumulative impacts should be disclosed when feasible. (*Preserve Wild Santee v. City of Santee* (2012) 210 Cal.App.4th 260, 277-78; *East Bay Mun. Util. Dist. v. Department of Forestry & Fire Protection* (1996) 43 Cal.App.4th 1113, 1130.) The cumulative impacts of the BDCP were far from speculative at the time the Water Fix RDEIR/SDEIS was prepared. This information permitted a discussion of a general range of impacts and cumulative impacts the Water Fix would likely produce in connection with the Council's Delta Plan, the Governor's California Water Plan, the new storage under study and other reasonably foreseeable projects.

Yet the Delta Plan EIR systematically failed to disclose even the most basic information. For instance, the only information regarding BDCP's impact on biological resources in the EIR's cumulative impact analysis is that "changes in instream flow or water quality conditions" could result from construction and operation of projects including the BDCP. (EIR section 23 on BDCP) The EIR fails to discuss how biological resources would be impacted by these "changes" or, more accurately, flow reductions that likely will result from implementing the new BDCP diversions, for instance. With the Delta Plan explicitly promoting a project that would remove close to half of the flow of the entire Sacramento River (BDCP operations criteria), "changes in instream flow" ought to have been elaborated upon for purposes of full disclosure.

In addition, the Council's FEIR barely acknowledges that BDCP-related ecosystem restoration activities "could involve the conversion of farmland to accommodate ecosystem restoration or enhancement or Delta conveyance," and claims these effects "could be temporary . . . which would not be a significant impact, or permanent." What would the Council's FEIR have said if they had known that the Water Fix was to replace the BDCP? The continually shifting project description means we will never know. The Water Fix RDEIR/SDEIS fails to provide a summary of the expected cumulative effects in a reasonable and good faith manner since specific details are still unknown. Will the Water Fix tunnels have water in them during dry years? Will there be new upstream storage projects and if so how will they be operated in conjunction with the new diversions and tunnels? How much agricultural land will be taken out of production as mitigation for the projects impacts? If so, how much land will be required to satisfy the requirements of the dual goals that are now part of the Water Code? BDCP said 133,000 acres; the Water Fix says 30,000 acres. What will U.S. Fish & Wildlife, National Marine Fisheries Service, California Fish & Game, the Delta Stewardship Council, the State Water Board, the Environmental Protection Agency, and the Army Corp of Engineers require? (*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 733 (failure to note loss of prime farmland resulting from required sewer expansion led to an insufficient analysis of the combined environmental effects of the proposed development).)

Second, Guidelines §15130(b) requires that the discussion of cumulative impacts shall reflect the severity of the impact from the projects and their likelihood of occurrence. The sufficiency of the factual disclosure and the adequacy of the analysis must be commensurate with the importance of the place potentially impacted. The Bay/Delta estuary is accurately described in the Delta Reform Act as a place of hemispheric importance, and the paramount interest of the people of California. The Water Fix RDEIR/SDEIS fails to give either the estuary, or the law designed to protect this “paramount” interest, its due NEPA/CEQA consideration.

### **The RDEIR/SDEIS Fails to Properly Analyze Cumulative Impacts Related to Climate Change, Water Resources, and Sea Level Rise**

An EIR must assess direct and indirect environmental effects of a project to ensure the long-term protection of the environment. (CEQA Guidelines §§ 15065(a)(4), 15126.2; PRC, §21001(d).) Climate change impacts fit squarely within a cumulative impacts analysis. (*Ctr. for Biological Diversity v. Nat. Highway Traffic Safety Admin.* (9th Cir. 2008) 538 F.2d 1172, 1217.) However, the EIR/EIS and the Findings do not adequately address the Fix’s impacts on climate change. In particular, the document fails to analyze impacts of cumulative projects on water resources in the context of sea level rise and changes in storm patterns.

The Water Fix proposes potentially massive shifts in water resources that will be exacerbated by climate change impacts such including rising sea levels as well as changes in precipitation and patterns. However, the EIR fails to adequately address the cumulative impacts the project could have on water resources against existing or future sea level and hydrological conditions. The cursory treatment in the RDEIR/SDEIS provides in discussing potential impacts on various projects due to changes in rainfall patterns does not adequately inform decision-makers or the public about these impacts.

To the minimal extent the RDEIR/SDEIS does discuss sea level impacts on water resources it relies on different assumptions than the Water Fix relies on planning for flood protection in anticipation of 55 inches of sea level rise by 2100. The Water Fix tunnel project will have effects and impacts long before 2100. The relevant issues regarding climate change in the Bay/Delta include changes in flows, changes in salinity, changes in estuarine residence time, changes in salinity, changes in exotic species and predation, changed effects on water quality from agricultural run-off and pesticide use. Without additional discussion and analysis of the effect of climate change in the areas of changing snowpack, increased water temperature, increased evapotranspiration, rim dam water management, flood flows, and upstream fishery habitat, it is impossible for the public and state and federal decision-makers to know whether the project should be approved.

The failure of the RDEIR/SDEIS to adequately analyze potential climate change effects on Delta hydrology makes it impossible for the public and the decision-makers to evaluate the alternatives, the mitigations, and the true nature of the environmental impacts of the proposed Water Fix, all of which are violations of CEQA’s fair disclosure requirements to afford the fullest possible protection of the environment. (CEQA Guidelines § 21001(a); *Kings County, supra*, 211 Cal.App.3d, at 720; *Friends of the Eel River v. Sonoma County Water Agency* (2003) 108 Cal.App.4th 859, 868 (*Friends of the Eel River*); *Ojai, supra*, 176 Cal.App.3d, p.432; *San*

*Franciscans, supra*, 151 Cal.App.3d, at 81.) The Water Fix environmental review's deficient cumulative impacts section has led to an incomplete EIR/EIS that skews the public's decision-making process and must be returned to the proponents for re-drafting. (*Madera Oversight Coalition, Inc. v. County of Madera* (2011) 199 Cal. App. 4th 48.)

### **The Water Fix Agencies Failed to Develop and Consider a Range of Reasonable Alternatives**

Brief descriptions of the project alternatives are found in the Findings and RDEIR/SDEIS Executive Summary and the RDEIR/EIS comparison of alternatives. According to the RDEIR/SDEIS, Alternative 4A, the preferred alternative called for by water exporters, would result in exporting more water out of the Delta in many year types. Appendix C, requested by the State Board and discussed in more detail below, would reduce exports in order to increase water flows to protect the Bay/Delta.

First, other than Appendix C, a modeling process requested by the State Water Board, and the EWC alternative supported by the environmental community, and more fully described in the EWC's alternative comments incorporated herein which would increase Delta flows by reducing exports, the alternatives appear vague to the point of being almost indescribable. Second, the Finding that the Preferred Project Alternative (4A) would result in export of roughly the same amount of water from the Delta and its watershed that is presently diverted is baffling. The only thing we know is that by calling for improved, meaning new Delta conveyance, the Water Fix is a step toward increasing the capacity to export even more water from the Bay/Delta and do so without letting the water first flow through the Delta as it does now. Thus the Water Fix preferred Alternative seems calculated to worsen rather than improve the current state of Delta water quality and quantity. Third, given the RDEIR/SDEIS' conclusion that Appendix C would sharply reduce exports from the Delta and thus is infeasible, the failure to develop and consider a range of reasonable alternatives reducing exports "less sharply" than called for by Appendix C or the EWC alternative, discussed below, is incomprehensible.

The RDEIR/SDEIS explains that the State Board requested Alternative, relegated to Appendix C and not considered for analysis in the Water Fix document itself, decreased export of water from the Delta and so allegedly did not meet the proponent agencies purpose and need for the project. The results show what could be done in constructing a real alternative to improve Bay/Delta public trust resources. Some of the excerpts from Appendix C follow: "In order to provide Delta outflow similar to what was included in Alternative 8 without impacting instream flows and storage, additional Delta outflows (beyond those presented for Alternative 4 in the BDCP Draft EIR/EIS or Alternative 4A in this RDEIR/SDEIS) were achieved by reducing SWP and CVP exports." The modeled results found that "increased winter/spring Delta outflow will shift the low salinity zone further downstream into the Suisun region likely resulting in more favorable conditions for longfin smelt and Delta smelt habitat. Higher Delta outflow during this period could also shift pelagic fish further from the export pumps and assist out-migrating salmonids. Additionally, the increased winter/spring Delta outflow would push fresh water through the Delta, past the Suisun region, and out into the San Francisco Bay likely benefiting native estuarine species that have evolved under conditions of seasonally fluctuating salinity." To the extent that releasing this increased storage would not impact cold water pool supplies or

instream flows necessary to protect fish or other beneficial uses, this increased storage could potentially be available to offset water supply effects or to further augment Delta outflows or instream flows.”

Despite this modeling, the agencies did not prepare an alternative informed by proposals from environmental organizations led by the EWC and supported by our previous comments to BDCP. The EWC proposal for an alternative also involves decreased water exports from the Delta as well as other features described in the EWC comments and incorporated herein. The RDEIR/SDEIS admits that overall Appendix C would have less water quality impacts than the Water Fix preferred Project, because it involves fewer facilities and less diversions of water from the Delta and Delta watershed. Also, “Appendix C would contribute more to improving conditions for biological resources and arresting ecosystem decline than the Preferred Water Fix Project.” (Alt 4A)) Appendix C would have to be environmentally superior to the Revised Project with respect to impacts on Delta waters. The EWC Alternative would have even more environmental benefit to estuarine fisheries, since it proposes new screens on the existing South Delta pumping facilities, where over half of the water exported will continue to be exported in normal and below water years.

Comments on the previous environmental documents for the now dead BDCP specifically proposed new alternatives creating a range of reasonable alternatives in addition to the EWC alternative. Some of the requested alternatives would not make a decision on whether to call for new conveyance until after determination of such fundamental issues as water supply availability and the environmental impacts of supplying the water under CEQA. Commenters called for developing a range of export reductions less severe than called for by the EWC alternative. Without a broader range of alternatives, including export reductions and screening of the existing SWP/CVP pumping facilities in the south Delta, the Water Fix proponents completely fail to meet their NEPA/CEQA requirements.

Despite the recognition by the Water Fix proponents that the Delta and the fish require greater rather than reduced flows, they relegated the State Water Board’s requested modeling of higher outflows to Appendix C and subsequently failed to consider it. DWR and the Bureau summarily dismissed their legal responsibility to develop and consider a range of reasonable alternatives, including alternatives reducing exports, stating that the State Board’s requested alternative did not meet their purpose a need for the project. They are wrong. There are alternative water supplies that are cheaper and more consistent with state and federal statutes, including the CWA, the ESA, the CVPIA, the public trust and the California Water Code. In other words, the proponents summarily refused to consider alternatives presented to them by the EWC and the State Water Board and refused to develop and consider reasonable alternatives that would increase Delta flows by reducing exports.

This refusal to develop and consider a range of reasonable alternatives increasing flows by reducing exports violates CEQA. Section 15126.6(a) of the CEQA Guidelines requires that: “An EIR shall describe a range of reasonable alternatives to the project or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives.” The “public agency bears the burden of affirmatively demonstrating

that, notwithstanding a project's impact on the environment, the agency's approval of the proposed project followed meaningful consideration of alternatives and mitigation measures." (*Woodland, supra*, 225 Cal.App.4th at 203.)

In *Watsonville Pilots Association v. City of Watsonville* (2010) 183 Cal.App.4th 1059, 1086-1090 (*Watsonville*) a city did not consider and evaluate a reduced development alternative claiming it would have been inconsistent with a general plan objective to accommodate projected growth. The court responded: "The City's argument on this issue is premised on its claim that no discussion of an alternative is required if that alternative would not meet a project's objective. This premise is mistaken. It is virtually a given that the alternatives to a project will not attain *all* of the project's objectives." (*Id.* at 1087.) The court affirmed the trial court's issuance of writ of mandate and determination that the City's certification of a Final EIR violated CEQA. (*Id.* at 1095; *accord, Friends of the Eel River v. Sonoma County Water Agency* (2003) 108 Cal.App.4th 859, 872-873 (EIR analysis flawed because it did not contain consideration of alternatives that would reduce dependence on water diverted from the Eel River).)

