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June 13, 2012

Via email to deltaplancomments@deltacouncil.ca.gov

Delta Stewardship Council
980 Ninth Street, Suite 1500
Sacramento, CA 95814

Re: Final Staff Draft Delta Plan
May 14, 2012

Dear Ladies and Gentlemen:

These comments are supplemental to our previous comments submitted to you on February 2, 2012 to the Delta Plan Draft Environmental Impact Report which we hereby incorporate by reference.

Disregard of the State Obligation For Reclamation of Swamp and Overflowed Lands in the Delta

The Draft Plan fails to recognize the reclamation obligation as to 1) prioritization of investment in levees, 2) so-called restoration of habitat and 3) disregard of priority for water supply and salinity control for the Delta.

Construction of levees along and surrounding the Swamp and Overflowed lands was pursuant to the efforts of the State of California to reclaim the Swamp and Overflowed Lands granted to it by the United States. Such lands were acquired by the State of California from the Federal Government by virtue of the Act of Congress of September 28, 1850 (9 U.S. Stats. at Large, p. 519), generally known as the Arkansas Act. In accepting the grant from the Federal Government the State is bound to carry out in good faith the objects for which the grant was made and thereby assumed an obligation to reclaim the lands.

> "The object of the Federal Government in making this munificent donation to the general States was to promote the speedy reclamation of the lands and thus invite to them population and settlement, thereby opening new fields for industry and increasing the general prosperity." See Kimball v. Reclamation Fund Commissioners (1873) 45 Cal. 344, 360.

The State patented such lands into private ownership conditioned on efforts towards reclamation. Swampland Districts (Reclamation Districts) organized pursuant to State law were typically the mechanism whereby such reclamation efforts were accomplished.

The local governmental entities and interests built the levees for the primary purpose of draining the Delta lands and tracts so that they could be put to productive use which in many cases was farming. The original non-project levees were in a number of cases later improved as a part of a federal project and are now "project levees".

Conversion of Swamp and Overflowed land to wetlands and particularly the breaching or removal of levees for such purpose would appear to be in violation of the State obligations to reclaim, invite to them population of settlement and thereby open new fields for industry and increased general prosperity.

Disregard of the Water Right and Statutory Priorities for the Delta and Other Areas of Origin Including Maintenance of the Delta Common Pool

The peripheral canal/tunnel which is the focus of the current effort is the isolated connection of the Sacramento River to the CVP and SWP export pumping facilities near Tracy intended to serve areas south of the Delta. Attachment A to these comments is a copy of the Department of Water Resources December 1960 Bulletin No. 76 - Report to the California State Legislature on the Delta Water Facilities which was transmitted to Governor Edmund G. Brown by letter dated December 30, 1960. At page 44 it is explained that:

> "Under any of the foregoing projects, water of very good quality would continue to be supplied to about 90 percent of the Delta lowlands through existing facilities. It is estimated that the mineral quality of the supplies would generally range between about 15 to 80 parts of chlorides and between 100 and 350 parts of total dissolved solids per million parts water. The quality of water in the southern portion of the Delta would be improved." (emphasis added.)

The maintenance of the "common pool" as contemplated in the Delta Protection Action - Water Code Section 12200 et seq. (which is set forth in full on page 6 of the report) was an essential feature of all alternatives. Water Code Section 12205 specifically provides:

> **"§ 12205. Storage of Water; integration of operation and management of released 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.)"

The objectives of the act include the provision of salinity control for the Delta and ". . . maintenance of an adequate water supply in the Delta sufficient to maintain and expand agriculture, industry, urban and recreational development in the Delta areas as set forth in Section 12220, chapter 2, of this part, and to provide a common source of fresh water for export . . ." (See WC 12201) (emphasis added.)

The report at page 10 explains:

> "Surplus water from the northern portion of the Central Valley and north coastal rivers will be conveyed by the natural river system to the Delta, where it must be transferred through Delta channels to export pumping plants without undue loss or deterioration in quality. Aqueducts will convey the water from the Delta to off-stream storage and use in areas of deficiency to the south and west."

The report also confirmed the intent of WC 12200 et seq. at page 12:

> "Further increase in water use in areas tributary to the Delta will worsen the salinity incursion problem and complicate the already complex water rights situation. To maintain and expand the economy of the Delta, it will be necessary to provide an adequate supply of good quality water and protect the lands from the effects of salinity incursion. 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.)

The Delta Protection Act WC 12200 et seq. enacted in 1959 remains the law and the limitation of Delta Stewardship Council actions contrary thereto is confirmed in Water Code 85031.

The original planning documents for the SWP were not premised on a peripheral canal but rather on maintaining a common pool of water for 90% of the Delta lowlands and developing water storage projects in the north coast so as to provide 5 million acre feet of water per year for the State Water Project by the year 2000. (See Attachment A - December 1960 Bulletin No. 76 Pages 10 through 13).

