Resources for extended learning

MOUNT ST. HELENS INSTITUTE

Learn more about Mount St. Helens:

- Visit the U.S. Geological Survey - Cascades Volcano Observatory webpage. Read about Mount St. Helens' geology and history, hazards, and monitoring. Browse multimedia (images, video, webcams). There are links to publications and additional resources for more in-depth exploration.
    - Watch primary source video of Mount St. Helens erupting as filmed from an airplane on May 18, 1980 (20 min).
    - Watch a video of scientists reflecting on the May 18, 1980 eruption.
- Learn more about the eruption of Mount St. Helens on an interactive website created by the U.S. Forest Service.
- Learn more about the return of life at Mount St. Helens by watching this interview with Charlie Crissafulli, Mount St. Helens National Volcanic Monument scientist.
- Learn about the science that is occurring at Mount St. Helens today! Learn more about the post-1980 eruptions at Mount St. Helens and the growth of the crater glacier:
    - Watch a video about USGS scientists studying the lava dome eruptions of 2004-2008 at Mount St. Helens.
    - Watch this timelapse of the growth of the glacier at Mount St. Helens created by computerized photographs by the U.S. Geological Survey.
    - Watch this timelapse of the lava dome growth during the eruption from 2004-2008 at Mount St. Helens created from photographs taken by the U.S. Geological Survey remote cameras.
    - Open the webcam to see into the crater of Mount St. Helens from a web camera.
- Learn more through photographs of Mount St. Helens:
    - Washington State University Vancouver Library Digital Collections, search for Clark County Historical Museum Photographs using keyword "Mount St. Helens"
    - Browse the photos in the U.S. Geological Survey Cascades Volcano Observatory Volcano Hazards Program Mount St. Helens Multimedia Photo Gallery.
    - Explore photographs of the 1980 eruption through this article in the Atlantic.
    - View this Flickr album with photographs of Mount St. Helens published by the U.S. Forest Service. These photographs are free to use for educational purposes.

Learn more about volcano monitoring:

- Find a seismic station at Pacific Northwest Seismic Network's Seismograms and click on "View Seismogram" to see the digital read-out.
- Read about the IMUSH project (Imaging Magma Under Mount St. Helens) and learn how scientists study volcanoes beneath the surface.
- Read weekly reports from the USGS Yellowstone Volcano Observatory in their series called "Caldera Chronicles."
- Read weekly reports from the Hawaii Volcano Observatory called Volcano Watch.

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Learn more about volcanoes and volcanic hazards:

- Reach this factsheet published by the U.S. Geological Survey "A 40-Year Story of River Sediment at Mount St. Helens"
- Learn where volcanoes are actively erupting today with the Smithsonian Global Volcano database. Watch an animation of eruptions and earthquakes that have occurred in our world since 1960!
- Browse the US Geological Survey's Volcano Hazards Program website.
- Learn more about the behavior of volcanoes by watching short films about volcano hazards made by VolFilm. VolFilm creates short educational films designed to help communities living near volcanoes.
- Download and explore this online booklet about landslides in Washington State created by the Washington Department of Natural Resources.
- Link to Washington State Department of Natural Resources printable booklet about landslides and hazards.
- Read about how the U.S. Army Corps of Engineers works near Mount St. Helens to control sediments and reduce flood hazards.
- Information about lahars: Visit the Washington State Department of Natural Resources informational page about volcanoes and lahars. Read this factsheet published by the U.S. Geological Survey about lahars called "Lahar-River of Volcanic Mud and Debris"
- Browse the Red Cross resource library and visit the U.S. government www.ready.gov page to learn more about how to be prepared for natural hazards.
- Find a list of resources specific to the long-term hazard of volcanic sediment including the Spirit Lake Tunnel Project and Sediment Retention Structure created by the Mount St. Helens Institute here.

Teach about volcanoes and earth science:

- Visit the Science Education Resource Center (SERC) to browse a multitude of resources. Includes teaching materials, workshops, resources for K12 and college level courses.
- Incorporate activities that are part of this educator guide called Living with a Volcano in Your Backyard that contains background information, student pages and teacher pages focusing on Pacific Northwest geology and Mount Rainier.
- Visit the IRIS Earthquake Education Page for information and resources, including animations, lessons, and professional development opportunities.
    - **IRIS** has a Teachable Moments resource that takes recent larger earthquakes and gathers all pertinent information (such as animations, visualization, PowerPoints) about the event, to describe the earthquake mechanics which caused it. Consider if you would like to participate in IRIS' Seismographs in Schools program.
- Visit the UNAVCO Education and Outreach page for resources for teachers and students along with data that illustrates various Earth science processes. Browse the UNAVCO's Data for Educators page that includes:

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- Analyzing Plate Motion Using EarthScope GPS Data
- Taking the Pulse of Yellowstone's "Breathing" Volcano
- Step-by-step instructions to explore GPS velocity vectors near your locale using the UNAVCO Velocity Viewer and instructions for viewing LiDAR imagery.

Visit Mount St. Helens!

- Learn about field-based educational programs offered with the Mount St. Helens Institute by visiting our webpage. Browse our program offerings to learn more about overnight and day field trips, summer camps, family camps and other outdoor programs.
- Join us for a virtual visit to Mount. St. Helens through our virtual field trips by exploring virtual field trips with the Mount St. Helens Institute..
- Plan a field trip to the U.S. Forest Service Visitor's Center at Johnston Ridge Observatory by visiting the Mount St. Helens National Volcanic Monument Teachers Corner page. This webpage has images, lessons and worksheets for teachers specific to Mount St. Helens.

Visit other places to learn about volcanoes and geology!

- Learn more about the top 100 places in Washington State to learn about geology on this new website wa100.dnr.wa.gov/south-cascades created by Washington Department of Natural Resources.