This case is dissimilar to the decision of *In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings* (2008) 43 Cal.4th 1143, 1162- 1169 (*CalFed*). In *CalFed*, the court did not fault the lead agency for failing to include reduced exports alternative in the former CalFed program EIR. CalFed had declined to carry the reduced export alternative over for study to the Final Program EIR because it concluded that alternative would not achieve the CalFed Program's "fundamental purpose and thus was not feasible." (*Id.* at 1166.) In this case, there has been no finding by anyone but the proponents who will own and manage the project that reducing exports is not feasible.

In addition, this case involves the very "program-generated environmental impacts," that the court noted were absent and that "determine the required range of program alternatives." (*CalFed, supra*, 43 Cal.4th at 1168.) Here, the Water Fix proponents expressly call for new conveyance, and the Findings admit that water quality and fish species impacts result from new conveyance. Consequently, program-generated environmental impacts require a range of reasonable program alternatives. (See Guidelines, §15168(b) (explaining that a benefit of a program EIR is that it may include "more exhaustive consideration of effects and alternatives); *Friends of Mammoth v. Town of Mammoth Lakes Redevelopment Agency* (2000) 82 Cal.App.4th 511, 533 ("Designating an EIR as a program EIR also does not by itself decrease the level of analysis otherwise required in the EIR. All EIRs must cover the same general content.")) Also, the court in *CalFed* observed that the CalFed proceedings were at a "relatively early stage of program design" and that the CalFed theory that it is possible to restore the Bay-Delta's ecological health while maintaining and perhaps increasing exports was "unproven." (*Id.*) The court said, "if practical experience demonstrates that the theory is unsound, Bay-Delta water exports may need to be capped or reduced." (*Id.*) The CalFed program work being reviewed in the cited case was performed in the 1990s. The theory that it is possible to restore Bay-Delta ecological health while maintaining or even increasing exports has now been demonstrated to be unsound. The importance of flow is reflected by the State Board's own finding after hearing in the 2010 during the Delta Plan process that "The best available science suggests that the currently required flow objectives within and out of the Delta are insufficient to protect the Delta ecosystem."

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A fundamental threshold decision will be made to either establish new conveyance, resulting in the diversion of more freshwater flows away from the lower Sacramento River and Delta, or to instead to increase freshwater flows through the Delta by reducing exports. The RDEIR/SDEIS for the Water Fix violates NEPA/CEQA because the required range of reasonable alternatives is absent from consideration in the environmental document. Moreover, the EIR impermissibly rejected consideration of variations on the EWC proposed alternative, which would have done more to increase flows into the Delta as the state and federal environmental agencies have recognized will be necessary to restore the ecosystem.

### NEPA/CEQA Conclusion

In determining the adequacy of an environmental document, the courts adopt a *de novo* standard of review to analyze potential abuse of discretion in procedural violations. (*Woodland, supra*, 225 Cal.App.4th at 187; *see also Vineyard, supra*, 40 Cal. 4th at 426-27.) As a result of the foregoing fatal defects in its approach, we already know that the proponents would prejudicially abuse their discretion by certifying an EIR/EIS that does not comply with CEQA or NEPA by approving the Water Fix and certifying this document in its present condition. The EIR/EIS was also so inadequate and conclusory that meaningful public review and comment were precluded. Consequently, certification of the EIR/EIS and approval of the Water Fix must be set aside. In order to prove to a very large number of California citizens that the Fix is NOT in, this Draft EIR/EIS must again be corrected and sent out for recirculation and public comment. (Guidelines, §15088(a); *Vineyard, supra*, 40 Cal.4th at 448-450.)

Thank you for considering these comments. If you have questions or require clarification, please do not hesitate to contact us.

Respectfully submitted,



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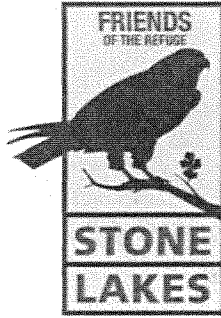


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**From:** William Jennings <deltakeep@me.com>  
**Sent:** Friday, October 30, 2015 3:13 PM  
**To:** BDCPcomments  
**Cc:** Mike Jackson; Carolee Krieger; Barbara Vlamis; Chris Shutes; Tim Stroshan  
**Subject:** CSPA, C-WIN, AquAlliance Comments on WaterFix RDEIR/SDEIS  
**Attachments:** CSPA et al.,WaterFixREIR 30Oct15.pdf; ATT00001.htm

Attached are comments respectfully submitted regarding the California WaterFix RDEIR/SDEIS by the California Sportfishing Protection Alliance, California Water Impact Network and AquAlliance.

We would appreciate a receipt of timely submission. Thank you.



October 30, 2015

**SENT VIA EMAIL (bdcpccomments@icfi.com)**

BDCP/WaterFix Comments  
P.O. Box 1919  
Sacramento, CA 95812

**RE: Comments of Friends of Stone Lakes National Wildlife Refuge on  
Draft Bay Delta Conservation Plan/California WaterFix and  
Associated Partially Recirculated Draft Environmental Impact  
Report/Supplemental Draft Environmental Impact Statement**

Dear Lead Agencies:

These comments are submitted in relation to the proposed Bay Delta Conservation Plan ("BDCP")/California WaterFix ("Tunnels", "project" or "Alt. 4A") and associated public review Partially Recirculated/Supplemental Draft Environmental Impact Report/Statement ("RDEIR/S") on behalf of the Friends of Stone Lakes National Wildlife Refuge, a California non-profit public benefit corporation ("FSL" – formerly known as the Stone Lakes National Wildlife Refuge Association). FSL is a volunteer organization dedicated to the conservation, protection, enhancement and promotion of the Stone Lakes National Wildlife Refuge ("Stone Lakes NWR" or "Refuge") whose members have been actively engaged in reviewing the Project for the benefit of the Refuge for many years. The comments submitted herein are solely those of FSL and are independent of Stone Lakes NWR staff and the U.S. Fish and Wildlife Service ("USFWS").

The Refuge is ground zero for this project. (See Exhibits 1 and 2, Surface Impacts Figures.) Stone Lakes NWR is adjacent to all three proposed Tunnel Intakes, and the Intermediate Forebay is located within the Refuge Boundaries. New power lines are proposed to cross the Refuge as well. Geotechnical exploration, construction equipment and associated traffic and noise will interfere with the Refuge for much of the fourteen-year construction period, and then industrial-scale water infrastructure will permanently dominate the landscape and the nearby Sacramento River. A place Congress specifically chose to save changed forever.

Friends of Stone Lakes National Wildlife Refuge, 1624 Hood Franklin Road, Elk Grove, CA 95757

www.friendsofstonelakes.org  
(916) 775-4418

FSL submitted a letter dated July 25, 2014, commenting upon the 2013 Draft BDCP and Draft EIR/S.<sup>1</sup> FSL has not received responses to those comments. The state and federal lead agencies have now created new sub-alternatives, including the new Alt. 4A as the proposed preferred alternative. The comments in this letter thus focus on the analysis in the RDEIR/S pertaining to Alt. 4A. FSL notes, however, that its ability to effectively comment on the RDEIR/S was hampered by a number of factors, including: (1) receiving no responses on the FSL comments submitted in 2014; (2) the disjointed organization of analysis in the RDEIR/S; (3) lack of specific cross referencing between relevant portions of the RDEIR/S and the 2013 draft EIR/S and BDCP; (4) the confused manner in which the project that is actually being proposed is presented in the DSEIR/S; and (5) the Lead Agencies' failure to provide public access to other comments on the 2013 draft EIR/S. FSL's review was aided some by assistance from lead agency staff/consultants familiar with the preparation of these documents; FSL does not believe that an average member of the public would be able to discern the basic proposal or its impacts from the documents as presented.

In addition to responses to the comments contained in this letter, FSL requests responses to all of its comments in its prior letter. In an attempt to focus the comments in this letter on the impacts of Alt. 4A, FLS has purposely not repeated everything in its July 25, 2014 letter. Please assume that all of FSL's prior comments on the 2013 documents and the previously preferred alternative (Alt. 4) also pertain to Alt. 4A unless those comments refer to a project component that is no longer included in Alt. 4A. As discussed below, due to the inadequacies of the RDEIR/S project description and impact analyses, it is quite difficult to discern which aspects of Alt. 4 are still included in Alt. 4A, especially with respect to measures or actions carried over from the previously proposed BDCP HCP/NCCP.<sup>2</sup> Thus, the RDEIR/S lead agencies and consultants are in the best position to determine which of the previous comments also apply to Alt. 4A.

## **I. BACKGROUND ON FRIENDS OF STONE LAKES' ENGAGEMENT ON THE PROJECT**

As explained in our prior comment letter, the Stone Lakes NWR and surrounding foraging acreage, especially those lands within the Refuges' legislatively approved

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<sup>1</sup> FSL incorporates herein by reference its comment letter dated July 25, 2014, in its entirety, including all attachments thereto as additional comments on the RDEIR/S. References to Exhibits in this letter are to the Exhibits attached to the letter of FSL dated July 25, 2014.

<sup>2</sup> See, e.g., RDEIR/S, App. A, p. 15-11 (referring to mitigation of impacts on long term reduction of recreation opportunities at Stone Lakes NWR from habitat creation that is not part of 4A).)

Project Boundary, is “ground zero” for BDCP impacts. The primary proposed conveyance facility components, consisting of three massive pumping stations, the water conveyance tunnels, new transmission lines and an intermediate forebay, are all located either on or very close to the Refuge and have significant potential to degrade or threaten the Refuge’s resources and habitat. Wildlife, staff and visitors will all be substantially impacted by construction noise, lighting and extreme levels of truck traffic that will occur during the lengthy construction process.

Since the time FSL learned that the tunnels were proposed to traverse the Refuge, FSL has been engaged in the BDCP process, first expressing major concerns in Scoping comments submitted in May 2008. We advocated for and participated in Stone Lakes Technical Working Group process that subsequently began in June 2013, which met several times in 2013-2014. At these meetings, FSL worked diligently with BDCP planning staff, USFWS, California Department of Fish and Wildlife (“DFW”), and Department of Water Resources (“DWR”), among others to reduce impacts on the Refuge.

A fundamental underpinning of the investment in time by FSL in discussions of how to reduce impacts of the Project on the Refuge was that the Project included a component to meet conservation standards under the HCP and NCCP statutes. Thus, even if there were severe impacts on the Refuge, for instance, the overall impact of the Project could be beneficial over the BDCP plan period. It was on this basis that FSL and many others spent significant time and resources to work with the Project proponents to improve the Project with respect to impacts on Refuge resources. FSL is extremely concerned that not all of the mitigation, which was anticipated to occur in conjunction with an HCP/NCCP, will occur with Alt. 4A as a “stand-alone” construction project. FSL continues to be concerned that impacts to species within and near the Refuge that are proposed for direct and indirect impacts from the Project still have not been adequately addressed.

## **II. COMMENTS ON ALT. 4A AND RDEIR/S**

### **A. The Project Is Inconsistent with Special Protections Afforded to National Wildlife Refuges under NEPA**

Despite some design improvements since its inception, the Refuge continues to be ground zero for the Tunnels project. This is inconsistent with policies pertaining to the creation of the Refuge in the first place. The national policy to promote efforts, which will prevent or eliminate damage to the environment under NEPA (42 U.S.C. § 4321) is implicated when the environment that may be damaged is one that Congress has specially designated for federal protection. (See *Nat’l Audubon Soc’y v. Dep’t of the Navy* (4th

Cir. N.C. 2005) 422 F.3d 174, 187 (ordering Navy to complete a Supplemental EIS to address its failure to take a “hard look” at impacts on a new landing field on Pocosin Lakes National Wildlife Refuge) (*Navy*).) As emphasized in the *Navy* case, “particular care” must be taken in a federal environmental document when the federal agency’s actions will “affect the unique biological features” of “a congressional protected area,” such as a national wildlife refuge. (*Ibid.* at p. 187.)

