



# Delta Stewardship Council

A CALIFORNIA STATE AGENCY

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Robert Trang

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## **RE: Comments on the Draft Environmental Impact Report for the West False River Drought Salinity Barrier Project**

Dear Robert Trang:

Thank you for the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the West False River Drought Salinity Barrier Project (project). The Delta Stewardship Council (Council) recognizes the objective of the project, as described in the DEIR, to minimize the impacts of salinity intrusion on the beneficial uses of Delta water during persistent drought conditions.

The Council submitted a comment letter on the Notice of Preparation (NOP) of a DEIR for the project on March 25, 2022. That comment letter explained the Council's regulatory authority under Division 35 of the California Water Code, sections 85000-85350 (Delta Reform Act); identified Water Code section 85225 requirements for the Department of Water Resources (DWR) to determine whether the project is a covered action and, if so, file a certification of consistency with the

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Council before implementing the project; and identified Delta Plan regulatory policies that would be potentially implicated by the project.

## **COVERED ACTION DETERMINATION AND CERTIFICATION OF CONSISTENCY WITH THE DELTA PLAN**

The Council's NOP comment letter stated that based on the project location and scope the West False River Drought Salinity Barrier Project appears to meet the definition of a covered action. DWR should therefore carefully determine whether the project is a covered action and, if so, submit a certification of consistency with the Delta Plan to the Council prior to project implementation. (Cal. Wat. Code section 85225; Cal. Code Regs., tit. 23, § 5001(j)(3).)

## **COMMENTS REGARDING DELTA PLAN POLICIES AND POTENTIAL CONSISTENCY CERTIFICATION**

The following section describes the Delta Plan regulatory policies that may apply to the proposed project based on the available information in the DEIR.

### ***General Policy 1: Detailed Findings to Establish Consistency with the Delta Plan***

Delta Plan Policy **G P1** (Cal. Code Regs., tit. 23, § 5002) specifies what must be addressed in a Certification of Consistency for a project that is a covered action. If a future Certification of Consistency is prepared for the Project, it must include detailed findings that address each of the following requirements:

#### ***Mitigation Measures***

Delta Plan Policy **G P1(b)(2)** (Cal. Code Regs., tit. 23, § 5002(b)(2)) requires that covered actions not exempt from the California Environmental Quality Act (CEQA) must include all applicable feasible mitigation measures adopted and incorporated into the Delta Plan as amended April 26, 2018 (unless the measures are within the exclusive jurisdiction of an agency other than the agency that files the Certification of Consistency), or substitute mitigation measures that the agency finds are equally or more effective. These mitigation measures are identified in Delta Plan Appendix O and are available at: <https://deltacouncil.ca.gov/pdf/delta-plan/2018-appendix-o-mitigation-monitoring-and-reporting-program.pdf>.

The project incorporates protective environmental measures and the DEIR proposes mitigation measures to reduce potentially significant project impacts to air quality, biological resources, cultural resources, hydrology and water quality, and tribal cultural resources. Council staff recommends that DWR review Delta Plan Appendix O and ensure that the protective environmental measures and mitigation measures proposed in the DEIR are equally or more effective than applicable and feasible Delta Plan measures. We are pleased to see that in section 3.3-41 of the DEIR, adaptive management is discussed in connection with Mitigation Measures BIO-8, BIO-9, and BIO-10 for reducing the impact of aquatic weeds and construction on water quality within West False River and adjacent waterways. As DWR develops an adaptive management plan, we encourage DWR to develop specific parameters to implement these mitigation measures.

### ***Best Available Science***

Delta Plan Policy **G P1(b)(3)** (Cal. Code Regs., tit. 23, § 5002(b)(3)) states that actions subject to Delta Plan regulations must document use of best available science as relevant to the purpose and nature of the project. The Delta Plan defines best available science as “the best scientific information and data for informing management and policy decisions.” (Cal. Code Regs., tit. 23, § 5001 (f).) Best available science is also required to be consistent with the guidelines and criteria in Appendix 1A of the Delta Plan (<https://deltacouncil.ca.gov/pdf/delta-plan/2015-appendix-1a.pdf>).

While some references are provided in the DEIR, Council staff recommends that for the certification of consistency for **G P1(b)(3)**, DWR provide additional information and references for scientific claims and make these citations part of the certification record.

### ***Adaptive Management***

Delta Plan Policy **G P1(b)(4)** (Cal. Code Regs., tit. 23, § 5002(b)(4)) requires that ecosystem restoration and water management covered actions include adequate provisions for continued implementation of adaptive management, appropriate to the scope of the action. This requirement is satisfied through: a) the development of an adaptive management plan that is consistent with the framework described in Appendix 1 B of the Delta Plan (<https://deltacouncil.ca.gov/pdf/delta-plan/2015-appendix-1b.pdf>), and b)

documentation of access to adequate resources to implement the proposed adaptive management plan.

