## To: Subcommittee On Natural Resources, Joint Ways & Means

I write regarding the current attempt to dismantle the Oregon Department of Geology and Mineral Industries, assigning parts to other agencies and significantly defunding the remaining units. The first step in implementing this plan is HB 5010, setting the general fund allocation (and limiting expenditures) for DOGAMI for the 2021-23 biennium, which is to receive its first hearing before your Natural Resources Subcommittee of Joint Ways and Means, tomorrow (Monday) morning, 1 February.

As you know, DOGAMI<sup>1</sup> is an independent state agency that acquires and provides Earth science information to increase understanding of Oregon's geologic resources and hazards, to make us safer and more prosperous. The Geological Survey & Services (GS&S) program develops data, maps and reports to help manage natural resources and prepare for natural hazards. Their core program areas include: 1) studying hazards such as earthquakes, tsunamis, landslides, volcanoes, floods and coastal erosion, community vulnerability to those hazards, and ways to reduce risk; 2) geologic mapping to support healthy ecosystems and guide rural and urban development; 3) collection and sale of high-resolution lidar<sup>2</sup> images of the Earth's surface for use in mapping, resource management, planning, and many other applications. The Mineral Land Regulation & Reclamation (MLRR) program oversees mineral production (including stone, aggregate, oil and gas if any), and works to minimize effects of resource extraction and maximize opportunities for land reclamation. This fee-based program regulates upland and underground mining on lands within the state, working with other agencies, local governments, Indian tribes, industry and the public.

In short, DOGAMI scientists and staff map the state's rocks and soils; help prepare for and assist during and after disasters; and safeguard resources and the environment through regulation of extractive activities and oversight of mine reclamation. Information from DOGAMI is trusted and used by Oregon communities, planners, developers, businesses, and citizens to help protect people and property. They have put Oregon at the national forefront by making geologic information available online to the public. The critical data they provide include interactive maps of current landslides, flooding, earthquake shaking and liquefaction, and coastal erosion, along with a lidar-based landslide database for the entire state. DOGAMI is involved in collaborative research with PSU, OSU and UO, and with other state and federal agencies such as ODOT, the USGS, and US Army COE, and the agency is a critical point of contact for current hazard and resource research in the state. Most of these functions would disappear under the Governor's elimination and dismemberment plan.

All of this is accomplished now with a staff of about 39, headquartered in Portland, with MLRR based in Albany and a few personnel in Baker City, Springfield and Newport. They work with an operating budget of about \$17.6 M for the 2019-21 biennium, and would request \$21.0 M for 2021-23 (if given their choice, according to the ARB), of which less than a third comes from the general fund; more than a third is derived from MLRR fees and income from other services (e.g., lidar, local governments), and about a third from federal grants (part of past problems; see below).

These amounts are small compared with the cumulative costs of ignorance of and inattention to geologic conditions that crop up as problems in land use, engineering, resource exploitation, coastal development, etc., and relative to the extreme costs of major disasters, which can be orders of magnitude greater. For example, losses from the 1993 Klamath Falls earthquakes and 2007 winter storm exceeded \$10 million and

<sup>&</sup>lt;sup>1</sup> Text adapted from the oregongeology.gov web pages and other sources, and the Agency Request Budget (ARB).

<sup>&</sup>lt;sup>2</sup> Light detection and ranging, a laser-based technology for surface mapping, from the ground, air or space.

\$100 million, respectively. The 2014 Oso landslide in NW Washington killed 43 people, and cost at least \$100 M directly (highway closure and repair, emergency response, cleanup, etc.), \$70 M damages in lawsuit settlements, plus unknown economic losses. In Oregon, the 1903 Heppner flood killed more than 200 (Oregon's worst recorded natural disaster); the 1974 Canyonville landslide killed 9; the Fall 1996 debris flows in SW Oregon killed 5. And though prehistoric, for the Pacific Northwest as a whole, we can easily imagine that the Cascadia Subduction Zone earthquake of January 1700 probably claimed thousands of lives. The next big Cascadia earthquake and associated tsunamis, landslides, building destruction, etc. will cost billions.

In addition, the effects of climate change are progressively apparent, manifest by increased flooding, wildfires, and storm-triggered and post-burn landslides. Not that a state geological agency can prevent any of these things, but it can provide information to government, business and citizens to avoid some of the effects, and ameliorate the unavoidable. As population grows, so do our demands on clean water and mineral resources; as our footprint grows in the landscape, we face increasing vulnerability to natural hazards; climate change will aggravate these risks and test our resiliency. We're better off on all counts having DOGAMI working on them.

Although DOGAMI has served its mission since creation by the Legislature in 1937 (ORS 516 and other statutes), Governor Brown has proposed to eliminate it as an independent agency. The Governor's proposed budget<sup>3</sup> (p 165-167) calls for shrinking DOGAMI in FY 2021-22, and then eliminating the agency altogether. The MLRR program would be transferred to the Department of Environmental Quality, with its fee funding and 11 FTEs; we suspect they would be bureaucratically buried within DEQ's huge staff (about 700 currently). Of the GS&S group, the majority of DOGAMI's current functions and staff, a very small part would be transferred to the Department of Land Conservation and Development, shrinking from 27 down to 7 FTEs. (Having a few geologists in DLCD might be a good idea, but not at the expense of gutting DOGAMI.) The budget specified in HB 5010 calls for \$1,834,234 from the general fund for FY 21-22; of a total budget (including grant and fee income), two-thirds would go to MLRR (\$2 M) and just \$951,000 to a shrunken GS&S. Then nothing to DOGAMI for FY 22-23 as MLRR and its fee income would move to DEQ, and vastly reduced functions and a few staff and FTE money (\$2.3 M) would move to DLCD.