The court in the *Navy* case explained that “the point of a wildlife refuge is not just to protect an area that is beautiful and valuable in its own right, but to remind us that an environment that is welcoming to wildlife will ultimately be one that is more hospitable to humankind.” (*Ibid.* at p. 187.) The “mission of the National Wildlife System is to administer a national network of lands and waters for the conservation, management and where appropriate, restoration of fish, wildlife and plant resources and their habitats.” (16 U.S.C. § 668dd(a)(2).)

Congress has expressly found that the overall goals of the Stone Lakes National Wildlife Refuge are to:

1. Preserve, enhance, and restore a diverse assemblage of native Central Valley plant communities and their associated fish, wildlife, and plant species;
2. Preserve, enhance, and restore habitat to maintain and assist in the recovery of rare, endangered, and threatened plants and animals;
3. Preserve, enhance, and restore wetlands and adjacent agricultural lands to provide foraging and sanctuary habitat needed to achieve the distribution and population levels of migratory waterfowl and other water birds consistent with the goals and objectives of the North American Waterfowl Management Plan and Central Valley Habitat Joint Venture;
4. Create linkages between Refuge habitats and habitats on adjacent lands to reverse past impacts of habitat fragmentation on wildlife and plant species;
5. Coordinate Refuge land acquisition and management activities with other agencies and organizations and to maximize the effectiveness of Refuge contributions to regional habitat needs;

6. Provide for environmental education, interpretation, and fish and wildlife-oriented recreation in an urban setting accessible to large populations; and

7. Manage riverine wetlands and adjacent floodplain lands in a manner consistent with local, State, and Federal flood management; sediment and erosion control; and water quality objectives.

(57 Fed.Reg. 33007 (July 24, 1992).) With major portions of the Project sited within and adjacent to the Refuge, the Project interferes significantly with the attainment of these goals. As described below, the Lead Agencies' attempt at a "hard look" fails to take particular care to evaluate how its actions will affect the unique biological features of Stone Lakes NWR, which is a congressionally protected area. Moreover, the mitigation that is provided for reducing impacts to the Refuge is uncertain and unenforceable. As a result, the RDEIR/S must be re-written and recirculated prior to Project approval.

**B. The Description of the Project Is Misleading, Confusing and Inadequate**

In order for the public to be able to comment meaningfully on a project, the description of the project must be clear and definite. After the close of the comment period on the BDCP and DEIR/DEIS, the Project proponents created several new sub-alternatives, including the new Alt. 4A, which is now the preferred alternative. If indeed Alt. 4A is the preferred alternative, and thus the proposed project for the purposes of the environmental review, the description of Alt. 4A is uncertain and incomplete, and fails to provide the public with a clear understanding of what environmental measures from the BDCP are actually incorporated into the Project or how they will be implemented.

Most confusingly, Alt. 4A now consists of what was previously called Conservation Measure 1 of the BDCP – the proposed water conveyance system – and a number of portions of some of what previously were referred to as "Conservation Measures" but have now been recharacterized as "Environmental Commitments". Nowhere in the RDEIR/S, however, is there a readily accessible and clear description of exactly which portions of the previous Conservation Measures ("CMs") have been incorporated into the new Environmental Commitments ("ECs"), or how they will be implemented. ECs are not included in the Executive Summary's Table of Mitigation Measures. (RDEIR, ES, Table ES-9.)

Of particular concern to FSL, is the amount of the proposed acreage for protection and restoration of natural communities that support migratory waterfowl. Though we have been assured that the CMs pertaining to creation of greater sandhill crane habitat

will be retained, is entirely uncertain as to how and when any such acreages will be acquired or managed. The RDEIR/S acknowledges on page 4.1-14 that only portions of the actions previously called CMs will be undertaken as part of Alt. 4A, and states that those will be at different levels. See Table 4.1-3, which constantly uses the qualifier of “Up to” a certain maximum of acreage to be protected or restored under ECs 3, 4 and 6-10. Yet the RDEIR continues to state that mitigation for impacts to these species will occur from the planned restoration acreages that were part of the Alt. 4 (BDCP). (See RDEIR/S, App. A, p. 15-10 (referring to habitat creation under BDCP as mitigating biological and recreational impacts); see also RDEIR/S, Section 12.3.3.9.).)

Under the prior preferred alternative, Alt. 4, the environmental restorations were included in the overall HCP/NCCP and were proposed to be undertaken in accordance with the Implementation Schedule as established under the Implementation Agreement discussed in Chapter 6 of the BDCP as part of the HCP/NCCP. Alt 4A, however, does not propose a HCP/NCCP, and therefore the prior Implementation Agreement and Schedule is no longer applicable or relevant. There is nothing that can be readily located within the RDEIR/S or other Alt. 4A documentation that is proposed to replace the Implementation Agreement and Schedule, and therefore the new proposed ECs do not appear to have any implementation obligation or criteria. Because Alt 4A lacks any readily identifiable mechanism to incorporate the ECs into it, they cannot be considered part of the project description upon which the environmental analysis rests. As such, the project description is vague and indefinite and with the absence of any sort of implementation mechanism, the ECs cannot be considered as a material aspect of the project description for Alt. 4A.

**C. The Mitigation Approach is Flawed in that It Does Not Assure That the Mitigations Will Be Implemented**

FSL provided detailed comments in 2014 regarding concerns with the conservation and mitigation approach in the BDCP. These comments also apply to the much scaled back mitigation and conservation that would be required under section 7 of the ESA and section 2081 of the California Endangered Species Act (“CESA”). The RDEIR/S does not contain adequate description of the location and character of mitigation and replacement habitat to assess its effectiveness. Moreover, the Biological Assessments have not been provided for public review. This critical information would be necessary in order to comment on the effectiveness of the mitigation currently being proposed.

The RDEIR/S states that it considers the ECs to be environmental mitigations, which act as “de facto CEQA and NEPA mitigation measures for the construction and operations-related impacts of Alternative 4A” (RSEIR/S, page 4.1-14). While the

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RDEIR/S refers to DWR including the ECs in the Mitigation Monitoring and Reporting Plan (“MMRP”), the same page states that the so called “Environmental Commitments” listed in Appendix 3B, will supposedly be enforced by a “[a]n environmental permitting coordinator.” (RDEIR/S, App. 3C, p. 3B-3.) The CEQA lead agency is responsible for implementing a MMRP.

The RDEIR/S approach to mitigation of the numerous significant effects of this Project does not meet the disclosure and enforceability requirements of CEQA. (CEQA Guidelines, § 15126.6, subd. (a)(2).) It is unclear why these ECs, if necessary to reduce significant Project impacts, would not be included as mitigation measures in the RDEIR/S. The information provided in Table 3B-1 is not a substitute for the required analysis and mitigation of project impacts. A clear implementation mechanism must be included in the RDEIR/S making these ECs subject to the required oversight and monitoring in the statutorily required mitigation monitoring and reporting plan. (See CEQA Guidelines, § 15097.)

A good example of the inadequacy of the implementation of the ECs is the case of the impacts of the forebay upon the Refuge. FSL believes that the location of the proposed forebay within the Refuge Project Boundary, together with the use of Zacharias Island to the west of the forebay as a tunnel muck storage area, when taken in conjunction with all of the cumulative effects of other aspects of the Project, necessitates the acquisition of all of Zacharias Island for wildlife habitat, and its permanent protection such as by incorporation into the Refuge, in order for there to be any type of a complete or adequate mitigation measure. This issue is discussed in great depth in FSL’s letter of July 25, 2014, and nothing in the RDEIR/S has changed any of FSL’s concerns in this regard.

FSL has worked collaboratively to develop AMM20 Greater Sandhill Crane to lessen impacts to greater sandhill crane, which was part of the BDCP Alt. 4. Now, it is not clear what the exact wording of AMM20 is with respect to Alt. 4A, if it applies at all. According to Appendix D, which includes redline modifications to Alt. 4, AMM20 was extensively revised. (RDEIR/S, App. D, p. D.3-108.) Yet it is unclear whether this AMM applies to Alt. 4A. While some discussion of AMM20 is in Appendix 3B (at p. B-39), it is unclear whether this important AMM relates to Alt. 4A or to Alt. 4 (or both). (See Appendix 3B, p. 3B-77 (referring to the AMMs applying to the DSEIR/S, not the RDEIR/S).) Further causing confusion is the fact that the Alt. 4 discussion in Appendix D, states that no take of greater sandhill crane will occur; yet the BDCP previously attempted to calculate the number of bird strike deaths in Appendix 5.J.C. (See discussion below for further concerns about take of this state Fully Protected Species.)



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Even the best designed ECs, AMMs and more rigorous mitigation measures are effective only if there is assurance that they will be fully implemented and enforced. Mitigation obligations, which are adopted and then ignored, are not mitigation obligations at all. The Plan does not provide assurances that the mitigation obligations, will be funded or implemented

Mitigation obligations that cannot be implemented because of lack of funding are not mitigation measures either. No finance plan has been set forth for the project. To the extent the ECs depend on future funding authorizations by the state and federal governments as well as General Obligation bond funding from the State, they cannot be assumed to be certain. The sources of the funding and the costs to mitigate the direct impacts to the Stone Lakes NWR should be specifically delineated in the cost. Sources of secure funding to pay for all of the mitigation obligations relating to Alt. 4A must be identified and included in the documents. Bonding and endowments are feasible means to ensure mitigation and conservation commitments are upheld, and must be included in the Project.

Under Alt. 4 (the BDCP), a group such as FSL could have potentially participated in the oversight process through the Stakeholder Council, which included seats for three conservation groups for the entirety of the Plan Area. Now, Alt. 4A includes no process or structure whatsoever for affected stakeholders during construction or project operations to participate in project implementation or to seek redress from severe impacts on the local wildlife and human communities. Such an important detail cannot be left to determine later, especially when water export agencies, through the Design Construction Enterprise, are vying to become the face of the project. Moreover, adequate funds for mitigation and compensation for damages caused by the project must be established, and oversight and public reporting of the implementation of all mitigation and other measures necessary to address the project's significant impacts must be provided.

**D. Power Transmission Lines Will Still Have Major Unmitigated Impacts on Birds within and Near the Refuge**

The location and design of new transmission line corridors remains of great concern to the FSL. The construction of new power lines within the Stone Lakes NWR is incompatible with the Refuge Management Plan, and placement of new power lines within and near the Refuge impedes the Refuge's core mission: the protection of vulnerable wildlife species such as the greater sandhill crane. These species are already under threat from widespread habitat degradation and existing power lines. Adding more power lines to this area would be highly damaging, and would certainly "take" or kill greater sandhill cranes and other birds.

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As recognized previously in the DEIR/S and more recently by the Delta Independent Science Board, construction of new transmission lines to power construction and operation of the project will lead to bird strike deaths. (September 30, 2015, DISB Letter, pp. 3. 17.) The Lead Agencies previously estimated that there would be 138 deaths per year, which is estimated to be reduced to 48 deaths per year if the power lines are marked. (See 2013 Draft BDCP, Appendix 5.J.C, p. 18 and Table 2, attached as Exhibit 3.)<sup>3</sup> The reduction in bird strikes was attributed to according to a Colorado study indicating that a 66% reduction in bird strikes could be attained through marking. (2013 Draft BDCP, Appendix 5.J.C, p. 18.) This lack of proper maintenance of bird diverters also diminishes their effectiveness. (See Exhibit 4, Broken Bird Diverters.)

