

Check Your Community Hazard

Knowing your risk before disaster hits could save your life. Explore the online tool at tsunami.alaska.edu to determine whether your house, workplace, or school is in the inundation/flood zone.

Historical Tsunamis

More than a dozen tsunamis have been recorded in Kodiak since the late 1700s, but only three had maximum water heights of more than 1 foot. The 1964 magnitude 9.2 earthquake generated the most tsunami flooding and damage. The earthquake caused Kodiak and the Naval Station to drop by 5.6 feet and generated a maximum water height of 22 feet.

Keeping Alaska Safe

Tsunami researchers use cutting-edge science to examine historical tsunamis and earthquakes, along with geologic records from prehistoric tsunamis, then generate possible worst-case scenarios. This information is visualized in maps showing potential flood zones to help communities create emergency plans.

Learn More about Tsunami Hazards in Kodiak

Emergency and disaster preparedness

Emergency preparedness website
<https://www.city.kodiak.ak.us/emergencypreparedness>

Local radio stations

98.7 FM KVOK <http://www.kvok.com>

100.1 FM KMXT <http://kmxt.org>

NIXEL Community Message Center

<http://www.nixle.com/>

Full scientific community report and maps

<https://doi.org/10.14509/29740>

Maritime response report

<http://hdl.handle.net/11122/12769>

Pedestrian travel time report

<http://hdl.handle.net/11122/12766>



Explore the online tool

tsunami.alaska.edu

Learn More about Tsunami Safety in Alaska

Preparing for tsunamis

Alaska Division of Homeland Security and Emergency Management
www.ready.alaska.gov



Tsunami warning information

National Tsunami Warning Center
www.tsunami.gov

National Tsunami Hazard Mitigation Program

nws.weather.gov/nthmp/

To request brochures, contact 907-474-7320 or uaf-aec@alaska.edu

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Know Your Tsunami Hazard in Kodiak



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Big Waves in the Biggest State

In Alaska, tsunamis can strike within minutes of an earthquake. Tsunami awareness and safety are crucial to anyone who lives, works, or travels along Alaska's coast.

Earthquakes frequently rumble coastal Alaska. Just offshore, the Pacific Ocean plate scrapes under the continental plate of mainland Alaska, causing much of this activity. Many places along Alaska's rugged coast are poised for landslides above or below the ocean's surface. A major earthquake or landslide near the coast could generate a tsunami.

High-risk Areas

If the ground shakes for more than 20 seconds and it is difficult to stand, and/or the tsunami siren is heard, anyone within the tsunami hazard zone should move to higher ground or a tsunami shelter (see map).

Pay attention to unusual sounds and sights when on or near the ocean. Tsunami impacts are greatest near ocean beaches, low-lying coastal areas, and waterways such as harbors and estuaries. Always avoid these areas during tsunamis. A tsunami can be a series of waves that may last for hours, so wait for local authorities to announce when these areas are safe. In addition to wave action, tsunamis can stir up currents that threaten harbors, facilities, and boats.

- Tsunami hazard zone
- Areas with dangerous eddies and whirlpools
- Pedestrian evacuation requires half hour or more to reach safety (at 2 mph)
- Probable locations of unstable sediment buildup that could cause underwater landslides
- Evacuation line designated by the City of Kodiak
- Assembly area designated by the City of Kodiak

- Airport
- Bridge
- City Office
- Ferry
- Hospital
- School
- Fire Services



There have been several tsunami evacuations in recent years, but fortunately no tsunami damage. Evacuation decisions need to be made quickly, often before tsunami size is known. Any evacuation, even one that in hindsight may be deemed unnecessary, provides a real-life opportunity to practice and improve community response to tsunamis.



1868: A magnitude 8.5 earthquake in Chile caused a tsunami reaching up to 7 feet in Kodiak. The rising water forced workers repairing a boat to leave the beach.



