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Fourth Annual Meeting of LTEEC to Feature Mini-Forum

by John Cobourn

This year's annual meeting of LTEEC members will be held at 6 p.m., Aug. 15, in Incline Village, at the new Donald W. Reynolds Community Center, 948 Incline Way, next to Incline Village Middle School. As always, the annual meeting will give Tahoe's environmental educators a chance to engage in a discussion of Tahoe's needs and to enjoy opportunities for social interaction and networking.

Our theme this year will be to examine the paradox that a majority of Tahoe residents want Tahoe's environment to be protected, but many also question or criticize the very programs and regulations designed to provide that protection. The evening will open with a half-hour presentation by famed scientist, Charles Goldman, Ph.D., on the question of how to increase public support for programs to restore Lake Tahoe. This keynote address will be followed by a forum with a panel including Goldman, educators, agency staff and community members. The audience will be invited to participate. After the forum, there will be refreshments and a social hour. To

register for this event, please call (775) 832-4150.

Are Tahoe's Agencies Winning Public Support?

The many agencies that are working to protect our environment were commended by the Clinton Administration in 1997 for their exemplary cooperation and collaboration. The Lake Tahoe Environmental Improvement Program (EIP) is one example of tremendous coordinated planning. Another interagency product was the Lake Tahoe Watershed Assessment. Currently, several agencies are coordinating the research for three major plans to be written by 2007. Here again, agencies such as the US Forest Service, the Lahontan Regional Water Quality Control Board, and the Tahoe Regional Planning Agency (TRPA) have christened their joint effort as "Pathway 2007." It will result in a Forest Plan Revision, a revised Water Quality Basin Plan with a Lake Tahoe TMDL, and a 20-year TRPA Regional Plan Update, all based on an internally consistent set of planning goals and principles.

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

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Media Campaign: The Lake Tahoe Report

Don't forget to tune in to Reno's News Channel 8 every Tuesday at 5 p.m. for The Lake Tahoe Report. LTEEC and the USDA Forest Service are sponsoring these informative 90-second spots about Lake Tahoe. These are followed by a more detailed article in all local newspapers the same week as well as a radio segment on KOH (780 AM). The local Tahoe Area Sierra Club chapter and Incline Village General Improvement District have helped to pay for some of the segments. We are still seeking input for the Lake Tahoe Report media campaign. To date, we have aired 24 televised news segments and matching weekly newspaper articles in the Tahoe Daily Tribune, Tahoe World, North Lake Bonanza, and the Tahoe Truckee This Week.

We want to extend special thanks to Shelly Purdy, Tim Ill, Jason Pascoe, Dave Marz, Kae Reed, Keith Sheffield, Kirk Caraway, and Katherine Hill for helping to air and publish this important information. Many others have contributed ideas and interviews. LTEEC is currently seeking additional funding to compile and produce videotapes of the year's televised segments for distribution.

Funding for this program is provided by the USDA Forest Service with special assistance by Ed Gee, Maribeth Gustafson, Jeannie Stafford, Sue Norman, and Rex Norman.



TV Segments / Articles:

- Introduction to Weekly Segments
- Your Watershed
- Watershed and Water Clarity at Lake Tahoe
- What We Are Doing to Save the Lake
- Winter Snow Removal
- Reducing Air Pollution
- Working Together to Win the Fight on Pollution
- Major Types of Pollution
- Non-Point Source Pollution
- Tahoe's Natural History
- Kids-Earth Day
- Collaboration Among Agencies
- Snapshot Day
- Near Shore Water Quality
- Algae
- Building Season Begins
- Old Growth Trees
- Urban Stormwater Runoff & Infiltration
- Recreation & Trail Use
- Tahoe Baikal Institute
- Fertilizer
- Eroded Soil/Soil Conservation
- BMPs - Five Main Types
- Native & Adapted Plants

National Survey Reveals Environmental Education Challenge

According to a 2002 Green Gauge study published by Roper ASW, (March 2003), about 10 percent fewer Americans are educating themselves about the environment than were a year ago. National security concerns and a slow economy are factors in a six-point drop-off (to 61 percent) of the number of Americans who "sometimes or often read an article, watch a television show or use some other resource to seek out information about the environment." This is the first drop-off in some years. The report also finds that, since 2001, fewer people are regularly:

- saving electricity at home (down 11 percent) to 58 percent of total,
- participating in curbside recycling (down 20 percent) to 36 percent of total, and
- reading labels on pesticides to ensure protection from environmental risk (down 13 percent) to 23 percent of total.

