P.O. Box 2000, Sacramento, CA 95812-2000

Info: (916) 341-5300, FAX: (916) 341-5400, Web: http://www.waterboards.ca.gov/waterrights

PROTEST- PETITION

This form may also be used for objections

PETITION FOR CHANGE ON

1

APPLICATION ____¹___ PERMIT ___¹___ LICENSE ____ of the California Department of Water Resources and the United States Bureau of Reclamation

We, Bill Jennings, Executive Director, California Sportfishing Protection Alliance (CSPA), 3536 Rainier Ave, Stockton CA 95204, deltakeep@me.com, (209) 464-5067; Chris Shutes, Water Rights Advocate, CSPA, 1608 Francisco St., Berkeley, CA 94703, blancapaloma@msn.com, (510) 421-2405; Barbara Vlamis, Executive Director, AquAlliance, P.O. Box 4024, Chico, CA 95927, barbarav@aqualliance.net, (530) 895-9420; Carolee Krieger, Executive Director, California Water Impact Network (CWIN), 808 Romero Canyon Rd., Santa Barbara, CA 93108, caroleekrieger7@gmail.com, (805) 969-0824; and Michael Jackson, counsel to CSPA, CWIN and AquAlliance, P.O. Box 207, 75 Court Street, Quincy, CA 95971, mjatty@sbcglobal.net, (530) 283-0712 (Protestants) have carefully read the petition requesting changes in water rights of State Water Project (SWR) and Central Valley Project (CVP), submitted to the State Water Resources Control Board on 25 August 2015, by the Department of Water Resources and U.S. Bureau of Reclamation; and the addendum and errata to the aforesaid petition submitted 11 September 2015, to the State Water Board by the same petitioners.

Attach supplemental sheets as needed. To simplify this form, all references herein are to protests and Protestants although the form may be used to file comments on temporary urgent changes and transfers.

Protest based on ENVIRONMENTAL OR PUBLIC INTEREST CONSIDERATIONS

- The proposed action will not be within the State Water Resources Control Board's jurisdiction
- The petition does not best serve the public interest
- The petition would be contrary to law
- The petition would have an adverse environmental impact

¹ Petition for diversion and rediversion submitted by DWR and the Bureau applies to Permits 16478, 16479, 16481, and 16482 and 16483 (Applications 5630, 14443, 14445A, and 17512, respectively) of the Department of Water Resources for the State Water Project; and Permits 11315, 11316, 11885, 11886, 11887, 11967, 11968, 11969, 11971, 11973, 12364, 12721, 12722, 12723, respectively) of the United States Bureau of Reclamation for the Central Valley Project.

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Protest based upon all of the above.

State facts which support the foregoing allegations:

CSPA, C-WIN and AquAlliance petition to participate in both Parts 1 and 2 of the hearings scheduled by the State Water Resources Control Board concerning this change petition. Attachment A comprises allegations of protest from CSPA, C-WIN and AquAlliance regarding environmental and public interest considerations and Attachment B comprises allegations of protest from CSPA regarding injury to prior rights.

Under what conditions may this protest be disregarded and dismissed? (Conditions should be of a nature that the petitioner can address and may include mitigation measures.) *See Attachment A*.

Protest based on INJURY TO PRIOR RIGHTS

To the best of my (our) information and belief the proposed change or transfer will result in injury as follows: *See Attachment B*.

Protestant claims a right to use of water from the source from which petitioner is diverting, or proposes to divert, which right is based on (identify type of right protestant claims, such as permit, license, pre-1941 or riparian right): *See Attachment B*

List permit or license or statement of diversion and use numbers, which cover your use of water (if adjudicated right, list decree). *See Attachment B*

Where is your permit located? Collinsville CA. See Attachment B

If new point of diversion is being requested, is your point diversion downstream from petitioner's proposed point of diversion? *See Attachment B*

The extent of present and past use of water by protestant of his predecessors in interest is as follows. *See Attachment B*

Under what conditions may this protest be disregarded and dismissed? See Attachment B

All protests must be signed by the protestant or authorized representative:

Date: 5 January 2016

Bill Jennings, Executive Director California Sportfishing Protection Alliance

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Chris Shutes, Water Rights Advocate California Sportfishing Protection Alliance

Chy n thit

Barbara Vlamis, Executive Director AquAlliance

B. Vlanus

Carolee Krieger, Executive Director California Water Impact Network

Carolee Krieger

Michael Jackson Counsel to California Sportfishing Protection Alliance, AquAlliance, and California Water Impact Network /s/ Michael Jackson

All protests must be served on the petitioner. Provide the date served and method of service used: *This protest was served via e-mail on the parties identified below on 5 January 2016.*

Attn: California WaterFix Hearing Staff	State Water Resources Control Board, Division of Water Rights	<u>CWFhearing@waterboards.ca</u> .gov
James Mizell	California Department of Water Resources	James.Mizell@water.ca.gov
Amy Aufdemberge	US Department of Interior, Office of Regional Solicitor, Pacific Southwest Region	Amy.Aufdemberge@sol.doi.g ov

Attachment A to protest of California Sportfishing Protection Alliance, California Water Impact Network and AquAlliance² of the Petitions "Requesting Changes in Water Rights of The Department of Water Resources and U.S. Bureau of Reclamation for The California Waterfix Project"

I. The Board and petitioners must comply with the Water Code.

For the State Water Board to approve a water right change petition, the petitioner must: (1) establish that the proposed change will neither in effect initiate a new right nor injure any other legal user of the water; (2) provide information concerning the extent to which fish and wildlife will be affected by the change; and (3) identify proposed measures to protect fish and wildlife from any unreasonable impacts of the change. The petitioner also must demonstrate that the proposed change will comply with any applicable requirements of the Fish and Game Code, including CESA, and the federal ESA, and demonstrate compliance with CEQA.

II. The Board and petitioners must comply with the requirements of the Delta Reform Act.

The Sacramento-San Joaquin Delta Reform Act of 2009 (Delta Reform Act) establishes additional requirements related to the California WaterFix Project. Among other provisions, the Delta Reform Act defines the state's co-equal water policy goals as providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. In addition, the Delta Reform Act states that "[t]he coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place." The Delta Reform Act also imposes unique requirements on the processing of a water right change petition for the BDCP and now the California WaterFix Project.

Specifically, the Delta Reform Act prohibits construction of any diversion or conveyance facility to begin until the State Water Board has approved a change in the point of diversion of the State Water Project (SWP) and the Central Valley Project (CVP) from the southern Delta to a point on the Sacramento River. In addition, the Delta Reform Act requires that any State Water Board order approving the change in point of diversion must include "appropriate Delta flow criteria." Those flow criteria must be informed by flow criteria to protect the Delta ecosystem, which the State Water Board was required by the 2009 additions to the California Water Code to develop in 2010, although the flow criteria are not to be considered pre-decisional with respect to any

² Throughout this document, California Sportfishing Protection Alliance is referred using the acronym CSPA, and California Water Impact Network is referred to using the acronym C-WIN. Collectively, California Sportfishing Protection Alliance, California Water Impact Network and AquAlliance are referred to as "Protestants." The Department of Water Resources is referred to using the acronym DWR, and the Bureau of Reclamation is referred to as "the Bureau." The State Water Resources Control Board is referred to as the "State Water Board," "State Board," or simply "the Board."

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subsequent State Water Board consideration of a permit. The Delta flow criteria are discussed in more detail, below.

The State Water Board received an application for water quality certification from DWR for the California WaterFix Project on September 24, 2015. Construction of the project would involve the discharge of dredged or fill material into waters of the United States, which requires a permit from the USACE under Section 404 of the Clean Water Act. Section 401 of the Clean Water Act specifies that any applicant for a federal license or permit to conduct any activity that may result in any discharge into navigable waters shall obtain certification from the State or, if appropriate, from an interstate water pollution control agency, that any such discharge will comply with the applicable water quality standards. Water quality standards include beneficial uses, together with the water quality objectives that are contained in water quality control plans to protect and enhance those beneficial uses, and state and federal anti-degradation requirements.

Because the water quality certification for the California WaterFix Project is associated with a water right action, the State Water Board, Division of Water Rights is responsible for processing the application for water quality certification. State Water Board staff proposes to process the application for water quality certification and the change petition separately. This is clearly not in the public interest and will potentially result in destruction of the Bay-Delta estuary. The existing Bay-Delta Plan³ includes designation of beneficial uses of water in the Bay-Delta watershed, water quality objectives to reasonably protect those beneficial uses, and a program of implementation identifying measures that the State Water Board and other entities will take to implement the Bay-Delta Plan. The Bay-Delta Plan currently includes beneficial uses that fall into three broad categories: (1) municipal and industrial, (2) agricultural, and (3) fish and wildlife uses. Current Bay-Delta Plan water quality objectives to protect fish and wildlife, agriculture, and municipal and industrial uses. The last major update to the Bay-Delta Plan occurred in 1995. Minor changes to the 1995 Bay-Delta Plan were also made in 2006.

