This public correspondence was modified for accessibility. For original correspondence, contact disb@deltacouncil.ca.gov

Submitted Via Portal: **disb@deltacouncil.ca.gov**

May 12, 2025

Delta Independent Science Board
715 P Street, 15-300
Sacramento, CA 95814

Re: Comment Letter- Draft Prospectus on the Contaminants Monitoring Review

Dear Delta Independent Science Board:

The State Water Contractors (SWC)[1] and the San Luis & Delta-Mendota Water Authority (SLDMWA)[2] appreciate this opportunity to comment on the Draft Prospectus on the Contaminants Monitoring Review (Prospectus). SWC and SLDMWA are providing these comments on behalf of themselves and their member agencies (collectively "Public Water Agencies") who work together to provide water to more than 29 million California residents and 1.9 million acres of farmland throughout the state, as well as listed species and millions of waterfowl that depends upon nearly 200,000 acres of managed wetlands and other critical habitat within the largest contiguous wetlands in the western United States. The Public Water Agencies receive water from the State Water Project ("SWP") and/or the Central Valley Project ("CVP"), primarily receiving water that has been diverted in the south Delta, so issues impacting the Delta are of critical importance to our

[1] Alameda County Flood Control District Zone 7, Alameda County Water District, Antelope Valley – East Kern Water Agency, Casitas Municipal Water District, Central Coast Water Authority, City of Yuba City, Coachella Valley Water District, Crestline – Lake Arrowhead Water Agency, Desert Water Agency, Dudley Ridge Water District, Empire West Side Irrigation District, Kern County Water Agency, Kings County, Littlerock Creek Irrigation District, Metropolitan Water District of Southern California, Mojave Water Agency, Napa County Flood Control and Water Conservation District, Oak Flat Water District, Palmdale Water District, San Bernardino Valley Municipal Water District, San Gabriel Valley Municipal Water District, San Gorgonio Pass Water Agency, San Luis Obispo County Flood Control and Water Conservation District, Santa Clara Valley Water District, Santa Clarita Valley Water Agency, Solano County Water Agency, and Tulare Lake Basin Water Storage District.

[2] SLDMWA member agencies: Banta-Carbona Irrigation District, Broadview Water District, Byron Bethany Irrigation District, Central California Irrigation District, City of Tracy, Columbia Canal Company (a Friend), Del Puerto Water District, Eagle Field Water District, Firebaugh Canal Water District, Fresno Slough Water District, Grassland Water District, Henry Miller Reclamation District #2131, James Irrigation District, Laguna Water District, Mercy Springs Water District, Oro Loma Water, Pacheco Water District, Panoche Water District, Patterson Irrigation District, Pleasant Valley Water District, Reclamation District 1606, San Benito County Water District, San Luis Water District, Santa Clara Valley Water District, Tranquillity Irrigation District, Turner Island Water District, West Stanislaus Irrigation District, and Westlands Water District.

members. This particular review is a natural evolution of the Delta ISB's previous reviews on water quality (Delta ISB, 2018 and the monitoring enterprise (Delta ISB 2022). We support the effort to elevate the importance of contaminant monitoring and offer these comments on the Prospectus. The comments are in regard to establishing management questions and decisions that would be served by this Prospectus, the approach, and future engagement. Management Decision Context

We believe that for this review to have relevance to decision makers it must link findings to management decisions in the Sacramento-San Joaquin Bay-Delta watershed (Delta). We note that in the system, there is a difference between how contaminants are managed under various legal requirements. For instance, requirements pursuant to the Clean Water Act (CWA) and the Porter Cologne Water Quality Control Act (Porter Cologne) are managed differently as compared to how stressors such as contaminants are managed under the Endangered Species Act (ESA) and California Endangered Species Act (CESA). This means there is often a lack of clarity regarding management decisions related to contaminants. The contaminant monitoring outcomes are not often used to support decision making and are not appropriately attributed when considering the effects and levels of various stressors on species of concern. Knowing the management decision context is critical to developing monitoring that is responsive to management needs. In the Prospectus, it is unclear what management decision(s) would be informed by the contaminant monitoring, and the proposed assessment of the contaminant monitoring and its relationship with the applicable regulatory standard.