A majority of Americans (51 percent) now report that they know little or nothing about environmental issues and problems. This is consistent with a five-year series of NEETF/Roper studies (1997-2001) that show that less than

one-third of Americans, including our private and public leaders, have even a passing knowledge of the most straightforward environmental topics.

These data surely challenge the entire environmental education/public information community. Several strategy shifts could be in order to better pursue more environmental literacy and stimulate public interest. The larger "learning landscape" is changing too. Television remains the leading major source of environmental information for adults (62 percent) and kids (72 percent). The Internet is listed as a source by just nine

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Environmental Improvement Program (EIP) Corner

Lake Tahoe Basin Executives Recognize Need for EIP Outreach

In 2002, the committee of the executive directors of key federal, state and local agencies at Lake Tahoe recognized the need for increased public education about the Lake Tahoe Environmental Improvement Program (EIP). This group formally established the EIP Outreach Subcommittee to help raise public awareness of the importance of the EIP in preserving the natural environment at Lake Tahoe.

One of the founders of this committee, Ed Gee, deputy superintendent of the Lake Tahoe Basin Management Unit of the USDA Forest Service, insists that Tahoe agencies must do a better job of publicizing the purpose of their EIP projects. He has supported the work of public information officers and of LTEEC, because he believes the public will be more supportive of this multifaceted \$1.4 billion program to protect the lake if public awareness is raised. The EIP calls for an ambitious array of scientific research, restoration projects, and

long-term maintenance programs to meet nine separate environmental goals or "thresholds" at the lake.

Gee has strong feelings about the debate described in this newsletter's cover story. In his position, he has been able to support EIP outreach education. Sadly for those of us who have worked with him, Gee has accepted a position in Washington, D.C., and he will be leaving in mid-August.

What Has the EIP Outreach Subcommittee Accomplished so Far?

Jeannie Stafford of the USDA Forest Service publishes a newsletter about EIP projects, and LTEEC includes the "EIP Corner" in its quarterly newsletter. The Tahoe Regional Planning Agency has created an informational video that describes the EIP, and LTEEC has developed a PowerPoint presentation on the EIP that can be used by managers and staff of other agencies. The USDA Forest Service has provided support for the LTEEC media campaign, which produces 90-second environmental

news segments on Reno's KOLO News Channel 8, KOH radio (780 AM), and matching newspaper articles each week in all local papers.

The Nevada Division of State Lands has provided funding for LTEEC to prepare one- to two-page EIP Update Reports and mail them to 4,400 Douglas County property owners in the Basin. A separate report is being included in the utility bills of 4,200 property owners in the Incline Village General Improvement District this month.

Other agencies have publicized their EIP projects in creative ways. The EIP Outreach Subcommittee is interested in promoting greater cooperation and coordination of these efforts in the future. As noted in the cover story, each of the many jurisdictions who are implementing the restoration projects of the EIP need to assign at least one staff member to disseminate information and before-and-after photos to the subcommittee. Their "success stories" need to be shared with all Tahoe residents, second-homeowners, and visitors.

A Great Backyard = Clear Lake Tahoe

Backyard conservation can bring out the best in your home landscape while also helping to improve Lake Tahoe's water quality! Recently, two homes received technical assistance from the Tahoe Resource Conservation District's Backyard Conservation Program and the Natural Resources Conservation Service (NRCS) to install Best Management Practices (BMPs) in their yards. The practices included installing gravel drywells to control driveway runoff, tilling and aerating compacted dirt, planting native/adapted plants, mulching bare soil areas and building raised vegetated beds. These practices control erosion, prevent polluted runoff from getting into Lake Tahoe and look great (see before and after pictures)! If you would like a free BMP

evaluation, technical assistance or landscaping tips for your single-family home in California, call the Backyard Conservation Program Hotline, (530) 543-1501, Ext. 6. If you live in Nevada, call (775) 586-7223, Ext. 1. Commercial properties should contact the Tahoe Regional Planning Agency, (775) 588-4547, Ext. 202.

