

ESTUARY & OCEAN SCIENCE CENTER

The mission of the Estuary and Ocean Science Center (EOS Center) is to connect science, society, and the sea through outstanding interdisciplinary research, education, and outreach programs. The EOS Center supports the scientific study of the sea, enhances public engagement with marine science, and develops solutions to the environmental problems confronting coastal communities. Our vision is to create a sustainable center for scientific discovery, innovation, and education focused on the health and resilience of the San Francisco Estuary, the Gulf of the Farallones, and other coastal ecosystems.

The EOS Center is located on the Romberg Tiburon Campus (RTC), 53-acres on the shore of the San Francisco Bay. RTC is just 11 miles north of the San Francisco State University campus in Tiburon, CA and serves as a gateway to a deeper understanding of the rich cultural and environmental history of San Francisco Bay. San Francisco Bay is part of the largest estuary and watershed on the west coast of the United States. The region is internationally recognized as a biodiversity hotspot, hosts a diverse array of marine protected areas, and an economically important coastal and marine economy, including productive fisheries, a diverse recreation, and tourism sector, and a hub of technological innovation.

The EOS Center has specialized facilities for marine and estuarine research including flow-through bay water tanks and tables; a research pier and nearby moorings equipped with a variety of environmental sensors for tracking water quality, weather conditions, and underwater sounds; laboratories for elemental analysis, analysis of water samples for nutrients, and carbonate chemistry; specialized microscopes for quantifying, identifying, and visualizing plankton; a molecular genetics laboratory; a greenhouse for raising wetland plants; and a well-equipped, 38-foot research vessel (R/V *Questuary*) and a small boat fleet to support aquatic field research. The center also offers a motorboat operators training course and supports an active scientific diving program.

The EOS Center hosts an innovative master's program in Interdisciplinary Marine and Estuarine Sciences for the College of Science & Engineering, originally developed with support from the National Science Foundation. Faculty from Biology, Earth and Climate Science, Geography and Environment, and Chemistry and Biochemistry are based at the Center along with additional affiliated scientists. A variety of undergraduate and graduate classes in marine and estuarine sciences is offered every semester. In addition, the EOS Center hosts visiting and resident university students for summer research experiences through several externally supported programs.

The San Francisco Bay National Estuarine Research Reserve (NERR) program, based at the EOS Center, oversees one of 29 networked coastal sites designated to protect and study estuarine systems through a partnership of the National Oceanic and Atmospheric Administration (NOAA), San Francisco State University, California State Parks, Solano Land Trust, and the Bay Conservation and Development Commission. The research reserve consists of two of the most intact, remaining historic tidal marshes and adjacent habitats in the San Francisco Estuary. They are located in two distinct Bay regions: Suisun Bay and Marsh (Rush Ranch) and San Pablo Bay (China Camp). The mission of the SF Bay NERR program is to improve stewardship and understanding of the estuary, and its connectivity with marine and coastal ecosystems beyond the Golden Gate. The SF Bay NERR provides research sites for scientists;

serves as a living classroom for teachers, land managers, and naturalists; and protects inspiring places for Bay Area residents and visitors to enjoy.

The Barbara and Richard Rosenberg Institute for Marine Biology and Environmental Science, based at the EOS Center, supports a popular and informative evening Public Forum series and a weekly scientific seminar series that bring leading scientists to speak at the Bay Conference Center. It also supports our annual Discovery Day open house event. All Rosenberg Institute events are free and open to the public.

The EOS Center, in collaboration with the SF Bay NERR, offers a variety of specialized trainings through our Wetland Science and Coastal Training Program for professionals and students. We also offer a popular Bay Shore Studies program on the beach at nearby Richardson Bay Audubon Center and Sanctuary, a science field trip program for 3-5th-grade school groups led by community volunteers. The Bay Shore Studies curriculum is aligned with current science standards, and volunteers are prepared through an in-depth training program.

The Smithsonian Environmental Research Center (SERC) is a formally affiliated research partner of the EOS Center. SERC has extensive research and education programs in environmental sciences, focused on land-sea interactions in coastal bays. SERC actively promotes opportunities for student training and collaborative research in both the San Francisco Bay and Chesapeake Bay, the nation's two iconic estuaries. Since 2000, SERC researchers have maintained a laboratory on San Francisco Bay at SF State's Romberg Tiburon Campus.

The Bay Conference Center (BCC), with sweeping views of the San Francisco Bay and its surrounding hills, is operated by the EOS Center. The BCC has three meeting rooms with seating capacity for 140 people in the largest room. It is available for use by University groups, government agencies, non-profit organizations, and private industry for meetings, educational programs, and conferences. The Rosenberg Institute Public Forum and weekly seminar series and Wetland Science and Coastal Training Programs are also presented at the BCC.

The RTC landscape and buildings are a product of a rich history of cultural uses and historical events. Native Americans (Coast Miwok) used the shallow cove and uplands as a fishing camp. After Europeans arrived, the site was used as a codfish processing plant and fishery, helping establish the US Pacific Cod Fishery. Between 1904 and 1958, the US Navy filled and paved the cove with a concrete slab and engineered an elaborate rail car and crane system for loading coal onto ships. The natural deep-water channel close to shore made it an ideal port. Before World War II, the NJ-based John A. Roebling's Sons Company built a seawall, wharf, and warehouse on another portion of the site to reel wires into cables for the Golden Gate Bridge, barging them over to the construction site. During World War II, it was a US Naval Net Depot producing anti-submarine nets to protect SF Bay and other US ports and harbors. After 1958 the site was transferred to the Department of the Interior for oceanographic and fisheries research. In 1978 SF State acquired a 30-year lease to most of the site when it was declared excess federal property. Transfer of the entire campus property from the federal government to SF State was finalized in 2008.

For more information on EOS Center and its programs and affiliates, see eoscenter.sfsu.edu (<http://eoscenter.sfsu.edu>), call us at (415) 338-3700, or visit us on the SF State Romberg Tiburon Campus at 3150 Paradise Drive in Tiburon, CA 94920.