

Volcanic Ash

The Cascade Range of the Pacific Northwest has more than a dozen active volcanoes. These snow-clad peaks are part of a 1,000 mile-long chain of mountains, which extend from southern British Columbia to northern California. Cascade volcanoes tend to erupt explosively, and have occurred at an average rate of 1-2 per century during the last 4,000 years.



Future eruptions are certain. Seven Cascade volcanoes have erupted since the first U.S. Independence Day slightly more than 200 years ago. Four of those eruptions would have caused considerable property damage and loss of life had they occurred today without warning. The most recent events were Mt. St. Helens in Washington (1980-86) and Lassen Peak in California (1914-1917). The existence, position and recurrent activity of Cascade volcanoes are generally thought to be related to the convergence of shifting crustal plates. As population increases in the Pacific Northwest, areas near volcanoes are being developed and recreational usage is expanding. As a result more and more people and property are at risk from volcanic activity.

The effects of a major volcanic event can be widespread and devastating. The Cascade Range in Washington, Oregon and northern California is one of the most volcanically active regions in the United States. Volcanoes produce a wide variety of hazards that can destroy property and kill people. Large explosive eruptions can endanger people and property hundreds of miles away and even affect the global climate. Some volcano hazards such as landslides can occur even when a volcano is not erupting.

Although there are no active volcanoes in Clatsop County (the closest volcano is Mt. Hood, Figure 1), it is important for counties to know the potential impacts of nearby volcanoes. While immediate danger area around a volcano is approximately 20 miles, ash fall problems may occur as much as 100 miles or more from a volcano's location; therefore, ash fall may affect Clatsop County. Table 1 displays the distances between Clatsop County and the nearest volcanoes.

Planning Resources

VIDEOS & PUBLIC SERVICE ANNOUNCEMENTS

St. Helens 1980s Eruption Footage <https://www.youtube.com/watch?v=AYla6q3is6w>

ARTICLES & DOCUMENTS

Mt. St. Helens Eruption: Facts & Information <https://www.livescience.com/27553-mount-st-helens-eruption.html>

Health Impacts of Volcanic Ash: A Guide for the Public
<https://www.ivhhn.org/information/health-impacts-volcanic-ash>

WEBSITES

Volcanic Ash Impacts & Mitigation (USGS) https://volcanoes.usgs.gov/volcanic_ash/

Volcano Observatory Program (USGS) <https://volcanoes.usgs.gov/observatories/cvo/>