

A look back 35 years after Mount St. Helens' deadly eruption

May 16 2015, byPhuong Le



In this April 1980 file photo, Mount St. Helens spews smoke, soot and ash into the sky in Washington state following a major eruption on May 18, 1980. May 18, 2015 is the 35th anniversary of the eruption that killed more than 50 people and blasted more than 1,300 feet off the mountain's peak. (AP Photo/Jack Smith, file)

Thirty-five years ago, Mount St. Helens in southwest Washington state erupted, killing 57 people, blasting more than 1,300 feet off the top and

raining volcanic ash for miles around. Today, the volcano has become a world-class outdoor laboratory for the study of volcanoes, ecosystems and forestry, as well as a major recreational and tourist destination.

THE DAY IT BLEW

Within minutes of a 5.1 earthquake that hit at 8:32 a.m. on May 18, 1980, the [volcano](#)'s north flank collapsed, triggering the largest landslide in recorded history. That set off powerful explosions that sent ash, steam, rocks and [volcanic gas](#) upward and outward. The lateral blast scorched and flattened about 230 square miles of dense forest.

Soon after, a plume of volcanic ash rose over 80,000 feet and rained down as far as 250 miles away in Spokane. Pushed by winds over the next few days, the ash cloud traveled east across the U.S. and encircled the globe in 15 days.

The eruption blew about 1,314 feet off the volcano and created a horseshoe-shaped crater in the mountain, which now stands at 8,363 feet.

MOST ACTIVE VOLCANO IN THE CASCADE RANGE

Yes, the volcano is still active. "But it's not erupting now," said Carolyn Driedger with the U.S. Geological Survey.

Scientists, however, are constantly recording activity in and around the mountain, including tiny temblors and gas releases.

In September 2004, after 18 quiet years, the volcano rumbled back to life with a swarm of tiny, shallow quakes. The first of a series of small explosions on Oct. 1 shot [volcanic ash](#) and gases into the air. A lava dome began to rise in the volcano's crater, building slowly over three years during the eruption period that lasted from 2004 to 2008.



In this 1980 file photo, Andy Setlow goes for a run near Moscow, Idaho, while wearing a mask to avoid breathing ash from the eruption of Mount St. Helens in Washington state more than 350 miles away. May 18, 2015 will mark the 35th anniversary of the eruption of the volcano. (Moscow-Pullman Daily News, Bob Bain, file/Via AP)

The volcano hasn't erupted since 2008, but it has been changing very subtly. Last year, scientists confirmed suspicions that fresh molten rock has been recharging the volcano since 2008. The magma reservoir about 5 miles beneath the volcano has been slowly re-pressurizing since 2008.

The uplift is slow, steady and subtle, measuring about the length of a thumbnail over six years, scientists said in 2014.

THE NEXT BIG ONE

Scientists say Mount St. Helens is the most [active volcano](#) in the Cascades and the most likely to erupt again, perhaps in this generation, but they can't predict years in advance when or how big it will be. There have been two significant eruptions at Mount St. Helens in the past 35 years.

Scientists meanwhile have developed new monitoring tools and installed a network of GPS and seismic monitors to track the mountain's movements. If the volcano reawakens, those monitors can detect signals to help scientists forecast whether an eruption is likely to happen within hours, days or weeks.

"We will know right away when there's some abnormal activity," Driedger said.



In this May 18, 2010 file photo, a memorial to those who lost their lives in the May 18, 1980 eruption of Mount St. Helens is shown near the Johnson Ridge Observatory at the Mount St. Helens National Volcanic Monument in Washington state. May 18, 2015 is the 35th anniversary of the eruption. (AP Photo/Ted S. Warren, file)

A LANDSCAPE RECOVERS

The once-barren gray landscape is coming back to life in the blast zone. Numerous species of plants, amphibians, fish and birds have returned and rebounded; some plants and animals surprisingly survived the blast.



