STATE OF OREGON
DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
VICKI S. McCONNELL, ACTING STATE GEOLOGIST

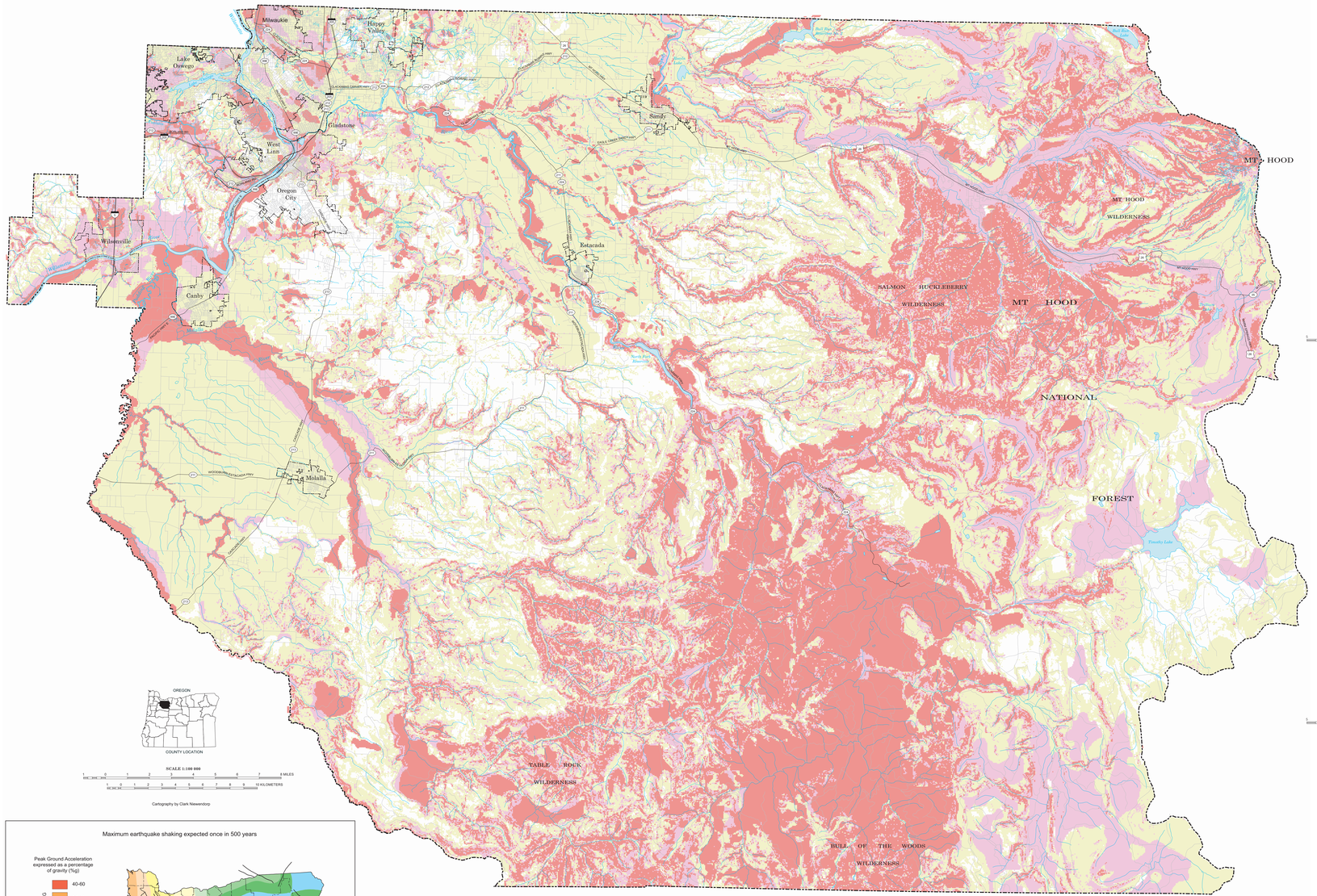
Relative Earthquake and Landslide Hazards in Clackamas County

