

**EXPLANATION**

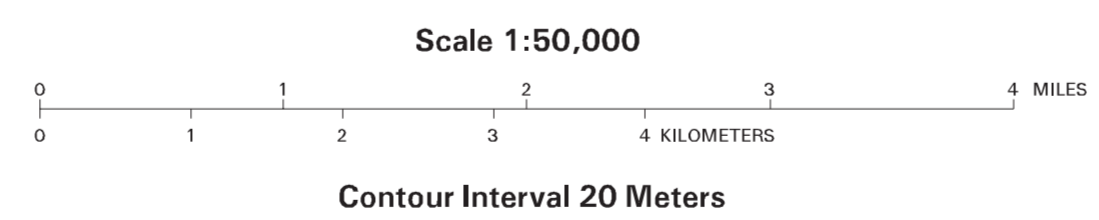
- Proximal Volcanic Hazard Zone**  
 Areas that could be affected by pyroclastic flows, pyroclastic surges, lava flows, and ballistic projectiles in future eruptions from San Salvador volcano [6]. During any single eruption, some drainages may be affected by some or all phenomena, while others may be completely unaffected. Debris avalanches and lahars originate within the proximal volcanic hazard zone, but depending upon their size may move farther down stream beyond the flanks of the volcano and beyond the limit of this zone.
- Lahar Hazard Zones**  
 Channels that head on San Salvador volcano are subject to lahars generated by debris avalanches, torrential rains, earthquakes, etc. Lahar hazard zones are subdivided into five zones on the basis of a range of hypothetical lahar volumes [7].
- Area that could be inundated by a lahar having a volume of 100,000 cubic meters. Highest probability.
  - Area that could be inundated by a lahar having a volume of 300,000 cubic meters.
  - Area that could be inundated by a lahar having a volume of 500,000 cubic meters.
  - Area that could be inundated by a lahar having a volume of 1 million cubic meters.
  - Area that could be inundated by a lahar having a volume of 2 million cubic meters. Lowest probability.



NOTE: Although the map shows sharp boundaries for hazard zones, the degree of hazard does not change abruptly at these boundaries. Rather, the hazard decreases gradually as distance from the volcano increases (small volume events are more common than large volume events). In addition, for lahars, the hazard decreases rapidly as elevation above the valley floor increases. Areas immediately beyond outer hazard zones should not be regarded as hazard-free, because the boundaries of hazard zones can be located only approximately, especially in areas of low relief. Many uncertainties about the source, size, and mobility of future events preclude locating the boundaries of zero-hazard zones precisely.

Numeral in brackets refer to endnotes in the report.

Base maps from El Salvador 1:50,000 scale series; San Salvador quadrangle, 1984 (2557 II); Nueva San Salvador quadrangle, 1983 (2557 III) from best available source; Digital Base Maps from Trimble Avenstar, Inc., Universal Transverse Mercator projection, Zone 16, Horizontal Datum North American 1927, Vertical Datum Mean Sea Level, Spheroid Clarke 1866.



This map is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards or with the North American Stratigraphic Code. Any use of trade, product, or firm names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

**Volcano Hazards in the San Salvador Region, El Salvador**  
 by  
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