The peripheral canal (isolated conveyance) was proposed after the planning and passage of the California Water Resources Development Bond Act (effective November 8, 1960). In the mid to late 1960s the Peripheral Canal proposal was introduced to the public. In contrast to the current proposals, the peripheral canal at that time included numerous release structures to maintain and improve Delta water quality. The current proposals have no outlets and will clearly result in degradation of Delta water quality.

Attachments B and C to this submittal are the CDWA letters to the Delta Stewardship Council dated August 3, 2010 and January 28, 2011 which more specifically address the lack of water supply for the SWP and the planning basis which was the 1928 through 1934 drought.

The year 2000 has passed and without the 5 million acre feet of north coast water the State Water Project as originally planned has no water supply. The approximately 4.25 million acre of SWP contract entitlements cannot be met with surplus waters as originally planned yet the decision has already been made to provide an isolated conveyance connecting the Sacramento River to the export pumping facilities near Tracy. A canal without a water supply can only mean that water which was planned for other uses is now planned for delivery to export contractors. This is clearly contrary to the promises and law and should not be represented as consistent with the original plans.

The Draft Plan interprets "co-equal goals" to favor exports from the Delta and disregards the mandates in Water Code §85031. The Delta and other areas of origin are part of California and providing a "More reliable water supply for California" includes a more reliable water supply for the Delta and such other areas of origin. Reliability must include recognition of water right and statutory right priorities. The interpretation of the "coequal goals" as to require a more reliable supply only for the SWP and CVP exports from the Delta to the detriment of the Delta is incorrect. Water Code §85031 makes it crystal clear that the statutory protections for "areas of origin" including the Delta are not to be diminished, impaired or otherwise affected in any manner.

Water Code §85031(a) provides as follows:

> **"§85031. Effect on existing water rights; diversion and conveyance of water not to deem area immediately adjacent or capable of being conveniently supplied; applicability of other water Code provisions; effect on existing legal protections**
>
> (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)

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 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.)*

§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.)*"

§ 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 Bulletin 76 (Attachment A) which is 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.)

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:

> "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 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."

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

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 reliability of water supply for California is enhanced by improving Delta levees and assuring that levee breaks be immediately repaired and flooded areas dewatered. The levee systems are critical to the efficient repulsion of salinity intrusion and avoidance of the evaporative losses from flooded areas and swampland which are significantly higher than the consumptive use resulting from typical Delta farming.

The reliability of water supply must recognize the real availability of water under differing climatic conditions. If the focus is on the reliability of SWP and CVP exports from the Delta there are three critical elements: 1) the natural hydrology of the watersheds from which the water is exported; 2) the future water needs within the watersheds entitled to priority; and 3) the needs for outflow from the Delta to provide salinity control and environmental flows. A clear determination of the realistic availability of surplus water for export will help define what is a reliable supply.

It is impossible to make reliable what nature does not provide. The capability of carrying over wet period flows for delivery in drier years is dependent upon the capacity to store water and the restraint exercised in operating such storage.

The planning for the SWP was dependent upon major water development projects in North Coast watersheds to supplement flows into the Delta of 5 million acre feet per year by the year 2000. These supplemental flows were needed to meet the approx. 4.25 million acre feet of SWP contract entitlements as well as other project responsibilities such as salinity control for the Delta. The failure to develop the water supply from the North Coast could logically lead one to conclude that the SWP has no water supply for export from the Delta that could be made more reliable until such development takes place.

The quantity of water available for supply that can be made more reliable will vary with the hydrology, the needs within the watersheds of origin and the outflow for salinity control and environmental purposes.

A subject of ongoing debate and evaluation is the amount of outflow required to sustain the environment of the Bay Delta Estuary and its contribution to the ecology of the Pacific Ocean. Until the required outflow is determined and by experience demonstrated to successfully restore and sustain the environment, reliability for exports from the Delta can not be achieved. Adaptive management will simply leave supply from the Delta unreliable.

An examination of how well fish within Bay Delta Estuary were doing as related to exports suggests that exports from the Delta at recent levels cannot be made more reliable and

measures outside the Delta watershed are necessary. (See attached charts showing exports from the Delta watershed and fish populations). Corresponding to the level of exports are the outflows from the Delta which maintain conditions favorable to fish in the western Delta and Bays. It appears that export levels prior to 1965 reduced by the effects on climate change and future needs within the watershed likely represent the average level of exports which could be made more reliable. This appears to be an average of about 1.5 million acre feet. Typically more should be available in wet years and less in drier years. Eventually the needs within the watersheds will likely require the entire supply from the Delta watershed.