Cranes, kite and rail are fully protected species under California law. (Fish & G. Code, § 3511.) While it was potentially possible to permit “take” (Fish & G. Code, § 86) in the context of a NCCP (Fish & G. Code, § 2835), that is not possible for a project subject to the typical CESA 2081 take permitting process, as is now occurring under Alt. 4A. Thus, no take of sandhill crane, black rail or white tailed kite can be permitted.

While the DSEIR/S now claims there will be no “take,” no credible analysis has been conducted to estimate bird strike deaths from the current transmission line configuration, which is substantially similar to that described in 2013. (See Exhibit 5, RDEIR/S Figure 24-6, Electrical Transmission Lines; see also, Exhibit 6, CA WaterFix Impacts to Waters of U.S.) Nonetheless, the RDEIR/S, in various locations, now claims that the transmission lines are somehow temporary and can be assumed to be taken down. (See, e.g., RDEIR/S, pp. 4.3.8-45, 62, 72, 113, 116, 135, 139-140; see also App. A, p. 15-11.) For instance, the RDEIR/S claims that the proposed 230 kV “9-mile segment extending east and west between the intermediate forebay and the SMUD/WAPA substation,” for instance, is temporary, indicating it will be removed after the 14-year construction period. (RDEIR/S, p. 4.3.8-140.)

Yet, in other parts, the RDEIR/S continues to characterize the transmission lines as permanent. For instance in Appendix 17E, which relates to aesthetic impacts, the transmission lines are depicted as permanent features. (RDEIR/S, Appendix 17E, p. 17E-55(Aesthetics); see also p. 15-8 (Recreation).) Additionally, the Construction Assumptions portion of the RDEIR/S makes no mention of the supposed temporary character of the transmission lines or includes the timing of their removal. (RDEIR/S, App. 3C-14.) Moreover, no requirement, mechanism or funding for the eventual removal

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<sup>3</sup> Available at:  
[http://baydeltaconservationplan.com/Libraries/Dynamic\\_Document\\_Library/Public\\_Draft\\_BDCP\\_Appendix\\_5J - Effects on Natural Communities Wildlife and Plants.sflb.ashx](http://baydeltaconservationplan.com/Libraries/Dynamic_Document_Library/Public_Draft_BDCP_Appendix_5J_-_Effects_on_Natural_Communities_Wildlife_and_Plants.sflb.ashx)

of the transmission lines now labelled as “temporary” is included in the RDEIR/S. In our research with the utilities (and relying on common sense), we learned that the removal of such a large line is very unusual given the cost of construction.

In any case, with construction slated at 14 years, the prior BDCP analysis, which likely underestimated bird deaths as described in FSL’s prior comment letter, clearly indicates that birds would die on the electrical transmission lines each year. Even if the lines were “only” up for 14 years for instance, using the 2013 draft BDCP take numbers in Appendix 5.J.C, 672 sandhill crane deaths would be caused by the project.

Nonetheless, the RDEIR/S now claims that by following AMM20, “there would be no take of greater sandhill crane from the project per Section 86 of the California Fish and Game Code” (RDEIR/S, p. 4.3.8-140), despite the earlier findings by the project’s own crane expert (Gary Ivey) that there would be 48 deaths per year even after mitigation. (2013 Draft BDCP, Appendix 5.J.C, p. 18 and Table 2). Notably AMM20 is not listed as an enforceable mitigation measure for impacts to cranes from the transmission lines (see, e.g., RDEIR, ES-68 (Impact BIO-70), and is instead only included in the now rejected Alt. 4 (RDEIR/S, App. D, p. D.3-108).

Undergrounding the new transmission lines would eliminate the potential for take, yet the RDEIR/S does not include undergrounding as a requirement, and simply mentions it as a possibility. Remarkably, where AMM20 standard in the draft BDCP provided only that there be **no net increase** in bird strike hazard to greater sandhill cranes, the revisions now purport to provide that there will be **no take** of sandhill cranes associated with the construction and operation of the conveyance facilities! (RDEIR/S, Appendix 3, p. D.3-109.) FSL believes this assertion is totally unrealistic and unsupported in the document. FSL continues to have concerns regarding the conclusions of the analysis with respect to greater sandhill crane, to wit:

- Zero is not a realistic bird strike number;
- Other bird strikes besides greater sandhill cranes should have been analyzed;
- The effectiveness of marking transmission lines with bird diverters is likely overstated and lacks a credible basis, especially given known failures to maintain the devices properly;
- The RDEIR/S fails to address how other project impacts, such as light/sound/vibration/traffic and habitat fragmentation, could exacerbate the potential for bird strike deaths;
- While undergrounding now appears to have been given some recognition as important, there is still no requirement that the lines be undergrounded, despite the fact that undergrounding is the only truly effective means to eliminate bird strikes;

- Despite the fact that there are inferences to the effect that certain transmission lines are intended to be temporary and not permanent, there is no firm, enforceable commitment or funding for their removal.

The minimization and mitigation for transmission line bird strike deaths is simply inadequate. One of the fundamental purposes of conducting an environmental review of a project is to identify potential mitigation measures, which lessen the impacts of the project. (Pub. Resources Code, § 21002.1, subd. (b).) There is no dispute over the fact that the introduction of a large new transmission line through the heart of the Stone Lakes NWR and adjacent habitat areas will result in additional bird strikes, and particularly the loss of greater sandhill cranes. (See 2013 Draft BDCP, Appendix 5.J.C, Figure 5.J.C-2 (Risk-Collision Index for Greater Sandhill Crane).) Stone Lakes' population of greater sandhill cranes is smaller, more recently established, and more vulnerable to disruptive impacts. We also believe that other birds besides cranes will die as a result of the new transmission lines.

Additionally, proposed procedures to verify no take are wholly unsatisfactory. There is no provision, for instance, to include remote monitoring or other information gathering devices on the new power lines. Rather, the project apparently intends to rely on bird surveys conducted every 5 years to determine whether there has been a reduction in numbers of greater sandhill cranes. (See 2013 BDCP, Appendix 5.J.C, p. 17.) By the time a population level effect is found in bird counts, it will be too late. Such a lackadaisical approach to monitoring effectiveness of the AMM does not meet minimum standards under the CESA in particular, since the greater sandhill crane is a fully protected, state-listed species.

There is little dispute that the most effective way to prevent birds strikes from occurring with the development of new transmission line facilities is to eliminate the conflict – i.e., underground the lines. Taking into account the inability to permit take of fully protected species, undergrounding is now an absolute necessity. While undergrounding is now more prominent in the discussion of AMM20 (RDEIR/S, p. D.3-109), it is still not required as a mitigation measure, nor is it described as part of the project. If the project proponents wish to conclude that no take will occur, undergrounding must clearly be part of the project or required as a mitigation measure.

The RDEIR/S also still fails to analyze the growth inducing effects of constructing transmission lines. Pumps at intakes and at tunnel head works will require new transmission lines. Any new power generation facilities that are brought on line to supply the power demands of the BDCP are by their very nature growth inducing because they bring power to areas that were previously unserved. The impacts of bringing the

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additional power generation capacity to supply the Tunnels' power requirements should have also been disclosed as an impact of the project.

The failure to adequately describe the transmission line portion of the project also constitutes impermissible piecemealing, as described in FSL's previous comments. Unfortunately, besides placing the word "temporary" in front of the word transmission, and providing yet another "conceptual rendering" of the location of the transmission lines, the RDEIR/S does nothing to remedy this project description deficiency.

There are already a significant number of transmission lines within and near the Refuge. The addition of more large above ground transmission lines will unquestionably cause higher bird mortality and will compromise the ability of the Refuge to complete its boundaries by introducing new wildlife risks into the area. Unfortunately, a full and good faith analysis of means to reduce impacts associated with these new structures has not yet been adequately undertaken. Moreover, the new claims in the RDEIR/S regarding the ability of a combination of making certain transmission lines temporary, installing bird diverters, and "considering" undergrounding, will not prevent the take of fully protected species. Should the project wish to legitimately claim that no bird strike deaths will occur as a result of the project, all new transmission lines must be undergrounded or co-located with existing transmission lines in such a way to avoid any increase in bird strikes.

**E. Traffic Impacts on Hood Franklin, Lambert and Twin Cities Road are Still Not Adequately Addressed**

As noted on the FSL comment letter of July 25, 2014, the traffic demands from construction of the intake structures, tunnels and forebay will significantly increase traffic on roads serving the Stone Lakes NWR and significantly impact the Refuge. The key road segments serving the Refuge are Hood Franklin Road between River Road (Highway 160) and Interstate 5, and Lambert Road from Herzog Road to Franklin Boulevard. Hood Franklin Road is the main access to the Refuge Visitor Center and Blue Heron Trails public use area. Like the DEIR/S, the RDEIR/S fails to acknowledge the Visitor Center or Blue Heron Trails, or consider transportation or recreation impacts to these public facilities, which have been open since 2011. (RDEIR/S, App. A, p. 15-11.) Lambert Road is the access point for refuge staff and hunters to the South Stone Lakes unit of the Refuge.

The RDEIR/S has modified the projected increase in traffic volume on roads in the vicinity of the tunnel project during construction. While the revised data projects the hourly traffic volumes as less than in the DEIR/S, to 620 vehicles per hour, this is still a significant amount of traffic, amounting to over 10 trucks a minute or on average (or one

truck every 6 seconds). Table 19-5 for Alternative 4 in the DEIR/S includes graphs, which show that traffic volumes will remain flat throughout the day with minimal peak hour highs, which suggests that almost all of the trips will be generated by truck traffic hauling supplies and waste material. There appears to be no comparable table in the RDEIR/S and assume that the graphs of daily traffic volume by hour remain the same for Alt. 4A.

FSL's prior comment letter identified several omissions and deficiencies in the DEIR/S, which have not been addressed in the RDEIR/S. Project traffic will negatively affect: (1) wildlife populations, (2) visitor experience, and (3) safety of staff, cooperators and visitors on roads, as explained below. These impacts, which relate to Transportation and Recreation impacts, are not adequately addressed in the RDEIR, despite FSL's prior comments on the DEIR/S.

### Wildlife Impacts

Roads and high traffic volumes reduce landscape connectivity, which effect wildlife populations in the following ways:

- Roads and traffic limit the regular movement of animals to different habitats (e.g., wetland to grassland) to meet daily, seasonal, and basic biological needs such as reproduction, feeding and sheltering.
- Roads and traffic affect use of habitats adjacent to roadways with some species having a higher degree of aversion to traffic and associated noise.
- Roads and traffic limit the ability for areas to be recolonized, and ability of young to find and establish new territories.
- Roads and traffic increase wildlife mortality due to collisions, which can affect reproduction success. At sufficiently high rates of mortality, areas become population sinks, which can then affect regional populations.

Impacts to landscape connectivity are evident along the east side of the Refuge, which is bordered by Interstate 5. The increase in volume of traffic since its construction in the late 1970's has affected a wide variety of animal species, which is evident by the number of carcasses Refuge staff observes on a weekly basis along the roadway. For example, barn owls are regularly found dead from collisions along the roadway. The number of collisions has been increasing over the years, as habitat conditions improve for the species and the birds that fly across Interstate 5 to access foraging areas. Additional species killed along Hood-Franklin and Lambert Road includes: gopher, garter and king snakes, western meadowlark, red winged blackbird, western pond turtle, barn owl, rabbit, opossum, striped skunk, coyote, American coot and unidentified ducks. River otter are

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another species that have been killed along roadways as individuals follow drainages from lakes to seasonal water bodies.

