

Executive Summary: WRMP Priority Monitoring Site Networks



SF ESTUARY
Wetlands
Regional
Monitoring
Program

Date: December 6, 2022

To: WRMP Steering Committee

From: WRMP Staff and WRMP TAC

The April 2020 [Program Plan of the San Francisco Estuary Wetlands Regional Monitoring Program](#) (WRMP) describes five near-term science priorities (emphasis added):

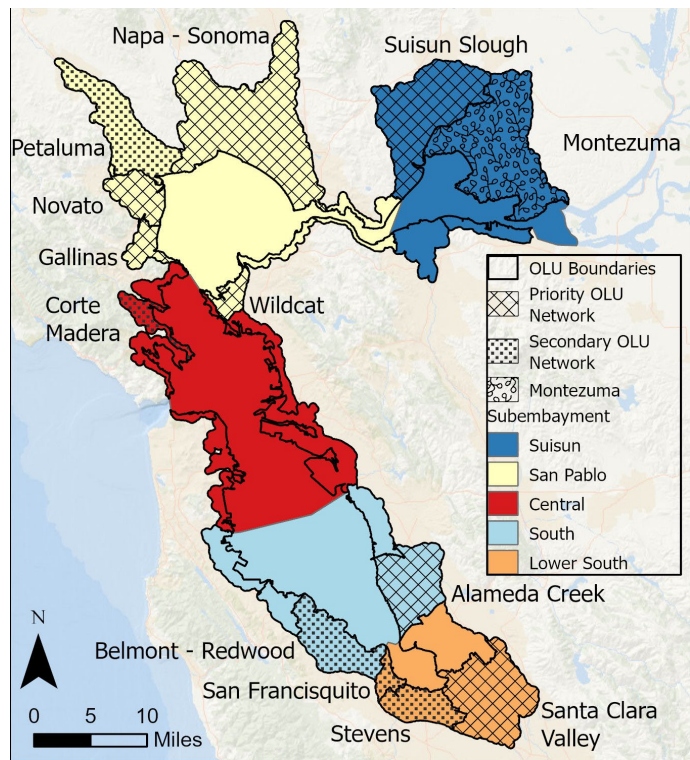
1. Conduct regional baseline and subsequent routine surveys and inventories of the distribution, abundance, diversity, and condition of tidal wetlands throughout the region.
2. **Establish the WRMP Monitoring Site Network.**
3. Conduct repeated surveys (detect change) of living organisms and their habitats (indicators).
4. Analyze data on the relative roles of estuarine and upland/watershed sources of sediment.
5. Assess the broad range of interactions between people and wetlands.

In March 2021, the WRMP Steering Committee (SC) accepted a proposal from the WRMP Technical Advisory Committee (TAC) that designated a suite of Benchmark Sites throughout the estuary. This [Benchmark Site Memo](#) represented the first step of the TAC and SC towards addressing priority #2 listed above. In the attached [Technical Memo](#), the TAC takes the next step, and proposes to the SC a series of priority monitoring site networks throughout the estuary built around particular Benchmark Sites. Each network includes one Benchmark Site and one or more Reference and Project sites. The Technical Memo describes the priority monitoring site networks, their technical justification, and the process the TAC utilized to develop these recommendations. In 2023, the TAC will develop a plan for initial WRMP monitoring implementation that will propose which Level 1, 2, and 3 indicators should be monitored (and, in the case of legacy data, synthesized) at the priority networks and sites.

The Technical Memo is the product of extensive research, coordination, review and revision by the WRMP core science staff, TAC, and key program stakeholders. Initially, the TAC was asked to provide input on an extensive list of potential sites. The core WRMP science team narrowed this list to a manageable suite of sites that met criteria derived from the WRMP Program Plan: networks and sites were selected to: a) distribute representation across the lower Estuary and within major estuarine subgradients, b) leverage existing data sources and monitoring programs, c) contribute to climate adaptation planning for underserved communities, d) inform existing and planned tidal wetland restoration efforts, and e) address the WRMP near-term science priorities. The science team developed a draft memo describing proposed sites and networks, and summarized key site characteristics in a supporting [spreadsheet](#). The draft memo and spreadsheet were then reviewed by TAC members and key science partners, and revised by the core science team to produce a final deliverable. The details of the memo's review and revision process are captured in a [Comment and Response](#) document.

The memo proposes six priority monitoring site networks within key Operational Landscape Units (OLUs, see [SFEI + SPUR 2019](#)) in each Estuary subregion that can serve as a focus for near-term WRMP implementation, as well as the foundation for future build-out of the program:

- Suisun subregion: **Suisun Slough network**
- San Pablo Bay subregion: **Gallinas-Novato network**, **Napa-Sonoma network**, and **Wildcat Creek network**
- South Bay subregion: **Alameda Creek network**
- Lower South Bay subregion: **Santa Clara Valley network**



Though the Wildcat Creek network is technically within the San Pablo Bay subregion, it shares many significant characteristics (wave/tidal environment, degree of urbanization, nearshore geomorphology) with the Central Bay

subregion, and the TAC believes it can reasonably represent both. The TAC identified a seventh priority network, **Montezuma Slough OLU - Cache Slough** spanning Suisun Marsh and the Delta, which offers an opportunity to bridge the WRMP with tidal wetland restoration and monitoring efforts in the Delta. Due to the technical and administrative challenges to establishing a cohesive monitoring network in this region, the TAC plans to explore this opportunity in parallel with establishment of the priority networks described above, to support timely implementation of the latter.

Finally, the memo identifies four secondary priority networks (**Petaluma River OLU** (San Pablo Bay), **Corte Madera OLU** (Central Bay), **San Francisquito OLU - Stevens OLU** (South Bay - Lower South Bay), and **Belmont - Redwood OLU** (South Bay)) that could be established with additional program resources, a shift in WRMP science priorities, and/or planned implementation of additional tidal wetland restoration projects.

It is important to emphasize that TAC and SC adoption of this memo does not constitute a formal plan to initiate monitoring at any of the proposed monitoring sites/networks; it simply acknowledges that they collectively represent the best opportunity to implement the WRMP science framework in the near-term. This proposal does not preclude use of the WRMP framework to address other science needs, in regions or locations other than those prioritized for near-term monitoring site network establishment.