

## When the Mighty Mississippi Ran Backward: MU Extension and SEMA Collaborate to Support Earthquake Resilience in the New Madrid Seismic Zone

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According to Central United States Earthquake Consortium (CUSEC) the New Madrid Seismic Zone (NMSZ) is capable of producing damaging earthquakes at any time. The earthquakes of 1811-12 were estimated to be between a M7.0-8.0 and occurred in an area that was sparsely populated. Were these earthquakes to occur today, their effects would be considered catastrophic, directly affecting several million people across eight states, and indirectly affecting millions of others across the continent. In an effort to prepare for this, the Federal Emergency Management Agency (FEMA) provided funding to CUSEC to lead an effort to develop, improve, and integrate the earthquake response plans of the eight states in the region – Alabama, Arkansas, Illinois, Indiana, Kentucky, Mississippi, Missouri, and Tennessee – that would be most affected by an earthquake. This Federal project, called the NMSZ Catastrophic Planning Project, includes planning on the local, state, and Federal levels of government but does not include citizen preparedness for this catastrophic event, as well as other catastrophic events in their states. Through a USDA National Institute of Food and Agriculture Smith Lever Grant, the State Extension programs within the NMSZ will address this citizen preparedness deficiency by the development of products that will assist families, businesses, schools, and faith-based organizations become more disaster resilient, as well as development of a public marketing strategy. In addition, an emergency planning, training, and exercise program for Extension professionals will be developed to better integrate them into local emergency management efforts.

This grant has afforded University of Missouri Extension (MU Extension) the opportunity to work with Missouri State Emergency Management Agency Earthquake Program Manager, Jeff Briggs, and eventually the earthquake program managers from the other seven states included in the NMSZ. To that end, Conne Burnham, Emergency Management Coordinator and Emergency Management State Specialist with University of Missouri Extension, and Mr. Briggs, co-presented at the MU Extension annual Extension and Engagement week on October 19<sup>th</sup>. The presentation “When the Mighty Mississippi Ran Backward” was recorded and can be viewed at [When the Mighty Mississippi Ran Backward Extension and Engagement Week 2021 - YouTube](#). The presentation focuses on the historic 1811-1812 New Madrid earthquakes, and the USDA grant that MU Extension was awarded to help promote awareness and education concerning the effects such a series of earthquakes would have today, not only on Missouri, but the other seven states that are part of the NMSZ—the nation’s largest active earthquake zone east of the Rocky Mountains. The discussion covered a history of the earthquakes in the region, earthquake damage and recovery here and around the world. The presentation also included a basic emergency management introduction and efforts individuals can take toward self and family preparedness and resilience from earthquakes and all hazards.

For more information on the MU Extension’s awareness and education initiatives associated with the USDA earthquake preparedness grant, or their other emergency preparedness and management initiatives, you can contact Conne Burnham, at [burnhamc@missouri.edu](mailto:burnhamc@missouri.edu).