



Sponsored by University of Nevada Cooperative Extension and University of California Cooperative Extension

Inside this issue:

Spotlight on K-12 Working Group	2
Guest Speakers Needed	2
Education Grant Awarded	3
AmeriCorps Volunteers Join LTEEC	3
Kids Learn Ecology, Have Fun Outdoors	3
Tahoe Rim Trail Officially Opens	4
Tahoe Baikal Institute Fosters Leadership	4
Calendar of Events	5
Tahoe's Amazing Plan (continued)	6
Clean Water Team Releases 2001 Report	6
About LTEEC	7

Tahoe's Amazing Plan: The Environmental Improvement Program (EIP)

By John Cobourn

When the Tahoe Regional Planning Agency (TRPA) released its Threshold Evaluation Report for 1996, it declared that new measures would have to be taken in order to reverse the downward trend in Lake Tahoe's water clarity. Scientists warned that if we did not improve our protection efforts, the deterioration of the lake's water quality could become irreversible early in the 21st century. The next year, the TRPA presented an integrated plan to complete more than 500 capital improvement (restoration) projects within 20 years. This plan, known as the Environmental Improvement Program (EIP), represented the first ever comprehensive approach to improving lake health.

TRPA's new booklet, Leaving a Lake Tahoe Legacy, describes the EIP with clear language and striking color photographs. For all educators interested in teaching the public about the monumental efforts to save Lake Tahoe, Leaving a Lake Tahoe Legacy is a must.



The EIP calls for an ambitious, \$1.4 billion program of scientific research, restoration projects and long-term maintenance programs to meet environmental goals or "thresholds" in these nine areas: water quality, soil conservation, air quality, vegetation, fisheries, wildlife, scenic resources and community design, recreation and noise abatement. Even with funding contributions by federal, state and local governments, the

(Continued on page 6)

Visit the LTEEC Web Site at
<http://www.lteec.org>

Contact Us:
 Lake Tahoe Environmental Education Coalition
 University of Nevada Cooperative Extension
 Post Office Box 8208
 865 Tahoe Boulevard, Suite 110
 Incline Village, NV 89452-8202

Phone: 775-832-4150
 Fax: 775-832-4139
 Email: segaleh@unce.unr.edu



COOPERATIVE EXTENSION
Bringing the University to You

The University of Nevada, Reno is an equal opportunity affirmative action employer and does not discriminate on the basis of race, color, religion, sex, age, creed, national origin, veteran status, physical or mental disability, sexual orientation, in any program or activity it operates. The University of Nevada employs only United States citizens and aliens lawfully authorized to work in the United States.

K-12 Watershed Education Working Group in the Spotlight

LTEEC Seeks Guest Speakers For the Classroom

LTEEC wants to urge resource professionals to consider participating in classroom presentations. A database of agency staff that are willing to take a few hours each school year to talk to the students of Lake Tahoe is being compiled for Tahoe Basin teachers. This "Community Leaders in the Classrooms" database will provide teachers with a list of possible topics and local contacts. Additionally, community leaders (resource professionals or interested community members) will have the opportunity to attend training workshops to learn how to provide appropriate presentations to various grade levels.

To add your name to the Community Leaders in the Classroom database call Heather Segale at (775) 832-4150. LTEEC's K-12 working group can also help connect resource professionals and teachers. Please let us know you care about the future generations here at Lake Tahoe, and participate this school year.

