



30 October 2015

BDCP/WaterFix Comments
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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.

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.¹ 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.² Every single survey of Delta smelt in late 2014 through mid-2015 identified new historic lows in species abundance.³ The U.S. Fish and Wildlife's (USFWS) Anadromous Fisheries Restoration Program (AFRP) documents that, since 1967, in-river natural production of 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

¹ 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>.

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

³ 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>.

levels mandated by the Central Valley Project Improvement Act, California Water Code and California Fish & Game Code.⁴ 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 2014⁵ and, as of 15 October, the 2015 winter-run year class numbers are 22% below last years decimated levels.⁶

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: required habitat mitigation in the CalFed Record of Decision and the various biological opinions

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

⁵ 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
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

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

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 Sacramento River 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 Environmental Assessment (EA) 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 EA as part of the permitting process. We're informed that consultation has begun but that the EA has not been completed. Failure to include the EA 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; 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 any one or two 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 3rd 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.⁷ 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.⁸ 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.⁹

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.¹⁰

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.¹¹

The Cause of the Fishery and Bay/Delta Estuarine Decline

⁷ 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.

⁸ 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.

⁹ 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.

¹⁰ 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.

¹¹ 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 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.¹²

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 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:

¹² 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.

- 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.¹³ 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.¹⁴

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 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

¹³ 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.

¹⁴ *Ibid.*, Jassby et al. 1995.

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 Sonora* (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 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.”

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.

Sincerely,



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