

Cascade Volcanoes Teaching Resources and Professional Development Opportunities

Professional Development:

Special workshops and trainings for school staff upon request: USGS staff offer half, full, and multi-day workshops for teachers in volcanic areas of Washington state. Each is designed to provide educators with up-to-date information about their nearby volcano, and how to use existing curricula in classroom. Free. Clock hours offered. Contact outreach staff.

Mount Rainier teacher workshop: July 27-31, 2020 at Mount Rainier National Park—is **cancelled during 2020 due to the COVID19 crisis.**



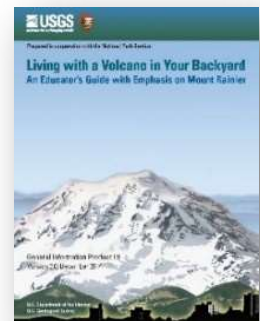
In-Class and At-Home Learning Resources:

Mount St. Helens Institute (MSHI)

<https://www.mshinstitute.org/> hosts the 2020 40th anniversary online resources. Check back frequently for links to activities, interviews, and special events assembled by MSHI staff and partners at Mount St. Helens National Volcanic Monument, Washington State Parks, USGS, the Army Corps of Engineers, Oregon Museum of Science and Industry (OMSI), Smithsonian, and others. **Keep Watching! More opportunities will be added!**



Living with a Volcano in Your Backyard Educator Guide available online: Lots of Activities about volcanoes! The Living with a Volcano in Your Backyard—An Educator's Guide was designed by and for scientists and educators in the Mount Rainier area. We invite educators and their students to learn what scientists are discovering about Mount Rainier's past; to explore its mysteries during this period of quiescence; and to plan future responses to volcanic unrest. <http://pubs.er.usgs.gov/publication/gip19>



USGS Webshort videos

Interviews with scientists:

https://volcanoes.usgs.gov/observatories/cvo/web_shorts_videos.html

Mount St. Helens Classroom Activities: Mount St. Helens Teacher's Corner Classroom Activities: <http://mshnvm.org/teachers-corner/lesson-plans-and-worksheets/>

Mount St. Helens Science and Learning Center

<http://www.mshslc.org/education-resources/>



VolFilms: Always online. The project oversees the development of short, educational films about volcano hazard, impacts, and the experiences of others. Developers have used a modular approach, designing three types of films that can be watched individually or in sequence. Useful for augmenting existing school curriculum. English and Spanish.

<https://vimeo.com/volfilm>



Volcano Explorers: (watch website for potential Fall 2020 showings) Volcano webinars for classrooms, offered by Mount St. Helens National Volcanic Monument, Mount St. Helens Institute, and the USGS. <http://mshinstitute.org/>

USGS Cascades Volcano Observatory Website, including HOT STUFF Current Events:
<http://volcanoes.usgs.gov/observatories/cvo/>

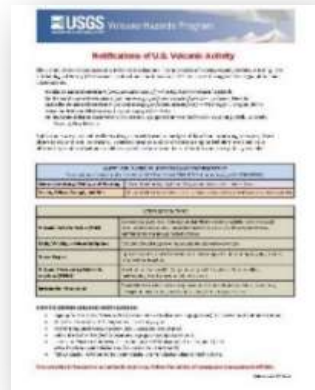
Recommendations USGS CVO website use in the classroom:
https://volcanoes.usgs.gov/observatories/cvo/classroom_use.html

Communications about volcano status:

USGS Volcanoes on Social Media: Postings about volcanoes in the US, the work of volcano scientists; and weekly volcano activity updates. Facebook, Instagram, Twitter. <https://www.facebook.com/USGSVolcanoes>

Volcano Notification Service (VNS): Register to receive email updates.
<http://volcanoes.usgs.gov/activity/status.php#cvo>

Volcano Preparedness Month in Washington, May annually, WATCH THIS WEBSITE FOR OPPORTUNITIES: <http://volcanoes.usgs.gov/observatories/cvo/>



Special Opportunities:

Geogirls: Early August annually. Five-day immersion into Mount St. Helens and geology careers for middle-school girls offered through USGS/Mount St. Helens Institute/several universities. Application period will open in late winter/early spring, 2021. WATCH THIS WEBSITE: <http://www.mshslc.org/>

Volcano Awareness Month: Declaration by governor, press release, special events in communities and online. Multi-agency commemoration annually since 2004. Check for annual Reddit AMA sessions about volcanoes.

Public Open House at USGS Cascades Volcano Observatory: Held every 2 to 3 years in May. Next scheduled for May 2021. Information on CVO website.