Local Teacher Quotes

Here is what local educators say about bringing resource professionals into classrooms:

• "Guest speakers are invaluable... they add a dimension of authenticity to the topics discussed in the classroom. Kids get far more excited about a subject when a guest speaker comes into the classroom. It not only stimulates the kids but also reinvigorates the teachers!" – Diana Reiner, South Tahoe Middle School

• "Many times the students ask questions that I can't answer about a specific topic, but the specialist knows the information and even challenges the thinking of my students by immersing them in



Students view the Watershed Model

their field of study with hands-on activities, slide shows, artifacts, demonstrations, and real life experiences. Another positive outcome from having a specialist visit my classroom is that it often opens up career pathways for my students." – Cathy Ricioli, Kingsbury Middle School

• "In teaching third grade for the past 7 years, I have found that the most influential activities are hands-on experiences or information kinds get from "experts" that work in other jobs (preferably both). The children get excited about realizing the information they are learning has relevance in the world outside of school." -Beth Quandt, Myers Elementary

• "By working with resource professionals on projects, students see themselves as doing valuable work, and this can increase their sense of self worth. The information given by the resource folks lasts with students; it's not just something they have read in a book or heard their teacher speak of." – Toni Rockwell, Rideout Elementary School

"The philosophy of the school room in one generation is the philosophy of the government in the next generation."

Abraham Lincoln

• "Environmental education has been a part of the curriculum in Tahoe Basin schools for nearly 20 years, but teachers around the Region echo the same concerns; they want their students to work on real problems mentored by real scientists. We wish to commend and thank those resource professionals who devote some of their valuable time and energy to classroom or field projects." – Sue Rae Irelan, Sierra Watershed Education Partnerships

Environmental Education Shown to Improve Student Achievement on Standardized Tests

Using the "Environment as an Integrating Context" (EIC) for learning is recognized by the Education Commission of the States (www.ecs.org) as one of the "promising practice(s)... that show evidence of success in improving student achievement." In simple terms, EIC uses local natural and community surroundings as the "venue" for teaching and learning.

The State Education and Environment Roundtable undertook a nationwide study of 40 schools beginning in 1996. Research from the study indicate that EIC has positive effects on learning. These effects include:

- Better performance on standardized measures of academic achievement in reading, writing, math, science and social studies, and on teachers and instruction
- Reduced discipline and classroom management problems
- Development of problem-solving
- Increased engagement and enthusiasm for learning
- Greater pride and ownership in accomplishments (Lieberman & Hoody, 1998)

Ways You Can Connect With Teachers and Students

- Be a part of the "Community Leaders in the Classroom" Resource Guide for Teachers
- Classroom Presentations
- Earth Day
- Watershed Fair
- Career Day
- Restoration Projects
- Service-Learning Projects
- Can you think of other fun activities?

AmeriCorps Volunteers Join LTEEC's K-12 Working Group

LTEEC would like to welcome the new AmeriCorps volunteers to the Tahoe area and to the K-12 Working Group. This year we have four AmeriCorps volunteers that are interested in environmental education outreach in the schools. Marianne Boccuzzi (Tahoe Regional Planning Agency Erosion Control Team), Elise DeLuna (North Shore League to Save Lake Tahoe), Laurie Smith (South Shore League to Save Lake Tahoe), and Rebecca Weinstein (Thunderbird Lodge Preservation Society) will be providing environmental education presentations to the schools on the following topics:

- Water Quality
- What is a Watershed?
- Erosion Control
- Sensitive Species
- Fire Prevention and Forest Health

If you are a teacher interested in a classroom presentation, please contact Heather Segale, Environmental Education Coordinator at (775) 832-4150.

Environmental Education Grant Awarded

Adopt-A-Watershed (AAW), Sierra Watershed Education Partnerships (SWEP) and the Lake Tahoe Environmental Education Coalition (LTEEC) were recently awarded a State of California Water Quality (Proposition 13) grant to fund a Regional K-12 Adopt-A-Watershed Coordinator in the Tahoe Basin as well as a Community Project Coordinator for



the Tahoe-Truckee School District. Besides funding these support positions, funds will also send teams of local teachers to the AAW Leadership Institute and provide local teacher training workshops and watershed education curriculum for use in the Tahoe schools.