In a future adaptive management plan to be submitted with a certification of consistency, DWR should further refine the discussion of project goals and measurable objectives, define specific metrics to track performance towards those goals and objectives, and describe a plan for strategies that could be used if the performance measure targets are not met.

Details of monitoring should be described in the adaptive management plan submitted to the Council and should include considerations beyond what is currently in the DEIR. For example, monitoring plans and potential adaptive management activities for invasive aquatic vegetation should be included. There is ongoing debate among scientists about whether the 2015 barrier implementation facilitated the establishment of invasive aquatic vegetation in the region, and Kimmerer et al. 2019 documented evidence of increases in aquatic vegetation density in the middle of Franks Tract during and after the 2015 barrier implementation. Given the uncertainty of the barrier's role in promoting invasive aquatic vegetation, DWR should use an adaptive management approach to monitor and manage aquatic vegetation. Additionally, we recommend that monitoring plans and potential adaptive management activities assess how the barrier modifies habitat conditions for listed fish species. Kimmerer et al. 2019 found evidence that the barrier influenced zooplankton transport which would affect the foraging of Delta Smelt, a special status fish species, so zooplankton monitoring could be included in the adaptive management plan to assess whether the project is impacting food resources available to Delta Smelt.

In addition, our comments on **RR P3** below acknowledge DWR's plans to adaptively manage the potential for the project's encroachment on the West False River floodway to jeopardize public safety. Taken together, these are just three examples of uncertainties that could be addressed with adaptive management. The scope of DWR's adaptive management plan should address numerous other project objectives.

### ***Ecosystem Restoration Policy 1: Delta Flow Objectives***

Delta Plan Policy **ER P1** (Cal. Code Regs., tit. 23, § 5005) requires the State Water Resources Control Board's Bay-Delta Water Quality Control Plan flow objectives to

be used to determine consistency with the Delta Plan for proposed actions that could significantly affect flow in the Delta. As mentioned in the DEIR, the State Water Board's Water Right Decision D-1641 requires CVP and SWP operations to protect beneficial uses in the Delta. Under DWR's water rights permit, DWR is charged to protect municipal and industrial; agricultural; and fish and wildlife beneficial uses in the Delta. (DEIR, p. 3.5-8).

The DEIR acknowledges that:

"The 1995 Bay-Delta Plan and D-1641 EC objectives for a critically dry water year are 2.78 milliSiemens per centimeter [mS/cm] at Emmaton, 2.2 mS/cm at Jersey Point, and 0.87 mS/cm at San Andreas Landing from April 1 to August 15 (maximum 14-day moving average). Through issuance of the temporary urgency change orders, the State Water Board moved the Emmaton compliance location to the Threemile Slough Bridge (about 4 kilometers upstream) for the 2015 and 2021–2022 [Emergency Drought Barriers](EDB). It is reasonable to assume that similar processes would occur with implementation of the proposed project (under all three installation scenarios)." (DEIR, p. 3.5-16)

Additionally, the DEIR references the *Efficacy Report, 2015 Emergency Drought Barrier Project*<sup>1</sup> (Efficacy Report), a report on the implementation of the EDB in 2015 and its effectiveness in preventing further salinity intrusion into the Delta. The Efficacy Report describes the connection between implementing the EDB and the approval of a temporary urgency change petition (TUCP). It concludes that the EDB would not have conserved water (i.e., prevented the need to release upstream stored water) absent the TUCP, under the ordinary D-1641 objectives in a critical year. (Efficacy Report, p. 103). The Efficacy Report also indicates in section 5.2 *Future Planning*, that "permit applications would be submitted to regulatory agencies if extended drought conditions persist and it is likely that a TUCP will be needed to temporarily adjust D-1641 requirements". (Efficacy Report, p. 115).

In the Final EIR, DWR should clearly describe the conditions under which the project may require the approval of a TUCP from the State Water Board in order to meet its stated objectives. As part of the future certification of consistency, DWR should also clearly identify how these conditions indicate that an approved TUCP would be

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<sup>1</sup> Efficacy Report, 2015 Emergency Drought Barrier Project, June 2019. [https://water.ca.gov/-/media/DWR-Website/Web-Pages/Water-Basics/Drought/Files/Publications-And-Reports/EDB-Efficacy-Report\\_June-2019\\_ay11.pdf](https://water.ca.gov/-/media/DWR-Website/Web-Pages/Water-Basics/Drought/Files/Publications-And-Reports/EDB-Efficacy-Report_June-2019_ay11.pdf)

required or would likely be required for this project to both: a) meet its stated objectives, and b) comply with the applicable Bay-Delta Water Quality Control Plan flow objectives in effect at the time of certification.

