



# Montana Earthquake Working Group

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January 2025

<https://doi.org/10.59691/WNDZ7736>

## MONTANA EARTHQUAKE WORKING GROUP (MEWG)

Beginning in 2022, the Montana Bureau of Mines and Geology (MBMG) organized the annual Montana Geohazards Workshop, in collaboration with State and Federal agencies, to share information on Montana's geologic hazards and discuss possible mitigation strategies. Earthquakes and landslides are the most likely geologic hazards to occur in Montana and have major impacts on the livelihood of communities in the State (see [Fact Sheet 4](#) to learn how we study these hazards). The first workshops highlighted the potential impacts of a moderately large earthquake on Montana's population centers, including Helena, Missoula, Kalispell, Bozeman, and Butte. Realizing the devastating effects of a well-placed earthquake, concerned agencies created the Montana Earthquake Working Group (MEWG) to more efficiently share information and improve statewide efforts at reducing Montana's earthquake risk.

## WHO ARE THE MEMBER ORGANIZATIONS?

MEWG is a consortium of organizations, with a core working group and a series of subcommittees. The core working group members include the MBMG, the Earthquake Engineering Research Institute, and Montana Disaster and Emergency Services.

Subcommittees are organized into three pillars, focused on Hazards Research, Mitigation Strategies, and Outreach. The subcommittees are led by a growing number of members that include FEMA, the University of Montana, the Montana Department of Transportation, the Montana State Library, Rocky Mountain Laboratory, California Polytechnic University, various counties (e.g., Missoula, Ravalli, Beaverhead), and school districts (Helena, Missoula).

## WHAT IS THE MONTANA EARTHQUAKE WORKING GROUP?

MEWG serves as a source of information for individuals and groups concerned with earthquake safety, promotes earthquake loss-reduction measures and resilience, develops partnerships, and implements awareness campaigns in order to save lives, prevent injuries, protect property, and reduce social and economic disruption from the effects of earthquake-related activity in Montana.

## Acknowledgements

The authors thank Susan Smith for assistance with the figures, Susan Barth for editing and layout, and Dalayna Christenson for the MEWG logo design. Valuable edits from Amanda Willingham, Colleen Elliott, and Mike Stickney are appreciated.

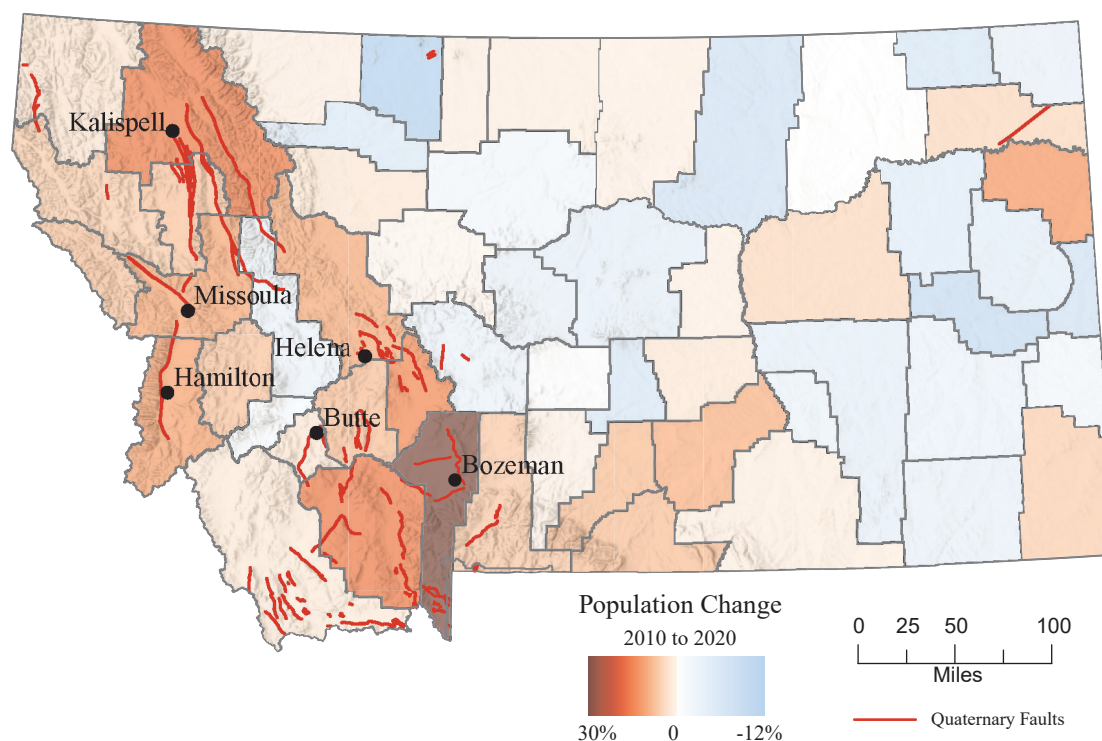


Figure 1. Population growth in Montana counties. Note most growth is occurring in western Montana, where most active (Quaternary) faults are located.

