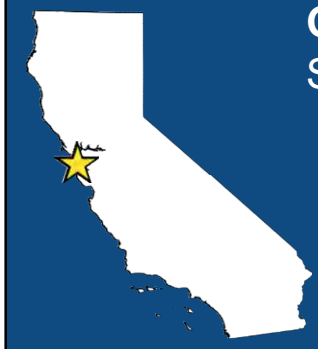
Port San Luis Harbor District

San Luis Obispo County

Site Description

The Port San Luis Harbor District (District), located on the Central California Coast in San Luis Obispo County, is a major center for commercial, recreational and industrial activities. The coast, of which 8,400 acres of state tidelands is under the control of the District, represents a fascinating interaction between land, water, and human enterprise. As trustee, the mission of the District is to develop a harbor that meets the needs of the people of California.

Currently, the District shoreline, and adjacent areas, are subject to fluvial (creek runoff) and coastal (wave and storm surge) flooding during large (100-year) storm events. Flooding from San Luis Obispo Creek has potential impacts to the community of Avila Beach. Coastal flooding affects the entire shoreline during storms with high tides. This flooding will increase with sea level rise. Most District facilities (buildings, piers, parking lots) are located outside of areas affected by sea level rise.

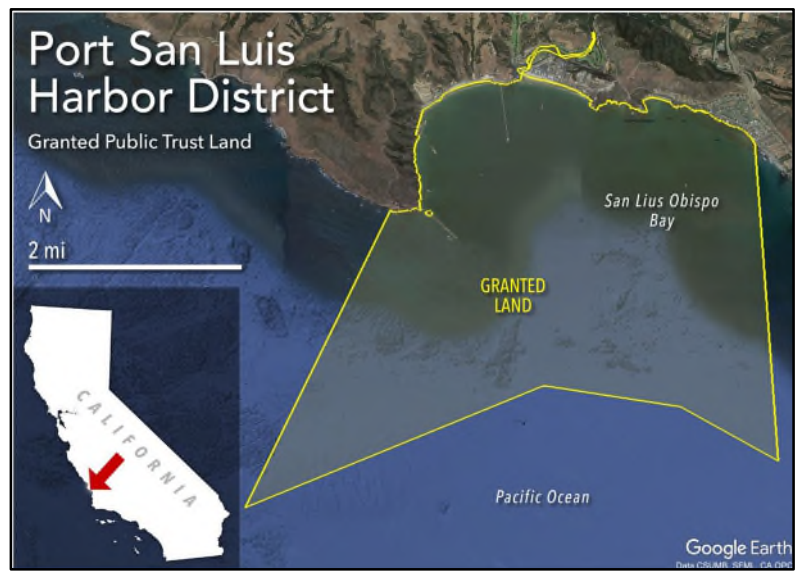


Granted Land Type:
Smaller Harbor/Marina

Public Trust Uses

Primary Uses: Commerce

Secondary Uses: Recreation, Environmental Stewardship, Navigation



Coastal Hazards considered:
tidal inundation, king tides, 100-year storm, overtopping, shoreline change, tsunamis

Modeling system used for mapping:
CoSMoS

Sea level rise scenarios/elevations
LINK TO FULL ASSESSMENT

Vulnerable Public Trust Resources	
Built Facilities	District facilities, boat launch facilities, parking areas, piers, and dredge and disposal areas
Natural Assets	Beaches and creeks

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Other Economic Vulnerabilities

Property losses do not include insured value, which is approximately $13,353,874.

Proposed Adaptation and Mitigation Measures

Policy Adaptation Strategies

Adjust routine operations, maintenance and inspection, and capital budget expenses to prepare for more frequent and intense storms, wave overtopping and flooding; educate the public about climate change and related impacts (e.g., via plaques at key locations of public access or via outreach and education sessions to inform and engage the public in maintaining shoreline access for all; identify and invest in non-motorized transportation corridors that will provide alternatives if significant roadways are disrupted.

Natural or Nature-Based Adaptation Strategies

Continue beach nourishment via dredging to replenish areas of sediment loss.

Building and Infrastructure Strategies

Repair and improve revetment, jetty, and breakwater; establish alternative access route in the event Avila Beach Drive is inundated; design new facilities and upgrade existing facilities to be resilient to sea level rise over their intended service life; reinforce bulkheads and relocate any infrastructure that is located underneath them; use flood-proof materials in construction of new infrastructure and in the repair or protection of existing infrastructure. (Additional proposed measures are in Section 6.3.)

Wave overtopping at the Port San Luis Boat Lift. Photo courtesy of Emily Shay.

Wave Overtopping

The waterfront edge at Harford Landing is exposed to wave overtopping annually during winter storms. The image above shows an example of conditions during a significant wave overtopping event.

Anticipated Costs of Sea Level Rise (millions)*

	Current	2030 (8.4 in.)	2050 (21.6 in.)	2100 (80 in.)
Assets at Risk or Repair and Replacement Costs	**$0.31**	**$0.47**	**$0.77**	**$5.6**
Losses in Non-Market Value	**$0**	**$0.21**	**$2.7**	**$43.2**
Cost of Adaptation	**$0**			

* Property Losses Section 5.2; Non-Market Losses section 5.1.