

Statement for the Record
U.S. Department of the Interior
Senate Committee on Energy and Natural Resources
S. 2056, the National Volcano Early Warning and Monitoring System Act
September 22, 2016

Thank you for providing the Department of the Interior with the opportunity to present this Statement for the Record on S.2056, the *National Volcano Early Warning and Monitoring System Act*. The Department strongly supports S. 2056 and shares its goal of improving public and aviation safety through comprehensive monitoring of the most threatening volcanoes in the United States and its Territories.

The National Volcano Early Warning System (NVEWS) is the U.S. Geological Survey's (USGS) approach to upgrading and modernizing its monitoring networks to ensure that all active volcanoes in the United States and its Territories are monitored at levels commensurate with their threat. NVEWS priorities are based on a 2005 national assessment of volcano threat levels, which the USGS is in the process of revising to incorporate new knowledge. While several network upgrades were made possible through the American Reinvestment and Recovery Act (ARRA) stimulus of 2009-2011, the USGS has since been making opportunistic NVEWS upgrades funded out of existing base resources. The USGS has achieved 30% completion of network upgrades to NVEWS standards with some Very-High-Threat and High-Threat volcanoes lacking basic monitoring networks. As with existing efforts, any work conducted to fulfill the objectives of the bill would need to compete for funding with other Administration priorities.

This legislation would enable the building out of the NVEWS network and will improve the USGS' capabilities to detect eruption precursors at the earliest possible stages (usually weeks to months before an eruption) and to deliver probabilistic eruption forecasts and warnings to the public, land managers, emergency responders and the aviation sector. The success of volcanic hazard mitigation efforts is highly dependent upon the quality and comprehensiveness of the in-ground monitoring networks deployed on and around the Nation's active volcanoes, the scientific expertise in our volcano observatories, and the preparedness of communities through well developed and regularly exercised volcano emergency response plans.

The USGS is fully prepared to deliver an updated implementation plan for completion of the National Volcano Early Warning and Monitoring System for the Nation's Very-High-Threat and High-Threat volcanoes in response to the legislation. The volcano research grants program that would be authorized under bill S. 2056 would allow the USGS to engage more of the Nation's major universities in this basic and applied research and lead to advancement of the field of volcanology. The USGS has a successful track record of effective leveraging of resources with other federal agencies, state geological surveys and universities. An authorized grants program under bill S.2056 would enable continued collaboration and design and development of promising and cost-effective volcano monitoring technologies of the future.