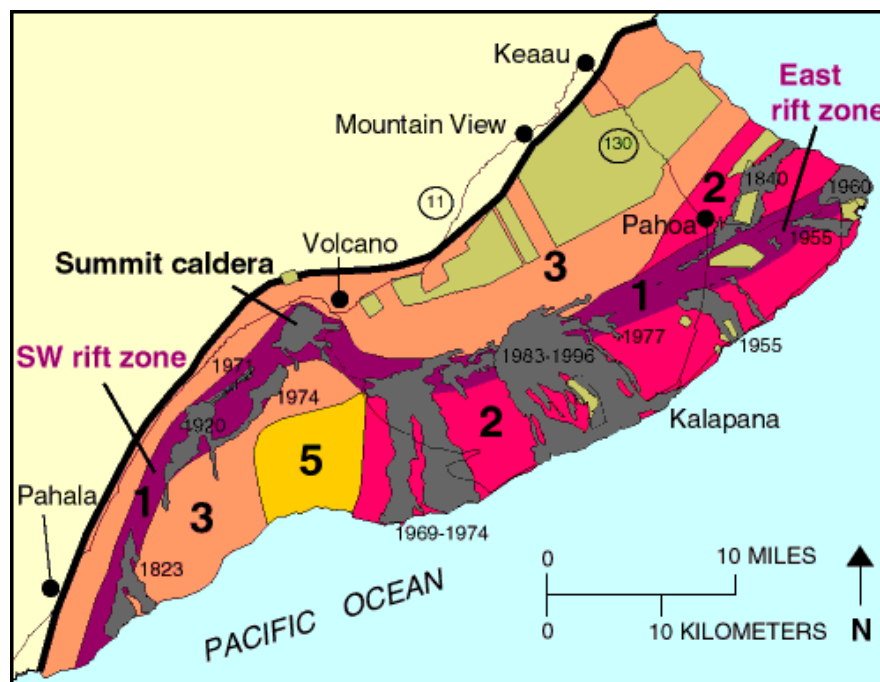


Kilauea

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Kilauea is Hawai'i's youngest volcano and one of the world's most active. Over 90 percent of Kilauea's surface is covered by lava less than 1,100 years old. In historical time, all of Kilauea's eruptions have occurred either in or near its summit caldera, or along the east or southwest rift zones. For the foreseeable future, we can assume that active vents will be limited to these areas.



Map of current lava-flow hazard zones for lava flows on Kilauea Volcano

The flows erupted since 1800 are shown in gray and dated. The map (simplified from map reference below) divides the island into zones that are ranked from 1 through 9 based on the probability of coverage by lava flows (see [table of hazard zone descriptions](#)). Twenty-eight percent of the area encompassed by Zones 1 and 2 on the east half of the volcano has been covered by lava since 1955. The major housing subdivisions on the slopes of the volcano are shown in green. More detailed information about lava flow hazard zones on Kilauea can be found in [Volcanic and Seismic Hazards on the Island of Hawai'i](#) and the map reference below.

Hazard Zones for Lava Flows on the Island of Hawai'i

Hazard zones from lava flows on the Island of Hawai'i are based chiefly on the location and frequency of historic and prehistoric eruptions and the topography of the volcanoes. Scientists have prepared a map that divides the five volcanoes of the Island of Hawai'i into zones that are ranked from 1 through 9 based on the relative likelihood of coverage by lava flows.

Zone	Percentage of area covered by lava since 1800	Percentage of area covered by lava in last 750 years	Explanation
1	greater than 25	greater than 65	Includes the summits and rift zones of Kilauea and Mauna Loa where vents have been repeatedly active in historic time.
2	15-25	25-75	Areas adjacent to and downslope of active rift zones.
3	1-5	15-75	Areas gradationally less hazardous than Zone 2 because of greater distance from recently active vents and/or because the topography makes it less likely that flows will cover these areas.
4	about 5	less than 15	Includes all of Hualalai, where the frequency of eruptions is lower than on Kilauea and Mauna Loa. Flows typically cover large areas.
5	none	about 50	Areas currently protected from lava flows by the topography of the volcano.
6	none	very little	Same as Zone 5.
7	none	none	20 percent of this area covered by lava in the last 10,000 yrs.
8	none	none	Only a few percent of this area covered in the past 10,000 yrs.
9	none	none	No eruption in this area for the past 60,000 yrs.

Reference

Wright, T.L., Chu, J.Y., Esposito, J., Heliker, C., Hodge, J., Lockwood, J.P., and Vogt, S.M., 1992, Map showing lava-flow hazard zones, island of Hawaii: U.S. Geological Survey Miscellaneous Field Studies Map MF-2193, scale 1:250,000.