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**To:** Delta Independent Science Board ([disb@deltacouncil.ca.gov](mailto:disb@deltacouncil.ca.gov))

**Subject: comments on draft Monitoring Enterprise Review**

Dear Independent Science Board,

Thank you for providing the opportunity to comment on the draft report and for bringing together the resources to facilitate discussion of the monitoring enterprise. As the first speaker (4 years ago!) in the seminar series supporting this effort, I've been looking forward to seeing the results and hope that fruitful conversations can continue. I present a couple of overarching requests, some thoughts on the "big moves," and a couple of specific comments for you to consider for the final version of your report.

The first request is to further describe and qualify the quality control efforts that went into inventory development, and to consider how inaccuracies may influence your conclusions. For example, you state that only 3% of the monitoring activities in the inventory are "effectiveness monitoring" on page 70. As I spoke about in my presentation and as all program documentation indicates, my program (Fish Restoration Program Monitoring) is focused on determining the *effectiveness* of tidal wetland restoration in providing food web and habitat support for listed fish species. However, the inventory (circa May 2020, anyway) lists the "type" of all monitoring activities in my program as "implementation." Other significant errors about my program had been corrected in that version of the profile, but I am unaware of efforts to QC information for other programs. For this particular example, perhaps the error wouldn't significantly affect your assessment, but if other programs are similarly mischaracterized, maybe it would. If the inventory is to be made public as the Delta Science Tracker it would be best to ensure accuracy before publishing misinformation.

The second overarching request is to fact check and/or provide proper context for results obtained from the questionnaire. Although you acknowledge at first mention that responses from 34 people are not likely to represent the entire monitoring enterprise, a lot of text and graphs are devoted to the results, and in instances quotes are incorporated at face value, rather than reported as perceptions (which would be totally valid). For example, a quote about invasive species monitoring on page 38: "...not effectively part of the Bay-Delta monitoring enterprise, because of the institutional barriers enterprise leaders reinforce to emphasize the management themes they desire it to focus on." Unless this person was an "enterprise leader" assumption of intent or desire of other people is sketchy at best. Another quote on page 134 makes the unrefuted claim that existing staff monitor nutria with no additional resources, when in fact a small army has been hired to do nothing but track and eliminate nutria. While I did make the time to respond to the questionnaire myself, it was available for a relatively short time near the beginning of the pandemic and I think you're missing a good bit of the range of perceptions.

Regarding the “big moves” (paraphrased):

- A) *Developing priority management-informed science needs and synthesize with reports and summit* – I would love to see such a summit, perhaps as a standing part of the Bay Delta Science Conference. While considering management questions, please do keep in mind important differences between regions (e.g., there is a reference to restoration being important for birds, which is definitely true and a priority in the Bay, but in Suisun Marsh there is concern about loss of habitat for waterfowl in restoration/conversion of managed to tidal wetlands).
- B) *Re-imagine monitoring designs guided by priority science needs and a system-wide conceptual model* - Perhaps this is outside the scope of this review, but for adaptive management to be useful, monitoring should also be linked to experimental actions that could provide for a range of results. It would be really interesting to see a system-wide conceptual model, but I’d want it to be backed by literature and agreed upon by a wide variety of stakeholders before it is used to determine what monitoring or research is valuable. On a more detailed note, in the discussion of this recommendation on page 71 there is mention of comparing zooplankton data – this is happening now, with interagency participation, largely led by DSP staff!
- C) *Strengthen the integration, organizational and funding structure to support monitoring, analysis, and adaptive management* – For some monitoring programs, what may be necessary to achieve this is integration among permitting agencies requiring the monitoring and consideration of how monitoring data should be reported and analyzed (e.g., programmatic vs. project-specific). Multiple permitting agencies should be clear what their individual jurisdictions are but coordinate with others (aim of IAMIT and AMAT, but need more buy-in) to provide efficiency of requirements and resource use.

Specific comments relative to my program or my presentation:

Page 39-40: It is incorrectly implied that food-web resources are only monitored in tidal wetland restoration because Delta Smelt take was difficult to permit. While incidental take has been a barrier to directed fish sampling, it is less so now, and fish sampling would have always been *in addition* to food-web sampling, as food-web support is a main objective of the Fish Restoration Program and was the primary premise behind the requirement for tidal wetland restoration.

Page 60: *“A need for “coordinating the coordination” through improved communication between scientists and managers was discussed as a way to improve the efficacy of the monitoring enterprise during our brown bag seminar and panel discussion with the Fish Restoration Program. Staff should be aware of program goals to ensure data quality and proper decision making.”* Although I agree that better communication all around is a good thing, what I meant by “coordinating the coordination” is consideration of the many groups that are purporting to coordinate monitoring or management in isolation from one another, but all going to the same agency staff or middle managers for participation. It seems there is not full

understanding of various coordination efforts even within the Delta Science Program, or those efforts were just not considered in this review.

Thanks again for the opportunity to comment.

Best regards,

Stacy Sherman

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