

City of Avalon

Los Angeles County

Site Description

The City of Avalon is on the northeastern shoreline of Santa Catalina Island in Los Angeles County. The granted state lands extend from the Hamilton Cove area in the west to select areas bordering Pebbly Beach Road to the east. The area has shorelines backed by cliffs and bluffs of varying height, a series of bays with primarily narrow, rocky beaches, and a portion to the southeast of a narrow to non-existent beach seaward of Pebbly Beach Road. It is impacted by southeasterly swells that can produce short-period, wind-driven wave hazards of sufficient magnitude to impact coastal infrastructure. Commercial and recreational uses include cruise ship and ferry services and infrastructure, as well as marinas, boat launches, retail, restaurants, and many other visitor-serving public trust resources. In addition, there are subtidal marine resources, kelp forests, and hard bottom habitats that support rich biodiversity and are world-renowned for scuba diving and snorkeling. Whale watching, recreational fishing, and beachgoing are also widely popular activities in this area.

Coastal Hazards considered:
tidal inundation, 100-year storm, overtopping, wave run-up, wave height



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

Public Trust Uses

Primary Uses: Commerce, Recreation
Secondary Uses: Safety & Navigation, Environmental Stewardship



Modeling system used for mapping:
CoSMoS

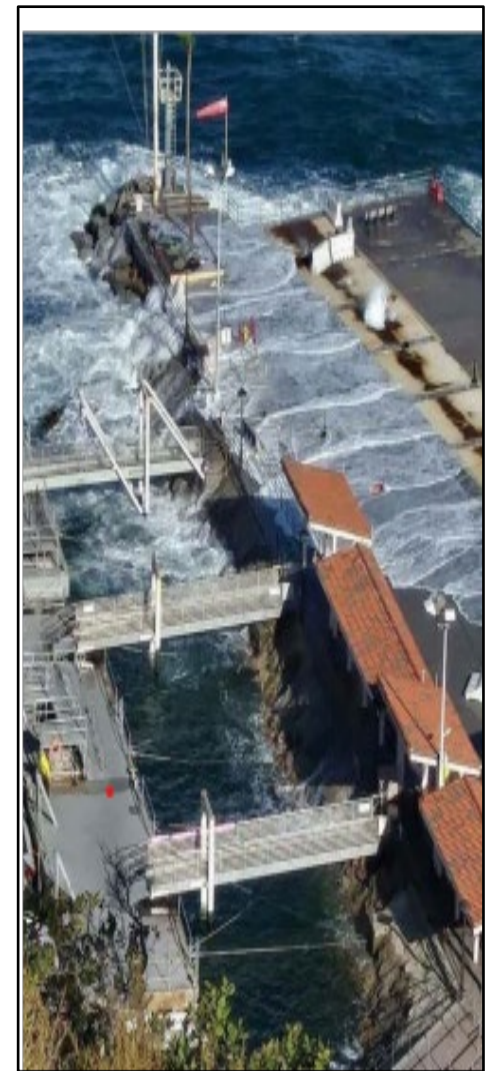
Sea level rise scenarios/elevations
[LINK TO FULL ASSESSMENT](#)

Vulnerable Public Trust Resources

Built Facilities	Catalina Island Yacht Club, Tuna Club, Green Pleasure Pier, Mooring and Boating Infrastructure (347 moorings, pump-out facility, fuel station, miscellaneous seasonal docks), Cabrillo Mole Terminal, various pedestrian pathways and public access points consisting of seawalls or revetments with stairs over top
Natural Assets	Casino Point State Marine Conservation Area, Lover's Cove State Marine Conservation Area, other beach, intertidal, and subtidal marine habitat

Other Site Vulnerabilities

An economic analysis of Catalina Island tourism estimated that in 2016 approximately 910,800 visitors accounted for \$166.7 million of direct spending, which generated \$5.8 million in local tax revenue and supported 1,254 jobs. The retail district of Avalon and the harbor were by far the most visited areas of the island. It includes flagship, pile-supported structures along the waterfront—the Catalina Island Yacht Club, Tuna Club, and Green Pleasure Pier—that are at high risk from rising seas. Moorings are also hugely important to city revenues, as well as annual permit and transfer fees. In 2018 the City operated 361 moorings resulting in over \$2 million of generated revenue. Given that the City’s tourism-dependent economy is focused on activities on or near the water, it is expected that adverse impacts to tideland resources could translate to significant direct and indirect financial impacts.



Proposed Adaptation and Mitigation Measures

Protect

Ongoing maintenance and enhancement of existing shoreline protection within the Cabrillo Mole. Augment existing shoreline protection system with retrofits or replacement of existing infrastructure.

Accommodate

Wet or dry flood-proofing. Beach nourishment. Elevation of the Cabrillo Mole to prevent loss of access and flooding of structures. Elevate coastal access resources with fill or other methods to offset increased water elevations.

Retreat

Retreat measures are most feasible for resources that have open space located landward at higher elevation such as the southeastern portion of Avalon Bay. Sandy beach areas can also retreat landward through natural processes as water elevations rise if open space is made available.

Public Access

The vital recreation and tourism sector for Avalon highly depends on public access to the water. At 24 inches of sea level rise, the beach area within Descanso Bay and Avalon Bay will be submerged. Beaches below the seawalls in Avalon Bay and Descanso Bay will be completely submerged at high tide with 48 inches of sea level rise. Coastal access points within Lover’s Cove and the Cabrillo Mole boat ramp are also impacted at 48 inches of sea level rise. All public beaches and coastal access points within Avalon Bay will be submerged with 6 feet of sea level rise.

Anticipated Costs of Sea Level Rise (millions)*

	Current	2030 (24 in.)	2050 (48 in.)	2100 (60 in.)
Losses in Non-Market Value	n/a	\$2.7	\$4.9	\$10.2
Direct Spending on Recreation	\$168.7			

* Losses in Non-Market Value from Table 7, p.48; Direct Spending from p. 43.