



1) Graduate students on an adventure on the Rio Grande; 2) NMT PhD student Jeff Pepin explores southern New Mexico; 3) Component co-lead Laura Crossey

GEOTHERMAL ENERGY

Geothermal energy exploration and utilization has the potential to become important to New Mexico's energy future, but human technologies applied to natural geothermal systems for energy production can cause profound changes to surface features, possibly leading to a net loss of groundwater. *Energize New Mexico's* Geothermal Energy component addresses not only the potential of hydrothermal systems to create sustainable energy, but also the economic implications of such systems by partnering with local communities.

In Year 2, the Geothermal team worked towards a better understanding of underlying hydrothermal systems in New Mexico by locating and mapping blind systems (see *Locating*, pg. 13) and creating a statewide database of these systems. Team members received training on the EPSCoR-funded, state-of-the-art Zonge Magnetotelluric (MT) system, and a test site was located just south of Socorro, NM. The MT system helps the team detect possible geothermal structures underground and allows for estimation of geothermal reservoir temperatures at various depths.

Energize New Mexico funding also allowed for an inter-institutional graduate level course, "Geothermal Energy: Tectonic Setting, Exploration, Production and Sustainability," providing a unique opportunity to combine research with education as students were actively engaged in the component's research activities.