The harmful effects of an increase in traffic underscore the need to maintain and restore essential movements of wildlife across roads to maintain population movements and genetic interchange. This is particularly important on roads with high traffic volumes that can be complete barriers to movement. Numerous studies show that high-volume and high-speed roads tend to be the greatest barriers and most effective in disrupting animal movements and population interchange. Therefore, mitigation measures must be put in place to offset the increase in traffic on roads bisecting the Refuge as part of the Project.

We suggest that the following feasible mitigation measures be included in the RDEIR/S to reduce traffic impacts on the Refuge:

- Avoid and/or reduce use of Hood-Franklin and Lambert Roads between Franklin Road and River Road.
- Purchase land or easements in strategic locations adjacent to the Refuge with no barriers to connectivity to offset losses of habitat and connectivity.
- Limit travel times to avoid dusk and dawn when some species are most active.
- Expand AMM20 3.C.2.20.1.4 Measures to Avoid and Minimize Potential Effects from Lighting and Visual Disturbance to restrict project related traffic on Hood Franklin Road one hour before sunset and one hour after sunrise to limit disturbance to greater sandhill crane roost site.
- Establish and enforce a lower speed limit (<45 mph).
- Construct wildlife crossing tunnels and fence barriers.
- Place wildlife crossing signage along Hood Franklin and Lambert Roads.

### Visitor Experience

In 2011, the USFWS opened a visitor station behind the office on Hood Franklin Road, which includes a parking area, restrooms, a series of universally accessible trails, informational kiosks, a playscape and an amphitheater for the visiting public. This area is now used by over 30,000 visitors annually that come for a quiet experience to explore the restored wetlands, riparian and grassland habitats and associated wildlife. Over 2,000 school children also visit this area to experience nature and take part in the Refuge's environmental education programs with hands on learning. FSL provides funding for school groups. The site also hosts a variety of events each year with surges of attendance that fill the primary and alternate parking lots, including an environmental competition for grade school children from throughout the area, entitled "Nature Bowl".

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The visitor experience will be impacted by the increase in traffic and noise on Hood Franklin Road. Therefore, mitigation measures must be in place to ensure the continued use of the valuable resource. The following mitigations measures must be included:

- Construction of additional turn pocket at the main entrance to the Headquarters Unit on Hood Franklin Road.
- Establish and enforce lower speed limits near the Refuge Headquarters Unit.
- Prohibit project-related truck traffic on Hood Franklin Road Friday through Sunday.
- Implement a litter control program.
- Educate drivers and project personnel to not use facilities at Refuge Headquarters.
- Implement noise reduction program.
- Plant vegetation screen along road visible to public at least one year prior to beginning of construction.
- Cover open haul trucks or otherwise control dust and debris that may escape from truck trailers.

In 2005, a waterfowl hunting program was established at the Sun River Unit of the Refuge. Hunters enter the Sun River Unit from Lambert Road, arriving between 4 and 5 a.m. and leaving between 11 and 2 p.m. on Wednesdays and Saturdays during the months of November through January. The entrance road has poor visibility in both directions. An increase in traffic associated with the Project will increase the ingress and egress hazards. Therefore, mitigation measures must be put in place to offset the increase in traffic.

The following mitigation measures must be included for Lambert Road:

- Design and build new entrance to Sun River Unit.
- Design and build turn pockets on Lambert Road at the entrance to the Sun River Unit.
- Prohibit project-related truck traffic on Lambert Road on Wednesday and Saturdays.
- Signage indicating side road access hazard.

### Safety

Refuge staff, volunteers, partners and cooperators utilize roads to travel between Refuge management units and move equipment such as tractors, boats, cattle trucks, etc. A significant increase in the volume of traffic on all roads will impact the ingress and egress onto service roads. Of particular concern are the more than 2,000 school children



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that visit the Refuge during the school year. They arrive and return in school busses. The level of truck traffic increases significantly the chances of a school bus-haul truck collision with tragic consequences. This potential safety risk must be evaluated in the RDEIR/S.

In summary, the RDEIR/S is seriously deficient in detailing the significant impacts of tunnel construction traffic on both wildlife and visitors to the Stone Lakes NWR. The preparers of the document do not appear to have visualized the prospect of an average truck every 5 seconds throughout the day for extended periods of time over many days and months during the long construction period of the project, and how that will impact wildlife and people. Recommended mitigation measures are general, minimal and offer no assurance of any actual mitigation. The document fails to consider additional, more substantive yet feasible mitigation measures. The Stone Lakes NWR represents a significant investment of public resources to protect habitat and wildlife and provide public access at the edge of a major urban area and the project has an obligation to mitigate impacts to the Refuge and its visitors.

#### **F. FSL Ongoing Concerns Regarding Tunnel Muck**

FSL previously submitted detailed comments regarding its concerns regarding the disposal of tunnel muck in areas currently in use or planned for use as wildlife habitat, such as Zacharias Island, which is within the Refuge boundary. The project will generate a significant volume of tunnel muck (with now over 30 million cubic yards estimated from tunneling alone) that will need to be stored, used or disposed. Yet preliminary testing indicates that the muck may have high heavy metal content, making it unsuitable for use in areas exposed to wildlife and people.

The Project must account for the fact that the muck may not be reusable. Specific mitigation must be developed that accounts for the very real possibility that the muck cannot be reused. While there are several ECs that supposedly address impacts associated with tunnel muck (see RDSEIR/S, App. B, p. 3B-12, 3B-52 to 69), we continue to have concerns, as described above, regarding the enforceability of these so-called "commitments."

#### **G. Impacts of Dewatering for Construction of the Facilities on Groundwater and Surface Water Supplies within the Refuge are Not Adequately Disclosed**

FSL continues to be concerned that the dewatering necessary for: (1) construction of the intakes (particularly the intake near Hood), (2) the forebay, and (3) tunnel construction may have adverse impacts on the Refuge's water sources as well as trees and

vegetation within the Refuge that rely on relatively shallow groundwater. Though it is not entirely clear from the RDEIR/S, it appears that significant dewatering activities will be necessary for all three of these activities, which will occur within and near the Refuge. These dewatering activities would significantly alter groundwater levels in the vicinity of the Refuge. (See Exhibit 7, RDEIR, App. A, Figure 7-27 (showing groundwater levels diminished by 4 feet within the Refuge).) The RDEIR/S does not describe dewatering activities with sufficient particularity to disclose the potential impacts to Refuge water supplies.

The Refuge uses the SP Cut Waterway as a water source and is concerned that this surface water diversion and other wells within the Refuge will be adversely impacted during, and potentially after, construction. It appears that the locations and construction details for existing production wells in the vicinity of the project are still unknown. A good faith effort at full analysis would include having a detailed project description of the intended actions to construct the Tunnel facilities, analyzing all groundwater impacts, and proposing adequate mitigation.

In addition, mitigation for water supply impacts remains inadequate. Mitigation Measure GW-1 must be modified to include replacement of water supplies for wildlife and habitat uses, in addition to replacement of interrupted domestic and agricultural water supplies. This previously requested change to mitigate for disruption of wildlife and habitat water supplies has not yet been made, despite other changes to the mitigation measure. (RDEIR/S, App. A, pp. 7-4 to 7-5.)

#### **H. Concrete Batch Plant Impacts are Not Disclosed**

The BDCP includes three approximately 40 acre concrete batch plant and 2 acre fuel stations near each of the three intake sites, all of which are immediately west of the Refuge boundary. (RDEIR/S, p. 4.1-22, Map book, Figure M3-4, Sheets 2 and 3.) Due to the proximity of the Refuge to these activities, we are concerned about potential impacts on the Refuge and habitat in the surrounding vicinity. These impacts do not appear to have been disclosed in the RDEIR/S.

Batch plants are a significant source of noise, dust and traffic. The content of the dust would likely be hazardous to humans, wildlife and vegetation. Dust generated by batch plants can contain asbestiform particles and crystalline silica, which are hazardous to the human respiratory system. The pH of many of these dusts may also be dangerous to vegetation and animals. The RDEIR/S has not, but must, analyze these potential impacts, and specifically the impacts of placing a batch plant so close to sensitive biological resources. At a minimum, mitigation in the form of noise screens, limiting truck drum speeds, lining hoppers with a resilient surface, and routing trucks to avoid

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sensitive receptors should be required. (See 2013 DEIR/S FSL Comment Letter, Exhibit K, Report on Noise Levels from Proposed Batching Plant, July 2008.)

### **I. Noise Impacts on the Refuge Have Not Been Addressed**

Noise levels above 60 dBA, which are expected during construction, may interfere with communication among birds and other wildlife. A baseline of 40 dBA is used to describe the existing ambient noise level in the study area. (RDEIR/S, App. A p. 23-7.) The thresholds for construction indicate that, where existing ambient noise level is less than 60 dBA, impacts would be significant where construction noise levels are predicted to exceed the DWR standard of 60 dBA (50 dBA during nighttime hours). (RDEIR/S, App. A p. 23-8.) There is no analysis in the RDEIR/S relating to the impacts of this noise on wildlife.

Construction noise above background noise levels (greater than 50 dBA) could extend 1900 to 5250 feet from the edge of construction activities. (2013 BDCP, Appendix 5.J, Attachment 5J.D, Indirect Effects of the Construction of the BDCP Conveyance Facility on Sandhill Crane, Table 4; see also BDCP, p. 12-1834.) Impacts may be similar among other bird species likely to be present in the area, which should also be analyzed in the RDEIR/S.<sup>4</sup>

We also continue to be concerned that the 2013 BDCP, Appendix 5.J.C treats the indirect effects on greater sandhill crane of noise from all construction activity and pile driving separately. The two types of noise should be aggregated so that the full impact on cranes is disclosed. It does not appear that this previously stated concern has been addressed at all in the RDEIR/S.

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<sup>4</sup> See BDCP, p. 12-1546 (California Black Rail), 12-1557 (California Clapper Rail), 12-1568 (California Least Tern), 12- 1617 (Least Bell's Vireo and Yellow Warbler), 12-1627 (Suisun Song Sparrow and Saltmarsh Common Yellow Throat Sand), 12-1643 (Swainson's Hawk), 12-1659 (Tricolored blackbird), 12-1674 (Western Burrowing Owl), 12-1685 (Western Yellow-Billed Cuckoo), 12-1700 (White Tailed Kite), 12-1712 (Yellow Breasted Chat), 12-1722 Cooper's Hawk and Osprey), 12-1744 (Cormorants, Herons, and Egrets), 12-1758 (Short Eared Owl and Northern Harrier), 12-1769 (Mountain Plover), 12-1775 (Black Tern), 12-1787 (Grasshopper Sparrow and California Horned Lark), 12-1795 (Least Bittern and White Faced Ibis), 12-1808 (Loggerhead Shrike), 12-1818 (Modesto Song Sparrow), 12-1821 (Bank Swallow), and 12-1834 (Yellow Headed Blackbird).

**J. Conservation Actions for Greater Sandhill Crane and Other Species of Concern are Still Incomplete**

FSL still has concerns about the timing of crane conservation actions in general, which are exacerbated by the abandonment of the project as an HCP. There has been no specificity provided for when the two new roosting ponds, that will be created to connect the Cosumnes crane populations to those of the Refuge, will be constructed. Beyond the concerns already expressed about funding certainty and timing of mitigations in relation to impacts, it is imperative to have the timing for these conservation actions mapped out to ensure that the Refuge can incorporate the presence of these actions into its own conservation management and monitoring schedule, and so that the timing can be analyzed in the context of the impacts from the Tunnels. When the conservation actions will be done, this needs to be as fully explicated as what they will be. To that end, a monitoring and management plan needs to be in place before construction begins, and the framework for that plan needs to be included in Alt. 4A so that it can be analyzed for completeness and appropriateness.

Of equal concern to the timing of mitigations, is the timing of Alt. 4A construction activities. Narrower construction windows would limit the impact on cranes but the “to the extent practicable” language would seem to greatly diminish the likelihood that any restrictions would be adhered to, and that take would be avoided as now claimed in the RDEIR/S. We understand that there will be construction window limitations to protect greater sandhill crane populations on Staten Island, and request those same restrictions on construction in the vicinity of Stone Lakes NWR.

