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Comment on the Delta Conveyance Project Draft Environmental Impact Report

We Advocate Thorough Environmental Review (W.A.T.E.R.) is a California 501(c)(3) non-profit corporation dedicated to promoting quality local and regional planning, land use and development, as well as to preserve a healthy human and natural environment within the Siskiyou County area.

We are responding to a request for public comment on the Draft Environmental Impact Report for the Delta Conveyance Project. Since the source waters that will be conveyed by this project include those from the Mt. Shasta watershed area in Siskiyou County, this project has significant importance to our organization's mission as well as our communities. Please note we submitted comments on the Notice of Preparation back in April of 2020.

1). Narrowly limited Purpose of the proposed project:

The project purpose is given as (e.g., Executive Summary, page ES-7, lines 2-6):

"DWR's fundamental purpose in proposing the project is to develop new diversion and conveyance facilities in the Delta that are necessary to restore and protect the reliability of SWP water deliveries, and potentially CVP water deliveries south of the Delta, consistent with the state's Water Resilience Portfolio (California Natural Resources Agency et al. 2020:7) in a cost-effective manner."

The assumption that past/current levels of SWP water deliveries will be possible into the future is not substantiated, given that current water exports from the Bay Delta are currently unsustainable (as indicated by the current unhealthy state of the Bay Delta ecosystems) and projections of the effects of Global Warming on California forecast less precipitation and more evaporation. Furthermore, the assumption of future water deliveries being possible at current

levels precludes study of alternatives that would implement approaches to reduce water exports and increase Delta outflow, the latter being essential for sustaining healthy Delta and Sacramento River ecosystems and communities. Such approaches include watershed protection, water conservation, recycling and desalination infrastructure, and demand reduction measures.

We note that the purpose of the project is written such that continuation of the SWP water delivery system is the only alternative actually addressed in the DEIR (although there are several variations on the same theme). We note a recent court decision where an FEIR was ruled in violation of CEQA because the FEIR for the project based its analysis on an impermissibly narrow set of project objectives, such that approval of the project as proposed was a "foregone conclusion," rendering the alternatives analysis an "empty formality." (*We Advocate Thorough Env't Review v. County. of Siskiyou* (2022) 78 Cal. App. 5th 683). The FEIR for the Delta Conveyance Project assumes the SWP is the ONLY solution to the water crisis and does not seriously consider alternatives for addressing the state water issues.

Thus in the FEIR the purpose needs to be expanded to acknowledge the reality that continued export of water to the south is likely not sustainable and to incorporate additional alternative strategies for realistically managing the states waters.

2). Impacts to Delta communities not adequately evaluated and mitigated:

The Draft EIR does not adequately evaluate the impacts of the project to Delta communities, especially those dependent on the Delta as their domestic water source, and the proposed Community Benefits program lacks evidence-based research demonstrating the effectiveness of it various components. The FEIR must provide concrete plans for programs that are evidence-based and include funding mechanisms that ensure the communities receive the benefits.

3). Inadequate consideration for Tribal Cultural Resources:

While the Draft EIR acknowledges that Tribes prefer the "no project" alternative, their concerns have been largely unaddressed, to the extent that the DEIR finds the proposed project will have significant and unavoidable impacts on Tribal Cultural Resources. The FEIR must include more alternatives that would comprehensively address Tribal concerns. At a minimum, increased Delta outflows are required to support recovery of the Bay Delta ecosystems including the TES species therein. Moreover, a healthy Bay Delta is required for recovery of anadromous species throughout the entire length of the Sacramento River, including its far northern reaches in Siskiyou County.

With this comment being submitted at the time when the UN Biodiversity Conference is meeting in Montreal, Canada, we must realize that despite on-going efforts, biodiversity is deteriorating worldwide and this decline is projected to worsen with business-as-usual scenarios. The tiny delta smelt is one of the best indicators of environmental conditions in the San Francisco Bay-Delta — an ecosystem that is now rapidly unraveling. The delta smelt is only one of 12 of the original 29 indigenous Delta fish species that have been eliminated entirely from the area or that are threatened with extinction. During the latest survey for fish in the Delta waters, not a single smelt was found. "When we manage ecosystems we don't manage them to flourish. We push them to the brink of collapse — tak(ing) as much as we possibly can."¹ The hubristic belief that we can engineer the ecosphere better than Nature has created the Global Climate and Biodiversity Crisis that we face.

