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National Marine Fisheries Service
Attn: Ryan Wulff
650 Capitol Mall, Suite 5-100
Sacramento, California 95814

Subject: Bay Delta Conservation Plan DEIR/DEIS

Dear Mr. Wulff:

This letter provides comments in regards to the Bay Delta Conservation Plan DEIR/DEIS. Unfortunately due to the voluminous nature of this DEIR/DEIS I was unable to review the plan in its entirety; frankly, a public document of this length is prohibitive of public review and engagement, and seems counter to the intent of NEPA/CEQA (the CALFED DEIR/DEIS, which encompassed the Delta was nearly 10 times shorter). The comments provided draw upon my professional, personal and cultural background.

Background
The Delta falls within the Miwko? Waali? (Plains Miwok ancestral homelands). This region has undergone tremendous change in geologic time, and in the process has provided a means for maintaining a resilient and sustainable ecosystems and livelihoods for countless generations who mindfully considered their obligations to generations unborn. In the spirit of these obligations we also maintain a need to take responsibility for our actions to ensure future generations receive a world left in as good, if not better condition than we leave it. In review of the Bay Delta Conservation Plan (hereafter BDCP), it is difficult to obtain a sense that this world would be left in a better condition for future generations. The BDCP is clearly a plan comprised of maintaining the status quo of old ideas to ensure operations for a water delivery system that is inefficient and unsustainable. Clearly, at this point in time the Delta is not resilient; the flora and fauna of the region are suffering, the landscape is threatened by poor land-use decisions, and the water that is crucial to it all is being commodified by interests that lack the foresight to see beyond financial gains for themselves. In short, the Delta is not resilient, and no alternatives offered within this plan will correct this. Thus, there is no choice but to support the No Project Alternative.

As indigenous people, we hold water as sacred. It is a life giving force which all creation is connected to. For millennia we have asserted our ancestral obligation to ensure the balance and stewardship of water is maintained. Since colonization we have systematically been denied our ancestral rights; rights which by the nature of transitory resources (i.e., water, air, fish and wildlife) were never surrendered by treaty or other means. Therefore, we as indigenous people form this position in response to the threat of mis-use and mis-management of our resources vis-a-vi the BDCP, its predacessors and offer a plan to achieve implementation of actions to make our systems sustainable and resilient to social and environmental change.

Among major flaws in this plan is the disconnect in recognizing the interrelatedness of the Delta within a landscape context that extends from source to sink. While there is discussion of hydrologic inputs from regions beyond the Delta, it does not holistically consider the landscape feedbacks from the crest of the mountains to the sea. The Delta is part of a system that is not linear, but is circular; simplistically, water, juvenile salmon, and nutrients flow through the Delta, but are ultimately cycled back to the source. Thus, the Delta is just part of the problem or solution, but real benefits will be

met when treated as a whole. The BDCP considers storage primarily in the sense of dam operations, but fails to recognize the landscape features that naturally provide storage including meadows and the basins and sinks that exist throughout the Central Valley from the Colusa Basin to Tulare Lake.

Where in the hell does it consider the impacts of restoration. Where would restoration occur, what would it look like. Why is there no historic map of the Delta for reference? The BDCP fails to clearly articulate what actions would be undertaken to restore the Delta or at a minimum facilitate natural processes, which would make it more resilient.

Given the BDCP has failed to include regional Tribal experts as stakeholders in the development of this plan the entire plan is an environmental justice issue.

Point-specific Comments

Introduction

Section 1.2 needs to acknowledge the impacts to cultural heritage and habitats. "Financial stability" is not achieved on an agricultural economy that contributes less than 2% of the state's economy. Unsustainable population growth, water-use and land-use must be reconsidered in this state.

Section 1.4 pg. 1-6 "historical context" does not begin with the 1850's white settlement and havoc. Historical context begins by understanding the entirety of human history within this landscape inclusive of geologic time.

Pg. 1-7 FWS and NOAA have issued biological opinions for culturally important species that they have Trust responsibilities to Tribes for, yet have not consulted with Tribe to ensure their cultural obligations are upheld.

Pg. 1-10 Does the development of the tunnels really provide a reliable water source? It seems that real investments in research and development for water resources would provide long-term benefits to the state and achieve better results for sustained water and environmental concerns.

