

1 **Appendix 1C**

2 **Comments from Regional and Local**
 3 **Agencies and Responses**

4 This section contains copies of comment letters from regional and local agencies
 5 on the Draft Environmental Impact Statement (EIS) for the Coordinated Long-
 6 term Operation of the Central Valley Project (CVP) and State Water Project
 7 (SWP). Each comment in the comment letters was assigned a number, in
 8 sequential order. The numbers were combined with the agency name (example:
 9 CDWA 1). The comments with the associated responses are arranged
 10 alphabetically by agency name, and appear in the chapter in that order.

11 Copies of the comments are provided in Section 1C.1. Responses to each of the
 12 comments follow the comment letters, and are numbered in accordance with the
 13 numbers assigned in the letters.

14 Large attachments included with letters from Central Delta Water Agency;
 15 Oakdale Irrigation District, South San Joaquin Irrigation District, and Stockton
 16 East Water District; and South Delta Water Agency are provided in Section 1C.2.

17 **1C.1 Comments and Responses**

18 The agencies listed in Table 1C.1 provided comments on the Draft EIS.

19 **Table 1C.1 Regional and Local Agencies Providing Comments on the Draft**
 20 **Environmental Impact Statement**

Acronym	Commenter
CDWA	Central Delta Water Agency
CDWA SDWA 1	Central Delta Water Agency and South Delta Water Agency
CDWA SDWA 2	Central Delta Water Agency and South Delta Water Agency
EBMUD	East Bay Municipal Utility District
EDCWA	El Dorado County Water Agency
EID	El Dorado Irrigation District
EDWPA	El Dorado Water and Power Authority
Folsom – Roseville – SJWD	Cities of Folsom and Roseville, and San Juan Water District
FWA	Friant Water Authority
NCWA – GCID	Northern California Water Association and Glenn-Colusa Irrigation District
OID – SSJID – SEWD	Oakdale Irrigation District, South San Joaquin Irrigation District, and Stockton East Water District
PCWA	Placer County Water Agency

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Acronym	Commenter
SAC	City of Sacramento
SLDMWA – WWD – SJRECWA	San Luis & Delta-Mendota Water Authority, Westlands Water District, and San Joaquin River Exchange Contractors Water Authority
SCVWD	Santa Clara Valley Water District
SDWA	South Delta Water Agency
Stanislaus	Stanislaus County
WWD	Westlands Water District

1 **1C.1.1 Central Delta Water Agency**

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September 29, 2015

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Re: DEIS Coordinated Long-Term Operation of the
Central Valley Project and State Water Project

PURPOSE AND NEED OF THE ACTION

The purpose statement places inappropriate emphasis on enabling “reclamation and DWR to satisfy their contractual obligations to the fullest extent possible.” Such an emphasis is inconsistent with the priorities of water rights and mandates of law. The contractual obligations are only part of the obligations of the projects and are junior in priority to many of the other obligations. The Coordinated Operation Agreement provides:

CDWA 1

“It is in the best interest of the United States and the State to agree on the use of water rights as set forth in this agreement rather than litigate such uses as between the two projects and potentially all other water users in the Central Valley of California.

Both the State and the United States are dedicated to utilizing their existing and future water conservation facilities so as to provide the maximum benefits to the people of California and the Nation and believe that through the coordinated and cooperative operation of State and Federal facilities, these benefits can be maintained.”

The DEIS purpose statement has created a bias in favor of project contractual obligations over other obligations, including the obligations to honor senior water rights, honor priorities for areas of

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origin, provide salinity control for the Delta, protect the public trust, protect the environment, including endangered species, mitigate adverse impacts and limit exports from the Delta to water which is truly surplus to the present and future needs of the Delta and other areas of origin.

CDWA 1
continued

This bias in purpose has resulted in the limitation of consideration of all reasonable alternatives, including those which lawfully limit deliveries to contractors in deference to senior priorities.

The need for the DEIS is to examine the RPA actions as to the significant effect to the human environment. The human environment includes much more than just the interest of the project contractors who receive project water exported from the Delta.

The promises and law constituting the obligations of the CVP and SWP to those other than contractors appear to have been overlooked, misinterpreted, or intentionally marginalized.

THE DEIS FAILS TO INCLUDE ANALYSES OF A REASONABLE RANGE OF ALTERNATIVES WHICH LIMIT AND EVEN PRECLUDE PROJECT DELIVERIES TO THEIR CONTRACTORS DUE TO THE ABSENCE OF SURPLUS WATER.

Deliveries to contractors have a variety of impacts depending on location and other factors. Such impacts include entertainment of fish eggs and larvae at diversions, degradation of water quality, inducement of reverse flows, inducement of bay salinity intrusion, reduction of water levels, creation of predator ambush locations, obstruction to and destruction of spawning grounds and reduction of availability of water necessary to meet the other and more senior obligations of the projects.

CDWA 2

NEPA requires that the DEIS meet the requirements of 40 CFR section 1502.14 which provides:

“§1502.14 Alternatives including the proposed action.

This Section is the heart of the environmental impact statement. Based on the information and analysis presented in the sections on the Affected Environment (§1502.15) and the Environmental Consequences (§1502.16), it should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public. In this section agencies shall:

- (a) Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.

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- (b) Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.
- (c) Include reasonable alternatives not within the jurisdiction of the lead agency.
- (d) Include the alternative of no action.
- (e) Identify the agency's preferred alternative or alternatives, if one or more exists, in the draft statement and identify such alternative in the final statement unless another law prohibits the expression of such a preference.
- (f) Include appropriate mitigation measures not already included in the proposed action or alternatives." (Emphasis added.)

CDWA 2
continued

An alternative which requires that the SWP and CVP be operated in accordance with current law is a reasonable alternative which must be rigorously and objectively evaluated.

The ability of the SWP and CVP to deliver the full amount of entitlements in every year never existed and thus, a range of reasonable alternatives must be considered including substantially reduced and at times no exports from the Delta. The upper range is of course limited by law and hydrology.

Export of water from the Delta is counter productive to improving the ecosystem and the DEIS has failed to present the environmental impacts and alternatives in a manner providing a clear basis for choice among options by the decisionmaker and the public as required by 40 CFR section 1502.14. The proposition that removal of natural flows into and through the Bay-Delta Estuary will improve the ecosystem is unique, bold and unsupportable.

CDWA 3

HYDROLOGY

The hydrology predating the construction of the CVP and SWP reflected that no surplus water would be available for export from the Sacramento-San Joaquin Watershed during a reoccurrence of the 1929-1934 drought.

CDWA 4

Attached hereto as Exhibit A is a copy of the hydrographs from page 116 of the Weber Foundation Studies titled "An Approach To A California Public Works Plan" submitted to the California Legislature on January 28, 1960. The highlights and margin notes are mine.

The 1928/29-1933/34 six year drought period reflected on Exhibit A shows the average yearly runoff is 17.631 million acre feet with local requirements of 25.690 million acre feet. There is a shortage during the drought period within the Delta Watershed of 8.049 million acre feet per year without any exports. It is questionable whether the groundwater basins can be successfully mined to meet the shortage within the watershed let alone the export demands. A comparable review of the hydrograph for the North Coast area reflects that surplus water could have been developed without

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infringing on local requirements.

The limited hydrology was clearly recognized in the planning for the SWP which was to develop projects on the rivers in the North Coast watersheds sufficient to import to the Delta about 5,000,000 acre feet of water seasonally for transfer to areas of deficiency. (See Exhibit B December 1960 Bulletin 76 page 13). Such areas of deficiency were expected to be both north and south of the Delta pumps. The projects in the North Coast watersheds were never constructed and the projects are woefully short of water.

In addition to the lack of precipitation in the Delta watershed to meet local and export needs are the environmental needs. Water is needed for mitigation of project impacts and the affirmative obligations for salinity control and fish restoration.

The original planning for the SWP and CVP appears to have underestimated the needs to protect fish both as to flow requirements and carryover storage required for temperature control. In 2009 after only two (2) dry years, the SWP and CVP violated the February outflow requirements claiming that meeting the outflow requirements would reduce storage below the point necessary to meet cold water requirements for salmon later in the year. Although the project operators lied and the real reason for the violation was the ongoing pumping of the unregulated flow to help fill San Luis Reservoir, the incident clearly shows the inability of the projects to provide surplus water for export in the 4th, 5th and 6th years of drought.

In May of 2013 the SWP and CVP again claimed a need to preserve cold water in storage for fish. They requested and were allowed by the SWRCB to reduce outflow so as to exceed the western and interior Delta agricultural water quality objectives to save such cold water in storage. They did not suggest and did not reduce export pumping which would have had the same effect as reducing outflow.

Currently the SWRCB has been issuing curtailment notices to post-1914, and some pre-1914 water right holders in the areas of origin and reducing exports due to the lack of water.

