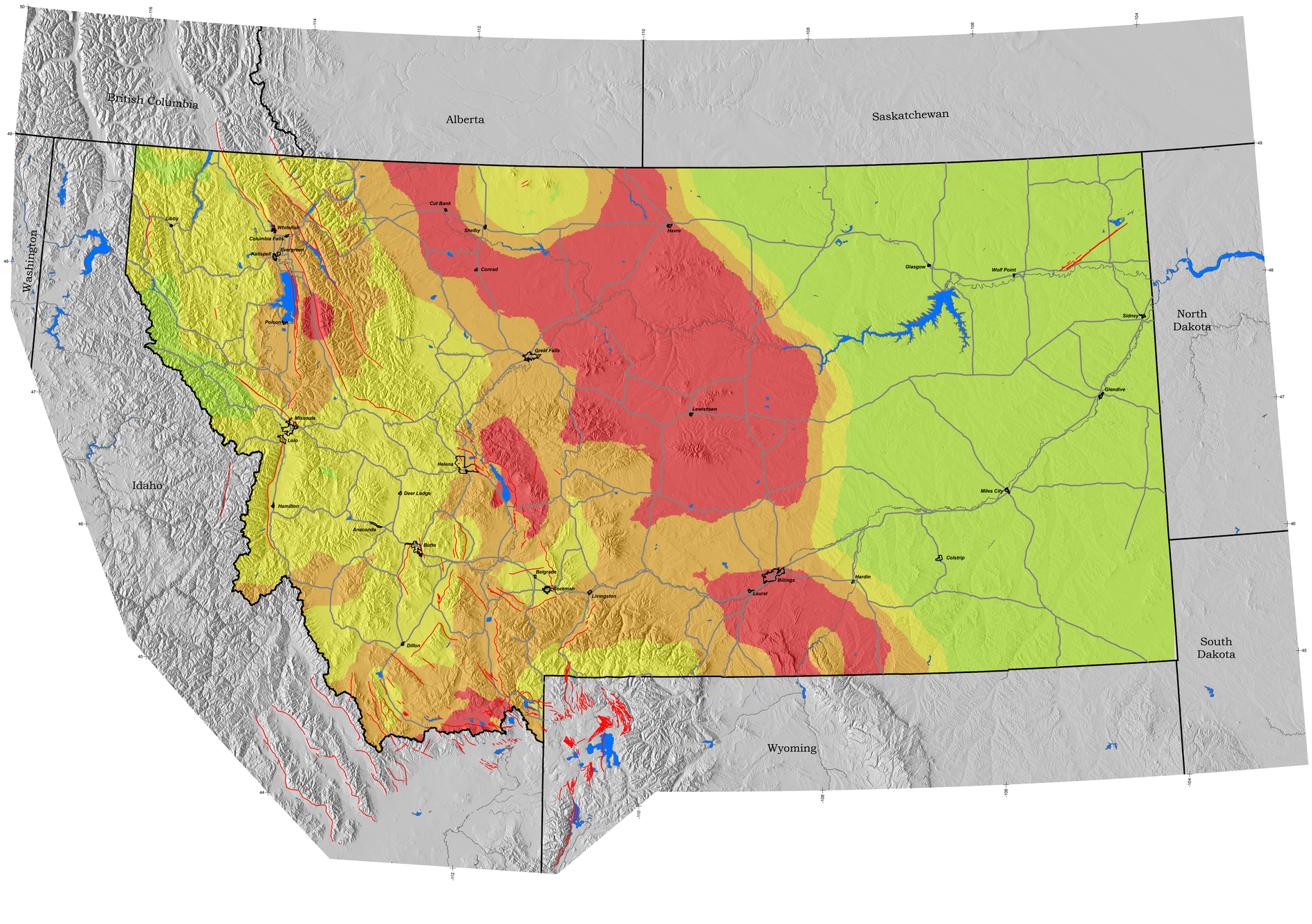
Plate 23
10% Probability of Exceedance in 50 Years
Modal Magnitude for Peak Horizontal Acceleration Hazard on Rock



MBMG Publication XXX

Probabilistic Earthquake Ground Shaking Maps for the State of Montana

by
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Douglas Wright, Eliza Nemser, David Lageson,
Walter Silva, Michael Stickney, Michele Lemieux
and Larry Anderson

2005

Modal Magnitude

- 5.0 – 5.4
- 5.5 – 5.9
- 6.0 – 6.4
- 6.5 – 6.9
- 7.0 – 7.5

Active and Potentially Active Faults

Fault Database modified from Stickney and others, 2000
(See Appendix for other fault map sources)

Limitations

There are large uncertainties associated with earthquake ground motion prediction in Montana due to limited region-specific information and data on the characteristics of seismic sources and ground motion attenuation. Additional uncertainty stems from the characterization of the subsurface geology beneath the map area and the estimation of the associated site response effects on ground motions.

The maps should not be used directly for site-specific design or in place of site-specific hazard evaluations.

N
W E
S

20 10 0 20 40 60 80 100 Kilometers
20 10 0 20 40 60 80 100 Miles

Project suported by the Montana Department of Natural Resources and Conservation and the Federal Emergency Management Agency. Basemap data from Montana State Library, Natural Resource Information System, GIS and layout by URS Corporation. Published by Montana Bureau of Mines and Geology.

Copies may be obtained from
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1300 West Park Street, Butte, Montana 59701-8997
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