



Mount St. Helens Sediment management measures

U.S. ARMY CORPS OF ENGINEERS

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Background

Mount St. Helens erupted May 18, 1980, blasting more than 3 billion cubic yards of volcanic ash and debris 14 miles into the sky and thundering down the mountain in an immense landslide of mud and rock. The extraordinary natural disaster killed 57 people and impacted the lives of thousands more.

In the months following the eruption, the U.S. Army Corps of Engineers managed to offset the impacts of the flow of debris into the Toutle, Cowlitz and Columbia rivers. Congress assigned the Portland District the responsibility and authority to find long-term solutions to manage the continuing flow of sediment and reduce flooding. The Spirit Lake Tunnel, completed in 1985, helped stabilize the lake's water levels. The Sediment Retention Structure, completed in 1989, keeps hundreds of millions of cubic yards of sediment from rushing down the Toutle River, preventing significant flooding and navigation problems.

Current actions

Today, sediment from the Mount St. Helens debris avalanche continues to cause flooding concerns to residents of Castle Rock, Kelso, Lexington and Longview, Wash.



In 2010, the Corps constructed a series of grade building structures designed to trap sediment flowing from the Mount St. Helens volcano, preventing it from making its way into the Cowlitz River system. Engineers believe these structures, located upstream from the SRS, combined with new modifications planned for the SRS spillway will help reduce the need for frequent dredging while still providing effective flood risk management.

The Corps is developing a long-term sediment management system designed to limit the amount of sediment flowing into the Toutle, Cowlitz and Columbia rivers.

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