Six year droughts can be expected and even longer droughts are possible. The historic occurrence of multi-year droughts was examined in a DWR study of tree rings. Exhibit C is Table 3 from such study. Also attached as Exhibit D is the March 10, 2014 News release, showing the severity of drought back to the 900s for the Sacramento and San Joaquin.

The State Water Project Delivery Reliability Report 2013 shows a long-term (10 year period) average Table A delivery as 2,266,000 acre feet per year; a long-term average (1921-2003) as 2,400,000 acre feet per year; a single dry year (1977) as 453,000 acre feet and a 6-year drought (1987-1992) as 1,055,000 acre feet per year. These figures can be contrasted to the Maximum Possible SWP

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Table A Delivery of 4,172,000 acre feet per year. See Exhibit E excerpts from SWP Delivery Reliability Report 2013.

CDWA 4
continued

LAW

The Delta Reform Act of 2009 includes provisions intended to provide additional protection for the Delta. Such provisions include Water Code §85054 which provides:

CDWA 5

“§85054. Coequal goals

‘Coequal goals’ means the two goals of providing a more reliable water supply for California and protecting restoring, and enhancing the Delta ecosystem. 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.”

Water Code §85021 which provides:

“§85021. Reduction of reliance on Delta for future water supply needs

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.”

The Delta and other areas of origin both upstream and downstream are part of California. The DEIS purposes are clearly directed only at the ability of the SWP and CVP to deliver water to contractors. Restoration and protection of Delta water quality and flows including flushing flows are not mentioned as a part of a more reliable water supply for California. Non-degradation of water quality and the statutory obligations to provide enhancement of water quality and an adequate supply are also absent from the purposes.

Embedded in the BDCP referenced in the DEIS is isolated conveyance which will clearly render water supply less reliable in all areas downstream. The common pool for the interior Delta will be eliminated along with the common interest in protecting the water quality. The isolated

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conveyance has no outlets and requirements to protect water quality in dry periods are always circumvented. For areas throughout the watershed, including those along the tributaries upstream of the Delta, curtailment of local water use, and water transfers to increase utilization of the highly expensive tunnels combined with the need for fish flows and high water consumption habitat to mitigate for the construction and operation of the tunnels will greatly add to unreliability of deliveries to contractors.

CDWA 6
continued

The DEIS ignores the need to reduce reliance on exports of water from the Delta. The hydrology of the Delta watershed is inadequate to support even the past level of exports. Development within the watersheds of origin and the need to recapture water from SWP and CVP exports will increase. There is evidence that more water will be needed to mitigate for the SWP and CVP damage to fish including meeting the CVPIA anadromous fish restoration requirements of 2 times the average natural production for the years 1967 through 1991. Climate change is also expected to adversely affect water supply. The increasing threat of terrorism, the continuing threat of natural calamities, including earthquakes and the growing need for electricity all gravitate towards less reliance on exports from the Delta and instead concentration on developing local self sufficiency. The deficit due to the failure to develop North Coast watersheds will not be overcome by efforts at self sufficiency, however, increased efforts in urban communities can increase the amount of water available for agriculture and the environment.

CDWA 7

The legislative intent to increase not diminish protection for the Delta and other areas of origin is made especially clear in the adoption of Water Code section 85031(a) which provides:

“(a) This division does not diminish, impair, or otherwise affect in any manner whatsoever any area of origin, watershed of origin, county of origin, or any other water rights protections, including, but not limited to, rights to water appropriated prior to December 19, 1914, provided under the law. This division does not limit or otherwise affect the application of Article 1.7 (commencing with Section 1215) of Chapter 1 of Part 2 of Division 2, Sections 10505, 10505.5, 11128, 11460, 11461, 11462, and 11463, and Sections 12200 to 12220, inclusive.” (Emphasis added.)

CDWA 8

Water Code Sections 11460 et seq. and 12200 et seq. are particularly specific in defining the limitation on the export of water from the Delta by the SWP and CVP. Water Code Section 11460 et seq. were added by Statutes 1943, c. 370, p. 1896 around the time of commencement of the CVP. Water Code Section 12200 et seq. was added by Statutes 1959, c. 1766, p. 1766 around the time of commencement of the State Water Project.

The obligation of the projects to provide salinity control and an adequate water supply sufficient to maintain and expand agriculture, industry, urban, and recreational development in the Delta was made clear.

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A summary of the promises made on behalf of the United States to those in the areas of origin is contained in the 84th Congress, 2D Session House Document No. 416, Part One Authorizing Documents 1956 at Pages 797-799 as follows:

CDWA 8
continued

“My Dear Mr. Engle: In response to your request to Mr. Carr, we have assembled excerpts from various statements by Bureau and Department officials relating to the subject of diversion of water from the Sacramento Valley to the San Joaquin Valley through the operation of the Central Valley Project.

A factual review of available water supplies over a period of more than 40 years of record and the estimates of future water requirements made by State and Federal agencies makes it clear that there is no reason for concern about the problem at this time.

For your convenience, I have summarized policy statements that have been made by Bureau of Reclamation and Department of the Interior officials. These excerpts are in the following paragraphs:

On February 20, 1942, in announcing the capacity for the Delta-Mendota Canal, Commissioner John C. Page said, as a part of his Washington D.C., press release: “The capacity of 4,600 cubic feet per second was approved, with the understanding that the quantity in excess of basic requirements mainly for replacement at Mendota Pool, will not be used to serve new lands in the San Joaquin Valley if the water is necessary for development in the Sacramento Valley below Shasta Dam and in the counties of origin of such waters.”

On July 18, 1944, Regional Director Charles E. Carey wrote a letter to Mr. Harry Barnes, chairman of a committee of the Irrigation Districts Association of California. In that letter, speaking on the Bureau’s recognition and respect for State laws, he said: “They [Bureau officials] are proud of the historic fact that the reclamation program includes as one of its basic tenets that the irrigation development in the West by the Federal Government under the Federal reclamation laws is carried forward in conformity with State water laws.”

On February 17, 1945, a more direct answer was made to the question of diversion of water in a letter by Acting Regional Director R. C. Calland, of the Bureau, to the Joint Committee on Rivers and Flood Control of the California State Legislature. The committee had asked the question, “What is your policy in connection with the amount of water that can be diverted from one watershed to another in proposed diversions?” In stating the Bureau’s policy, Mr. Calland quoted section 11460 of the

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State water code, which is sometimes referred to as the county of origin act, and then he said:

“As viewed by the Bureau, it is the intent of the statute that no water shall be diverted from any watershed which is or will be needed for beneficial uses within that watershed. The Bureau of Reclamation, in its studies for water resources development in the Central Valley, consistently has given full recognition to the policy expressed in this statute by the legislature and the people. The Bureau has attempted to estimate in these studies, and will continue to do so in future studies, what the present and future needs of each watershed will be. The Bureau will not divert from any watershed any water which is needed to satisfy the existing or potential needs within that watershed. For example, no water will be diverted which will be needed for the full development of all of the irrigable lands within the watershed, nor would there be water needed for municipal and industrial purposes or future maintenance of fish and wildlife resources.”

CDWA 8
continued

On February 12, 1948, Acting Commissioner Wesley R. Nelson sent a letter to Representative Clarence F. Lea, in which he said:

“You asked whether section 10505 of the California Water Code, also sometimes referred to as the county of origin law, would be applicable to the Department of the Interior, Bureau of Reclamation. The answer to this question is: No, except insofar as the Bureau of Reclamation has taken or may take assignments of applications which have been filed for the appropriation of water under the California Statutes of 1927, chapter 286, in which assignments reservations have been made in favor of the county of origin.

The policy of the Department of the Interior, Bureau of Reclamation, is evidenced in its proposed report on a Comprehensive Plan for Water Resources Development—Central Valley Basin, Calif., wherein the Department of the Interior takes the position that “In addition to respecting all existing water rights, the Bureau has complied with California’s ‘county of origin’ legislation, which requires that water shall be reserved for the presently unirrigated lands of the areas in which the water originates, to the end that only surplus water will be exported elsewhere.”

On March 1, 1948, Regional Director Richard L. Boke wrote to Mr. A. L. Burkholder, secretary of the Live Oak Subordinate Grange No. 494, Live Oak, Calif., on the same subject, and said:

“I can agree fully with the statement in your letter that it would be grossly unjust to take water from the watersheds of one region to supply another region until all present and all possible future needs of the first region have been fully determined and completely and adequately provided for.” That is established Bureau of Reclamation

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policy and, I believe, it is consistent with the water laws of the State of California under which we must operate.”

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continued

On May 17, 1948, Assistant Secretary of the Interior William E. Warne wrote a letter to Representative Lea on the same subject, in which he said:

“The excess water made available by Shasta Reservoir would go first to such Sacramento Valley lands as now have no rights to water.”

