February 3rd, 2021

To: The Oregon State Ways & Means Subcommittee on Natural Resources

RE: DOGAMI BUDGET CUT CONCERNS

Dear Subcommittee Members,

I appreciate you taking the time to read my letter. I am an M.S candidate in Applied Geosciences at the University of Washington. I grew up in Portland, OR where I developed much of my love for the outdoors, and more recently spent a year interning for the U.S.G.S Water Science Center in Portland back in 2018. I completed my bachelor's degree at Oberlin College in Geology in 2016. Hearing the committee is looking to cut DOGAMI's budget and reduce the number of employees is of serious concern to me.

My work over the past couple years has primarily centered around geospatial analysis dependent on good quality, up-to-date Light Detecting and Ranging Remote Sensing (LiDAR) data. This past work has included high water mark mapping of the historic Missoula Floods. In the past, I have also used LiDAR to model precipitation effects from the catastrophic flooding events of 2014 while working with the National Park Service in order to determine at what threshold erosion started to occur. I now work with King County in Seattle delineating Channel Migration Zones (CMZ's). These CMZ's are incredibly reliant on LiDAR and integral to understanding how river channels have migrated in the past and where they may migrate in the future. The purpose of the CMZ's are to protect property owners, recreationists, fish habitat, and mitigate flooding hazards. Having access to a database of historic and current LiDAR has made it uniquely possible to determine the spatial extent of past flooding events in a way that was not previously feasible. Channel migration and flooding are equally important concerns in Portland since it experiences much of the same precipitation as Seattle. These similar precipitation patterns are driven by high winter rainfall and Cascade Mountain Range spring run-off and snowmelt, the saturation of which promote landslides and debris flows. Eliminating the ability to maintain and update a database of LiDAR will create severe limitations for geologists in Oregon studying natural hazards with potential disastrous impacts to the population of Portland and its surrounding areas.

Upon completion of my Master's degree, I would love to return to work in Oregon and give back to my state. However, much of the analytic work I do will become costly and limited if LiDAR is no longer funded. Oregon currently maintains an excellent reputation for hazard assessment and analysis, but we will hurt the state's credibility and fall behind without the means to progress our field of science through data collection. We cannot afford to lose geologists, nor can we afford to deter others from coming to work in Oregon. Oregon is too geologically active an area to simply cease measures for monitoring and predicting geohazards.

For all of these reasons and more I implore the subcommittee to consider DOGAMI as an entire agency, maintain the LIDAR program, and keep the State Geologist position. Not only as a student, but as an Oregonian concerned for the safety of my community.

Sincerely,

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