



College of Science
University of Nevada, Reno

February 1, 2021

Joint Committee on Ways and Means, Subcommittee on Natural Resources:

I wish to express my opposition to the passage of Oregon HB 5010 to dismantle the operational functions, budgets, and staff of the Oregon Department of Geology and Mineral Industries (DOGAMI), which serves as the geological survey for Oregon. I am Director of the Nevada Bureau of Mines and Geology (NBMG), which is the state geological survey of Nevada. I have first-hand knowledge of DOGAMI's many scientific contributions that are critical to Oregon's citizens. The geology associated with natural hazards and resources extends across our shared border, and thus NBMG has a long collaborative relationship with DOGAMI.

DOGAMI is an independent source of objective science for Oregon, as it provides critical information on geologic hazards and natural resources essential for the safety of Oregon citizens and the wise, environmentally sound development of infrastructure across the state. DOGAMI produces maps of landslide, flood, debris flow, tsunami, earthquake, and volcanic hazards. Bottom-line is that these products save lives and property. Without DOGAMI, Oregon would not have a reliable, unbiased source of geologic information, which would put Oregonians at greater risk from natural disasters. Further, DOGAMI's maps and reports are all in the public domain and are thus used repeatedly by communities, other state agencies (e.g. ODOT), federal agencies, and geotechnical firms for planning purposes. Studies show that each use of a hazard map can be worth thousands of dollars, and the cumulative value of such products is in many cases millions of dollars. This ultimately saves Oregon taxpayers millions of dollars. Dismantling DOGAMI will ultimately cost far more than it's worth, would not be in the best interest of protecting the citizens of Oregon, and would likely compromise future economic growth in the state. Below are three specific examples of the many contributions that DOGAMI provides for Oregon's citizens.

Geologic Hazards: DOGAMI is a leader among geological surveys in researching geologic hazards, including landslides, debris flows, tsunamis, earthquakes, and volcanic eruptions. They have developed landslide hazard maps, tsunami inundation maps, coastal erosion maps, and earthquake fault maps (among others) that are used extensively for infrastructure planning. All their studies employ state-of-the-art scientific practices. Nevada and other states look up to DOGAMI as providing pragmatic, cost-efficient approaches to analysis of geologic hazards.

Lidar: Lidar (light detection and ranging) provides high-resolution topographic maps of the Earth's surface. These maps are used to evaluate geologic hazards, natural resources, and the health of forests. Thanks to DOGAMI, Oregon now has one of the best lidar datasets of any state. The lidar data are hosted on their web site and available to the public. Geologic hazard assessments and the forestry industry have benefited greatly from the amply available data. For example, these data have been used in the Portland area for studies of faults that pose significant seismic hazards. DOGAMI's lidar program is widely recognized and has stimulated similar programs in other states.

Geothermal Resources: Geothermal resources abound in Oregon and provide a large potential resource of clean renewable, carbon-free energy. Geothermal plants provide power 24/7 and have a very small footprint on the landscape. There is vast untapped potential for geothermal energy across much of Oregon. DOGAMI has carried out excellent work on evaluating geothermal resources in Oregon. NBMG has collaborated with DOGAMI on geothermal resource assessments critical for transitioning the region to a carbon-free energy base.

If you have any questions, please feel free to contact me.

Respectfully,

DocuSigned by:

James E. Faulds

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