



#### **CONTACTS**

City of Warrenton 225 S Main Avenue Warrenton, OR 97146 www.ci.warrenton.or.us City Hall (503) 861-2233 Fire Department (503) 861-2494 Police Department (503) 861-2235

Clatsop County Sheriff's Office 355 7th Street Astoria, OR 97103 (503) 325-8635

www.co.clatsop.or.us **Clatsop County Emergency Management** 800 Exchange Street, Suite 400 Astoria, OR 97103 (503) 325-8645 www.co.clatsop.or.us

**Oregon Emergency Management** 3225 State Street, Salem, OR 97301 P.O. Box 14370, Salem, OR 97309-5062 (503) 378-2911 http://www.oregon.gov/OMD/OEM/

**Oregon Department of Geology and Mineral Industries** 800 NE Oregon Street #28, Suite 965 Portland, OR 97232 (971) 673-1555

http://www.oregongeology.org Nature of the Northwest Information Center 800 NE Oregon Street #28, Suite 965 Portland, OR 97232 (971) 673-2331

International Tsunami Information Center 737 Bishop Street, Suite 2200 Honolulu, HI 96813 (808) 532-6422

http://www.naturenw.org





low-lying areas emergency officials before returning to

- Isool mont "nselp lis" ne not TIAW onshore for several hours
- large waves may continue to come – hosed shift to the beach • DO NOT PACK or delay
- GO ON FOOT if at all possible
- DO NOT WAIT for an official warning
- ΕΟΓΓΟΜ ΕΛΕCUATION ROUTE SIGNS coastal areas
  - Build-wol mont yewe bre bruons daid ο ΟΝΑΙΝΗ ΑΝΑΙΑΤΕΙΑ ΙΝΑΙΑΝΗ ΑΛΟΗ Ο
  - εσιτρημακε ις ονεη; protect yourself • DROP, COVER, HOLD until the
    - :00 OT TAHW

#### ...guimoo a tsunami may be if you feel an earthquake,

# WHAT TO KNOW about tsunamis

A **tsunami** is a series of sea waves, usually caused by a displacement of the ocean floor by an undersea earthquake. As tsunamis enter shallow water near land, they increase in height and can cause great loss of life and property damage.

Recent research suggests that tsunamis have struck the Oregon coast on a regular basis. They can occur any time, day or night. Typical wave heights from tsunamis occurring in the Pacific Ocean over the last 500 years have been 20–65 feet at the shoreline. However, because of local conditions a few waves may have been much higher — as much as 100 feet.

We distinguish between a tsunami caused by an undersea earthquake near the Oregon coast (a **local** tsunami) and an undersea earthquake far away from the coast (a **distant** tsunami).

## **BE PREPARED!**

Assemble **emergency kits** with at least a 3-day supply for each family member:

- Local map showing safe evacuation routes to high ground
- First-aid supplies, prescriptions and non-prescription medication
- Water bottle and filtration or treatment supplies capable of providing 1 gallon per person per day
- Non-perishable food (ready-to-eat meals, canned food, baby food, energy bars)
- Cooking and eating utensils, can opener, Sterno<sup>®</sup> or other heat source
- Matches in water-proof container or lighter
- Shelter (tent), sleeping bags, blankets
- Portable radio, NOAA weather radio, flashlight, and extra batteries
- Rain gear, sturdy footwear, extra clothing
- Personal hygiene items (toilet paper, soap, toothbrush)
- Tools and supplies (pocket knife, shut-off wrench, duct tape, gloves, whistles, plastic bags)

TSUNAMI HAZARD ZONE

• Cash

Look for these hazard zone signs and be ready to leave the area by following evacuation route signs.

Climb to Assembly Area

#### How to help with tsunami awareness in your community

- Start a tsunami buddy system
- Make and distribute emergency packs
- Initiate or participate in a local preparedness program

Visit **OregonTsunami.org** to find more great resources!

## WHAT TO DO for both local and distant tsunamis

I. Evacuate on foot, if at all possible. Follow evacuation signs and arrows to an Assembly Area.\*



- 2. If you need help evacuating, tie something white (sheet or towel) to the front door knob. Make it large enough to be visible from the street. If the emergency is a distant tsunami, then help may arrive. In the event of a local tsunami, it is unlikely that anyone will help you, so make a plan and be prepared!
- 3. Stay away from potentially hazardous areas until you receive an ALL CLEAR from local officials. Tsunamis often follow river channels, and dangerous waves can persist for several hours. Local officials must inspect all flooded or earthquake-damaged structures before anyone can go back into them.
- 4. After evacuation, check with local emergency officials if you think you have special skills and can help, or if you need assistance locating lost family members.

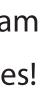
\*Assembly areas A are shown on the map. Do not confuse Assembly Areas with Evacuation Centers, which are short-term help centers set up after a disaster occurs.

#### **Local tsunamis**

A *local tsunami* can come onshore within 15 to 20 minutes after the earthquake before there is time for an official warning from the national warning system. Ground shaking from the earthquake may be the only warning you have. Evacuate quickly!

### **Distant tsunamis**

A *distant tsunami* will take 4 hours or more to come ashore. You will feel no earthquake, and the tsunami will generally be smaller than that from a local earthquake. Typically, there is time for an official warning and evacuation to safety. Evacuation for a distant tsunami will generally be indicated by a 3-minute siren blast (if your area has sirens) and an announcement over NOAA weather radio that the local area has been put into an official TSUNAMI WARNING. In isolated areas along beaches and bays you may not hear a warning siren. Here, a sudden change of sea level should prompt you to move immediately to high ground. If you hear the 3-minute blast or see a sudden sea level change, first evacuate away from shoreline areas, then turn on your local broadcast media or NOAA weather radio for more information.



# TSUNAMI EVACUATION ROUTE