Assistant Secretary Warne goes on to say, in the same letter:

“As you know, the Sacramento Valley water rights are protected by: (1) Reclamation law which recognizes State water law and rights thereunder; (2) the State’s counties of origin act, which is recognized by the Bureau in principle; and (3) the fact that Bureau filings on water are subject to State approval. I can assure you that the Bureau will determine the amounts of water required in the Sacramento Valley drainage basin to the best of its ability so that only surplus waters would be exported to the San Joaquin. We are proceeding toward a determination and settlement of Sacramento Valley waters which will fully protect the rights of present users; we are determining the water needs of the Sacramento Valley; and it will be the Bureau’s policy to export from that valley only such waters as are in excess of its needs.”

On October 12, 1948, Secretary of the Interior Krug substantiated former statements of policy in a speech given at Oroville, Calif. Secretary Krug said, with respect to diversion of water:

“Let me state, clearly and finally, the Interior Department is fully and completely committed to the policy that no water which is needed in the Sacramento Valley will be sent out of it.”

He added:

“There is no intent on the part of the Bureau of Reclamation ever to divert from the Sacramento Valley a single acre-foot of water which might be used in the valley now or later.”

The California Water Resources Development Bond Act provides in Water Code Section 12931 that the Sacramento-San Joaquin Delta shall be deemed to be within the watershed of the Sacramento River.

Exhibit F is a copy of the 1960 ballot argument in favor of the California Water Resources Development Bond Act which spawned the State Water Project (SWP). Of particular note are the following representations:

“No area will be deprived of water to meet the needs of another nor will any area be

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asked to pay for water delivered to another.”

“Under this Act the water rights of Northern California will remain securely protected.”

“A much needed drainage system and water supply will be provided in the San Joaquin Valley.”

Water Code §§12200 through 12205 are particularly specific as to the requirements to provide salinity control for the Delta and provide an “adequate water supply in the Delta sufficient to maintain and expand agriculture, industry, urban and recreational development.”

For ease of reference, the following Water Code sections are quoted with emphasis added:

§12200. Legislative findings and declaration

The Legislature hereby finds that the water problems of the Sacramento-San Joaquin Delta are unique within the State; the Sacramento and San Joaquin Rivers join at the Sacramento-San Joaquin Delta to discharge their fresh water flows into Suisun, San Pablo and San Francisco bays and thence into the Pacific Ocean; the merging of fresh water with saline bay waters and drainage waters and the withdrawal of fresh water for beneficial uses creates an acute problem of salinity intrusion into the vast network of channels and sloughs of the Delta; the State Water Resources Development system has as one of its objectives the transfer of waters from water-surplus areas in the Sacramento Valley and the north coastal area to water-deficient areas to the south and west of the Sacramento-San Joaquin Delta via the Delta; water surplus to the needs of the areas in which it originates is gathered in the Delta and thereby provides a common source of fresh water supply for water-deficient areas. It is, therefore, hereby declared that a general law cannot be made applicable to said Delta and that the enactment of this law is necessary for the protection, conservation, development, control and use of the waters in the Delta for the public good. *(Added by Stats. 1959, c. 1766, p. 4247, §1.)*

§12201. Necessity of maintenance of water supply

The Legislature finds that the maintenance of an adequate water supply in the Delta sufficient to maintain and expand agriculture, industry, urban, and recreational development in the Delta area as set forth in Section 12220, Chapter 2, of this part, and to provide a common source of fresh water for export to areas of water deficiency is necessary to the peace, health, safety and welfare of the people of the State, except

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that delivery of such water shall be subject to the provisions of Section 10505 and Sections 11460 to 11463, inclusive, of this code. *(Added by Stats. 1959, c. 1766, p 4247, §1.)*

CDWA 8
continued

§12202. Salinity control and adequate water supply; substitute water supply; delivery

Among the functions to be provided by the State Water Resources Development System, in coordination with the activities of the United States in providing salinity control for the Delta through operation of the Federal Central Valley Project, shall be the provision of salinity control and an adequate water supply for the users of water in the Sacramento-San Joaquin Delta. If it is determined to be in the public interest to provide a substitute water supply to the users in said Delta in lieu of that which would be provided as a result of salinity control no added financial burden shall be placed upon said Delta water users solely by virtue of such substitution. Delivery of said substitute water supply shall be subject to the provisions of Section 10505 and Sections 11460 to 11463, inclusive, of this code. *(Added by Stats. 1959, c. 1766, p 4247, §1.)*

§12203. Diversion of waters from channels of delta

It is hereby declared to be the policy of the State that no person, corporation or public or private agency or the State or the United States should divert water from the channels of the Sacramento-San Joaquin Delta to which the users within said Delta are entitled. *(Added by Stats. 1959, c. 1766, p 4249, §1.)*

§12204. Exportation of water from delta

In determining the availability of water for export from the Sacramento-San Joaquin Delta no water shall be exported which is necessary to meet the requirements of Sections 12202 and 12203 of this chapter. *(Added by Stats. 1959, c. 1766, p 4249, §1.)*

§12205. Storage of water; integration of operation and management of release of water

It is the policy of the State that the operation and management of releases from storage into the Sacramento-San Joaquin Delta of water for use outside the area in which such water originates shall be integrated to the maximum extent possible in order to permit the fulfillment of the objectives of this part. *(Added by Stats. 1959, c. 1766, p 4249, §1.)"*

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§11460 provides:

"§ 11460. Prior right to watershed water

In the construction and operation by the department of any project under the provisions of this part a watershed or area wherein water originates, or an area immediately adjacent thereto which can conveniently be supplied with water therefrom, shall not be deprived by the department directly or indirectly of the prior right to all of the water reasonably required to adequately supply the beneficial needs of the watershed, area, or any of the inhabitants or property owners therein. *(Added by Stats. 1943, c. 370, p. 1896. Amended by Stats. 1957, c. 1932, p. 3410, §296.)*"

The December 1960 DWR Bulletin 76 (Exhibit 14) which includes a contemporaneous interpretation by DWR of Water code Section 12200 through 12205 provides at page 12:

"In 1959 the State Legislature directed that water shall not be diverted from the Delta for use elsewhere unless adequate supplies for the Delta are first provided." (Emphasis added.)

Similarly the DWR confirmed its interpretation of law in the contract between the State of California Department of Water Resources and the North Delta Water Agency For the Assurance of a Dependable Water Supply of Suitable Quality dated January 28, 1981, which provides:

"(d) The construction and operation of the FCVP and SWP at times have changed and will further change the regimen of rivers tributary to the Sacramento-San Joaquin Delta (Delta) and the regimen of the Delta channels from unregulated flow to regulated flow. This regulation at times improves the quality of water in the Delta and at times diminishes the quality from that which would exist in the absence of the FCVP and SWP. The regulation at times also alters the elevation of water in some Delta channels."

"(f) The general welfare, as well as the rights and requirements of the water users in the Delta, require that there be maintained in the Delta an adequate supply of good quality water for agricultural, municipal and industrial uses."

"(g) The law of the State of California requires protection of the areas within which water originates and the watersheds in which water is

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CDWA 8
continued

developed. The Delta is such an area and within such a watershed. Part 4.5 of Division 6 of the California Water Code affords a first priority to provision of salinity control and maintenance of an adequate water supply in the Delta for reasonable and beneficial uses of water and relegates to lesser priority all exports of water from the Delta to other areas for any purpose.” (Emphasis added.) (See Exhibit 17.)

In the case of United States vs. State Water Resources Control Board 182 Cal.App.3d 82 (1986) the court, at page 139 provides:

“In 1959, when the SWP was authorized, the Legislature enacted the Delta Protection Act (§§ 12200-12220.) The Legislature recognized the unique water problems in the Delta, particularly ‘salinity intrusion,’ which mandates the need for such special legislation ‘for the protection, conservation, development, control and use of the waters in the Delta for the public good.’ (§ 12200.) The act prohibits project exports from the delta of water necessary to provide water to which the Delta users are ‘entitled’ and water which is needed for salinity control and an adequate supply for Delta users. (§§ 12202, 12203, 12204.)”

As related to the Peripheral Canal or Tunnels or any other isolated conveyance facility, the requirements of WC 12205 are particularly relevant.

“It is the policy of the State that the operation and management of releases from storage into the Sacramento- Joaquin Delta of water for use outside the area in which such water originates shall be integrated to the maximum extent possible to permit fulfillment of the objectives of this part.”

The objectives include salinity control and an adequate water supply. Conveyance facilities which transport stored water to the export pumps with no outlets or releases to provide salinity control and an adequate water supply in the Delta would not comply.

