

**Western Ecological Research Center** <http://www.werc.usgs.gov>

# San Francisco Bay Estuary Field Station

The watersheds of the Central Valley drain into the San Francisco Bay estuary, the largest estuary on the lower west coast of North America. The estuary is home to eight million people and is the source of water for a large part of California. More than ninety percent of the original wetlands have been lost to development in the past century, and because the region is highly urbanized, remaining wetlands are threatened by agricultural, industrial, and municipal contaminants. Yet, the paradox of this estuary is found in the richness of its natural resources. The estuary is an international hemispheric shorebird reserve site. It provides a major wintering area for waterfowl and supports many resident endangered or candidate wildlife species of salt marsh habitats.

The San Francisco Bay Estuary Field Station is co-located with the San Pablo Bay National Wildlife Refuge, a refuge in the San Pablo and Francisco Bay National Wildlife Refuge Complex, and with the San Francisco Bay office for the Ecological Services division of the U.S. Fish and Wildlife Service. The field station is located on Mare Island, a recently decommissioned Naval Shipyard facility that had operated since the 1850s.

The San Francisco Bay Estuary Field Station conducts research on the habitats of the estuary and on the migration and winter ecology of migratory waterbirds. Projects on migratory waterbirds focus on populations that spend the winter in California or the western states, but include international studies in Canada, Japan, Mexico, and Russia. The field station also specializes in radio telemetry studies of wildlife, including development of satellite telemetry research methods.

Examples of ongoing research studies include: foraging ecology and environmental contaminants in migratory birds and their benthic prey in the San Francisco Bay ecosystem; ecology of salt marsh ecosystems of the San Francisco Bay estuary and restoration of tidal wetlands; evaluating baseline conditions and restoration potential of salt ponds in San Francisco Bay; at-sea distributions of sea birds and marine mammals in the southern California bight.



USGS

## Lead Scientist

**John Y. Takekawa, Ph.D.**, Research Wildlife Biologist

- Ecology of migratory waterbirds on the Pacific Rim
- San Francisco Bay ecosystem
- Radio and Satellite Telemetry

## For more information, contact:

USGS WERC San Francisco Bay Estuary Field Station  
P.O. Box 2012

Bldg. 505, Azuar Avenue and I Street  
Vallejo, CA 94592

Phone: 707.562.2000 Fax: 707.562.3001

*For a list of technical products from this field station, click on the "Products" button on our home page at <http://www.werc.usgs.gov/>*