

# Port of Oakland

Alameda County

## Site Description

The Port of Oakland, which operates as a trustee under the City of Oakland, manages more than 875 acres of granted Public Trust lands. The port acts as an international gateway and economic engine for the San Francisco Bay Area, encompassing a busy seaport, airport, and an array of commercial buildings and waterfront parks. These public assets create jobs, provide recreation, and drive commerce throughout the region. The port supports more than 73,000 jobs in the region, and nearly 827,000 jobs across the United States. Jack London Square, one of the most robust waterfront development properties in the U.S., hosts large public educational and recreational events throughout the year, making it a large cultural hub.

With all of these assets at risk from sea level rise impacts, the port intends to utilize an iterative and ongoing planning process to protect assets and maintain business continuity as conditions change over the long-term.

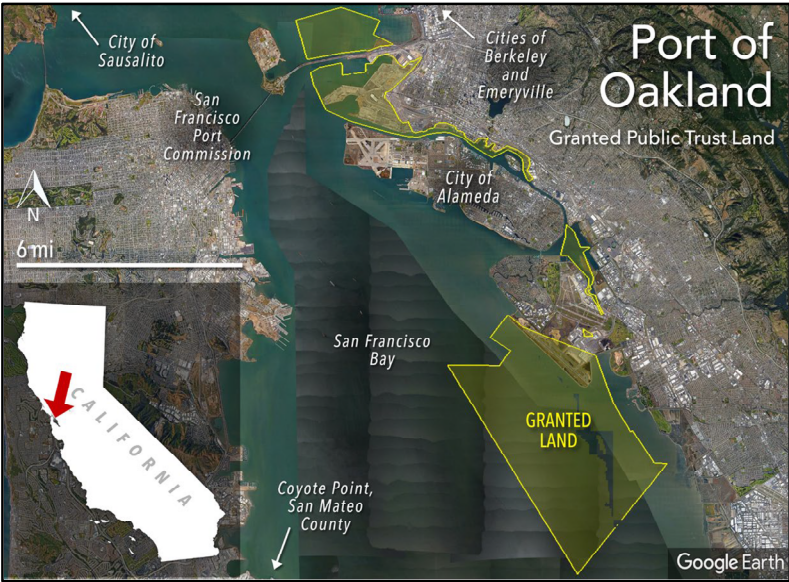


**Granted Land Type:**  
Large Port

## Public Trust Uses

*Primary Uses:* Commerce

*Secondary Uses:* Navigation



**Coastal Hazards considered:**  
tidal inundation, 100-year storm

**Modeling system used for mapping:**  
ART

**Sea level rise scenarios/elevations**  
[\*\*LINK TO FULL ASSESSMENT\*\*](#)

Vulnerable Public Trust Resources	
Built Facilities	Maritime non-terminal tenant area, Matson Terminal, Charles P. Howard Terminal, Ben E. Nutter Terminal, TraPac Terminal, multiple rail lines, electrical substations, sanitary sewer lift stations, storm drainage discharge points, Jack London Square, Clay St. Fire Department, Oakland Airport Business Park, roadways, The Embarcadero, Oakland Airport North Field and South Field, hangar buildings, airport mechanical buildings, airport perimeter dikes, stormwater pump houses
Natural Assets	Arrowhead Marsh, San Leandro Creek, Elmhurst Creek

# Other Economic Vulnerabilities

Many large ports were unable to provide quantitative cost estimates due to the extent and proprietary nature of some operations. See qualitative keys in Table 3 and 4 for more information about what the impacts of sea level rise will cost the Port of Oakland. Non-market value was assessed based on Recreational Value and Other Ecosystem Services Values; Refer to technical memo.

## Proposed Adaptation and Mitigation Measures

### Port

Enhance existing dunes area; add a living shoreline, and construct seawall to protect the park area, International Container Terminal and maintain roadway access; add riprap to stabilize shoreline along peninsula of Middle Harbor Shoreline Park; raise seawall along maritime area and elevate footpath between terminals; raise grade of shipping berths when the terminals reach the end of their useful life; inventory stormwater drainage points for back flow prevention; raise shoreline elevation to address a narrow flood pathway along Burma Road that provides access for Bay floodwaters to reach low-lying, inland areas of the port.

### Commercial Real Estate

Construct seawall between Clay and Jefferson Streets to prevent flood pathway; elevate San Francisco Bay Trail around JackLondon Square Area and The Embarcadero; provide temporary flood protection during storm events to provide a short-term option until an area shoreline protection solution is implemented; use dredge spoils to artificially increase the marsh elevation at a similar rate as sea level rise; implement watershed restoration and elevate existing levee along creek channel.

### Airport

Following the South Field Perimeter Dike Improvement Project, raise the crest of dike design incrementally over time to maintain FEMA + 1 foot of freeboard; add backflow prevention to two discharge points on the North Field to prevent negative flow from daily high tides; add culvert and two pump stations to provide efficient drainage connections between flood storage areas; provide redundant protection around critical facilities (Mechanical Buildings).



#### Diverse Stakeholders

All potential strategies require significant approvals or participation from local and regional stakeholders as collaborators. Planning will need to be an iterative and ongoing process to protect assets and maintain business continuity as conditions change over the long-term.

## Anticipated Costs of Sea Level Rise

	Current	2030 (12 in.)	2050 (24 in.)	2100 (36–66 in.)
Assets at Risk or Repair and Replacement Costs		Port: High CRE: Medium Airport: Very High	Port: High CRE: High Airport: Very High	Port: Very High CRE: Very High Airport: Very High
Losses in Non-Market Value		Port: Low CRE: Medium Airport: High	Port: Low CRE: Medium Airport: High	Port: High CRE: Medium Airport: Very High
Cost of Adaptation		Port: High CRE: Medium Airport: Medium–High	Port: High CRE: Medium Airport: High	Port: High CRE: Medium Airport: Very High

CRE = commercial real estate