The export projects must additionally fully mitigate their respective impacts and meet the affirmative obligations to the Delta and other areas of origin including those related to flow. Failure to do so results in a shift of the cost of the project to someone else. The State Water Resources Development Bond Act was intended to preclude such a shift in costs. See also Goodman v. Riverside (1993) 140 Cal.App.3d 900 at 906 for the requirement that the costs of the entire project be paid by the contractors. Water Code Section 11912 requires that the costs necessary for the preservation of fish and wildlife be charged to the contractors. The term “preservation” appears to be broader than mitigation and appears to create an affirmative obligation beyond mitigation.

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Title 34 of Public Law 102-575 referred to as the Central Valley Project Improvement Act in Section 3406(b)(1) authorizes and directs the Secretary of Interior to enact and implement a program which makes all reasonable efforts to ensure by the year 2002 natural production of anadromous fish (including salmon, steelhead, striped bass, sturgeon and American shad) will be sustainable on a long term basis at levels not less than twice the average levels attained during the period of 1967-1991.

CDWA 9
continued

Reliability of water supply for exports from the Delta and other contract deliveries must be junior to the needs and obligations requiring water in the Delta and other areas of origin including fish and wildlife needs. The modeling and analysis should provide a clear confirmation of the types and numbers of years when no water will be available for export and provide estimates of the amounts that might be available in other years. Care should be taken to model carryover storage requirements with due consideration of meeting temperature, flow and statutory requirements to determine the firm yield available for export. Such modeling is necessary to determine the impacts to the human environment.

Reliability of water supply for Northern California requires that no water be exported that is necessary to meet the needs of and obligations to restore and even enhance fish.

CDWA 10

Both State and Federal laws seek to prevent degradation of water quality. Isolated conveyance will remove the higher quality Sacramento River water from the Delta pool thereby reducing the dilution of the poorer quality water returning to the Delta by way of the San Joaquin River from SWP and CVP operations which deliver water to the west side of the San Joaquin Valley. The delivery of such water to the San Luis Unit was prohibited by the San Luis Act of 1960 unless there was a Valley Drain with an outlet to the ocean. (See Exhibit G). The prohibition was circumvented. Even the promise that "A much needed drainage system and water supply will be provided in the San Joaquin Valley" included in ballot argument in favor of the California Water Resources Development Act (SWP) was not kept. (See Exhibit F). The DEIS Purposes unreasonably seek to provide deliveries to contractors to the fullest extent possible. Exports from the Delta to the west side of the San Joaquin Valley degrade Delta water quality. The commitment to isolated conveyance aggravates such degradation.

CDWA 11

CDWA 12

The provision of salinity control and an adequate supply for the Delta was deemed to be of utmost importance and is a critical feature of a reliable supply for the Delta.

CDWA 13

Salinity control for the Sacramento-San Joaquin Delta is a primary purpose for Shasta Dam.

Water Code Section 11207 provides:

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“§11207. Primary purposes

Shasta Dam shall be constructed and used primarily for the following purposes:

- i. Improvement of navigation on the Sacramento River to Red Bluff.
- ii. Increasing flood protection in the Sacramento River.
- iii. Salinity control in the Sacramento-San Joaquin Delta.
- iv. Storage and stabilization of the water supply of the Sacramento River for irrigation and domestic use. (*Added by Stats. 1943, c 370, p. 1896*) (Emphasis added.)

The Delta Protection Act of 1959 in WC 12200 specifically provides: “It is, therefore, hereby declared that a general law cannot be made applicable to said Delta and that the enactment of this law is necessary for the protection, conservation, development, control and use of the waters in the Delta for the public good.”

The degradation of water quality in the Delta adversely impacts agricultural, industrial, urban and recreational (including fish and wildlife) uses in the Delta and surrounding areas as well as areas served with exports from the Delta.

Except as provided by agreement, salinity control and the adequacy of the quality of the water supply for the Delta is determined by water quality objectives set by the SWRCB. Such objectives provide the minimum level deemed necessary to protect beneficial uses. Although the objectives are set for certain uses for certain periods, it is the composite of all objectives which the SWRCB determined would provide the protection for all beneficial uses. Such objectives have at times been violated and it is critical to the rigorous and objective analysis of alternatives to incorporate with and without compliance conditions.

Federal law is specific as to the obligations for the CVP.

PL99-546 (HR3113) specifically provides:

“(b)(1) Unless the Secretary of the Interior determines that operation of the Central Valley project in conformity with State water quality standards for the San Francisco Bay/Sacramento-San Joaquin Delta and Estuary is not consistent with the congressional directives applicable to the project, the Secretary is authorized and directed to operate the project, in conjunction with the State of California water project, in conformity with such standards. Should the Secretary of the Interior so determine, then the Secretary shall promptly request the

CDWA 13
continued

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Attorney General to bring an action in the court of proper jurisdiction for the purposes of determining the applicability of such standards to the project.

(2) The Secretary is further directed to operate the Central Valley project, in conjunction with the State water project, so that water supplied at the intake of the Contra Costa Canal is of a quality equal to the water quality standards contained in the Water Right Decision 1485 of the State of California Water Resources Control Board, dated August 16, 1978, except under drought emergency water conditions pursuant to a declaration by the Governor of California. Nothing in the previous sentence shall authorize or require the relocation of the Contra Costa Canal intake.”

Section (b)(1) does not allow for the Bureau of Reclamation to operate the CVP without conforming to the State water quality standards for the San Francisco Bay/Sacramento-San Joaquin Delta and Estuary even if the SWRCB is willing to look the other way. A determination by a court of law is required. (See Exhibit H.)

There are specific processes and procedures for changes to Water Quality Control Plans including review by the United States EPA, which are not being considered.

Section (b)(1) is thus applicable and requires USBR and USF&WS compliance unless the Secretary of Interior makes a determination that compliance is inconsistent with congressional directives applicable to the project and then the Attorney General is to be requested to bring a legal action for a court determination of the applicability of the standards. There is no such court determination that would allow the CVP to operate without conforming to the standards.

Section (b)(2) provides an additional constraint with regard to the water quality at the intake to the Contra Costa Canal. Even if the standards were determined by the court to not be applicable to the CVP, then the D-1485 water quality standards would be applicable to the intake of the Contra Costa Canal except under drought emergency water conditions pursuant to a declaration by the Governor of California.

In 2004 Congress passed another law to ensure that Delta water quality standards and objectives would be met.

PL 108-361 (HR 2828) Section 103(d)(2), in pertinent part provides:

“(D) Program to Meet Standards. -

CDWA 13
continued

CDWA 14

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- (i) In General. - Prior to increasing export limits from the Delta for the purposes of conveying water to south-of-Delta Central Valley Project contractors or increasing deliveries through an intertie, the Secretary shall, not later than 1 year after the date of enactment of this Act, in consultation with the Governor, develop and initiate implementation of a project to meet all existing water quality standards and objectives for which the Central Valley Project has responsibility.” (See Exhibit I.)

CDWA 14
continued

PL 108-361 also provided in Section 103(d)(1)(C)(i) that the USBR conduct a water supply and yield study. The results of a determination of firm yield in successive years of drought is essential to analyzing the impact to the human environment. The absence of available water for contractors regardless of RPAs would presumably show no adverse impact. If the USBR has failed to conduct such study as mandated by Congress, then it should be done as a part of the requirements for a proper DEIS.

The DEIS must also take into account the provisions in PL 108-361 requiring the Secretary to include to the maximum extent feasible in a plan to meet standards a recirculation program to reduce reliance on New Melones Reservoir for water quality and fishery flow objectives, reduction of the water quality impacts of discharges from wildlife refuges that receive water from the federal government and discharge salt and other constituents into the San Joaquin River, the acquisition of water from willing sellers from streams tributary to the San Joaquin and other sources to provide flow, dilute discharges of salt and other constituents and to improve water quality in the San Joaquin below the confluence of the Merced and to reduce reliance on New Melones for meeting water quality and fishery flow objectives. The DEIS should include alternatives which provide for the purchase of water for the above purposes, including waters which is otherwise the subject of transfers for delivery to contractors. Recapture of a portion such waters at the Delta may be possible.

CDWA 15

The DEIS purpose of providing exports from the Delta to serve contractors to the fullest extent possible is directly contrary to the direction of Congress which was to assure that all existing (October 25, 2004) water quality standards and objectives would first be met.

CDWA 16

CREATION OF ADDITIONAL TIDAL WETLANDS IN THE DELTA IS NOT A REASONABLE OR PRUDENT ACTION

Driving the need for ecosystem restoration is the need to address the dramatic decline in fish species and in particular those in danger of extinction. The DEIR puts forth the proposition that habitat in the Delta and factors other than the amount flow into and through the Delta are the cause of the subject fish declines. The impact of SWP and CVP exports on the amount of flow into and through the Delta from diversion to storage and direct diversion is improperly discounted.

