



# TSUNAMI EVACUATION MAP

# ASTORIA, OREGON



**IF YOU FEEL AN EARTHQUAKE:**

- Drop, cover, and hold
- Move immediately inland to higher ground
- Do not wait for an official warning

**SI USTED SIENTE EL TEMBLOR:**

- Tírese al suelo, cúbrase, y espere
- Diríjase de inmediato a un lugar más alto que el nivel del mar
- No espere por un aviso oficial

	<b>OUTSIDE HAZARD AREA:</b> Evacuate to this area for all tsunami warnings or if you feel an earthquake.	<b>ZONA DE PELIGRO EXTERIOR:</b> Evacue a esta área para todas las advertencias del maremoto o si usted siente un temblor.
	<b>LOCAL CASCADIA EARTHQUAKE AND TSUNAMI:</b> Evacuation zone for a local tsunami from an earthquake at the Oregon coast.	<b>MAREMOTO LOCAL (terremoto de Cascadia):</b> Zona de evacuación para un tsunami local de un temblor cerca de la costa de Oregon.
	<b>DISTANT TSUNAMI:</b> Evacuation zone for a distant tsunami from an earthquake far away from the Oregon coast.	<b>MAREMOTO DISTANTE:</b> Zona de evacuación para un tsunami distante de un temblor lejos de la costa de Oregon.