Visit www.adopt-a-watershed.org

Kids Learn Ecology, Have Fun Outdoors

Lake Tahoe was the perfect classroom for Washoe County students to learn about local ecology. More than 100 children learned, explored, and made new friends at Lake Tahoe with Great Basin Outdoor School this past spring. Fourth-, fifth-, and sixth-grade classes studied during four-day sessions at Camp Galilee on Tahoe's east shore. Experienced field instructors, resource agency professionals, high school leaders, and volunteers led children in forest, water, wildlife, geology, and astronomy lessons. The program also offers a field trip to Spooner Lake and an educational boat ride with Marine Research & Education, Inc. aboard the research vessel.

Great Basin Outdoor School has spring and fall programs and hopes to expand to include winter programs. Teachers can call (775) 849-1890 for more information.



Great Basin Outdoor Education Students View Marine Research & Education Watershed Model

Tahoe Area Sierra Club Now Official

The Tahoe Area Sierra Club received its national recognition in August of 2001, after organizing for two years. For information on the Sierra Club, outings or to become a member, contact Shannon Raborn at (530) 320-1795, or check out the club's web site at www.motherlode.sierraclub.org/tahoe. Sierra Club meetings are held on the third Thursday of each month.



Project WET (Water Education for Teachers) workshops presented by the Water Education Foundation. Contact Judy Wheatley-Maben at (916) 444-6240, email jwheatley@watereducation.org, or visit www.watereducation.org for more information.

Tahoe Rim Trail Officially Open

After 20 years of work, the Tahoe Rim Trail, a 150-mile loop trail that runs along the ridges and mountaintops circling Lake Tahoe, was officially opened in September of 2001. To celebrate, the Tahoe Rim Trail Association hosted an event titled the 150-Mile Celebration on September 21-23.

The Tahoe Rim Trail is truly a trail like no other. Built and maintained by volunteers, the trail is open to runners, equestrians, hikers and, in most areas,



Official Dedication of the Tahoe Rim Trail 150-Mile Trek Leaders

mountain bikers. An estimated 3,000 people use the trail each week during peak summer and fall months.

The Tahoe Rim Trail Association, founded in 1981, is a non profit organization that builds, promotes and maintains the Tahoe Rim Trail. The Association works in partnership with the USDA Forest Service and Nevada State Parks. For more information, contact the Tahoe Rim Trail Association at (775) 588-0686 or visit their website at www.tahoerimtrail.org.



Tahoe Rim Trail Dedication Site

Derrick Jensen Guest Lecture

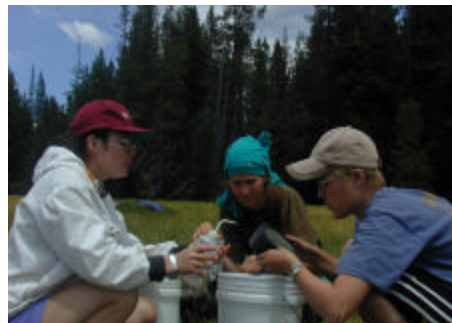
Derrick Jensen, author of *A Language Older Than Words*, will be speaking at 7 p.m., November 7 at the Jot Travis Student Union on the UNR campus. As an activist, writer, journalist, and philosopher, Derrick Jensen explores the complexities of violence, the nature of responsibility, and the power and necessity of expression. For more information on Derrick Jensen, visit

www.derrickjensen.org.

"All across the country, I ask activists and others, 'Do you believe our Culture will undergo a voluntary transformation to a sane and sustainable way of living?' Out of hundreds of people I've asked, not a single one has answered even remotely in the affirmative." - Derrick Jensen

Tahoe Baikal Institute: Fostering Environmental Leadership

The Tahoe-Baikal Institute recently completed its 11th exchange program – 17 students from Russia, Mongolia, Japan, and the United States studied environmental issues for five weeks in the Tahoe region and five weeks at Lake Baikal. The main focus of the Tahoe-Baikal program is to provide participants with a broad understanding of environmental issues and how they are being handled at two of the world's unique lakes - Lake Baikal, in Russia, and Lake Tahoe. The 10-week program brings together an international team of university-level students and young professionals to focus on the threatened environments, and provides a cultural and scientific forum where future environmental leaders can gain insight into regional and global ecological problems.