CDWA 17

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The correlation between SWP and CVP exports and the decline of the fisheries has been a concern for many years. In August of 1978 the State Water Resources Control Board rendered its Water Right Decision 1485. The Decision was the culmination of 32 days of evidentiary hearing initiated on November 15, 1976 and concluded on October 7, 1977. At that time the striped bass index was considered to be the indicator of ecosystem health for the Delta and Suisun Marsh. Striped bass were in effect the “canary in the coal mine”. As the years passed and striped bass populations plummeted, the water exporters claimed striped bass to be invasive species, predators on endangered species and major cause of fish declines wrongfully attributed to the export of water. The canary died and the death was ignored to facilitate greater exports. As Exhibits J-M show, striped bass, steelhead, Delta smelt, fall-run Chinook salmon and winter-run Chinook salmon all co-existed at relatively high populations at lower export levels.

CDWA 17
continued

In 1978 the SWRCB concluded in D-1485 at page 13 that:

“To provide full mitigation of project impacts on all fishery species now would require the virtual shutting down of the project export pumps.” (See Exhibit N.)

The SWRCB also concluded in D-1485 at page 14 that:

“Full protection of Suisun Marsh now could be accomplished only by requiring up to 2 million acre feet of fresh water outflow in dry and critical years in addition to that required to meet other standards.” (See Exhibit N.)

Exports from the Delta were not curtailed and the additional 2 million acre feet of outflow was not provided for the marsh.

Exhibits J-M show that significant declines in fish populations commenced when annual exports reached 2 million acre feet. Increased development in the watersheds and the effects of climate change would indicate that additional water yield would have to be developed within the Delta watershed to provide a comparable level of fish protection for the future and maintain the 2 million acre feet of exports. Little or no export water in dry years and more in wet years would likely be necessary in any event.

An examination of the fish population graphs indicates that restoration of the ecosystem for fish is not correlated with Delta wetland habitat conditions in the 1850’s or at all. The likely relationship is to water conditions, particularly flow.

The Delta was fully leveed and reclaimed by about 1930.

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“By 1930 all but minor areas of the swampland had been leveed and were in production.” (See page 8 of December 1960 Bulletin 76 - Exhibit B.) The USACE completed project levee construction on the San Joaquin River in the early 1960’s. There are no significant changes in leveed areas or even riverine habitat which appear to be the cause of the decline of the fisheries. In fact, there have been increases in Delta wetland habitat during the periods of apparent decline. Mildred Island flooded in 1983 and has not been reclaimed. Little Mandeville and Little Frank’s Tract flooded in the 1980’s and have not been reclaimed. Lower Liberty Island levees were not restored and the area has been in a tidal wetland condition since at least 2002.

CDWA 17
continued

The focus on conversion of Delta land to habitat as a substitute for water for fish is misplaced. Adequate analysis has not been done to determine if development of shallow wetland habitat is actually detrimental to salmon and other anadromous fish. In particular, stranding and predation from otters, egrets, herons, cormorants, gulls, white pelicans and the like needs further analysis. The limited study (Exhibit O) showing a picture of larger salmon smolts raised for a time in a wetland versus smaller smolts raised in the channel is cited as the evidence that shallow seasonal wetland in the Delta would be a substitute for flow and justification for increased exports. The study monitored caged smolts in the channel where the fish must constantly swim against the current and compared those smolts to smolts in cages in shallow wetlands where there was little or no current. The experiment did not attempt to evaluate stranding or predation and it is doubtful that the smolts in the channel cages if uncaged would spend as much time swimming against the stronger currents rather than seeking areas of the channel where the velocity is lower. The presentation of results including the fat fish/skinny fish photo neglected to show the sizes of the fish from the cages in the channel upstream of the shallow habitat which reportedly were comparable to those in the wetlands. “During periods of low, clear water, fish growth rates in the river site above the floodplain were comparable to those in the floodplain”. (Exhibit O, pg 1.)

Creation of Floodplain Habitat Is Not a Substitute for Flow

The available evidence and studies do not support such a substitution. The floodplain habitat which is suggested as potentially beneficial is that which is inundated by high flows for a limited period; involves a large area of water of a proper depth to help avoid predation; assumes avian predator populations are limited; is properly drained to avoid stranding and avoids increased water temperatures detrimental to salmonids.

The Jeff Opperman Final Report for Fellowship R/SF-4 referenced above containing the picture of the fat fish and skinny fish is often shown as support for the proposition that floodplain habitat can be substituted for flow (Exhibit O.) The study does not put forth that conclusion but suggests “that juvenile Chinook benefit from access to floodplain habitats”. (Page 2) It is important to recognize that the test fish were caged and thus predation from birds, fish and other animals was not an issue. Stranding was down-played but admittedly not tested. The test was conducted in and along the Cosumnes River. The skinny fish were in the river swimming against the current and

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because they were in cages they couldn't move with the current or move to quiet and more productive water. The fat fish obviously saved their energy for growth and apparently benefitted from improved food availability. The possibility exists that fish in the slow moving wetland water may be less able to survive than the thinner and more athletic fish spending more time in the current. The report states "During high flows the river offers poor habitat and fish living in this type of habitat will tend to be displaced downstream." High flows and displacement downstream are likely not detrimental. It is generally accepted that the salmon do well in high flow years. The return of adults (escapement) is usually higher two and one-half years after a high flow year. It is recognized that ocean conditions also play a part and may in some cases reduce escapement nullifying the benefit of high flow. The difference in food availability in the high flow channel versus in the quiet water may not be significant in the test given the consumption of energy and lack of opportunity for the skinny fish to move to more favorable parts of the river. Displacement downstream into the cooler and more productive parts of the estuary is likely not bad for displaced salmon smolts.

CDWA 17
continued

Floodplain Habitat Not Accompanied by High Flow Does Not Appear to Result in Increased Chinook Salmon Ocean Survival and May Not Improve Survival of Sacramento River Juvenile Chinook Salmon Migrating to the Ocean

In the study titled "Floodplain Rearing of Juvenile Chinook Salmon: Evidence of enhanced growth and survival" by Sommer, et al. (2001), a copy of which is Exhibit P, tests were conducted in the Yolo Bypass in 1998 and 1999. The study concluded that during such years salmon increased in size substantially faster in the seasonally inundated agricultural floodplain than in the river, suggesting better growth rates. The study, however, provides: "Survival indices for coded-wire-tagged groups were somewhat higher for those released in the floodplain than for those released in the river, but the differences were not statistically significant. Growth, survival, feeding success, and prey availability were higher in 1998 than in 1999, a year in which flow was more moderate indicating that hydrology affects the quality of floodplain rearing habitat". (Exhibit P, pg 1.)

In the discussion the authors provide:

"Mean length increased faster in the Yolo Bypass during each study year, and CWT fish released in the Yolo Bypass were larger and had higher apparent growth rates than those released in the Sacramento River. It is possible that these observations are due to higher mortality rates of smaller individuals in the Yolo Bypass or of larger individuals in the Sacramento River; however we have no data or reasonable mechanism to support this argument."

"Elevated Yolo Bypass survival rates are also consistent with significantly faster migration rates in 1998, the likely result of which would be reduced exposure time to mortality risks in the delta,

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including predation and water diversions.”

In the study “Habitat Use and Stranding Risk of Juvenile Chinook Salmon on a Seasonal Floodplain” by Sommer, et al. (2004), a copy of which is Exhibit Q, the authors build upon the above study with further testing in 2000 and present their analysis of ocean survival.

The author’s abstract provides:

“Although juvenile Chinook salmon *Oncorhynchus tshawytscha* are known to use a variety of habitats, their use of seasonal floodplains, a highly variable and potentially risky habitat, has not been studied extensively. Particularly unclear is whether a seasonal floodplain is a net “source” or net “sink” for salmonid production. . . . Adult ocean recoveries of tagged hatchery fish indicate that seasonal floodplains support survival at least comparable with that of adjacent perennial river channels. These results indicate that floodplains appear to be a viable rearing habitat for Chinook salmon, making floodplain restoration an important tool for enhancing salmon production. (Emphasis added.)

The data provided for ocean survival is as follows:

Table 1. – Number of coded wire tags recovered in the ocean and commercial fisheries for Chinook salmon released in the Yolo Bypass and Sacramento River. The total number of tagged fish released in each location for each year is shown in parentheses. The survival ration is calculated as the number of Yolo Bypass recoveries divided by the number of Sacramento River recoveries.

Release Group	1998 (53,000)	1999 (105,000)	2000 (55,000)
Yolo Bypass	75	136	27
Sacramento River	35	138	47
Survival Ration	2.14	0.99	0.57

A more complete analysis is required.

It Is Unclear Whether Shaded River Aquatic Habitat Is Good for Special Status Fish

It is assumed that shaded river aquatic habitat is desirable for special status fish and that implementation of the USACE ETL or other disturbance would require mitigation. Attention is called to the BDCP Draft Chapter 8 which puts forth the need to control predators by removing structures which affect flow fields and provide shade. The focus appears to be on abandoned docks, pilings and the like, however, shaded river aquatic habitat can provide the same affect on flow and provide shade.

