



**Sierra Watershed
Education Partnerships**

*Promoting science literacy
through hands-on community
projects*

Projects and Events

World Water Monitoring

Students Think Globally, Act Locally

This fall, SWEP hosted a myriad of water quality monitoring field days. Students ranging from grades 3-7, collected water quality data on creeks throughout the North Tahoe and Truckee regions.

In honor of World Water Monitoring Day (Oct.18), students got to learn first hand the importance of clean water. Seventh graders from Sierra Mountain Middle School conducted water quality tests and macroinvertebrate samples on Sagehen Creek. Third and fifth graders from Kings Beach Ele-

mentary explored Griff creek. Tahoe Lake 4/5 multiage tested the Truckee River. In all, there were over 300 students out on local creeks this fall!

All students collected the same set of data; temperature, ph, dissolved oxygen and conducted qualitative assessments. The field experience differed between grade levels depending on what standards could best be met. For instance, third graders were challenged to understand that scientists use different instruments to collect certain

Truckee River Day

This year, the 8th annual Truckee River Day brought out over 500 volunteers, including a troupe of girl scouts interested in watershed improvement. Troupe 229&558 joined SWEP staff in the effort to help protect cottonwood trees on lower Trout Creek. The trees are suffering from the effects of busy beavers trying to build dams along the creek.

A mixture of latex paint and sand was brushed on to the lower four feet of the trees near the creek. The intended effect is to deter the beavers from chewing on the trees. This method has been used successfully in other areas afflicted with beaver damage.

When beavers build dams on small creeks (and larger ones too), they create ponds

Winter January '04

Human beings, by changing the inner attitudes of their minds, can change the outer aspects of their lives.

*William James
(1842 - 1910)*

types of data. They were then instructed on how to read a thermometer, ph strip and record the data on the data sheet. Seventh graders focused on how the temperature, ph and dissolved oxygen effect life in and around the creek. They also learned about the structure and function of the aquatic insects that are indicators of water quality.

SEE STUDENTS ON TV!!!

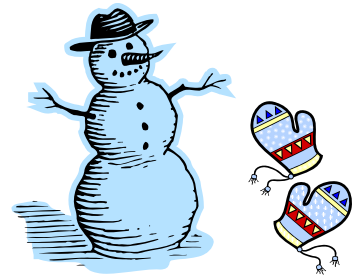
Tahoe Lake fifth graders are on TV educating the public about water quality and erosion issues that effect Lake Tahoe.

Check it out!!

Channel 12: 6-7pm daily
Channel 3: 10pm daily;
9am Saturday and Sunday
Channel 6: 10pm daily;
7am Mon/Tue, Sat/Sun

which can change the course of the creek, affecting wildlife habitat and riparian vegetation.

The issue of the North American Beaver is a controversial one. Some believe that they are not part of the native fauna here and negatively affect habitat and restoration efforts. Others believe that the pools they create become vital habitat for fish, as well as expanding the riparian corridor.



2004

Winter Workshop Series

Snow Tracking

Bob Milne

Nevada State Parks

February 7

9am-12noon

Bring your snow shoes! Interpretive specialist Bob Milne will lead you through the winter forest in search of animal tracks and habitat. Bob will help us to discover 'clues' to animal behavior and winter activity. No dogs please.

Washoe History

Washoe Elders

March 4, 2004

4:00-6:30pm

Washoe elders will give us insight to the "Washeshu" culture and history as it relates to the Lake Tahoe basin. Learn about traditional uses of native plants; prepare for potential restoration projects on Washoe lands.

Forest Health:

Burning Issues

Rich Harvey

March 25, 2004

4:00-6:30pm

This workshop will focus on fire ecology, creating defensible space at school or home and the role of this natural process in a healthy forest system.

*SWEP is requesting a
\$5 donation for each hike*

To register, contact:

Jan Ellis

530-546-5622

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Dates To Re-

January 23-24: Place-Based Learning Workshop; Tahoe Lake School

January 27: Site Advocates meeting, NTMS, 4-6pm

February 7: Snow Tracking Winter Workshop, 9am-1pm

February 10-11: Project Citizen Training; PCOE, Auburn. (Subs avail.)

March 4: Washoe History

March 25: Forest Health: Burning Issues

March 23: Partnership Meeting, Celebration; TTUSD District Office

March 28-31: National Service Learning Conference; Florida

April 2: Service Learning 101: Reflection tools

April 20: Site Advocates Meeting, SMMS

May 18: Site Advocates Meeting, KBE

SAYING GOODBYE, FOR NOW

SWEP program manager, Christine McMorro, will be leaving for New Zealand in early February to study Education at the University of Otago. Christine will be returning to her SWEP duties in December 2004. SEE YOU THEN!!

Tahoe-Truckee Service Learning

Tahoe Truckee Youth-Community Advisory Board

Youth leaders in our community have identified a need for more interaction between themselves and the adults in our community. The goal: To work together toward a more positive atmosphere in the high school community. In response, the TTSLP applied for and received a grant from Placer County Health and Human Services Strengths and Assets Promotion Program. The grant will fund the development of a district-wide youth council.

In their initial meeting on January 7, the group deemed themselves *The Tahoe Truckee Youth-Community Advisory Council*. High school students, including those from public, continuation, home school and charter schools are invited to participate.

To start, the Council seeks to be involved with the Tahoe Truckee Unified School District

and influence the decisions made that affect the needs of the youth in the community. Eventually, the council would like to have youth representatives involved with other boards, town meetings and community events planning.

The Council has received additional funds from Calserve to be used toward a youth philanthropy initiative. This initiative is designed to give students the opportunity to grant money to individuals and organizations working on projects that support youth development in our community.

If you are an adult or high school-age youth and interested in participating with this council, please contact:

Sarah Dorland, TTSLP Vista volunteer at 582-2517.

Partnership Highlight: *Derek Larson*

Formed by a community of professional educators and highly trained outdoor guides in the North Lake Tahoe area, TAO Education seeks to network with schools and youth groups in order to promote natural history education, outdoor skills, leadership, and stewardship toward the environment. TAO serves students in schools from Reno, Lake Tahoe, and the San Francisco Bay area.

Derek Larson, educator, outdoor enthusiast and president of TAO Education, believes that a combination of physical and cognitive activity has a lasting effect on the kids he works with. "I believe that adventure is a key way to grab their attention and make them want to learn more about their surroundings. This is why we at TAO Education provide a full spectrum

of adventure activities in addition to first rate environmental education."

Adventure activities include, backpacking, rock climbing, kayaking and winter trekking. TAO provides the equipment and staff necessary to instruct youth in the outdoor setting. Derek knows that school budgets often do not allow for this kind of education, which is precisely why he founded TAO—to allow youth access to a kind of education they may not otherwise get.

SWEP has had the privilege to work with TAO and SMMS 7th graders at Sagehen Creek Field Station. While TAO organized and funded the program (a total of four field days), SWEP contributed to the educational component by conducting water quality monitoring tests and studying the aquatic insect life in the creek.



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