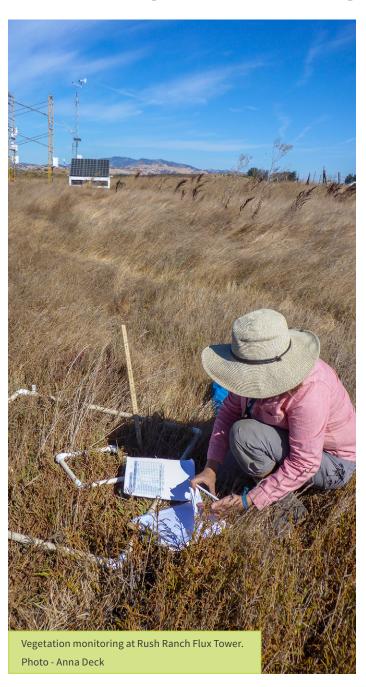


# Wetland Regional Monitoring Program (WRMP) 2020 Update



#### What is the WRMP?

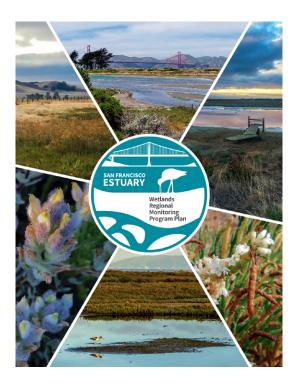
The San Francisco Estuary restoration community is working rapidly to protect and restore wetlands that can provide flood protection, recreation, water quality improvement, and habitat for surrounding communities. In order to meet a regional target of 100,000 acres restored by 2030, close coordination is needed between land managers, scientists and regulators. The WRMP will improve wetland restoration project success by putting in place regional-scale monitoring increasing the impact, utility and application of permit-driven monitoring to inform science-based decision-making. Once in place, the WRMP will be a robust, science-driven, collaborative regional monitoring program that includes:

- Monitoring site network
- Open data sharing platform
- Comprehensive science framework

The WRMP Plan was released April 2020 and lays the foundation for the development of this program. The next steps include determining the funding model and governance structure, developing the data management system, conducting outreach to the intended user community, and establishing a Technical Advisory Committee in Summer 2020.

### Why do we need it?

Tidal wetlands in the San Francisco Estuary face an uncertain future due to climate change, continued development pressure, and other regional stressors. Accelerating sea level rise and decreased sediment supplies threaten to drown and erode existing tidal wetlands and undo restoration progress that has been made to date. A lack of standardized, coordinated and shared monitoring for tidal wetlands increases the risk that new restoration projects will fail to protect shoreline communities from sea level rise, reduce flooding risk, provide wildlife habitat, or create access to recreation. The WRMP can leverage monitoring data to respond and adapt to these challenges and help support a more resilient Estuary.



## What is the goal of the WRMP plan?

The primary goal of the WRMP Plan is to identify the science and technology framework, institutional relations, governance structure, costs, and funding sources for the program. The Plan addresses the following Guiding Questions:

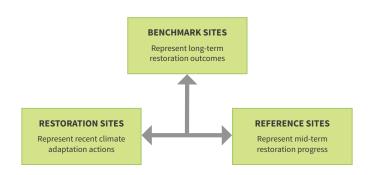
- 1. Where are the region's tidal wetlands and wetland projects, and what net landscape changes in area and condition are occurring?
- 2. How are external drivers, such as accelerated sea level rise, development pressure, and changes in runoff and sediment supply, impacting tidal wetlands?
- 3. How do policies, programs, and projects to protect and restore tidal marshes affect the distribution, abundance, and health of plants and animals?
- 4. What new information do we need to better understand regional lessons from tidal wetland restoration projects in the future?
- 5. How do policies, programs, and projects to protect and restore tidal wetlands benefit and/or impact public health, safety, and recreation?

#### **WRMP Science Framework**

The WRMP is intended to grow in scope and scale over time, and includes near-term science priorities that will be the focus of implementation. These science priorities include:

- Develop a baseline habitat map and conduct surveys of condition of tidal wetlands throughout the region-
- Establish the WRMP Monitoring Site Network. The Network includes:
  - Projects Restoration projects implemented over roughly the past 20 years that improve understanding of restoration designs and management
  - Reference Sites Marshes at mid- to late stages of evolution that help forecast the rate of project development as habitat
  - Benchmark Sites Mature marshes that indicate the likely long-term conditions of existing and restored marshes.
- Conduct repeated surveys of living organisms and their habitats across various project types.
- Analyze existing data on the use of sediment to counter the threats of marsh drowning, mudflat loss, and shoreline erosion driven by sea level rise.
- Assess the broad range of interactions between people and wetlands that should be monitored for the safety of people and health of the wetlands, including flood control and mosquito and disease vector control.

## **Regional Monitoring Site Network**



# How do I get involved?

To get involved, check out the project website (wrmp.org) and sign up for the newsletter. Contact the Project Manager Heidi Nutters (heidi.nutters@sfestuary.org) with additional questions. Thanks to our funders, the U.S. Environmental Protection Agency Region 9 Wetland Program Development Grant.