A Delta Plan which suggests that the primary zone of the Delta should evolve into an inland bay or combination of bay and tidal marsh or some other negative condition is inconsistent with the legislative mandate of "Coequal goals". It is difficult to see how "Coequal goals" can even arguably be met with proposals which separate the Sacramento River flows to the export pumps from the Delta pool or proposals for isolated conveyance facilities with no outlets for release into the Delta channels or proposals which fail to provide Delta users with a substitute water supply for that provided by salinity control or proposals which fail to meet the non-degradation requirements in State and Federal law.

An evolving Delta consistent with Water Code §12201 is one which maintains and expands agriculture, industry, urban and recreational development. The evolution is to be positive not negative. The Sacramento-San Joaquin Delta Reform Act of 2009 cannot be properly interpreted to require harm to the future prosperity of the Delta to foster development in southern deserts or to convert water contracts for surplus water into firm supply.

Coequal goals can be advanced by the following:

1) Improved Delta levees to provide as a minimum for all levees the PL84-99 agricultural levee standard with a minimum 22 ft. levee crown.

2) Improved levees to a higher level of protection for Delta communities and other areas thought to be of particular concern.

3) Providing 100 million dollars to fund local first response to floodfights, including immediate closure of levee breaks and dewatering of flooded areas. Local control of such funding will help insulate the emergency response from the impact of the conflict of interest due to DWR's commitment to the export of water from the Delta.

4) Establish and maintain stockpiles of sheet piling and rock for immediate response to dry period levee failures resulting in increased salinity intrusion. In such event the plan for water supply reliability would be to install temporary channel closures and close levee breaks to

reduce salinity intrusion into the interior Delta thus facilitating the timely restoration of favorable water quality for local and export uses.

5) Improve channel capacity in the North and South forks of the Mokelumne River and in the south Delta to reduce channel restrictions, reduce the velocity of in channel water flow velocity and increase the in-channel volumes of water. This will improve water export, flood protection and reduce impacts to fish.

6) Install permanent barriers to replace the temporary south Delta barriers. Add low lift pumps where needed to provide circulation for maintenance of water quality.

7) Improve fish screens at the SWP and CVP (Tracy) export facilities and consider incorporation of features from the Delta corridor proposal to bypass San Joaquin River Flows past the export intake facilities.

8) Provide greater spring and summer Delta outflows which flush the Delta thereby improving water quality for local and export use, maintain conditions favorable for fish in Suisun Bay and reduce the presence of species of concern in the vicinity of the export pumps.

9) Operate export pumps with great sensitivity to the actual presence of fish species of concern. Improved spring and summer Delta inflow and outflow and reduced exports in drier periods (to correspond to the availability of surplus water) should greatly reduce the adverse impacts to fish.

10) Assist urban communities receiving water exported from the SWP and CVP (Tracy) facilities to achieve greater self-sufficiency and reduced reliance on exports from the Delta. Such a reduced reliance could increase the water supply for other uses.

11) A clear determination of the realistic availability or lack thereof of surplus water during the various year types including drought periods such as 1929-1934 and 1987-1992 should establish the reliable supply which would be available for export.

12) Support local water development projects which could add to the overall water supply reliability in the watersheds of origin including the Delta and throughout the State. Any surplus water resulting from such efforts will be available for use in other watersheds.

Public Trust Interests Are Not Adequately Addressed And Are Improperly Compromised

The plan fails to adequately address and protect the public trust interests in the San Francisco Bay, Sacramento and San Joaquin Delta and its tributaries ("Bay-Delta"). The public trust is "traditionally defined in terms of navigation, commerce and fisheries." Marks v. Whitney (1971) 6 Cal.3d 251, 259. The state has a "sovereign power and duty to exercise continued

supervision over the trust." National Audubon Society v. Superior Court (1983) 33 Cal.3d 419, 437. "[P]arties acquiring rights in trust property generally hold those rights subject to the trust, and can assert no vested right to use those rights in a manner harmful to the trust." Id. In National Audubon the court held that the state's power "extends to the revocation of previously granted rights or the enforcement of the trust against property long thought to be free of the trust." Id., 440.

Uses of public trust assets must "relate to uses and activities in the vicinity of the lake, stream or tidal reach at issue[.]" Id. Public trust protections may not be abrogated or compromised since "no one could contend that the state could grant tidelands free of the trust merely because the grant served some public purpose, such as increasing tax revenues [or supplying water outside the vicinity of the Bay-Delta], or because the grantee might put the property to a commercial use." Id. While the co-equal goals may have some public purpose, to the extent of supplying water outside the Bay-Delta vicinity they are subservient to the public trust needs of the Bay-Delta vicinity. The plan should address this issue head-on, rather than side stepping the responsibility to protect the public trust.

Most importantly, the public trust" [I]s an affirmation of the duty of the state to protect the people's common heritage of streams, lakes, marshbanks and tidelands, surrendering that right of protection only in rare cases when the abandonment of that right is consistent with the purposes of the trust." Id.

