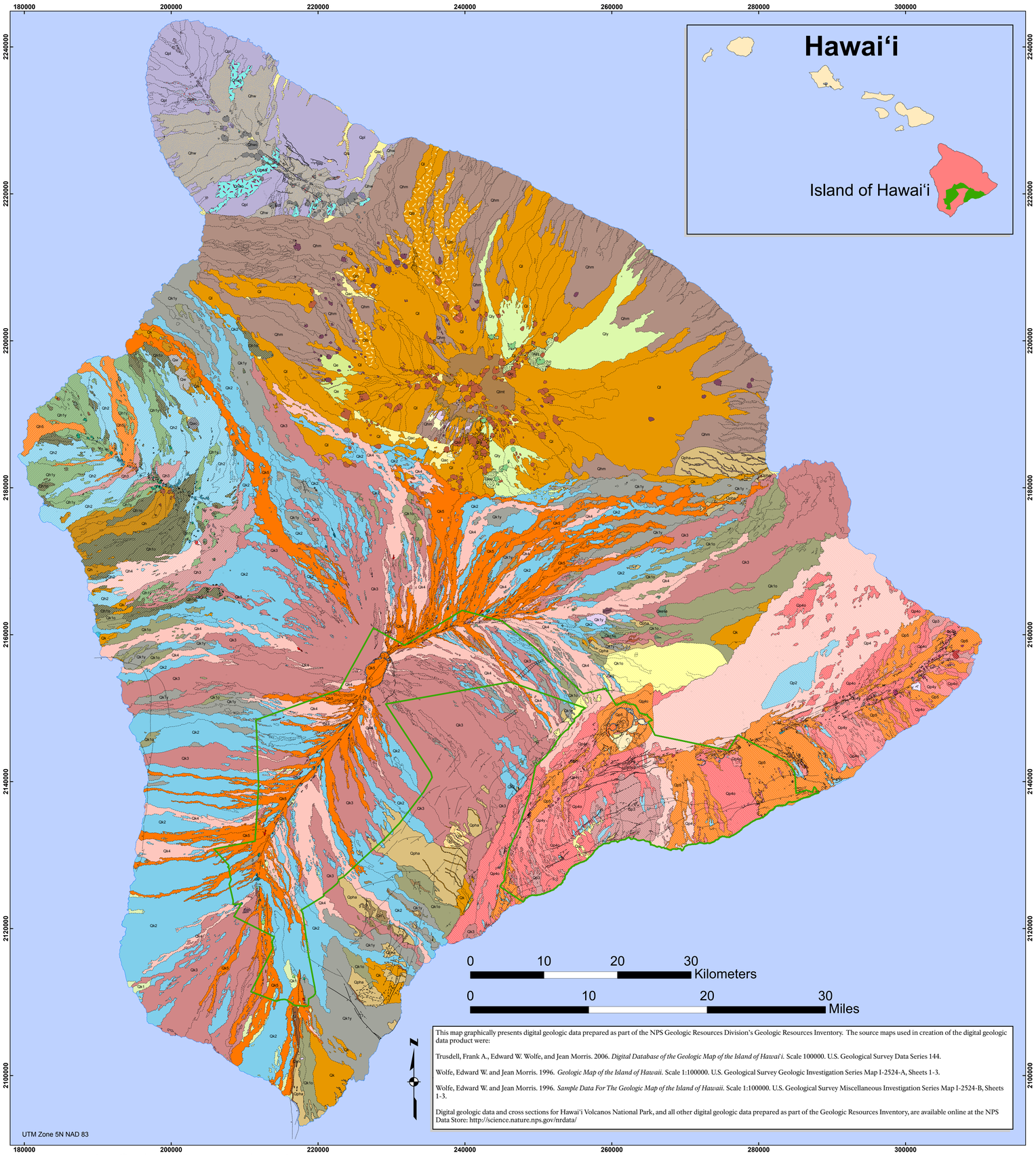
Geologic Map of Hawai‘i Volcanoes National Park



This map graphically presents digital geologic data prepared as part of the NPS Geologic Resources Division's Geologic Resources Inventory. The source maps used in creation of the digital geologic data product were:

Trusdell, Frank A., Edward W. Wolfe, and Jean Morris. 2006. *Digital Database of the Geologic Map of the Island of Hawai'i.* Scale 100000. U.S. Geological Survey Data Series 144.