In this May 20, 1980 file photo, trees knocked down by the May 18, 1980 eruption of Mount St. Helens are shown as viewed from the air along a logging road near the south fork of the Toutle River in Washington state. May 18, 2015 is the 35th anniversary of the eruption that killed more than 50 people and blasted more than 1,300 feet off the mountain's peak. (AP Photo/Perry, file)

"We're still in a rapid rate of change," said Charlie Crisafulli, research ecologist with the U.S. Forest Service. "We're gaining species. We're getting to where all the players are out there. The land is getting filled in."

One major noticeable change is the shift in dominant vegetation, from grass and lupine to deciduous shrubs and trees such as willow and alder, he said. A deciduous forest is returning to the landscape, changing the microclimate, light and other conditions and ushering in a turnover in species.

"We're really turning the corner in the ecological process," Crisafulli said. It's a story of succession, as important keystone species such as beavers, willow, lupine and others are facilitating the entry of other species.



In this May 18, 1980 file photo provided by the U.S. Geological Survey, Mount St. Helens erupts in Washington state, sending a plume of ash many miles skyward. May 18, 2015 is the 35th anniversary of the eruption that killed more than 50 people and blasted more than 1,300 feet off the mountain's peak. (USGS, Austin Post, file/Via AP)



In this May 26, 1980 file photo, a camper containing two victims of the Mount St. Helens eruption sits amidst the gray landscape about 8 miles from the mountain in Washington state. Markings in the volcanic ash in front of and behind the camper were left by a helicopter and a searcher who found the victims. May 18, 2015 is the 35th anniversary of the eruption that killed more than 50 people and blasted more than 1,300 feet off the mountain's peak. (AP Photo, File)



In this May 18, 1980 file photo, Mount St. Helens sends a plume of ash, smoke and debris skyward as it erupts. May 18, 2015 is the 35th anniversary of the eruption that killed more than 50 people and blasted more than 1,300 feet off the mountain's peak. (AP Photo, file)



In this May 17, 1980 file photo provided by the U.S. Geological Survey Cascades Volcano Observatory, Mount St. Helens is shown in Washington state the day before its massive eruption. May 18, 2015 is the 35th anniversary of the eruption that killed more than 50 people and blasted more than 1,300 feet off the mountain's peak. (USGS Cascades Volcano Observatory, Harry Glicken, file/Via AP)



In this 1980 file photo, a worker at an auto dealership in Moscow, Idaho uses a blower to remove ash from a car from the eruption of Mount St. Helens in Washington state, more than 350 miles away. May 18, 2015 will mark the 35th anniversary of the eruption of the volcano. (Moscow-Pullman Daily News, file/Via AP)



In this May 7, 2010 file photo, a tree stump is shown in front of Mount St. Helens in Washington state. May 18, 2015 is the 35th anniversary of the eruption of Mount St. Helens that killed more than 50 people and blasted more than 1,300 feet off the mountain's peak. (AP Photo/Ted S. Warren, file)



In this May 7, 2010 file photo, Mount St. Helens is shown against a backdrop of stars just before sunrise in Washington state. May 18, 2015 is the 35th anniversary of the eruption that killed more than 50 people and blasted more

than 1,300 feet off the mountain's peak. (AP Photo/Ted S. Warren, file)



In this March 9, 2005 file photo, lava glows in this time-exposure photograph taken just after nightfall at Mount St. Helens in Washington state. The volcano erupted violently 35 years ago on May 18, 1980, and briefly returned to activity in 2004 and 2005 before resuming its relative quiet level of activity today. (AP Photo/Ted S. Warren, file)



In this May 14, 2010 file photo, visitors look out a display window at the Johnston Ridge Observatory at Mount St. Helens National Volcanic Monument, Friday, May 14, 2010, in Washington state. May 18, 2015 is the 35th anniversary of the eruption that killed more than 50 people and blasted more than 1,300 feet off the mountain's peak. (AP Photo/Elaine Thompson, file)



In this July 20, 2013 photo, participants in a Mount St. Helens Institute guided hike head up the trail for the climb to lip of the crater of Mount St. Helens in Washington state. May 18, 2015 is the 35th anniversary of the eruption that

killed more than 50 people and blasted more than 1,300 feet off the mountain's peak. (The Daily News, Bill Wagner, file/Via AP)

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