The State Water Board is currently developing updates to the Bay-Delta Plan and its implementation through a phased process. Phase 1 involves updating the San Joaquin River flow and southern Delta salinity objectives and their associated program of implementation included in the Bay-Delta Plan. Phase 2 involves other changes to the Bay-Delta Plan to protect beneficial uses not addressed in Phase 1, including Delta outflows, Sacramento River flows, export restrictions, DCC gate closure requirements and potential new reverse flow limits for Old and Middle Rivers. Following the updates to the Bay-Delta Plan, the State Water Board will undertake proceedings to implement the Bay-Delta Plan through water rights or other measures, referred to as Phase 3. Phase 3 may be further subdivided to implement the changes resulting from Phases 1 and 2. Phase 1 is expected to be complete in the summer or fall of 2016 and Phase 2 is expected to be complete in mid-2018. Phase 3 will commence following completion of Phases 1 and 2.

While Delta and Sacramento River flow issues and other operational constraints are involved in both the California WaterFix and the Phase 2 and 3 proceedings, the WaterFix process is alleged

³ Also referred to in this document as the Bay-Delta Water Quality Control Plan.

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by State Board staff to be much more narrowly focused on the Projects' request to add points of diversion. This is impractical, since the project is the largest infrastructure project in the history of this declining estuary. Such a blind examination of the impacts of the WaterFix will result in negating the findings that are required to approve those changes, and will eviscerate the Delta Reform Act's requirement to establish appropriate Delta flow criteria for the Bay-Delta dual goal to restore the estuary. In light of the current schedule for completion of Phase 2, State Water Board staff proposes to try to review the subject Petition and conduct Phase 2 concurrently, rather than delay consideration of the Petition for several years while Phase 2 is conducted and completed in conformance with the federal Clean Water Act. This is a fundamental mistake and will result in massive violations of both the Clean Water Act and the Delta Reform Act, and will cause substantial damage to the Bay/Delta estuary and the species dependent for survival on the health of the estuary.

The fundamental purpose of the Delta Reform Act is to achieve coequal goals, which are defined in law as "the two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem." These fundamental statewide interests must be pursued in a way that "...protects and enhances the unique cultural, recreational, natural resources, and agricultural values of the Delta as an evolving place." (Water Code Section 85054). 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)) 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. (Water Code Section 85022(c)(2)) To promote the public safety, health, and welfare, and to protect public and private property, wildlife, fisheries, and the natural environment, it is necessary to protect and enhance the ecosystem of the Delta and prevent its further deterioration and destruction. (Water Code Section 85022(c)(3))

The objectives of the Delta Reform Act are defined by the coequal goals, and policy objectives presented in Water Code sections 85054, 85020, 85021, 85022(c), and 85023, as follows:

85054. "Coequal goals" means the two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place.

85020. The policy of the State of California is to achieve the following objectives that the Legislature declares are inherent in the coequal goals for management of the Delta:

- (a) Manage the Delta's water and environmental resources and the water resources of the state over the long term.
- (b) Protect and enhance the unique cultural, recreational, and agricultural values of the California Delta as an evolving place.
- (c) Restore the Delta ecosystem, including its fisheries and wildlife, as the heart of a healthy estuary and wetland ecosystem.
- (d) Promote statewide water conservation, water use efficiency, and sustainable water use.

- (e) Improve water quality to protect human health and the environment consistent with achieving water quality objectives in the Delta.
- (f) Improve the water conveyance system and expand statewide water storage.
- (g) Reduce risks to people, property, and state interests in the Delta by effective emergency preparedness, appropriate land uses, and investments in flood protection.
- (h) Establish a new governance structure with the authority, responsibility, accountability, scientific support, and adequate and secure funding to achieve these objectives.

85021. 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.

85022 (c) 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 natural 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.

85023. The longstanding constitutional principle of reasonable use and the **public trust doctrine** shall be the foundation of state water management policy and are particularly important and applicable to the Delta.

III. The State Board must complete an adequate EIR/EIS before the Board can hold hearings on water rights for the proposed Delta Tunnels.

The present state of the environmental documents for the Delta Fix does not provide sufficient environmental analysis, modeling, operational information, range of alternatives, or scientific

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support for the State Board to determine whether or not the Petition can be approved.⁴ The State Board should prepare its own environmental document at the expense of the Petitioners before it holds hearings on the Petition in this matter. To do otherwise is a waste of the State Board's time and in not in the interest of the whole of the California public.

A. The inescapable flaw that will be caused by using the BDCP DEIR/EIS and the Water Fix RDEIR/SDEIS to approve this petition is that they are geographically deficient.

Since the environmental documents for BDCP and the WaterFix have been written and controlled by the petitioners and their self-interested contractors, the scope of the environmental documents has been restricted to the legal Delta. The argument for such restriction has shifted over time as the petitioners have searched for a way to insulate their project from its extensive adverse environmental impact.

Previously, the petitioners tried to insulate the project from environmental laws by designating the project as a habitat conservation plan in order to find "safe harbor" from the state and federal endangered species laws and, when that began to fail, they used their political power in the Legislature to carve out a new kind of "safe harbor" within the Delta Reform Act to prevent the new Delta Stewardship Council from addressing environmental questions of outflow, species numerical targets, operational criteria, and numerous other environmental requirement that would automatically be inserted in the Delta Plan with the approval of the BDCP. Now that the BDCP has been formally withdrawn, none of those "safe harbor" protections for the WaterFix exist.

The Delta Stewardship Council and its Delta Plan did not consider many watershed issues because they believed their authority over watershed areas outside the legal Delta are not part of the authority granted them by the Delta Reform Act. The USFWS and NMFS have authority over endangered species, but not over the requirements of state and federal law that regulate all other environmental impacts from the WaterFix project.

The State Board has no such narrow responsibility under its jurisdiction as the state-wide agency responsible for water rights, water quality, and more recently, groundwater, throughout California. The State Board has CEQA, CESA, Clean Water Act, Porter-Cologne, Water Code, Public Trust, and Public Interest responsibilities that are much more extensive than were ever contemplated by the existing environmental documents. The State Board must now at long last amplify the environmental review to cover, among other things, the source of water that the proposed new points of diversion and rediversion will divert, the upstream watershed impacts, the full range of water quality impacts, the effects of the project on San Francisco Bay, the coordinated operations of the CVP and SWP, and how this new set of diversions will change operations of the existing reservoirs and diversions. The State Board must now consider all

⁴ When we refer in this protest to the environmental documents for the WaterFix, we generally mean the Partially Recirculated Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement issued by the Bureau and DWR in July, 2015, and use the acronym RDEIR/SDEIS. To the degree that the 2013 Draft EIR/EIS for the Bay Delta Conservation Plan is also still in effect, our comments on the RDEIR/SDEIS also apply to it. Comments or cites to the 2013 Draft EIR/EIS specifically are noted as such.

beneficial uses of the Bay, the Delta, and the rivers that form the Bay-Delta watershed, and must consider alternatives that could sustain the water supplies of California without harming either other legal users of water or environmental values throughout California.

B. The RDEIR/SDEIS improperly fails to disclose both the source of water that the new points of diversion and rediversion will divert, conditions in the source areas of that water, and the impacts of such diversions on those source areas and their waters.

1. The RDEIR/SDEIS fails to disclose Sacramento Valley conditions and impacts.

The new points of diversion and rediversion will increase water transfers from the Sacramento River watershed. The RDEIR/SDEIS does not disclose the source of the additional transfer water. Internal communication about the Tunnels from the Department of the Interior indicates that the purchase of approximately 1.3 MAF of water is being planned as a means to make up for flows that would be removed from the Sacramento River by the tunnels.⁵

The Draft DEIS/EIR and RDEIR/SDEIS both fail to adequately disclose the existing geology that is the foundation of the Sacramento River's hydrology and the Sacramento Valley's groundwater basins. They also fail to describe as part of the affected environment the conditions of Sacramento Valley groundwater basins despite availability of such information (including groundwater levels and maps) on a DWR website.⁶

The models employed in the DEIS/EIR and RDEIR/SDEIS for both surface and groundwater have been heavily criticized, are seriously flawed and technically indefensible. They fail to account for uncertainty, variability and assume an unlimited supply of groundwater.⁷ Consequently, the DEIS/EIR and RDEIR/SDEIS' modeling results cannot form the basis for determining water supply, availability and potential adverse impacts. Furthermore, CalSim II is a monthly time-step model, is hardwired and will not model less than contracted deliveries delivered from Shasta Reservoir.

