

## 1980 Mt St Helens Eruption



On 18 May 1980, a catastrophic volcanic eruption occurred on the northern flank of Mt St Helens, a composite volcano, located in Washington, USA. The volcano is one of the largest and devastating in North America.

### Causes

The eruption was a result of the collision between North American Plate (continental crust) and the Nazca Plate (oceanic crust). The sinking of the Nazca Plate beneath the buoyant continental crust triggered magma to ooze to the surface in a violent manner which was facilitated by a 5.7 magnitude earthquake prior the eruption.

### Effects

- The magma composed of several gases blew out the northern side of the volcano.
- Pyroclastic debris incinerated objects in the path including trees and animals within a matter of seconds.
- The nearby Spirit Lake was filled and choked with ash making it black and unrecognizable.
- All aquatic lives in the lake were killed.
- 57 people were killed
- Several lahar flows were experienced
- Elk & deer wiped out
- Infrastructure including 250 homes, 47 bridges and 185 miles of highway was destroyed.
- \$951 million, almost a billion, was used for reparations.



*lahar flow, src Geodes*

### Short term responses

- Temporary shelter and accommodation was given.
- Medical supplies

### Long term responses

- Afforestation and Reforestation projects
- New tourist facilities established
- New houses, roads, bridges, railways e.t.c

*More about volcanoes and plate tectonics:*

<https://thegeoroom.co.zw/geomorphology/volcanoes.php>

<https://thegeoroom.co.zw/geomorphology/plate-boundaries.php>