CDWA 17
continued

CDWA 18

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The impact of shaded river aquatic habitat on special status fish is unclear.

CDWA 18
continued

Increase in Tidal Prism

A significant additional threat occurs where floodplain habitat is created in the tidal zone where increases in the tidal prism results in increased flood and ebb tide flows. Such increase in the tidal prism created by the flooding of Lower Liberty Island has been found to have caused juvenile salmon migrating to the ocean to be pushed from their normal Sacramento River migration route back up into the lower region of the Yolo Bypass thereby further exposing such fish to the risk of predation, stranding and detrimental temperatures. (See attached excerpts from “Insights into the Problems, Progress, and Potential Solutions For Sacramento River Basin Native Anadromous Fish Restoration”, April 2011 by Dave Vogel). (Exhibit R.)

CDWA 19

THE PROPOSED CREATION OF ADDITIONAL TIDAL WETLANDS IN THE DELTA IS NOT A REASONABLE OR PRUDENT ACTION

RPA 1.6.1 and 1.6.2 direct restoration of floodplain habitat to the lower Sacramento basin including Liberty Island. Although still located within the basin of the lower Sacramento, Liberty Island is in great part no longer “Floodplain” or seasonally flooded but rather is permanently inundated area bordered by wetlands.

The April 2011 report by Dave Vogel titled “Insights into the Problems, Progress, and Potential Solutions for Sacramento River Basin Anadromous Fish Restoration” prepared for the Northern California Water Association and Sacramento Valley Water Users contains the results of studies which include the Liberty Island Ecological Reserve area. (The entire study can be viewed on the Northern California Water Association website by clicking on “Fisheries”) (Excerpts are attached as Exhibit R).

At pages 112 and 113 the report provides:

Subsequent, additional juvenile salmon telemetry studies were conducted by Natural Resource Scientists Inc. on behalf of the USFWS and CALFED in the north Delta (Vogel 2001, Vogel 2004). Triangulating radio-tagged fish locations in real time (Figure 61) clearly demonstrated how juvenile salmon move long distances with the tides and were advected into regions with very large tidal prisms, such as upstream into Cache Slough and into the flooded Prospect and Liberty Islands (Figure 62). During the studies, it was determined that some radio-tagged salmon were eaten by predatory fish in northern Cache Slough, near the levee breaches into flooded islands (discussed below).

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At page 120 the report provides:

During recent years, there has been an emphasis to reclaim or create shallow, tidal wetlands to assist in re-creating the form and function of ecosystem processes in the Delta with the intent of benefitting native fish species (Simenstad *et al.* 1999). Among a variety of measures to create such wetlands, Delta island levees either have been breached purposefully or have remained unrepaired so the islands became flooded. A recent example is the flooding of Prospect Island which was implemented under the auspices of creating shallow water habitat to benefit native fish species such as anadromous fish (Christophel *et al.* 1999). Initial fish sampling of the habitat created in Prospect Island suggested the expected benefits may not have been realized due to an apparent dominance of non-native fish (Christophel *et al.* 1999). Importantly, a marked reduction of sediment load to the Delta in the past century (Shvidchenko *et al.* 2004) has implications in the long-term viability of natural conversion of deep water habitats on flooded Delta islands into shallow, tidal wetlands. The very low rates of sediment accretion on flooded Delta islands indicate it would take many years to convert the present-day habitats to intertidal elevations which has potentially serious implications for fish restoration (Nobriga and Chotkowski (2000) due to likely favorable conditions for non-salmonid fish species that can prey on juvenile salmon. Studies of the shallow water habitats at flooded Delta islands showed that striped bass and largemouth bass represented 88 percent of the individuals among 20 fish species sampled (Nobriga *et al.* 2003).

There have likely been significant adverse, unintended consequences of breaching levees in the Delta. There is a high probability that site-specific conditions at the breaches have resulted in hazards for juvenile anadromous fish through the creation of favorable predator habitats. The breaches have changed the tidal prisms in the Delta and can change the degree in which juvenile fish are advected back and forth with the tides (Figure 61; previously discussed). Additionally, many of the breaches were narrow which have created deep scour holes favoring predatory fish. Sport anglers are often seen fishing at these sites during flood or ebb tides. Breaching the levees at Liberty Island is an example (Figure 72 and 73). Recent acoustic-tagging of striped bass in this vicinity confirmed a high presence of striped bass (Figure 74, D. Vogel, unpub. data.)

The evidence appears to be clear that the increased tidal prism and advection of juvenile salmon into the area of Cache Slough, Prospect Island and Liberty Island resulting from maintaining Lower Liberty Island as proposed will likely cause ongoing significant adverse impacts to juvenile salmon.

CDWA 19
continued

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Increased Loss of Fresh Water

Absent from consideration is that surface water bodies and wetland vegetation result in increased consumptive use of fresh water when compared to farming as occurred on Lower Liberty in its pre-flooded conditions.

CDWA 20

Attached hereto is Table A-5 from DWR Bulletin 168, October 1978 which shows the annual Et values for various crops and for Riparian Vegetation and Water Surface. The Riparian Vegetation and Water Surface 67.5 inches can be compared to tomatoes 33.8 inches and alfalfa 46.0 inches. The increased fresh water loss is from 33.7 inches when compared to tomatoes and 21.5 when compared to alfalfa.

For the 4,308 acres in Lower Liberty this represents an increased loss of fresh water in the range of 7,719 to 12,098 acre ft. per year which is particularly significant in drier years.

The Division of Water Resources (predecessor to The Department of Water Resources) in the Sacramento - San Joaquin Water Supervisor's report for the year 1931 dated August 1932 and designated Bulletin 23 includes the results of studies of water consumption of tules and cat-tails. Attached hereto as Exhibit S is Table 69 from such report. Consumptive use for open water surface is shown as 4.91 acre feet per acre, tules at 9.63 acre feet per acre, and alfalfa at 3.51 acre feet per acre. To examine the relatively high consumptive use for tules the U.S. Department of Agriculture undertook a continuation of the study of consumptive use for asparagus, tules and cat-tails. Tables 74 and 75 from the report are attached as Exhibit T. The tables show an average of 14.63 acre feet per acre for cat-tails and 13.48 acre feet per acre for tules. Results from cat-tails and tules grown in tanks at Camp 3, King Island for 1931 are shown in Table 77 which is attached as Exhibit U. The results for normal sized tules was 8.0 acre feet per acre.

The impacts on the increased loss of fresh water from the proposed habitat restoration in the Delta are significant and require further analysis.

The Delta already has thousands of acres tidal wetlands like what has occurred on Lower Liberty and there is no justification for more.

Water Quality

Impacts of the proposed floodplain restoration in the Delta on salinity, methyl mercury and other water quality parameters requires a more complete analysis. The increase in tidal prism alone will induce greater salinity intrusion.

CDWA 21

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Damage to Adjoining Land and Levees

The exposure to surrounding area levees and lands from the increased fetch for wind waves and seepage could result in levee breaks and flooding resulting in soil erosion, damage to land, structures and services, injury to and death to people and animals. Such impacts are significant and unmitigated.

CDWA 22

PREDATOR CONTROL PROGRAMS FOR BLACK BASS AND STRIPED BASS ARE IN GENERAL OF UNCERTAIN BENEFIT AND COULD HAVE A SIGNIFICANT DETRIMENTAL IMPACT ON RECREATION AND ON THE SOURCE OF FOOD FOR AN IMPORTANT SEGMENT OF THE POPULATION

CDWA 23

The substantial decline in Striped Bass appears to parallel the decline in Delta Smelt and winter run salmon, and does not appear to correlate in any way with declines in fall run salmon even on the San Joaquin Tributaries. (See Exhibit L.) It is apparent that fish eat other fish however it is clear that Striped Bass, Delta Smelt and Salmon co-existed at relatively high populations until the late 1960's when exports from the Delta substantially increased.

Congress has specifically included Striped Bass in the CVPIA required restoration for doubling of the natural production over the 1967 to 1992 levels.

Prior to the start of the SWP in the Bulletin 76 report to the California Legislature in December 1960 the Department of Water Resources stated:

“The 50,000 acres of water surface and almost 1,000 miles of shore line in the Delta offer a vast and fascinating area with a great diversity of recreational opportunities. Fishing is the favorite pursuit and striped bass is the leading catch. Salmon, shad, black bass, catfish and sturgeon are also important in the sportsman's bag. (emphasis added). (See Exhibit B page 22.)

Today a notable portion of the population fishing in the Delta depends on their catch for food. Black Bass and Striped Bass are a significant part of their catch.

Such predators replace other predators and all take advantage of the physical conditions of the various waterways. Modification of such conditions in particular waterbodies may prove more effective than some method of predator control.

