

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.

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

5
6 WHEREAS, active volcanos are natural hazards that can
7 repeatedly threaten public safety; and

8
9 WHEREAS, the tephra, ashfall, lahars, volcanic gas, lava
10 flows, pyroclastic density currents, and volcanic landslides
11 from a volcanic eruption can not only lead to an immediate loss
12 of life and property, but also negatively alter the nearby
13 environment for years to come; and

14
15 WHEREAS, there are six volcanoes that are classified as
16 active in the State: Kilauea, Mauna Loa, Hualalai, and Mauna Kea
17 on Hawaii Island; Haleakala on the east side of Maui; and Loihi,
18 an underwater volcano within state waters southeast of Hawaii
19 Island; and

20
21 WHEREAS, in 1974, the United States Geological Survey
22 (USGS) prepared a map of Hawaii Island showing long-term lava-
23 flow hazards based on existing geologic data. This map was
24 updated in 1992 and published as "USGS Miscellaneous Field
25 Studies Map 2193" and is still used today; and

26
27 WHEREAS, USGS Miscellaneous Field Studies Map 2193 divides
28 Hawaii Island into nine lava-flow hazard zones that are
29 numerically ranked on a scale of decreasing hazard as the
30 numbers increase; for example, Zone 1 is at highest risk and
31 includes the summits and rift zones of active volcanoes where
32 volcanic vents have been repeatedly active in historic time, and
33 Zone 2 includes areas adjacent to and encompassing the downslope
34 of active rift zones; and



S.R. NO. 3

1
2 WHEREAS, these zones are designated based on the locations
3 of probable eruption sites, the likely path of lava flows
4 erupting from those sites, the frequency of lava flow inundation
5 of an area over the past several thousand years, and structural
6 and topographical features that would affect the direction of
7 lava flows; and

8
9 WHEREAS, USGS Miscellaneous Field Studies Map 2193 is
10 intended to communicate long-term lava-flow hazards but may not
11 reflect the vulnerability of resources that are likely to be
12 affected by lava flows, the value of the lives or property that
13 is threatened by lava flows, nor does it account for the
14 elevation differences within the lava-flow hazard zones; and

15
16 WHEREAS, since 1992, while most lava flows erupted from
17 Kilauea Volcano on Hawaii Island have remained within the Hawai'i
18 Volcanoes National Park, according to the USGS, the volcano's
19 geologic history indicates that future activity will continue to
20 threaten residential areas on the volcano's south flank; and

21
22 WHEREAS, the USGS Miscellaneous Field Studies Map 2193 was
23 last updated in 1992, and an update to that map could provide
24 state and county emergency management agencies, and affected
25 residents and businesses to better understand risks from
26 volcanic hazards on Hawaii Island; now, therefore,

27
28 BE IT RESOLVED by the Senate of the Thirty-second
29 Legislature of the State of Hawaii, Regular Session of 2024,
30 that the United States Geological Survey is urged to conduct
31 topographical surveys, particularly within lava-flow hazard
32 zones 1 and 2, to update USGS Miscellaneous Field Studies Map
33 2193; and

34
35 BE IT FURTHER RESOLVED that the updated surveys are
36 requested to include more detailed assessments of risk based on
37 elevation differences within each lava-flow hazard zone included
38 in the existing version of USGS Miscellaneous Field Studies Map
39 2193; and

40

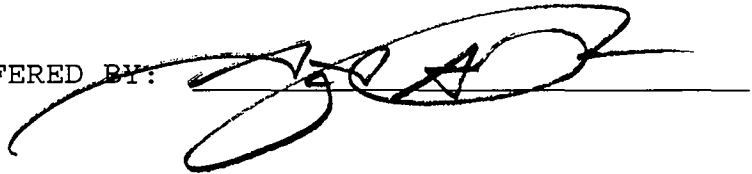


S.R. NO. 3

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

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OFFERED BY:

A handwritten signature in black ink, appearing to be "J. A. D.", is written over a horizontal line. The signature is stylized and somewhat illegible.