The plan fails to establish, describe, provide for, or analyze any baseline public trust information, protections, needs, uses, or proposed future uses and protections. Moreover, in the name of co-equal goals, the plan appears to improperly compromise and subordinate public trust protection, to allow improper use of public trust resources outside the vicinity of the Bay-Delta. The public trust must be protected at the outset, before any application of the co-equal goals and any use of public trust resources outside the Bay-Delta vicinity.

While the plan notes that the State Water Resources Control Board ("SWRCB") and the U.S. Fish and Wildlife Agency have public trust responsibilities in the Bay-Delta, the Council does not acknowledge its own responsibility to protect the public trust, much less describe what is needed to protect the public trust. In a statement fairly characterized as meaningless double-talk, the plan states:

> "Regions that use water from the Delta watershed will reduce their reliance on this water for reasonable and beneficial uses, and improve regional self-reliance, consistent with existing water rights and the State's area of origin statutes and Reasonable Use and Public Trust Doctrines.

- This will be done by improving, investing in, and implementing projects and programs that increase water conservation and efficiency, increase water recycling and use of advanced water technologies, expand storage, improve groundwater management, and enhance regional coordination of local and regional water supply development efforts."

The statement that reduced reliance will be consistent with the public trust doctrines is without any support and is obtuse, when it is observed that the use outside the vicinity was already subordinate and contrary to the public trust uses within the Bay-Delta for commerce, navigation, fisheries, and other public trust purposes. At the outset, those uses within the Bay-Delta vicinity need to be protected.

The plan apparently concedes responsibility to protect the public trust to the SWRCB, but the Council cannot avoid its own responsibility and accountability for protection of the public trust. The Council should accept its responsibility and account for the full protection of public trust uses within the Bay-Delta vicinity.

The plan makes another oblique reference to the public trust:

> "It is important to note that storage can increase the benefits of conveyance improvements, and conveyance improvements may be limited without the benefit of added storage. Improved operational flexibility will result in more reliable water supplies for all beneficial uses from year to year, and when managed for multiple benefits, can also ensure adequate flows to meet public trust needs, including the protection of the Delta ecosystem."

The Council has it backwards. The public trust in the Bay-Delta vicinity must be protected first. The Council's statement contributes nothing to the protection of public trust uses in the Bay-Delta vicinity. More detail and substance is required to allow for meaningful opportunity for review and comment. Without more detail, this is merely an empty statement worth less than a peppercorn.

The Delta Reform Act clearly states in Water Code section 85032 that the act does not affect, among other things, "The application of the public trust doctrine." Sub-paragraph (f). This does not mean that the Council can rely on others and avoid responsibility to protect the public trust. The Council cannot carry out its sovereign duty to protect what it does not specifically assess or quantify, nor can the public assess, review, and comment upon a plan which is devoid of the requisite baseline data and any plan for the protection of the public trust.

In the name of co-equal goals, the Council has improperly compromised its responsibility to protect commerce, navigation, fishery, and other public trust uses in the Bay-Delta vicinity, for use outside the Bay-Delta vicinity. This is a clear breach of the public trust and the Council's fiduciary duty to protect trust assets. The Council needs to fully address the public trust before moving forward.

The Emphasis on So-called Restoration of Habitat in the Delta Is Misplaced

Breaching and setting back levees and otherwise converting productive lands in the Delta to create habitat to justify a take permit for continued export of water is purely and simply a redirected impact where the export areas receive the benefit and the Delta the detriment.

The detriments include:

1) Loss of property tax revenue

2) Probable loss of special district assessment revenue

3) Loss of employment opportunity

4) Loss of future economic benefits

5) Interference with adjoining agricultural activities due to restrictions on pesticide applications

6) Propagation of disease carrying vectors such as mosquitos

7) Propagation of other pests including noxious weeds

8) Seepage into adjoining lands and levees

9) In the case of flooding lands otherwise protected by levees the generation of wind waves that could result in significant impacts to surrounding island levees

Breaching and setting back levees to restore wetlands on Swamp and Overflowed lands would be in direct conflict with the State's obligation to reclaim for productive use as addressed above.

In any event, the need for eco-system restoration should be directed at fish. Attachment D includes graphs of fish populations, excerpts from the State Water Resources Control Board decision D1485 (1978) and a graph showing SWP and CVP exports from the Delta. It is interesting to note that striped bass and salmon historically coexisted at relatively high

populations at lower export levels. In 1978 the State Water Resources Control Board determined that:

> "To provide full mitigation of project impacts on all fishery species now would require the virtual shutting down of the project export pumps."
>
> and
>
> "Full protection of Suisun Marsh now could be accomplished only by requiring up to 2 million acre-feet of freshwater outflow in dry and critical years in addition to that required to meet other standards."