## Outreach

*Develop educational activities and publication materials to improve public earthquake preparedness and risk communication, earthquake scenario and practice.*

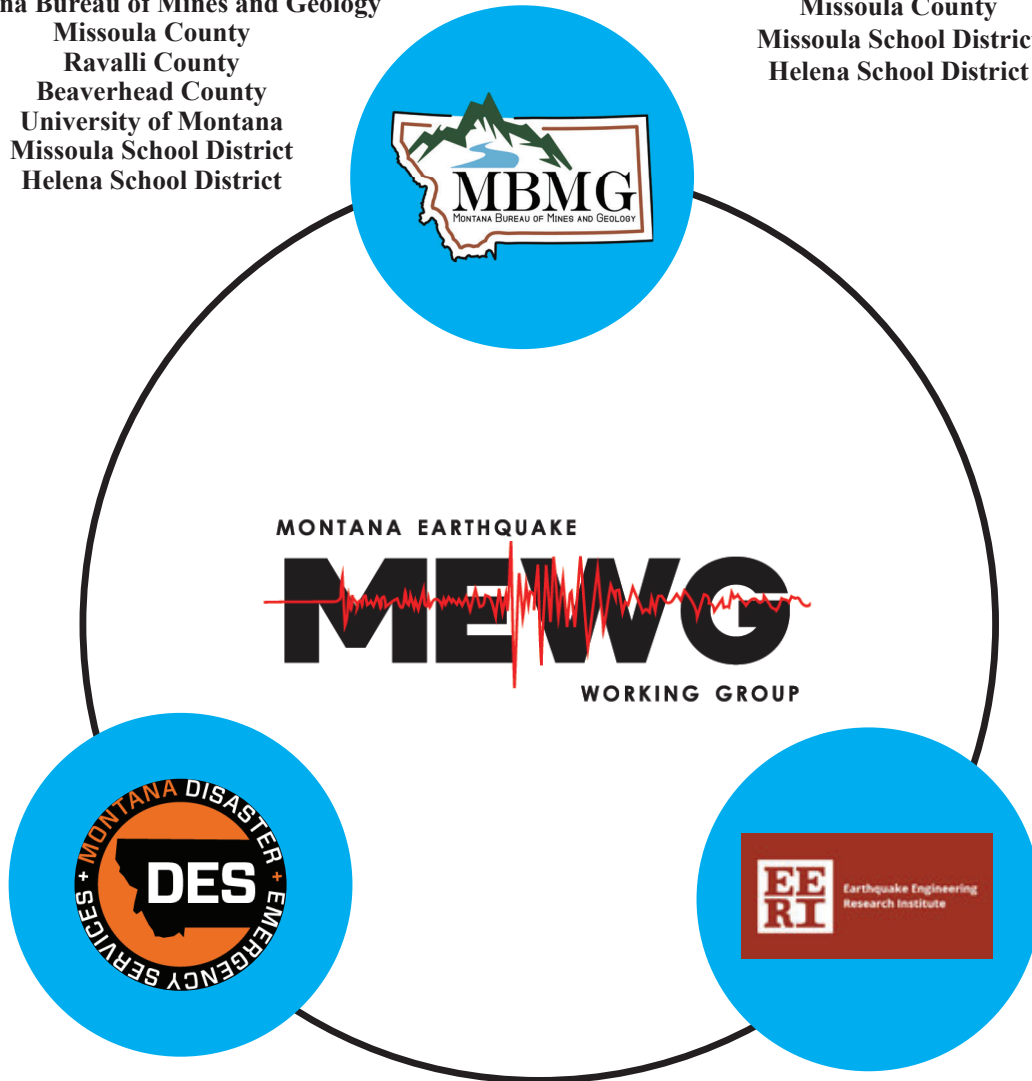
**Montana Disaster & Emergency Services  
FEMA**

**Montana Bureau of Mines and Geology  
Missoula County  
Ravalli County  
Beaverhead County  
University of Montana  
Missoula School District  
Helena School District**

## Mitigation Strategies

*The main goal is to provide recommendations and facilitate strategies to reduce seismic vulnerability in the built environment, particularly for public schools, government offices, and major infrastructure.*

**Montana Disaster & Emergency Services  
Missoula County  
Missoula School District  
Helena School District**



## Hazards Research

*The main goal is to identify and characterize earthquake hazards, including potential cascading geological hazards in Montana, by prioritizing research using hazards mapping, seismic/geodetic monitoring, geophysical data, slip-rate, and earthquake forecasting.*

**Montana Bureau of Mines and Geology  
CalPoly  
University of Montana  
Montana Department of Transportation**

### About the MBMG

Established in 1919, the Montana Bureau of Mines and Geology (MBMG) continues to fulfill its mandate to collect and publish information on Montana's geology to promote orderly and responsible development of the energy, groundwater, and mineral resources of the State. A non-regulatory state agency, the MBMG provides extensive advisory, technical, and informational services on the State's geologic, mineral, energy, and water resources. The MBMG is increasingly involved in studies of the environmental impacts to land and water caused either by past practices in hard-rock mining or by current activities in agriculture and industry. The Montana Bureau of Mines and Geology is the principal source of Earth science information for the citizens of Montana. More information is available at [mbmg.mtech.edu](http://mbmg.mtech.edu).