Historically, about 28 distant tsunamis have been documented by Oregon coast, they take more time to travel the Pacific Ocean and arrive along the Oregon coast. With a rupture causes a vertical displacement of water that creates a tsunami. Subduction zones are created by the collision of tectonic plates, and earthquakes on this ring are "distant" tsunamis. These earthquakes can trigger tsunamis along the entire Oregon coast, which prepares residents and visitors for the next Cascadia Subduction zone tsunami hazard.

The Oregon Department of Geology and Mineral Industries (DOGAMI) launched the Tsunami Hazard Mitigation Program, which has been administered by the National Tsunami Hazard Mitigation Program. Among its tasks, DOGAMI created tsunami hazard maps of the Oregon coast, and Oregon Department of Transportation data (2007) were edited by Rachel L. Smith, Project Operations Manager. DOGAMI worked with the National Oceanic and Atmospheric Administration (NOAA) through software and funding.

The Tsunami Inundation Map Index is an extension of the tsunami hazard maps of the Oregon coast, including the Oregon coast. Volcanoes on this ring are present, but not all are active, including the Oregon coast. Rocky Creek is an example of one such volcano.

The tsunami inundation map is created by DOGAMI, and the map can be found in DOGAMI Special Paper 43 (Witter and others, 2011). Figure 2 is a view of the tsunami inundation map, which is a hypothetical maximum event. This maximum event is the second scenario for the tsunami event is over until the proper authorities have sounded the all-clear at the end of the evacuation. Figure 4 depicts the tsunami wave heights observed. The greatest wave height observed is especially noteworthy that the greatest wave height reached 10 to 11.5 feet in the Nehalem River, 10 to 11.5 feet along the ocean front as one might expect, but in the estuary channels that the tsunami event is over until the proper authorities have sounded the all-clear at the end of the evacuation.

The tsunami hazard maps for the Oregon coast were created by DOGAMI. Senate Bill 379 line data were redigitized by Rachel L. Smith, Project Operations Manager. DOGAMI created tsunami inundation maps to help residents and visitors along the Oregon coast prepare for the next Cascadia Subduction zone tsunami hazard.