4). Inadequate evaluation of cumulative impacts:

The Bay Delta ecosystems are already heavily compromised because of the cumulative impacts of existing projects. The DEIR fails to adequately consider the cumulative impacts of the Proposed Project given the compounding negative environmental impacts to the Bay Delta of other proposed and ongoing projects activities such as voluntary agreements, diversions for the proposed Sites Reservoir Project, expansion of the San Luis and Los Banos Reservoirs, other dams and canal projects, and pollution from agricultural run-off (to name a few). These many cumulative impacts must be comprehensively addressed in the FEIR. For example, in a recent email from the Department of Water Resources dated December 7, 2022, it was suggested that "if the [Delta Conveyance] project had been operational during the storm events at the end of 2021, the State Water Project could have captured about 236,000 acrefeet of water". Intercepting such a pulse of water denies the downstream reaches of the Sacramento River and the Delta, polluted from agricultural runoff, sewage effluent and more, the essential benefit of flushing polluted water and sediments out to sea while also impacting salmon migration. The river ecosystems require such pulse events and cumulative impacts to the Delta from other dams, diversions, and pollution from agriculture and decreased river flows and pulses must be comprehensively addressed.

Skimming off 236,000 acre-feet of water from the flow of the Sacramento River at the very end of Fall and the beginning of Winter, a time when crops are not being irrigated nor gardens being watered much, presumes a storage facility to hold that volume. The San Luis Reservoir is currently being raised an additional ten feet but only adds 130,000 acre-feet. The Sites reservoir, an acknowledged but unbuilt part of the SWP, is reported as "moving forward"² and "remain(ing) on track"³ and would create more storage. It is expected to deliver on average 243,000 acre feet annually; a figure slightly above the amount suggested in the email aforementioned. Unfortunately, "(e)vaporation from the 14,000 acres (5,700 ha) reservoir would remove 30,000 acre-feet (37,000,000 m3) per year"⁴ - that's over twelve percent of the expected deliveries of Sacramento River water lost.

There is no mention of the Sites Reservoir in the DEIR. This does bring up the issue of piecemealing prohibited by CEQA.

"The court explained that the California Supreme Court set forth a piecemealing test in *Laurel Heights Improvement Association v. Regents of University of California* (1988) 47 Cal.3d 376, 396. Specifically, the Supreme Court held that an EIR must include an analysis of the environmental effects of future expansion if: (1) <u>it is a reasonably foreseeable consequence of</u> <u>the initial project;</u> and (2) the future expansion or action will be significant in that it will likely change the scope or nature of the initial project or its environmental effects.

For instance, there may be improper piecemealing when the purpose of the reviewed project is to be the first step toward **future development**."⁵ (emphasis added)

5). Problems with irrigating the Westlands Water District:

In the aforementioned email, there was the suggestion that "the State Water Project could have captured about 236,000 acre-feet of water". However, this is less than 20% of the water currently used for the irrigation of crops in the Westlands Water District⁶ and less than the 300,000 acre-feet of water estimated to be used just for irrigation of almond trees grown there⁷. Thirty percent of the water delivered by the SWP is used for agricultural irrigation⁸. The Westlands Water District, one of the largest SWP contractors, would be one of the prime beneficiaries for additional water supplies despite the email's rhetoric of the 236,000 acre-feet being "enough water for over 2.5 million people, or nearly 850,000 households, for a full year." "The majority of counties in California are not served by the State Water Project, and many served by the State Water Project receive little water from it."⁹

The San Joaquin Valley wherein the Westlands Water District is located is a desert by definition¹⁰ receiving only 8 inches of rain annually. Initially growing drought-tolerant cereal grain crops, enhanced water availability, first by groundwater extraction followed by water deliveries from the Central Valley Project and the State Water Project, encouraged the farming of ever more thirsty, irrigation dependent crops¹¹ resulting in the vast acreage of almonds, pistachios, tomatoes and even grapes currently grown¹² with most of the harvested nuts getting exported¹³. Much of the soil in the Westlands Water District contains "extraordinarily elevated concentrations of selenium, boron, chromium, molybdenum, and extremely high concentrations of various salts that disrupt the normal ionic balance of the aquatic system."¹⁴ Irrigation runoff containing these leached elements caused the 1983 catastrophe at the Kesterson National Wildlife Refuge. Continued agriculture in the Westlands Water District is highly problematic and its permanent fallowing should be seriously considered.