**K. Effects of Additional Increased Water Transfers on Pacific Flyway Resources Unanalyzed**

While the current Alt. 4 BDCP still refer to 1.3 million acre feet of water transfers (RDEIR/S, App. D, pp. D.3.83 to 85), it is unclear what amount of water transfers are contemplated under Alt. 4A. FSL is also concerned that the use of the Tunnels to facilitate additional transfers will threaten water supplies for other important Pacific Flyway habitat in the Sacramento Valley.

Over 90 percent of the wetlands in the Central Valley has been lost since the 1850s. Surveys in the Central Valley indicate that in the 1850s there were over four million acres of wetlands in the valley. These wetlands historically supported more than 4 million acres of wetland habitats, supporting an estimated 20 to 40 million waterfowl annually. Today, just over 205,000 acres of managed wetlands remain in the Central Valley, and of these, two thirds are in private ownership.

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The Central Valley Joint Venture (“CVJV”) was created to address the need to conserve and restore wetland habitats in the Central Valley. Through legislative action to mandate a portion of Central Valley Project Improvement Act water for conservation, the CVJV has protected, restored and enhanced over 434,000 agricultural acres. But the water supplies for these wetlands are not secure, and the purchase of water is often not feasible given the increase in costs and the decrease of federal and state budgets. Furthermore, the search for additional municipal and industrial and agricultural water supplies continues, and water agencies have become very active in locating and acquiring water supply options, both north and south of the Sacramento San Joaquin River Delta (“Delta”), to help meet demands for its service area. Typically, urban water users can pay prices that are an order of magnitude greater than can be afforded by government agencies, conservation organizations, and private landowners, resulting in the unintended consequence of “out-bidding” wetland managers.

The Tunnels, once built, will facilitate the transfer of water from the Sacramento Valley and the Delta to Southern California, essentially building a “water transfer pipeline.” As California moves towards a drier climate, these increases in water transfers will result in major shifts in agriculture away from crops that now support hundreds of thousands of waterfowl and waterbirds that depend on these habitats during the winter and migration. We have already lost over 95% of wetlands in the state, and the Project as it is now envisioned with its ability to move water and facilitate water transfers could potentially erase the gains made by the CVJV and other federal and state efforts to restore and protect habitat.

If the Tunnels will be used to transfer water, the RDEIR/S should have clearly analyzed the impacts of those transfers on Pacific Flyway resources. As a result of this omission of information regarding the Project and its likely impacts, the RDEIR/S is deficient.


### **III. CONCLUSION**

The Friends of Stone Lakes National Wildlife Refuge has appreciated the opportunity it has had to work with the Lead Agencies to explore solutions to the impacts the Project will have on the Refuge. Nonetheless, as explained above FSL has significant remaining concerns that the Project continues to have enormous impacts on the Refuge that have not yet been properly identified, analyzed or avoided/mitigated. FSL remains

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ready and available to continue the dialogue to ensure that, should the Project be approved and constructed, that its impacts on the Refuge are fully mitigated.

Sincerely,



Dale Claypoole  
President, Friends of Stone Lakes  
National Wildlife Refuge

cc: David Murillo, Regional Director, Mid Pacific Region, U.S. Bureau of Reclamation (dmurillo@usbr.gov)  
Susan Fry, Manager, Bay-Delta Office, U.S. Bureau of Reclamation (bdo@usbr.gov)  
Ren Lohofener, San Francisco Bay-Delta Fish and Wildlife Office, U.S. FWS (ren\_lohofener@fws.gov)  
Chuck Bonham, California Department of Fish and Wildlife (chuck.bonham@wildlife.ca.gov)  
Bart McDermott, Manager, Stone Lakes NWR (Bart\_mcdermott@fws.gov)  
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John Buse, Center for Biological Diversity (jbuse@biologicaldiversity.org)  
Barbara Barrigan-Parilla, Restore the Delta (barbara@restorethedelta.org)  
Osha Meserve, Counsel for FSL (osha@semlawyers.com)

Attachments:

Exhibit 1, Permanent Surface Impacts, BDCP Fix Alternative 4A, Figure A  
Exhibit 2, Permanent Surface Impacts, Proposed Forebay Area BDCP Fix Alternative 4A, Figure B  
Exhibit 3, 2013 Draft BDCP, Appendix 5.J.C, p. 18 and Table 2  
Exhibit 4, Broken Bird Diverters  
Exhibit 5, RDEIR/S Figure 24-6, Electrical Transmission Lines  
Exhibit 6, CA WaterFix Impacts to Waters of U.S. (Index)  
Exhibit 7, RDEIR, Appendix A, Figure 7-27, Reduced Groundwater Levels

# **EXHIBIT 1**





Permanent Surface Impacts  
BDCP Fix Alternative 4A  
Figure A



# **EXHIBIT 2**



Permanent Surface Impacts  
Proposed Forebay Area  
BDCP Fix Alternative 4A  
Figure B

# **EXHIBIT 3**

1  
2  
3

Attachment 5J.C  
**Analysis of Potential Bird Collisions at  
Proposed BDCP Powerlines**

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|                 |  |
|-----------------|--|
| <b>Date:</b>    | September 3, 2013  |
| <b>To:</b>      | Laura King Moon, Project Manager, BDCP<br>California Department of Water Resources   |
| <b>Cc:</b>      |  |
| <b>From:</b>    | Paola Bernazzani<br>Senior Conservation Biologist, ICF International<br><br>Gary L. Ivey<br>Research Associate, International Crane Foundation |
| <b>Subject:</b> | <b>Analysis of Potential Bird Collisions at Proposed BDCP Powerlines</b>   |

This memo describes the potential risk to avian species from collision with electrical powerlines that would be installed as part of the Bay Delta Conservation Plan (BDCP) and provides additional analysis of risk and mitigation for the greater sandhill crane (*Grus canadensis tabida*). The following specific factors are addressed.

- Assessment of vulnerability for covered birds.
- Mortality estimates and population-level effects for greater sandhill crane.
- Minimization and mitigation measures for greater sandhill crane based on anticipated levels of take.

## 1.0 Introduction

### 1.1 Definitions

Powerlines are rated and categorized by the voltage carried and the purpose served (Avian Power Line Interaction Committee 2006). Because voltages carried by powerlines are typically large, voltage is specified by the kilovolt (kV).

- **Distribution lines:** Electrical lines that are energized at lower voltages (60 kV or below). Up to 3.3 miles of temporary, 34.5-kV distribution lines would be installed under the BDCP; additional distribution lines could be used for mitigation. Typically, distribution lines range in height from 35 to 40 feet (11 to 12 meters) (Figure 1) (Avian Power Line Interaction Committee 2006).
- **Transmission lines:** Electrical lines that are energized at higher voltages (60 kV or above). Under the BDCP, 69-kV and 230-kV transmission lines would be installed. Typically, the higher-voltage (230-kV) lines vary in height from 90 to 110 feet (27 to 34 meters), while the "sub"

## Analysis of Potential Bird Collisions at Proposed BDCP Powerlines

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length of line crossing them, to estimate the number of cranes expected to cross those lines on a daily basis.

Using this approach, an average population size was determined for each line segment, which was then multiplied by 130 days (the mean number of days that greater sandhill crane spend in the Delta wintering area) and by four flights per day (birds going between foraging areas and roost sites twice a day, crossing the lines twice in the morning and twice in the evening). Based on the assumption that the probability of flying out of the roost in a given cardinal direction is 25%, this number was then divided by four, resulting in a crossing estimate for each segment and for the total line (Table 2.). The number of crossings was then multiplied by collision mortality rates that were calculated for greater sandhill crane in the Rocky Mountains of Colorado (Brown and Drewien 1995). These data were used because local or regional data are not available. Brown and Drewien (1995) estimated that annual collision mortality of greater sandhill crane at unmarked lines was between  $2.5 \times 10^{-5}$  (low estimate) and  $30.4 \times 10^{-5}$  collisions per crossing (high estimate). For the purposes of this analysis, the high estimate was used to ensure that all potential impacts were captured.

Because lack of visibility is one of the most commonly implicated causes of collision mortality, live or ground wires can be marked to increase their visibility. While it hasn't been studied, the efficacy of bird flight diverters are likely diminished with reduced visibility associated with the new moon or fog. However, it is reasonable to assume that bird flight diverters still reduce mortality. Other markers also include dampers, hanging plates, and spheres. Marking lines has been shown to decrease collision risk substantially. Brown and Drewien (1995) estimated that annual collision mortality rates of birds at marked lines were reduced by 62 and 66% for two types of markers, and it is likely that birds found dead in these studies were also flying at night. Morkill and Anderson (1991) indicated a 54% reduction in crane mortality at marked lines. In addition to the risk map derived above, collision risk and mortality in the Plan Area were estimated relative to the proposed powerline locations. This was done for both marked and unmarked lines.

Absent line marking, which increases visibility and reduces collision risk (i.e., without minimization measures), the potential annual take of greater sandhill crane is estimated at 18 per year at permanent lines and 120 per year at temporary lines. Assuming a reduction of 66% (Brown and Drewien 1995), potential mortality at marked lines is estimated at 7 per year at permanent lines and 41 per year at temporary lines.

**Table 2. Estimated Collision Mortality of Greater Sandhill Crane at BDCP Marked and Unmarked Powerlines**

| Powerline Type  | Crossings/Year <sup>a</sup> | Deaths/Year <sup>b</sup><br>(unrounded) |                           |
|---|-----------------------------|---|---------------------------|
|   |                             | Unmarked Lines                          | Marked Lines <sup>c</sup> |
| 69-kV line (permanent)  | 749,949                     | 16 (15.18)                              | 6 (5.16)                  |
| 230-kV line (permanent)   | 6,586                       | 2 (2.00)                                | 1 (0.68)                  |
| 230-kV line (temporary)   | 321,120                     | 96 (95.89)                              | 33 (32.60)                |
| 34.5-kV line (temporary)  | 76,862                      | 24 (23.37)                              | 8 (7.95)                  |
| <sup>a</sup> Baseline mortality = $30.4 \times 10^{-5} \times \text{crossings/year}$ .        |                             |   |                           |
| <sup>b</sup> Values have been rounded up to the nearest integer unless otherwise specified.   |                             |   |                           |
| <sup>c</sup> 66% reduction based on Brown and Drewien (1995) for sandhill cranes in Colorado. |                             |   |                           |

Based on the analysis above, the cumulative mortality associated with marked temporary lines is estimated to be 410 birds over a 10-year period. While it is possible to calculate cumulative impacts from permanent lines over the permit term, mortality will continue at these lines as long as they are present. Therefore, deaths per year is a better metric for describing mortality at permanent lines. Note that mitigation is also calculated on an annual, ongoing basis.