Neither the shutting down of exports nor the provision of the 2 million acre-feet of additional outflow occurred while exports continued to increase. This information alone points to exports and outflow and not wetland habitat in the Delta as critical to restoration.

An examination of the fish population graphs indicates that restoration of the ecosystem for fish is not likely tied to 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.

"By 1930 all but minor areas of the swampland had been leveed and were in production." (See page 8 of December 1960 Bulletin 76 - Attachment A) 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.

The focus on conversion of Delta land to habitat 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 egrets, herons, cormorants, gulls, white pelicans and the like needs further analysis. The limited study showing a picture of larger salmon smolts raised for a time in a wetland versus smaller smolts raised in the channel is sometimes cited as the evidence that shallow seasonal wetland in the Delta would be a benefit. The study monitored caged smolts in the channel where the fish must constantly swim against the current and compared them 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 or seek areas of the channel where the velocity is lower.

Levee setbacks and breaching of levees in the Delta are costly and in most cases can increase flood risk in adjoining areas.

Adaptive management is suggested as the solution to address uncertainty with regard to the cause of declines in fish populations. 2011 was a year of ample water flows such that both fish and exports appeared to benefit. Adaptive management should be applied to the SWP and CVP operations so as to restrict exports and reestablish flows to the levels where it is clear that fish prospered. If after fish populations are restored, SWP and CVP diversions to storage and exports can be increased in appropriate years and at appropriate times. If it is apparent that fish do not rebound with flow then exports limited to surplus waters can be increased so long as there is no related detriment.

The plan treats all users of water the same and ignores the obligations and priorities established by law.

The SWP and CVP must be required to meet their respective obligations prior to burdens being shifted onto other water users.

In the case of Goodman v. County of Riverside (1983) 140 Cal.App. 3d 900 the court at page 906 included a footnote which included the following press releases as confirmation that the contractors would pay for the cost of the entire project.

> "[3]Alan Cranston, then State Controller, noted in a press release: '"As additional security for the bonds, and to prevent a drain on the General Fund in case of deficiency, the local contracting agencies will have ad valorem taxing power over and above the cost of water which the user will pay. [¶] Local agencies will therefore be able to meet their commitments to the State even if revenues from local sales of water are not sufficient for this purpose. [¶] Through this procedure, the beneficiaries of the Water Plan become the financial keystone and support rather than the General Fund and the general taxpayer."'
>
> Governor Pat Brown's press comments at the time are also informative:
>
> 'Governor, what is your answer to people who say, "I don't want to pay for somebody else's water." Like San Franciscans. "I have already paid for one water project. Why should I be compelled to buy another?"
>
> 'GOVERNOR BROWN: Well, they won't. The plan itself is completely self-supporting. The law provides that the *contracts* have to provide for the repayment of the cost of the *entire* Project. That's the real answer to it.' (Italics added.)"

The cost includes not only costs for facilities, but costs for mitigation of project impacts and costs of meeting affirmative obligations such as for provision of salinity control for the Delta.

The obvious project-caused impacts related to salinity control are:

1) The salinity intrusion from the Bay induced by draw down of the export pumping facilities sometimes referred to as reversed flows.

2) The salinity intrusion from the Bay induced by upstream diversions of natural flow to fill project reservoirs and serve project customers. There are also project induced diversions which are diversions of natural flow which would not have occurred but for the projects.

3) The salinity entering the Delta by way of the San Joaquin River which is the return of salts included in the water exported from Delta together with the latent salts leached from the west side soils.

4) Reduction of flushing flows which prior to the projects would freshen the Delta pool which acts like a reservoir providing a fresh water supply for in Delta use long after fresh water inflow had diminished.

5) The need for augmented spring flows and other flow-related requirements which shift flow from the periods when salinity control is needed and which are needed to mitigate fishery-related impacts such as those caused by the damming of the rivers thereby destroying or blocking passage to natural spawning areas, reversing the in-Delta flows thereby interfering with fish migration and drawing fish to the huge pumping facilities of the SWP and CVP, dislocating and killing fish at the SWP and CVP screening and pumping facilities, dislocating the ecologically important mixing zone between fresh and salt waters from the natural location in Suisun Bay to areas farther up in the Delta where tidal marsh habitat comparable to that of the Suisun Marsh is not available, dislocating the spawning and rearing areas for critically important and endangered fish, and increasing the temperature of waters along the critical fish migration routes and in spawning and rearing areas.

In general outline form, all of the following are conditions which must be met before burdens are shifted to in-Delta water users:

1) The SWP and CVP must bear full responsibility for full mitigation of their impacts including without limitation the impacts from reverse flows, reduced outflow, the drainage into the San Joaquin River from the westside of the San Joaquin Valley, and damage to spawning areas.