The Backyard Conservation Program is sponsored by both Conservation Districts at the Lake and by the USDA Natural Resources Conservation Service. These organizations

are associated with the Partners in Conservation coalition, which also includes TRPA and University of Nevada Cooperative Extension.



Before (left) and after (above) TRCD Backyard Conservation Program Assistance

Special Report

Although Tahoe Basin residents have avoided devastating wildfires for many years, the wildfire threat is getting stronger. The threat is so strong that most of the communities in the Basin are listed on the Federal Register for Communities-At-Risk and/or each state's list of threatened communities.

Continuing population shifts from urban to rural areas have increased the danger of wildfire throughout the Tahoe Basin. At the same time, recent below-average precipitation levels and a tremendous accumulation of wildland fuels have created a hazardous environment that could host a catastrophic wildfire. Wildfire has the potential to destroy lives, property, and natural resources within the Basin.

Last year's Gondola Fire was a scare for Tahoe Basin residents, but it was just a taste of the damage that wildfires can cause. The taste was bitter enough to leave citizens wondering how to protect their lives and property from future fires. Many have sought the assistance of one of two fire safe councils serving the Tahoe Basin. The Nevada Fire Safe Council is working with residents in the Nevada portion of the Basin, and the Tahoe Basin Fire Safe Council is assisting those on the California side. These are just two of over 120 fire safe councils nationwide.

Nevada Fire Safe Council

The Nevada Fire Safe Council evolved from growing recognition that the threat of wildfire to human life and property has been escalating rapidly. To address this issue, Cooperative Extension spearheaded a conference titled "Living With Fire...The First Fire Forum" in Carson City in June 1999. In attendance were individuals representing a broad range of interests. Following intense discussions, a resolution was adopted calling for "the establishment of a statewide



fire safe council to provide support throughout Nevada to help make homes, neighborhoods, and communities fire safe." Following the conference, Ed Smith of Cooperative Extension headed up the effort to convene an organizing committee, and on Aug. 4, 2000 the Nevada Fire Safe Council was approved as a 501 (c) (3) nonprofit corporation.

Currently the council's board of directors is comprised of 13 members elected at a general membership meeting held each spring. The board has one paid employee who serves as primary staff and principle spokesperson for the council. Since its inception, over 400 individuals have joined the Nevada Fire Safe Council as individual members.

The Nevada Fire Safe Council's primary mission is to foster the organization of members into local chapters to promote defensible space, complete pre-fire planning activities, and implement hazardous fuel reduction projects on private properties to increase the survivability of threatened communities. Currently the council has 14 chapters across Nevada, with four organized in the Tahoe Basin: (1) Glenbrook, (2) Hidden Woods, (3) Incline Village, and (4) Tyrolean Village.

The Nevada Fire Safe Council invites any group that supports its purpose and principles to become a formally affiliated chapter. Elwood Miller, executive coordinator, can be reached at (775) 322-2413 or firesafe@renonevada.net.

Tahoe Basin Fire Safe Council

In 1995, the Tahoe ReGreen Project was created to address the extraordinary threat of wildfire in the Basin. The project was successful for several years, but lost funding in 2001. Former leaders

from the Tahoe ReGreen Project, namely local fire chiefs, met to determine how to continue the efforts of the Tahoe ReGreen Project. The solution was to create a fire safe council for the California portion of the Tahoe Basin that would serve as a counterpart to the Nevada Fire Safe Council.

The Tahoe Basin Fire Safe Council (TBFSC) will work to raise fire awareness, identify fire hazards, develop projects to reduce the hazards, and secure funding to complete the work. Future projects may include community fire plans, hazardous vegetation removal services, senior and disabled assistance programs, defensible space improvement programs, and many others.

