Bay-Delta Monitoring Coordination: Brief Summary of Interviews Wetlands Regional Monitoring Program Hannah Kempf, Ph.D., CA Sea Grant State Fellow

Interviewees worked in a variety of entities across the Bay-Delta system. A mix of regulatory and non-regulatory agencies were represented both at the state and federal levels, and all respondents were familiar with tidal wetland restoration progress in the San Francisco Estuary. Most participants were involved in the WRMP through the SC, TAC and/or Work Groups. Interviews were conducted in the summer of 2024. All questions were developed by the author with input from the WRMP staff, and follow-up questions during the interview process were unplanned and varied by conversation. The following questions were asked in all interviews:

- 1. Please tell me a little bit about your role. What types of issues do you work on in the San Francisco Estuary?
- 2. Currently, various estuarine and wetland parameters are being regularly monitored by over 100 different entities in the Bay and Delta. Much of this monitoring is being conducted for different purposes and has different intended goals. Do you see a benefit to more coordination happening between these different monitoring enterprises? Why / why not? Coordination may include deciding jointly on metrics and standard operating protocols for data collection, sharing monitoring equipment, contributing to a shared database or data visualization platform, etc.
- 3. Do you think that more sharing of monitoring data across the lower and upper estuary would benefit wetland restoration and adaptive management? If so, how?
- 4. Are there any examples of where/how this data sharing is already happening effectively?
- 5. Are there certain environmental/biological metrics that are/would be easier (or more difficult) to coordinate? For example, fish vs. water quality?
- 6. What do you view as the main barriers to coordination between the lower and upper estuary?
- 7. What (if any) ideas do you have to alleviate those barriers?

Common topics from interviews

1) Upper and Lower Estuary: Connections and Differences

Almost all respondents agreed that managers should carefully consider the physical and ecological connections between the San Francisco Bay and the Delta. Many respondents made that point that the SF Estuary is one connected system; what happens upstream in the Delta (i.e., water management, restoration activities) affects the water and habitats downstream, and as sea levels rise, salinity gradients are changing in the upstream direction. Further, some respondents made the point that some species (fish, birds) move around the Estuary with no regard for jurisdictional boundaries. While the Estuary is a large connected system, there are also noteworthy differences between the lower and upper regions. One respondent mentioned a notable difference in land availability for wetland restoration; the Bay has more publicly owned land than in the Delta, where there is a mosaic of mostly private landowners (some which will sell their land for restoration, and some of which will not). Some

respondents also mentioned coordination barriers related to other social, hydrodynamic and restoration drivers of the systems. In the Delta, the salinity and freshwater "dance" is important to restoration success, and pressures of water diversion are constantly at play. Restoration goals are often different in the two regions, too. For example, restoring habitat for Delta smelt, where freshwater flows are so important, is very different from restoring habitat for Ridgeway Rails. One respondent emphasized that data relevant to human needs (both in the Bay and Delta) — such as water quality as it relates to human health, vector control and abatement, harmful algal blooms (HABs), and point source pollution — will always be a monitoring priority. As such, there is often greater urgency to monitor these metrics, and funding aimed at coordinating these data may be more available.

2) Communications and Messaging

Many interviewees expressed that a main barrier to coordination is the fact that current systems in place are difficult to change. Oftentimes, monitoring entities are restricted by governmental mandates. Staff capacity is also limited, and there is rarely a person explicitly charged with coordinating with other agencies. Communication channels are often not open across agencies, and groups can become siloed from one another. Almost all respondents mentioned the need for more communication between the different people involved in monitoring (i.e., those collecting data vs. analyzing data vs. using the data to make decisions), and more time for in-person, interagency coordination. One respondent mentioned that a large challenge to coordination is tied to messaging; they argued that it's not always clear to regulatory agencies why and how coordinated monitoring data is beneficial to management. Given this, they suggested creating a simplified message surrounding the benefits of coordinated regional monitoring. Some respondents mentioned that monitoring often serves different purposes and goals, and therefore coordination may not always beneficial. Additionally, a few respondents expressed that the logistical challenge of coordinating across the Estuary may simply be too great to overcome. While coordination (i.e., sharing equipment, planning monitoring activities in tandem) between existing monitoring programs may be impossible, they suggested that it could be possible for the WRMP to entice *new* programs to coordinate more effectively.

3) Data

Many respondents mentioned the importance of supporting data storage that is publicly available, especially when data collection is supported by public funding. Many respondents also emphasized the need for standardized data collection around the Estuary. Plentiful standardized data from the entire Estuary could make evaluating environmental processes that cross the Bay-Delta boundary more accurate, and enhanced coordination between agencies collecting data could reduce redundancy. One respondent mentioned that valuable data often gets lost over time when it's not stored online. Another respondent mentioned some of the challenges with open-source data, suggesting that agencies may be hesitant to make data publicly available before it's gone through intense QA/QC, which can take a lot of time and therefore present a barrier to efficient coordination.

Potential opportunities for the WRMP

Interviews identified the following list of possibilities for the WRMP to prioritize to support monitoring coordination between the lower and upper Estuary. This is not an exhaustive list, and you are encouraged to discuss these or other ideas during the workshop.

- 1) Contribute to and/or host an online platform that supports standardized SFE data collection, sharing and use. Some suggested building a clearinghouse of metadata for wetlands across the entire Estuary. Consider collaborations with existing groups, like the CWMW/CEMW.
- 2) Support the expanded use of existing WRMP tools like the Baylands Habitat Map by 1) cocreating a strategy to fund these efforts, 2) co-creating new products with other entities.
- 3) Focus coordination efforts on vector monitoring this is needed given potential/perceived risks to wetland monitoring crews, as well as its relevance to public health.
- 4) Focus WRMP efforts on synthesizing existing datasets from both the lower and upper SFE.
- 5) Focus coordination efforts on a geographic area of combined interest, like Suisun Marsh.
- 6) Facilitate more in-person opportunities. This could occur at existing meetings like the Bay-Delta Science Conference, State of the Estuary, IEP annual meeting, etc.
- 7) Create a simplified message surrounding the benefits of regional monitoring and Bay-Delta connections.
- 8) Build staff capacity for Bay-Delta coordination and incentivize progress on this topic by writing it into job descriptions/merit reviews.