Russian TBI Students studying aquatic insects



After completed restoration project at Sunset Stables

The centerpieces of the program are two-week small-group projects in both countries. This year topics at Lake Tahoe included city planning with the City of South Lake Tahoe; Fallen Leaf Lake's food web with scientists from the Tahoe Research Group; protecting the endangered plant Tahoe Yellow Cress with the Tahoe Conservancy; and sampling Tahoe streams for aquatic insects to evaluate the success of restoration projects, an effort supported by both the Tahoe Research Group and the Conservancy. A month later, the students were involved in an erosion control project on Lake Baikal's biggest island, a forest health study in a nature preserve, and bird reintroduction in Zabaikalskiy National Park.

If you are interested in learning more about the Tahoe-Baikal Institute, please contact Silke Rover, Program Coordinator at (530) 542-5599 or tbi@etahoe.com.

Environmental Education Calendar of Events

October

October 6, 2001: Fire Fest at South Tahoe Middle School from 10 a.m. to 3 p.m. Fire Fest is designed to educate people about defensible space and best management practices. There are fire engines and helicopters for the kids, a buffet BBQ, and lots of fun.

October 6, 2001: Project-Based Learning and Community Mapping. Contact Sarah Green with the Sierra Watershed Education Partnerships at 530-550-0819.

October 10, 12, 13, and 14, 2001: Carson River Environmental Education Teacher Workshop in Carson City. Topics include River Morphology, Project Learning Tree, Excellence in Environmental Education, Project WET, Bio Assessment Method, Water Quality Testing. Contact Mark Kimbrough at 775-684-8116.

October 11, 2001: California Regional Environmental Education Community (CREEC) Network Meeting from 10:00 a.m. - 12:30 p.m. at Zephyr Point Presbyterian Conference Center. For more information please contact Harriet Goldman at 530/541-5589.

October 12 - 13, 2001: Project WET (Water Education for Teachers) Friday and Saturday (8:30 to 3:30) at the Tallac Vista Conference Center, South Lake Tahoe. This WET

workshop will focus on the water resource issues in the Lake Tahoe region, including water quality. Contact Judy Wheatley Maben at (916) 444-6240 to reserve your space now.

October 14, 2001: Truckee River Day includes hands-on projects, demonstrations and more. Contact Janie Collomb at (530) 546-7148 for more information.

October 15, 2001: Tahoe Forest Stewardship Team Leader Appreciation Dinner at Secret Harbor Camp Ground. Contact Dan Sussman, League to Save Lake Tahoe, 530-541-5388

October 18, 2001: Tahoe Area Sierra Club Meeting. Contact Shannon Raborn (530) 320-1795 or Michael Donahoe (775) 588-5466 for more information.

October 19, 2001: Snapshot Day Volunteer Appreciation Dinner Party at the Thunderbird Lodge. The final report from the 2001 Snapshot Day citizens monitoring event will be released. Contact Heather Segale at (775) 832-4150 for more information.

November

November 2, 2001: The Craft of Writing about Place - for teachers at all levels, and students in middle school and high school, at the Fourth Ward

Submit environmental education events for inclusion in the calendar of events. Updates are available at <http://www.lteec.org>

School Museum, Virginia City, (9 AM - 1 PM). Writing workshops on this day provide training to write more effectively about community life and environment by working with skilled poets, nonfiction writers, and novelists. Contact Craig Rock at (775) 847-7088.

November 3, 2001: Place-Based Learning: A Watershed Education Workshop at Rideout Elementary School, Tahoe City, 8:30 to 4:00 pm. Presented by Sierra Watershed Education Partnerships, this is a free workshop open to K-12 teachers and community members with an interest in supporting environmental education in the Tahoe Area. Contact Sarah Green at (530) 550-0819 for more information.

