

Operational Landscape Units for San Francisco Bay

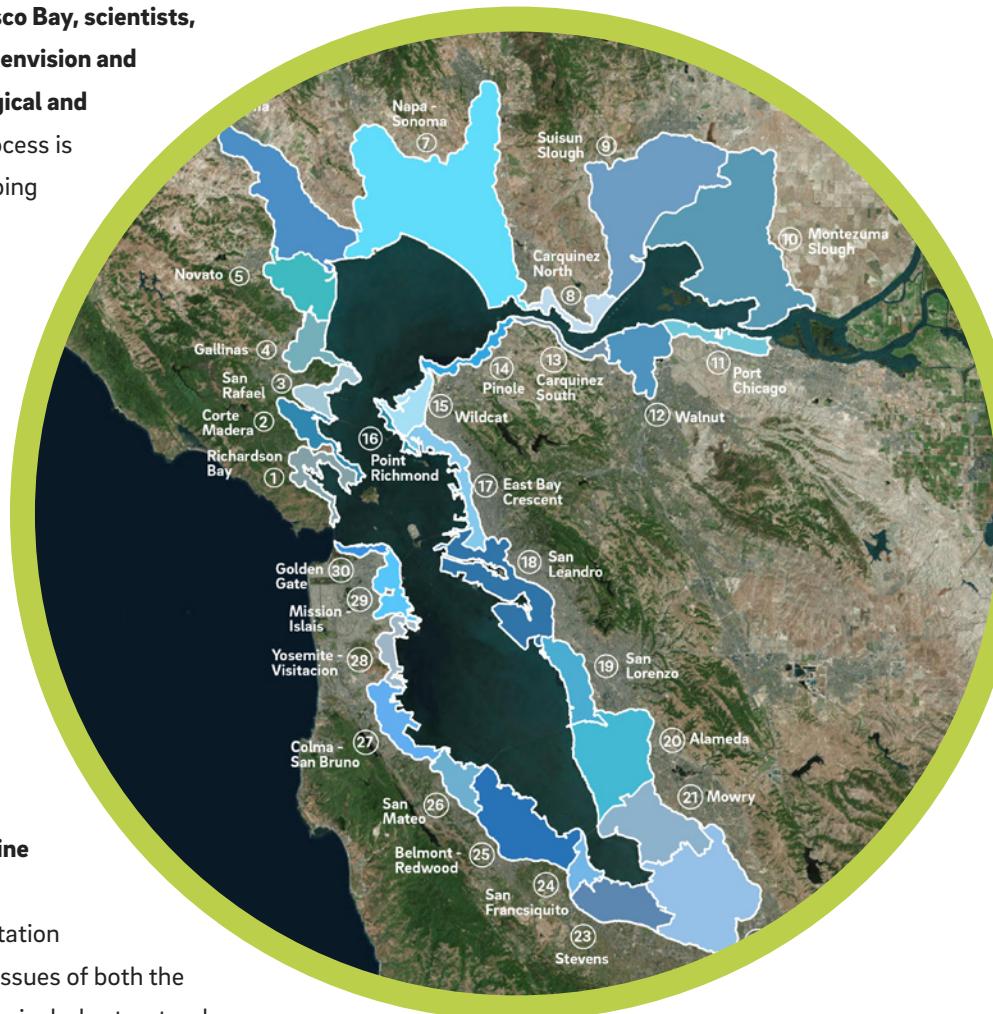
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As sea level rise accelerates in the San Francisco Bay, scientists, planners, and decision makers will need to re-envision and adapt our complex shoreline to provide ecological and social resilience. An important tool for this process is a science-based spatial framework for developing climate adaptation strategies appropriate to our diverse shoreline settings. The Bay Area's varying landscape characteristics (geology, hydrology, climate), land use, and demographics make different parts of the Bay shore vulnerable to sea level rise in different ways. At the same time, the region has 101 cities and towns, 9 counties, and hundreds of special districts and local government agencies and NGOs. Yet shoreline adaptation will ultimately require a coordinated, place-based, and cross-jurisdictional approach.

This project aims to define practical, science-based landscape units surrounding the shoreline

(*Operational Landscape Units*) to facilitate a geographically-specific set of integrated adaptation strategies at the appropriate scale to address issues of both the natural and built environment. These strategies include structural and nonstructural measures that address ecosystem, flood risk management, water quality, land-use planning, and social equity goals.

The result will be a spatial framework for understanding what kind of adaptations could work for real places in the Bay Area to foster a regional, collaborative, data-driven and long-term vision for regional resilience. This concept is gaining momentum as a useful input to sea-level rise planning processes, and is being integrated with vulnerability analyses in several counties. This framework can also provide guidance for the regulatory community, as well as for landscape designers, planners, and engineers. Recent local applications through the OLU project is occurring in Marin and San Mateo Counties.



Draft map of
Operational
Landscape
Units, 2018.

To read more visit: sfei.org/projects/OLUs

To explore the OLUs in an interactive map, visit: resilienceatlas.sfei.org

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