

City of Carpinteria

Santa Barbara County

Site Description

The City of Carpinteria is located in southern Santa Barbara County. The City is located almost entirely on a coastal plain between the Santa Ynez Mountains and the Pacific Ocean. In general, the area's topography slopes from the foothills of the Santa Ynez Mountains in the north towards the Pacific Ocean to the south.

Between the foothills and the populated area of the City is an agricultural zone.

Existing coastal hazards from severe storms cause erosion and wave flooding. Routine tidal inundation already affects community resources; sea level rise could exacerbate already difficult and often competing management challenges. Many of the affected areas were once historic wetlands before the development of Carpinteria. As the habitats have been altered and land uses expanded into flat low-lying areas, infrastructure, roads, and neighborhoods have been built in these areas. These habitats, land uses, and built infrastructure will need to adapt to rising sea levels. The process of examining existing and future vulnerabilities is the first step for a community to take in understanding the extent of the potential challenges and to begin discussing and formulating effective adaptation strategies over time to maintain the quality of life in Carpinteria.

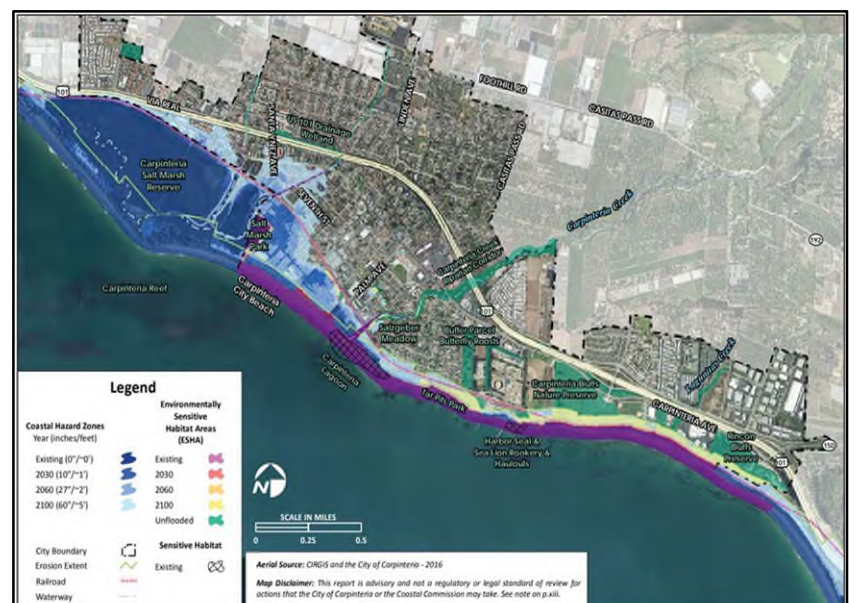


Granted Land Type:
Jurisdiction With
Recreational Amenities

Public Trust Uses

Primary Uses: Recreation,
Environmental Stewardship

Secondary Uses: Commerce



Coastal Hazards considered:
sea level rise, tidal inundation, 100-year storm, erosion

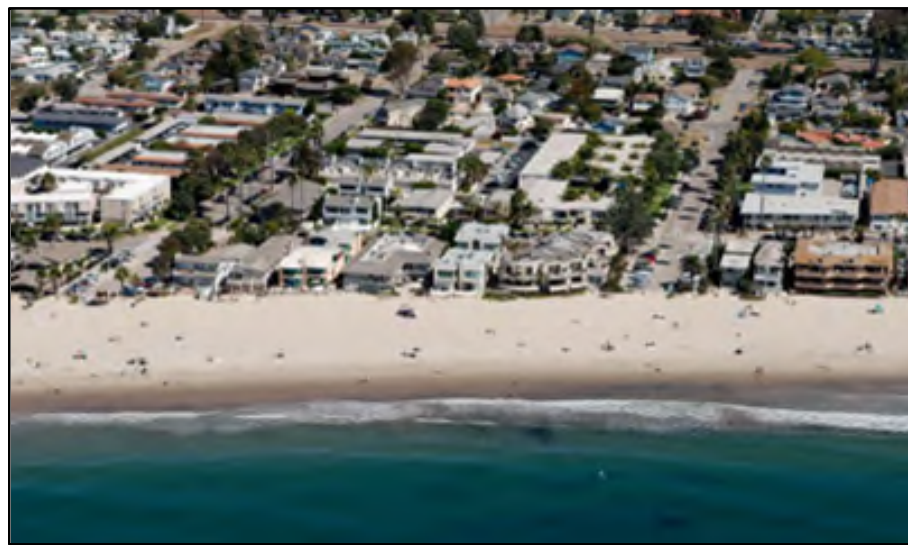
Modeling system used for mapping:
In-house model