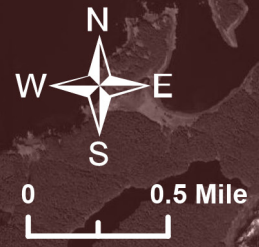
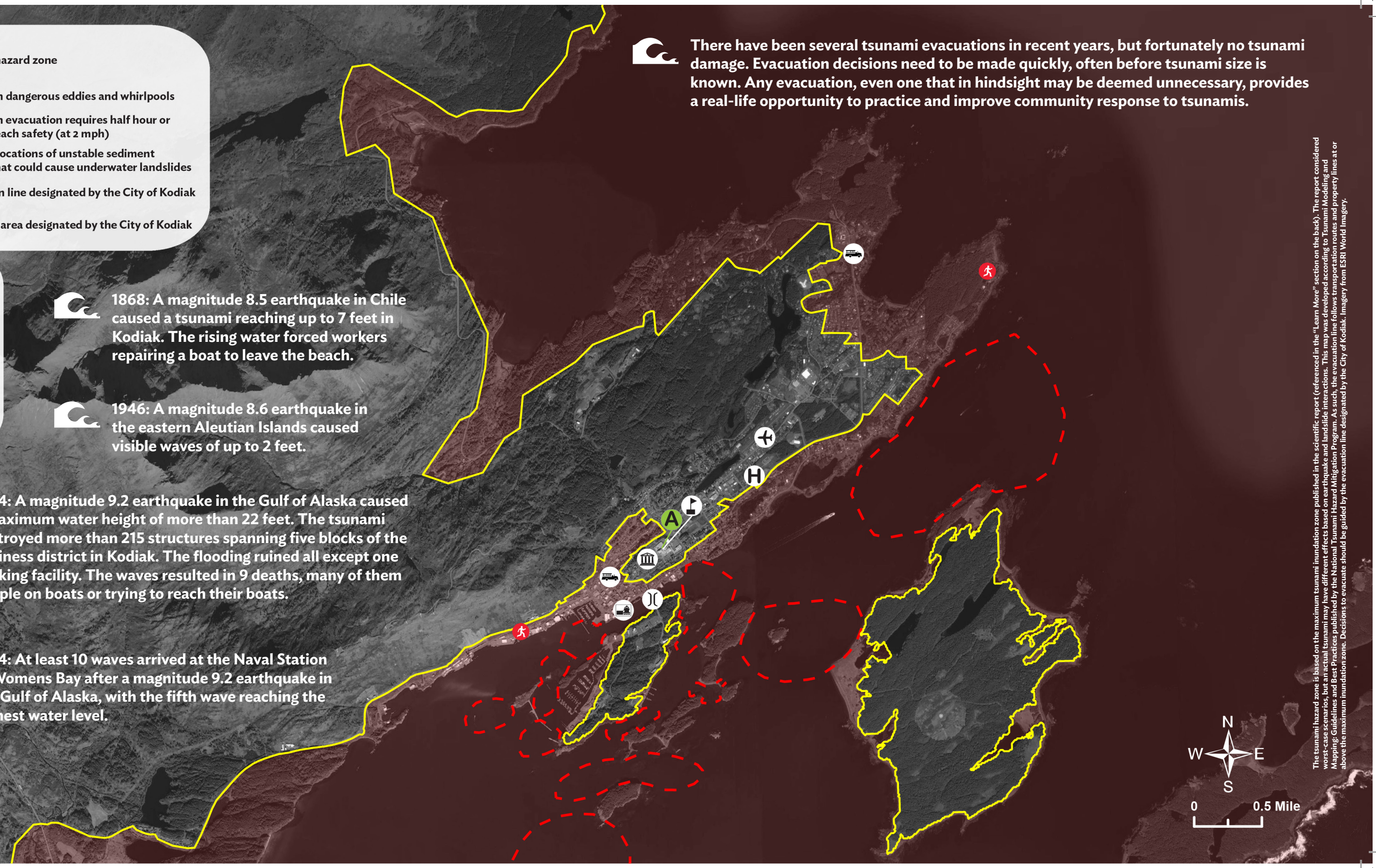
1946: A magnitude 8.6 earthquake in the eastern Aleutian Islands caused visible waves of up to 2 feet.



1964: A magnitude 9.2 earthquake in the Gulf of Alaska caused a maximum water height of more than 22 feet. The tsunami destroyed more than 215 structures spanning five blocks of the business district in Kodiak. The flooding ruined all except one docking facility. The waves resulted in 9 deaths, many of them people on boats or trying to reach their boats.



1964: At least 10 waves arrived at the Naval Station at Womens Bay after a magnitude 9.2 earthquake in the Gulf of Alaska, with the fifth wave reaching the highest water level.



The tsunami hazard zone is based on the maximum tsunami inundation zone published in the scientific report (referenced in the "Learn More" section on the back). The report considered worst-case scenarios, but an actual tsunami may have different effects based on earthquake and landslide interactions. This map was developed according to Tsunami Modeling and Mapping: Guidelines and Best Practices published by the National Tsunami Hazard Mitigation Program. As such, the evacuation line follows transportation routes and property lines at or above the maximum inundation zone. Decisions to evacuate should be guided by the evacuation line designated by the City of Kodiak. Imagery from ESRI World Imagery.