As referenced in the Delta ISB 2022, monitoring must serve a purpose. Frequently, that purpose is to inform a management decision, and if the monitoring does not inform any management decisions its usefulness is called into question (Latour 2016). It is our understanding that the Delta ISB is performing this review to determine the scope of monitoring in the Delta and how it informs management decisions related to contaminants. In Reynolds et al (2016), the authors developed a conceptual "road map" to structure how to develop and implement management relevant monitoring (Fig. 1). This Road Map has been used successfully to implement the Enhanced Delta Smelt Monitoring Program as well as other monitoring reviews in the Delta.

The Road Map has four important phases, but we would like to call attention to two overarching phases, Phase 1, Frame the Problem, and Phase 4 Learn and Revise, as we know these phases are pertinent to the Prospectus.

In Phase 1, the problem should be defined in regards to both the monitoring program being reviewed as well as to the review itself. It is imperative that the problem or questions used to develop and implement management decisions is sufficiently detailed. Regarding the monitoring program being reviewed, knowing the problem will inform the Delta ISB on how to better inform decision making, what gaps need to be addressed, and how to fill those gaps. In regards to the

Prospectus itself, the Delta ISB should outline what management decision(s) it is informing in a detailed manner. For instance, the purpose of the Prospectus appears to be to inform ecosystem management in the Delta, but to what purpose? A helpful question for focusing on the purpose is, what is the fundamental objective informing ecosystem management? Without specificity, this review could end up too broad and difficult to implement.

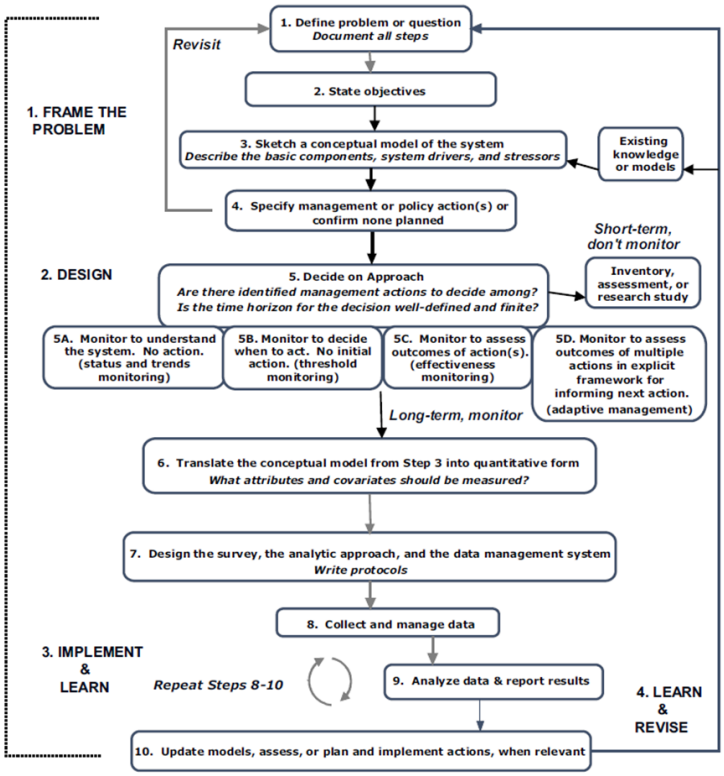

Fig 1. Monitoring Road Map from Reynolds et al (2016) that lists the 4 categories of Frame the Problem, Design, Implement and Learn, and Learn and Revise.

The image above may not be accessible for those using a screen reader. Below are the text within the image.