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

Vulnerable Public Trust Resources	
Built Facilities	Coastal access points, Carpinteria State Beach Campground, Union Pacific Railroad, recreation trails, Tar Pits Park, US Highway 101, bike paths, parking lots, Linden Field, legacy inactive oil wells, stormwater drains, stormwater drain inlets, stormwater drain outlets, water supply pressure regulators, water pipes, sewer pump stations, sewer pipes
Natural Assets	Carpinteria State Beach, Carpinteria City Beach, Salt Marsh Park, Carpinteria Bluffs, Rincon Beach Park, Carpinteria Harbor Seal Rookery

Other Site Vulnerabilities

Areas containing the highest number of minority households and households below the poverty level in the City are the most at risk of being impacted from sea level rise. Additionally, bicycle and bus/transit routes that are utilized by low-income populations in the City as the primary means of transportation would be impacted. For instance, the 2017 Thomas Fire and related winter 2018 debris flows closed U.S. 101 for approximately three weeks, severely impacted services and associated jobs, increased childcare expenses, and destroyed homes.



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Proposed Adaptation and Mitigation Measures

Protect

Continue winter storm berm program to protect Beach Neighborhood. Create a cobble and vegetative dune system along the City beach. Develop a sediment management and beach nourishment program, continue opportunistic beach nourishment. Construct sand retention structures perpendicular to the shoreline and/or offshore. Armor Carpinteria Bluffs to slow erosion. Complete storm damage and shoreline protection feasibility study (USACE).

Accommodate

Improve stormwater infrastructure in Beach Neighborhood and along the Carpinteria Bluffs. Establish policy and program framework for adaptation such as development standards for accommodation of SLR. Place a special zone district over properties within defined coastal hazard areas. Elevate the railroad downtown, and raise the railroad on a causeway at the Carpinteria Salt Marsh to provide opening for tidal inundation.

Retreat

Relocate development subject to repetitive damage. Relocate highly vulnerable utility infrastructure

State/City Beach Economic Revenues: The total estimated spending for beach visitation is \$48 million annually, generating \$445,000 in sales taxes for the City, and just under \$1.9 million in Transient Occupancy Tax for the City from overnight visitors who do not camp. Loss of the State and City Beaches could result in an economic impact associated with loss of beach visitation and associated spending.

In addition to economic impacts, the State and City beaches are strongly associated with the community's identity and serve as important open space and recreation opportunities.

Anticipated Costs of Sea Level Rise (millions)*

	Current	2030 (12 in.)	2050 (24 in.)	2100 (72 in.)
Assets at Risk or Repair and Replacement Costs	2.89	9.53	24.01	66.59
Losses in Non-Market Value	n/a	\$60.4/year, recreation value		
Cost of Adaptation	n/a	n/a	n/a	n/a

* Repair and replacement costs are from Figs. 6.4, 6.6, 6.13, and 6.14, and Tables 6.5, 6.6. They include estimates for every category except residential land use, which is not a public trust consistent use. Non-market value is from Table 6.16. Adaptation costs are variable, estimates can be found in Chapter 8.