Dr. Jeffrey S. Thompson Dean, College of Science MS-0424, University of Nevada Reno, NV 89557 USA

## Dear Dean Thompson:

As a professor of Earth and Environmental Sciences with 40 years of experience, I am writing to express my grave concern about the plan to dramatically shrink or even dismantle the Nevada Bureau of Mines and Geology. I speak both as a geoscientist who has benefited directly from NBMG activities and products and as one who generally appreciates the vital nature of the Bureau's mission and its excellence in carrying out that mission.

My alarm upon hearing about this plan is based upon my awareness of the vital though commonly underappreciated role that a good geological survey plays in many public and private functions of states. The alarm is more acute because this is Nevada, a state with enormous mineral and energy resources, serious geological hazards, and rapid development: Nevada has a far greater need for an effective survey than other states. Furthermore, as it stands, the NBMG is not just a good survey, it is outstanding. With downsizing or elimination, a great resource that much more than pays for itself is suddenly gone. For example, it's hard to imagine the hit that Nevada's economic prospects for the future will take if the gold mining industry can no longer benefit from the work of the NBMG.

Most of my life's work has involved Nevada and adjacent states. This work has benefited immeasurably from the field studies of the NBMG, both through direct collaboration and through use of NBMG maps and reports. In comparison with other surveys, the NBMG is unusual because it functions very well both in the applied side of its mission - producing the maps and reports that support mineral and energy exploration, hazard evaluation, and development plans – and in the research and higher education side. They produce outstanding studies, both by employees and by students with whom they work. This research produces a foundation for critical future applied studies because it directly yields basic knowledge and trains the geologists of the future who carry out these studies.

My students and I have worked formally and informally with Dr. James Faulds of the NBMG for almost twenty years, and his published papers and maps have been an invaluable resource. He is a truly extraordinary scientist and public servant, and my impression is that his skill, productivity, and dedication are characteristic of the Bureau. Jim is remarkably good – arguably the best in the country – at a prime function of the NBMG: geological mapping, and interpretation of histories and resource potential (e.g. gold, geothermal) and hazards (earthquake and flooding potential) of areas that he maps. His work is so good that at the same time that he provides the State with critically important practical information, he also establishes the basis for research that has won him international acclaim as well as impressive external funding. He is also an extraordinary research mentor for graduate and undergraduate students, turning out the next generation of great geological mappers and field interpreters. Jim and his colleagues at the NBMG personify an institution that is about as good an investment for the short and long term welfare of the State of Nevada as can be found and it would be extremely unfortunate if this investment is abandoned.

Sincerely,

Calmin & Miller

Calvin F. Miller Professor & Director of Graduate Studies Earth & Environmental Sciences, Vanderbilt University

Cc: Board of Regents (James Dean Leavitt, Jason Geddes, Mark Alden, Andrea Anderson, Robert Blakely, William Cobb, Cedric Crear, Mark Doubrava, Ron Knecht, Kevin Melcher, Kevin Page, Jack Lund Schofield, Michael Wixom)