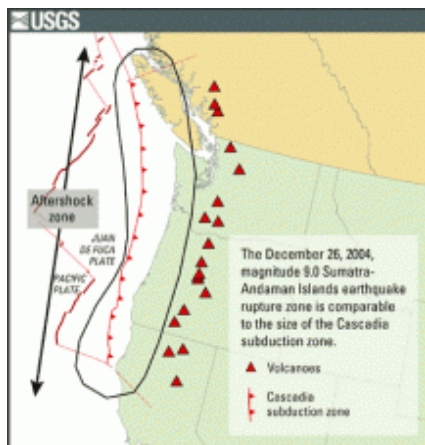


Published on *American Geosciences Institute* (<https://www.americangeosciences.org>)

Home > Critical Issues: National Academy of Sciences holds meeting on earthquake and tsunami risk in the Pacific Northwest

Critical Issues: National Academy of Sciences holds meeting on earthquake and tsunami risk in the Pacific Northwest



On Thursday November 10, The National Academies' Board on Earth Science and Resources and the Committee on Seismology and Geodynamics held a joint meeting on *The Cascadia Subduction Zone: Science, Impacts, and Response*. The meeting provided a forum for the discussion of progress and future directions in the monitoring, modeling, measurement, mitigation, and communication of earthquake and tsunami risk in the Pacific Northwest. Click “Read More” for a summary of some key takeaways.

- Enormous earthquakes up to magnitude 9 or higher, and accompanying tsunamis, have struck the Pacific Northwest roughly twenty times in the last 10,000 years (most recently in 1700 CE) and will definitely occur again, although there is great uncertainty as to when.
- Much work has already been done to monitor and communicate this risk, especially to coastal communities along the Washington and Oregon coasts. However, communities’ ability to mitigate this risk depends on the availability of funding to improve warning and evacuation procedures and infrastructure.
- Two major infrastructure needs for improving coastal resilience to earthquakes and tsunamis are the rebuilding of vulnerable bridges and the building of vertical evacuation structures in areas where evacuation to high ground is not possible before the arrival of a tsunami.
- Our ability to monitor earthquakes, predict their effects, and provide warning of arriving earthquakes and tsunamis would be greatly improved by the installation of ocean-bottom seismometers and offshore GPS stations.
- The ShakeAlert earthquake early warning system aims to provide seconds to minutes of warning before the arrival of an earthquake. It is already in use in some parts of California and will ultimately cover the entire West Coast.
- Our ability to detect and provide warnings for tsunamis is already good but improving all the time, using buoys on the ocean surface and pressure sensors on the seafloor, as well as satellites that detect tsunami-induced perturbations in the Earth’s ionosphere.
- The TsunamiReady supporter program from the National Weather Service provides free education, maps, and evacuation training for staff at qualifying coastal businesses. More information on this program can be found [here](#).

If you want to learn more, we produced a webinar on this topic last year, a recording of which is now freely available online with a variety of additional resources.

Tags:

- geotimes, critical issues, hazards, earthquake, tsunami, blog
-