

25 March 2011

Dear Drs. Glick and Johnson,

I am writing to express my deep dismay at the recent proposal to cut over half of current State funding to the Nevada Bureau of Mines and Geology (NBMG).

I am a UNR graduate (PhD, Geology, 2004). I was formerly a Postdoctoral Scholar at Caltech (2005-2008) and I now work as a Research Geologist for the US Geological Survey. I'm also a homeowner in Nevada and I have deep family ties to the state. The views I'm expressing here are entirely personal and do not represent my current or former employers.

A thriving State Geological Survey like NBMG is critical for a state - The Silver State - that has abundant mineral wealth and geothermal potential, as well as deadly geohazards.

Because my expertise is earthquake studies, I'd like to focus on the extraordinary contributions NBMG makes toward understanding seismic hazard and reducing seismic risk in Nevada.

The geological and historical records are very clear: Nevada will experience future devastating earthquakes. The relative calm of the last few decades is deceptive. The unnerving Mogul swarm and the relatively small but damaging Wells earthquake a few years ago are wake-up calls that warn of larger economic and life losses to come. Work at the NBMG will help to mitigate these losses.

NBMG scientists are at the forefront of efforts to address the urgent seismic hazard problems facing Nevada. The Bureau provides critical applied research results that feed directly into seismic hazard maps, building codes and emergency response plans.

For example, Bureau geodesists (Blewitt, Hammond, Kreemer, and Plag) at NBMG's internationally-recognized Nevada Geodetic Laboratory use GPS to produce detailed maps of strain stored in the Earth's crust beneath Nevada. Because much of this strain will ultimately be released as earthquakes, this map is provoking a much-needed re-appraisal of seismic hazard in many areas -- including the Truckee Meadows and southern Nevada.

NBMG's Quaternary geologists (dePolo, Ramelli, Bell, and others) are widely recognized experts at mapping active faults and deciphering their earthquake histories. Their work has provided a basic understanding of earthquake sources

in Nevada and has profoundly affected seismic hazard maps. It's simple: Continued work by NBMG geologists to locate active faults and map other potential geologic hazards will save lives.

In summary, NBMG is not an ivory tower that needs dismantling. NBMG scientists have an unparalleled ability to translate their research into societally meaningful results for Nevadans, results that will save lives and money. Loss of this capability would be a monumental mistake. When fingers begin pointing after the next large earthquake in Nevada, please don't allow them to point toward a misplaced decision to gut this fine organization.

Respectfully,

Rich Briggs
UNR PhD, Geology, 2004