

## WHAT IS A TSUNAMI?

A tsunami is a series of waves most commonly caused by an earthquake beneath the sea floor. As tsunamis enter shallow water near land, they increase in height and can cause great loss of life and property damage where they come ashore.

Recent research suggests that tsunamis have struck the Washington coast on a regular basis. They can occur at any time of the day or night, under any and all weather conditions, and in all seasons. Beaches open to the ocean, bay entrances, tidal flats, and coastal rivers are especially vulnerable to tsunamis.

## WHAT IS THE DIFFERENCE BETWEEN A 'DISTANT' AND A 'LOCAL' TSUNAMI?

When a tsunami has been generated by a distant earthquake, it will not reach the Washington coast for several hours, and there is time to issue a warning, if necessary. When a tsunami is generated by a strong offshore earthquake, its first waves would reach the outer coast minutes after the ground stops shaking. Feeling an earthquake could be your only warning!

## WHAT CAN I DO TO PROTECT MYSELF FROM A TSUNAMI?

- Develop a family disaster plan. Everyone needs to know what to do on their own to protect themselves from an earthquake or tsunami.
- Be familiar with local earthquake and tsunami plans. Know where to go to survive a tsunami.
- Prepare emergency kits for your home, automobile, and work.

- Take a first aid course and learn survival skills. Knowledge is your greatest defense against potential disaster.

## HOW DO I KNOW WHEN TO EVACUATE?

If you feel the ground shake, evacuate inland or to high ground immediately! A wave as high as 20 feet could reach the Westport and Grayland area within 30 minutes of the quake. The first wave is often not the largest; successive waves may be spaced many minutes apart and continue to arrive for several hours. Return only after emergency officials say it is safe.

## WHERE DO I EVACUATE TO?

The map shows tsunami hazard areas (yellow) and areas of higher ground (green). Go to the nearest high ground, at least 50 feet above sea level, if possible. If you don't have time to travel to high ground, but are in a multi-story building, go to an upper level. If you are on the beach and unable to get to high ground, go inland as far as you can.

## WHAT DO THE EVACUATION SIGNS MEAN?

Tsunami evacuation routes were developed to help coastal residents and visitors find safer locations in case of an earthquake and/or tsunami. Evacuation signs have been placed along roadways to indicate the direction inland or to higher ground. In some places, there may be more than one direction available to reach safer areas. These routes may be marked with several signs showing additional options for evacuation. You will need to know the evacuation routes for your area.



## HOW DO I GET INLAND OR TO HIGH GROUND?

Go on foot if necessary, particularly if an earthquake has caused damage to roads and power lines and resulted in significant debris. Avoid lakes and wetlands, which are prone to flooding and liquefaction during aftershocks.

## WHAT SHOULD I HAVE IN MY EMERGENCY KIT?

You should prepare an emergency kit with a three-day supply of necessary items for each member of your family. The kit should be adapted to your needs, but keep it light and manageable in case you must evacuate on foot. Have it ready to go for immediate evacuation. Possible supplies include:

- Maps showing safe routes to high ground
- Non-perishable food and cooking and eating utensils, including can opener
- Water and water purification kit
- First-aid kit and prescriptions
- Plastic bags for water storage and waste
- Dental and personal hygiene items
- Sturdy shoes, clothes, sleeping bag, tent
- Portable radio, headlamp/flashlight, and extra batteries
- Pocket knife, whistle, matches, and duct tape

## DOES MY COMMUNITY HAVE ANY PLANS IN PLACE?

Local emergency management has tried to locate evacuation routes and assembly areas that are safe and within a reasonable distance for foot traffic. These are difficult criteria to meet in some areas, primarily because of private property issues. For that

reason, if you are at risk of a tsunami, but do not have an “official” route or congregation area within a reasonable distance, you are urged to develop an evacuation plan within your neighborhood. A plan should address property access issues, evacuation routes, and the number of people needing to use the site.

Your personal evacuation plan should identify an evacuation site within 15 minutes walking distance of home and/or work. The site may or may not be listed on this guide. After the immediate danger is past and if there is damage to the degree that you cannot return home, you should then attempt to reach a designated assembly area.

## WHERE CAN I STAY UNTIL THIS IS OVER?

Outdoor assembly areas have been selected to facilitate delivery of emergency services. You are responsible for bringing your own three-day emergency kit and emergency shelter. The areas listed below are not specific in terms of boundaries. Take care not to block a street and/or highway; leave access for emergency vehicles. You may camp or park along adjacent areas. All of the identified areas are publicly owned since counties cannot recommend evacuation to privately owned properties. Citizens can make personal arrangements to evacuate to other areas that may be privately owned.

Designated assembly areas are Ocosta High School, Westport; Ocosta Community Center, Ocosta, and Bunker Hill gravel pit, Grayland.

## WHAT ARE THE NOAA WEATHER RADIO FREQUENCIES?

Astoria 162.40 MHz  
Olympia 162.475 MHz  
Mount Octopus 162.425 MHz

## WHEN YOU FEEL AN EARTHQUAKE:

- Protect yourself—drop, cover, hold until the earthquake is over
- Grab your three-day emergency kit
- Move quickly inland to high ground and away from low-lying coastal areas
- Evacuate on foot if at all possible because of potential road damage and traffic jams
- Do not wait for an official warning
- Do not pack or delay
- Do not return to the shore
- Listen to NOAA Weather Radio or your local radio station for information on shelter locations and emergency broadcasts
- Be alert for aftershocks

## WHO CAN I CONTACT FOR MORE INFORMATION?

**GRAYS HARBOR COUNTY**  
Department of Public Services  
Emergency and Risk Management Division  
100 W. Broadway, Suite 31  
Montesano, WA 98563  
Phone: 360-249-4222; 360-249-3805 (fax)  
Website: <http://www.co.grays-harbor.wa.us/info/DEM/index.htm>



**WASHINGTON MILITARY DEPARTMENT**  
Emergency Management Division  
Camp Murray, WA 98430-5122  
Phone: 800-562-6108  
Website: <http://www.emd.wa.gov>

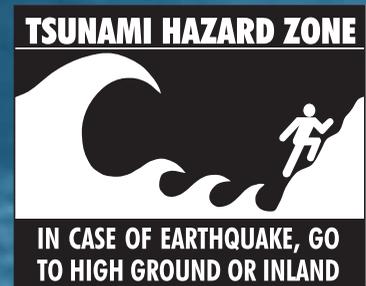


*This map was produced by the Washington State Department of Natural Resources, Division of Geology and Earth Resources, in cooperation with local emergency management officials.*



# Tsunami!

## Evacuation Map for Westport, Grayland, and Ocosta



## Safety Tips for the Washington Coast