November 7, 2001: Derrick Jensen, author of *A Language Older Than Words* will be speaking at the Jot Travis Student Union at UNR. Contact Heather Segale at (775) 832-4150 for more information.

November 16 - 17, 2001: Citizen Water Quality Monitoring "Clean Water Team" Train the Trainers Workshop. Sponsored by the Clean Water Team of the California State Water Resources Control Board. Contact Dominic Gregorio (916) 341-5488 for details.

Watershed Academy Web-Based Training

The EPA-sponsored Watershed Academy Web modules allow you to learn on the internet--when your schedule allows, and at no cost. Modules include Watershed Introduction and Overview, Watershed Ecology, Watershed Change, and additional topics dealing with Watershed Management. Visit www.epa.gov/watertrain/

Tahoe's Amazing Plan: The Environmental Improvement Program (EIP)

(Continued from page 1)

successful completion of this program will present many challenges. In fact, the future of Lake Tahoe's environment now depends in large part on public awareness and support for the EIP.

The Connection to Environmental Education

How can the Lake Tahoe Environmental Education Coalition (LTEEC) help build public support for the EIP? First of all, we can educate each of our target audiences about the importance of a comprehensive plan like the EIP. Ecology studies the interconnectedness of all living things and the natural resources that sustain them. John Muir said if we try to pull anything out of nature to look at it, we find that it is hitched to everything else in the universe. To save Lake Tahoe, we must understand how all human activities in its watershed affect the health of the lake.

The EIP is a profound example of "integrated watershed management." Many EIP projects meet several goals at once. For instance, the restoration of a stream and meadow will reduce water pollution due to erosion and will also rehabilitate habitat for native plant and tree species. These, in turn, will provide healthy habitat for fish and wildlife.

In addition, the EIP works by "adaptive management," meaning that each project is monitored after completion to determine if it is providing optimal environmental protection. The results of monitoring are combined with the products of new scientific research to continually improve the design of restoration projects at the lake.

LTEEC's Role

LTEEC has divided into eight working groups in order to provide comprehensive coverage of various issues and reach several audiences at the lake. Our Citizens Restoration and Monitoring working groups complement the restoration and monitoring components of the EIP by teaching the public about the science that drives adaptive management.

The Partners in Conservation working group teaches homeowners how to install and maintain Best Management Practices (BMPs) in their residential landscapes, emphasizing that if we want to save the lake, we all need to be part of the solution. Citizens gain an appreciation for the value of the big capital projects while working on small-scale BMP projects of their own.

Our K-12 Watershed Education working group helps interested school teachers find guest speakers and hands-on environmental education activities to use in the classroom and outdoors. These environmental lessons can be used to enhance the

teaching of basic skills needed to meet rigorous academic testing standards.

What all of LTEEC's public outreach and classroom education activities have in common is a sense of purpose. As Dean Heller, TRPA Governing Board Chair, and Juan Palma, TRPA Executive Director, state in the introduction of Leaving a Legacy, "eventually people from all walks of life will accept the challenge to become a part of something greater than themselves--protecting and restoring the lake so future generations can enjoy it."

You can obtain a free copy of Leaving a Lake Tahoe Legacy at TRPA, (775) 588-4547, or at the University of Nevada Cooperative Extension office in Incline Village, (775) 832-4150. Multiple copies of this 16-page document are available from TRPA for distribution to groups and organizations.

We wish to thank authors Laura Read, David Ziegler and Pam Drum for permission to use excerpts from Leaving a Lake Tahoe Legacy.

