

2010 Earth Science Week KUNM radio broadcast

Geothermal Energy

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Welcome to Earth Matters...field notes on the geology of New Mexico's enchanting landscapes. Celebrating Earth Science Week, I'm Shari Kelley, from the New Mexico Institute of Mining and Technology.

Geothermal energy is a naturally occurring energy source generated and stored within the interior of the earth. Volcanic activity and groundwater movement concentrate this energy near the Earth's surface. By drilling wells into reservoirs of hot water and steam, geothermal energy can be used to produce electricity, to heat buildings and greenhouses, and even to make the water temperature just right for farm-raised talapia.

When I was a student in the 70s, excited about the potential of geothermal energy, only two states were harnessing geothermal power for electricity. Despite tremendous potential, geothermal provided only a tiny fraction of the energy supply for the U.S., primarily because large reservoirs of hot water near the surface are rare, and extracting the energy is complicated and expensive.

Now, some thirty years later, advances in technology have allowed scientists like myself to consider sites not possible before. Almost every state in the union is looking at ways to reap the benefits of geothermal energy. Here in New Mexico, I work with a team developing geothermal possibilities at Jemez Pueblo. We are also compiling a database of geothermal resources in our state.

Celebrating Earth Science Week, I'm Shari Kelley of the New Mexico Institute of Mining and Technology.