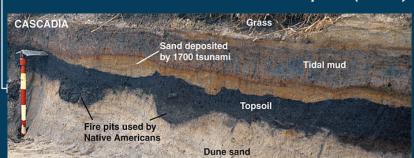
## California Tsunami History

<sub>1</sub>1700

Cascadia subduction zone (CSZ) earthquake and tsunami impacted northern California and is a source for oral histories of the first peoples. Left: 1700 CSZ Tsunami sand deposit in coastal Washington (USGS). Right: NOAA Tsunami model for a CSZ earthquake (PTWC).



1812

An earthquake near Santa Barbara caused a tsunami which caused the first peoples (Chumash) to move their habitation sites from Santa Rosa Island to the La Purisma Mission near Santa Barbara.

1946



A magnitude M8.6 Alaska/Aleutian earthquake triggered tsunami flooded portions of Half Moon Bay, CA and other locations, caused damages in excess of \$150,000 (2022 dollars), and led to 1 fatality in CA. Left: Photo taken by Howard Anderson showing damage to boats and buildings in Half Moon Bay.

1960



Crescent City, CA, was inundated by tsunami from the magnitude M9.5 earthquake in Chile that led to 1 death in the state and nearly \$1,000,000 (2022 dollars) in damages.

Left: photo from Orville Magoon photo collection.

1964



Crescent City, CA, was inundated by tsunami generated by the magnitude M9.2 Good Friday earthquake in Alaska that led to 13 deaths in the state. Damage in CA exceeded \$160 million (2022 dollars). Left: Aerial Image from Orville Magoon photo collection showing buildings moved off of foundations during the tsunami.

1992

The most recent locally sourced tsunami generated by the magnitude M7.2 Cape Mendocino earthquake caused waves to be recorded on NOAA tide gages statewide.



2006



Tsunami sourced from the magnitude M8.3 Kuril Islands earthquake in the NW Pacific Ocean generated strong currents and caused \$20 million in damage in Crescent City, CA. Left: photo from Lori Dengler.

A magnitude M8.8 earthquake in Chile generated tsunami waves that caused millions in damage in CA. Left: Photo taken during the tsunami as it caused damage to docks at Shelter Island, San Diego, CA. Right: photo after the tsunami. Both photos from Rick Wilson photo collection.



The Great East (Tōhoku-oki) Japan earthquake and tsunami caused hazardous currents and surges in CA resulting in over \$100 million in damage to marinas and harbors. Below Left:

Bodega Bay, CA from Pamela J. Boehand, USCG;
Below Right: Crescent City, CA from NOAA NWS.





\*2022 Collapse of a volcano in the Kingdom of Tonga produced tsunami flooding along the coast of CA, generated strong currents, and caused \$8-10 million in damage. Left to Right: Santa Cruz (from Jacqueline Bott), Moss Landing (from Nicholas Graehl), Ventura (from Michael DeFrisco).









For more information about tsunami in California, visit: tsunami.ca.gov or myhazards.caloes.ca.gov

