San Diego Unified Port District*

San Diego County

Site Description

The State Legislature formed the San Diego Unified Port District (District) in 1962 through the San Diego Unified Port Act and granted certain public trust tidelands and submerged tidelands in and around San Diego Bay. The District encompasses portions of five cities—San Diego, National City, Chula Vista, Imperial Beach, and Coronado—and the San Diego International Airport. With approximately 5,750 acres of water and land, the District hosts a wide range of Public Trust-compliant uses and improvements including public access, maritime, commercial, industrial, institutional, conservation, and recreation.

Sea level rise is projected to potentially impact the coastal lands along the San Diego Bay, creating a set of challenges and related opportunities to build the resilience and adaptive capacity of the area. The potential effects of projected sea level rise, such as inundation, storm events, and increased risk of flooding and coastal erosion, have the potential to impact the District, including natural resources, public access, infrastructure, and business operations.

Granted Land Type:
Large Ports

Public Trust Uses

Primary Uses: Commerce, Navigation, Recreation, Environmental Stewardship, Fisheries

Coastal Hazards considered:
tidal inundation, 100-year storm

Modeling system used for mapping:
CoSMoS

Sea level rise scenarios/elevations
LINK TO FULL ASSESSMENT

Vulnerable Public Trust Resources	
Built Facilities	Roads, rail, bikeways, pathways, marine terminals, buildings, piers, stormwater management, sewer lifts, boat launch ramps
Natural Assets	Beach accessible areas, parks, salt marshes, eelgrass, upland habitat

*Since this full assessment was submitted, there have been changes to the San Diego Unified Port District's granted land area.

CALIFORNIA STATE LANDS COMMISSION
REVELL COASTAL Surf. Sand. Sustainability.
integral consulting inc

Other Economic Vulnerabilities

Costs listed below for repair and replacement are for the “no action” scenario. Losses in non-market value are extensive and estimated in detail per year on p. 136 of the report. Adaptation strategies with associated costs are described in detail on p. 142. For example, restoring salt marsh or eelgrass for sea level rise accommodation would cost between $16,000 and $45,000 per acre.

Photo courtesy of the San Diego Unified Port District

Proposed Adaptation and Mitigation Measures

Policy Adaptation Strategies

Protect District mission-driven uses by employing adaptation strategies that protect against sea level rise, and then accommodate temporary coastal flooding and inundation; limit redevelopment in at-risk locations; design standards and provide adequate setbacks.

Natural or Nature-Based Adaptation Strategies

Living shoreline, living breakwaters (oyster reef/floating reef); bio-enhancing concrete, beach nourishment; wetland terraces, sediment augmentation, and restoration.

Building and Infrastructure Strategies

Embankments, retractable barriers/aquafence; elevate infrastructure, floodable park; revetments, breakwaters (branch box/floating/submerged); bulkhead, seawall, groins; floating sector gate.

Partnerships

Collaboration with other relevant jurisdictions will be fundamental to the District’s success in implementing the framework. Of significance, the District and Navy Regional Southwest recently entered into a Memorandum of Agreement to align their planning initiatives related to projected sea level rise and coastal flooding. As the two largest land managers along San Diego Bay, a continued partnership between the District and the Navy is crucial to protecting coastal dependent uses. Likewise, working with academia is important for the District to identify and fill research gaps. As a result, the District and academic institutions such as Scripps Institution of Oceanography will continue their long-standing relationship of research in San Diego Bay.

Anticipated Costs of Sea Level Rise (millions)*

	Current	2030 (9.6 in.)	2050 (19.2 in.)	2100 (30–59 in.)
Assets at Risk or Repair and Replacement Costs		**$48.4**	**$58.7**	**$114.5–$1,035**
Losses in Non-Market Value	**$40–$61**			**$11.9–$12.3**
Cost of Adaptation	**n/a**	**$16.1**	**$16.1**	**$24.8–$39.2**

* Repair Costs from Table ES-6 and ES-7 pp. 15-16 (loss of port revenue not included); Loss in Revenue from Table ES-6 and ES-7 pp. 15-16 (loss in Port revenue); Tables 4 and 5, pp, 28-29 provide detailed estimates of City and non-City assets.