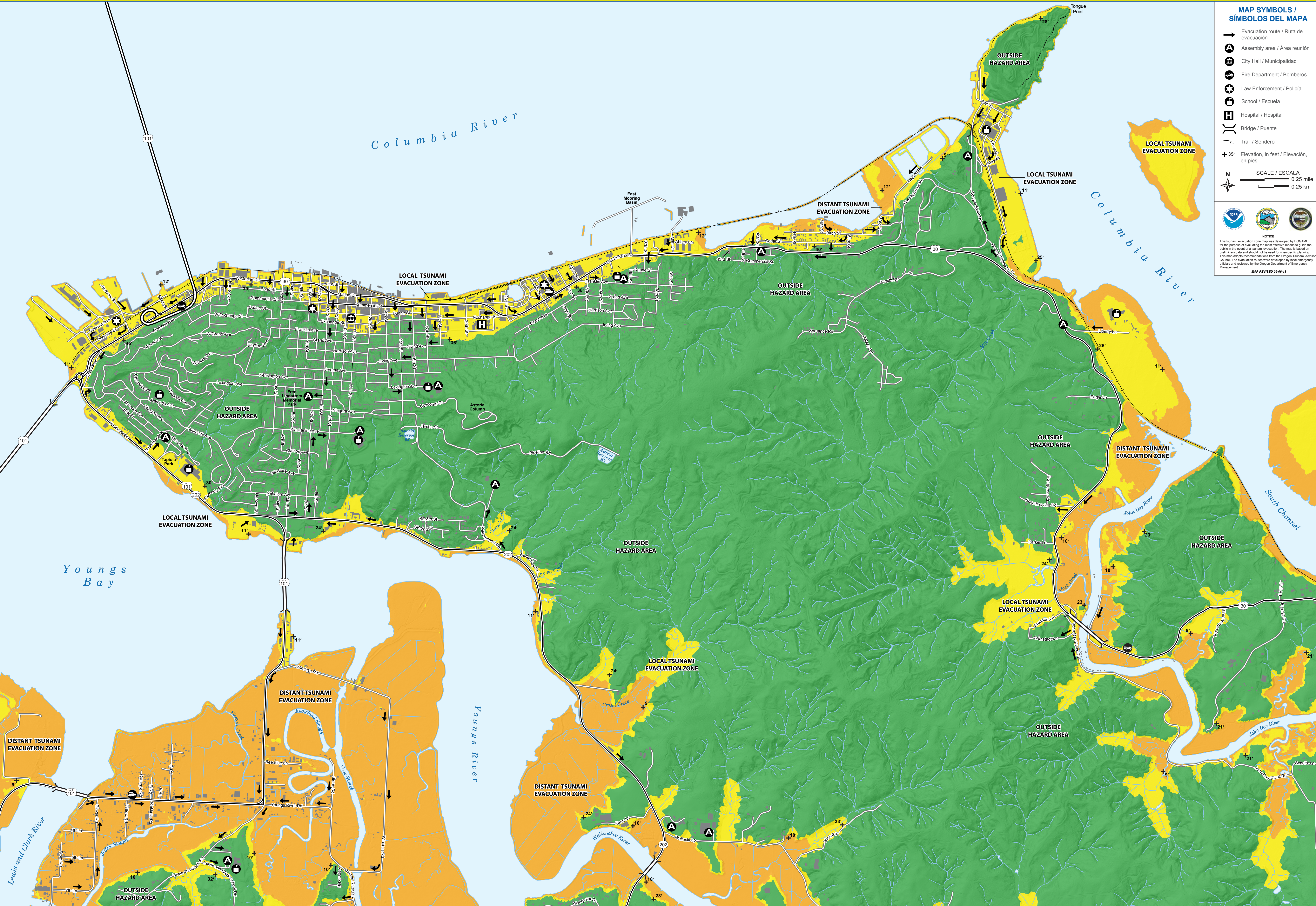
### MAP SYMBOLS / SIMBOLOS DEL MAPA

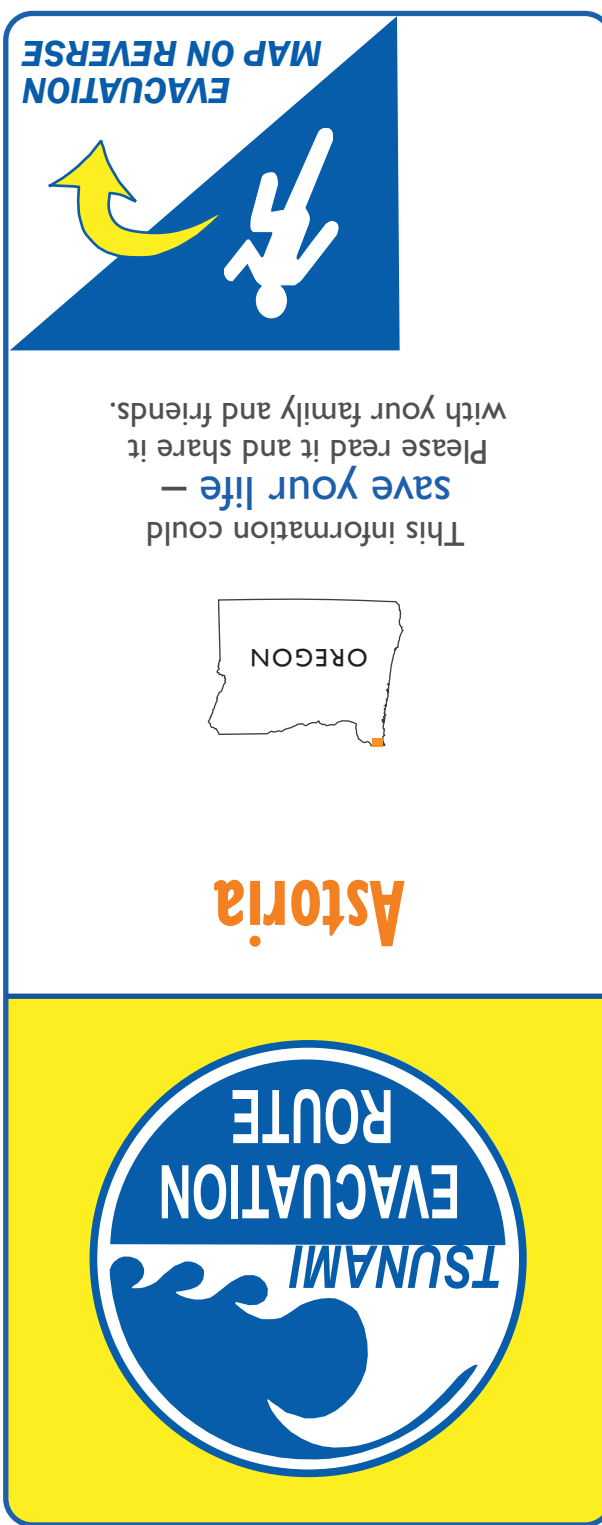
- Evacuation route / Ruta de evacuación
- Assembly area / Área reunión
- City Hall / Municipalidad
- Fire Department / Bomberos
- Law Enforcement / Policía
- School / Escuela
- Hospital / Hospital
- Bridge / Puente
- Trail / Sendero
- + 35' Elevation, in feet / Elevación, en pies