Neither the Draft DEIS/EIR nor the RDEIR/SDEIS disclose existing strains on Sacramento Valley groundwater. Groundwater depletions in the Sacramento Valley are already 12,000,000 AF cumulatively (1920-2010 figures).⁸ Additional strains on groundwater from groundwater substitution and dam reoperation transfers will further affect groundwater-dependent communities, homes, farms, businesses, and terrestrial habitat. In addition, strained groundwater basins in the Sacramento Valley are already depleting streamflow at -500,000 AF per year (2010

⁵ Letty Belin, Counselor to the Deputy Secretary of the Interior, e-mail to Mark Cowin (DWR), Charlton Bonham (California Department of Fish and Wildlife), Will Stelle (National Marine Fisheries Service) and others, dated 2/25/13.

⁶http://www.water.ca.gov/groundwater/data_and_monitoring/northern_region/GroundwaterLevel/gw_level_monitoring.cfm#Well%20Depth%20Summary%20Maps

⁷ http://www.aqualliance.net/wp-content/uploads/2014/09/kdm_bdcp_comments_final.pdf

⁸ Custis, Kit. 2014. Comments on the Bureau of Reclamation and San Luis Delta Mendota Water Authority's *Long Term Water Transfers Environmental Impact Statement/Environmental Impact Report Public Draft*. Available at http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=21145. See pdf. pp 7 ff.

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figures).⁹ Prior losses and repeated losses of this magnitude have turned many mainstem perennial streams into ephemeral streams. Both perennial and ephemeral streams have lost juvenile rearing habitat for Chinook salmon and steelhead. Failing to *dramatically* reverse this trend will cause dewatering of additional streams that are among the few remaining natal and rearing habitats for salmonids in the Sacramento River watershed.

The BDCP DEIS/EIR discloses that up to 400,000 acre-feet of groundwater substitution transfers could occur.¹⁰ It also discloses that there may be long term impacts to streamflow that continue long after the groundwater substitution transfers are over and impact other legal water users.¹¹ However, neither the DEIS/EIR nor the RDEIR/SDEIS accounts for the extent or duration of associated past, present, or potential WaterFix impacts to streamflow and other legal users, an accounting that the DEIS/EIR describes as "essential."¹²

The DEIS/EIR and RDEIR/SDEIS fail to disclose the over-appropriation of water rights in the Sacramento River Watershed. The average annual unimpaired flow in the Sacramento River basin is 21.6 MAF, but the consumptive use claims are an extraordinary 120.6 MAF – 5.6 times more claims than there is available water. ¹³

2. The RDEIR/SDEIS fails to disclose Trinity River watershed conditions and impacts

The RDEIR/SDEIS does not analyze baseline conditions of the fisheries in the Trinity River downstream of Lewiston Dam and in the Klamath River downstream of Trinity River confluence. These rivers and their fisheries are directly affected by the quantity and water quality (including water temperature) of releases of water from Trinity Reservoir. They are also directly affected by export of water from the Trinity watershed to the Sacramento River for use by the CVP.

Additional groundwater pumping will, to some extent, have an effect on the surface water supply, referred to as streamflow depletion. The impacts of the transfer on streamflow can continue to occur long after the transfer has been completed. If the additional streamflow depletion occurs at a time when excess flow is available, downstream users are not affected. However, if the depletion occurs at a time when other downstream users could divert that water, the transfer could have an impact on other legal users. (p. 1E-3)

¹² The BDCP DEIS/EIR (2013) states:

Accounting for the impact of the transfer on streamflow is essential to determining the amount of real water available for transfer and to avoid injury to downstream water users. The amount and timing of the impacts, however, cannot be directly measured but can be estimated through the use of mathematical models. Although the work required to accurately assess the appropriate streamflow depletion factor for a particular transfer can be time-consuming and costly, the assessment of an appropriate streamflow depletion factor is necessary to protect other legal users of water." (p. 1E-3)

⁹ Id.

¹⁰ BDCP DEIS/EIR (2013), p. 5C-23.

¹¹ The BDCP DEIS/EIR (2013) states:

¹³ California Water Impact Network, AquAlliance, and California Sportfishing Protection Alliance 2012. *Testimony* on Water Availability Analysis for Trinity, Sacramento, and San Joaquin River Basins Tributary to the Bay-Delta Estuary. Available at http://c-win.org/webfm_send/265

The RDEIR/SDEIS does not disclose or analyze baseline conditions of Trinity Reservoir and its management, and most notably of its cold water pool.¹⁴ It does not disclose or analyze the fact the Trinity Reservoir is less likely to refill than Shasta Reservoir or Folsom Reservoir. It does not analyze the importance of the availability of cold water in Trinity Reservoir in sufficient quantity and quality to manage water temperatures in the Lower Klamath River; the Bureau drew on water from Trinity Reservoir in 2003, 2004, 2012, 2013, 2014 and 2015 in amounts ranging from 17,500 AF to 64,000 AF in order to avoid mortality of Chinook salmon in the lower Klamath River similar to the massive die-off that occurred in 2002.

Increased export capacity and reduced constraints on exports through the proposed new north of Delta points of diversion and rediversion will increase CVP demand for Trinity River water. The RDEIR/SDEIS does not disclose these increased demands, their impacts on Trinity River and Klamath River fisheries and water quality, or their impacts on carryover storage and the coldwater pool in Trinity Reservoir.

C. The Final Environmental Impact Report should not be entered into the administrative record for the Water Fix petition

If the Board were to delay appropriate CEQA consideration, and a required Water Quality Control Plan update, when all evidence points to more outflow as a necessary first step toward the recovery of the Bay-Delta estuary, in order to rush to approval a political vanity project that no one in their right mind would fund, it would simply make a mockery of the law and reveal the State Board as an agency captured by the politically powerful. Our testimony in this proceeding will make these points determinative for either the Board's decision or judicial review. For the purpose of this protest, we offer a few examples. The examples could be legion. If the State Board intends to use the mostly useless prior environmental documents regarding this project, we hereby incorporate the voluminous comments made by us, the Environmental Water Caucus, Delta farming interests, Delta counties, and all other rational citizens who commented on the obvious legal defects.

The Final Environmental Impact Report should not be entered into the administrative record for the Water Fix petition for the following reasons:

The unfinished environmental process for the WaterFix is not adequate to support the State Board's approval process. Evidence in the hearing will show that there are many inadequacies identified by state and federal agencies, including the SWRCB, the federal EPA, the Army Corps of Engineers, the United States Fish & Wildlife Service, the National Marine Fisheries Service, the Delta Stewardship Council, the Bay/Delta Independent Science Board, the National Research Council, to name just a few.

¹⁴ More specifically, the RDEIR/SDEIS does not describe the regulatory requirements of North Coast Basin Plan temperature objectives for the Trinity River and Trinity River temperature standards in Water Right Order 90-05, the ability of the Bureau of Reclamation to comply with these standards, or the Bureau's compliance history in meeting these standards.

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For example, the Delta Independent Science Board scathingly criticized the RDEIR/SDEIS's lack of clarity regarding the scientific and comparative aspects of both environmental impacts and project performance, and concluded that the document was "sufficiently incomplete and opaque to deter its evaluation and use by decision-makers, resource managers, scientists, and the broader public." The federal Environmental Protection Agency (EPA) commented that the lack of information on project operations means "the impacts of the WaterFix project on the Delta ecosystem cannot be fully evaluated at this time, and that any attempt to describe the environmental impacts of the project is necessarily incomplete" and that "information in the SDEIS indicates that the modeling completed for the BDCP alternatives is not necessarily representative of the environmental effects resulting from the WaterFix alternatives." Consequently, the EPA concluded "the unusual circumstances of the project mean that the information is not available for a complete evaluation of environmental impacts" and gave the SDEIS an "inadequate" rating.

Protestants herein have commented on gross inadequacies of the BDCP and WaterFix environmental documents throughout the multi-year environmental review process for this project, paying special attention to the devastation of the Bay/Delta ecosystem likely to result from an approval of the tunnels project in the areas of water inflow, Delta outflow to the Bay, water quality below the new diversions, water availability for the project, new impacts caused by moving the point of diversion to take water directly from the Sacramento River fish migration and rearing corridor, and many more unreasonable impacts on fish and wildlife that could be mitigated by feasible alternatives.