Wolfe, Edward W. and Jean Morris. 1996. *Geologic Map of the Island of Hawaii.* Scale 1:100000. U.S. Geological Survey Geologic Investigation Series Map I-2524-A, Sheets 1-3.

Wolfe, Edward W. and Jean Morris. 1996. *Sample Data For The Geologic Map of the Island of Hawaii.* Scale 1:100000. U.S. Geological Survey Miscellaneous Investigation Series Map I-2524-B, Sheets 1-3.

Digital geologic data and cross sections for Hawai'i Volcanos National Park, and all other digital geologic data prepared as part of the Geologic Resources Inventory, are available online at the NPS Data Store: http://science.nature.nps.gov/nrdata/

NPS Boundary

Geologic Sample Localities

- Age-Date Sample Locality
- Non-Age-Date Sample Locality

Observation, Observed Extent and Trend Lines

- stratigraphic section line, known or certain

Volcanic Point Features

- vent

Volcanic Line Features

- eruptive fissure, known or certain
- non-eruptive fissure, known or certain
- flow direction line, known or certain

Fault Map Symbology

- fault down-side (bar and ball) indicator

Faults

- reverse fault, known or certain
- reverse fault, approximate
- reverse fault, concealed
- normal fault, known or certain
- normal fault, approximate
- normal fault, concealed
- unknown offset/displacement fault, known or certain

Deformation Area Contacts

- known or certain
- scratch boundary

Deformation Areas

- ground-crack zone

Ash Contacts

- known or certain
- approximate
- water or shoreline

Geologic Contacts

- known or certain
- approximate
- concealed
- water or shoreline
- scratch boundary

Ash Units

- Qcal - steep wall of caldera or crater
- Qsd - slope deposits
- Qpha - Pahala Ash
- Qpc5 - Puna Basalt
- Qp5 - Puna Basalt
- Qpa5 - Puna Basalt
- Qpa4o - Puna Basalt
- Qpa2 - Puna Basalt
- Qka3 - Kau Basalt
- Qkc - Kau Basalt
- Qkh - Kahuku Basalt
- Qha4 - Haualalai Volcanics, basalt
- Qlay - Laupahoehoe Volcanics, younger volcanic rocks member
- Qlc - Laupahoehoe Volcanics, older volcanic rocks member
- Qla - Laupahoehoe Volcanics, older volcanic rocks member
- Qhwa - Hawi Volcanics

Geologic Units

Surficial Deposits

- Qcal - steep wall of caldera or crater
- Qf - fill
- Qls - landslide deposits
- Qac - alluvium and colluvium
- Qe - eolian deposits
- Qsd - slope deposits

Regional Ash Deposits

- Qpha - Pahala Ash

Kilauea Volcano

- Qpc5 - Puna Basalt, cone
- Qp5 - Puna Basalt, lava flow
- Qpld5 - Puna Basalt, littoral cone
- Qpa5 - Puna Basalt, tephra deposit
- Qpc4y - Puna Basalt,cone
- Qpc4o - Puna Basalt, cone
- Qp4 - Puna Basalt, lava flow
- Qp4y - Puna Basalt, lava flow
- Qp4o - Puna Basalt, lava flow
- Qpld4o - Puna Basalt, littoral cone
- Qpa4o - Puna Basalt, tephra deposit
- Qpc3 - Puna Basalt, cone
- Qp3 - Puna Basalt, lava flow
- Qpld3 - Puna Basalt, littoral cone
- Qpc2 - Puna Basalt, cone
- Qp2 - Puna Basalt, lava flow
- Qpa2 - Puna Basalt, tephra deposit
- Qp1y - Puna Basalt, lava flow
- Qp1o - Puna Basalt, lava flow
- Qhi - Hilina Basalt, lava flow