***Ecosystem Restoration Policy 5: Avoid Introductions of and Habitat Improvements for Invasive Nonnative Species***

Delta Plan Policy **ER P5** (Cal. Code Regs., tit. 23, § 5009) requires that covered actions fully consider and avoid or mitigate the potential for new introductions of, or improved habitat conditions for nonnative invasive species, striped bass, or bass in a way that appropriately protects the ecosystem. As stated in the DEIR, the presence of the salinity barrier has the potential to increase the presence of aquatic invasive vegetation (DEIR, p. 3.3-43). While **ER P5** is not specified as an applicable policy, the DEIR acknowledges the Delta Plan under the *State* section of 3.3.3 *Regulatory Section*. The DEIR further acknowledges that:

“Irrespective of overall Delta hydrology and water operations, the drought salinity barrier could influence the occurrence of [...] invasive aquatic vegetation by affecting water depth, turbidity, and channel velocity.” (DEIR, p. 3.3-42)

and

“Based on the observations from the 2015 EDB as studied by Kimmerer et al. (2019), it is possible that the drought salinity barrier (under all three installation scenarios) could cause an increase in the amount of invasive aquatic vegetation in portions of the Delta such as Franks Tract.” (DEIR, p. 3.3-42)”

Thus, **ER P5** requires DWR to avoid or mitigate the potential for new introductions or improved habitat conditions for nonnative aquatic vegetation in a way that appropriately protects the ecosystem. The DEIR proposes Mitigation Measure BIO-10 *Remove Invasive Aquatic Vegetation*, which would commit DWR to:

“coordinate with the Aquatic Invasive Plant Control Program of the California Department of Parks and Recreation, Division of Boating and Waterways, for the control of invasive aquatic weeds near the barrier that are covered by the control program. DWR shall coordinate with the Division of Boating and Waterways on removal strategies for covered invasive aquatic weeds as necessary to ensure that the barrier does not exacerbate the spread of invasive aquatic vegetation.” (DEIR, p. 3.3-44)

In a future certification of consistency regarding **G P1(b)(2)** and **ER P5**, DWR should specifically identify how project Mitigation Measure BIO-10 is equally or more effective than Delta Plan Mitigation Measure 4-1 (available at: <https://deltacouncil.ca.gov/pdf/delta-plan/2018-appendix-o-mitigation-monitoring-and-reporting-program.pdf>). Among other performance standards, Delta Plan Mitigation Measure 4-1 requires that an invasive species management plan be developed and implemented to ensure that invasive plant species and populations are kept below preconstruction abundance and distribution levels. In the certification, DWR should also identify any other applicable measures that if implemented as part of the project would avoid or mitigate the potential for new introductions or improved habitat conditions for nonnative aquatic vegetation in a way that appropriately protects the ecosystem.

***Delta as Place Policy 2: Respect Local Land Use when Siting Water or Flood Facilities or Restoring Habitats***

Delta Plan Policy **DP P2** (Cal. Code Regs., tit. 23, § 5011) reflects one of the Delta Plan's charges to protect the Delta as an evolving place by siting water management facilities, ecosystem restoration, and flood management infrastructure to avoid or reduce conflicts with existing uses or uses described or depicted in city and county general plans for their jurisdictions or spheres of influence when feasible, considering comments from local agencies and the Delta Protection Commission (as defined in Cal. Code Regs., tit. 23 § 5001(p)).

DEIR Chapter 3.6 *Recreation*, pp. 3.6-7 through 3.6-9 recognize Delta waterways that are designated recreational areas, and note that installation, duration of installation, and removal of a drought salinity barrier would temporarily conflict with the existing recreational use of the West False River at the proposed project location, and within the area around the proposed project location. The presence of a salinity barrier would result in temporary boat traffic closures and change navigational access routes to and from the San Joaquin River to marinas and Frank's Tract State Recreation Area (SRA). However, under proposed Installation Scenario 1,2, or 3 (DEIR Chapter 2 *Project Description*, Table 2-2, p. 2-8), alternate routes are available (DEIR, Chapter 3.6 *Environmental Setting, Impacts and Mitigation Measures*, Figure 3.6-1, p. 3.6-3). DEIR Chapter 3.6 discusses DWR's evaluation of a proposal to accommodate boat traffic by providing a boat towing service around

the salinity barrier area. The evaluation did not justify the need for boat towing due to the lack of time saved when compared to a boaters' use of an available alternate route. Installation Scenario 2 allows for DWR to construct a partial opening in the drought salinity barrier to provide boat navigation through the West False River between January and March, eliminating the need for boats to use alternative routes around the project site. Regardless of which Installation Scenario is installed, DWR would include closure signage, which would also identify alternate routes to avoid the project site location.