## 4.0 Population Impacts

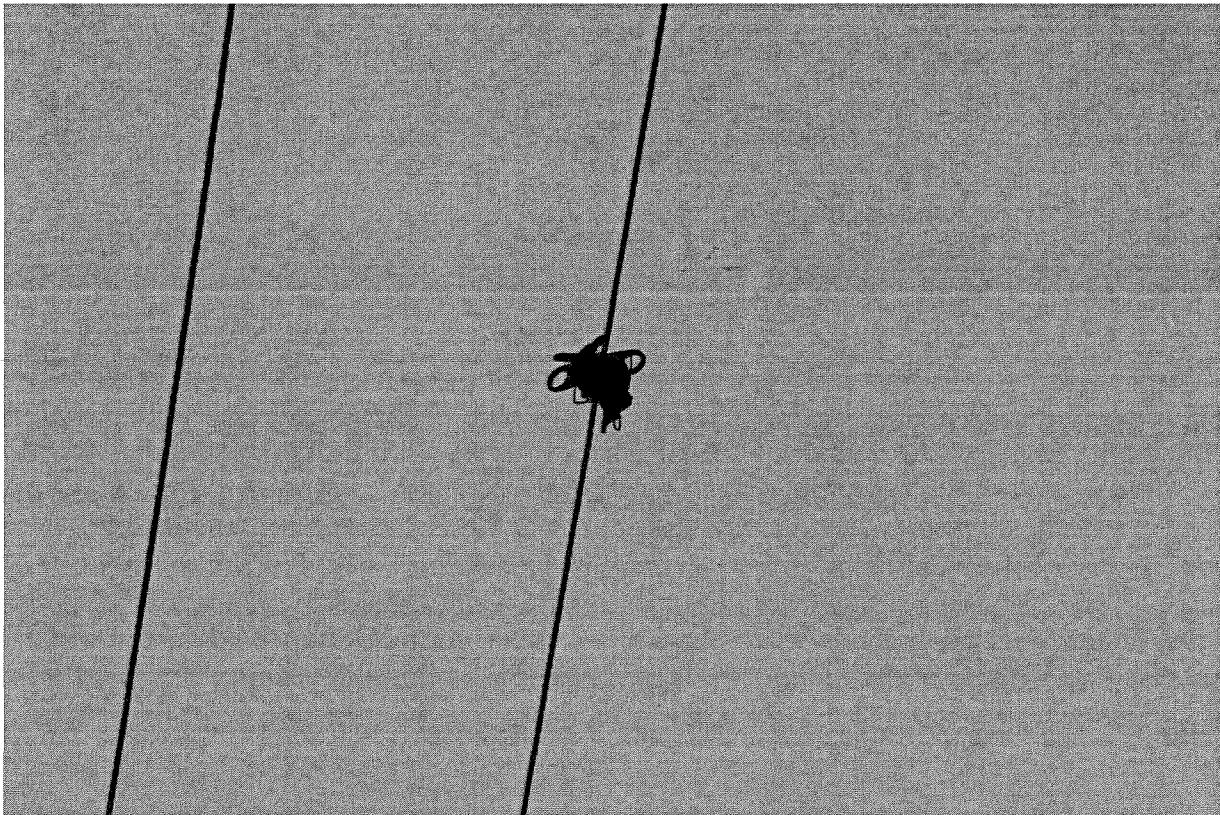
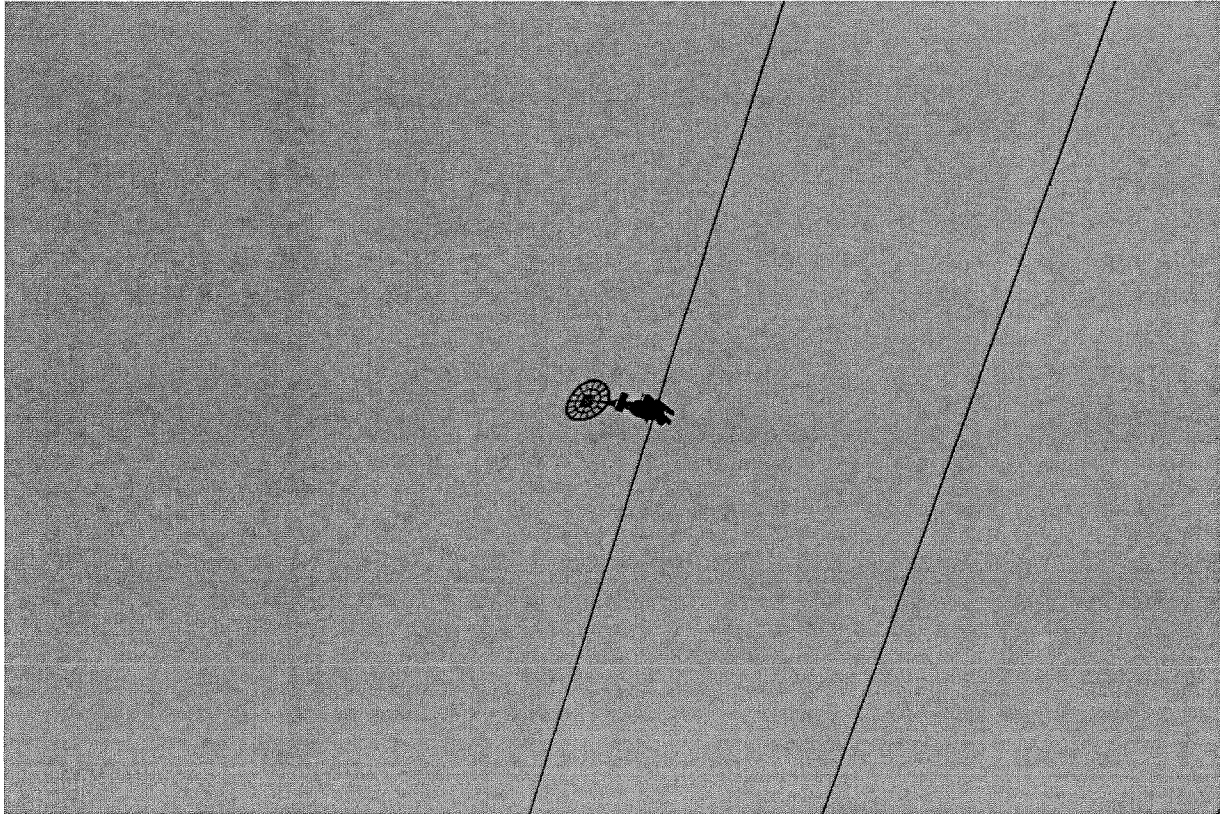
Greater sandhill cranes that winter in the Plan Area are designated as the Central Valley population (Pacific Flyway Council 1997). Although there is no current estimate for the Central Valley population, recent counts of summering cranes in California, Oregon, and Washington total approximately 4,200 (Ivey and Herziger 2000, 2001), and a recent estimate of summering cranes in interior British Columbia totaled an additional 4,000 (Breault pers. comm.). These birds are all within the same regional population; resulting in a total population of approximately 8,200 birds (also see Littlefield 2002).

Assuming a population of 500 birds in 1945 (based on literature reporting less than 200 pairs in Oregon and California) (Gabrielson and Jewett 1940; Walkinshaw 1949) and 8,200 birds in 2012 (Littlefield 2002), the overall annual rate of increase is 1.4% per year. Because cranes are long-lived with relatively low recruitment rates and high annual survival rates (usually greater than 90%) (Tacha et al. 1992; Drewien et al. 1995), additional mortality is unlikely to be compensated by population growth, and losses could directly affect population dynamics. Also, greater sandhill cranes are highly faithful to wintering sites and are primarily sedentary during winter, so birds that roost close to proposed powerlines are particularly vulnerable. Note that the current rate of growth accounts for existing sources of mortality for greater sandhill crane, such as collision at existing

