

## Safety

### Tsunami Warnings

Many tsunami warnings result from distant earthquakes. The largest earthquakes can cause tsunamis that spread across oceans, sometimes generating strong currents and dangerous flooding in areas where shaking was not felt, and that are far away from the earthquake's source.

### Landslides

Near Seldovia, steep coastal slopes above water could collapse during an earthquake or due to other factors, such as extreme rain. Underwater landslides can be triggered by earthquakes or extreme low tides. Such events could produce a tsunami that may arrive without warning. If you see a landslide occur along the coast, move immediately to the highest ground available.

### Vessel Operator Guidance

In the case of a tsunami, operators who are on shore should follow evacuation guidelines. Operators on docked vessels should leave their boats and flee to high ground. Operators already on the water, who cannot safely reach shore and evacuate before the tsunami arrives, should flee to deep water (30 fathoms or more for distant tsunamis, 100 fathoms for local tsunamis) at least a half mile from shore. They should be prepared to be on the water for more than 24 hours or to travel to a different port if the home port is severely damaged. Vessels in shallow, enclosed, or narrow water bodies are more at risk of tsunami damage than those in open, deep water.

(See the Maritime guidance report listed in the Learn More section for detailed guidance.)

## Check Your Community Hazard

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

## Historical Tsunamis

In 1883, Augustine Volcano erupted, causing a massive landslide that generated a tsunami that damaged the communities of Port Graham and Nanwalek. The 1964 magnitude 9.2 earthquake caused a tsunami that destroyed much of the harbor in Seldovia, but overall caused less impact than in other communities because the largest waves arrived at low tide. Several underwater landslides in Kachemak Bay triggered tsunamis, causing damage on Homer Spit.

## 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 Seldovia

### Emergency and disaster preparedness

City of Seldovia

Facebook: @cityofseldovia

<https://cityofseldovia.com/emergency-preparedness>

KBBI AM 890

Kenai Peninsula Borough Alerts

Facebook: @KPBAAlerts

Kenai Peninsula Borough Ready, Set, Go!

[info.kpb.us](http://info.kpb.us) (register for alerts here)

Duty officer: 907-714-2415

Seldovia Village Tribe

<https://svt.org/emergency-services>

### Full scientific community report and maps

<https://doi.org/10.14509/30867>

### Maritime guidance report

<http://hdl.handle.net/11122/10917>



### Explore the online tool

[tsunami.alaska.edu](https://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](http://www.ready.alaska.gov)



### Tsunami warning information

National Tsunami Warning Center

[www.tsunami.gov](http://www.tsunami.gov)

### National Tsunami Hazard Mitigation Program

[www.weather.gov/nthmp/](http://www.weather.gov/nthmp/)

To request brochures, contact 907-474-7320 or [uaf-aec@alaska.edu](mailto:uaf-aec@alaska.edu)

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# Know Your Tsunami Hazard in Seldovia



[tsunami.alaska.edu](https://tsunami.alaska.edu)