Currently, the council's Technical Advisory Committee (TAC) is getting the Council ready to reach out to the public. The committee is comprised of 13 members representing the City of South Lake Tahoe Fire Department, Lake Valley Fire Protection District, Meeks Bay Fire Protection District, North Tahoe Fire Protection District, California Department of Forestry and Fire Protection, USDA Forest Service, California Department of Parks and Recreation, League to Save Lake Tahoe, California Tahoe Conservancy, Kiwanis, Tahoe Regional Planning Agency, Sierra Pacific Power Company, local businesses, and concerned homeowners.

The Tahoe Basin Fire Safe Council was made possible by the Community-based Wildfire Prevention Grants Program of the Sacramento Regional Foundation. The funding was provided to the Sacramento Regional Foundation by the Department of Interior, Bureau of Land Management as part of the National

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Special Report

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Fire Plan. The plan was conceived as a result of the catastrophic 2000 fire season. It calls for increased management of private developed lands that interface with public forests. The grant and the Tahoe Basin Fire Safe Council are administered by the Tahoe Resource Conservation District.

Individuals or groups interested in becoming involved or learning more about the Tahoe Basin Fire Safe Council are encouraged to call Jennifer Arrowsmith, (530) 543-1501, Ext. 112, or e-mail tahoebasinfiresafe@yahoo.com.

About the Nevada Fire Safe Council Executive Coordinator

Elwood L. Miller, Ph.D. has been a professional forester for nearly 40 years. His career spans timber management and fire suppression positions with the USDA Forest Service and 30 years as a forestry professor and administrator with the University of Nevada, Reno. While at UNR, Miller served as Associate Dean of the College of Agriculture and Associate Director of Cooperative Extension. He has received numerous recognitions and awards including the university's highest teacher award and selection as one of 23 outstanding graduates in the 75-year history of Northern Arizona University. In January 2002 Miller accepted his current position as executive coordinator of the Nevada Fire Safe Council. In this role he is helping urban interface communities to increase their survivability in the face of a growing threat from wildfire.

About the Tahoe Basin Fire Safe Council Administrator

Jennifer Arrowsmith is a recent graduate of Cal Poly State University, where she earned a degree in Forestry and Natural Resources. Arrowsmith's studies of forestry were supplemented by work experience as a student assistant for the

Forestry Department Head, an intern for the Dean of Agriculture, and a forestry aid for 18 months with the California Department of Forestry and Fire Protection (CDF). In March 2003, Arrowsmith was selected to serve as the Tahoe Basin Fire Safe Council administrator. In this role, she is charged with the responsibility of providing management for activities related to the development and maintenance of the Tahoe Basin Fire Safe Council.



Elwood Miller, Nevada Fire Safe Council



Jennifer Arrowsmith, Tahoe Basin Fire Safe Council

Hikes and Outings

Visit <http://www.lteec.org> for a complete list of upcoming hikes and outings for the Lake Tahoe area including those sponsored by Tahoe Area Sierra Club, Tahoe Rim Trail, League to Save Lake Tahoe, Tahoe Wilderness Institute, and more.

