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# MEMORANDUM

**Date:** June 26, 2024

**To:** Delta Stewardship Council
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Sent via email: fiveyearreview@deltacouncil.ca.gov

**From:** Delta Independent Science Board

## Subject: Comments on the Delta Plan Five-Year Review, 2024, with Performance Measure Report Cards

The Delta Independent Science Board (Delta ISB) has reviewed the draft of the Delta Plan Five Year Review, 2024, with Performance Measure Report Cards. This letter aims to provide constructive guidance and feedback on the Delta Stewardship Council's approach to evaluating the performance of the Delta Plan. We offer both general comments about the overall approach and methods of performance review, as well as specific comments on key sections of the draft report.

The Delta ISB recognizes that conducting a review of performance for such a complex system as the Delta is extremely challenging. Overall, the systematic approach that the Delta Stewardship Council adopted for this review is logical and well-organized. The 2024 Report, however, could be clearer in explaining how performance indicators were selected and how the values were determined. While the report may provide a view into the big picture of what is happening in the Delta, it could provide more guidance on how recommendations can be implemented to better meet Delta Plan objectives. We offer more specific comments on each of the three main sections of the 2024 Review below.

## Part 1: Key Five-Year Accomplishments

Overall, the accomplishments described in Part 1 lay out useful and targeted steps that are advancing the Delta Plan. In particular, the Delta ISB praises the 2024 Review's emphasis on emerging issues identified in the 2019 Five-Year Review. Those issues include climate change risk in the Delta, which postdates the original Delta Plan. The discussion in the 2024 Review (page 7) of Delta Stewardship Council's investments in the Delta Adapts program is an important step in addressing the threat of climate change. The 2024 Review also highlights updates to the three elements of the Delta Science Strategy, which the Delta ISB finds to be timely and inclusive/collaborative. Further development of the Science Tracker should improve accessibility to Delta science results (page 8). Perhaps less evident in Part 1 of the Review are the areas where the Delta Stewardship Council has not made progress on emerging issues from the 2019 Five-Year Review. The Review notes that the Council "has made progress on *some* of these issues" (page 5) but could identify areas that still need progress. To improve clarity, the text should directly state what all of the emerging issues were from the 2019 Five-year Review.

## Part 2: Performance Measurement Report Cards

Part 2 of the 2024 Review provides a useful mix of quantitative and qualitative evidence to illustrate key performance metrics in a way that is easy to digest and understand, while also recognizing the diversity of metrics needed to assess key goals. The indicators offer a reasonable high-level view of the state of actions, activities, and some outcomes. Many indicators offer insights into future change, such as trends in per capita water use.

In general, the indicators provided in Part 2 could be more effective at representing desirable outcomes. A prominent example is the metric "Acres of natural community restored." Without some kind of quality adjustment, representing the level of habitat quality achieved, we do not get a good sense of how well restoration is supporting the life cycle activities of species. Overall, it can be difficult to connect how the key management strategies in the Delta are supporting or hindering the performance outcomes. Additionally, some metrics could be clearer about the time frame, which would aid in interpretation. For instance, on page 15, is the reduction of 20% in urban water use part of a continuous trend or one point in time? Please include this information if possible.

A couple of key sections of Part 2 also would benefit from more specificity or nuance. For example, although the section on water supply reliability is summarized nicely, it will be important to mention the importance of demand reduction in California water planning (page 14). Second, the 2024 Review recognizes that subsidence has been reversed over the past 10 years on only "a little over 10% of the 30,000-acres" of the target (page 21). This observation also applies to carbon sequestration projects called for in the Delta Plan in conjunction with the subsidence reversal efforts. While the 2024 Review recognizes that these efforts should include subsidence halting as well as reversal, this is somewhat lost in the sentence on page 21. As was confirmed by discussions at the Delta ISB subsidence workshop in October 2023, managing subsidence rates is a complex subject. Even slowing subsidence by changing agricultural practices is a benefit and threat reducer.

Finally, Part 2 could describe limitations of the metrics more transparently. For instance, dashboard indicators based on averages do not allow us to see the temporal or spatial variability of performance metrics, or the compounding or cumulative effects of performance, when relevant. In the Delta system, it may be important, for instance, to understand cumulative effects of different indicators on particular communities of the Delta (e.g., on Environmental Justice communities). Although the online performance tool has more spatial detail, it is not clear if multiple indicators can be assessed together in the same spatial area. A common approach to evaluating priorities and accomplishments is to overlay indicators of vulnerability with indicators of change. For indicators that are enhanced by spatial context, it would be helpful to see the results as a map. This comment does not only apply to social outcomes but ecological ones too.

Another limitation worth noting is that using representative species or metrics for evaluation of progress in ecosystem health/water quality (e.g., salmon representing all aquatic species; sediment toxicity representing "measurable toxicity") is a useful and practical approach to tracking progress. However, since the full spectrum of species or ecosystem processes have different responses to stressors, changes in these indicators must be interpreted with caution. The document could be improved by adding general or specific caveats about known limitations of indicators for representing aspects of the system.

