

Department of Aerospace Engineering Science

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To: President's Office University of Nevada, Reno Reno, NV 89557-001

Dear Dr. Glick.

My father was a graduate of the Mackay School of Mines. He worked in the oil industry for 15 years and was subsequently the operations manager/head of engineering for the Deep Sea Drilling Project headquartered at UC San Diego. My family has always felt allegiance to the University of Nevada, Reno because of this connection, particularly so to the Mackay School and the Nevada Bureau of Mines and Geology. For this reason, I was particularly saddened to learn that UNR has recommended significant cuts to the NBMG. As a faculty member at a public university, I am aware of the budget difficulties being faced by nearly all states. However, I am concerned about this particular proposed cut. The group I am best aware of in the NBMG – the Nevada Geodetic Laboratory – has an international reputation. Although the group is relatively small in total numbers, their research productivity in geodesy far surpasses that of larger and betterknown state universities such as Berkeley, University of Washington, UCLA, University of Texas etc. From my time serving on funding panels for NSF, NASA, and the USGS, I know their research is well-funded. From my time as an editor for Geophysical Research Letters, I also know them to be in the highest echelon of research excellence. The group leader is a fellow in the American Geophysical Union, and most recently the award for the leading geodetic researcher under the age of 40 went to a Nevada geodetics faculty member. The group provides service not only to the geodetic research community, but also to the National Academy of Sciences National Research Council, where Geoff Blewitt and I served on a panel to develop a national strategy for geodetic infrastructure. I know this group take the mandates of the NBMG very seriously

and is heavily involved in natural hazards research. While many states do not have to worry about earthquake hazards, Nevada does.

The geodesy group at Nevada Reno is also very involved in using the geodetic methodology to study the water cycle. In fact Las Vegas, Nevada was one of the first places used to demonstrate the value of using geodesy to study aquifer depletion. Geodetic techniques used by the Nevada Geodetic Laboratory can also be used to measure snow pack, which is of great value to water managers now, but will be of increasing value in the future. We are all coming to realize that we must value our water resources, and I believe the geodesy group at UNR will make important contributions to the quality of life in your state by their research in this field.

Although my specific knowledge of NBMG comes from the geodesy group, I have to concede that as an Earth scientist, I am perplexed that a state with a long history of mineral development is even considering cutting the NBMG. While the US has seen many of our jobs go overseas, such outsourcing ultimately comes with a cost. If we come to depend on minerals that are mined elsewhere, there is no question that we will have problems later on. Each state much choose how to focus its economic investments. I would think that Nevada would choose to maintain its excellence in mining and energy.

Sincerely,

Kristine M. Larson

Professor of Aerospace Engineering Sciences

Kestere Mr. Larson

University of Colorado, Boulder

AGU Geodesy Section Award, 2005

AGU Bowie Lecturer, 2007

Member, NRC panel on Geodetic Infrastructure: National Requirements Member, NRC panel on NSF Earth Science Research Opportunities

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