(a) Note: the impacts of ship channels are burdens of the State and Federal Government; and the burden of westside drainage is that of the CVP and should fall most heavily upon the San Luis Unit in that the unit was not to go forward without a drain.

2) The SWP and CVP must provide adequate salinity control. (See e.g., Wat. Code, §§ 12200 et seq. & 11207; U.S. v. Gerlach Livestock Co. (1950) 339 U.S. 725; Ivanhoe Irr. Dist. v. McCracken (1958) 357 U.S. 275.)

3) The CVPIA burdens are those of the CVP, including the doubling of the natural production of anadromous fish over the 1967-1991 levees.

4) Preservation of fish and wildlife is the responsibility of the SWP with cost to be paid by users. Where possible enhancement must be incorporated with the cost of enhancement attributed to the State General Fund. (Wat. Code, § 11900 et seq.; Goodman v. County of Riverside (1998) 140 Cal.App.3d 900.)

5) The SWP and CVP must to the maximum extent possible operate and manage releases from storage into the Delta to provide salinity control and maintain an adequate water supply in the Delta sufficient to maintain and expand agriculture, industry, urban and recreational development. (Wat. Code, § 12205.)

6) In allocating the burden within the CVP and SWP, the uses within the Delta and other areas and watersheds of origin must be accorded priority over exports. (Wat. Code, §§ 10505 et seq., 11460 et seq. & 12200 et seq.)

7) The remaining burden which would appear to be in the tributaries above the Delta is allocable among the other water users in accordance with water right priorities. The burden for bypass flows and other fish and wildlife requirements applicable under law to the various impoundments should not be shifted to other water users. Exporters other than the CVP and SWP must yield priority to the users within the Delta and other areas and watersheds of origin. (See Wat. Code, § 1215 et seq.; see also Wat. Code, §§ 12203 & 12205.)

8) To the extent that a water user within the Delta and the other areas and watersheds of origin is required to yield water which can be replaced with CVP or SWP water, then the CVP or SWP water should be burdened provided that if the water is not unregulated flow, bypassed natural stream flow, return flow from upstream use, natural tidal flow or physical solution water, etc., and is truly "stored water," then a requirement of a contract or other mechanism for reasonable payment for the storage benefit may be appropriate. (See Wat. Code, §§ 11460 et seq.)

There Is No Apparent Correlation Between the Availability of Floodplain Habitat in the Delta and Declining Fish Populations

The Delta was fully reclaimed by 1930 and the amount of floodplain habitat has increased rather than decreased since that time. Among other examples Frank's Tract flooded in 1938 and remains unreclaimed. Mildred Island flooded in 1983 and remains unreclaimed and Liberty Island which is in the Yolo Bypass has remained flooded since 1998. In general anadromous fish populations in the Bay Delta Estuary have declined since the 1960s with the most dramatic declines occurring since 2004. Commercial and sport fishing for salmon was prohibited in 2008 and 2009 due to such decline. The effects of increasing floodplain habitat on salmon remain uncertain. Predation, stranding and increased temperature continue as major risks.

Increase in Tidal Prism

A significant additional threat occurs where such 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 flooded portion of Lower Liberty Island 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).

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 aviary 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 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 (a copy of the report is attached). 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 because they were in cages 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 benefited from

improved food availability. 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 given the consumption of energy and lack of opportunity for the skinny fish to move to move 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.

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 attached, 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.

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, 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 attached, 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.

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.

Attached hereto are copies of graphs of the numbers of fish for various years taken from the AFRP website. If there is a correlation between floodplain habitat in the Delta and fish numbers, the PDEIR should explain it. The possibility that the Yolo Bypass has had a positive contribution to Sacramento River salmon in the high flow years remains unresolved. There is no apparent comparable possibility on the San Joaquin.

<u>It Is Unclear Whether Shaded River Aquatic Habitat Is Good for Special Status Fish</u>

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. Your

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

Delta Levees

We concur with the recommendations of the Delta Protection Commission Economic Sustainability Plan and urge its incorporation in the Delta Plan.

Maintenance and rehabilitation/improvement of Delta levees is critical to the economic sustainability of the Delta, protection of Delta area infrastructure which serves greater areas of the State, protection of irreplaceable wintering habitat for waterfowl of the Pacific Flyway, protection of habitat for terrestrial species, and protection of hundreds of miles of meandering waterways and the related habitat. The levees are also critical to the efficient repulsion of salinity; avoidance of increased evaporative losses (which could be in excess of a million acre feet per year) and maintenance of Delta Pool storage. Rehabilitation/improvement of the Delta levees could to a great extent reduce the risk to conveyance of water through the Delta for export thereby eliminating the need for the huge expenditure on a peripheral canal/tunnel.

There are a number of areas where the lack of understanding or presentation of misinformation has led to confusion.

