Statement for the Record
U.S. Geological Survey
U.S. Department of the Interior

before the Energy and Mineral Resources Subcommittee
of the House Committee on Natural Resources

on H.R. 2250, National Landslide Preparedness Act Reauthorization Act of 2025; H.R. 3168, National Earthquake Hazards Reduction Program Reauthorization Act of 2025; and H.R. 3176, to amend the John D. Dingell, Jr. Conservation, Management, and Recreation Act to reauthorize the National Volcano Early Warning and Monitoring System

May 20, 2025

Chairman Stauber, Ranking Member Ansari, thank you for inviting the Department to provide this statement on three bills that reauthorize key programs within the U.S. Geological Survey (USGS) that help make the United States a more hazard-ready nation.

For geologic hazards such as earthquakes, landslides, and volcanoes, the USGS provides timely and accurate information to emergency managers and response officials. USGS monitoring and geospatial data combined with multi-disciplinary expertise deliver real-time situational awareness and long-term hazard assessments to inform and educate at-risk communities during crises and to anticipate and prepare for future geologic hazard events.

H.R. 2250

Landslides are a deadly and costly hazard that impact every U.S. state and territory. The USGS is the lead Federal agency providing actionable landslide hazard and risk information to decision makers and the public. We also lead advances in the use of lidar to map topography to ever higher fidelity, valuable applications of which are landslide hazard assessments and other core public safety and commercial applications. The National Landslide Preparedness Act (NLPA), first signed into law by President Trump in January 2021, has accelerated efforts to reduce Americans' exposure to landslide hazard and risk through the National Landslide Hazard Reduction Program and 3D Elevation Program. Under the Act, the USGS has expanded national coverage of landslide inventories and hazard assessments; delivered faster, more accurate debris flow early warnings to state and Federal partners, including post-wildfire; developed emergency response protocols for landslide disasters; and dramatically increased the coverage of high-resolution topographic data available to support hazard analyses across the United States. We have also established interagency and advisory bodies to ensure efficiency and oversight called for by the Act. Studying landslides requires more than just lidar, and lidar is used to study more than just landslides, but the association of the two activities by NLPA is appropriate and effective. In addition, expanding coordination and development of improved mapping of stream networks from lidar will improve community risk assessments of destructive post-wildfire debris flows.

H.R. 2250 would reauthorize NLPA through 2030. Changes to NLPA, such as new priorities focusing on atmospheric rivers and other hydrologic events, as well as new frameworks for regional stakeholder participation, will improve implementation in the future. The Department supports the intent of H.R. 2250, but would like to work with the Sponsor to align the authorization levels to the President's Budget.

H.R. 3168

Earthquakes represent one of our Nation's most significant and costly natural hazards. Thirty-seven U.S. States, and all U.S. Territories have experienced an earthquake exceeding magnitude five over the past two centuries, and 50 percent of States have a significant potential for future damaging shaking. The USGS and our partner agencies, the National Science Foundation, the National Institute of Standards and Technology, and the Federal Emergency Management Agency, have participated in the interagency National Earthquake Hazards Reduction Program (NEHRP) since its inception in 1977, following the San Fernando Earthquake in Los Angeles. NEHRP has helped make America "earthquake ready" with innovative science, extensive seismic monitoring networks, and the first earthquake early warning system in the U.S., *ShakeAlert*. NEHRP exists to reduce the losses associated with earthquake hazards, in recognition that although earthquakes are inevitable, their consequences for people and the built environment are not.

Under NEHRP, the USGS recently published an unprecedented 50-state National Seismic Hazard model, describing the likelihood and potential effects of earthquakes nationwide. The USGS also developed and deployed the first-ever earthquake early warning system for the U.S., called *ShakeAlert*, which is now live across California, Oregon, and Washington and which has delivered potentially life-saving information on pending shaking for dozens of earthquakes. Since its inception, *ShakeAlert* has delivered real-time information on tens of thousands of earthquakes domestically and abroad, including impact estimates and aftershock forecasts, through some of the most heavily utilized web pages across the Federal government, receiving tens of millions of visitors even on days without significant earthquake activity. In collaboration with FEMA, the USGS has recently updated estimates of annualized earthquake losses for the nation, showing reductions in loss when measured against increases in building value, which indicates progress in reducing building vulnerability largely thanks to the efforts of NEHRP.

H.R. 3168 would reauthorize NEHRP through 2030 and includes several improvements to NEHRP the USGS supports. In particular, the bill would integrate the Chair of the Scientific Earthquake Studies Advisory Committee into the NEHRP oversight structure. This body is the most important external advisory to the USGS related to earthquake science, and codifying its role within NEHRP will strengthen the program. H.R. 3168 would also authorize future expansion of earthquake early warning and the dissemination of aftershock forecasts after significant earthquakes, both of which are tools the USGS and our NEHRP partners will need to make America even safer from earthquakes. The Department supports the intent of H.R. 3168, but would like to work with the Sponsor to align the authorization levels to the President's Budget.

H.R. 3176

The National Volcano Early Warning System (NVEWS) authorization was first signed into law by President Trump in 2019 to establish a unified and integrated volcano monitoring system for the Nation to ensure public safety from volcano hazards. The USGS has pursued this objective by merging our volcano observatories into one interoperable Volcano Science Center, and we have begun planning a national volcano information center to make our data more useable and provide watch office capabilities around the clock. Earlier this year, unrest at Mt. Spurr west of Anchorage reminded us why volcano monitoring is crucial to the Nation. Hundreds of thousands of Americans and millions of dollars of cargo traveling by plane can be impacted by eruptions. The USGS volcano monitoring capabilities enabled by NVEWS are essential to addressing gaps in coverage keeping Americans safe.

H.R. 3176 would reauthorize NVEWS through 2030. The Department supports the bill as introduced.