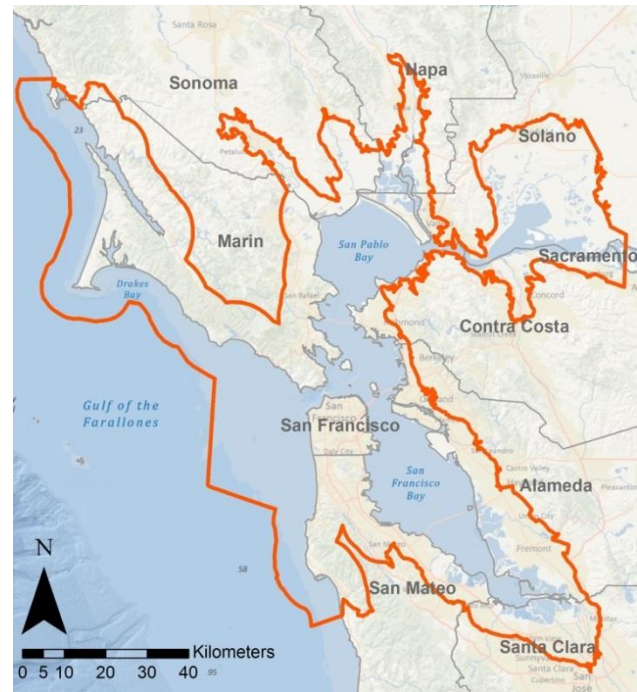


The **NOAA Sentinel Site Program** brings to life NOAA’s science-service-stewardship continuum to ensure resilient coastal communities and ecosystems in the face of changing sea level and coastal inundation. The program’s place-based, collaborative approach leverages NOAA coastal and ecosystem monitoring, measurement, and tools in partnership with federal, state, and local efforts to solve concrete problems that people are facing in coastal communities.

## The San Francisco Bay and Outer Coast Sentinel Site Cooperative

San Francisco Bay and its Outer Coast comprise the largest estuarine area on the west coast of the United States. Home to numerous protected natural areas, including three National Marine Sanctuaries (Greater Farallones, Cordell Bank, and Monterey Bay) and the San Francisco Bay National Estuarine Research Reserve, as well as over 7 million people, the region serves as an ideal area to help achieve the vision of the NOAA Sentinel Site Program.

Planning for and adapting to changing coastal flood conditions requires regional collaboration to translate and focus available science, identify vulnerabilities, and consider feasible adaptation options. The San Francisco Bay and Outer Coast Sentinel Site Cooperative works to improve collaboration and build new partnerships that connect local- and regional-scale programs and partners to national NOAA resources, with a vision of improving regional resilience to sea level rise.



Geographic extent of the San Francisco Bay and Outer Coast Cooperative.

The Cooperative Management Team is made up of representatives from NOAA’s Office for Coastal Management, NOAA’s Greater Farallones National Marine Sanctuary, the San Francisco Bay National Estuarine Research Reserve, the San Francisco Bay Conservation and Development Commission, and California Sea Grant.

### Cooperative Goals: *Partnerships, capacity, awareness*

1. Leverage Cooperative partnerships to help coastal professionals work collaboratively across jurisdictions on actions to improve resilience to sea level rise
2. Advance innovative new relationships between the Cooperative, coastal professionals, and nontraditional partners to support sea level rise awareness and adaptation planning
3. Help connect coastal professionals to NOAA and NOAA partner data, tools, and information that inform actions to improve resilience to sea level rise
4. Build coastal decision-maker capacity to develop and implement strategies that protect critical ecosystem and community services from the impacts of sea level rise
5. Support efforts to ensure that San Francisco Bay Area community members are aware of sea level rise impacts



# NOAA SENTINEL SITE PROGRAM

sfsentinelssitecooperative.org  
oceanservice.noaa.gov/sentinelssites



SAN FRANCISCO  
BAY AREA

## How We Work

The Cooperative's overarching goal is to enhance the capacity of Bay Area communities to plan for and adapt to changing coastal flood conditions. Addressing impacts of sea level rise requires creative and cross-jurisdictional efforts. We foster partnerships and facilitate collaboration to leverage the wealth of knowledge, programs, and resources that already exist here in the Bay Area, and to link these with national NOAA resources. Contact our Cooperative Coordinator (below) to find out ways to engage with the Cooperative's existing activities, or to suggest new opportunities for collaboration.

## Cooperative Focus Areas

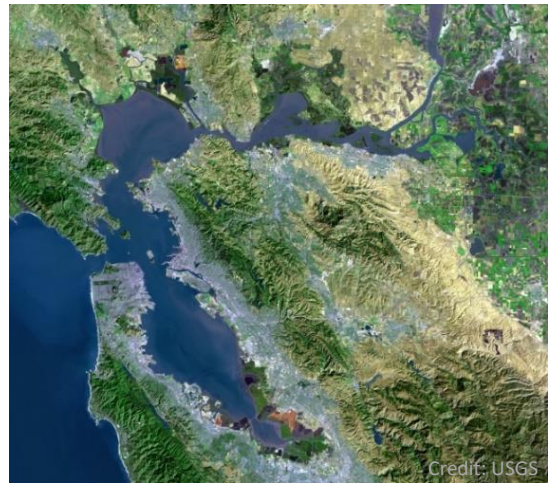
Cooperative activities fall under three main Focus Areas:

1. Bridging natural and built adaptation planning
2. Supporting development of a regional network for early detection and forecasting of marsh ecosystem changes
3. Fostering resilience efforts that connect the ocean, outer coast, and bay

## Data and Resources

Examples of current data and resources from NOAA and partners:

- NOAA water level gauges and Physical Oceanographic Real Time System
- National Estuarine Research Reserve and National Marine Sanctuary System-Wide Monitoring Programs
- Topographic data for sea level rise and inundation mapping (LIDAR-derived DEM)
- Central and Northern California Ocean Observing System data sets and tools (e.g., wave frequency and energy)
- NOAA National Ocean Service's Operational Forecast System
- Sea level rise and adaptation data, tools, and training from the NOAA Digital Coast partnership
- Adaptation planning resources from the Adapting to Rising Tides program
- Comparison of decision-support tools for visualizing sea level rise and coastal flood models from the Lifting the Fog project (e.g., NOAA viewer, Our Coast Our Future)



Credit: USGS



Credit: Sarah Ferner, SFNERR



Credit: Greater Farallones NMS



OFFICE FOR COASTAL MANAGEMENT  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION



NATIONAL MARINE  
SANCTUARIES  
GREATER FARALLONES



San Francisco Bay  
National Estuarine Research Reserve



## CONTACT

Jenna Judge, SF Cooperative Coordinator  
jenna.judge@noaa.gov | 510-637-3797