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Comments: I am a plant ecologist and faculty member at the University of Washington-Bothell. I received my PhD in Ecology and Evolution in 2011 and have been conducting research on Mount St. Helens studying plant succession in the blast zone, mainly on the Pumice Plains since 2012. In addition to starting my own research program out on the Pumice Plains, I have taken over monitoring Roger del Moral's long-term permanent plots which has documented plant community diversity yearly from 1980-2010. These long-term plots are part of a larger collaborative network of permanent plots where together with 9-10 other ecologists and researchers, we monitor plant community diversity in the blast, blowdown, and tephra deposit areas on Mount St. Helens. The proposed road-building actions will negatively impact my ability to do this research by disturbing (or destroying) plants growing in or near these permanent plots.

My main ecological concern about the proposed action is that the road will either completely destroy my existing research plots (including the historical permanent plots) and/or severely destroy the surrounding plant community. Erosion due to any new roads will also likely destabilize areas where some plots are located. Finally, new roads increase the spread of invasive species. The natural recovery on the Pumice Plains has thus far, luckily not seen the invasion of many non-native, weedy species. However, roads and construction equipment and crews are all known factors for greatly increasing the spread of invasive species. This could have a severe negative, long-term, and unknown impact on this delicate and valuable ecosystem.

Like many other researchers on Mount St. Helens, I am an early career ecologist who has built the foundation of my career on doing research on Mount St. Helens. I have had the good fortune of being able to harness a wealth of data and existing network of long-term research plots. Furthermore, the plots on the Pumice Plains are part of a larger network of plots. Together with Drs. Dylan Fischer (Evergreen State College), Abir Biswas (Evergreen State College), Joseph Antos (University of Victoria), Don Zobel (Oregon State University), Mark Swanson (Washington State University), Andres Holz (Portland State University), Robert Pabst (Oregon State University), Charles Halpern (University of Washington), and James Cook (University of Wisconsin-Stevens Point), we have recently published a synthesis paper on plant succession on Mount St. Helens in the Journal of Ecology that include these plots. This paper highlights the value of long-term coordinated datasets, and by irreversibly damaging these long-term plots, these actions will destroy the history and legacy much of the research. It is without a doubt that any proposed actions that greatly damage any of these Pumice Plains plots and/or the surrounding plant community will have a significant impact on both my own personal career, as well as the greater ecological scientific community.

Finally, my research involves a large number of undergraduate researchers from the University of Washington-Bothell. I have mentored 8 undergraduate students over the past 4 summers, many of who have chosen career pathways in ecology and science based on their research experiences with me. In addition, the data from these research plots are used in several of my courses here at UW-Bothell. They are also the location of future class field trip sites. Furthermore, each summer I have volunteered with the Mount St. Helens Institute and taken high schoolers out with us to do research on the Pumice Plains. The research sites on Pumice Plains have great value in not only research, but also education and outreach.

This proposed action would negatively influence irreplaceable research, and have severe consequences to the scientific and educational community, as well as the public. I strongly encourage you consider other proposed options (e.g. alternative route from Johnston Ridge Observatory or UTV road to Duck Bay) that would protect the delicate and valuable ecosystem on the Pumice Plains.

Thank you for your time and consideration.

