

## My Turn

# Taosenos should be concerned about geothermal development of Jemez Mountains

Marilyn Gayle Hoff

*The Taos News*, 10/20/2016

The geothermal generation of electricity is one clean method to replace the dirty burning of fossil fuel, claims the geothermal industry, and thus it can aid in forestalling global warming. Ostensibly based on this premise, the Santa Fe National Forest has opened for public comment a draft environment impact statement (DEIS) proposal to harness the vast reservoir of underground magma-heated water, feeding the many hot springs of New Mexico's nearby Jemez Mountains, for geothermal development.

A million years ago the Jemez Mountains were 30,000 feet high, the second-largest volcano ever to exist on earth.

Now, after uncountable eruptions, they are an unstable wonderland of geological formations, lava domes, technicolor cliffs, prehistoric dwellings, hiking and ski trails, wildlife habitat and those famous bracing hot springs.

Taose-os can see the Jemez' silhouette on the southwest horizon, 40 miles distant as the crow flies. When those mountains catch fire, the smoke can carry illnesses to Taos.

Downed power lines started two terrifying fires. Geothermal electric power plants in the Jemez would multiply such power line hazards. And three previous fires licked at the boundaries of Los Alamos National Laboratory, nestled against the Jemez slopes on the Pajarito Plateau. Four metric tons of plutonium reside in PF-4, a LANL building inadequately reinforced against earthquake, perched on fault-riddled terrain. Plutonium is pyrophoric, meaning it can catch fire on mere contact with air — and its fires are treacherous to douse, since water reflects neutrons and can make the plutonium “go critical.”

According to the DEIS map, the proposed geothermal development of the Jemez Mountains could encroach within scant miles of LANL and PF-4.

In response to the geothermal proposal, environmental organizations decry the privatization of our public lands, our commons. And they extol the uniqueness of the Jemez ecosystem, where endangered species like the spotted owl and jumping mouse, plus the northern goshawk, the peregrine falcon and vast herds of elk and mule deer nest or calve or otherwise require the wild Jemez Mountains for habitat where they can perpetuate their kind. All would be badly disrupted by geothermal development.

The geothermal process would likely also steal the heat from the many Jemez hot springs so attractive to tourists. As a result of geothermal development in New Zealand, for example, the Environment Waikato Regional Council said: “The withdrawal of geothermal fluids for electricity production in the Wairakei basin resulted in the extinction of all geysers (about 70),

loss of approximately 240 hot springs...and ground subsidence of 14 meters (about 46 feet), the largest ever recorded for any type of fluid withdrawal including gas and oil.”

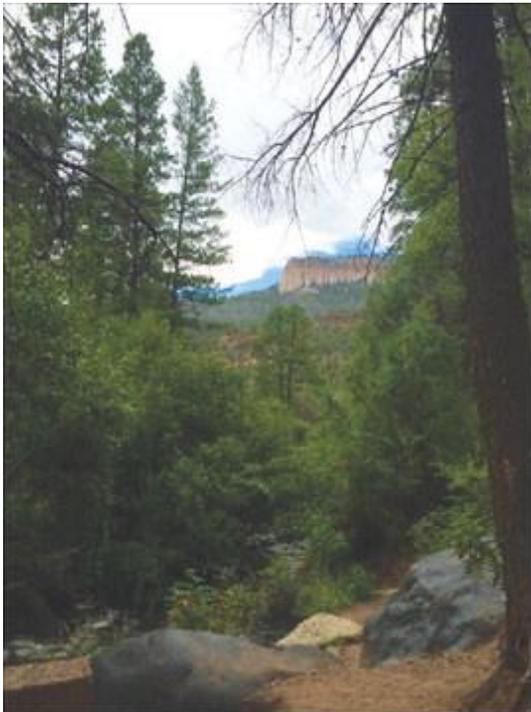
Couldn't one suppose that ground subsidence in the Jemez Mountains might cause the earth to quake?

The DEIS stated that the likeliest method of “mining” the hot water of the Jemez would operate by means of a so-called enhanced geothermal system (EGS). The Department of Energy explains: “In an EGS, fluid is injected into the subsurface under carefully controlled conditions, which cause pre-existing fractures to reopen, creating permeability [that allows] fluid to circulate throughout the now-fractured rock and to transport heat to the surface where electricity can be generated.”

The process euphemistically called EGS is more commonly called fracking. Earthquakes coincidentally abound in areas like Oklahoma, where fracking proliferates. Fracking anywhere near a location, like LANL, where deadly poisonous and highly flammable plutonium is stored in a shaky building atop fault-riddled ground, endangers all of Northern New Mexico.

Please help preserve our Land of Enchantment for future generations by sending comment, before the DEIS Oct. 28 deadline. Comment by email at [comments-southwestern-santafe@fs.fed.us](mailto:comments-southwestern-santafe@fs.fed.us) .

*Hoff is a resident of Arroyo Hondo.*



**Jemez Mountain view.**

**Kimberly DiMiceli Blanton**