City of Oceanside

San Diego County

Site Description

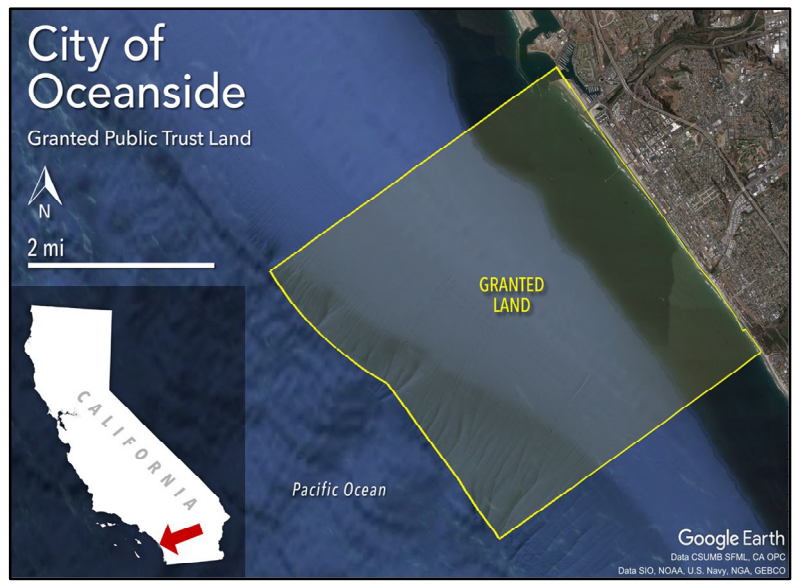
The City of Oceanside was originally granted sovereign waterfront lands in 1963. These lands—made up of beaches, bluffs, and wetland habitats—accommodate a variety of built and natural Public Trust assets. These assets include beach and park access for recreation, waterfront tourism provided by the Oceanside Pier, critical infrastructure (transportation, water, and communications), and several other commercial developments. With future sea-level rise, many of these assets will become vulnerable to tidal inundation, storm flooding, wave impact, and erosion. Several adaptation strategies are already in place, including beach nourishment and sand bypassing, the Oceanside Small Craft Harbor breakwater, and sea walls and revetments. Through a holistic and phased approach, the City plans to continue implementing a variety of traditional and nature-based solutions so that appropriate adaptation strategies can be chosen over time as specified triggers for action are reached.

Granted Land Type:
Smaller Harbor/Marina with Recreational Amenities or Natural Assets

Public Trust Uses

Primary Uses: Fishing, Recreation

Secondary Uses: Navigation



Coastal Hazards considered:
tidal inundation, storms (annual, 20-year, 100-year), wave run-up, shoreline erosion/cliff retreat, river flooding

Modeling system used for mapping:
CoSMoS

Sea level rise scenarios/elevations
LINK TO FULL ASSESSMENT

Vulnerable Public Trust Resources	
Built Facilities	**Building Assets**: Commercial/retail offices; general industrial; mixed use; lifeguard headquarters; emergency shelter sites; hotels and lodging **Infrastructure Assets**: Roads; railroads; water, wastewater, sewage and storm drain infrastructure; electrical transmission lines; natural gas pipelines; communication infrastructure; shoreline protective devices; groins, jetties, breakwaters, pier; river levees and floodwalls; fire hydrants; wells **Hazardous Materials**: Hazardous material sites; underground chemical storage tanks **Cultural Assets:** Historic resources; Cemeteries; Native cultural resources
Natural Assets	Beaches, bluffs, wetlands, preserves and critical species habitats, parks and open space, access, trails

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Other Economic Vulnerabilities

The City of Oceanside submitted a vulnerability analysis and adaptation plan for its entire coastal zone. The table below attempts to display only what is part of their granted lands.

Proposed Adaptation and Mitigation Measures

Protect

Coastal sediment management (e.g., beach and dune enhancement, sand bypassing); sand retention structures (e.g., groins and artificial headlands, breakwaters, offshore reefs); shoreline protection devices (e.g., seawalls, revetments); raising and/or modifying the harbor breakwater.

Accommodate

Elevating of structures and/or property grades; raising the marina facilities; raising the pier.

Retreat

Managed retreat; abandoning the harbor; abandoning the pier.

Consistent with California Coastal Commission Sea-Level Rise Policy guidance, this Coastal Hazard Adaptation Plan includes a variety of adaptation strategies, including traditional coastal engineering and nature-based infrastructure solutions. In choosing appropriate adaptation strategies, the City of Oceanside will consider multi-objective measures and a holistic approach, rather than focusing on independent or single-purpose solutions to protection. Given the ES-4 | Executive Summary Coastal Hazard Adaptation Plan June 2019 uncertainty in sea level rise projections and erosion/ flooding model limitations, planning for sea level rise requires a phased approach. Certain adaptation strategies will be used in the near-term, while others will be needed in the long-term. This phased approach provides a way to manage the inherent uncertainty in timing and extent of potential sea level rise impacts.

Anticipated Costs of Sea Level Rise (millions)*

	Current	2030 (9.6 in.)	2050 (19.2 in.)	2100 (68.4 in.)
Assets at Risk or Repair and Replacement Costs	**$3.0**	**$4.1**	**$4.2**	**$5.6**
Losses in Non-Market Value		**$40**	**$112**	**$160**
Cost of Adaptation	**$136.4**	**$190.4**	**$199.4**	**$398.5**