

From: Frederick P. Zoerner, Consulting Geologist

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To: The Honorable James Dean Leavitt, Chairman

Board of Regents

Nevada System of higher Education

200 Hoover Ave., Suite 150

Las Vegas, NV 89101

Dear Honorable Chairman Leavitt:

The 53% cut to the Nevada Bureau of Mines and Geology is much too severe. This state agency, originally affiliated with the University System because of its scientific mission, has multiple functions that are important to the safety and economic well being of the State of Nevada. In the follow I point out some of the reasons that adequate funding for this organization needs to be provided.

The Geodesy Group in this agency is possibly the best in the world. Its studies are directly applicable to the early warning and possible prediction of earthquakes. This is very important to the whole state as evidenced by the strong 2008 earthquake in Wells that caused severe damage, the earthquake swarms beneath Somerset subdivision west of Reno, the large faults in the state's populous areas of Las Vegas, the Carson Range Front, and Elko. The latter is near the goldfields which, presently, are the only part of the state economy that is doing well. A large quake in the Lake Tahoe Basin could cause a seich, a sloshing of the lake similar to a tsunami. Evidence in the Lake Tahoe Basin mapped by a UNR geology professor showed that these can be 100s of feet high. Other than the destruction to Nevada towns and economic assets in The Basin, this slosh would pour an enormous wall of water down the Truckee River inundating downtown Reno and the industrial areas of Sparks and the Truckee Meadows. This type of flooding may be how the enormous granite boulders from the Sierra are found in the Truckee River's gravel deposits in the Truckee Meadows. These boulders give evidence of the extreme power of this sort of flood. The Truckee Meadows needs their research to be warned of such an event. The synergy

of the Geodesy Group must be persevered by keeping the whole staff of this group intact. As pointed out above, the early warning to citizens of the State of Nevada of an impending large earthquake is a matter of public safety. The early warning in Japan saved many lives from the shaking of the earthquake itself.

The researchers of the Nevada Bureau of Mines and Geology bring about \$4 million dollars to the University system in outside money. About half of this goes to pay UNR overhead. Loss of 53% of the NBMG budget will cut this revenue source to the University a half.

Natural resource explorers use the expertise of the researchers, map and data repository, and publications to aid their investigation of mineral discovery and development of metal, geothermal and petroleum resources of Nevada. As a minerals exploration geologist, I use the NBMG resources in my work to sustain Nevada's mineral sector of the economy.

As a volunteer with the Nevada Rock Art Foundation, just last week I used a NBMG report to define the rock type on which petroglyphs are scratched. This information is vital in the professional recordation of these cultural assets to be recorded this week by the foundation. This site is the Court of Antiquity, a proposed Washoe County Park a few miles down river from Sparks. This shows that the work of the NBMG is useful to the preservation of archeological and cultural history of Nevada.

I urge the Board of Regents to reconsider the drastic cut in funding of the Nevada Bureau of Mines and Geology and provide funding for its necessary function.

Sincerely,

Frederick P. Zoerner

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