## 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.

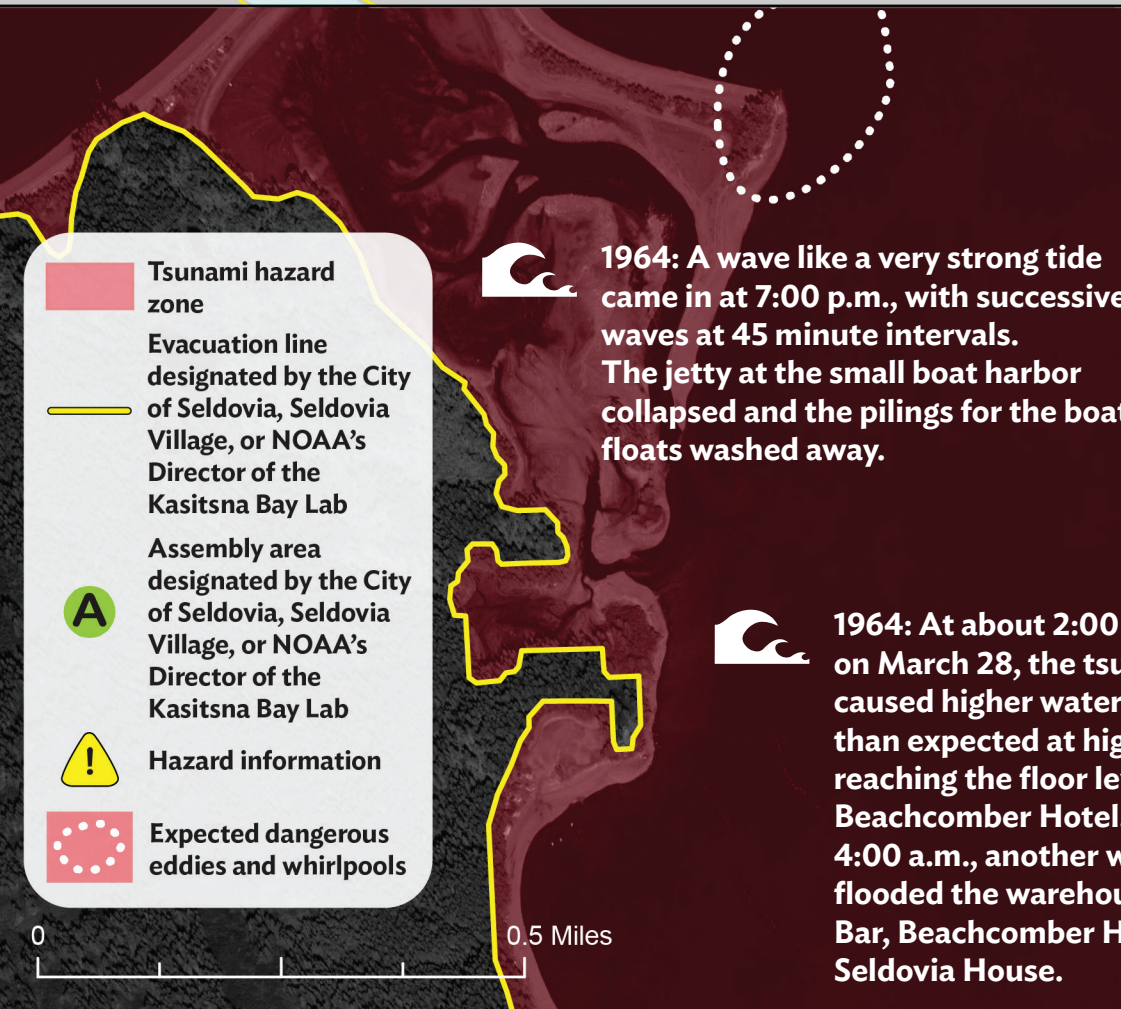
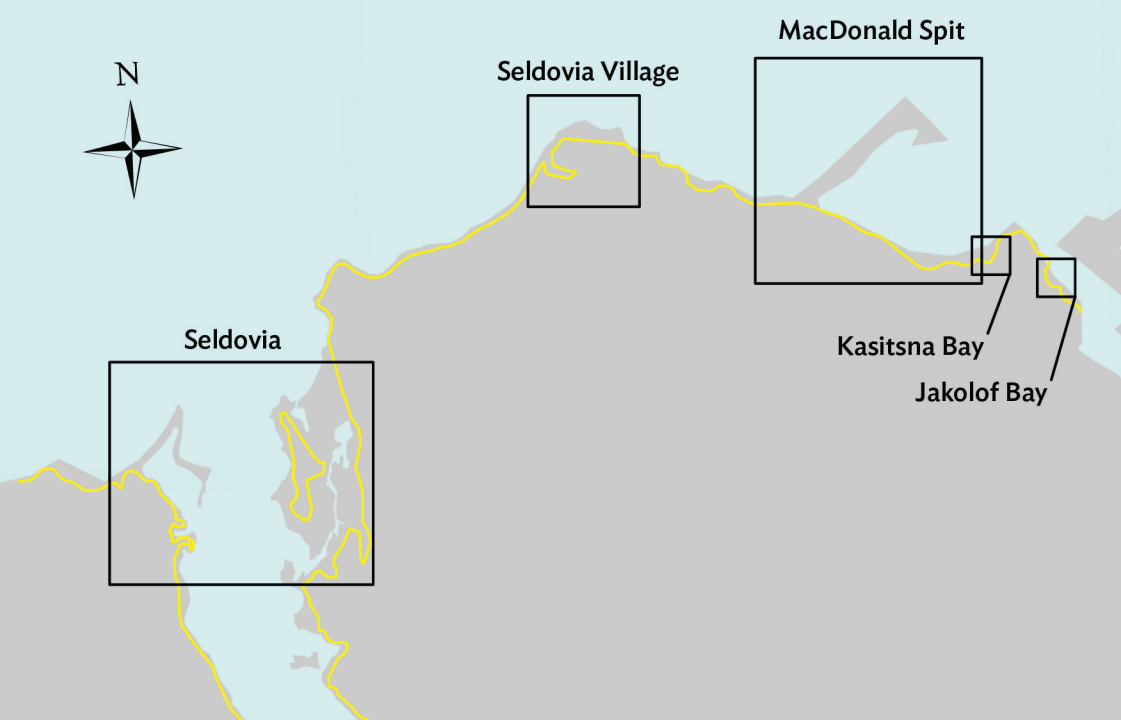
Earthquakes frequently rumble coastal Alaska. Just offshore, the Pacific Ocean plate scrapes under the continental plate of mainland Alaska, causing much of this activity. Many places along Alaska's rugged coast are poised for landslides above or below the ocean's surface. A major earthquake or landslide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