- July 3:** Fallen Leaf-Lake Aloha Loop (Tahoe Rim Trail)
- July 5 - 6:** High Traverse of Desolation (Tahoe Area Sierra Club)
- July 5:** Tahoe Meadows to Brockway (Tahoe Rim Trail)
- July 12 - 13:** Woman's Beginning Backpack (Tahoe Rim Trail)
- July 12 - 13:** Echo to Big Meadow Backpack (Tahoe Rim Trail)
- July 13:** Tahoe Meadows Interpretive Trail (Tahoe Rim Trail)
- July 17:** Conditioning Hike West Reno-Truckee Area (Tahoe Area Sierra Club)
- July 19:** Island Lake to Rockbound Pass (Tahoe Area Sierra Club)
- July 19:** Photography Hike (Tahoe Rim Trail)
- July 19:** Big Meadow to Meiss Meadows (Tahoe Rim Trail)
- July 20:** Barker Pass to Tahoe City Hike (Tahoe Area Sierra Club)
- July 20:** Lakes Basin Hike (Tahoe Area Sierra Club)
- July 26:** Barker Pass to Twin Peaks (Tahoe Rim Trail)
- July 26 - 27:** Introduction to Backpacking (Tahoe Rim Trail)
- July 31 - Aug. 3:** Tahoe Wilderness Institute Weekend Field Program
- Aug. 2:** Workout for Wimps (Tahoe Rim Trail)
- Aug. 5:** Barker Pass to Ward Creek (Tahoe Rim Trail)
- Aug. 9 - 17:** Tahoe Wilderness Institute Backcountry Program
- Aug. 9 - 10:** Sunset and Full Moon of Lassen Peak (Tahoe Area Sierra Club)
- Aug. 10:** Spooner Summit to Kingsbury Grade (Tahoe Rim Trail)
- Aug. 13:** Armstrong Pass to Star Lake (Tahoe Rim Trail)
- Aug. 16:** Echo Peak via Flag Pole Peak (Tahoe Area Sierra Club)
- Aug. 16:** Tahoe Meadows to Brockway Summit (Tahoe Rim Trail)
- Aug. 21 - 24:** Echo Lake to Barker Pass Backpack (Tahoe Rim Trail)
- Aug. 31:** Tahoe Meadows Interpretive Trail (Tahoe Rim Trail)
- Sept. 13 - 14:** Introduction to Backpacking (Tahoe Rim Trail)
- Sept. 23:** Big Meadow to Showers Lake (Tahoe Rim Trail)
- Sept. 30:** Echo Lake to Lake Aloha (Tahoe Rim Trail)

Environmental Education Calendar of Events

July 12 (7 — 10 p.m.): Tahoe-Baikal Institute (TBI) Friendraiser Dinner

You are invited to meet this year's TBI participants at a special event at the Top of the Tram, at Heavenly Valley, South Lake Tahoe. The Friendraiser dinner is \$100, with a slide presentation and special guest speaker Boyd Norton, famed nature photographer and coauthor of "Baikal: Sacred Sea of Siberia." The second Annual Dwight C. Steele Memorial Award, honoring an individual who has shown exceptional leadership and stewardship in the protection of Lake Tahoe, will also be presented. Proceeds benefit TBI programs. Contact TBI, (530) 542-5599, or <http://www.tahoebaikal.org>.

July 13: TBI Summer Exchange Participants Present

TBI summer exchange participants will present research and results from their two week projects on one of four research/conservation projects including with agencies such as Lahontan Regional Water Quality Control Board, California Tahoe Conservancy, the Washoe Tribe and Tahoe Rim Trail, and UC Davis Tahoe Research Group. Contact Anu Carroll, TBI, (530) 542-5599, acarroll@tahoebaikal.org, or <http://www.tahoebaikal.org>.

July 16 (5:30 p.m.): NNREC Annual Meeting

The Nevada Natural Resource Education Council Board of Directors cordially invites you to the NNREC Annual Meeting. There will be a potluck dinner before the annual meeting starting at 5:30 p.m. at the Bureau of Land Management, Carson City Office. Contact Chris Miller for further information, (775) 885-6148.

July 17 (6:30 — 9 p.m.): Tahoe Area Sierra Club Meeting

The Tahoe Area Sierra Club meetings are held on the third Thursday of every month at the Douglas County Fire Department (Elks Point Road). Contact Michael Donahoe, (775) 588-5466, or visit <http://motherlode.sierraclub.org/tahoe/>.

July 24 (4:30 — 6:30 p.m.): Incline Village Clean Water Team

Join Rick Susfalk from the Desert Research Institute for a special presentation about the water quality around Incline Village. Contact Ann Bollinger, (775) 832-1284, for details.

July 25 (8 — 11:30 p.m.): Mid-Summer Star Party

Join Space Science for Schools, Inc. for an evening of stargazing to learn about the "Mysteries of the Summer Triangle" at Burnt Cedar Beach Park in Incline Village. Call for details, (775) 720-6999.