Interrelationship of Delta Levee Systems

If an area of the Delta suffers a levee failure there will be increased seepage into the lands and levees on adjoining areas. The Upper Jones Tract levee failure in 2004 is a clear example. The increased seepage could cause the failure of the adjoining levee. Wind generated waves across the flooded island could wash through the flooded island levees and impact adjoining levees. If left unreclaimed, the flooded island levee remnants will erode away causing greater exposure to adjoining levees which must be substantially upgraded to deal with increased wave heights and run-up. It is important to improve all levee systems in the Delta and expeditiously repair those that fail. Accelerated efforts to improve levees should not be limited to those areas in which infrastructure is located. The Central Delta Water Agency after consultation with the Delta engineers submitted a plan (a copy of which is Attachment E) which would provide funding for achieving a base level of protection for all Delta levee systems while at the same time providing funding for higher levels of protection for those containing critical infrastructure or otherwise deemed more important. The suggested allocation of funding allows for all concerns to be addressed simultaneously, but with an accelerated pace for levees thought to be of greater importance.

The so-called HMP minimum standard for Delta levees is not a suitable engineering standard for Delta levees. Attachment E-1 is a copy of the September 15, 1983 flood Hazard Mitigation Plan for the SacramentO-San Joaquin Delta for Disaster Declaration FEMA-633-DR, FEMA-651-DR, FEMA-669-DR and FEMA-677-DR. It is important to recognize that the so-called HMP minimum standard is part of the "Short-Term Levee Rehabilitation Plan". (Pages 13 & 14) It was never represented or intended to be a suitable engineering standard for Delta levees. It was a way to guage good faith progress in the interim pending the start of the Long-Term Mitigation Plan. The "Long-term Mitigation Plan (Pages 15-17) was to be "a System Plan as described in the Corp's Draft Feasibility Report, Dated October 1982, and in the Department's Bulletin 192-82. Delta Levees Investigation, dated December 1982."

The PL 84-99 standards and Bulletin 192-82 standards are similar and both are based on engineering considerations rather than simply a measure of interim progress for the purpose of disaster assistance. An important element of the "Long-term plan" was recognition of the Delta island levees as a "System". The "Long-Term Mitigation Plan" provided at Page 15 "All islands should be included in the System Plan for stage construction, as recommended in the Corp's plan." The Draft Plan as proposed suggests that it would be appropriate to abandon some island levees unless economic justification was provided and further establishes a disqualification for State funding of work beyond the so-called HMP minimum standard in the Short-term Mitigation Plan. The Draft Plan should distinguish between recommending priorities for allocation of funding and recognizing an appropriate engineering standard which should be used as a goal for the Delta levee system including all islands.

The existing Delta Levee Subvention and Special Project programs administered by DWR incorporate adequate priorities for allocation of funding. The plan submitted by the Central Delta Water Agency on behalf of the local Delta interests recognized priorities for funding, but did not abandon any Delta islands. (See Attachment E). Of the recommended 100 million dollars per year, 12 million dollars was allocated to the Subventions Program, 44 million dollars to DWR Special Project priorities and 44 million dollars to Special Projects Delta wide other than the DWR Special Project priorities. It is requested that the Delta Plan recognize the PL 84-99/Bulletin 192-82 standard as a goal for the levees in the Delta System and that recommendations for disqualifications for state funding be removed.

Setback Levees

Setback levees in the Delta are in all cases more expensive to construct than improvements to existing levees. The increased costs are significant and typically in the range of 4 or 5 times more expensive. Where subsurface soils are soft or loose moving off of the original levee alignment where consolidation has been taking place for decades necessitates greater amounts of material and time for consolidation.

In some cases a setback levee could result in a change of the hydraulics thereby increasing flood risk to other areas. Widening existing levees in limited areas to accommodate shaded riverine habitat is a better approach. Consideration of setback levees should be limited to areas upstream of the Delta lowlands where foundation and hydraulic conditions are appropriate.

Sea Level Rise

Attachment F contains historical sea level data from the NOAA website and from the DWR California Water Plan Update 2009. Sea level along the Pacific Coast is quite variable. Over the last 100 years mean sea level in Alaska is reported to have dropped over 4 feet while the San Francisco gauge at the Golden Gate reflects a rise of about .65 feet or about 8 inches. It would appear that even the levels along California vary depending on location and the exposure to short term surges due to factors such as wind, storms and even tsunamis. Of particular note is the .27 feet or 3.24 inches at Alameda, California versus the 8 inches at the Golden Gate. The apparent difference is due to short duration rises at the Golden Gate which are dampened by spreading in the bay before they reach Alameda. Such short term rises will be further dampened as they extend through the various bays and then up the river system to the Delta. The chart from the DWR California Water Plan Update 2009 shows the 19 year mean tide average at the Golden Gate declining. Assumptions as to sea level rise in the Delta should be re-analyzed to provide better information to the decision makers. The appropriate minimum standard for all Delta levees should be the USACE PL 84-99 agricultural standard with a minimum 22 ft. crown width. this will provide a minimum of eighteen inches of freeboard above the 100 year flood level. The 22 ft. crown width will provide the base to allow for even greater freeboard as and if sea level rise approaches higher levels in the Delta. The flexibility to provide for greater freeboard will also assist if climate change results in higher flood stages.

