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RE: Prospect Island Tidal Habitat Restoration Project Draft Environmental Impact Report, SCH # 2013052056

Dear Mr. Riordan:

Thank you for the opportunity to provide comments on the Prospect Island Tidal Habitat Restoration Project (hereafter referred to as "Prospect Island Restoration Project") Draft Environmental Impact Report (DEIR). As part of that project, the Department of Water Resources (DWR) will implement an approximately 1,600-acre tidal restoration project on Prospect Island in Solano County under the Fish Restoration Program (FRP). This project is listed under the California Natural Resource Agency's EcoRestore Initiative as a priority project.

The Delta Stewardship Council (Council) through the Delta Reform Act was granted specific regulatory and appellate authority over certain actions that take place in whole or in part in the Delta and Suisun Marsh; the Council exercises this authority through the development and implementation of the Delta Plan. According to the Delta Reform Act, it is the state or local agency approving, funding, or carrying out the project that must determine if that project is a "covered action" subject to Delta Plan regulations, and if so, file a certification of consistency with the Delta Plan.

Delta Plan Policies

The Delta Plan includes 14 regulatory policies that are applicable to all covered actions. Below we have highlighted a few key regulatory policies from the Delta Plan that may be specifically relevant to the Prospect Island Restoration Project and a Delta Plan certification of consistency, if DWR determines the project to be a covered action.

Best Available Science and Adaptive Management

Delta Plan Policy **G P1** (23 California Code of Regulations [CCR] Section 5002) calls for covered actions to document use of best available science. This documentation should be consistent with the criteria listed in Appendix 1A of the Delta Plan regulations (available at http://deltacouncil.ca.gov/docs/appendix-1a), which include relevance, inclusiveness, and objectivity. If DWR files a Delta Plan certification of consistency, we suggest DWR explain the role of the Delta Regional Ecosystem Restoration Implementation Plan (DRERIP) technical review and the "Science Panel" convened in March 2014 in guiding planning and design of the project using best available science.

Additionally, Policy **G P1** calls for ecosystem restoration projects to include adequate provisions for continued implementation of adaptive management, appropriate to the scope of the action; this requirement can be satisfied through the development of an adaptive management plan that is consistent with the framework described in Appendix 1B of the Delta Plan (http://deltacouncil.ca.gov/docs/appendix-1b), along with documentation of adequate resources to implement the proposed adaptive management process. Since ongoing funds originating from the State Water Project contractors will be used to support and monitor the project, we anticipate DWR will have the ability to describe access to the funding, equipment and staffing necessary to implement adaptive management for the project.

Some key parts of the adaptive management process involve identifying key uncertainties that can be addressed by a project and disseminating key findings to interested parties so that the design of future projects can be based on the lessons learned from past efforts. Two notable features of the Prospect Island Restoration Project involve excavating tidal channels as part of site preparation and constructing levee breaches with velocity dissipation features (as described on page 2-46 of the DEIR). According to the DEIR, the excavation of tidal channels is intended to facilitate hydraulic connectivity and transport pathways within the project site as well as serve as a "template" for channel network evolution. Concurrent projects like the State and Federal Contractor Water Agency's Tule Red Restoration Project are also using the approach of excavating the primary tidal channels before breaching the exterior levee in an area with high sedimentation, while another DWR FRP project, the Decker Island Restoration Project, will not involve any channel excavation since hydrologic modelling indicated it was not necessary for that site. Major channel excavation and earthwork increases the complexity and cost of tidal wetland restoration projects, but it is hypothesized that for certain sites these efforts can help accelerate the reestablishment of natural tidal wetland processes following the introduction of full tidal influence. We suggest the adaptive management plan incorporate strategies for evaluating the effectiveness of excavating tidal networks prior to exterior levee breaching (e.g., evaluate whether the main channel silts in, determine if channels help maintain adequate velocities to help preclude colonization by invasive aquatic vegetation, and assess whether the excavated main channel helps facilitate formation of smaller dendritic, channel networks), as the lessons learned will be valuable for guiding the design of future tidal wetland restoration projects.