Additionally, improved public access and facilities for fishing at Clifton Court Forebay and other publicly owned terminal locations is a better way to address predation than electroshocking, trapping and other methods which eliminate recreational opportunity and a source of food.

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A far better approach is to restore water conditions to those existing in the 1960's when populations of fish appeared to be at acceptable and sustainable levels.

CDWA 23
continued

THE RPAs AND DEIS MISCHARACTERIZE THE DELTA AND REFLECT A BIAS IN FAVOR OF DELIVERIES TO CONTRACTORS

The RPAs characterize the Delta as being severely degraded over the past 150 years due to anthropogenic actions within its boundaries and in the surrounding watersheds. The Delta was reclaimed pursuant to the encouragement and direction of the laws of the United States and the State of California. Through the Arkansas Act of 1850 (sometimes referred to as the Swampland Act of 1850) the mosquito infested swamps and overflowed land in the Delta and other areas of the United States was conveyed to the States for reclamation and development. In furtherance of such objective the State conveyed the lands into private ownership. Such reclamation has enhanced not degraded the human environment, and the demonstration that reclamation and farming of the Delta islands has resulted in degradation of any kind has not been set forth.

CDWA 24

It is crystal clear that reclamation and farming of the Delta has resulted in the salvage of hundreds of thousands of acre feet of water per year by way of reduction in evaporative losses. (See above discussion and exhibits.) Water surface, cat-tails, tules and other wetland vegetation results in evaporative losses far greater than what occurs with the current use which is farming. The relevant period for fishery concerns appears to be the period since the late 1960s. Not the period prior to reclamation.

It should be recognized that most of the constituents of concern in Delta waters come from upstream and a great portion is due to SWP and CVP deliveries of water to contractors and the associated induced development.

SUGGESTED ALTERNATIVE 6

An additional alternative should be put forth to require the SWP and CVP to develop a plan of operation to meet all legal requirements, including HR 2828, the CVPIA and SWRCB D-1641 without "Temporary Urgency Changes" for a recurrence of at least the droughts experienced in 1929-1934 and 1987-1992 and determine the amounts of surplus water available for delivery to contractors in each of such years.

CDWA 25

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With such determination a proper comparison can then be made with the addition of the RPAs to determine impacts to the human environment.

CDWA 25
continued

Very truly yours



Dante John Nomellini, Sr.
Manager and Co-Counsel

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1 **1C.1.1.1 Attachments to Comments from Central Delta Water Agency**

2 Attachments to the Central Delta Water Agency Comment letter are included in
3 Attachment 1C.1 located at the end of Appendix 1C.

4 **1C.1.1.2 Responses to Comments from Central Delta Water Agency**

5 **CDWA 1:** The purpose of the action, as described in Chapter 2, Purpose and
6 Need, of the EIS, is not biased because it considers the purposes for which the
7 CVP was authorized, and as amended by Central Valley Project Improvement Act
8 (CVPIA), as well as the regulatory limitations on CVP operations, including
9 applicable state and federal laws and water rights.

10 **CDWA 2:** The alternatives considered in the EIS deliver water do not deliver full
11 contract amounts to CVP and SWP water service contractors in most years. The
12 CVP and SWP operations assume that water is delivered to water rights holders
13 and to meet regulatory requirements prior to delivery to CVP and SWP water
14 contractors. Water deliveries would average about 56 to 69 percent of full
15 contract amounts under long-term average annual water conditions, and 22 to 30
16 percent of full contract amounts under critical dry year water conditions as shown
17 in in Tables C-19 and C-20 in Appendix 5A, Section C, CalSim II and DSM2
18 Model Results (see Table 5A.B.1 in Appendix 5A, Section B, CalSim II and
19 DSM2 Modeling Simulations and Assumptions, for full contract amounts).

20 **CDWA 3:** The EIS compares conditions under a range of CVP and SWP water
21 deliveries, including Delta exports, and related Delta flow scenarios. The
22 alternatives were developed to continue to meet the CVP and SWP authorized
23 purposes and regulatory requirements related to the CVP and SWP operations, as
24 described in Chapter 2.

25 **CDWA 4:** The comments related to the hydrology that occurred between 1922
26 and 2003 is consistent with the assumptions used in the hydrologic analysis
27 included in the EIS. Additional details related to the recent drought conditions
28 and CVP and SWP operations has been added to the Affected Environment
29 section of Chapter 5, Surface Water Resources and Water Supplies, of the EIS.

30 **CDWA 5:** The Delta Reform Act requires actions by state and local agencies that
31 are within the legal definition of a covered action to be consistent with the
32 policies included in the Delta Stewardship Council’s 2013 Delta Plan (see
33 Appendix 4A, Federal and State Policies and Regulations). As described in the
34 2013 Delta Plan, the current regulatory provisions of the Delta Plan, including the
35 consistency review and appeals process, apply to only covered actions by state
36 and local agencies. The Delta Plan also discusses that the Delta Stewardship
37 Council is working with federal agencies to explore opportunities for federal
38 participation in the Delta Plan implementation efforts.

39 **CDWA 6:** The Bay-Delta Conservation Plan (BDCP) is identified in the EIS as a
40 potential future projects in the cumulative effects analysis. The BDCP, including
41 the WaterFix alternative, is undergoing separate project development and separate
42 environmental documentation concurrent with this EIS process. The results of

1 that analysis are not known at this time; and therefore, are only included as a
2 cumulative effects program.

3 **CDWA 7:** The analysis in the EIS includes a range of hydrologic conditions
4 projected to occur with a projected 2030 level of demand and regulatory
5 requirements (including implementation of the U.S. Fish and Wildlife Service
6 (USFWS) and National Marine Fisheries Service (NMFS) Biological Opinions
7 (BOs) which are consistent with the CVPIA Section 3406(b)(1) to provide
8 sustainable populations of anadromous fish through natural production in Central
9 Valley rivers and streams at levels not less than twice the average levels attained
10 during the period of 1967-1991), climate change and sea level rise, as described in
11 Appendix 5A, Section A, CalSim II and DSM2 Modeling. It is anticipated, as
12 described in Section 5.4.2 of Chapter 5, Surface Water Resources and Water
13 Supplies, that the projected CVP and SWP water deliveries will be less in 2030
14 than under existing conditions due to further use of water rights, climate change,
15 and sea level rise. It is also anticipated that some existing users of CVP and SWP
16 water supplies will be able to increase use of alternative water supplies.
17 However, other users will not be able to access alternative water supplies, such as
18 ocean desalination facilities, as described in Chapter 5. These conditions would
19 occur under the No Action Alternative, Second Basis of Comparison, and
20 Alternatives 1 through 5. Under each of the alternatives considered in this EIS, as
21 discussed in the response to Comment CDWA 2, full contract deliveries to CVP
22 and SWP water contractors is not anticipated in the future.

23 **CDWA 8:** Reclamation operates to the federal and state regulatory requirements,
24 include the State Water Resources Control Board Decision 1641 which was
25 deemed to be adequate for the protection of beneficial uses in the Delta. None of
26 the alternatives considered in this EIS include a new conveyance facility.

27 **CDWA 9:** As discussed in response to Comment CDWA 2, water deliveries to
28 the CVP and SWP water contractors would average about 56 to 69 percent of full
29 contract amounts under long-term average annual water conditions, and 22 to 30
30 percent of full contract amounts under critical dry year water conditions as shown
31 in in Tables C-19 and C-20 in Appendix 5A, Section C, CalSim II and DSM2
32 Model Results (see Table 5A.B.1 in Appendix 5A, Section B, CalSim II and
33 DSM2 Modeling Simulations and Assumptions, for full contract amounts).
34 Annual exports under each of the alternatives and Second Basis of Comparison
35 are presented in Table C-18 of Appendix 5A, Section C of the EIS. The model
36 results are presented for monthly exceedances. For example, under Alternative 5,
37 monthly CVP and SWP exports may be as low as 7,000 acre-feet/month during
38 May 10 percent of the time because at this time Old and Middle River criteria
39 would be positive. Similarly, monthly CVP and SWP exports may be as low as
40 80,000 acre-feet/month during May 10 percent of the time under Alternative 1
41 which does not include requirements for Old and Middle River flows.

42 **CDWA 10:** Reclamation operates in accordance with federal and state regulatory
43 requirements that considers upstream and Delta water quality and flow
44 requirements.

