**Introduction**

The San Francisco Estuary Institute is creating a new base map of aquatic habitat for the entire San Francisco Bay watershed area, as part of the Wetlands Regional Monitoring Program (WRMP). The mapping and QAQC protocol was continued through a combination of methodologies including geographic information systems, field work, and landscape modeling. The mapping resolution exceeds existing standards and has undergone extensive internal quality control to meet regional and federal standards. The Bay Area Base Map of aquatic habitats has two immediate purposes: to foster the development of protocols for statewide mapping, and to serve as the Bay Area regional base map for wetlands and riparian restoration planning. The mapping through a combination of methodologies is intended to improve the accuracy while complying with federal and state mapping standards.

**Project Partners**

The Bay Area Base Map covers the boundary of the San Francisco Bay Region Water Quality Control Board which includes portions of the Bay Area counties of Santa Clara, Contra Costa, Marin, Alameda, and Solano Counties with a total area of 1.3 million acres. The project partners include the following:

- SFEI (San Francisco Estuary Institute)
- DRG (Digital Royalty Group)
- NED (National Elevation Dataset)
- NWI (National Wetland Inventory)
- CADFG (California Department of Fish and Game)
- USFS (United States Forest Service)
- PIA (Private Industry Advisory Group)
- SSI (San Francisco State University)
- GIC (Geographic Information Center)
- USGS (United States Geological Survey)

**Quality Assurance and Quality Control (QAQC)**

SFEI reviews draft mapping data for linear and polygonal features from Marin, Richmond, and Suisun basins. Each map is compiled to the standard required by the Project Science Advisory Group, NWI, and project partners. The classification schemes differ from existing standards and include new aquatic habitat categories.

**Base Map Progress**

As of September 2009 84% of linework and 79% polygonal wetlands are in draft or completed phases. QAQC errors are collected and monitored to determine the presence or absence of an aquatic feature. Similar methodology is conducted after in-house QAQC is complete to validate mapping.

For more information on WRMP and the Base Map please visit: [http://www.wrmp.org/prop50.html](http://www.wrmp.org/prop50.html)