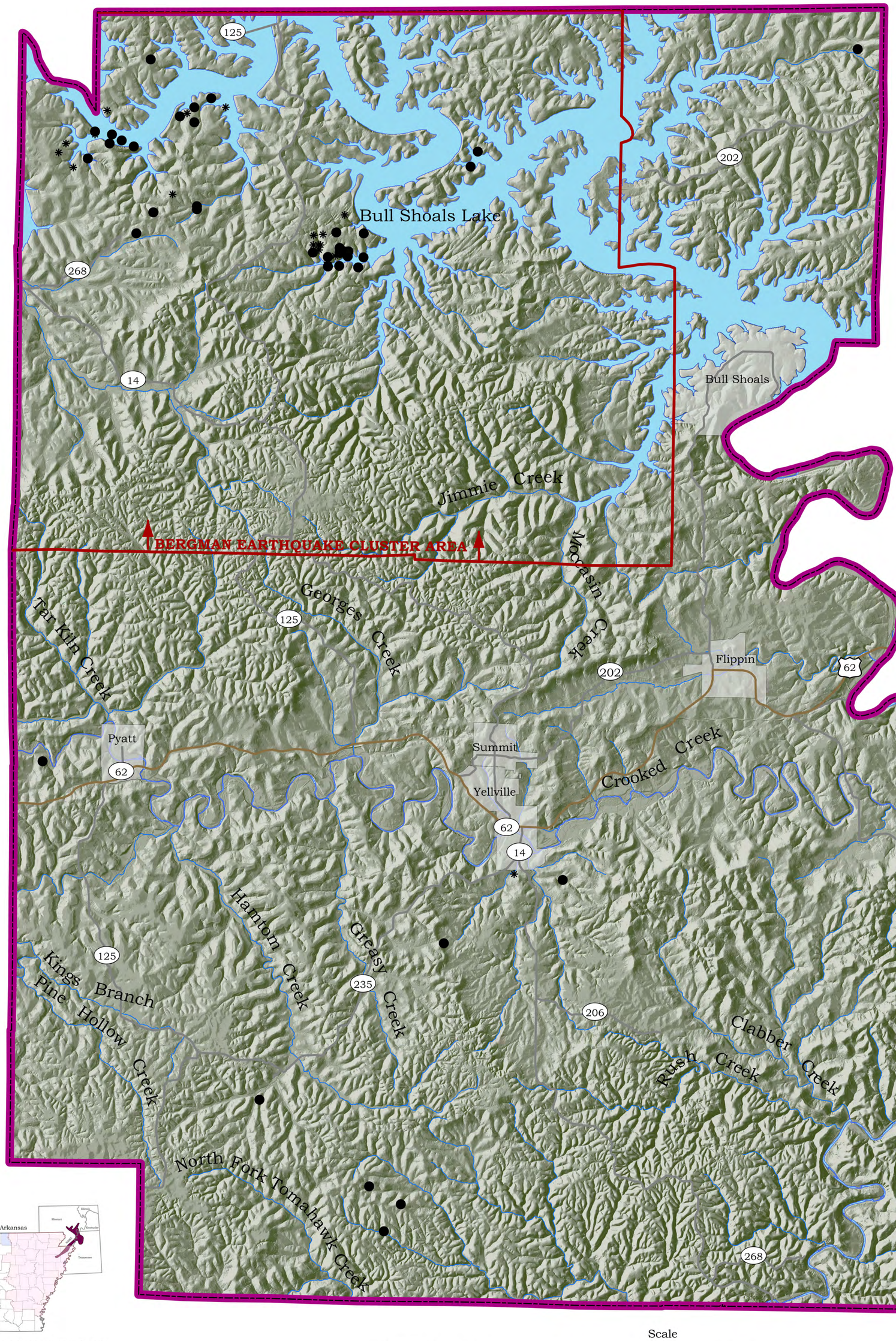
Office of the State Geologist
Scott Ausbrooks, Director and State Geologist

Marion County Seismicity Map



About the Map

This map illustrates the location and magnitude of reported earthquakes that have occurred in Marion County, Arkansas from 1984 to Present. The data source for the earthquakes depicted on this map is derived from the Office of the State Geologist (OSG) earthquake catalog. The catalog has been compiled from various sources and publications and includes date, time, latitude, longitude, magnitude or intensity and depth information. Some event records may contain incomplete data due to their date and/or source. The OSG earthquake catalog is dynamic and continually updated as event parameters are modified, new events are added, and occasionally, events are deleted. The seismic areas/zones illustrated on this map are derived from various geologic sources and publications on file at the OSG. Depicted seismic areas/zones are for illustration purposes only and may not represent all the seismically active features within a given location or relate to the origin of the earthquakes depicted on this map.

Earthquake Magnitudes

- 0.0 - 1.9
- 2.0 - 2.9

Symbol

- US Highways
- State Highways
- Incorporated Areas
- Water
- AR Seismic Regions Cluster Areas

References

Advanced National Seismic System (ANSS) earthquake database web page: URL: http://earthquake.usgs.gov/monitoring/anss/

Center for Earthquake Research and Information (CERI) - New Madrid Earthquake Catalog: URL: http://folkworm.ceri.memphis.edu/catalogs/html/cat_nm.html

United States Geological Survey USGS) Earthquake Notification Service (ENS).

The basemap was acquired at the Spatial Analysis Laboratory, University of Arkansas at Monticello. The feature class data was acquired at http://www.geostorarkansas.gov.

Disclaimer

Although this map was compiled from digital data that was successfully processed on a computer system using ESRI Pro 3.x software at the Office of the State Geologist (OSG), no warranty, expressed or implied, is made by the OSG regarding the unity of the data on any other system, nor shall the act of distribution constitute any such warranty. The OSG does not guarantee this map or digital data to be free of errors or assume liability for interpretations from this map or digital data, or decisions based thereon.

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Marion County (shaded in blue) is located outside the New Madrid seismic zone (NMSZ) catastrophic planning area (shaded in pink), as designated by the Arkansas Department of Emergency Management (ADEM) - The NMSZ is shaded in purple.

Scale

2 1 0 2 4 6 8 10 Miles

2 1 0 2 4 6 8 10 Kilometers

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Revised Date:	Scale:	Digital Compilation:	Updated:
05 June 2025	1 : 75,000	Jerry W. Clark	