2003

OFR O-03-09

Relative Earthquake and Landslide Hazards in Clackamas County

Clackamas County Emergency Management and Geographic Information Systems



Cartography by Clark Newendorp

Amplification Map

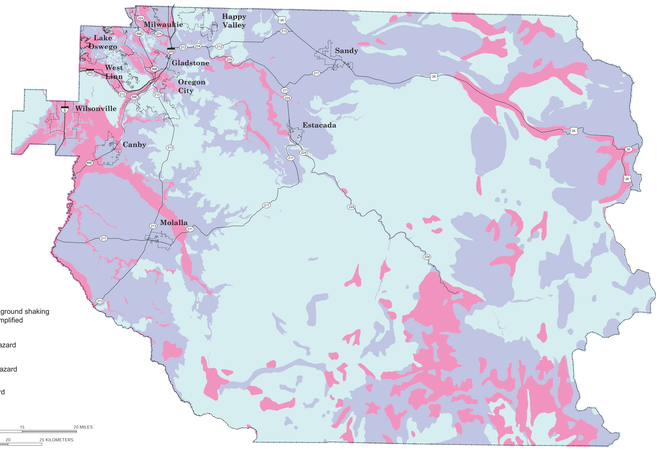
Hazard zones are based on the degree to which ground shaking from a given earthquake is likely to be amplified

- Highest amplification hazard
- Medium amplification hazard
- Low amplification hazard

SCALE 1:250 000

20 MILES

25 KILOMETERS



Open-File Report O-03-10, Earthquake and Landslide Hazard Maps, and Future Earthquake Damage Estimates, for Clackamas County, Oregon, by R. Jon Hofmeister, Carol S. Hasenberg, Ian P. Madin, and Yumei Wang

Liquefaction Map

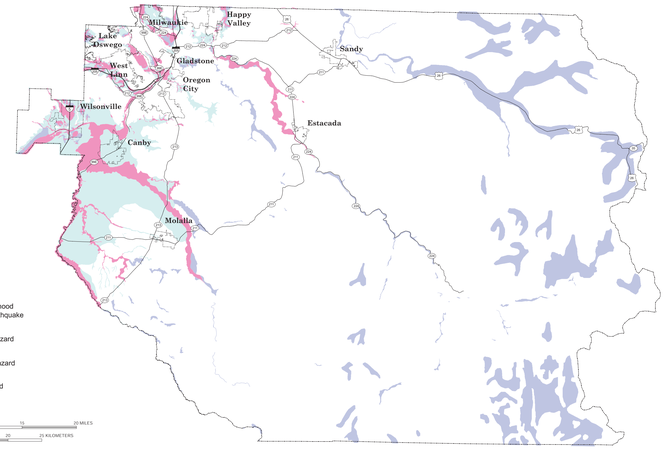
Hazard zones are based on the likelihood that liquefaction will occur in a given earthquake

- Highest liquefaction hazard
- Medium liquefaction hazard
- Low liquefaction hazard

SCALE 1:250 000

20 MILES

25 KILOMETERS



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Slope Instability Map

Hazard zones are based on the likelihood that landslides will occur in a given earthquake or from high rainfall

- Very high
- High
- Moderate
- Low

SCALE 1:250 000

20 MILES

25 KILOMETERS

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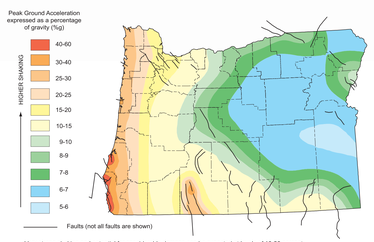
Maximum earthquake shaking expected once in 500 years



Very strong shaking and potential for considerable damage can be expected at levels of 10-20 percent

U.S. Geological Survey, National Seismic Hazard Mapping Program, Interactive Map 1996

MAP SYMBOLS

- Lakes, rivers, creeks, and branches
- County boundary
- City limit
- Road, street, or highway
- Interstate route
- U.S. route
- State route

Relative Earthquake Hazards Map in Clackamas County

These hazard zones are a combination of the three hazard maps (liquefaction, amplification, and slope instability) shown to the right

- Very high
- Moderate
- Low
- Very low

IMPORTANT NOTICE: This map depicts relative earthquake hazard zones that are based on limited geologic and geophysical data as described in the Department of Geology and Mineral Industries' publication, Open-File Report O-03-10, 2003, Earthquake and Landslide Hazard Maps, and Future Earthquake Damage Estimates, for Clackamas County, Oregon, by R. Jon Hofmeister, Carol S. Hasenberg, Ian P. Madin, and Yumei Wang. This map is intended for regional purposes only and cannot replace site-specific investigations.

This map is available from:

The Nature of the Northwest Information Center
800 NE Oregon Street #5
Portland, OR 97232
503/872-2750 www.naturenw.org
and the Baker City (541-523-3133) and Grants Pass (541-476-2496), Field Offices of the Oregon Department of Geology and Mineral Industries