

PROJECT	PROJECT LEADERS	PROJECT DESCRIPTION	LOCATION	ACCESSIBILITY NOTES
<b>Day 3, August 9, 2023</b>				
<b>Let it shake! Seismology project</b>	<b>Avery Connor</b>	Landslides, rock falls, and other types of mass movement are common hazards at volcanoes. We can use seismic waves to safely observe these events at a distance. In this project, we are going to make some seismic waves to look at how different factors such as rock size or distance to a sensor affect the data that is recorded. We will set up some instruments and make some mini-rock falls by rolling rocks down a hill. Afterward, we will be able to look at the seismic wave data generated by our mini-rock falls!	Will be working along slopes that are within a 5 minute walk of the building. May walk along the service road that wraps around the Science & Learning Center and Winds of Change.	This project will occur all within walking distance of the Science & Learning Center building. No driving required. Project will take place off trail and will involve rolling rocks down hills near the SLC.
<b>Explosive Volcanoes</b>	<b>Heather Winslow &amp; Suki Smaglik</b>	Learn about why some volcanoes cause explosive eruptions! We will investigate rock samples under the microscope and explore different ways to simulate explosive volcanic eruptions.	This group will start at Science & Learning Center looking at rock samples, will not go far from the SLC, will not need to drive.	This group will start at Science & Learning Center looking at rock samples, will not go far from the SLC, will not need to drive.
<b>Tephra Project</b>	<b>Liz Westby &amp; Mallory Ford</b>	This project focuses on how to map and interpret tephra deposits. It begins indoors talking about explosive eruptions followed by drawing stratigraphic columns using tephra deposits in a clear plastic tube. The afternoon will be outdoors looking for deposits, trying to analyze what we see in the field, and relating it back to Mount St. Helens' May 18, 1980 eruption.	This group will start at the Science & Learning Center drawing stratigraphic columns and then will drive up to the Castle Lake overlook or other location where it might be possible to hike off trail to find tephra deposits.	This project will start at the Science & Learning Center. The morning will be spent indoors drawing. After lunch, the group will drive to Castle Lake overlook to hike off trail to explore to see if there are any tephra outcrops to dig around in and explore.
<b>Landslides of Coldwater Lake</b>	<b>Morgan Gifford</b>	We will be hiking along the Coldwater Lakes trail investigating landslide evidence along the way. Landslides that occur along the lake are not related to the May 18, 1980 eruption of Mount St. Helens, but are due to older history of glaciers in this area. Learn how to identify landslides on the landscape and have a great time hiking along one of the most scenic trails in the area!	Hike from Science & Learning Center to Coldwater Lake trail and end at Coldwater Lake boat launch.	This project will be on the Coldwater Lake hiking trail for the entire length of the day. We will begin hiking ~ 10:30 after some introductions and will return by 3PM. We will have lunch on the trail. We will stay on trail for the entire length of the hike. This hike has some shade but majority of the hike is in the sun along the shore of Coldwater Lake.

PROJECT	PROJECT LEADERS	PROJECT DESCRIPTION	LOCATION	ACCESSIBILITY NOTES
<b>Day 4, August 10, 2023</b>				
<b>SR-504 Debris Flow &amp; Unstable Slopes</b>	<b>Nora Utevsky &amp; Jenny DiGiulio</b>	Our research activity has two parts: 1) mini-landslide activity which showcases how water and earthquakes affect unstable soils and cause landslides and 2) visiting the debris flow on SR-504 at MP 49. For the mini-landslide activity, girls will make predictions and observations on how model houses will fair for a given material (found at Mount St Helens) and slope angle, combined with water and shaking. At the debris flow, we will make observations regarding on-site safety and slope conditions and predictions about how to possibly repair the roadway.	Will start at Science & Learning Center and then will visit multiple Sites along SR504. We will visit the area where the slide that happened on the 504 road.	We will start at the SLC (or outside at a table in camping area) until about 1130 and at the SR504 Debris Flow at MP 49 from 12-3 PM. We will hike less than one mile. For some of the project, we will be exposed and in the sun. We will try to be in the shade when possible. We will be going off trail.
<b>Finding Magma Underground with GPS</b>	<b>Emily Montgomery-Brown, Gabrielle Davy, JoAnna Marlow</b>	Deformation is one way we can tell if new magma is accumulating under a volcano. We have some GPS sites permanently installed, but we also need to survey in between those stations so our measurements cover more of the volcano. We will collect some GPS survey data around the Coldwater Science and Learning Center, and then process and analyze it. Since this is the first time this survey will be done, we will be establishing this experiment for future educational and scientific studies.	We will walk around the Coldwater center, and find survey points in the parking lot, make survey measurements, then we will take the instruments inside and download and process data. We will only be walking around the parking lot. This project does NOT involve hiking. We will be partly in the sun, partly indoors to download, process, and analyze data.	We will walk around the Coldwater center, and find survey points in the parking lot, make survey measurements, then we will take the instruments inside and download and process data. We will only be walking around the parking lot. This project does NOT involve hiking. We will be partly in the sun, partly indoors to download, process, and analyze data.
<b>Let it shake! Seismology project</b>	<b>Avery Connor</b>	Landslides, rock falls, and other types of mass movement are common hazards at volcanoes. We can use seismic waves to safely observe these events at a distance. In this project, we are going to make some seismic waves to look at how different factors such as rock size or distance to a sensor affect the data that is recorded. We will set up some instruments and make some mini-rock falls by rolling rocks down a hill. Afterward, we will be able to look at the seismic wave data generated by our mini-rock falls!	Will be working along slopes that are within a 5 minute walk of the building. May walk along the service road that wraps around the Science & Learning Center and Winds of Change.	This project will occur all within walking distance of the Science & Learning Center building. No driving required. Project will take place off trail and will involve rolling rocks down hills near the SLC.
<b>Pebble Count Sampling</b>	<b>Tami Christianson &amp; Erin Lysne</b>	The pebble count method is used for stream characterization. It is used to determine the particle size of material in a stream bed. This is one method that is used to study sediment transport in a stream.	We start hiking from the Hummocks Trail Head, continue some distance on the Boundary Trail, then go off trail to the NF Toutle River. The hike is 2.9 miles round trip. We will be mostly in the sun, but there are spots with shade that can be accessed. We hiked to this site last year also.	This is onen of the more strenous projects for hiking and accessibility. The hike is 2.9 miles round trip. We will be mostly in the sun, but there are spots with shade that can be accessed