

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

The 1964 magnitude 9.2 earthquake changed Homer's landscape: the Homer Spit dropped almost 6 feet due to subsidence from the earthquake combined with ground compaction from shaking. Afterwards, buildings and structures on the spit flooded during high tides. The earthquake caused a combination of tsunamis generated by the earthquake itself and by local underwater landslides.

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 Homer

Emergency and disaster preparedness
City of Homer website
www.cityofhomer-ak.gov/emergency-information
beready@ci.homer.ak.us



City of Homer incident updates
www.cityofhomer-ak.gov

On Facebook
[@cityofhomerak](https://www.facebook.com/cityofhomerak)
[@homerakpolice](https://www.facebook.com/homerakpolice)

Full scientific community report and maps
<https://dggs.alaska.gov/pubs/id/30095>

Maritime guidance report
<http://hdl.handle.net/11122/10916>

Pedestrian travel times report
<http://hdl.handle.net/11122/10027>



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

UAF is an AA/EO employer and educational institution and prohibits illegal discrimination against any individual: www.alaska.edu/nondiscrimination/.

Published in 2022

Know Your Tsunami Hazard in Homer



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.alaska.edu

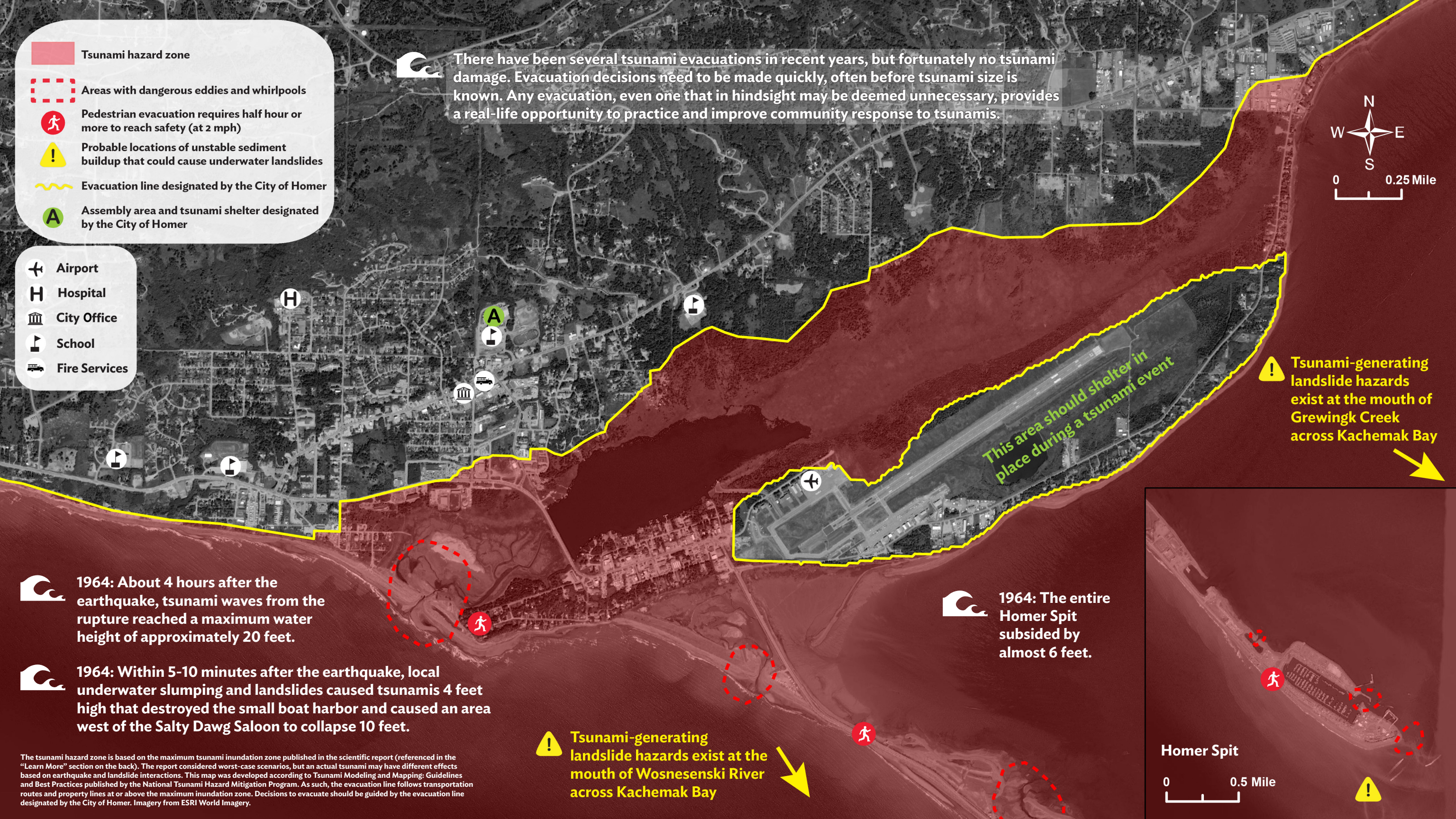
- Tsunami hazard zone
- Areas with dangerous eddies and whirlpools
- Pedestrian evacuation requires half hour or more to reach safety (at 2 mph)
- Probable locations of unstable sediment buildup that could cause underwater landslides
- Evacuation line designated by the City of Homer
- Assembly area and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

- Airport
- Hospital
- City Office
- 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.

0 0.25 Mile



This area should shelter in place during a tsunami event

Tsunami-generating landslide hazards exist at the mouth of Grewingk Creek across Kachemak Bay



1964: About 4 hours after the earthquake, tsunami waves from the rupture reached a maximum water height of approximately 20 feet.



1964: Within 5-10 minutes after the earthquake, local underwater slumping and landslides caused tsunamis 4 feet high that destroyed the small boat harbor and caused an area west of the Salty Dawg Saloon to collapse 10 feet.



1964: The entire Homer Spit subsided by almost 6 feet.



Tsunami-generating landslide hazards exist at the mouth of Wosnesenski River across Kachemak Bay

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 Homer. Imagery from ESRI World Imagery.

Homer Spit

0 0.5 Mile