Pg. 1-14-15 lists the BDCP proponents. It is apparent that corporate and political interests are well represented. Where is the balance to this? Where is there true interest in healthy and resilient ecosystems?

Pg. 1-16 etc. list of covered species contains many culturally significant species. The list are noticeably absent of important species including, but not limited to gray whale, humpback whale, bald eagle, peregrine falcon and other marine mammals and fishes. Traditional knowledge within this region recognizes the connection of these species to the region and impacts to these species need to be considered in this plan. It is a Trust responsibility to Tribes of this region to ensure impacts to these species are addressed, as impacts to them are likely to occur.

Figure 1.4. How can the project area not include the entire catchment of the Sacramento and San Joaquin Rivers?

Pg. 2-2 How will this be achieved when it is still the same amount of water being used from the same sources. This does not add up. There needs to be reform with respect to urban and agricultural use. Past efforts have failed for a variety of reasons; largely have been unsuccessful due to a lack of being able to think beyond the status quo.

Pg. 2-4 The BDCP should take initiative to lead to recovery of all species whose homeranges fall within the Delta. The proposed restoration and enhancement activities are minimal efforts towards recovery. The plan should strive for a resiliency and long-term viability of populations. Restoring less than 10 percent of the Delta's landscape will not recover many of the covered species if any.

Pg. 3-1 Why is the plan only to encompass a 50 year period? The plan should be developed for multiple generations. It is feasible that within my own lifetime this plan will have expired. Will the species have recovered? Will the Delta face the same threats we anticipate and know of today?

Pg. 3-4 "Under these principles, the EIR needs to describe and evaluate only those alternatives necessary to permit a reasonable choice and "to foster meaningful public participation and informed decision making" (State CEQA Guidelines Section 15126.6[f])." This is ironic, because the BDCP does not provide an array of alternatives that are reasonable. It seems there are other options for procurement and conveyance of water. Further, the restoration does not even include any discussion of setback levees throughout the Delta, which would also provide more in-stream habitat, improve water quality, and retention. Lastly, the length of this document and lack of inclusion of Tribal people in its development have been far from meaningful, and thus limit truly informed decision making.

Pg. 3-6 The Steering Committee includes not a single Tribal representative. At least there are some environmental groups represented here.

Pg. 5-1 The environmental setting is too narrowly focused on the Delta. The direct, indirect and cumulative effects associated with this plan are much farther-reaching than is analyzed. This is where every plan thusfar has gone wrong. To understand the Delta the environmental setting begins at the top of the contributing watersheds and extends through the ocean.

Pg. 5-2 Define historical precipitation patterns. The paleo record demonstrates extensive droughts, and traditional knowledge does too. Using recorded climate data without considering the paleo record is short-sighted.

Pg. 5-4 California's water demand is not sustainable. What are the ramifications of water over use… saline soils, subsidence, etc. California needs to be looking to alternative means such as establishing policies for new (if not every) housing development to install cisterns and grey water systems. Research and development should be funded to improve water technologies such as desalination, recycling, and fog harvesting.

Table 5-1 How does this relate to the balance of water for fish? If the consumptive use is a percent of the water available, then there shouldn't be an issue for species survival. How does the lack of Tulare lake and wetlands lost due to the Swamp Lands Act factor in to our water budget?

Figures 5-17-19 It seems that things come out ahead to ensure more water in the Delta with the No Action alternative. How is it that exports will decrease from existing conditions with the No Action alternative?

Pg. 6-7 it is acknowledged that sea level has risen ~120 meters in 20 ka, with ~ 1.8 mm/year during the 20th century. If those rates of increase hold, then it would be anticipated that sea level will increase by approximately 8.28 cm during the life of the plan period, but sea level rise has been greater than that in recent years, and there is much uncertainty in sea level model predictions; the greatest extent would yield a 7m increase in sea level, which would have shorelines near Yuba City. If the BDCP is serious about securing water and improving environmental conditions it would make more sense to plan for the worse case scenario. What good would it do to have intakes located within the current extent of tidal flux, when it is obviously going to move further upstream. Furthermore, impacts to fisheries some of the focus fisheries are still within areas that would likely have the greatest impact on them. This is clearly a flaw in the thinking process for the development of the BDCP.

