# City of Emeryville

Alameda County

## **Site Description**

Emeryville's public trust grant is located between Emeryville Marina and Emery Cove Yacht Harbor, as shown below, at right. There is a public trust easement that extends to the city's East Bay shoreline. By midcentury, a big storm could cause temporary flooding of the north end of the restaurant, parking for the restaurant and the Marina, the lawn north of the restaurant, about 300 feet of Powell Street, the boat ramp, the trail from the Marina restroom south, and some trees, picnic tables, benches, trash bins and lights. The docks could rise to about 2 feet higher than the adjacent shore. The ramp angle to the slips would then be about the same as it is now, going up from shore rather than down. Water on Powell Street could be pumped toward the boat ramp parking lot to restore access to the Marina. Park users would not be able to use the lawn north of the restaurant, the two picnic tables just south of the Marina office, or the trail on the east side until flood waters recede; however, most of the park would be usable.





**Coastal Hazards considered:** 

tidal inundation, 100-year storm, overtopping, shoreline change

**Modeling system used for mapping:** ART

Sea level rise scenarios/elevations LINK TO FULL ASSESSMENT

Vulnerable Public Trust Resources				
Built Facilities	Emeryville Marina Park and facilities (2 restrooms, office, pedestrian pathway), pump station, fuel station, breakwater, fishing boat dock, windsurf ramp, Powell Street, Hong Kong East Ocean Seafood Restaurant			
Natural Assets	Park			







## Other Economic Vulnerabilities

The total estimated cost of sea level rise adaptation is \$725,000 by 2050 and \$4,500,000 by 2100 for a total of 5,225,000. The non-market recreational value of Marina Park is estimated at \$770,000 per year, based on city observations of park use and values based on research by Economic and Planning Systems for East Bay Regional Parks District in 2017. Storm flooding of park access and half of the park, as would occur with 2100 sea level rise and 100-year storm, would cause a loss of recreational value of about \$2,000 a day. The City also received approximately \$585,959 in rental income from commercial buildings that are vulnerable to future sea level rise.

### Proposed Adaptation and Mitigation Measures

#### **Protect**

By **2050 sea level rise + 100-year storm (52 in.):** Sandbags to protect the restaurant.

By **2100 sea level rise + 100-year storm (66 in.):** Relocate and rebuild restaurant.

#### Accommodate

By **2050** sea level rise + **100**-year storm (**52** in.): Pump floodwater on Powell Street toward the boat ramp parking lot to restore access to the Marina; stabilize and waterproof streetlights; rinse trees with fresh water after floods and/or replace with saline-tolerant trees.

By **2100 sea level rise + 100-year storm (66 in.):** Adjust docks (3.5 ft higher than land); seal manholes and upgrade pump station.

#### Retreat

By **2050** sea level rise (12 in.): Relocate 200 feet of trail south of the park restroom.

By **2100 sea level rise (24 in.):** Rebuild/relocate the Marina Office; relocate 1,000 feet of trail south of the park restroom.

By **2100 sea level rise + 100-year storm (66 in.):** Create beach to protect infrastructure.



Photo courtesy of San Francisco Bay Conservation and Development Commission – Adapting to Rising Tides

## Partnerships & Future Monitoring Plans

The City works with the San Francisco Bay Conservation and Development Commission's Adapting to Rising Tides program. Sea leve3l rise is addressed in Emeryville's 2017 Local Hazard Mitigation Plan, which includes a section on plan review, evaluation and implementation. The LHMP will be monitored, evaluated, and updated every 5 years. The next General Plan (circa 2030–2050) is also anticipated to address sea level rise in more detail than the current General Plan.

## Anticipated Costs of Sea Level Rise (millions)\*

	Current	2030 ( in.)	2050 (12 in.)	2100 (24 in.)
Losses in Non-Market Value	n/a	\$0.77/year, lost recreation value		
Cost of Adaptation	n/a		\$0.725	\$4.5
Annual Revenues (average)	\$0.586			

<sup>\*</sup> Annual revenues, Table 1, p.1. Losses in Non-Market Value and Cost of Adaptation from Table 2, p.7.