Mouna Loa Volcano

- Qkc5 - Kau Basalt, cone
- Qk5 - Kau Basalt, lava flow
- Qkld5 - Kau Basalt, littoral cone
- Qkc4 - Kau Basalt, cone
- Qk4 - Kau Basalt, lava flow
- Qkld4 - Kau Basalt, littoral cone
- Qkc3 - Kau Basalt, cone
- Qk3 - Kau Basalt, lava flow
- Qkld3 - Kau Basalt, littoral cone
- Qka3 - Kau Basalt, tephra deposit
- Qkc2 - Kau Basalt, cone
- Qk2 - Kau Basalt, lava flow
- Qkld2 - Kau Basalt, littoral cone
- Qkc1 - Kau Basalt, cone
- Qkc1y - Kau Basalt, cone
- Qkc1o - Kau Basalt, cone
- Qk1 - Kau Basalt, lava flow
- Qk1y - Kau Basalt, lava flow
- Qk1o - Kau Basalt, lava flow
- Qkld1 - Kau Basalt, littoral cone
- Qkc - Kau Basalt, cone
- Qk - Kau Basalt, lava flow
- Qkh - Kahuku Basalt, lava flow
- Qn - Ninole Basalt, lava flow

Hualalai Volcano

- Qhc5 - Haualalai Volcanics, basalt, cone
- Qh5 - Haualalai Volcanics, basalt, lava flow
- Qh4 - Haualalai Volcanics, basalt, lava flow
- Qhc4 - Haualalai Volcanics, basalt, cone
- Qha4 - Haualalai Volcanics, basalt, tephra deposit
- Qhc3 - Haualalai Volcanics, basalt, cone
- Qh3 - Haualalai Volcanics, basalt, lava flow
- Qh2 - Haualalai Volcanics, basalt, lava flow
- Qhc2 - Haualalai Volcanics, basalt, cone
- Qhc1y - Haualalai Volcanics, basalt, cone
- Qh1y - Haualalai Volcanics, basalt, lava flow
- Qh1o - Haualalai Volcanics, basalt, lava flow
- Qhc1o - Haualalai Volcanics, basalt, cone
- Qhc - Haualalai Volcanics, basalt, cone
- Qh - Haualalai Volcanics, basalt, lava flow
- Qwc - Haualalai Volcanics, Waawaa Trachyte Member, cone
- Qw - Haualalai Volcanics, Waawaa Trachyte Member, lava flow

Mauna Kea Volcano

- Qlcy - Laupahoehoe Volcanics, younger volcanic rocks member, cone
- Qly - Laupahoehoe Volcanics, younger volcanic rocks member, lava flow
- Qlay - Laupahoehoe Volcanics, younger volcanic rocks member, tephra deposit
- Qlc - Laupahoehoe Volcanics, older volcanic rocks member, cone
- Ql - Laupahoehoe Volcanics, older volcanic rocks member, lava flow
- Qla - Laupahoehoe Volcanics, older volcanic rocks member, tephra deposit
- Qlbc - Laupahoehoe Volcanics, older volcanic rocks member, cone
- Qlb - Laupahoehoe Volcanics, older volcanic rocks member, lava flow
- Qlmt - Laupahoehoe Volcanics, Makanaka Glacial member, glacial deposit
- Qlmo - Laupahoehoe Volcanics, Makanaka Glacial member, glacial deposit
- Qhmc - Hamakua Volcanics, basalt, cone
- Qhm - Hamakua Volcanics, basalt, lava flow
- Qhmw - Hamakua Volcanics, Waihu Glacial member, glacial deposit

Kohala Volcano

- Qhwc - Hawi Volcanics, scoria cone
- Qhwd - Hawi Volcanics, lava dome
- Qhw - Hawi Volcanics, lava flow
- Qhwa - Hawi Volcanics, tephra deposit
- Qhwbc - Hawi Volcanics, scoria cone
- Qhwbd - Hawi Volcanics, lava dome
- Qhwb - Hawi Volcanics, lava flow
- Qhwtd - Hawi Volcanics, lava dome
- Qhwt - Hawi Volcanics, lava flow
- Qplc - Pololu Volcanics, scoria cone
- Qpl - Pololu Volcanics, lava flow
- Qpld - Pololu Volcanics, lava dome
- Qplmc - Pololu Volcanics, scoria cone
- Qplm - Pololu Volcanics, lava flow