The environmental effects, the legality, and the relative public interest in the instant proposed changes in the points of diversion and rediversion can only be understood by analyzing whose water the new points of diversion and rediversion will divert, under what conditions they will divert, how much they will divert, when they will divert, and under what constraints they will divert. Right now, we don't really know the answers to any of these questions. The RDEIR/SDEIS does not describe the operation of the Delta Tunnels that the petitions would facilitate in any detail. No alternatives analyzed in the RDEIR/SDEIS include substantially increased Delta outflow; an alternative proposed by SWRCB staff for modeling analysis that would increase Delta outflow by (a modest) 1.6 MAF per year was modeled but not analyzed in the RDEIR/SDEIS.

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, the State Board is constrained by the California Water Code and federal Clean Water Act and cannot employ adaptive management as an alternative to complying with explicit promulgated water quality standards. The lack of identified specificity in the RDEIR/SDEIS adaptive management program is a fatal flaw under CEQA and NEPA.¹⁵

¹⁵ 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 for a variety of enumerated reasons. 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

The failure of the RDEIR/SDEIS to provide sufficient information on operations and environmental impacts of the WaterFix project prejudices our ability to identify and quantify unreasonable impacts to fish and wildlife, the public interest and potential injury to CSPA's riparian water rights.

IV. The WaterFix will effectively create a new water right.

A. The CVP and SWP water rights have no numeric limitation and are unique in their volume. Moreover, allowing the Bureau and DWR to add north-of-Delta points of diversion and rediversion to existing permits would allow them undue extraordinary procedural and substantive advantage without credible fidelity to their original water rights.

As previously described by State Water Board staff:

The mean annual unimpaired or full natural flow in the Delta Watershed between 1921 and 2003 was 29 million acre-feet per annum (AFA), with a maximum of 73 million AFA in 1983. ...[t]he total face value of the approximately 6,300 active water right permits and licenses within the Delta managed by the State Water Board, including the already assigned portion of state filings, is approximately 245 million AFA.... The Central Valley Project and State Water Project hold 75 permits and licenses within the Delta watershed that account for 53% of the total face value of the water rights within the watershed.¹⁶

The water rights for the CVP and SWP diversions in the Delta have not gone to license. The permits for the CVP expired in 1990; in 1985, the Bureau petitioned for extension of time. The Board did not act on those petitions. In 2009, the Bureau again petitioned for extension of time on its CVP permits, seeking to extend its permits to 2030. In a reply to CSPA's protest of the 2009 petition for extension of time, the Bureau maintained: "the CVP is fully constructed in order to divert and beneficially use water under the subject permitted applications."¹⁷ It further argued: "Reclamation has shown due diligence and that it has the means to make progress if an extension of time is granted."¹⁸

http://deltavision.ca.gov/BlueRibbonTaskForce/Oct2008/Respnose from SWRCB.pdf

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. All of these identified reasons exist on steroids in the management of water resources in the Delta. See http://www.nap.edu/catalog/13148/a-review-of-the-use-of-science-and-adaptive-management-in-californias-draftbay-delta-conservation-plan

¹⁶ See State Board to Delta Vision, September 26, 2008, pp. 2-3.

¹⁷ Letter from Richard Woodley, Bureau of Reclamation to Victoria Whitney, Division of Water Rights regarding CSPA protest of CVP petitions for extension of time, January 13, 2010, p. 2. ¹⁸ Id, p. 4.

In its 2009 petition for extension of time, the Bureau suggested that the BDCP EIS/EIR would "describe and evaluate Central Valley Project operations and future water use during the term of the extension requested for the subject permits."¹⁹

DWR, on the other hand, petitioned in 2010 to extend its SWP permits (which expired in 2009), but sought to extend its permits only until 2015, by which point DWR anticipated that the Bay-Delta Conservation Plan would generate a clearer picture of its long-term operations. In its February 10, 2011 reply to CSPA's protest of its 2010 Petition for Extension of Time, DWR stated: "...BDCP will offer the best opportunity to provide a realistic projection of future, long-term SWP operations. ... At the end of the extension period, DWR anticipates filing for a longer term time extension and will comply with the California Environmental Quality Act (CEQA) for any petition filed at that time."²⁰

For all the promises of both agencies, there is still no picture of the long term operations of the CVP and SWP. All we know is that the projects will seek to divert all the water they can.

In its reply to C-WIN's protest of its petition for extension of time, DWR was quite candid about this:

DWR has also been diligent in putting the water to beneficial use. Since the SWP began operating, there has been a steady increase in SWP diversions and deliveries, matching the increased demand in the SWP service area. It has only been recently, that DWR deliveries have not continued to increase (when water is available). The leveling off (or decrease) of SWP diversions and deliveries, however, is not the result of lack of facilities or demand. Instead, the steady or declining diversions are the direct result of new and increased regulatory constraints.²¹

In short, the permits for the CVP and SWP in combination allow diversion of enormous amounts of water limited only by their physical capacity to divert and/or store it and by regulatory constraints. As CSPA stated in its protest of the CVP petitions for extension of time:

[T]hese water rights permits effectively operate as a permanent line of credit, good anywhere in the Central Valley and in the Trinity River watershed upstream of Lewiston Dam, limited only by operational constraints, by whatever regulatory restrictions the Bureau cannot avoid, by diversion and storage facilities, and by what is taken by others. It is, in short, not a right to a certain amount of water. It is a right to all of it that's left.²²

In addition, the Bureau has enjoyed the highly irregular treatment of being able to proceed for twenty-five years without extending the time on its permits, which as noted above expired in 1990. Now the Bureau comes before the Board to ask that permits which on their face required

¹⁹ Bureau of Reclamation, Petition for Extension of Time of CVP water rights, 2009, Attachment 1, p. 2. CSPA still maintains that the RDEIR/SDEIS is not adequate as a CEQA document for the Bureau's petition for extension of time: for all its verbiage, the RDEIR/SDEIS does not analyze the extension. This is one more example of a sloppy deferral that is never picked up.

²⁰ Letter from Erick Soderlund, staff counsel, DWR to Chris Shutes, CSPA, February 10, 2011.

²¹ Letter from Erick Soderlund, staff counsel, DWR to Tim Stroshane, C-WIN, February 10, 2011, pp. 6-7

²² CSPA Protest, CVP petition for extension of time, October 31, 2009, p. 4.

that water be put to use twenty-five years ago both be extended and be allowed new points of diversion to finally arrive at the opportunity to seize additional water, but evidently in two separate proceedings in order to reduce overall regulatory exposure.

DWR, for its part, did not contemplate that the Feather and Sacramento rivers would provide all the water for the SWP. Indeed, in DWR Bulletin 76 (1960), DWR laid out how by 2020 it would need to divert water from 5 north coast rivers to meet its projected demand. It identified the average annual need for north coast water as 5 million acre-feet. Of the north coast rivers, the Trinity was developed in part for the CVP; the others are now designated as Wild &Scenic.

Neither the CVP's nor the SWP's initial water rights permits breathed so much as a whisper about points of diversion or rediversion just north of the Delta, such as those proposed by the WaterFix.

B. The Board should require the Bureau and DWR to seek new water rights for the proposed Delta Tunnels.

In sum:

- 1. None of the Bureau's and DWR's original permits contemplated an export diversion facility north of Delta.
- 2. The change in point of diversion and rediversion will have unique, extraordinary and extreme environmental consequences that cannot be reasonably construed as incidental to or implied by existing permits.
- 3. The Bureau's permits should have gone to license decades ago. Allowing them to be extended for twenty-five years without hearing and then used to gain access to potentially millions of acre-feet of water is irregular and prejudicial.
- 4. DWR's permits have also expired.
- 5. While both the Bureau and DWR's permits have expired, there is no administrative effort or environmental review to link petitions for extension of time with petitions to change in point of diversion.
- 6. When DWR initiated the State Water Project, it never contemplated adding to Delta diversions with water from the Sacramento and Feather watersheds. Allowing the SWP to backfill lost opportunities to export north coast water to the Delta with water needed in the Delta for other beneficial uses betrays fidelity to water rights process, particularly since DWR's permits have expired.
- 7. Procedurally, treating new points of diversion pursuant to a change petition may absolve the Bureau and DWR of the requirement to show that there is water available to service the Tunnels. Given the unique circumstances of these permits, their magnitude, and the operations they support, this is not in the public interest.