## Warning Signs

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 inundation/flood zone should move to higher ground or a tsunami shelter (see map).

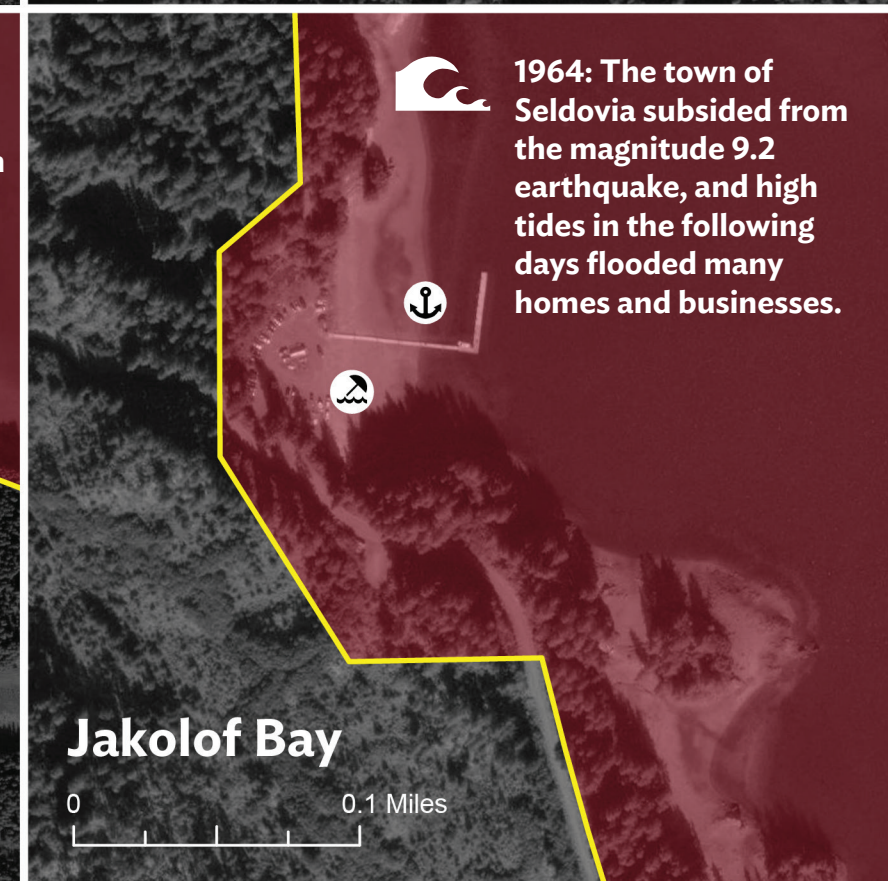
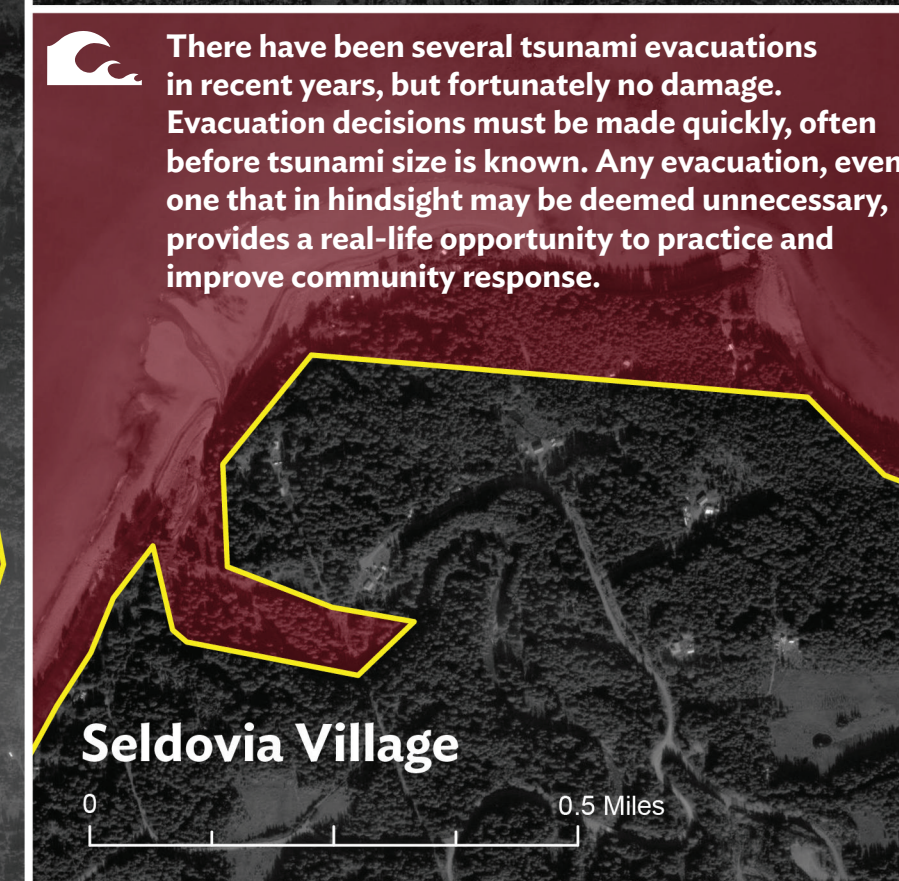
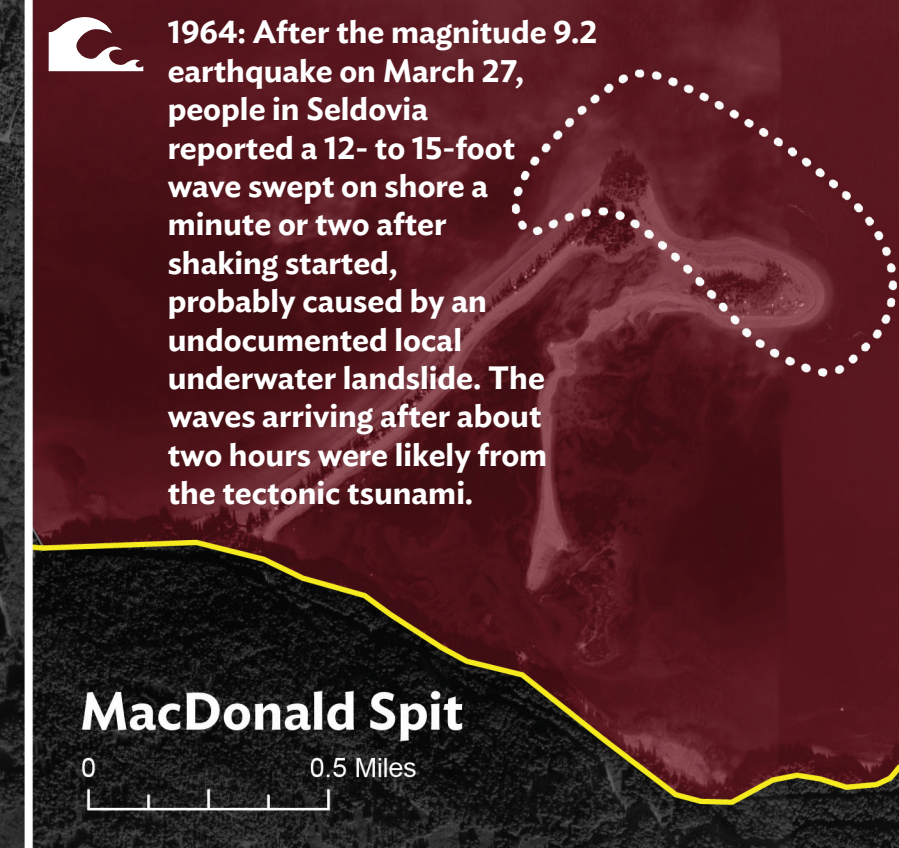
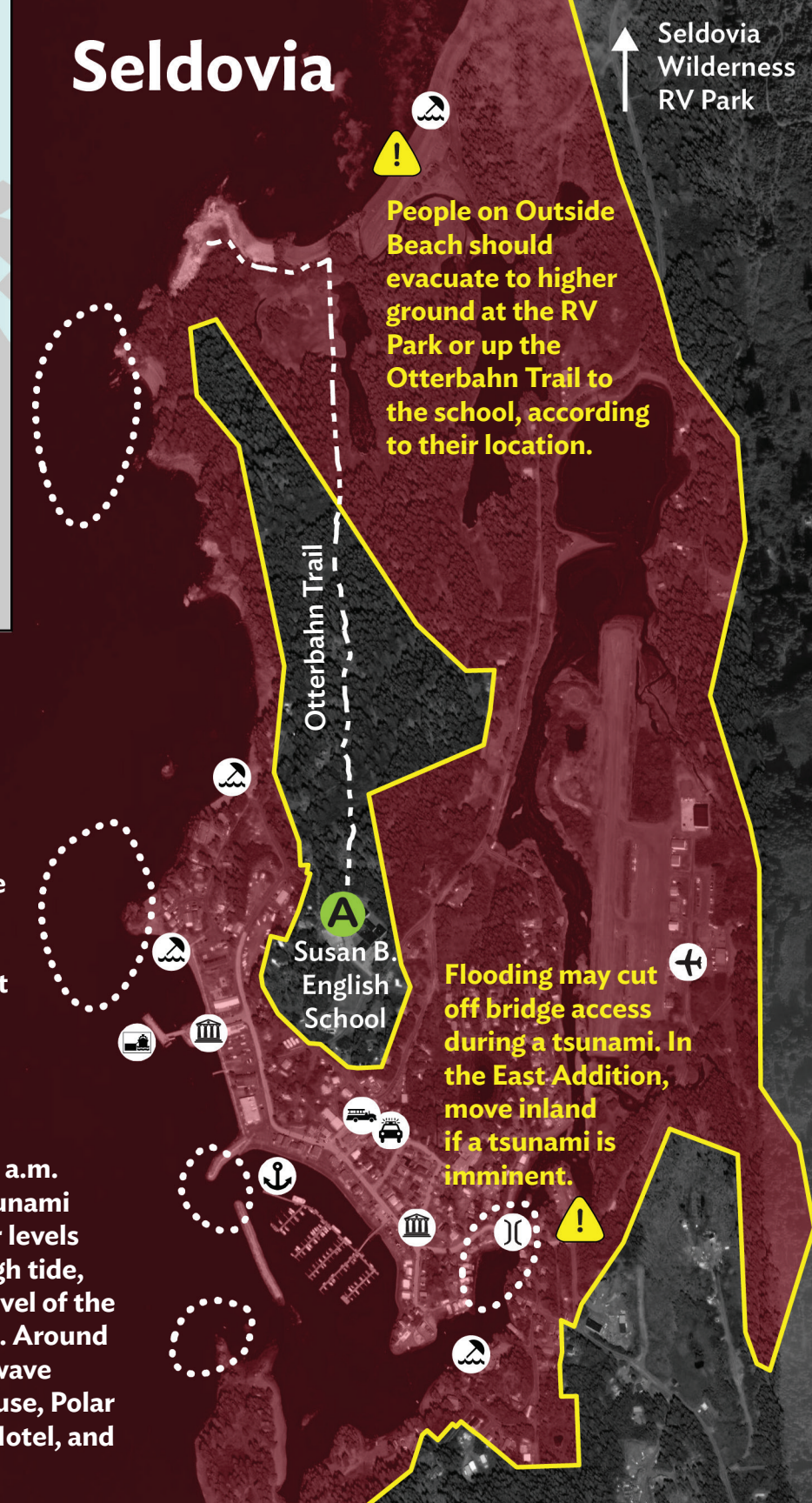
Pay attention to unusual sounds and sights when on or near the ocean. Tsunami impacts are greatest near ocean beaches, low-lying coastal areas, and waterways such as harbors and estuaries. Always avoid these areas during tsunamis. A tsunami can be a series of waves that may last for hours, so wait for 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.





1964: A wave like a very strong tide came in at 7:00 p.m., with successive waves at 45 minute intervals. The jetty at the small boat harbor collapsed and the pilings for the boat floats washed away.

1964: At about 2:00 a.m. on March 28, the tsunami caused higher water levels than expected at high tide, reaching the floor level of the Beachcomber Hotel. Around 4:00 a.m., another wave flooded the warehouse, Polar Bar, Beachcomber Hotel, and Seldovia House.



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 of the brochure). 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 Seldovia, Seldovia Village, and NOAA's Director of the Kasitsna Bay Laboratory. Imagery from ESRI World Imagery.