

Regional Resilience Planning Map

Columbia Memorial Hospital, Astoria, Oregon

This resilience map shows the Columbia Memorial Hospital and highlights critical facilities in its immediate surroundings. It can be used for Cascadia earthquake and tsunami planning *before* the earthquake occurs and for other disaster planning purposes. Due to the hospital's proximity to the Cascadia fault, the hospital is in a high seismic hazard region and is expected to experience prolonged strong shaking. The hospital is located in the Large, Extra Large, and Extra Extra Large (XXL) tsunami inundation zones. The worst-case scenario is the XXL zone, which defines the tsunami evacuation zone. See the Columbia Memorial Hospital site resilience planning map for a close-up view. Columbia Memorial should *not* evacuate from a "distant tsunami," which is generated from an earthquake far away from the Oregon coast, such as Alaska or Japan.

Explanation of Symbols

Tsunamis generated by a Cascadia Subduction Zone earthquake can vary in size from SM, M, L, XL to XXL.

- Small Tsunami Hazard Zone (SM)
(Small tsunamis inundate the area defined by this zone.)
- Medium Tsunami Hazard Zone (M)
(This zone captures ~79% of local tsunamis.)
- Large Tsunami Hazard Zone (L)
(This zone captures ~95% of local tsunamis.)
- Extra Large Tsunami Hazard Zone (XL)
(This zone captures ~98% of local tsunamis.)
- Extra Extra Large Tsunami Hazard Zone (XXL)
(This zone captures 100% of local tsunamis.)