V. The Board must establish "appropriate Delta flow criteria" to order any change in the point of diversion of the CVP and SWP.

The Delta Reform Act, Water Code Division 35, § 85086 recognized that *Delta* flow criteria need to be established. The Delta Reform Act thus recognized the Delta as an ecosystem that

requires systemic protection. The Delta Reform Act also demonstrated the recognition by the legislature that water diverted for export by a north-of-Delta point of diversion was potentially in direct conflict not only with other water users, but with public trust resources in the Delta.

The *Delta Flow Criteria Report* published by the SWRCB in 2010 in response to the Delta Reform Act showed that the difference between the Delta outflow needed to protect fish and actual outflow from 1988-2009 diverged by about 6.8 million acre-feet per year at 50% exceedance.²³ This overwhelming deficiency of Delta outflow, and the unique responsibility of the projects to meet Delta outflow, suggest that water is not available to serve the CVP and SWP's proposed new points of diversion at levels anywhere near those analyzed in the RDEIR/SDEIS.

In the Notice for the current petitions, the Board states that the *Delta Flow Criteria Report* has "no regulatory effect." The Delta Reform Act, as quoted on the final page of the Delta Flow Criteria Report, also makes clear: "The flow criteria shall not be considered predecisional with regard to any subsequent board consideration of a permit, including any permit in connection with a final BDCP."²⁴ However, the Notice diminishes the importance of the *Delta Flow Criteria Report* when the Notice states: "The information in the report is one of many factors that the State Water Board will consider as the State Water Board updates the Bay-Delta Plan and reviews the subject Petition." The *Delta Flow Criteria Report* is not simply a "factor." It represents the best available science on the public trust resources that will be affected by the proposed changes in points of diversion and rediversion. To denigrate it by calling it a "factor" is akin to calling El Capitán a large rock.

The Notice for the current petition states:

While Delta and Sacramento River flow issues and other operational constraints are involved in both the California WaterFix and the Phase 2 and 3 proceedings, the WaterFix process is much more narrowly focused on the Projects' request to add points of diversion, the findings that are required to approve those changes, and *the Delta Reform Act requirement to establish appropriate Delta flow criteria for the California WaterFix project alone.* [emphasis added]²⁵

However, the Delta Reform Act in particular does not say that it is sufficient to establish Delta flow criteria *incident to the changed point of diversion per se and alone*, in evaluating a change in the point of diversion for the CVP and SWP.

As quoted on the final page of the Delta Flow Criteria Report, the Delta Reform Act states:

²³ See SWRCB, *Delta Flow Criteria Report*, 2010, Figure 14, p. 106. Available at: http://www.swrcb.ca.gov/waterrights/water_issues/programs/bay_delta/deltaflow/docs/final_rpt080310.pdf

The plots of unimpaired flow and 75% of unimpaired flow shown on the graph in Figure 14 cover a longer period of record than 1988-2009, so the 50% exceedance number could be different for 1988-2009. Another, more conservative estimate of the deficiency of Delta outflow might be 5 million acre-feet per year. A 5 million acre-foot per year annual average deficiency was the figure CSPA argued in the 2011 hearings on the rights for Davis and Woodland, whose outcome resulted in Water Rights Decision 1650.

²⁴ Id., p. 178.

²⁵ Notice, p. 7.

(2) Any order approving a change in the point of diversion of the State Water Project or the federal Central Valley Project from the southern Delta to a point on the Sacramento River shall include appropriate Delta flow criteria and shall be informed by the analysis conducted pursuant to this section. The flow criteria shall be subject to modification over time based on a science-based adaptive management program that integrates scientific and monitoring results, including the contribution of habitat and other conservation measures, into ongoing Delta water management.²⁶

If the Board elected to issue "appropriate Delta flow criteria" solely in order that the "WaterFix" change in points of diversion and rediversion for the CVP and SWP could be moved forward, the Board would be limited to assigning responsibility for meeting such criteria to the CVP and SWP alone. The Board cannot assign to other water right holders the responsibility for mitigations that attach to a water right decision or order.²⁷ Holding hearings limited to the WaterFix in order to set Delta flow requirements would thus guarantee a duplicative redux of Delta flow hearings once the Board is ready to proceed with the update of the Bay-Delta Water Quality Control Plan that is already 10-20 years past due, and would further delay that update. This would create an enormous hardship on the Board, its Staff, and affected parties. Such a waste of public and private resources, and resulting delay in numerous other matters of the Board, is not in the public interest.

VI. The Board must complete the update of the Bay-Delta Water Quality Control Plan prior to ruling on adding north Delta points of diversion for the CVP and SWP.

The appropriate mechanism for developing "appropriate Delta flow criteria" as described in Section 85086 (c)(2) of the Delta Reform Act, i.e. Delta flow requirements *that have regulatory* effect, is the update of the Bay-Delta Water Quality Control Plan. It is in the public interest for everyone – including those who may spend billions of dollars to finance the Delta Tunnels – to know before any construction might begin how much water would be available for the Tunnels to export, and in particular whether the update to the Bay-Delta Water Quality Control Plan will allow too little export water for the Tunnels to be worth their enormous expense.

In the Davis-Woodland water rights hearings in 2011, CSPA argued that Delta flow criteria should be established before any new water rights permits were issued in the Bay-Delta watershed:

²⁶ Delta Reform Act, Section 85086 (c)(2). The Board's terminology considers "criteria" as used in the Delta Flow Criteria Report to be non-binding and without regulatory effect (as opposed to "objectives" in a Water Quality Control Plan, which do have regulatory effect). This should not be confused with the use of the term "criteria" as described in the section of the Delta Reform Act quoted above, Section 85086 (c)(2), which are clearly required to be legally binding. ²⁷ D-1641.

As a policy matter, and in order to defend the public interest, as well as to defend the priority system, there should be no new consumptive diversions in the Sacramento – San Joaquin system permitted until public trust requirements are established and met.²⁸

The SWRCB recognized the public interest in avoiding a situation where a permit created an expectation of water when subsequent changes left substantially less water available to service it. At $\[26, D-1650\]$ summarizes the concern:

CSPA asserts that because there may be less water available for diversion in the future, it is not in the public interest to approve the applications and they should be denied. (January 19, 2011 R.T., pp. 19-22.) If the Board establishes more stringent water quality objectives for the Delta in a future proceeding, and amends the permits held by USBR and DWR to require implementation of those objectives, as the Board has with previous updates to the water quality objectives for the Delta, the effect likely will be to reduce the amount of water that can be diverted under water rights subject to Term 91. If the CVP and SWP are required to release stored water more often, Term 91 curtailments will be imposed more often, and the diversions that may be made under permits subject to Term 91 will be reduced accordingly.

For the Davis-Woodland water right application for a permit with a maximum face value of 45,000 afy, the Board did not uphold CSPA's argument. However, recognizing the issue of "permanent demand" for water that later might not be available, the Board ordered that applicants Davis and Woodland have a back-up plan in place to replace water no longer available because of future changes in Delta water quality objectives. In D-1650 at ¶28, the Board thus ordered:

In order to avoid creating a permanent demand for water deliveries based on a water supply that may be reduced as Term 91 reduces the period over which diversions may be made, WDCWA must demonstrate an alternate source of water supply for use when Term 91 is in effect. The Deputy Director for Water Rights will evaluate the acceptability of the alternate source and no water may be diverted by WDCWA until the alternate source is approved. The evaluation will include but not be limited to, the dependability of the alternate source, the need to avoid injury to other legal users of water, and mitigation measures necessary to reduce impacts to public trust resources.

While the Term 91 mechanism is not germane to the CVP and SWP permits, the principle is otherwise exactly on point. However, there is no conceivable back-up plan to replace millions of acre-feet of water per year that may be no longer be available to the CVP and SWP if a Bay-Delta Water Quality Control Plan adequately protects the Delta's public trust resources. The Board should complete the update of the Bay-Delta Water Quality Control Plan before it holds hearings on the "WaterFix."

²⁸ Testimony of Chris Shutes, CSPA, Davis-Woodland Water Rights Hearing, Exhibit cspa-cs#2, January 18, 2011, p. 15.

VII. The Board must identify the source of water for the proposed new points of diversion and rediversion, and require mitigation of any impacts of drawing water from those sources if the WaterFix project goes forward.

The RDEIR/SDEIS does not adequately address the upstream effects of the WaterFix project, mainly because the petitioners have argued that BDCP was limited by the Delta Reform Act to the legal Delta. Now that the petitioners have dropped the habitat conservation plan that was required to qualify for a federal ESA Section 10 permit and a state NCCP permit, the State Board must expand the geographic area necessary to identify environmental impacts.