The breach velocity dissipater approach is a unique strategy being implemented by the project to reduce the formation of disorienting eddy currents near levee breaches that can confuse native fish and increase their vulnerability to predation loss. Council staff understand the major challenges of directly evaluating the effects of this levee breach design on predation rates (e.g., predator stomach contents studies) given the current restrictions on fish sampling to reduce incidental take of delta smelt. One potential approach to study this design is to have a single-time special study that analyzes real-life hydrodynamics around the levee breach and see how that compares to the pre-project modelling results; such a study could verify the effectiveness of the design in reducing the types of water eddies that disorient small, juvenile native fish and/or provide insights in how future pre-project hydrodynamic modeling could be improved.

Another feature of the Prospect Island Restoration Project that lends itself to special study is the establishment and expansion of vegetation. Since there are some features on the site that are scheduled to be pre-planted, and others that are going to be passively re-vegetated, a study on the establishment of vegetation could provide valuable information on natural versus transplanted colonization rates, which may be useful for planning other projects. Information gained from studying re-vegetation on Prospect Island could also be compared with studies of vegetation at nearby Liberty Island to provide context and reference.

Delta Science Program staff provide consultation regarding preparation of documentation of use of best available science and adaptive management. Staff from the FRP shared preliminary drafts of the Prospect Island Restoration Project adaptive management plan with us and we very much appreciated the opportunity to engage during the early phase of adaptive management plan development. Karen Kayfetz (karen.kayfetz@deltacouncil.ca.gov) of the Delta Science Program will continue to be the primary point-of-contact regarding discussions related to documentation of best available science and development of the adaptive management plan for the Prospect Island Restoration Project.

Mitigation Measures

Delta Plan Policy **G P1** (23 CCR Section 5002) also requires that actions not exempt from the California Environmental Quality Act (CEQA) and subject to Delta Plan regulations must include applicable feasible mitigation measures consistent with those identified in the Delta Plan Program Environmental Impact Report (PEIR) or substitute mitigation measures that are equally or more effective. The Delta Plan Mitigation and Monitoring Reporting Program (MMRP) is to be used to ensure compliance with the Delta Plan mitigation measures and this document is available at http://deltacouncil.ca.gov/sites/default/files/documents/files/Agenda%20Item%206a_attach%202.pdf. One specific example of a relevant Delta Plan PEIR mitigation measure is provided below.

Habitat Restoration

Delta Plan Policy **ER P2** (23 CCR Section 5006) states that habitat restoration must occur at appropriate elevations and be consistent with Appendix 3 of the Delta Plan regulations, which is an excerpt from the 2011 Draft Ecosystem Restoration Program Conservation Strategy. Appendix 3 describes the many ecosystem benefits related to restoring tidal wetlands, but it also cautions about the impacts of invasive species and methylation of mercury. The DEIR explains that CDFW and DWR are currently developing studies to evaluate the flux of methylmercury in freshwater tidal wetlands. To the extent possible, DWR should incorporate methylmercury studies into the monitoring and adaptive management plan for Prospect Island Restoration Project.

Invasive Species

Delta Plan Policy **ER P5** (23 CCR Section 5009) states, "The potential for new introductions of or improved habitat conditions for nonnative invasive species, striped bass, or bass must be fully considered and avoided or mitigated in a way that appropriately protects the ecosystem." Nonnative species, such as terrestrial and aquatic weeds, are a major obstacle to successful restoration because they affect the survival, health, and distribution of native wildlife and plant species. Although there is little chance of eradicating most established nonnative species, management can be designed to reduce their abundance. As stated above, the Ecosystem Restoration Program Conservation Strategy also states that a major concern for restored tidal wetland would be potential for colonization of this habitat by non-native species.