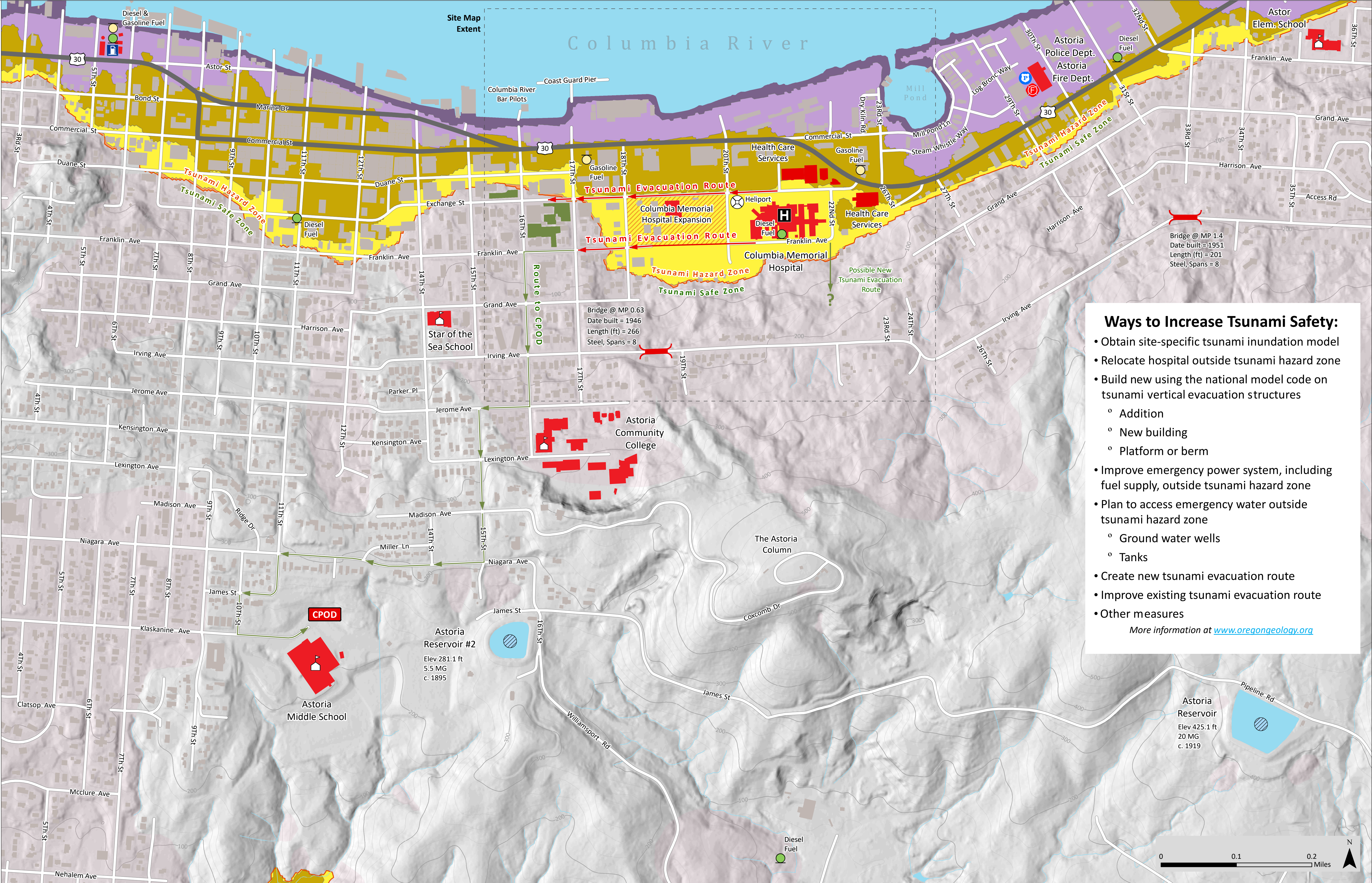
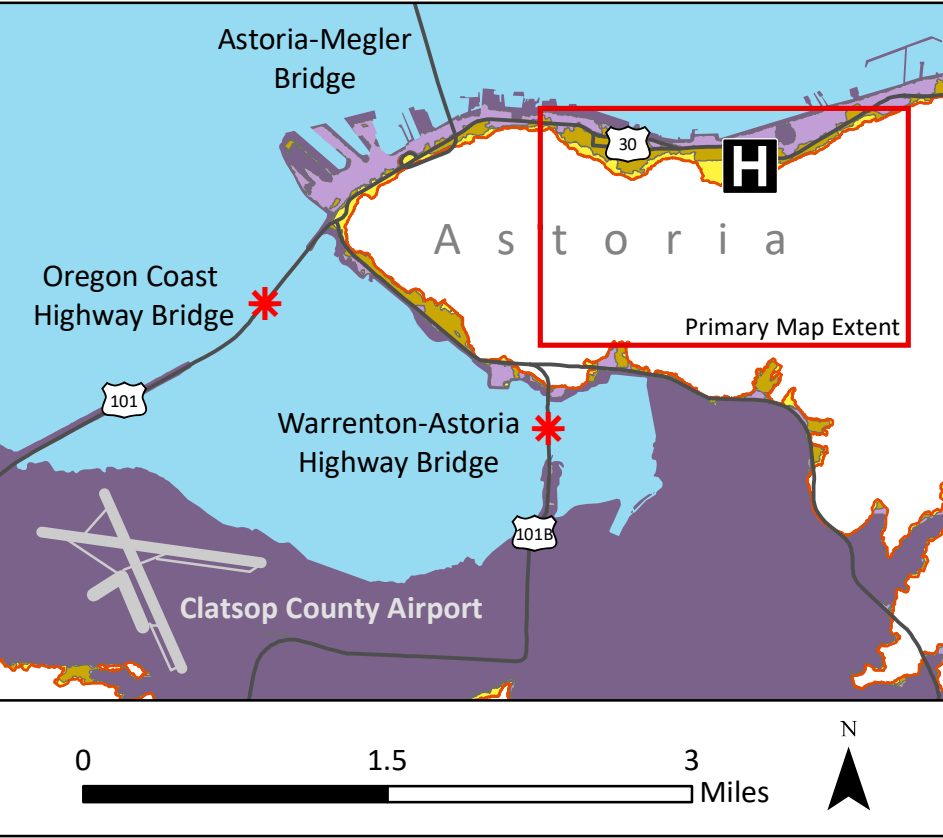
The tsunami evacuation zone is defined by the XXL zone.
DOGAMI tsunami evacuation brochures are available at:
www.OregonTsunami.org
Source: DOGAMI Special Paper 43 (2011)

- Parking Lot
(Potential Tsunami Evacuation Site)
- CPOD
Community Point of Distribution

- Tsunami Evacuation Route
- Route to CPOD
- Hospital
- Buildings of Interest
- Hospital Expansion
- Buildings
- Fuel - cardlock
- Existing Landslide Hazard Area
- Fuel - above ground
- Bridge
- Fuel - underground
- Lift Bridge

Astoria Area Map

Clatsop County Airport is located in the DOGAMI Small (SM) tsunami inundation zone (purple).



Ways to Increase Tsunami Safety:

- Obtain site-specific tsunami inundation model
- Relocate hospital outside tsunami hazard zone
- Build new using the national model code on tsunami vertical evacuation structures
 - Addition
 - New building
 - Platform or berm
- Improve emergency power system, including fuel supply, outside tsunami hazard zone
- Plan to access emergency water outside tsunami hazard zone
 - Ground water wells
 - Tanks
- Create new tsunami evacuation route
- Improve existing tsunami evacuation route
- Other measures

More information at www.oregongeology.org



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