The RDEIR/SDEIS does not describe how the Tunnels if permitted would be operated or what the source of water to serve the tunnels will be. Since the contracted amounts of water for both the CVP and SWP greatly exceed the present ability of the projects to fulfill them, it is reasonable to assume that the Tunnels' added capacity will induce substantial demand and thus a search for additional water to export. Many aspects of the operation of the CVP and SWP are not currently constrained, and discretionary decisions are likely to increase exports to make use of the exorbitantly expensive new infrastructure. In addition, for those aspects of project operation that are constrained, future operations if the Tunnels are constructed will be likely to push existing constraints even harder and to create economic and political pressure to weaken constraints to accommodate more exports.

Thus, for example, the additional Delta pumping capacity from the proposed California Water Fix is likely to require more water from the Trinity Division. The RDEIR/SDEIS erroneously assumed no change in Trinity operations without substantiating the claim. To the contrary, the Bureau has emphasized for many years that Shasta and Trinity reservoir operations are fully integrated. In responding to protestants regarding their protests of the petitions for extension of time for the CVP and SWP, both the Bureau and DWR went so far as to argue that this integrated operation absolves them from identifying the amount of water they divert or redivert under any of their respective individual permits.

There are no firm and enforceable carryover storage requirements for any of the major CVP or SWP storage reservoirs. Reduced carryover storage in any of the reservoirs will reduce cold water available for management of anadromous fisheries downstream of those reservoirs by reducing the reservoirs' cold water pools. The projects have done a poor job of managing these fisheries under existing conditions, pushing some of them, notably in the Sacramento and American rivers, to crisis situations during the recent drought. Rather than allowing further reduction of project cold water pools for any purpose, including provision of water for export through the Tunnels at discretion of the projects, the Board should require more stringent carryover storage requirements as part of phase III of the update of the Bay-Delta Water Quality Control Plan or incident to proceedings to address the expiration of the water rights permits for the CVP and SWP.

The Board must analyze impacts that may come about through any combination of water transfers and increased exports. The 2013 version of the draft EIR/EIS for the Bay Delta Conservation Plan described the extent of the potential changes that the Tunnels could enable:

Creation of a separate cross-Delta facility provides additional capacity to move transfer water from areas upstream of the Delta to export service areas and provides a longer transfer window than allowed under current regulatory constraints. In addition, the facility provides conveyance that would not be restricted by Delta reverse flow concerns or south Delta water level concerns. As a result of avoiding those restrictions, transfer water could be moved at any time of the year that capacity exists in the combined cross-Delta channels, the new cross-Delta facility, and the export pumps, depending on operational and regulatory constraints, including BDCP permit terms. As discussed above in Section 5.1.2.7, this change could reduce or eliminate the current constraint on the export of transfer water generated outside of the current July-September transfer window, possibly facilitating more crop idling transfers, which generally develop transfer water from April through October, and also expanding the period when groundwater substitution pumping could be conducted to include the entire irrigation season. This change is likely to make upstream-of-Delta transfers more attractive to export service area contractors at the times they need transfer water.²⁹

If the Board approves the new points of diversion and rediversion, the Board must thus require measures to prevent impacts to groundwater levels from water transfers through the Tunnels. The Board must also require measures to avoid impacts to surface water that result from increased groundwater substitution transfers through the new points of diversion and rediversion. More specifically, the Board must assure that high value but high risk Sacramento Valley perennial and ephemeral streams are not significantly dewatered by declining groundwater levels and consequent loss of base flow.³⁰ These east side Sacramento Valley streams are home to most remaining Central Valley spring-run Chinook salmon, and are already in dry years and dry year sequences marginal or unsuitable for upstream migration of adult spring-run.

If the Board approves the new points of diversion and rediversion, the Board must also assure that a wider window for water transfers does not increase impacts to fisheries downstream of project reservoirs, where the transfer water may also be sourced. During the recent drought sequences, numerous redds of winter-run and fall-run Chinook in the Sacramento River downstream of Keswick Reservoir were de-watered. The Board must assure that increased transfer opportunities do not create similar incidents of redd-dewatering or other impacts to fish caused by flow fluctuations.

Protestants have for many years opposed the impacts of water transfers on in-Delta resources. In particular, we have objected to the unmitigated impacts of altered hydrodynamics in the Delta due to transfers, and to the treatment of each transfer for its incremental rather than its cumulative impact on fisheries. What was wrong before would be doubly wrong should the magnitude, frequency and duration of transfers increase. The Board should create new protections for in-Delta public trust resources due to water transfers, not only if it approves the changes in points of diversion and rediversion, but in any case, as part of its update of the Bay-

²⁹ BDCP DEIS/EIR (2013), pp. 5-76 to 5-77.

³⁰ See Maslin, Paul E., et. al, 1996. Intermittent Streams as Rearing Habitat for Sacramento River Chinook Salmon: 1996 Update. Available at

http://swrcb2.swrcb.ca.gov/waterrights/water_issues/programs/bay_delta/deltaflow/docs/exhibits/swrcb/swrcb_masli n1997.pdf

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Delta Water Quality Control Plan, or incident to proceedings to address the expiration of the water rights permits for the CVP and SWP.

VIII. The new points of diversion if approved will inevitably exacerbate existing water quality problems, will thus create unreasonable impacts to aquatic life and other beneficial uses, and cannot be in the public interest.

Over mere decades, construction and operation of the Central Valley and State Water Projects have deprived the Delta estuary of half its flow; turned the natural hydrograph on its head, reduced temporal and spatial variability; eliminated crucial habitat, complexity and diversity; and deprived the estuary of dilution necessary to assimilate increased pollutant mass loading. These flow reductions have also caused significant adverse impacts to the water quality and aquatic communities of San Francisco Bay. It is not surprising that an ecosystem that developed and prospered under a state of nature has been brought to the brink of destruction. No estuarine ecosystem in the world has survived this level of abuse.

Water quality and quantity are flip sides of the same coin; changes in flow change assimilative capacity, residence time and the fate and transport of contaminants. Hydrologic changes modify constituent concentration and bioavailability, which in turn can adversely impact the aquatic ecosystem and other beneficial uses. BDCP/California WaterFix is predicated on the fatally flawed premise that you can protect and restore an estuary hemorrhaging from a lack of flow by depriving it of an additional 2.5 million acre-feet (MAF) of flow.

Sacramento River water is significantly less polluted than water flowing into the estuary from other tributaries, especially the San Joaquin River. Sacramento River water drawn across the Delta to the export pumps is a major reason water quality in the South Delta is better than it would otherwise be. Diversion of approximately 2.5 MAF of this relatively good quality water around the estuary will inevitability reduce assimilative capacity, increase the concentration of existing constituents and increase residence time for those constituents to act on and bioaccumulate in the environment. For example, bioaccumulating constituents like selenium and methyl-mercury, or legacy pollutants like DDT and dioxin, will have more opportunity to work their way up the food chain. These adverse impacts will be enhanced in a tidal environment where pollutants tend to move back and forth with the tides.

The radical transformation in Delta hydrodynamics that the change in the point of diversion and rediversion would create would have dramatic water quality impacts on the Delta and beneficial uses, including increased salinity concentrations in agricultural and residential drinking water supplies, greater concentrations of pesticides, increased boron, nitrate, mercury, selenium and other pollutant concentrations, as well as various nutrients and dissolved organic carbon and increased occurrence of harmful and toxic algal blooms, like *Microcystis*. These water quality impacts will occur in designated critical habitat of Delta smelt, longfin smelt, winter-run and spring-run Chinook salmon, and green sturgeon, all of which are listed under the federal Endangered Species Act and/or the California Endangered Species Act. Beyond impacting all life stages of aquatic life, they will directly threaten the large subsistence fishing and recreational community in the Delta whose health depends upon healthy fish and water quality. BDCP/California WaterFix and the petition for a change in the point of diversion fail to contain a

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legally or technically defensible antidegradation analysis and discussion of the likelihood and extent of degradation and adverse impacts to Delta water quality.