Pg. 6-23 discusses the regulatory setting, as it is also discussed in other sections of the BDCP. Throughout the document there is an apparent neglect for Tribal law, which is critical for Federal and to a lesser extent State entities to uphold. PL 93-638 Tribal Self Determination policies were established by Congress to ensure that the Sovereign interests of Tribes and Tribal organizations are

upheld. As permitting, funding and authorizing entities Federal agencies much act in the interest of Tribes and Tribal organizations. Thus, coordination with Tribes and Tribal organizations beyond the minimalist attempt that has been provided needs to occur. To date, DWR has neglected to hold consultations at mutually agreeable times with key Tribal groups.

Pg 6-37-41 It is unclear how X2 would be managed through climate change and sea level rise. How could it be ensured that this mixing zone could be maintained. Further, if more restoration was done, would X2 have to be managed at such a fixed location. Clearly from the maps provided about historic salt water intrusion, the fish have obviously been able to survive with the mixing zone at various locations provided there is habitat and more robust populations.

Pg. 6-42 Basically, there are no guarantees that this plan will achieve its intended purpose.

Pg. 6-46 Why are exports and river flows increasing? How would flood stage capacity be less under the No Action alternative? Would salt water enter the existing export facilities under the No Action Alternative?

Technical Appendices
Pg. 218 of 5A-A-5-B-B state the max diversion will be 3000 cfs at each intake. How was 65,000 acres determined for restoration? How would it be done? What would the impacts thereof be on water quality and quantity? How will it lead to sustained populations and recovery for fish, wildlife and plants?

Table B-31 USFWS Biological Opinion did not account for Trust responsibilities. It is focused on Delta Smelt, estuarine habitat in the fall (historically fall would have had lower flows and salinity would move eastward. The problem is that there is not enough instream floodplain habitat for covered fishes. NMFS Biological Opinion is focused on spring-run Chinook and steelhead. Wouldn't thermal stress relief better be achieved through cooling agricultural return waters and having more riparian restoration along the rivers. Models did not account for these sorts of efforts.

5A-C Since the model accounts for Trinity Lake, the effects analysis should be extended to the Klamath Trinity system too.

Table C-7-1-1 has nice data on Delta outflows; the No Action Alternative does better than the existing conditions for outflows.

5A-D figure 1 seems to assume a lack of species resiliency and fluidity. Why did the sea-level rise model not project beyond 2060? Figure 11 and 12 both show more significant rise. Table 1 shows more limited model projections within state, but there are models that indicate up to 7 m rise. Where is a map showing the extent of tidal flux and sea water via climate change and sea level rise?

5A-D2 Restoration should focus on areas not already natural. How and why were the restoration areas selected? Who will hold title to these lands after restoration. Title should be deeded to Tribe and Tribal organizations as appropriate to traditional territory or agreements.

7.7.1 Why is there such a narrow scope of groundwater areas?

Pg. 7-10 Salinity of groundwater increases due to overdraft and irrigated agriculture evapotranpiration. It has been known from Mesopotamian times that irrigated agriculture is difficult to sustain in arid regions. The state needs to think beyond current land use and water management to support ag.

How might the tunnels truncate or contaminate groundwater in the eastern and central Delta? Pg. 7-57 shows some of this.

Pg. 7-19 Tulare Lake poses a unique feature to naturally provide water in the San Joaquin Valley for ag and other users. Would the lake be dry if not for diversions upstream? If the basin has subsided, what would the potential holding capacity be now? If the Kern subbasin has lost 325,000 acre-feet capacity/year between 1970-1998, then they have not been managing their groundwater sustainably, and should not be rewarded with water from the Delta to subsidize their poor management.

Pg. 7-22 It states that San Francisco Bay covers 4,600 acres of coastal plain. Is this a misprint?

Pg. 7-43 How would the No Action Alternative in itself lead to increased subsidence due to continued water withdrawls. Groundwater management plans should be in place to ensure this does not occur.

Table 7-7 if a table can be done for SWP/CVP deliveries with each alternative, there should also be one for groundwater changes under each alternative. It is also unclear what groundwater changes would occur due to restoration efforts.

Figure 7-7 depicts that impacts to groundwater may affect a traditional cultural property.

