Mount St. Helens Retrospective—Lives Changed, Lessons Learned, and Legacies of the 1980 Eruptions

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The 1980 catastrophic eruption of Mount St. Helens was a historic event that fundamentally changed how scientists and society view volcanoes. Residents gained a profound appreciation for the destructive power of volcanoes. Cascade volcanoes had seemed benign to many Pacific Northwesterners. But Mount St. Helens introduced a sense of insecurity, and caused people to question strongly held beliefs about the eternal nature of the landscape. Still, the eruption inspired a new generation of volcanologists and it increased international scientific cooperation. New ideas and technologies sparked a revolution in volcano monitoring and in our ability to provide hazard warnings. It transformed individuals in adjacent professions, causing regional news media to embark on increased science programming, and safety officials to bond over a newly recognized hazard. This presentation follows a generation of eruption eyewitnesses and responders moved deeply by events, who later designed new systems and partnerships for volcano safety in the Cascades. For additional background, see the 40th anniversary fact sheet, "Ten Ways Mount St. Helens Changed Our World—The Enduring Legacy of the 1980 Eruption" (https://pubs.er.usgs.gov/publication/fs20203031).

Biography: Carolyn Driedger's career with USGS began in 1978 at the USGS Project Office—Glaciology in Tacoma, Washington with research on glaciers in the Pacific Northwest and Alaska. In 1986 she began a longterm study of glacier-related debris flows at Mount Rainier. That project led to employment at the USGS Cascades Volcano Observatory (CVO). But, it was her earlier witnessing of the May 18, 1980 eruption of Mount St. Helens and taking part in the response that set the course for the remainder of her career. The experience provided a front-row seat for observation and reflection about the role of scientists in society. Carolyn works in partnership with public officials, emergency planners, news media, park interpreters, and educators to advance the cause of eruption preparedness. Some earlier career choices have informed Carolyn's current work, including teaching school in the USA and Kathmandu, Nepal, and working for the National Park Service.