Presently, flow from the Sacramento is diverted through the Delta Cross Channel into the Mokelumne River and San Joaquin River as it is drawn across the estuary to the south Delta pumping facilities. The presence of better quality Sacramento River water in the central Delta and the reverse flows in the San Joaquin at Stockton serves to somewhat reduce nutrient concentration and ameliorate oxygen depletion in the Stockton Deep Water Ship Channel. Further, pollutant loads in the San Joaquin River are presently drawn to the south Delta pumps via Old River, Middle River, Turner Cut and Columbia Cut and are exported or "siphoned" south. Reduction of this "siphon" mechanism will affect nutrients and numerous other pollutants in the eastern and southeastern Delta. It will likely increase the spatial distribution of water quality impacts into the central Delta. For example, selenium concentrations might increase in the Delta to levels comparable to those found in wildlife in Suisun Bay. Salinity impairment is likely to expand into the eastern Delta. Reductions in flow below the proposed new diversion points will reduce salinity variability and encourage the spread of various undesirable invasive species. For example, BDCP/California WaterFix has been referred to as a habitat expansion plan for the overbite clam *Potamocorbula amurensis*.

The Delta and its tributary streams are formally identified, pursuant to the federal Clean Water Act, as impaired by a broad suite of pollutants. The pollutants identified as causing impairments on the 303(d) list are only the tip of the iceberg. Water quality criteria have been developed for only a very small subset of the chemicals routinely found in Delta waters and a number of water quality impairments in the Delta are attributable to total organic carbon, nutrients and other contaminants for which there are no federal or state water quality criteria. In addition to a lack of promulgated water quality criteria for many common water pollutants, there are situations in which the current water quality criteria/standards are well recognized as not being protective of aquatic life resources. Even where water quality criteria have been developed, they frequently fail to adequately consider additive/synergistic, bioaccumulative and chronic/sublethal effects or multiple stressors acting on an already weakened aquatic ecosystem. As noted, increased diversion or routing of good quality dilution flows around the estuary will result in reduce pollutant flushing and increases in the concentration, residence time and bioaccumulation of toxic pollutants.

There is nothing in the BDCP/California WaterFix environmental documents or petition for change of diversion that resembles a technically credible attempt to identify, quantify or mitigate the myriad adverse impacts to water quality that will be created by a change in point of diversion. The approach to identifying impacts to water quality is fundamentally and technically flawed. Inappropriate models that have not been properly calibrated and verified have been employed, egregiously misused and their results misrepresented. Actual project operations and a reasonable range of alternatives have not been modeled. The lack of an accurate comprehensive environmental assessment of the potential adverse consequences of the WaterFix project prejudices our ability to identify and quantify unreasonable impacts to fish and wildlife, the public interest and potential injury to CSPA's riparian water rights.

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The State Board has failed to comply with federal regulations in developing and updating the Bay-Delta Plan. The federal Clean Water Act requires that states develop enforceable water quality standards consisting of the designated uses of navigable waters and the water quality criteria that **fully protect** those beneficial uses of water. Federal regulations also require states to revisit and revise water quality control plans every three years. However, the State Board has refused/failed to develop defensible/protective water quality standards for the Delta. The present Bay-Delta water quality standards were adopted twenty years ago in 1995, implemented five years later and briefly revisited in 2006 without change. Many of the water quality standards adopted in 1995 were carryovers from the 1978 water quality control plan. Since the SWP began exporting water from the Delta in 1967, fisheries and water quality have continued to decline. Despite the fact that the Bay-Delta Water Quality Control Plan contains specific standards applicable to drought conditions, the State Board has routinely and sequentially failed to enforce violations of water quality standards or waived compliance with those less stringent requirements whenever requested by DWR and the USBR. The State Board has even ignored or failed to enforce violations of standards in normal water years. Consequently, fisheries, water quality and beneficial uses have deteriorated. A new proceeding is underway but has experienced long delays, and it is unknown when it will be completed.

The State Board now proposes to consider approving a change in the point of diversion in order to facilitate a project that proposes a massive hydrologic modification of the estuary without first updating the Bay-Delta Water Quality Control Plan. It suggests that it will develop "interim" standards that will subsequently be updated whenever it gets around to completing the update to the Bay-Delta Plan. Quick and dirty interim standards are an unacceptable surrogate for a comprehensive update of a water quality control plan for an estuary in the midst of ecological collapse. Interim standards are not likely to include the necessary extensive and all-inclusive balancing of the public trust values versus competing consumptive uses of water that will fully protect identified beneficial uses. And should a change in point of diversion for a multi-billion dollar project be approved and underway, the State Board is not likely to have the political will or ability to subsequently adopt more stringent water quality standards that would turn the project into a wasted and stranded asset. Adoption of interim standards will prejudice the development of comprehensive protective standards in the Bay-Delta Plan proceeding and cannot be in the public interest. Failure to update the Bay-Delta Plan prior to considering a change in point of diversion will prejudice our ability to identify and quantify unreasonable impacts to water quality and fish and wildlife, the public interest, and potential injury to CSPA's riparian water rights.

IX. The new points of diversion and rediversion if approved will have unreasonable adverse impacts to fish.

A. Operation of the Tunnels during unregulated high flows will affect juvenile salmonids in the Sacramento River during their peak migrations, thus creating unreasonable adverse impacts to fish.

Except during flood releases or spill, only about 10% of the water from the Sacramento River watershed that reaches the Delta is unregulated. Migration of juvenile salmonids peaks during flow pulses in the Sacramento River. Though the operation of the Tunnels is not clear, the

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export of large volumes of water during and following storm-driven high flow events would reduce the migration benefits of those events both as salmonids pass the Tunnel intakes and as they migrate downstream in flows reduced by Tunnel diversions. Tunnel diversions will adversely affect these downstream migrants as they pass the Tunnel intakes, as they enter the Delta, and in Suisun Bay, as described below.

B. The new points of diversion and rediversion if approved will divert inflow before it reaches the Delta, thus creating unreasonable adverse impacts to fish.

Operation of the Tunnels will reduce the success of the migration juvenile salmonids from the Sacramento River into the Delta. Millions of juvenile salmonids will have to pass the Tunnel intakes. Small juvenile salmonids (20-35 mm) may be impinged on screens for the new intakes. New hydrodynamics and reverse flows towards the intakes will confuse juvenile salmonids, and will slow their migration downstream; among other things, this will increase the likelihood of predation.

Delta smelt spawn upstream of the location of the proposed Tunnel intakes. Delta smelt larvae that are spawned upstream of the Tunnel intakes will be entrained as they pass the Tunnel intakes because the new screens will be too coarse to screen them. Adults may be impinged. New hydrodynamics and reverse flows towards the intakes will confuse adult Delta smelt seeking to migrate upstream past the intakes, will slow the migration of juvenile Delta smelt downstream, and will increase the likelihood that Delta smelt remain in the area of the Tunnel intakes, where summer water temperatures become too warm to allow survival.

The Cache Slough area is one of the few remaining locations where Delta smelt have survived over the past few years. Delta smelt that spawn in the Cache Slough area, and their larvae, will be likely to move upstream with the tides to new Tunnel intakes rather migrating downstream where they would be more likely to survive. The larvae drawn to the Tunnel intakes would likely be entrained, and adults may be impinged. Surviving smelt that are in the area of the Tunnel intakes may remain in this area, where summer water temperatures become too warm to allow survival.

Sturgeon, striped bass and splittail larvae spawned upstream of the Tunnel intakes may be entrained into the Tunnels; larger juveniles of these species may be impinged on the screens for these intakes.

Tunnel diversions upstream of the Delta will remove nutrients and primary production from the Delta's food web, thus degrading habitat for fish downstream of the intakes.

C. The new points of diversion and rediversion if approved will reduce fresh water flow downstream of their intakes, thus creating unreasonable adverse impacts to fish.

If approved and operated, the Delta Tunnels will reduce fresh water inflow to the Delta. The operation of the Tunnels will thus create conditions of higher salinity downstream of their

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intakes. This will move the Low Salinity Zone (LSZ) upstream, reducing habitat for Delta smelt since the LSZ becomes smaller in volume and surface area as it moves upstream.

By reducing flow downstream, operation of the Tunnels will reduce the success of the migration juvenile salmonids through the Delta past Rio Vista and into Suisun Bay. When the Tunnels are operating, the resulting reduction in Delta inflow will mean that juvenile salmonids will be more likely to be entrained into the central Delta rather than migrating to Suisun Bay.

D. The new points of diversion and rediversion if approved will exacerbate the existing impacts of the south Delta project facilities, thus creating unreasonable adverse impacts to fish.

If approved and operated, the operation of the Tunnels will move the Low Salinity Zone upstream, and with it the Delta smelt and other native estuarine fishes that favor this habitat. This operation will, in combination with project diversions in south Delta, increase the entrainment of Delta smelt from the LSZ into the central Delta and ultimately into the south Delta project facilities. This effect will be greatest whenever the operation of the Tunnels moves the LSZ upstream as far Three Mile Slough in the lower Sacramento and San Joaquin river channels of the central Delta.