According to the DEIR, the project site is host to several ecologically disruptive, invasive weeds species, including water primrose, Eurasian watermilfoil, curlyleaf pondweed, giant reed, yellow star thistle, and tamarisk. The restoration strategy includes removing existing invasive weeds in coordination with dewatering of the site. We agree with this approach by DWR to focus on removal of invasive weeds prior during site preparation; lessons learned from other tidal restoration sites indicate that controlling invasive weeds when the site is dry is important as weed control in an aquatic habitat becomes much more challenging. The DEIR outlines different methods for weed control (e.g., herbicide application or mechanical removal) for specific weed species and the timing for these implementing these strategies.

We recommend that DWR develop an invasive species management plan for the project, in accordance with Delta Plan MMRP **Biological Resources Mitigation Measure 4-1**, which addresses both terrestrial and aquatic weeds. This particular mitigation measure calls for an invasive species management plan to be developed and implemented which include the following elements:

- Nonnative species eradication methods (if eradication is feasible)
- Nonnative species management methods
- Early detection methods
- Notification requirements

- Best management practices for preconstruction, construction, and post construction periods
- Monitoring, remedial actions and reporting requirements
- Provisions for updating the target species list over the lifetime of the project as new invasive species become potential threats to the integrity of the local ecosystems

Land Use

Delta Plan Policy **DP P2** (23 CCR Section 5011) calls for habitat restoration projects to avoid or reduce conflicts with existing uses. Additionally, it calls for consideration of comments from local agencies and the Delta Protection Commission.

Habitat restoration efforts can contribute to potential conflicts with neighboring landowners and stakeholders. As you are probably aware, DWR - in collaboration with several other agencies - developed a toolbox of Agricultural and Land Stewardship (ALS) strategies which provide guidance for managers of projects located within agricultural areas. These strategies include good neighbor practices, options for landowner participation, and strategies to support an agricultural economy (all these strategies are available online at https://agriculturallandstewardship.water.ca.gov/). To the extent feasible, we recommend DWR utilize these ALS strategies as it works with local landowners and stakeholders throughout the CEQA analysis process.

The DEIR also includes an analysis of the potential for seepage from the project to the neighboring Ryer Island, which the DEIR ultimately concludes will be a less-than-significant effect. Such analyses can be used to demonstrate consistency with DP P2 and how unintended consequences from the project on existing uses for neighboring properties was considered and mitigated if necessary.

Other General Comments on DEIR

The Delta Plan contains 74 recommendations, which we encourage project proponents to consider as they design and implement their projects and programs. Progress towards their implementation will help with achieving the coequal goals in a manner that protects and enhances the unique values of the Delta. The DEIR identifies a few Delta Plan recommendations as policies (e.g., page 3-320 of DEIR), including Recommendation ER R2 (Prioritize and Implement Projects that Restore Delta Habitat) and DP R10 (Encourage Wildlife-friendly Farming). We want to clarify that unlike the Delta Plan's 14 policies, the 74 recommendations of the Delta Plan are non-regulatory in nature. Although DWR would not be required to document compliance with these recommendations as part of a Delta Plan certification of consistency, we appreciate DWR's recognition of the importance of relevant Delta Plan recommendations as a component of demonstrating consistency with applicable regional plans, as called for by section 15125(d) of the CEQA Guidelines.

We recommend DWR also include in the Final EIR analysis related to Delta Plan recommendations DP R11 (Provide New and Protect Existing Recreation Opportunities), DP R14 (Enhance Nature-based Recreation), and DP R16 (Encourage Recreation on Public Lands) which encourage increasing outdoor recreation to the extent feasible. Potential recreational opportunities to consider for the site include boating access, bird watching and environmental education.

Final Remarks

Overall we support DWR in this effort to restore tidal wetlands to benefit native species including delta smelt and salmonids. We look forward to working with DWR staff on this project and, if necessary, providing early consultation to DWR staff on filing a Delta Plan certification of consistency. I encourage you to contact Daniel Huang at Daniel.Huang@deltacouncil.ca.gov for any questions you have regarding issues raised in this comment letter.

Sincerely,

C Enos-Nobriga

Cassandra Enos-Nobriga
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Delta Stewardship Council