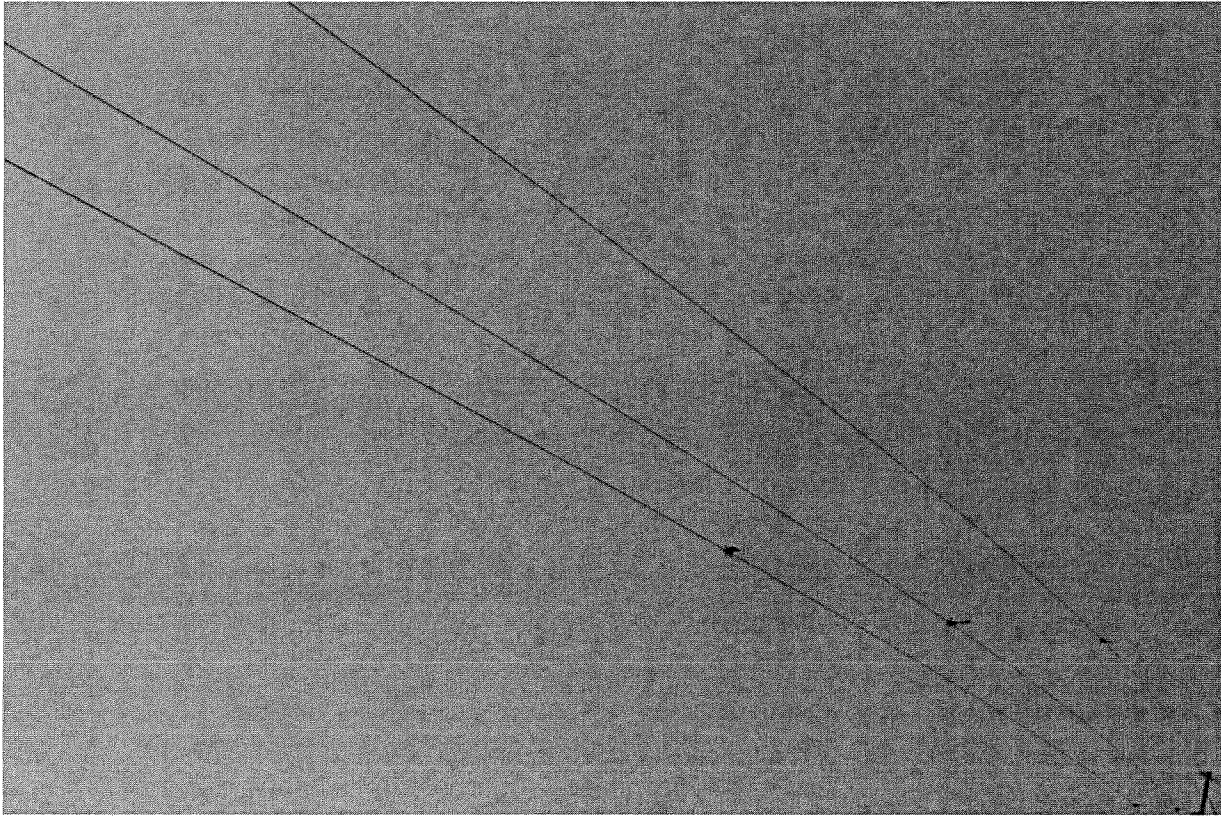
# **EXHIBIT 4**



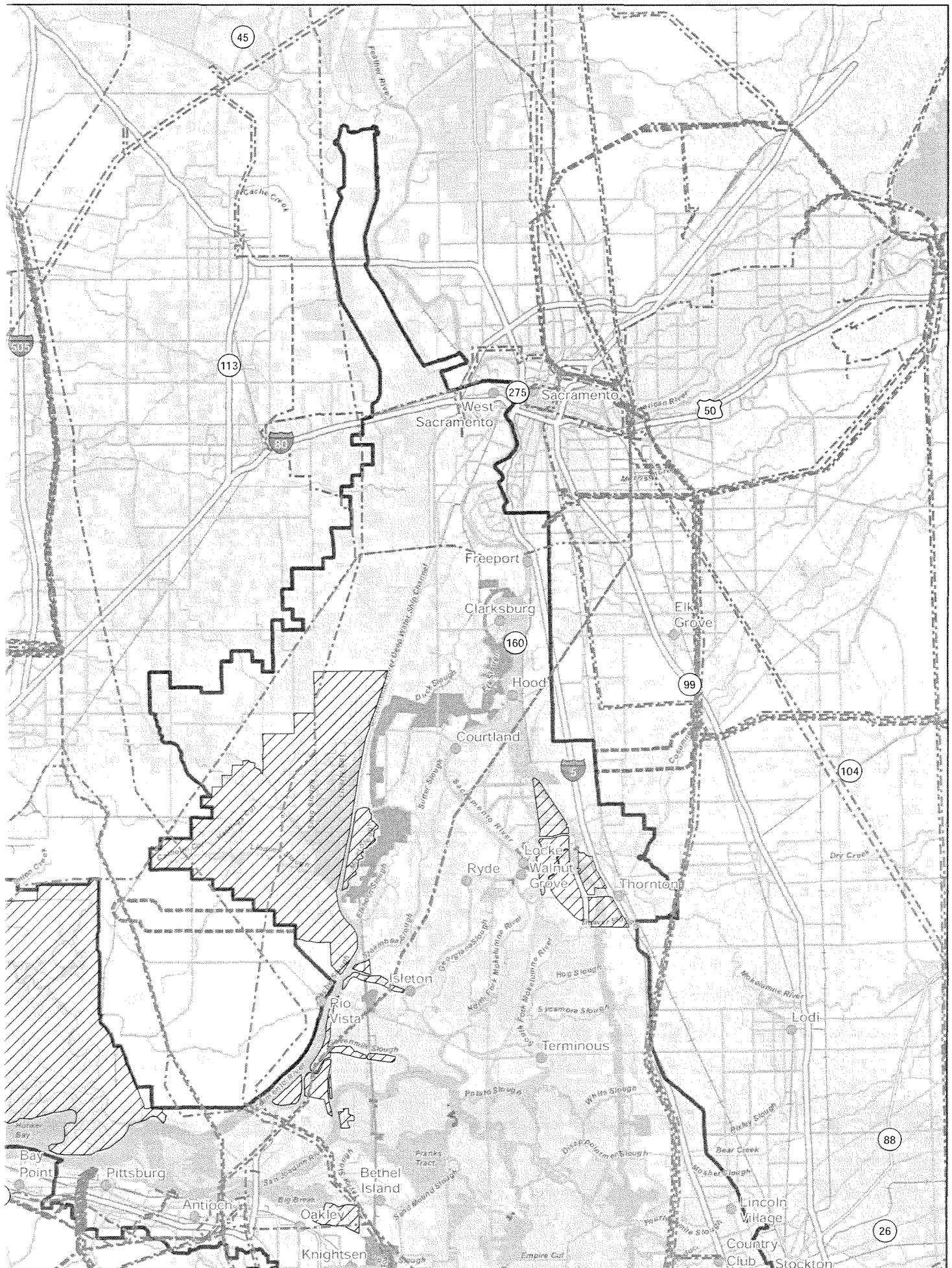
Bird Diverters on Staten and Woodbridge Island Jan. 2015



Bird Diverters on Staten and Woodbridge Island Jan. 2015

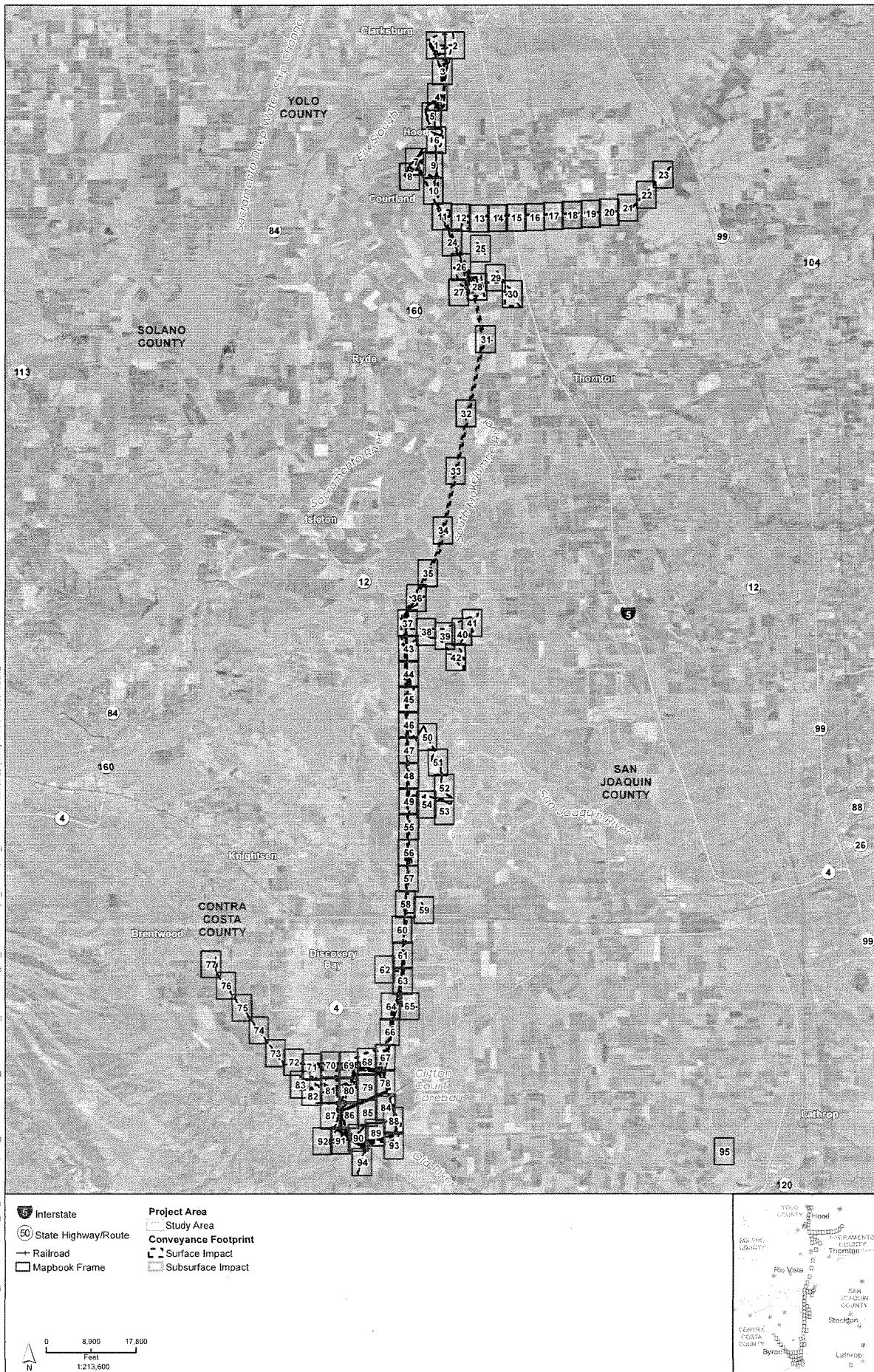


# **EXHIBIT 5**





# **EXHIBIT 6**



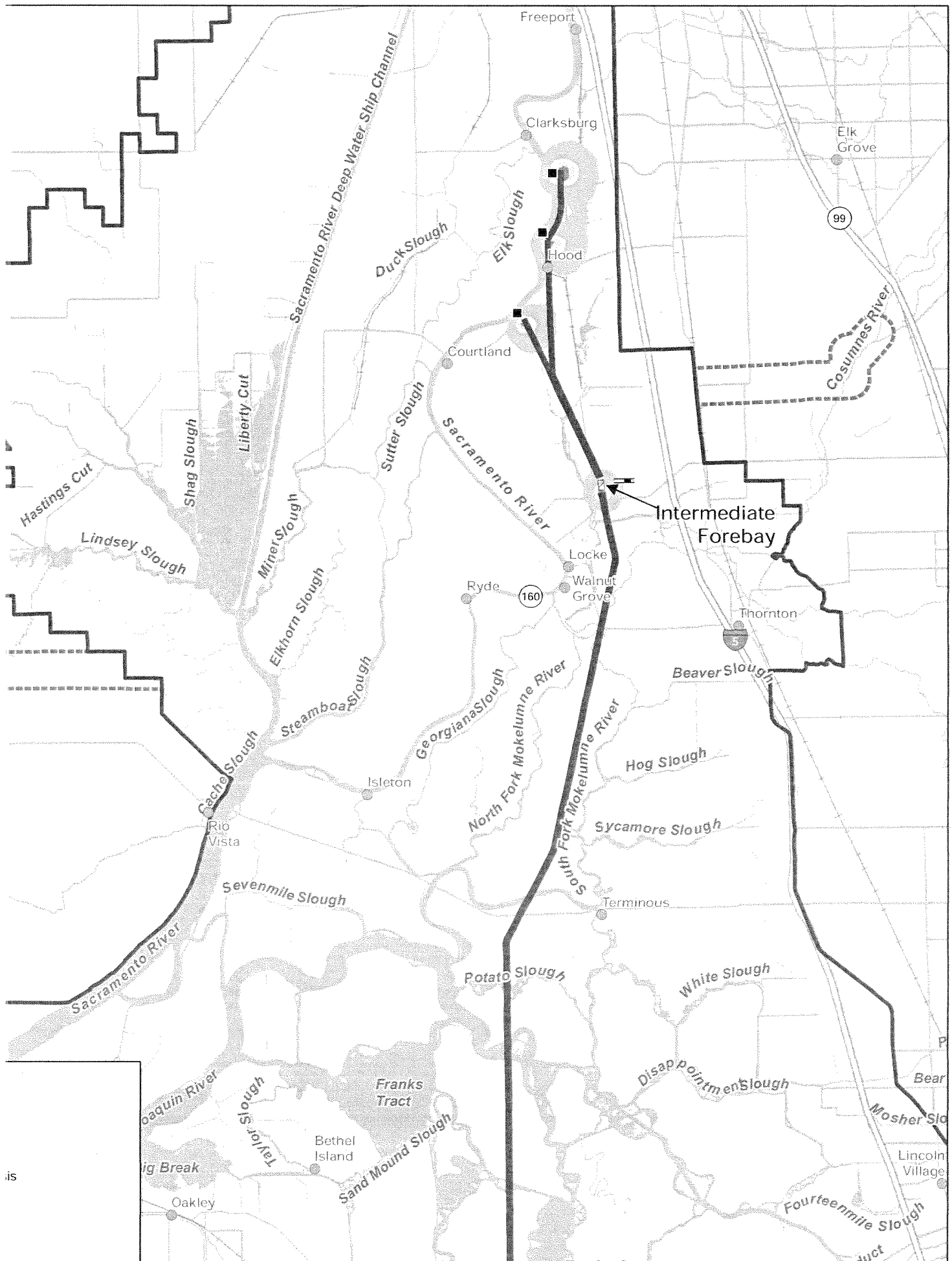
Sources: Conveyance Planning Area revisp (DWR 2015); Wetlands (DWR 20150621); NAD 2011

Prepared by:  
Division of Environmental Services  
Department of Water Resources  
3500 Industrial Blvd.  
West Sacramento, CA 95691



**Index**  
**California Water Fix**  
**Impacts to Waters of US**  
**Wetland Delineation v.2**

# **EXHIBIT 7**





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**From:** Mae Empleo <mae@semlawyers.com>  
**Sent:** Friday, October 30, 2015 1:25 PM  
**To:** BDCPcomments  
**Cc:** dmurillo@usbr.gov; bdo@usbr.gov; ren\_lohoefener@fws.gov; chuck.bonham@wildlife.ca.gov; Bart\_mcdermott@fws.gov; wirthsoscranes@yahoo.com; yogoombah@yahoo.com; jbuse@biologicaldiversity.org; barbara@restorethedelta.org; osha@semlawyers.com; claypoole@sbcglobal.net  
**Subject:** Comments of Friends of Stone Lakes National Wildlife Refuge re: BDCP/CA WaterFix RDEIR/SDEIS  
**Attachments:** FSL\_RDEIRS\_Cmnt\_Ltr\_10.30.15.pdf

Dear Lead Agencies:

Attached please find the correspondence submitted on behalf of the Friends of Stone Lakes National Wildlife Refuge regarding the proposed Bay Delta Conservation Plan/California WaterFix Partially Recirculated Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement. Thank you for considering the information in this letter. Should you have questions, please do not hesitate to contact our office.

Sincerely,

Mae Ryan Empleo  
Legal Assistant  
*Soluri Meserve, A Law Corporation*  
1010 F Street, Suite 100  
Sacramento, CA 95814

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