Category 1. Frame the Problem

1. Define problem or question. Document all steps
2. State Objectives
3. Aketch a conceptual model of the system. Describe the basic components, system drivers, and stressors. Include existing knowledge or models
4. Specify management or policy action(s) or confirm none planned. Revisit step 1 if needed

Category 2. Design

5. Decide on Approach. Are there identified management actions to decide among? Is the time horizon for the decision well-defined and finite? If short-term, don't monitor: inventory, assessment, or research study.
    A. Monitor to understand the system. No action. (status and trends monitoring)
    B. Monitor to decide when to act. No initial action. (Threshold monitoring)
    C. Monitor to assess outcomes of action(s) (effective monitoring)
    D. Monitor to assess outcomes of multiple actions in explicit framework for informing next action. (adaptive management)
6. For long-term monitoring. Translate the conceptual model from step 3 into quantitative form. What attributes and covariates should be measured?
7. Design the survey, the analytic approach, and the data management system. Write protocols

Category 3. Implement & learn (Repeat steps 8 – 10)

8. Collect and manage data
9. Analyze data & report results
10. Update models, assess, or plan and implement actions, when relevant

Category 4. Learn and Revise (return to step 1 or incorporate knowledge into step 3)

Approach

Given the objective is to assess if and how current monitoring informs contaminant risk assessments it is important to frame the scope of this review. We provide additional thoughts below.

- It is clear that the Delta is part of the review, but contaminants come from both up and downstream of this region (Brooks et al 2012). Any monitoring from those locations should also be considered.
- In regards to the interviews, it's important to engage managers at the ground level in both regulatory and implementation areas. As for addressing gaps and conducting workshops on novel methods, that has been done with little to no change in approach (Connon et al 2019).
- Phase 4 of Reynolds et al (2016) is Learn and Revise. This Prospectus has the noble goal of trying to identify gaps in information. However, more monitoring may only end up with more data not being used.
- The metrics measured need to be timely and appropriate to inform a management decision.

- Identifying new or novel methods seems premature without knowing whether the inclusion of the information would be worth the cost of improving the certainty in a management decision.

Engagement

It is unclear what engagement will take place beyond presentations at scientific conferences after the Prospectus is published. It has not appeared to be enough to just present the information and call on the Delta Science and Management enterprise to make systemic changes. This is an important issue that will require serious engagement with the science and policy community to move management forward. Given expertise on contaminants issues at the Public Water Agencies we wish to continue engaging with the Delta ISB on this review if called upon.

We appreciate the Delta ISB Prospectus approach and commitment to elevate the importance of contaminants in ecosystem management. We hope you find our comments constructive. If you have any questions about our comments, please contact Darcy Austin (SWC) at daustin@swc.org or 916-396-8202, or Scott Petersen (SLDMWA) at scott.petersen@sldmwa.org or phone 209-597-0232.

Sincerely,

Jennifer Pierre, General Manager, State Water Contractors

Federico Barajas, Executive Director, San Luis & Delta-Mendota Water Authority

Attachment 1, Bibliography

Reynolds, J. H., Knutson, M. G., Newman, K. B., Silverman, E. D., & Thompson, W. L. (2016). A road map for designing and implementing a biological monitoring program. Environmental Monitoring and Assessment, 188, 1-25.

Delta Independent Science Board. 2018. Water Quality Science in the Sacramento-San Joaquin Delta. Chemical Contaminants and Nutrients. Sacramento, CA.

Delta Independent Science Board. 2022. Review of the Monitoring Enterprise in the Sacramento-San Joaquin Delta. Report to the Delta Stewardship Council. Sacramento, California.

Latour, R. J. (2016). Explaining patterns of pelagic fish abundance in the Sacramento-San Joaquin Delta. Estuaries and Coasts, 39, 233-247.

Brooks, M.L., Fleishman, E., Brown, L.R., Lehman, P.W., Werner, I., Scholz, N., Mitchelmore, C., Lovvorn, J.R., Johnson, M.L., Schlenk, D. and van Drunick, S., 2012. Life histories, salinity zones, and sublethal contributions of contaminants to pelagic fish declines illustrated with a case study of San Francisco Estuary, California, USA. Estuaries and Coasts, 35, pp.603-621.

Connon, R.E., Hasenbein, S., Brander, S.M., Poynton, H.C., Holland, E.B., Schlenk, D., Orlando, J.L., Hladik, M.L., Collier, T.K., Scholz, N.L. and Incardona, J.P., 2019. Review of and recommendations for monitoring contaminants and their effects in the San Francisco Bay–Delta. San Francisco Estuary and Watershed Science, 17(4).