"When you look back over the last 1-or-2,000 years, you can see that (the last century) stood out as being a wet century," (Lynn) Ingram (a paleoclimatologist at the University of California, Berkeley) says, adding that the average over the last couple of thousand years might've been 15 percent drier than the 20th century. And that's precisely when most development happened in California.

In the 20th century, California's population grew more than twenty-fold and farmers planted millions of acres of irrigated farmland. The planning and building of California's vast plumbing system of dams and canals was based on the climate that engineers thought we had."¹⁵

"(The Westlands Water District) is really an area that should have never been farmed," said Richard Walker, a retired UC Berkeley geography professor and an expert on agricultural economics. California's elected officials, however, have by and large ignored the idea of buying up half of the farmland in Westlands and retiring it for good. "It would be cheaper to do that than to build these siphons under the delta," Walker noted, referring to the governor's Bay Delta Conservation Plan (BDCP). "But you'll never get the political will to do that."⁷

The FEIR must comprehensively evaluate the inappropriate, water-intensive activities occurring in the Central Valley and provide solutions beyond the impermissibly narrow project objectives (see comment 1).

6). Impacts of headwater resource management:

The DEIR must also consider water resource management practices that go beyond the Central Valley and consider headwater sources. The aforementioned email states: "The snowpack in the mountains has functioned as additional storage, delaying water from flowing into downstream reservoirs and into the Delta until late spring when it began to melt. This pattern of accumulating snowpack followed by slower snowmelt and more stable streamflow is the basis for historical water and flood management." The forests of California could be capable of functioning similarly in the future given changes made to the Forestry Practice Rules as an additional alternative.

Hundreds of forest clearcuts are visible in the image of a large swath of the Sacramento watershed below (See figure 1) with many tree plantations discernible on viewing the full size image available at the address listed below. Intact mature and old growth forests are capable of regulating soil moisture thereby producing more reliable and less varied streamflows throughout the year. In contrast, clearcuts allow rain to run off the soil rapidly and also allow sunlight to melt the snowpack more rapidly preventing the moisture from percolating into the soil thus producing higher streamflows during the winter and spring and depleted flows in the summer and fall. Given the current low levels of California's reservoirs, this might be acceptable in the short term; but the future may find the reservoirs overflowing in the spring such that dam operators must release water prematurely. This is the situation with a watershed infested with clearcuts and young tree plantations.

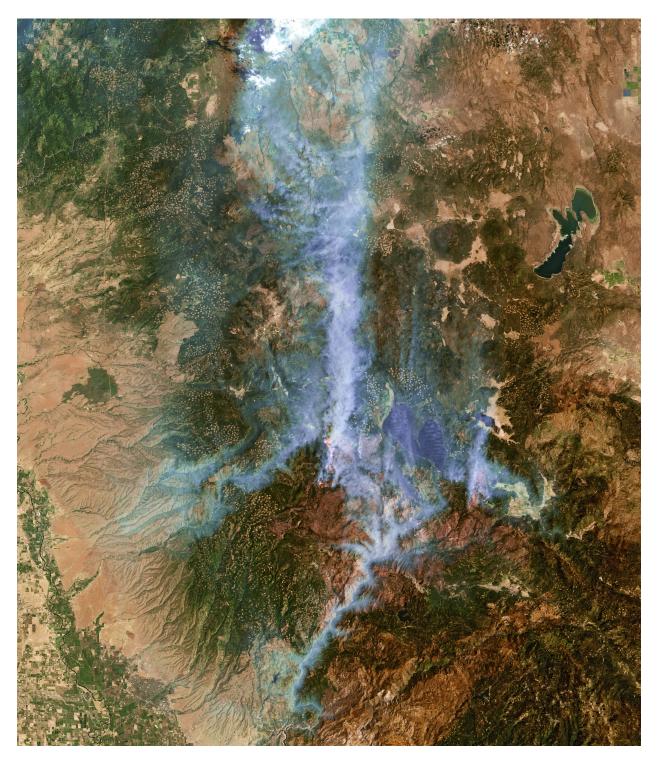


Figure 1. Image of the 2021 Dixie Fire¹⁶ showing a large swath of the Sacramento River watershed.

