



Earth MRI Funds Critical Minerals Projects in Texas

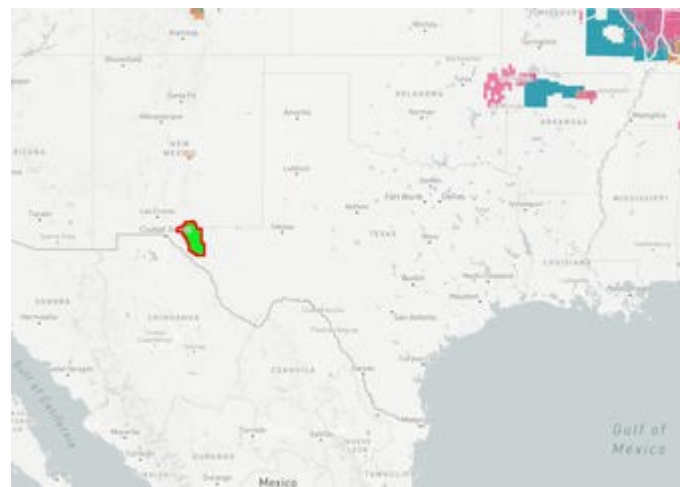
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A total of \$134,453 will fund new research and preserve important data across the Lone Star State

The U.S. Geological Survey and the Association of American State Geologists are pleased to announce \$134,453 in funding for critical minerals projects in Texas. These funds are for fiscal year 2020 under the [USGS Mineral Resources Program's Earth Mapping Resources Initiative](#), or Earth MRI.

These funds include grants to the Texas Bureau of Economic Geology for geologic mapping and geochemical analyses for an area of the Trans-Pecos area of far west Texas. This mapping project complements a new airborne geophysical survey planned over the region.

“These new projects in Texas represent the next step in our ambitious effort to improve our knowledge of the geologic framework in the United States and to identify areas that may have the potential to contain undiscovered critical mineral resources,” said Jim Reilly, director of the USGS. “The



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identification and prioritization of prospective areas was done through our strong partnership with the state geological surveys in a series of workshops in Fall 2019.”

USGS map of Earth MRI projects in Texas' Trans-Pecos region announced in September 2020.

(Public domain.)

“This program will revitalize and update the science and geologic research and data compilation that is needed in many states for the United States to identify new geologic associations,” said John Yellich, director of the Michigan Geological Survey and president of AASG.

“The Earth MRI effort is an outgrowth of the strong partnership between the AASG members and the USGS,” said Warren Day, Earth MRI lead scientist for the USGS. “The USGS is grateful for the scientific input and support from the state geological surveys, resulting in a robust body of information useful for many applications beyond mineral resources.”

The Trans-Pecos area of western Texas has potential for rare earth elements and other critical minerals. The new data acquisition projects include an airborne geophysical survey, geologic mapping projects and geochemistry reconnaissance surveys.

Airborne geophysical surveys collect a combination of magnetic and radiometric data. Magnetic data can tell us the amount of magnetic minerals, primarily magnetite, in the exposed and deeply buried rocks; whereas the radiometric data indicates the relative amounts of potassium, uranium, and thorium in the exposed rocks. This information allows scientists to help identify likely locations of particular rocks that can host minerals of interest, geothermal energy resources, groundwater and potential earthquake hazards in the region.

The geologic mapping efforts, which are managed through the [National Cooperative Geologic Mapping Program](#), will refine scientific understanding of the geologic framework of areas of interest. In addition to helping identify mineral potential, these maps also support decisions about use of land, water, energy and minerals, and help to mitigate the impact of geologic hazards on communities.

In 2017, President Trump issued [Executive Order 13817](#), a Federal Strategy to

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Ensure Secure and Reliable Supplies of Critical Minerals. This executive order called on agencies across the federal government to develop a strategy to reduce the nation's susceptibility to critical mineral supply disruptions.

In May of 2018, DOI released a [list of 35 minerals](#) deemed critical to the U.S. economy and security, based on a methodology by the USGS. This list forms the foundation of the full federal strategy. More information on USGS research to address the federal strategy on critical minerals can be found [here](#).

Earth MRI is a partnership between the USGS, state geological surveys and industry to acquire new geologic maps, geophysical surveys and lidar data to better understand the fundamental geologic framework of areas across the nation with potential for hosting critical mineral resources. More information can be found [here](#). To learn more about USGS mineral resource and commodity information, please visit our [website](#) and follow us on [Twitter](#).