- 1 **CDWA 11:** The models used in the EIS to analyze the alternatives assume
2 compliance with federal and state regulatory water quality requirements, as
3 described in Appendix 5A, Section A, CalSim II and DSM2 Modeling. The
4 purpose and need for the EIS includes a provision to enable Reclamation and DWR
5 to satisfy their contractual obligations to the fullest extent possible in accordance with
6 the authorized purposes of the CVP and SWP, as well as the regulatory limitations
7 on CVP and SWP operations, including applicable state and federal laws and
8 water rights. None of the alternatives considered in this EIS include a new
9 conveyance facility.
- 10 **CDWA 12:** As described in Chapter 6, Surface Water Quality, it is assumed that
11 dischargers will be in compliance with the existing and planned Total Maximum
12 Daily Load objectives and that programs such as the Grasslands Bypass Project
13 would be completed by 2030. Therefore, water quality in the San Joaquin River
14 would be similar under all of the alternatives as compared to the No Action
15 Alternative and Second Basis of Comparison.
- 16 **CDWA 13:** The models used in the EIS to analyze the alternatives assume
17 compliance with federal and state regulatory water quality requirements, as
18 described in Appendix 5A, Section A, CalSim II and DSM2 Modeling.
- 19 **CDWA 14:** The study referred to in this comment was published in March 2014
20 as the *Central Valley Project Integrated Resource Plan*.
- 21 **CDWA 15:** The CVP water cannot purchase water for long-term water supplies
22 due to the Anti-Deficiency Act. In addition, purchasing water for long-term water
23 supplies would be speculative for large amounts of water.
- 24 **CDWA 16:** The purpose and need for the EIS includes a provision to enable
25 Reclamation and DWR to satisfy their contractual obligations to the fullest extent
26 possible in accordance with the authorized purposes of the CVP and SWP, as well as
27 the regulatory limitations on CVP and SWP operations, including applicable state
28 and federal laws and water rights.
- 29 **CDWA 17:** The No Action Alternative, Second Basis of Comparison, and
30 Alternatives 1 through 5 include tidal wetlands projects that have been initiated or
31 completed, including Suisun Marsh Habitat Management, Preservation, and
32 Restoration Plan; Yolo Ranch; and Northern Liberty Island Fish Restoration
33 Project, as discussed in Sections 3.3.1.2 and 3.3.1.3.4 of Chapter 3, Description of
34 Alternatives. The No Action Alternative, Second Basis of Comparison, and
35 Alternatives 1 through 5 also includes floodplain habitat to be implemented in the
36 Yolo Bypass Salmonid Habitat Restoration and Fish Passage Implementation
37 Plan, as discussed in Section 3.3.1.2 of Chapter 3.
- 38 **CDWA 18:** Alternative 4 includes provisions to not implement the U.S. Army
39 Corps of Engineers requirements to remove vegetation from levees. This would
40 lead to a larger extent of shaded riverine aquatic habitat as compared to conditions
41 under No Action Alternative; Alternatives 1, 2, 3, and 5; and Second Basis of
42 Comparison which would benefit terrestrial and aquatic resources.

1 **CDWA 19:** As described in the response to Comment CDWA 17, the No Action
2 Alternative, Second Basis of Comparison, and Alternatives 1 through 5 include
3 tidal wetlands projects that have been initiated or completed, including Suisun
4 Marsh Habitat Management, Preservation, and Restoration Plan; Yolo Ranch; and
5 Northern Liberty Island Fish Restoration Project which have completed
6 environmental documentation, as discussed in Chapter 3. These areas do not
7 specifically include projects on Lower Liberty Island.

8 **CDWA 20:** The areas for additional tidal wetlands considered under the No
9 Action Alternative, Second Basis of Comparison, and Alternatives 1 through 5 do
10 not specifically include projects on Lower Liberty Island.

11 **CDWA 21:** The EIS assumes that the No Action Alternative, Second Basis of
12 Comparison, and Alternatives 1 through 5 would include similar tidal wetlands
13 and floodplain habitat because these programs would have occurred with or
14 without implementation of the 2008 USFWS BO and 2009 NMFS BO; and
15 therefore, water quality changes would be similar under all of the alternatives.
16 The environmental documentation for ongoing tidal wetland restoration projects
17 indicate that the projects would not result in substantial changes in Delta water
18 quality primarily because of the locations of multiple, relatively small restored
19 areas located in the Suisun Marsh and Cache Slough areas. With respect to
20 potential changes in mercury due to implementation of tidal wetland and
21 floodplain restoration projects by 2030, it is assumed that the ongoing State Water
22 Resources Control Board and Regional Water Quality Control Boards Total
23 Maximum Daily Load (TMDL) programs will be fully implemented before 2030
24 and that the restoration plans will be compliant with the mandated TMDL
25 requirements.

26 **CDWA 22:** The currently identified tidal wetlands restoration projects considered
27 to be completed under the No Action Alternative, Second Basis of Comparison,
28 and Alternatives 1 through 5 with or without implementation of the 2008 USFWS
29 BO and 2009 NMFS BO would be located within Suisun Marsh and the Cache
30 Slough area. Environmental documentation for several of the larger projects
31 considered potential for impacts due to wind fetch and included design measures
32 to protect adjacent leveed lands and uplands, including the Lower Yolo
33 Restoration Project described in the EIS.

34 **CDWA 23:** Alternatives 3 and 4 include increased bag limits for bass as a
35 measure to reduce the populations of these predatory fish. The alternatives do not
36 include electroshocking or trapping. As discussed in the response to Comment
37 CDWA 8, Reclamation operates to the federal and state regulatory requirements,
38 include the State Water Resources Control Board Decision 1641 which was
39 deemed to be adequate for the protection of beneficial uses in the Delta.

40 **CDWA 24:** As described in the affected environment section of Chapter 6,
41 Surface Water Quality, constituents of concern in the Delta waters are influenced
42 by sources located both upstream and within the Delta.

1 **CDWA 25:** The alternatives considered in the EIS were analyzed in a wide range
2 of hydrologic conditions, including drought conditions in 1927 through 1934 and
3 1987 through 1992. The CalSim II model assumptions include assumptions for
4 compliance with federal and state regulatory requirements. The model results
5 indicate that CVP and SWP water deliveries under critical dry periods is minimal.
6 For example, water deliveries to CVP and SWP water contractors (not water
7 rights holders, settlement, or exchange contractors) would average about 22 to
8 30 percent of full contract amounts under critical dry year water conditions as
9 shown in Tables C-19 and C-20 in Appendix 5A, Section C, CalSim II and DSM2
10 Model Results (see Table 5A.B.1 in Appendix 5A, Section B, CalSim II and
11 DSM2 Modeling Simulations and Assumptions, for full contract amounts). The
12 CalSim II model does not represent historical annual responses to extreme
13 conditions by Reclamation, DWR, and other agencies to reduce adverse
14 conditions to a wide range of water users, as described in Section 5.3 of
15 Chapter 5, Surface Water Resources and Water Supplies, in the Final EIS.

1 **1C.1.2 Central Delta Water Agency and South Delta Water Agency**

9/25/2015

DEPARTMENT OF THE INTERIOR Mail - Request for Extension of Comment Period



Nelson, Benjamin <bcnelson@usbr.gov>

Request for Extension of Comment Period

1 message

S. Dean Ruiz <dean@hprlaw.net>

Fri, Sep 25, 2015 at 12:59 PM

To: "bcnelson@usbr.gov" <bcnelson@usbr.gov>

Cc: "Dante Nomellini, Sr. (ngmplcs@pacbell.net)" <ngmplcs@pacbell.net>, "John Herrick (Jherrlaw@aol.com)" <Jherrlaw@aol.com>, "Dan Nomellini Jr (dantejr@pacbell.net)" <dantejr@pacbell.net>

CDWA
SDWA 1

Dear Mr. Nelson:

I am attorney for both the Central and South Delta Water Agencies. The Agencies request an extension of the comment period for the Coordinated Long-Term Operation of the Central Valley Project and State Water Project Draft EIS. The issues contained within the EIS are highly complicated and involved. This is an extremely busy time in the water field. Many of us are also allocating our limited resources and time reviewing the DEIS/DEIR for the California Water Fix. An extension of the comment period is clearly in the best interest of the public.

I appreciate your consideration of this request.

Sincerely,

S. Dean Ruiz, Esq.

HARRIS, PERISHO & RUIZ

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9/25/2015

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1 **1C.1.2.1 Responses to Comments from Central Delta Water Agency and**
2 **South Delta Water Agency**
3 **CDWA and SDWA 1:** At the time the request for extension of the public review
4 period was submitted, the Amended Judgement dated September 30, 2014 issued
5 by the United States District Court for the Eastern District of California (District
6 Court) in the *Consolidated Delta Smelt Cases* required Reclamation to issue a
7 Record of Decision by no later than December 1, 2015. Due to this requirement,
8 Reclamation did not have sufficient time to extend the public review period. On
9 October 9, 2015, the District Court granted a very short time extension to address
10 comments received during the public review period, and requires Reclamation to
11 issue a Record of Decision on or before January 12, 2016. This current court
12 ordered schedule does not provide sufficient time for Reclamation to extend the
13 public review period.