THE SENATE
THIRTY-SECOND LEGISLATURE, 2024
STATE OF HAWAII

S.R. NO. 3

JAN 22 2024

SENATE RESOLUTION

URGING THE UNITED STATES GEOLOGICAL SURVEY TO CONDUCT TOPOGRAPHICAL SURVEYS, PARTICULARLY WITHIN LAVA-FLOW HAZARD ZONES 1 AND 2, TO UPDATE ITS LONG-TERM LAVA-FLOW HAZARD MAP OF HAWAII ISLAND.

WHEREAS, for emergency management purposes, a hazard is an event or condition of the physical environment that results or may likely result in damage to property; injury to or death of individuals; or damage to the environment; and

WHEREAS, active volcanos are natural hazards that can repeatedly threaten public safety; and

WHEREAS, the tephra, ashfall, lahars, volcanic gas, lava flows, pyroclastic density currents, and volcanic landslides from a volcanic eruption can not only lead to an immediate loss of life and property, but also negatively alter the nearby environment for years to come; and

WHEREAS, there are six volcanoes that are classified as active in the State: Kilauea, Mauna Loa, Hualalai, and Mauna Kea on Hawaii Island; Haleakala on the east side of Maui; and Loihi, an underwater volcano within state waters southeast of Hawaii Island; and

WHEREAS, in 1974, the United States Geological Survey (USGS) prepared a map of Hawaii Island showing long-term lava-flow hazards based on existing geologic data. This map was updated in 1992 and published as "USGS Miscellaneous Field Studies Map 2193" and is still used today; and

WHEREAS, USGS Miscellaneous Field Studies Map 2193 divides Hawaii Island into nine lava-flow hazard zones that are numerically ranked on a scale of decreasing hazard as the numbers increase; for example, Zone 1 is at highest risk and includes the summits and rift zones of active volcanoes where volcanic vents have been repeatedly active in historic time, and Zone 2 includes areas adjacent to and encompassing the downslope of active rift zones; and

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WHEREAS, these zones are designated based on the locations of probable eruption sites, the likely path of lava flows erupting from those sites, the frequency of lava flow inundation of an area over the past several thousand years, and structural and topographical features that would affect the direction of lava flows; and

WHEREAS, USGS Miscellaneous Field Studies Map 2193 is intended to communicate long-term lava-flow hazards but may not reflect the vulnerability of resources that are likely to be affected by lava flows, the value of the lives or property that is threatened by lava flows, nor does it account for the elevation differences within the lava-flow hazard zones; and

WHEREAS, since 1992, while most lava flows erupted from Kilauea Volcano on Hawaii Island have remained within the Hawai'i Volcanoes National Park, according to the USGS, the volcano's geologic history indicates that future activity will continue to threaten residential areas on the volcano's south flank; and

WHEREAS, the USGS Miscellaneous Field Studies Map 2193 was last updated in 1992, and an update to that map could provide state and county emergency management agencies, and affected residents and businesses to better understand risks from volcanic hazards on Hawaii Island; now, therefore,

BE IT RESOLVED by the Senate of the Thirty-second Legislature of the State of Hawaii, Regular Session of 2024, that the United States Geological Survey is urged to conduct topographical surveys, particularly within lava-flow hazard zones 1 and 2, to update USGS Miscellaneous Field Studies Map 2193; and

BE IT FURTHER RESOLVED that the updated surveys are requested to include more detailed assessments of risk based on elevation differences within each lava-flow hazard zone included in the existing version of USGS Miscellaneous Field Studies Map 2193; and

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BE IT FURTHER RESOLVED that a certified copy of this Resolution be transmitted to the Director of the United States Geological Survey.

OFFERED BY: