

**From:** Ingram, Campbell@SSJDC

**Sent:** Monday, January 6, 2020 8:47 AM

**To:** ecosystemamendment@deltacouncil.ca.gov

**Cc:** Tatayon, Susan@DeltaCouncil <Susan.Tatayon@deltacouncil.ca.gov>; Pearson, Jessica@DeltaCouncil <Jessica.Pearson@deltacouncil.ca.gov>; Law, Jessica@DeltaCouncil <Jessica.Law@deltacouncil.ca.gov>; Melcer, Ronald@DeltaCouncil <Ronald.Melcer@deltacouncil.ca.gov>

**Subject:** Chapter 4 Comments from the Delta Conservancy

Dear Chair Tatayon and Staff,

Thank you for the opportunity to provide comments on the Preliminary Draft of Chapter 4, Protect, Restore, and Enhance the Delta Ecosystem, of the Delta Plan. The preliminary draft provides a great framework for achieving the coequal goal of protecting, restoring and enhancing the Delta ecosystem and the Delta Conservancy looks forward to being a partner in restoration efforts that help achieve the goal. The Conservancy is a unique state organization that is tasked with conducting restoration in coordination with the Delta Community and we are proud to have been able to fund 27 locally supported restoration projects to date. Please consider the following comments in future revisions to Chapter 4.

- 1) Page 4-4, consider expanding the introductory paragraph to include information contained in the beginning of the second paragraph on page 4-29 recognizing the importance of a well-coordinated and collaborative approach with the Delta Community if restoration is to be successful. Additionally it would be good to recognize the restoration partnership that is required for success, calling out state and federal agencies, NGO partners and consultants who do the work. Both concepts introduced in the first paragraph would provide a more complete context for the rest of the document.
- 2) Page 4-13, first and second paragraphs should include a brief description of subsidence in the Delta, the resulting carbon emissions and increasing risk to the state and federal water projects, local agriculture and communities. Language in the first sentence of page 4-43 recognizes the significance of the carbon emissions and how they work against the state's carbon neutrality goals. This language should be incorporated into this first discussion of climate adaptation. Additionally, it would be good to introduce managed wetlands and rice cultivation here and briefly describe the benefits of stopping subsidence and related emissions and providing benefits to avian and listed species. The second paragraph does this for tidal wetland and riparian habitat and should do the same for managed wetland/rice.
- 3) Page 4-17, second paragraph. Similar to number 2, here is another opportunity to introduce the benefits of managed wetlands.
- 4) Page 4-18, bulleted list of future characteristics should include a bullet that indicates controlled subsidence and related carbon emissions in a manner that provides economic incentives and co-benefits of risk reduction, and habitat for avian and other listed species. There are large sections of the document that discuss protection against land loss, it would seem a bullet here would reflect the importance commensurate with the attention later in the document.
- 5) Page 4-28, last sentence of third paragraph. The Conservancy very much appreciates the recognition of incremental benefits making meaningful contributions to ecological function over time. We believe this recognition is consistent with the realities of the challenges and timelines associated with large-scale restoration including lack of funding and significant local opposition to restoration at scale.

- 6) Page 4-27-29, Core Strategy 2 section. While we understand and concur with the focus on ecological function in this section, the concept of channel margin habitat is not addressed anywhere in the document. With over 1,100 miles of mostly armored edge and fast moving channels, significant effort has gone into assessing what can be done to improve edge habitat to provide benefits to migrating juvenile salmonids (Davenport analysis for DSC, and SFEI analysis for the Conservancy, draft due out by early 2020). A discussion of the topic could be appended to the functional floodplains discussion.
- 7) Page 4-33. First and second paragraphs. These two paragraphs should more explicitly connect the mechanism of subsidence, microbial oxidation of highly organic drained agricultural soils, to the rates of subsidence and rates of carbon emissions (average of 10/tons/acre/yr., in the deeply subsided areas of the Delta, and indicate the total carbon emission per year from the Delta). Again incorporating language from the first sentence on page 4-43 would be valuable.
- 8) Page 4-35. Last section of the second paragraph, second sentence beginning with Providing terrestrial and wetland habitat.... We understand the context of the section but it still seems to unnecessarily overstate the costs and diminished value of creating managed wetlands and under sells the broader climate, habitat and reduced risk benefits. The last sentence in the paragraph is the first time in the document that oxidation and carbon emissions are recognized, this can be rectified by addressing comments 2, 3, 4 and 7 above.
- 9) Page 4-36. Second to last sentence. Due to rates of carbon emissions of drained agriculture, and the production of methane when soils are re-saturated, the overall climate benefit is emission avoidance and not carbon sequestration. Sequestration is canceled by methane production. This is a fundamental difference of highly organic peat soils that should be understood.
- 10) Page 4-40. Last bullet, Western Delta/ECCC. This bullet should include managed wetlands to stop subsidence and related emissions, and provide habitat benefits.
- 11) Page 4-43. End of first paragraph. It would be good to recognize the habitat/species benefits of managed wetlands in this paragraph.
- 12) Page 4-43. First sentence last paragraph. Sequestering carbon should be changed to reducing carbon emissions.
- 13) Page 4-44. Second paragraph. While the Conservancy supports more utilization of RCDs (we partner with them on many projects) it seems odd to single them out here and not recognition other partners like reclamation districts and water districts that we partner with on these type projects. Note that New ER-D on page 4-65 recognizes other local agencies and districts. Further it is important to recognize in the areas that are rapidly subsiding in the Delta the only practice that can significantly reduce the alarming rate of carbon emissions and subsidence is rewetting the land to stop the microbial oxidation. Other practice such as the referenced grasslands protocols, while extremely valuable on the more mineral soils on the edge of the Delta and around the state are not relevant in the subsided Delta because the relationships change profoundly on peat soils. Both the state's rice protocol and the grasslands protocol do not cover the Delta for this reason. Better management of grasslands (soil amendments, no till) on more mineral soils can sequester 1 to 3 tons a carbon/yr. Rewetting of peat soils results in an avoided emission of 10 tons of carbon/yr., and sequestration rates that are cancelled by methane production. See comment 9 above.
- 14) Page 4-53. Second paragraph. Add the Department of Fish and Wildlife to the parenthetical that identifies the Conservancy as funding state-led programs. DFW also has Prop. 1 and 68 dollars for the Delta.
- 15) Page 4-55. Delta Conservancy box. Please include that we are actively developing carbon market incentives and pilot projects.
- 16) Page 4-57. Ownership and Management section. This section recognizes the Conservancy's authorization to acquire and manage lands but does not recognize the ongoing role of DFW, DWR and Department of Parks in managing lands currently.

- 17) Page 4-67. ER R7. The Department of Boating and Waterways should be recognized here. Also, funding strategies for control of existing terrestrial invasive species (not just new) should be developed as well. Existing aquatic species are pretty well covered by DBW, but underfunded.
- 18) Page 4-69. ER RF (b). Consider adding, "to stop subsidence and related carbon emissions and", between necessary and to achieve.

Thank you again for the opportunity to comments and please feel free to reach out for any clarification of the comments here.

Campbell

Campbell Ingram

Executive Officer

***Sacramento-San Joaquin Delta Conservancy***

1450 Halyard Drive, Suite 6

West Sacramento, CA 95691

916.375.2089 direct

916.281.4145 mobile

*"A partner for balanced ecosystem restoration and economic development in the Delta."*

[www.deltaconservancy.ca.gov](http://www.deltaconservancy.ca.gov)