When the south Delta facilities are operating simultaneously with the new Tunnel intakes, the relative effect of south Delta pumping and related OMR reverse flows will increase. This will mean that juvenile salmonids and other species migrating downstream such as sturgeon, striped bass and splittail will be more likely to be entrained into the central Delta and ultimately into the south Delta facilities.

The operation of the Delta Tunnels will increase project impacts to juvenile salmonids from the San Joaquin River, Calaveras River and Mokelumne River. Exports from the existing south Delta intakes will draw relatively more water from the San Joaquin River, Calaveras River and the Mokelumne River (rather than from the Sacramento River). This will draw more San Joaquin River, Calaveras River and Mokelumne River salmonids to the south Delta pumps. It will also reduce the likelihood that periods of high flow from the Sacramento River through the Delta Cross Channel will provide outflow downstream of the mouth of the Mokelumne River, (positive Q-West); the positive Q-west condition allows San Joaquin River, Calaveras River and Mokelumne River and Mokelumne River, Calaveras River and Mokelumne River of the mouth of the Mokelumne River, (positive Q-West); the positive Q-west condition allows San Joaquin River, Calaveras River and Mokelumne River, Calaveras River and San Joaquin River, Calaveras River and San Joaquin River, Calaveras River and Mokelumne River and San Joaquin River, Calaveras River and Mokelumne River and Mokelumne River, Calaveras River and Mokelumne River salmonids to escape the central Delta into Suisun Bay.

The RDEIRS/SDEIS does not make clear what proposed south Delta operations would be, just as it does not make clear what Tunnel operations would be. However, it is likely that reduced flow downstream of new diversions will outweigh any prospective benefits of reduced volumes pumped through existing south Delta facilities.

E. The new points of diversion and rediversion if approved will reduce Delta outflow, thus creating unreasonable adverse impacts to fish.

The RDEIR/SDEIS does not make clear what project operations would be with the Delta Tunnels in place. However, one of the express purposes of the Tunnels is to eliminate the

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current 6500 cfs constraint on pumping at the SWP's Banks facilities; this constraint is currently imposed by the Army Corps' §404 permit. In allowing full use of the pumping capacity of the SWP and CVP facilities, the Tunnels in combination with south Delta exports will reduce Delta outflow.

Reduced Delta outflow will direct fewer fish of multiple species into Suisun Marsh. Suisun Marsh contains much of the best remaining habitat in the Bay-Delta.

Reduced Delta outflow will move the Low Salinity Zone, when it is in Suisun Bay, farther upstream, thus reducing the spatial extent of habitat for Delta smelt and other species. Reduced Delta outflow will also adversely affect aquatic species and their habitats in Suisun, San Pablo and San Francisco bays.

Under what conditions may this protest be disregarded and dismissed?

- 1) Prior to conducting hearings on adding new north of Delta points of diversion and rediversion for the CVP and SWP or on other aspects of the WaterFix program, the State Board must complete the update of the Bay-Delta Water Quality Control Plan.
- 2) Prior to conducting hearings on adding new north of Delta points of diversion and rediversion for the CVP and SWP or on other aspects of the WaterFix program, the State Board must, after completion of adequate environmental review, conduct licensing hearings for existing CVP and SWP water rights that modify existing water CVP and SWP water rights to achieve the following:
 - A. Mitigate effects of existing project operations and facilities, including construction of state of the art fish screens on project south Delta facilities and revision of OMR requirements so that they are protective of fish.
 - B. Assure carryover storage in all project reservoirs that protects public trust resources in rivers downstream of the reservoirs and in the Delta.
 - C. Assure management of all project reservoirs to protect fisheries and other instream resources downstream.
 - D. Revise the Bureau's Trinity water rights to conform instream fishery flows therein to flows contained in the Bureau's Trinity River Record of Decision, incorporate North Coast Basin Plan temperature objectives as terms and conditions in water rights, establish a minimum cold water pool to preserve salmonids in the Trinity River below Lewiston Dam, and require a temperature control solution in Lewiston Reservoir.
 - E. Address the public trust impacts of water transfers. This includes impacts in areas where transfers are sourced and impacts in the Delta of any transfer water that passes through it.
 - F. License CVP and SWP water rights consistent with the Water Code, in particular with Code prohibitions of waste and unreasonable use and unreasonable method of diversion, and other applicable law.
- 3) Prior to conducting hearings on adding new north of Delta points of diversion and rediversion for the CVP and SWP or on other aspects of the WaterFix program, the State

Board must complete a legally sufficient EIR/EIS at the expense of the Bureau and DWR. The new EIR/EIS must resolve the deficiencies Protestants have raised or cited in this protest and in our respective comments on the BDCP DEIR/EIS and the RDEIR/SDEIS. Protestants reserve the right to state additional dismissal terms once an adequate EIR/EIS has been completed.

Until these conditions are met, there are no conditions under which this protest may be dismissed.

Attachment B (Protest Based On Injury to Prior Rights) to protest of California Sportfishing Protection Alliance, of the Petitions "Requesting Changes in Water Rights of The Department of Water Resources and U.S. Bureau of Reclamation for The California Waterfix Project"

To the best of my (our) information and belief the proposed change or transfer will result in injury as follows:

The California Sportfishing Protection Alliance (CSPA) owns 14.53 acres of riparian land in Collinsville California in the western Delta near the junction of the Sacramento and San Joaquin Rivers (see below). In considering how best to utilize our property, CSPA has considered a number of potential projects including, among others: a tidal and upland mitigation bank, demonstration habitat project focused on plants and other species historically present in the area, an educational project for school children highlighting the connection between water and natural communities, a community garden for disadvantaged people, a recreational area including fishing access and an environmentally focused conference center in a setting of restored habitat.

The present degraded quality water adjacent to our land and the prospect of further degradation has delayed our decision on how best to use our property. CSPA has been patiently waiting for the State Water Resources Control Board to complete the long-delayed update to the Bay-Delta Water Quality Control Plan before making a final decision on how to make best use of the property. The proposed North Delta diversion project would reduce outflow and further degrade water quality adjacent to our property and restrict our ability put our property to the best use.

Protestant claims a right to use of water from the source from which petitioner is diverting, or proposes to divert, which right is based on (identify type of right protestant claims, such as permit, license, pre-1941 or riparian right):

CSPA has a riparian water right.

List permit or license or statement of diversion and use numbers, which cover your use of water (if adjudicated right, list decree).

NA

Where is your permit located? __1/4 of __1/4 of Section__, T___,R___, __B&M

See aerial photograph and tax statements below.



675 TEXAS STREET, SUITE 1900 FAIRFIELD, CA 94533-6337 PHONE 707-784-7485 E-MAIL: TTCCC@SOLANOCOUNTY.COM		SOLANO COUNTY SECURED PROPERTY TA FOR THE FISCAL YEAR JULY 1, 20	X STATEME	
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TAX RATE AREA CORTAC AGENCY		-		
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CHARLES LOMELI TAX COLLECTOR 573 TEXAS STREET, SUITE 1930 FAIRFIELD, CA 9433-6337 PHONE 707:784-7485 E-MAIL: TTCCC@SOLANOCOUNTY.COM		SOLANO COUNTY SECURED PROPERTY TA FOR THE FISCAL YEAR JULY 1, 201	X STATEMEN	
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2000017520 2494/2		OTHER EXEMPTIONS		
		NET TOTAL ►	6.4	
CALIF SPORT FSHING PRO ALLIANCE 1248 E OAK AV #D WOODLAND, CA 95776		* If a mortgage company is responsible for paying your taxes, please contact them.		
TAX RATE AREA CORTAC AGENCY				

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If new point of diversion is being requested, is your point diversion downstream from petitioner's proposed point of diversion?

CSPA's property and point of diversion is below the petitioner's proposed point of diversion.

The extent of present and past use of water by protestant of his predecessors in interest is as follows:

Source

- a. Approximate date first use made: *Uncertain*
- b. Amount used (list units): Uncertain
- c. Diversion Season: Uncertain
- d. Purpose(s) of use: *Historically uncertain*. *CSPA intends to use its riparian rights for economic, environmental, educational, scientific, recreational and community purposes*.

Under what conditions may this protest be disregarded and dismissed?

This protest may be resolved upon the withdrawal of the petition until such time as the State Water Resources Control Board has updated the Bay-Delta water quality control plan and developed a technically credible and legally adequate environmental document.