Chapter 8 suggests that water quality would still be poor in the Delta. Why isn't there more effort to address point source and non-point source pollution in this plan? More riparian plantings would help improve water quality.

Pg. 8-46 Could sediment from the export facilities be used to restore Delta islands if mixed with coarse organic material?

Appendix D5 figure 4.4 Why would the tidal prism be less in future years in the east Delta?

Pg. 11-14 Clearly the issue of fish entrainment will not be absent with the proposed pipelines. What is the point then if fish are still being threatened by export operations. If exports must continue, then a better plan would be to locate intakes outside of the range of the most critically threatened species (perhaps focus on upstream tributaries).

Pg. 12-8 69,275 acres protected and 83,839 acres of natural community restored, but the loss would be 74,413-92,301 due to habitat conversions. So what this is saying is there is basically no net gain in wildlands either upland or wetland. 12-ES-2 states that most of the protected acreage would be cultivated ~51,000 acres. As stated previously, protecting natural functional areas is important in conservation, but we also need to restore natural processes to make these systems resilient. It does not seem the BDCP is prepared to achieve that. A key goal should be to ensure that all channels are restored with emergent vegetation versus the 20 miles proposed out of the hundreds of miles of waterways that exist in the Delta.

Pg. 12-11 impacts to vernal pools west of Clifton Court Forebay would impact Traditional Cultural Properties and culturally significant species.

Table 12-2, Why is the bald eagle not covered, but golden eagle is? There is traditional association of bald eagles within traditional accounts throughout the Delta. Burrowing owls are also not included, yet they are known from areas near Clifton Court. Marine mammals are not included, yet they are also an important component of the Delta and Trust responsibilities. Tule elk are also of importance and are not covered. There are a variety of species not covered, but should be. See below for a cursory list of culturally significant species:

Table 1-1. BDCP Covered Species

No.	Common Name	Scientific Name	Status (Fed/State/CNPS)[1]
Fish (11 species)			
1	delta smelt‡	*Hypomesus transpacificus*	T/E/–
2	longfin smelt‡	*Spirinchus thaleichthys*	C/T/–
3	Chinook salmon, Sacramento River winter-run ESU*	*Oncorhynchus tshawytscha*	E/E/–
4	Chinook salmon, Central Valley spring-run ESU*	*Oncorhynchus tshawytscha*	T/T/–
5	Chinook salmon, Central Valley fall- and late fall–run ESU*	*Oncorhynchus tshawytscha*	–/SSC/–
6	Steelhead, Central Valley DPS*	*Oncorhynchus mykiss*	T/–/–
7	Sacramento splittail‡	*Pogonichthys macrolepidotus*	–/SSC/–
8	green sturgeon, southern DPS*	*Acipenser medirostris*	T/SSC/–
9	white sturgeon*	*Acipenser transmontanus*	–/–/–
10	Pacific lamprey‡	*Entosphenus tridentatus*	–/–/–
11	river lamprey‡	*Lampetra ayresii*	–/–/–
Mammals (5 species)			
12	riparian brush rabbit‡	*Sylvilagus bachmani riparius*	E/E/–
13	riparian woodrat (San Joaquin Valley)‡	*Neotoma fuscipes riparia*	E/SSC/–
14	salt marsh harvest mouse‡	*Reithrodontomys raviventris*	E/E, FP/–
15	San Joaquin kit fox‡	*Vulpes macrotis mutica*	E/T/–
16	Suisun shrew‡	*Sorex ornatus sinuosus*	–/SSC/–
Birds (11 species)			
17	California black rail‡	*Laterallus jamaicensis coturniculus*	–/T, FP/–
18	California clapper rail‡	*Rallus longirostris obsoletus*	E/E, FP/–
19	greater sandhill crane‡	*Grus canadensis tabida*	–/T,FP/–
20	least Bell's vireo‡	*Vireo bellii pusillus*	E/E/–
21	Suisun song sparrow‡	*Melospiza melodia maxillaries*	–/SSC/–
22	Swainson's hawk‡	*Buteo swainsoni*	–/T/–
23	tricolored blackbird‡	*Agelaius tricolor*	–/SSC/–
24	western burrowing owl‡	*Athene cunicularia hypugaea*	–/SSC/–
25	western yellow-billed cuckoo‡	*Coccyzus americanus occidentalis*	C/E/–
26	white-tailed kite‡	*Elanus leucurus*	–/FP/–
27	yellow-breasted chat‡	*Icteria virens*	–/SSC/–
Reptiles (2 species)			
28	giant garter snake‡	*Thamnophis gigas*	T/T/–
29	western pond turtle‡	*Actinemys marmorata*	–/SSC/–

