

**OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES**  
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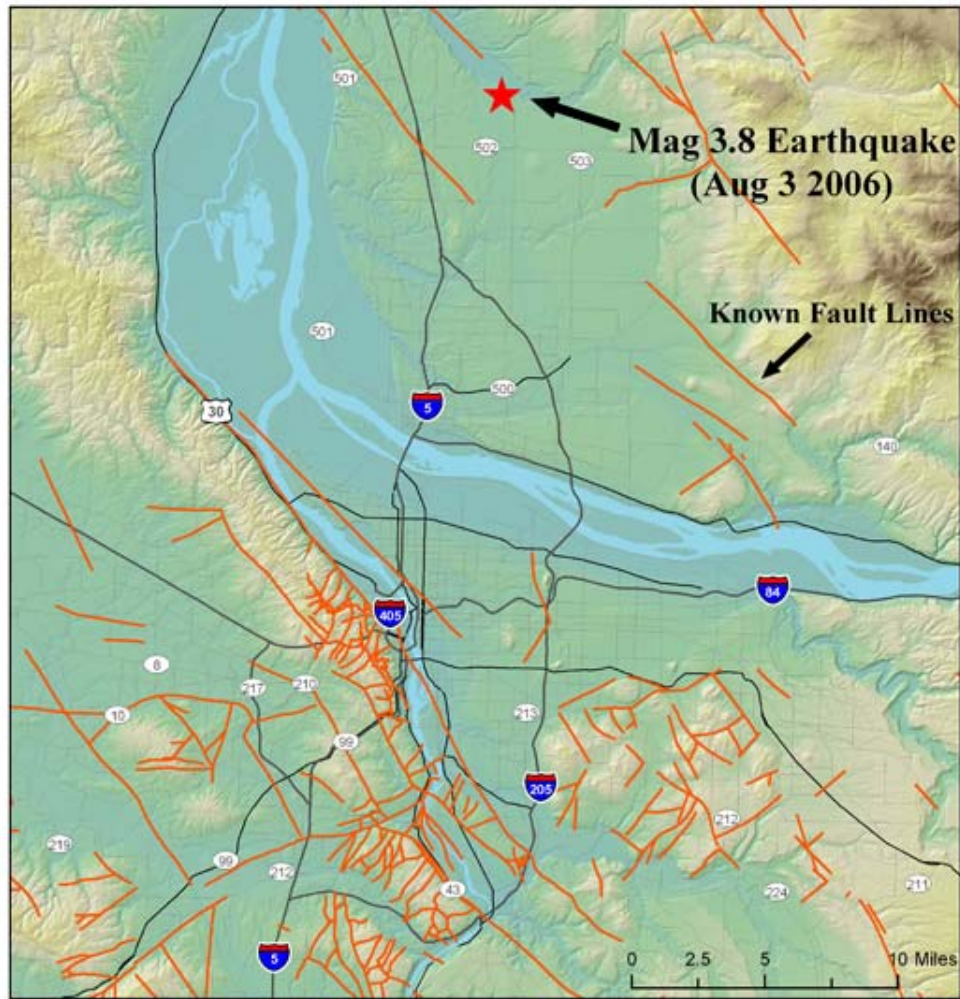
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## **Magnitude 3.8 earthquake centered 19 miles north of Portland**

**A magnitude 3.8 earthquake, originating 7 miles below surface, shook the Portland Metro area today at 1:39 am. Weak to moderate shaking was felt over a 3,000 square mile area and was reported by 2,457 people. The earthquake did not occur on a known fault. Five aftershocks ranging from M2.8 to M1.8 had occurred by 7:46 am.**

**Portland, Oregon:** “Today’s earthquake was felt over an unusually large area for a magnitude 3.8 quake, perhaps because of our soil types” says Ian Madin, Chief Scientist at the Oregon Department of Geology & Mineral Industries (DOGAMI). “The bottom line is that this is a reminder that Portland is threatened by ‘home-brewed’ earthquakes, and should serve as a reminder for people to take steps to secure their homes and review their family disaster plans,” Madin added.

The following image is a map of the earthquake location north of Portland. The image also shows known fault lines in the area.



This earthquake event follows on the heels of the magnitude 2.8 earthquake in east Portland on January 28, earlier this year, but this earthquake involves different fault structures. The two events are most likely unrelated to each other, to the ongoing eruption at Mt. St. Helens, or to the recent micro-earthquake swarm beneath Mt. Hood.

Nevertheless, “a magnitude 3.8 quake is significant” cautioned Yumei Wang, Geohazards Section Leader at DOGAMI. “People should remember that each one point increase on the earthquake magnitude scale reflects about 30 times an increase in energy. For example, this M3.8 quake was about 30 times stronger than the M2.8, and a M6.8 is about 30,000 times stronger than a M3.8. The Nisqually quake on February 29, 2001, was a 6.8 quake and it caused \$2 billion of damage in the Seattle region. Portland, too, faces the risk of a possible M6.8 earthquake along the Portland Hills Fault, and also needs to prepare for the eventual M9.0 rupture of the Cascadia Subduction Zone that occurs on average every 500 years.”

The Oregon Department of Geology & Mineral Industries has several projects underway assessing geologic hazards around Oregon. These projects include the Statewide Seismic Needs Assessment project, resulting from Senate Bill 2 (2005), wherein over 2,000 public schools, police and fire stations, and hospitals will be reviewed. Visit <http://www.oregongeology.com/sub/projects/rvs/> for details on this project.

For more information on this earthquake and Pacific Northwest earthquakes, tsunamis, volcanoes, landslides, hazard assessment, mitigation and preparedness, visit the Department's web site at <http://www.oregongeology.com>.

The Oregon Department of Geology and Mineral Industries is an independent agency of the State. It has a broad responsibility for developing a geologic understanding of natural hazards. The Department then makes this information available to individuals, businesses and communities to help reduce the risks from earthquakes, tsunamis, landslides, floods and volcanic eruptions. The Department assists in the formulation of State policy where an understanding of geologic materials, geologic resources, processes, and hazards are key to decision-making. The Department is also the lead State regulatory agency for mining, oil, gas and geothermal exploration, production, conservation and reclamation.

For more information, contact James Roddey at 800 NE Oregon St., Portland, OR 97232, (971) 673-1543 or on cell phone at (503) 807-8343. DOGAMI field offices can be contacted at: 1510 Campbell St., Baker City, (541) 523-3133; 5375 Monument Drive, Grants Pass, (541) 476-2496; and the Mined Land Regulation and Reclamation Program, 229 Broadalbin St. SW, Albany, (541) 967-2039.

Learn more about Oregon's geology by going online at:

<http://www.oregongeology.com>

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