Clean Water Team Releases 2001 Report

The first annual water quality monitoring "Snapshot Day" event was held on June 2, 2001 in the Lake Tahoe and Truckee River watersheds. More than 100 committed citizen-volunteers, working closely with many water quality management agencies, participated in gathering water quality information in the form of visual assessments, photos, and water quality data at 44 locations. The final report will be released at a volunteer appreciation party on October 19 at the Thunder-

bird Lodge. The party will include dinner catered by Wild Alaskan Fish Company and special guest speakers (Dominic Gregorio of the California State Water Resource Control Board, Dr. John Kleppe of the University of Nevada, Reno, Bob Richards of the Tahoe Research Group, and Kendrick Taylor of the Desert Research Institute). Scientists will be able to access the 2001 monitoring data through the LTEEC web site at www.lteec.org.

About the Lake Tahoe Environmental Education Coalition (LTEEC)

LTEEC is sponsored by the University of Nevada Cooperative Extension and the University of California Cooperative Extension.

Goal: To help groups and educational organizations work together to educate the public about how to prevent pollution of Lake Tahoe.

Objectives: To enable the many education providers to coordinate planning for environmental and experiential education. To encourage groups with similar educational priorities to cooperate and collaborate rather than trying to plan educational programs in a vacuum.



COOPERATIVE EXTENSION
Bringing the University to You

Participating Partners

- California Conservation Corps
- California State Water Resources Control Board
- California Tahoe Conservancy
- Desert Research Institute
- Lahontan Regional Water Quality Control Board
- Lahontan Audubon Society
- League to Save Lake Tahoe
- Nevada Conservation Corps
- Nevada Division of Environmental Protection
- Nevada State Parks
- Nevada Tahoe Conservation District
- Parasol Foundation
- Sierra Watershed Education Partnerships
- Tahoe Americorps Group
- Tahoe Area Sierra Club
- Tahoe-Baikal Institute
- Tahoe Regional Planning Agency
- Tahoe Regreen
- Tahoe Resource Conservation District
- U.S. Forest Service
- U.S.D.A. Natural Resources Conservation Service
- University of California, Davis, Tahoe Research Group
- University of Nevada, Reno
- Waste Not, Incline Village General Improvement District

LTEEC Working Groups

There are eight distinct working groups. Each group is led by one or two individuals with a passion for the group's task. Please call us if you would like to join a working group!

Home Landscaping and Backyard Conservation

Assist homeowners in controlling erosion and runoff from landscapes.

Volunteer Center

Engage citizens in volunteer conservation and environmental education efforts.

Citizens Restoration

Educate and involve citizens in actual environmental restoration projects.

K-12 Watershed Education

Help teachers and schools integrate environmental education into the classroom.

Higher Education and Research

Work with researchers to disseminate information about the research projects conducted within the Lake Tahoe Region.

Business and Tourism

Educate visitors and engage businesses in solutions to Lake Tahoe's unique environmental problems.

Citizen Monitoring: The Clean Water Team

Engage citizens in watershed stewardship and monitoring of environmental indicators.

Forest Health and Fire Prevention

Work with fire prevention agencies to ensure dissemination of consistent firescaping message in the community.

Produced quarterly by the Lake Tahoe Environmental Education Coalition (LTEEC). Send event listings, letters or comments to:

Heather Segale
Lake Tahoe Environmental Education Coalition
University of Nevada Cooperative Extension
P. O. Box 8208
865 Tahoe Blvd. #110
Incline Village, NV 89452-8202
Phone: 775-832-4150
Fax: 775-832-4139
Email: segaleh@unce.unr.edu
Web Site: www.lteec.org

Lake Tahoe Environmental Education Coalition

University of Nevada Cooperative Extension

Post Office Box 8208

865 Tahoe Boulevard, Suite 110

Incline Village, NV 89452-8208

Phone: 775-832-4150

Fax: 775-832-4139

Email: segaleh@unce.unr.edu

WWW.LTEEC.ORG
WEB SITE UNDER DEVELOPMENT

Special thanks to Smith-Jones, Inc. for web design assistance.

Lake Tahoe Environmental Education Coalition
University of Nevada Cooperative Extension
P. O. Box 8208
Incline Village, NV 89452-8208