**SCALE / ESCALA**  
0.25 mile / 0.25 km

**NOTICE**  
This tsunami evacuation zone map was developed by OCGM for the purpose of evaluating the most effective means to guide the public in the event of a tsunami evacuation. The map is based on preliminary data and should not be used for site-specific planning. This map adopts recommendations from the Oregon Tsunami Advisory Council. The evacuation routes were developed by local emergency officials and reviewed by the Oregon Department of Emergency Management.

MAP REVISED 06-06-13





**CONTACTS**

- Astoria Fire Department**  
555 30th Street  
Astoria, OR 97103  
(503) 325-2345  
www.astoria.or.us
- Astoria Police Department**  
555 30th Street  
Astoria, OR 97103  
(503) 325-4411  
www.astoria.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  
http://www.naturenw.org
- International Tsunami Information Center**  
737 Bishop Street, Suite 2200  
Honolulu, HI 96813  
(808) 532-6422  
http://itic.ioc-unesco.org



Funded by the National Oceanic and Atmospheric Administration under a federal award to Clatsop County through the Oregon Department of Geology and Mineral Industries. Funded by the Oregon Department of Geology and Mineral Industries in consultation with local emergency management officials.



**If you feel an earthquake, a tsunami may be coming... WHAT TO DO:**

- DROP COVER HOLD until the earthquake is over; protect yourself
- MOVE IMMEDIATELY INLAND to high ground and away from low-lying coastal areas
- FOLLOW EVACUATION ROUTE SIGNS
- DO NOT WAIT for an official warning
- GO ON FOOT if at all possible
- DO NOT PACK or delay
- DO NOT RETURN to the beach - large waves may continue to come onshore for several hours
- WAIT for local emergency officials before returning to low-lying areas

**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!**

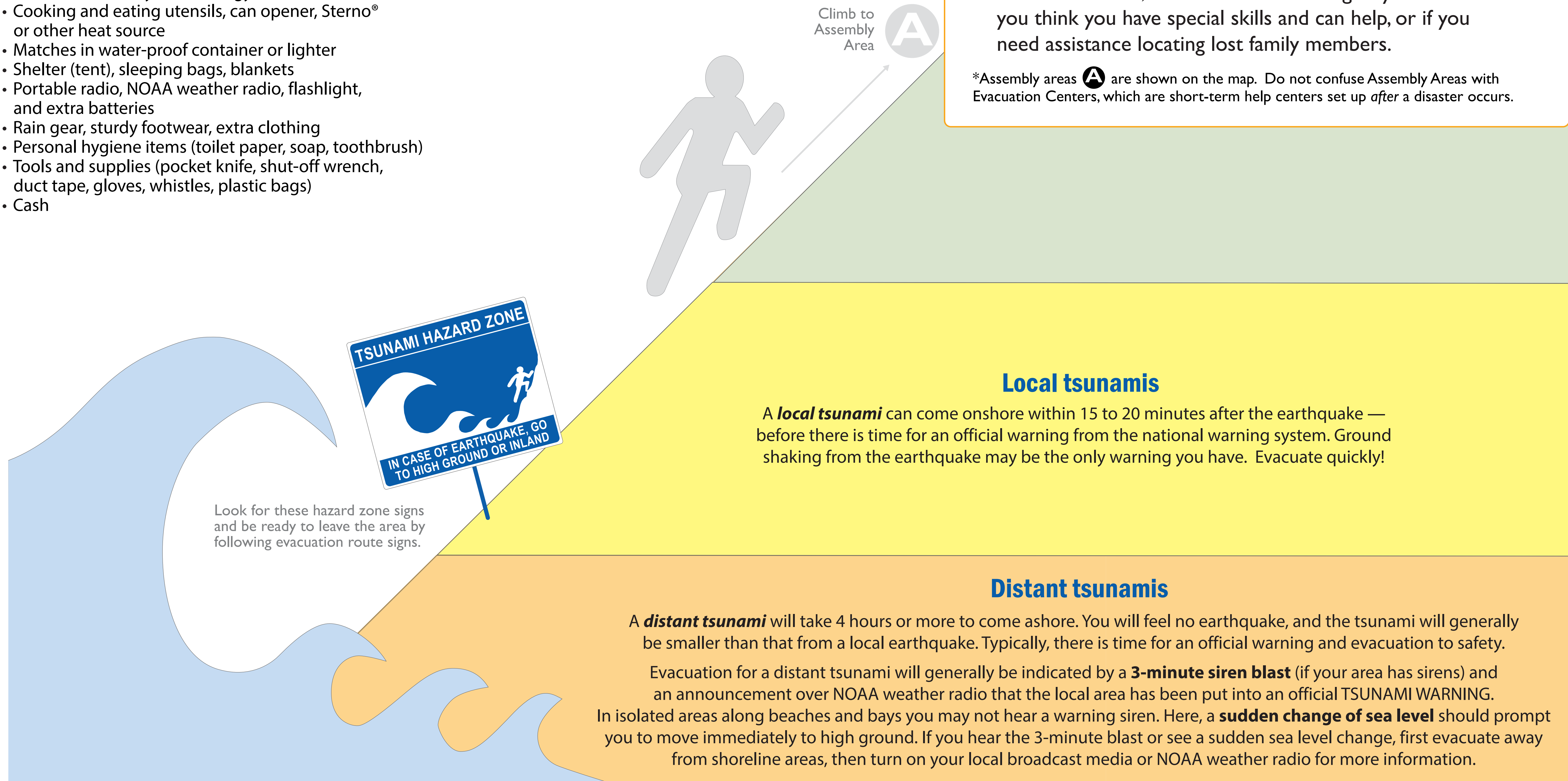
Assemble **emergency kits** with at least a 3-day supply for each family member:

- 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® 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)
- Cash

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

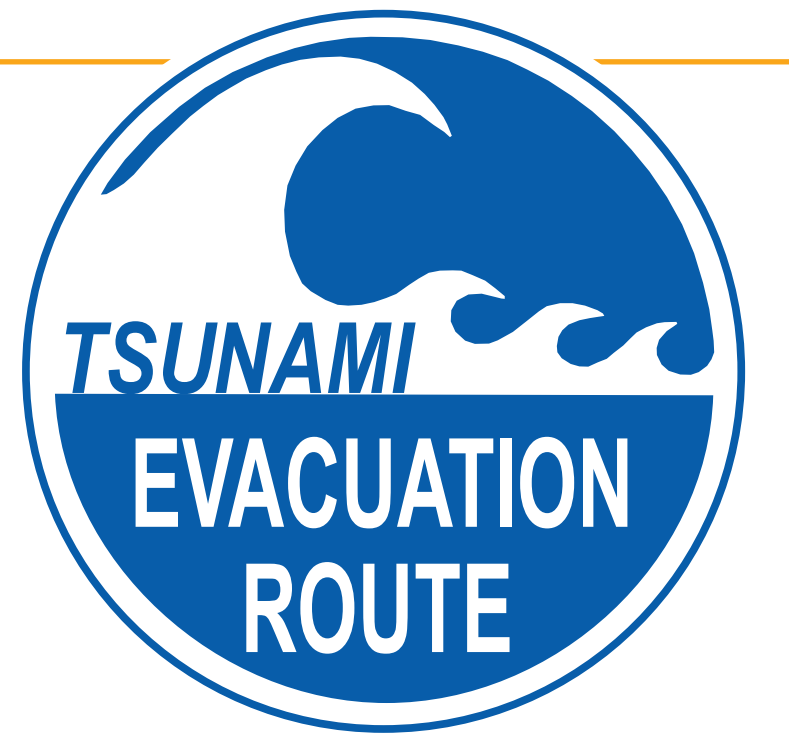
- Start a tsunami buddy system
- Make and distribute emergency packs
- Initiate or participate in a local preparedness program

Visit [OregonTsunami.org](http://OregonTsunami.org) to find more great resources!



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

**WHAT TO DO for both local and distant tsunamis**



1. 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.