

10 January 2019

I am writing to offer comments on the Spirit Lake Tunnel Intake Gate Replacement and Geotechnical Drilling Project #57259. I was a postdoctoral researcher funded through a NSF grant held by Dr. John Bishop (WSU-Vancouver) from 2002-2004. I witnessed firsthand the fragility and dynamism of this landscape during my time investigating the role that insect herbivores played in determining the trajectory of primary succession. The 1980 volcanic eruption opened up a rare opportunity for scientists to track the process of the recovery of a landscape completely lacking a biological legacy from the very beginning. Certainly other opportunities have presented themselves across the globe, but few are as accessible to as many researchers at all stages of development, from principal investigators to postdocs to graduate students to undergraduates.

The research conducted at Mount St. Helens has greatly illuminated concepts of the forces important in succession, such as the previously unappreciated impact of invertebrate herbivores, as well as offering a myriad of educational opportunities for both scientists and the general public. Any disruption of this delicate landscape deserves very careful consideration with a detailed investigation of its impacts weighed against the benefits of such a transformative installation of infrastructure like a road. I believe that a road through this region would disrupt invaluable long-term research activities in permanent plots and transects, diminish the recreational opportunities offered by the Monument as it mars the viewshed, as well as potentially imperil sensitive species while risking the introduction of invasive species.

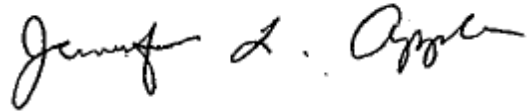
While I recognize the need to protect downstream communities, we must take time to carefully consider the costs and benefits of the proposed actions. This process deserves more time to provide opportunities for interested parties and experts to comment on the impacts of the proposed road and other infrastructure changes. The concerns that need to be addressed lack the urgency that warrants fast-tracking a plan without adequate exploration of its potentially significant and irreversible impacts.

The negative impacts of roads on ecological systems are widely appreciated and in such a special place like the Pumice Plain would be especially harmful. A 2017 publication in *Science* featured a perspective article lamenting the expanding enterprise of road-building given its ecological consequences (DOI: 10.1126/science.aao0312). The Pumice Plain is certainly one area that does not demand this kind of infrastructure, which would disrupt research and degrade a pristine landscape that provides a rich and unique example of the fascinating and important process of primary succession.

I urge the Forest Service to reconsider this proposal to disrupt the valuable and unique habitats and research enterprises supported on the Pumice Plain. The Forest Service should take the time to explore alternative rational and measured approaches for protecting the local communities and maintain public safety, and accurately communicate the level of risks and impacts of particular actions or lack of action.

I believe the Mount St. Helens National Volcanic Monument is certainly a jewel in our public lands system, providing countless educational and research opportunities. We must work to maintain its value by making all efforts to preserve it in as natural a state as possible,

Sincerely,

A handwritten signature in black ink, reading "Jennifer L. Apple". The signature is fluid and cursive, with the first name "Jennifer" written in a larger, more prominent script than the last name "Apple".

Jennifer L. Apple, PhD
Associate Professor of Biology
SUNY Geneseo
Geneseo, NY 14454