We understand that there are no current plans to amend the Delta Plan or the performance measures, but we hope our comments can improve descriptions of

the performance measure evaluation process and will be kept in mind should the opportunity arise in the future for amending performance measures.

### Part 3: Regulatory Analysis

Part 3 offers useful descriptive data on progress associated with the Delta Stewardship Council's regulatory policies and certification of consistency process. Efforts to expand outreach to local and state agencies and early consultation processes are notable. Growth in the number of certifications of consistency submitted could be indicative of "growing awareness of the Council's process and authority" (page 27), as suggested. However, in the future, the Delta Stewardship Council might consider conducting more systematic outreach or surveys of stakeholders to more directly evaluate the covered action certification process (e.g., awareness of the process, challenges of the process, transparency of decisions). Doing so would give a clearer picture of local concerns and understanding. Additionally, the Delta ISB supports the 2024 Report's call to collect "information about the post-certification implementation of covered action" to evaluate how key projects/covered actions, and regulatory policies that govern them, are contributing to Delta Plan performance (page 30). Finally, the Delta ISB appreciates the information provided on the Best Available Science criteria cited in certification appeals (page 37), as it speaks to broader concerns about inclusiveness and relevance of science being used in the Delta.

### Part 4: Recommendations

More information on the process for selecting the set of recommendations identified in Part 4, given the information provided in Parts 1 to 3, would be helpful. It is also unclear why some components of the Report are not integrated into the recommendations. For example, pages 19+ discuss ways to "*Protect and Enhance the Unique Cultural, Recreational, Natural Resource, and Agricultural Values of the California Delta as an Evolving Place*," and incentives for addressing this goal were mentioned at the Delta ISB meeting on May 22, 2024 - yet they are not a part of this Report's recommendations.

Additionally, although several of the actions offer specific steps for implementation, some of the steps could be more specific and focused. For example, it is not clear how ecosystem restoration would be accelerated. The need for conversion to more rice production was mentioned at the Delta ISB meeting on May 22, yet there is also the need for additional managed wetlands to reverse subsidence. Managed emergent wetlands are able to reverse subsidence, while rice cultivation has been

shown thus far only to stop subsidence, but not reverse it (although this is still being researched). Instead of presenting or referring to such details, the report uses general statements such as calling for advancements in "*incentives and protocols that support transitioning subsided lands to sustainable farming practices and make subsidence halting and reversal activities more economically viable"* (page 49). It is hard to judge how this recommendation will be implemented, and it will be helpful to provide examples.

The Delta ISB also recommends considering the implications of recommended actions for future performance assessments. In particular, consider recommendation 6b: *"Review available social science information and leverage existing efforts (Delta Resident Survey, Socioeconomic Indicators) to develop a composite index that incorporates economic infrastructure, environmental, and social indicators into a comprehensive assessment of the Delta economy that enables comparisons to statewide trends*." A single composite index hides vital details and does not provide a means to track attribution for the value.

Furthermore, aggregation assumes that each of the components are independent (which is often not the case). Because aggregate indices are not transparent (that is, the values do not relate to any specific condition, and they have no units), they provide little actionable information. Rather than a single index, it would be more helpful to populate the online dashboard with information on select indicators so that users can consider them in a manner which best suits their questions and context. In addition, guidelines should be made available on how best to interpret and use the data.

Perhaps a more minor recommendation on wording relates to "Accelerate Subsidence Reversal" (page 48). The word accelerate implies increasing the rate of subsidence reversal. Would *Accelerate Subsidence Reversal Efforts* be clearer?

## Appendix and Online Dashboard

For the sake of transparency, more details on metrics used for the evaluation (including units), data sources and data sets should be provided in the Appendix.

A quick check of the Delta Plan Performance Measure Dashboard for supporting information showed that for the "measurable toxicity" performance measure, information is available for both sediment and water toxicity. The reason for selecting sediment toxicity as the only metric used is not provided. Moreover,

additional links have to be opened to get information on detailed methods and threshold and categories used. This appendix should, at a minimum, provide the name of the tests used to determine toxicity, as well as the time period of data collection and sources.

This said, if one single metric has to be chosen for the evaluation, sediment toxicity is likely a good choice. It is also a good idea to use toxicity testing data rather than chemical concentration data for evaluating toxicity/risk. Toxicity tests provide a more direct measure of chemical mixture effects than standard risk assessment. However, it would be wise to interpret any improvement with caution as sediment toxicity measurements are limited to one or few species, and are neither representative of other organism groups nor of water column toxicity.

Minor edits to the Appendix also include: briefly explain what “Farm Gate” data represents (page 5) and add Latin name to “Nutria” (page 14).

Additionally, for the online dashboard, which was discussed in more detail at the May 22, 2024, presentation to the Delta ISB, it would be helpful to give information about how the performance measures and targets were selected originally, and current challenges in meeting targets. The site might also provide more information as to how the recommendations could be implemented.