For comparison, the agency request plan called for \$6.6 M general fund and \$21 M all income, for the full biennium. Best I can tell, the GF savings of the GPB are less than \$3 M, although total expenditures for the biennium are about \$11 M less: money not spent on the 17 people to be laid off in July 2022, along with the grants that would not be obtained – i.e., money lost to Oregon's economy. Meager savings indeed.

Another issue: the budget starvation of HB 5010 does not repeal ORS 516, or amend the dozen or so statutes that assign DOGAMI with various duties and monies. This would be a huge policy and organizational change – so where's the bill that would actually execute the dismemberment? For that matter, where is the "review of agency operations" mentioned in the Governor's budget proposal (GBP p 165) in which "it has been determined Department core operations should be moved to other agencies"? I would expect such a review to have produced a decent policy analysis document – should you (and we) be able to see it, to at least understand the Governor's proposal? Perhaps you should ask the agency representatives about that at the hearing tomorrow. How can the merits of this whole issue be judged without those details?

I urge you and your colleagues to spend 10 minutes or so (if you can stop there) checking DOGAMI's web pages (<u>www.oregongeology.gov</u>), to see what this agency does for the state. I think it should be clear that the production and dissemination of this kind of information is valuable – not just to other Earth scientists and related practitioners (researchers, engineers, consultants, resource industries, developers), but to all

<sup>&</sup>lt;sup>3</sup> Oregon for All: Governor's Proposed Budget, 2021-23 (GPB)

the citizens of Oregon, who live in a beautiful and dynamic landscape full of economic and recreational opportunities but also susceptible to many kinds of natural hazards. All this for the equivalent of \$1.56 per Oregonian from the general fund, or about \$5 per capita in total expenditures (including fees, grants, etc.).<sup>4</sup>

There is no denying that DOGAMI has had fiscal problems over the past few biennia – especially the instability created by relying on grants for about a third of the operating budget. Getting those grants is a chancy operation (not to mention the time and effort spent chasing them which could be spent on more important tasks); and even getting paid for those won can also be challenging. (Sound familiar? – see "money problems, Department of Forestry".) In an ideal world, the state would fully fund the entire DOGAMI mission, decreasing its reliance on unreliable grant income. If we want to think about alternate structures for DOGAMI – within another agency, as in Washington and California (though not Oregon's typical government structure), or within a university, as in Idaho ad many other states – let's create a rational process to examine those possibilities, their organizational and funding structures, problems, etc.

But those possibilities are not on the table right now, so we deal with two basic options.

Eliminating DOGAMI will cripple the research into Oregon's geology, permit natural disasters to be more destructive and costly; and the loss of independence of its mining regulatory oversight may degrade our environment and natural resources. The Governor's proposal to break up the band is a dumb idea; sending the rumps to other agencies lacking the same missions (science in the public interest) and skill sets is worse; and starving the remainder is absurd. Oregon can do better than this – and will have to, eventually, when we must recreate such a state agency after the next geologic disaster (pay now, or pay more later ....). And we shouldn't spend <u>all</u> our effort and money (especially that "savings" of just \$3 M <sup>5</sup>) dealing with today's crisis (covid and its effects) while ignoring ameliorating <u>tomorrow's</u> disasters.

The Governor's proposal – as expressed in the DAS agency testimony presentations (which appeared for digestion just this morning!) – use disingenuous terms such as "right-size operations and decentralize", claiming that it "maintains essential program work". This is laughable.

My request of you, your subcommittee, Joint Ways & Means, and the Legislature: fund DOGAMI for the full 2021-23 biennium at the ARB's originally estimated levels – or better yet, do that plus cover any part of the grant money that doesn't come through or get paid in a timely manner. Stabilize and go forward, for the full biennium; keep the agency whole, with the requested 39 FTEs. If it would be worthwhile to examine the organizational and fiscal details of DOGAMI operations for the future – as it probably is – have the Legislature, DAS, and the geologic and stakeholder communities of Oregon get together to examine the rational options. The Governor's proposal is not one of them.

Matthew J. Brunengo, Ph.D. Adjunct professor, Portland State University, Dept. of Geology

<sup>&</sup>lt;sup>4</sup> Calculated from the 2021-23 ARB general fund request of \$6.585 M and total budget estimate \$21.009 M, each divided by population of 4.22 million – we don't all pay equally, of course, but we all benefit.

<sup>&</sup>lt;sup>5</sup> News reports that UO's head football coach signed a new contract for \$27.3 M for 6 years, i.e. \$9.1 M/biennium, ~40% more than DOGAMI's original general fund request. For a glorified public employee – even if the state or the university aren't paying all of the tab – we are way past ludicrous and on the road to bizarre.