July 25 — 26: Leave No Trace® Trainer Course

Presented by Nevada Division of State Parks and the Tahoe Rim Trail Association at Nevada State Park: Spooner Lake, Leave No Trace® (LNT) is an educational program endorsed by the National Park Service, USDA Forest Service, Bureau of Land Management, and the U.S. Fish and Wildlife Service. These agencies have incorporated LNT into their outdoor courses being taught to agency staff, volunteers, and others that use the outdoors and are interested in becoming trainers so they can both practice and teach Leave No Trace ethics. You will learn to demonstrate and teach state of the art minimum impact techniques and outdoor ethics to scout troops, family, friends, and other community groups. For more information contact Allen Newberry, (775) 686-1692.

July 26 (2 — 10 p.m.): Great Basin Outdoor Schools Family Outdoor Fest

Enjoy the shore of Lake Tahoe with swimming and kayaking. Learn about our fragile ecosystem with lessons on local flora & fauna and a hike led at Spooner Lake. Take in the sky and explore the universe with a presentation on day and night sky viewing with a telescope. Bask in a beautiful summer day with your family playing ping-pong, horseshoes, tetherball or volleyball. There will also be various presentations

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

throughout the day, arts & crafts, songs & skits, fun activities and ecological games. A BBQ dinner plus snacks and beverages are included! Call Amanda, (775) 337-8208, or visit <http://greatbasin-os.org/funders/fest.html>.

July 31 — Aug. 3: Tahoe Wilderness Institute Weekend Field Program

Students will choose from and participate in a variety of sessions including some that discuss broad subjects and some that focus on specific conservation issues and efforts tied to the Lake Tahoe Basin. All ages are welcome. Participants should be prepared for moderate day hikes. To register contact (530) 541-4660, Ext. 525, twi@ltcc.edu, or <http://www.ltcc.edu/programs/wildinst/>.

Aug. 5 (10 a.m. — 2 p.m.): Children's Environmental Science Day

A free community event for children (ages 8+) that includes hands-on science activities designed to create an awareness of the unique ecology of beautiful Lake Tahoe. Join us for this amazing day filled with activities, such as interactive science demonstrations by UC Davis scientists, a Sand Harbor geology tour by UNR scientists, bird watching with the Audubon Society, a boat ride on the Paradise Hornblower to view lake studies done by UC Davis Tahoe Research Group, crafts from The League to Save Lake Tahoe, and more. Children will be provided a pizza, cookie, and soda lunch, T-shirts, and lots of interesting materials to take home. Call Lake Tahoe School Business Office, (775) 831-3343, Ext. 105, to make a reservation.

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Environmental Education Calendar of Events

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Aug. 9 — 17: Tahoe Wilderness Institute Backcountry Program

The Tahoe Wilderness Institute Backcountry Program is an nine-day interdisciplinary learning adventure. With wilderness as both subject and classroom, participants study geology, literature, art, mountaineering, wilderness medicine, biology, and backcountry navigation. The institute's hands-on, cooperative approach fosters a holistic understanding of our natural surroundings. To register contact (530) 541-4660, Ext. 525, twi@ltcc.edu, or <http://www.ltcc.edu/programs/wildinst/>

Aug. 15: LTEEC Annual Meeting

See article on Page 1.

Aug. 16 — 17: Sierra Nevada Alliance Tenth Annual Conference

Loving the Sierra - Inspiration for the Decades Ahead: In 1993, the Sierra Nevada Alliance was formed out of a love for the Sierra and recognition that there were fragmented efforts to protect the mountain range. In this amazing decade of work the Alliance and member groups throughout the region and state have focused on a wide range of Sierra issues including timber, wilderness, sustainable communities, open space, habitat protection, and water quality. This conference will celebrate 10 years of accomplishments, share ways to turn residents' and visitors' love of the Sierra into winning strategies, and discuss what hasn't happened and what needs to happen in the next 10 years to protect and restore all the qualities we love about the Range of Light. Join us for two days of workshops, field trips, inspirational speakers and fun! For a full conference description, including travel and lodging information, visit <http://www.sierranevadaalliance.org/conference/> or contact Sierra Nevada Alliance, (530) 542-4546.

