

Mount st. helens essay

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Mount St. Helens is an active stratovolcano found the County of Skamania, Washington. It is located at the Pacific Northwest region of the United States, 96 miles (154 km) south of the Seattle and 53 miles (85 km) northeast of Portland, Oregon (Harris 201). Mount St.

Helens was named after Lord St. Helens, a British diplomat who was a very close friend of George Vancouver, the explorer who made a survey of the area and discovered the mountain in the late 18th century. The mountain is a part of the Cascade Volcanic Arc, which is a segment of the Pacific Ring of Fire that is a chain of more than 160 active volcanoes (Mullineaux & Crandell 2). St. Helens' growth began 37, 600 years ago in the Pleistocene, with dacite and andesite eruptions of ash and fiery pumice.

About 36, 000 years ago, large mudflows that cascaded down the mountain helped build seismic pressure that eventually led to an eruptive cycle (Harris 203 – 205). Mt. Helens is well known for its ash explosions and pyroclastic flows. Eight alternating light- and dark-colored layers of silica-rich lava in the form of andesitic ash flows about 7500 feet below the summit, that's about 3500 feet below the base. When it explodes, blocky andesite lava flow from St.

Helens' summit crater and down the volcano's southeast flank. There are clear differences between the ancestral and modern compositions of lava expelled by St. Helens.

The former was mainly made of a mixture of dacite and andesite while the latter tends to have very diverse composition, ranging from olivine basalt to andesite and dacite (Mullineaux & Crandell 11).. The 1980 eruption was

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preceded by two months of earthquakes and steam-venting episodes which were traced later to have been caused by magma injections at shallow depth below the mountain base (Kramer 13). The magma formation created a dangerous fracture system on the North Slope of the volcano which eventually caused its explosion.

Estimates as to the damages caused by the disaster reached more than US\$3 billion. The federal government upon the approval of the United States Congress released a supplemental appropriation of \$951 million which largely went to small business administration and infrastructure reconstruction (Kramer 17 – 18). The areas ravaged by the volcano in 1980 have since been rebuilt and its inhabitants have moved on, although people living in the area are still always vigilant as St. Helens remains to be an active volcano, with smaller, dome-building eruptions continuing into the present day.

Works Cited: Harris, Stephen L. “ Mount St. Helens: A Living Fire Mountain”, Fire Mountains of the West: The Cascade and Mono Lake Volcanoes, 1st edition, Missoula, Montana: Mountain Press Publishing Company, pp.

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