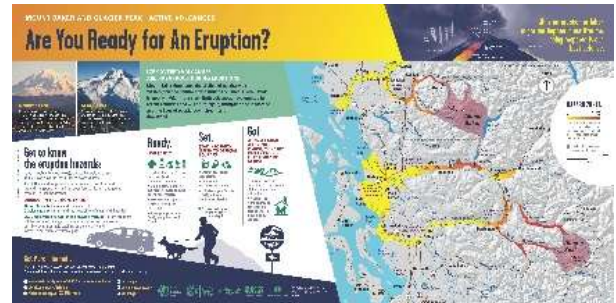


Opportunities for community officials and the public:

USGS-CVO Presentations and Trainings: We tailor our presentations to the audience and your needs for information. FEMA/USGS Volcano Crisis Awareness course and tailored trainings available upon request for school safety organizations, teachers, district officials, public information specialists.

USGS Volcano Traveling Community Exhibits: Table top temporary exhibits for Mount Baker/Glacier Peak; Rainier, volcanic ash, Cascade volcano hazards. Available on loan upon request. Commonly displayed in schools libraries, and special community events.

Community Interpretive Signs: Available on request at 11X17"; large scale version is suitable for posting outdoors. For permanent and temporary display and distribution at special events



USGS Fact Sheets for Washington Volcanoes and Hazards

Ten ways that Mount St. Helens changed our world—the enduring legacy of the 1980 eruption

Driedger C., Major J., Pallister J., Clynne A., Moran S., Westby E., and Ewert J. (2020), [Ten ways that Mount St. Helens changed our world—the enduring legacy of the 1980 eruption](#) U.S. Geological Survey Fact Sheet 2020-3031, 6 pages.

Living with volcano hazards

Stovall, W. K., Driedger, C., Westby, E. G. & Faust, L. M. (2019), [Living with Volcano Hazards](#). U.S. Geological Survey Fact Sheet 2018-3075, 6 p.

When volcanoes fall down—Catastrophic collapse and debris avalanches (ver. 1.2, August 2019)

Siebert, L., Reid, M.E., Vallance, J.W., and Pierson, T.C., (2019), [When volcanoes fall down—Catastrophic collapse and debris avalanches \(ver. 1.2, August 2019\)](#):U.S. Geological Survey Fact Sheet 2019-3023, 6 p.,

Lahar—River of volcanic mud and debris

Major, J.J., Pierson, T.C., and Vallance, J.W., (2018), [Lahar—River of volcanic mud and debris](#): U.S. Geological Survey Fact Sheet 2018–3024, 6 p.

Volcanic ash fall – a "hard rain" of abrasive particles

Kenedi, C.A, Brantley, S.R., Hendley II, J.W., and Stauffer, P.H. (2000), [Volcanic ash fall – a "hard rain" of abrasive particles](#) U.S. Geological Survey Fact Sheet 027-00, 2 p.

Mount Baker - living with an active volcano

Scott, K., Hildreth, W. & Gardner, C. (2000), [Mount Baker - living with an active volcano](#). U.S. Geological Survey Fact Sheet , 059-00, 4 p.

Glacier Peak – History and hazards of a Cascade Volcano

Mastin, L. G. & Waitt, R. (2000), [Glacier Peak – history and hazards of a Cascade Volcano](#). U.S. Geological Survey Fact Sheet , 058-00, 4 p.

Mount Rainier—Living safely with a volcano in your backyard

Driedger, C. & Scott, W. E. (2008), [Mount Rainier—Living safely with a volcano in your backyard](#). U.S. Geological Survey Fact Sheet , 2008-3062, 4 p.

Mount St. Helens, 1980 to now—what's going on?

Dzurisin, D., Driedger, C. & Faust, L. M. (2013), [Mount St. Helens, 1980 to now—what's going on?](#) U.S. Geological Survey Fact Sheet , 2013-3014, 6 p.

Mount St. Helens -- From the 1980 Eruption to 2000

Brantley, S. R. & Myers, B. (2000), [Mount St. Helens -- From the 1980 Eruption to 2000](#). U.S. Geological Survey Fact Sheet , FS-036-00, 2 p.

Pre-1980 eruptive history of Mount St. Helens, Washington

Clynne M.A., Ramsey, D.W., Wolfe E.W. (2005), [Pre-1980 eruptive history of Mount St. Helens, Washington](#) U.S. Geological Survey Fact Sheet 2005-3045, 4p.

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