

Romberg-Tiburon Center

County: Marin

Risks: sea level rise, storm surge and tidal flooding, aging infrastructure, lack of investment

The Romberg-Tiburon Center includes ½ mile of shoreline and associated tide land lots that were transformed by extensive filling and armoring to support US Navy operations (1904-1958). For 40 years, the site has been home to a university research center for marine and estuarine science, the only marine laboratory and aquatic research facility on SF Bay. Half the shoreline has critical infrastructure that relies on the integrity of a seawall, while the other half has failing seawall infrastructure and riprap. Almost half the site is undeveloped allowing for design possibilities that incorporate shoreline migration and connectivity with upland habitat. The site is also open to the public and has growing program of public engagement on topics related to coastal resiliency. These attributes provide a unique opportunity to amplify ongoing public engagement and education about resilient design concepts to a very diverse set of audiences through the entire lifecycle of the projects from design to inception and beyond.

Physical vulnerabilities that threaten this site include flooding, seismic activity, sea level rise, storm surge and critical infrastructure. This site and much of its critical infrastructure, including potentially historic buildings, are located on a filled and armored shoreline (seawalls and riprap). The armoring is failing in several places, exposing areas of fill that are highly vulnerable to catastrophic erosion. The former cove, filled and held in place by a seawall, is now a large concrete tarmac with a mix of public university facilities and historic structures. Most of the buildings on the site require some seismic retrofitting, some are no longer considered suitable for public occupancy. The site is currently served by a septic system but defunct wastewater treatment infrastructure remains on the shore from the days when the US Navy owned it.

Social vulnerabilities include: 1) the loss of SF Bay's only marine laboratory and aquatic research facility; 2) displacement and loss of three outstanding public institutions working on interdisciplinary research, education and environmental stewardship of SF Bay; 3) loss of unique opportunities for urban university students to conduct hands-on research in marine and estuarine sciences near their main campus and 4) loss of public access to SF Bay and its history. The Center is embedded in one of the wealthiest communities in the nation creating a confusing juxtaposition that often increases the social vulnerability of its programs. Without it, resources for socially vulnerable communities are less likely to be allocated to public institutions embedded in a community of high socioeconomic status.