No.	Common Name	Scientific Name	Status (Fed/State/CNPS)[1]
Amphibians (2 species)			
30	California red-legged frog[‡]	*Rana draytonii*	T/SSC/–
31	California tiger salamander (Central Valley DPS)[‡]	*Ambystoma californiense*	T/T/–
Invertebrates (7 species)			
32	California linderiella[‡]	*Linderiella occidentalis*	–/–/–
33	conservancy fairy shrimp[‡]	*Branchinecta conservation*	E/–/–
34	longhorn fairy shrimp[‡]	*Branchinecta longiantenna*	E/–/–
35	midvalley fairy shrimp[‡]	*Branchinecta mesovallensis*	–/–/–
36	valley elderberry longhorn beetle[‡]	*Desmocerus californicus dimorphus*	T/–/–
37	vernal pool fairy shrimp[‡]	*Branchinecta lynchi*	T/–/–
38	vernal pool tadpole shrimp[‡]	*Lepidurus packardi*	E/–/–
Plants (18 species)			
39	alkali milk-vetch[‡]	*Astragalus tener* var. *tener*	–/–/1B
40	Boggs Lake hedge-hyssop[‡]	*Gratiola heterosepala*	–/E/1B
41	Brittlescale[‡]	*Atriplex depressa*	–/–/1B
42	Carquinez goldenbush[‡]	*Isocoma arguta*	–/–/1B
43	Delta button celery[‡]	*Eryngium racemosum*	–/E/1B
44	Delta mudwort[‡]	*Limosella subulata*	–/–/2
45	Delta tule pea[‡]	*Lathyrus jepsonii* var. *jepsonii*	–/–/1B
46	dwarf downingia[‡]	*Downingia pusilla*	–/–/2
47	Heartscale[‡]	*Atriplex cordulata*	–/–/1B
48	Heckard's peppergrass[‡]	*Lepidium latipes* var. *heckardii*	–/–/1B
49	Legenere[‡]	*Legenere limosa*	–/–/1B
50	Mason's lilaeopsis[‡]	*Lilaeopsis masonii*	–/R/1B
51	San Joaquin spearscale[‡]	*Atriplex joaquiniana*	–/–/1B
52	side-flowering skullcap[‡]	*Scutellaria lateriflora*	–/–/2
53	slough thistle[‡]	*Cirsium crassicaule*	–/–/1B
54	soft bird's-beak[‡]	*Cordylanthus mollis* ssp. *mollis*	E/R/1B
55	Suisun Marsh aster[‡]	*Symphyotrichum lentum*	–/–/1B
56	Suisun thistle[‡]	*Cirsium hydrophilum* var. *hydrophilum*	E/–/1B

Chapter 18 The noted Tribes responding do not necessarily include traditional owners within the Delta. While no sacred lands files recognized sacred sites within the Delta, there are many sacred sites within the Delta that need to be addressed. Similarly, there are man Traditional Cultural Properties that exist throughout the area, and some sites do fall within the alignments of the proposed pipelines. Living cultural resources need to be included for impacts consideration too; some of this would be addressed through broadening the list of covered species. Analysis needs to include reservoirs linked to the SWP and CVP, which have had adversely affected sacred sites, traditional cultural properties, etc. which previously were not subject to consultation, or consultation processes did not involve the appropriate Tribal leaders with specific knowledge of these sites.

Pg. 18-52 Any conservation easements or title should be granted through consultation to appropriate regional Tribe(s) or designated Tribal organizations (e.g., California Indian Water Commission).

In closing I'd like to reiterate that I support the No Action Alternative; I'd prefer to see a true effort to restore the Delta and make it a resilient ecosystem. If you have questions in regards to any of these comments please feel free to contact me at the provided contact information.

Sincerely,

Don L. Hankins, Ph.D.