

# DRAFT (DO NOT CITE)

Date: February 8, 2023

To: United States Army Corps of Engineers

From: Delta Independent Science Board

## **Subject: Comments on the Delta Conveyance Project Draft Environmental Impact Statement**

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The Delta Independent Science Board (Delta ISB) reviewed the Delta Conveyance Project draft Environmental Impact Statement (EIS) in accordance with our responsibilities to evaluate the broad range of scientific programs that support adaptive management of the Delta, including review of major Delta Conveyance proposals. Our focus was on a scientific/technical assessment of the quality and scope of the scientific analyses used for informing decisions. At this time, due to the length of the draft EIS, the comprehensive coverage of the topics and the short period allowed for review, the Delta ISB decided to provide a general review of selected environmental topics.

The draft EIS shows several improvements relative to the draft Delta Conveyance Project Environmental Impact Report (EIR). The cumulative analysis was somewhat more comprehensive and the presentation of material was clear and concise, although the scope of results is narrower than in the draft EIR. Limiting the discussion to the preferred tunnel alignments helped to streamline the report. The explanation of which planning horizons were being compared was clarified in some cases. However, the draft EIS relies heavily on analyses and conclusions of the draft EIR. It appears that a comprehensive re-assessment of assumptions, methods, and analyses that were reported in the EIR was not performed. New scientific approaches were not specifically identified. Therefore, we are including our review of the draft EIR as part of this EIS review. We believe that the eight major cross-cutting concerns of our EIR review also apply to the EIS and should be carefully considered.

The Delta ISB identified some shortcomings in the science applied in the draft EIR. We concluded that it showed a lack of 1) clear illustrations of how the proposed project achieves the water supply and environmental benefits claimed; 2) clear evidence to support some of the findings of less than significant impacts; and 3) clear descriptions of uncertainty stemming from climate effects, mitigation effectiveness, analytic methods, and incomplete quantitative and mechanistic understanding of some underlying processes and relationships. These and other omissions lead to a partially inadequate representation and discussion of potential project impacts and benefits.

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In addition to those cross-cutting concerns, we add the following specific comments on the draft EIS:

1. The draft EIS emphasizes the impacts of construction, rather than project operations, on outcomes. This is a concern, which is particularly acute for understanding the projected impacts on the aquatic ecosystem and for evaluating effectiveness of mitigation efforts. The draft EIS carries forward the conclusions that mitigation will be able to fully offset harms, which the science would suggest is uncertain. In addition, some risks are given uneven treatment. The draft EIS provides relatively detailed descriptions of the potential risks of construction and maintenance-related accidental release of construction chemicals and wastes to surface waters, and resuspension of contaminated sediments due to construction and dredging (chapter 3.4) for mitigation and restoration projects, desalination plants etc. However, such risk analyses are entirely missing for the project alternatives. This omission makes it look as if such effects would not occur during project construction and operation.
2. The draft EIS differs from the EIR in discussing more of the presumed consequences of the no-action-alternative but it does not provide detailed analyses (as stated on page 2-18) to improve understanding of the effects of project alternatives. The qualitative discussion demonstrates that the water delivery system has multiple options for compensating for changing variability in water supply without the Delta Conveyance Project, and that each option has associated effects on the environment. However, without making projections that include future construction and operation, the analysis does not provide a full accounting of net changes due to the Delta Conveyance Project.
3. The analysis on climate change was extended, in parts of the report, to 2072 or 2100, which is a helpful difference from the draft EIR for understanding potential project effects. In addition, the draft EIS correctly identifies some fundamental questions related to climate change and some implications of those questions on conveyance alternatives (section 3.6.2). However, because future climate change influences on operations were not included in the analysis of future conditions (Table 3.9-1), these analyses are still incomplete for understanding project effects on many endpoints.
4. Some conclusions that differ from the draft EIR are not well documented or explained. The draft EIS covers terrestrial species not evaluated in the EIR, but the basis for the conclusions drawn is not provided. Similarly, the justification for differing conclusions about the significance of a few socio-economic endpoints, relative to the EIR, are not well explained.

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5. The draft EIS is lacking analyses on water quality effects on biota and indirect pathways of effects on human health. With regard to water quality (including nutrients and contaminants), the draft EIS relies entirely on the information provided in the draft EIR, and focuses on public health considerations (page 593), with the only exception being selenium effects on birds (page 282). No additional analyses were performed. Greater detail on the potential effects of construction and maintenance of the project alternatives, and the consequences of altered flows on species of concern and their habitat are needed to adequately assess potential project effects.
6. The summary of draft EIS Section 3.10.1.1 (Geology and Seismicity) includes information about Bay area faults that could lead to a biased interpretation of the seismic hazard in the Delta. This EIS section begins by referencing the active faults in the Bay area that are outside the study area and then alludes to the "blind thrusts" beneath the Delta. The only blind thrust mentioned by name is the West Tracy Fault. The seismic sources in the Bay area are much more active than the sources in the Delta but are less important for projecting risk within the Delta. The emphasis on the Bay area faults could be misleading to readers unfamiliar with these nuances if they assume a connection between the Bay area faults and the potential for levee failure. Another potential concern that is not addressed is whether levees can withstand tunnel boring beneath them.

Attachment

[Review of the Draft Environmental Impact Report for the Delta Conveyance Project by the Delta Independent Science Board](#)