Seismological Society of America

Statement by SSA Board of Directors on the National Volcano Early Warning System (NVEWS)

The Seismological Society of America supports the National Volcano Early Warning System (NVEWS) and urges Congress to reauthorize and fully fund this program.

The United States has over 160 active or recently active volcanoes, including 18 categorized as very high threat and 39 as high threat by the U.S. Geological Survey. These hazards pose a significant national threat to public safety, transportation and commerce (Update to the U.S. Geological Survey National Volcanic Threat Assessment, 2018[1]).

Many volcanic eruptions exhibit seismological and other precursory indications of elevated eruptive hazard that allow for implementation of public, military, business, transportation, and other safety precautions to reduce risk (Volcanic Eruptions and Their Repose, Unrest, Precursors, and Timing, National Academies Press, 2017[2]). The public interest can thus be advanced by a well-coordinated and technologically modernized national early volcano warning effort that monitors the most hazardous volcanoes well in advance of the onset of eruption. Despite recent and ongoing advances in monitoring and volcano science realized at the five U.S. volcano observatories and by the global volcanological community, many US volcanic centers remain insufficiently monitored.

NVEWS will dramatically improve multiple capabilities for US stakeholders and bolster the volcano monitoring and research community. These include: Increasing partnerships with local governments and emergency responders to improve preparedness and response; Increasing funding to university and other researchers to advance and implement cooperative volcano science, monitoring, and response strategies; Augmenting US Volcano Observatory staffing and resilient multi-disciplinary automated systems for 24/7 assessment of volcanoes and associated hazards, including earthquakes and tsunamis; and Developing new data sharing and computational capabilities that allow for the distribution and broad utilization of uniform and high quality authoritative volcano data to government offices, responsible agencies, the public, and the scientific community.

For these reasons and for the future safety, wealth, and security of the nation, SSA strongly encourages Congress to act in support of a sustained National Volcano Early Warning System.

Approved by the SSA Board of Directors, February 2023

[1] *https://pubs.er.usgs.gov/publication/sir20185140*

[2] *https://nap.nationalacademies.org/catalog/24650/volcanic-eruptions-and-their-reposeunrest-precursors-and-timing*