National Academy of Sciences hosts Cascadia Subduction Zone panel

November 10, 2016

On November 10, the National Academy of Sciences (NAS) hosted a panel discussion on the Cascadia Subduction Zone (CSZ) and its potential for large scale fault rupture. Research from a number of academic institutions has suggested that such a rupture is capable of producing a magnitude-9.0 earthquake and subsequent tsunami, which could devastate coastal regions of Washington, Oregon, northern California, and British Columbia. The NAS event was separated into three panels and ended with a discussion on preparedness, response, and mitigation techniques for a potential earthquake.

Panelists from the Geological Survey of Canada (GSC), the U.S. Geological Survey (USGS), and the Federal Emergency Management Agency (FEMA) discussed the need for better monitoring and risk assessment tools in case of a CSZ earthquake. Dr. Kelin Wang, a research scientist with GSC, outlined the benefits of installing geodetic and seismic sensors on the seafloor along the coast from British Columbia to northern California to help determine the possibility of a CSZ earthquake. Dr. Joan Gomberg, a research geophysicist with the USGS, outlined methods that more accurately quantify risk from natural hazards. She also mentioned the importance of agency partnerships that disseminate information and warning messages ahead of these risks. The final panel highlighted the progress of FEMA’s risk assessment mapping in Oregon, which now covers 11 coastal counties.

The NAS event ended with a discussion of the Tsunami Warning, Education, and Research Act (H.R.34), and the National Earthquake Hazards Reduction Program (NEHRP), which both provide research and funding for natural hazard mitigation.

Sources: Congress.gov, Federal Emergency Management Agency, National Academy of Sciences