Tsunami Hazard Map of the Anacortes–Whidbey Island Area, Washington: Modeled Tsunami Inundation from a Cascadia Subduction Zone Earthquake

by
Timoithy J. Walsh, Vasily V. Titov, Angie J. Venturato, Harold O. Mofjeld, and Frank I. Gonzalez
January 2005

LIMITATIONS OF THE MAP

The modeled inundation is calculated using computer models of earthquake-generated tsunami from the Cascadia subduction zone. The results are shown on the map in three color-coded depth ranges: 0–0.5 m, 0.5–1.0 m, and 1.0–2.0 m. The results are intended to provide a preliminary indication of potential tsunami inundation for planning purposes. The inundation may be affected by local topography and bathymetry, and the results may not be applicable in all areas.

RESULTS

The computed tsunami inundation is shown on the map in three color-coded depth ranges: 0–0.5 m, 0.5–1.0 m, and 1.0–2.0 m. The inundation is not perfect, and there are other potential limitations to the model, such as the possible effect of waves breaking on coastal features, the possible effect of tide on inundation, and the effect of other potential tsunami sources. For the results to be useful in designing evacuation areas, the inundation must be reasonably accurate.