However, after growing for about fifteen years, tree plantations (as opposed to mature/old growth forests) cause a persistent reduction in streamflows. "Daily streamflow from a 40- to 53yr-old Douglas-fir plantation was 25% lower on average, and 50% lower during the summer (June 15 to Sept 15 of 2006 to 2009), relative to the reference watershed containing mature/ old forest. High evapotranspiration from rapidly regenerating vegetation, including planted Douglas-fir, and from the residual plantation forest in the riparian buffer appeared to explain the persistence of streamflow deficits after logging of nearly 100% of the forest plantation. Results of this study indicated that 40- to 50-yr rotations of Douglas-fir plantations can produce persistent, large summer low flow deficits. While the clear-cutting of these plantations, with retention of riparian buffers, increased daily streamflow slightly, **flows did not return to prefirst entry conditions**. Results of this study indicate that contemporary forestry harvesting practices, including 40- to 50-yr rotations of Douglas-fir plantations with riparian buffers, may produce persistent low flow deficits."¹⁷ (emphasis added) These same effects have been observed at many sites globally.

Changing the Forestry Practice Rules to require non-even age selective harvesting of rather small stands of trees and increasing the rotation period of harvests to eighty years or more, an age when trees are beginning to be considered mature, would create conditions more akin to mature/old growth forest stands producing a more stable streamflow than is currently occurring while producing more higher quality timber.

In summary, the DEIR for the Delta Conveyance Project perpetuates unsustainable exports of water to the southern part of the state to the huge detriment of Delta communities and ecosystems and the entire Sacramento River watershed. The future of sustainable water availability lies in watershed protection, water conservation, recycling and desalination infrastructure, and demand reduction measures, and the Final EIR must fully evaluate these alternative solutions for building a sustainable state water distribution system.

Given the many negative and unmitigable consequences that would result from implementing the Delta Conveyance Project which are only partially enumerated above, we strongly advocate for a No Project decision.

Sincerely,

Frank S Toriello

Frank Toriello President, Board of Directors We Advocate Thorough Environmental Review

- 1). Suzanne Simard, Forests Are Wired For Wisdom https://onbeing.org/programs/suzanne-simard-forests-are-wired-for-wisdom/
- 2). Sites Reservoir is Sacramento Valley's water project. But L.A. is taking a huge role https://www.sacbee.com/news/california/water-and-drought/article225944195.html
- 3). Massive Northern California reservoir project scaled back to reduce costs <u>https://www.mercurynews.com/2020/05/11/massive-northern-california-reservoir-project-</u> scaled-back-to-reduce-costs/
- 4). Sites Reservoir https://en.wikipedia.org/wiki/Sites_Reservoir
- 5). TAG: PIECEMEALING https://www.rmmenvirolaw.com/tag/piecemealing/
- 6). Water Supply Westlands Water District https://wwd.ca.gov/water-management/water-supply/
- 7). California's Thirsty Almonds https://eastbayexpress.com/californias-thirsty-almonds-1/
- 8). California State Water Project https://en.wikipedia.org/wiki/California_State_Water_Project
- 9). DELTA FLOWS: What's missing in the new Delta Tunnel price tag? <u>https://www.restorethedelta.org/2020/08/23/delta-flows-whats-missing-in-the-new-delta-</u>

tunnel-price-tag/

- 10). USGS What Is A Desert? https://pubs.usgs.gov/gip/deserts/what/
- 11). History Westlands Water District https://wwd.ca.gov/about-westlands/history/
- 12). Crop Report 2021 Westlands Water District https://wwd.ca.gov/crop-report-2021/
- 13). Stop Water Abuse by the Almond and Pistachio Empire https://www.nytimes.com/roomfordebate/2015/04/07/can-farms-survive-without-drying-

up-california-13/stop-water-abuse-by-the-almond-and-pistachio-empire

- 14). Westlands Water District <u>https://en.wikipedia.org/wiki/Westlands_Water_District</u>
- 15). Megadroughts: Four Points to Put California's Dry Times in Perspective <u>https://www.kqed.org/science/13986/megadroughts-four-points-to-put-californias-dry-</u>

times-in-perspective

16). Image of the 2021 Dixie Fire <u>https://eoimages.gsfc.nasa.gov/images/imagerecords/148000/148669/</u> dixie_etm_2021216_lrg.jpg

17). Catalina Segura, Kevin D. Bladon, Jeff A. Hatten, Julia A. Jones, V. Cody Hale, George G. Ice, 2020. Long-term effects of forest harvesting on summer low flow deficits in the Coast

Range of Oregon, Journal of Hydrology, Volume 585, 124749, ISSN 0022-1694 https://doi.org/10.1016/j.jhydrol.2020.124749.