Earthquakes and Floods

Earthquake and flood risks for Delta levees have been overstated. Attachment G is a summary of comments by the U.S. Army Corps of Engineers to the DRMS report setting forth such risks. The SWP and CVP aqueducts and pumping plants are located near active faults and are particularly at risk to other threats including terrorism.

Increased self-sufficiency in areas receiving water exported from the Delta by investment in local projects including groundwater banking, water reclamation, water conservation and desalting of brackish waters (and in some cases ocean water) is the proper path to reliability for such areas.

Covered Actions

Covered actions should not apply to or inhibit levee improvement for agricultural areas, already urbanized areas and already urbanizing areas. Efforts to improve flood protection should be encouraged not delayed.

Buildings and facilities necessary for increased development of agriculture and recreation in the Delta should not be treated as covered actions.

Covered Actions should be limited to those actions relating to exports from the Delta. Short term transfers and changes should be included as such could easily lead to greater long term demand.

The imposition of "Covered Action" impediments on activities which may interfere with right of way acquisition for a peripheral canal/tunnel or any other conveyance facility or acquisition for habitat restoration or acquisition for habitat restoration or acquisition of flood bypass easements is an improper attempt to take valuable property rights without complying with the legally required eminent domain procedures and just compensation constitutional mandates. The Delta Plan as proposed will result in a substantial loss in property values in the Delta.

Development of Self-sufficiency in Areas Importing Delta Water Is Justified Not Only by Risks Associated with the Delta but by Other Factors

The Delta Plan should recognize the earthquake and terrorist risks to the hundreds of miles of canals and other facilities used to transport water from the Delta and other regions to serve the needs in the importing areas. Of particular note should be the proximity of such facilities to the highly active earthquake faults paralleling the California aqueduct and Delta Mendota Canals. There are also numerous other active faults intersecting the water import facilities serving the South Coastal Region.

The Draft Plan should also highlight the savings in energy that could be achieved through implementing local measures to increase water supply as a substitute for importation of water from the Delta.

No Plan Should Be Adopted Until All of the Required Components Are in Place

The flow criteria required by Water Code section 85086, the Bay Delta Conservation Plan, and the report of the Delta Independent Science Board are not available and the Delta Plan lacks specificity and performance measurements.

According to Water Code section 85059, the "Delta Plan" means "the comprehensive, long-term management plan for the Delta as adopted by the council in accordance with this division." The plan is to have performance measurements (§85211), and the plan shall meet all of the following requirements:

> "(a) Be based on the best available scientific information and the independent science advice provided by the Delta Independent Science Board.
>
> (b) Include quantified or otherwise measurable targets associated with achieving the objectives of the Delta Plan.
>
> (c) Where appropriate, utilize monitoring, data collection, and analysis of actions sufficient to determine progress toward meeting the quantified targets.
>
> (d) Describe the methods by which the council shall measure progress toward achieving the coequal goals.
>
> (e) Where appropriate, recommend integration of scientific and monitoring results into ongoing Delta water management.
>
> (f) Include a science-based, transparent, and formal adaptive management strategy for ongoing ecosystem restoration and water management decisions."

The plan fails to meet these requirements.

Yours very truly,

Dante John Nomellini
Manager and Co-Counsel

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Enclosures

Attachment A:	December 1960–DWR– Bulletin No. 76, Delta Water Facilities.
Attachment B:	August 3, 2010 letter from CDWA to Delta Stewardship Council.
Attachment C:	January 28, 2011 letter from CDWA to Delta Stewardship Council.
Attachment D:	Graphs of Fish populations, SWRCB D-1485 excerpts and graph of exports.

Attachment E:	CDWA Levee Plan.
Attachment E-1:	September 15, 1983 Flood Hazard Mitigation Plan for the Sacramento-San Joaquin Delta.
Attachment F:	Sea Level Data.
Attachment G:	Summary of USACE comments on DRMS.

Excerpts from "Insights into the Problems, Progress, and Potential Solutions For Sacramento River Basin Native Anadromous Fish Restoration".

Jeff Opperman Final Report for Fellowship R/SF-4.

Floodplain Rearing of Juvenile Chinook Salmon: Evidence of enhanced growth and survival.

Habitat Use and Stranding Risk of Juvenile Chinook Salmon on a Seasonal Floodplain.

AFRP website graphs.