This and other supporting information regarding both potential conflicts of the project with existing recreational boating use and steps taken by DWR to avoid or reduce such potential conflicts, when feasible, should be disclosed in a future Certification of Consistency for the project submitted to the Council as part of the analysis for **DP P2**.

***Risk Reduction Policy 3: Protect Floodways***

Delta Plan Policy **RR P3** (Cal. Code Regs., tit. 23, § 5014) prohibits the presence or construction of encroachments in floodways that are not designated floodways or regulated streams unless it can be demonstrated by appropriate analysis that the encroachment will not unduly impede the free flow of water in the floodway or jeopardize public safety. West False River, like many of the rivers and sloughs in the Delta, conveys floodwaters into, through, and out of the Delta, and is considered a floodway. The Project would place a rock salinity barrier across the West False River, which may impede flood flows within the floodway.

The DEIR describes the use of a salinity barrier up to 2 times within a 10-year timeframe, with construction of the salinity barrier beginning no sooner than April 1 of a given year and removal of the salinity barrier completed by November 30 of the same or a subsequent year. Additionally, if the barrier is in place for a subsequent year, a notch would be constructed (e.g., a middle portion of the rock would be removed) to allow for fish passage and vessel navigation between the January after the installation year and the first week in April (DEIR, p. ES-2).

The DEIR discusses the potential impact of the barrier on the channel's capacity to convey flood waters in Chapter 3.5, Hydrology and Water Quality, concluding that the high flows could overtop the barrier and/or wash the barrier downstream. It



goes on to state that the West False River is a tidal channel and water surface elevation changes are driven by tidal events, rather than storms, and that no mitigation measures are required to manage high flow events (DEIR, p. 3.5-22).

The DEIR also discusses how the barrier would alter the amount of water flowing through adjacent channels. Based on observations from the 2015 EDB, velocities in adjacent channels (e.g., Fisherman’s Cut, Dutch Slough, the mouth of Old River), would increase from between 0.5-1.0 foot per second to between 3.0-3.5 feet per second. This increased velocity has the potential to cause seepage, scouring, or erosion along West False River and adjacent channels. If scour were to cause levee damage or cause the barrier to fail by undermining its foundation, this would be a significant impact (DEIR, p. 3 5-20). Project Mitigation Measure HYDRO-1 would commit DWR to monitor tidal velocities in Fisherman’s Cut and the Franks Tract levees while the West False River drought salinity barrier is in place, and under Installation Scenario 2, to regularly conduct bathymetric surveys to monitor for potential scour at the riverbed, to collect inclinometer measurements on Bradford Island to ensure there is no observed movement of the adjacent levee, and to monitor velocity measurements around the barrier while the notch is in place. DWR would be required to immediately implement corrective measures, such as early filling of the notch, if the stability of the barrier or levees may be compromised by the scour.

The Final EIR should acknowledge **RR P3** as an applicable policy in the regulatory setting for the Hydrology and Water Quality section. In the Final EIR and future Certification of Consistency submitted to the Council, DWR should acknowledge the potential construction of the barrier as an encroachment in the floodway of West False River, and reference appropriate analysis (e.g., hydraulic modeling) demonstrating that the encroachment will not unduly impede the free flow of water in the floodway or jeopardize public safety. The data that was used to develop mitigation for this potential impact was collected from observations and measurements made during the 2015, and 2021-2022 EDB projects. This limited data set inherently creates uncertainty. Adaptive management measures should be developed and included in DWR’s adaptive management plan described under **G P(1)(b)(4)** above to minimize the risk to public safety.

### ***Closing Comments***

Robert Trang – DWR, South Delta Branch  
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As DWR proceeds with development of the project, the Council invites DWR to continue to engage Council staff in early consultation (prior to submittal of a Certification of Consistency) to discuss project features and proposed mitigation measures that would promote consistency with the Delta Plan.

More information on covered actions, early consultation, and the certification process can be found on the Council website, <https://coveredactions.deltacouncil.ca.gov>. Please contact Eva Bush, Environmental Program Manager, at 916-284-1619 or [Eva.Bush@deltacouncil.ca.gov](mailto:Eva.Bush@deltacouncil.ca.gov) with any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeff Henderson", with a long horizontal flourish extending to the right.

Jeff Henderson, AICP  
Deputy Executive Officer  
Delta Stewardship Council