

From: Peter Scholle [mailto:scholle1@gmail.com]
Sent: Tuesday, March 15, 2011 8:46 AM
To: Jonathan G Price
Subject: Re: Support for the Nevada Bureau of Mines and Geology

Dear Jon:

I wanted to follow up on my message of last night regarding possible budget cuts at the Nevada Bureau of Mines and Geology. In that message I discussed your survey mainly from the perspective of the experience at our survey. But on further reflection, I thought I should also comment directly on the situation at your survey.

I consider your geological survey to be one of the best in the country, despite the fact that it is far from one of the largest. The research and applied studies conducted by your survey in mineral resource potential and in earthquake, flooding and landslides has added greatly not only to the knowledge base in these critical economic and public safety areas within Nevada, but the information has also greatly benefited surrounding states with similar geology as well. Your geologic mapping group is one of the most advanced that I have seen, using modern GPS-based field and laboratory techniques that have greatly streamlined the mapping process. And your association with the Mackay School of Mines allows students there to learn first-hand about the applied side of mining research during their college education. Mining (not that other thing) is really the world's oldest profession, and yet we are far from understanding all there is to know in this profession. Soaring metals and other minerals prices in recent years indicate that demand for many commodities is outstripping supplies. That, in turn, means that Nevada, one of America's richest mining areas, will continue to have a bright economic future if it can continue to find new new mineral deposits. That is precisely the major role of the Bureau of Mines and Geology and precisely why its funding should not be in jeopardy.

I am therefore very concerned to hear that the budget of your organization might be cut by more than 50 percent. I was, in fact, astounded to hear that your current budget was as low as it is. Cutting the budget further would greatly compromise your ability to provide Nevada with the critical information needed for continued mineral resource development as well as for essential for hazards studies, for geologic mapping, and for all the other activities that you conduct for the state.

This will probably embarrass you, but I would like people reading this to understand that the Nevada Bureau of Mines and Geology is one of the most efficient and effective state geological surveys in the nation. The director (you) is remarkably productive, remarkably knowledgeable, and unbelievably dedicated. He is married not just to a lovely and talented spouse, but also to a series of handheld devices that allow his colleagues to track his work hours. I believe that I have received as many messages sent at 3 am as ones sent at 3 pm. That work ethic clearly has rubbed off onto an equally dedicated and productive staff. That combination has led to Nevada Bureau to also be one of the most aggressive, innovative and successful agencies at applying for and receiving Federal funds from a wide variety of agencies (DOE, BLM, FEMA/DHS, USGS and others) to supplement state dollars in carrying its mission.

For that reason it seems especially counterproductive to cut the state-based funding of the agency. That magnitude of funding loss will inevitably lead to loss of staff members, loss of the ability to apply for Federal matching funds, and loss of productivity in research that contributes directly to the future economy of the state.

I would be happy to comment further on any specifics that you would like and wish you

success in dealing with this budget crisis.

With best wishes

Peter

From: Peter Scholle [mailto:scholle1@gmail.com]

Sent: Monday, March 14, 2011 7:54 PM

To: Jonathan G Price

Subject: Re: Support the Nevada Bureau of Mines and Geology

Dear Jon:

I write in support of the Nevada Bureau of Mines and Geology and its efforts to minimize state budget cuts. While it is understandable that states are cutting back on funding state agencies in an effort to balance their budgets, it seems quite counterproductive to cut those agencies that directly and/or indirectly contribute to current and future state income, for that income will be crucial to economic recovery. Our state, like yours, derives a major portion of its income from natural resource exploitation. Ours is more from natural gas and oil while yours is more from mining, but in both cases the work of state geological surveys in delineating resources, publishing exploration plays, providing assistance to companies in the form of maps, data, and knowledgeable advice is crucial in encouraging exploration and development. In New Mexico, the state has invested a total of about \$115 million in supporting the Bureau of Geology over its 84 year history. This past decade alone, our demonstrated efforts in publishing innovative exploration plays have led to more than 5 million dollars in lease sale income. In addition, exploration successes on just one those leases is expected bring an estimated \$2 billion to the state in direct taxes and royalties over the next 20 years (a nearly 20-fold return on all of our 84 years of funding). Likewise, the dollars resulting from our research efforts on mining potential for uranium, rare earth elements and other minerals are likely to repay the small costs of that research by factors of 20 or more. Just in the past few years our research efforts in ore processing methodologies have improved recovery efficiency in the potash industry from about 50 percent to nearly 80 percent, a huge economic benefit in an industry that brings in more than \$80 million per year to our state. The extensive research we conduct on mine remediation has significantly reduced the environmental impacts of mining at the sites we have studied (and have guided response to legacy mining issues in other areas).

Results from our broader activities are more difficult to quantify, but undoubtedly also have a major positive impact on the state economy. These studies include general geologic mapping, water resource investigations (both water quantity and quality), geologic hazards investigations (earthquakes, landslides and volcanic activity), general geological outreach education, alternative energy programs (especially geothermal), climate research (including carbon sequestration studies), and the like. We provide databases of subsurface information to support studies in all these areas and maintain a repository of subsurface cores, cuttings, well logs and associated information. All these activities are critically important in a state in which water and energy are the lifelines of our existence and the very basis of our economic success. And most of our efforts are further leveraged by grants that we receive from a wide variety of Federal agencies.

I would be remiss if I did not mention that both the New Mexico and the Nevada surveys are based at universities that have strong geological and mining programs. Our presence at those universities contributes to the teaching and research programs, provides real-world job experience for students, and helps to train the next generation of workers for energy and mining industries with critical workforce shortages in the foreseeable future.

State geological surveys do not work in a vacuum. We interact extensively with the US Geological Survey and with other state geological surveys in our regions because we share both a profession and common issues. Through our own efforts, and those of the Association of American State Geologists, we have forged regional alliances and have received group grants to further geologic mapping, subsurface data preservation, geothermal investigations, mineral resource investigations, earthquake hazards research, and carbon sequestration. These group efforts have allowed us to produce regional syntheses of information in all these areas of critical information needs.

These are difficult financial times and virtually all of this nation's state geological surveys have suffered some level of budget reductions. All cuts are painful since research needs always outstrip available funding, but major cuts can cripple the very research that can and almost certainly will lead our resource-rich states back to economic health. Furthermore, it is essential that none of our state geological surveys suffers major cuts for that will undercut the vital efforts to understand earthquake hazards, carbon sequestration, geothermal and mineral resource distribution, radioactive waste disposal and similar topics from a regional perspective.

In short, I believe that it is in the interest of each of our states to maintain high levels of funding for their respective geological surveys. That funding is indeed an investment for the future and reductions in that spending will inevitably extend the length of time needed for a recovery from the current economic recession. I hope that you will agree.

Sincerely

Peter A. Scholle