

# TERC Field Trips

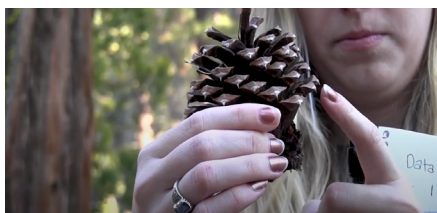
Thank you for your interest in a field trip with TERC! Field trips are offered in person at the Tahoe Science Center, as live virtual sessions facilitated by TERC educators, or as pre-recorded videos and with facilitation guides and worksheets. **Be sure to check the request form matches your preferences.** Please complete [this form](#) to schedule a field trip or to gain access to the materials for a pre-recorded field trip. All in person programs include a tour of the research vessel and laboratory exhibits in the Tahoe Science Center and a viewing of our “Lake Tahoe in Depth” 3-D film. Each of our field trips is adaptable to the grade levels listed and can be tailored to suit the needs of your class. Our detailed [NGSS guide](#) is also available for teachers looking to match your class’ current learning goals.



## Tahoe’s Aquatic Food Web (Grades 3–12)

Students participate in a scavenger hunt in our Underwater Lounge to learn about the wildlife of Lake Tahoe and create an aquatic food web. Students explore changes in our local Lake Tahoe aquatic food web. Students learn unique details about specific Tahoe organisms and use that knowledge to model the flow of energy with their peers either in person or using Google Jamboard. The food web model demonstrates the complexity and serves as a discussion for the many impacts from a single change.

**Available in person, live virtual, or pre-recorded**



## Trees of Tahoe (Grades 3–5)/Forest Health (Grades 6-8)

Students learn how to identify the common tree species found in Tahoe’s forests. They get to practice and apply these skills by performing a forest survey to assess the local biodiversity. Students then use their survey to determine the health of Tahoe’s forests. Trees of Tahoe can be adapted for older audiences to include forest health assessment.

**Available in person, live virtual, or pre-recorded**



## Water on Earth (Grades 3–5)

Students explore watersheds, the water cycle, freshwater as a limited resource, and Lake Tahoe water quality. Hands-on activities may include Blue Planet, Drop in a Bucket, Incredible Journey, Blue River, or Incline Creek Stream Monitoring (weather dependent).

**Available in person**



## Shaping Earth’s Surface (Grades 3–6)

Students explore the forces that shape Earth’s landforms and use models to investigate how water creates landforms through erosion and deposition. Students also learn how to read, utilize, and create their own topographic maps from 3D models.

**Available in person**



## Earth System Science (Grades 3–12)

This program includes an engaging game show that helps students conceptualize the Earth science concepts of life webs, cycles of matter, and flows of energy. A 3-Part Play shows how energy continuously flows through Earth and all of its life forms. Other topics covered on this field trip include the carbon cycle, the carbon budget, and the greenhouse effect.

**Available in person**



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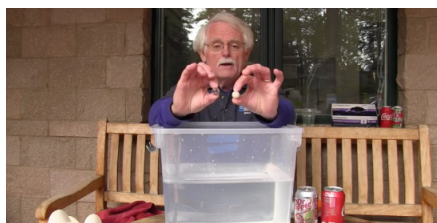
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## **The Tahoe System** (Grades 3–12)

This program provides an overview of the Tahoe Basin with a focus on systems thinking. Students explore some of the features of Lake Tahoe that make it so special and learn about the threats to the lake. Hands-on activities may include Watershed Model and Build Lake Tahoe, Pollution Adds Up, Incline Creek Stream, Race to Save Lake Tahoe, and Macro-invertebrate Monitoring.

**Available in person**



## **Formation of Lake Tahoe** (Grades 4–6; three 1-hour sessions\*)

Students are taken on a broad journey of the geological processes that formed Lake Tahoe over millions of years. Through several hands-on demonstrations, students explore big-picture earth science topics such as density, plate tectonics, and earthquakes, and make the connection of how those actions over time led to the formation of Lake Tahoe.

**Available live virtual or pre-recorded**

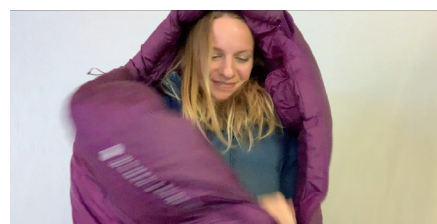
\*Live virtual sessions



## **Geology & Plate Tectonics** (Grades 4–8)

Students will learn about the geological processes that formed Lake Tahoe and how tectonic activity is still at work in the Tahoe Basin. Students also discover how seismic energy flows throughout the earth and shapes the entire world. Activities may include, Earthquake Energy, Rock Detective, Rock Around Tahoe, Earthquake Triangulation, Pangaea Puzzle, and Science on a Sphere Earthquake dataset.

**Available in person**



## **Climate Change at Lake Tahoe** (Grades 6–8; two 1-hour sessions\*)

Students start with an active and engaging lesson that discusses ways to combat climate change from a personal to global level. This is followed by an evidence-based exploration into how our changing climate affects Tahoe specifically. The field trip is designed to give students the information they need to understand the implications of this global crisis while empowering them to get involved!

**Available in person, live virtual, or pre-recorded**

\*Live virtual sessions

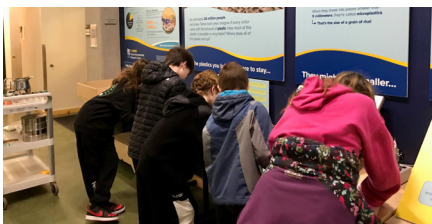


## **Environmental Detectives** (Grades 6–8)

Students will investigate human impact on both terrestrial and aquatic ecosystems while assessing watershed health. Students play the roles of the concerned public, scientists, and community leaders and collect and examine data to solve the “Mystery of the Dying Fish.”

**Available in person; 4 hours minimum required; \$250 cost minimum**

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## **The Microplastics Problem** (Grades 3–12)

Students learn how plastic products are rarely recycled and how the “chasing arrows” symbol at the bottom of plastics items is an example of green-washing. Students examine microplastics under a microscope and learn how they can prevent microplastic pollution. Students can develop original solutions to the global plastic problem, taking inspiration from different education programs, policies, and emerging technologies aimed at reducing microplastic pollution, plastic consumption, and/or plastic litter.

***Available in person***



## **Customized Tahoe Science Center Experience** (Grades 9–12)

With a focus on in-depth discussion of more advanced concepts, any of the above thematic programs are appropriate for high school student groups, or other groups who request a more specialized trip. We also offer tours of our laboratories, a green building tour of the LEED Platinum Science Center, Science on a Sphere Explorer, and a University of Nevada Reno at Lake Tahoe campus tour.

***Available in person or pre-recorded***