Aug. 17: League to Save Lake Tahoe Annual Meeting

Contact the League, (530) 541-5388.

Aug. 18 — 22 (8:30 a.m. — 2:30 p.m.): Environmental Education Institute at Lake Tahoe Community College

Join the first ever Environmental Institute at the Lake Tahoe Community College. This course will be a five-day, field-based course in which K-12 educators can learn environmental science laboratory techniques and develop appropriate curricula in several key areas, including ecology, geology, stream restoration, water quality analysis, macroinvertebrate study, forest health, and Audubon International school certification. There will be four instructors for the course, each specializing in a different scientific field. Contact Kathy Strain, (530) 541-4660, Ext. 267, to register.

Aug. 21 (6:30 — 9 p.m.): Tahoe Area Sierra Club Meeting

The Tahoe Area Sierra Club meetings are held on the third Thursday of every month at the Douglas County Fire Department (Elks Point Road). Contact Michael Donahoe, (775) 588-5466, or visit <http://motherlode.sierraclub.org/tahoe/>.

Sept. 15 — 21: National Pollution Prevention Week

The Department of Toxic Substances Control's Office of Pollution Prevention and Technology Development provides additional information to help your organization participate in this national event. Contact Robert Ludwig, (916) 324-2659, or visit <http://www.dtsc.ca.gov/PollutionPrevention/index.html>.

Sept. 18 (6:30 — 9 p.m.): Tahoe Area Sierra Club Meeting

The Tahoe Area Sierra Club meetings are held on the third Thursday of every month at the Douglas County Fire Department (Elks Point Road). Contact Michael Donahoe, (775) 588-5466, or visit <http://motherlode.sierraclub.org/tahoe/>.

Sept. 20: Tahoe Forest Stewardship Day 2003

Once again the Tahoe Forest Stewardship Day volunteer event will be held in partnership with the League to Save Lake Tahoe and the California Tahoe Conservancy at the site of the Gondola Fire. Last year's event was a big success, but there is still much work that could be done. Mark the date and come out to volunteer to help clean up the forest, make some new friends, and learn about forest health, water quality and more. All volunteers will receive a free t-shirt, and after a morning of hard work, will be treated to a raffle and a BBQ. To volunteer for this year's event, please contact Dan Sussman, environmental monitor, (530) 541-5388, or Dan@keeptahoeblue.org.

Sept. 20: National Public Lands Day

The overall theme for National Public Lands Day will be to protect and restore native habitats. This is in keeping with the 100th anniversary of the National Wildlife Refuge System and the fact that so many of our volunteers work on habitat restoration projects. Our 2003 goal is to exceed 80,000 volunteers donating 400,000 hours (200 full-time work years) of hard work. We are shooting for more than 500 public land locations spread across all 50 states. Visit <http://www.npld.com>.

Sept. 27: Nevada Natural Resource Education Council Fall Conference

The Nevada Natural Resource Education Council Board of Directors cordially invites you to a day-long Fall Conference. This conference will have many workshops on such programs as Leave No Trace, Project Learning Tree, Burning Issues and other regional environmental education activities in this area. The theme is "Partnerships Ignite Environmental Education." Contact Dan Allison, (775) 741-5595, or visit <http://nnrec.org/conference/>.

Tahoe Truckee K-16 Watershed Education Program

K-16 Watershed Education Strategic Plan

The Kindergarten through College Grade 16, or K-16, Watershed Education Strategic Plan has been released in DRAFT form for comments. The plan provides the history and background of efforts to provide environmental education in our schools. It includes a listing of opportunities and a detailed timeline with goals and objectives for the next five years. Jill Sarick, Tahoe's regional coordinator with Adopt-a-Watershed, is anticipating sharing this document with many different agencies, organizations, community groups, businesses, and administrators, but she needs your help. Are you a member of an agency or organization that would like to hear about plans to enhance K-16 watershed education? Are you a board member or administrator who would benefit from hearing a collection of issues, concerns and opportunities expressed for K-16 watershed education? Do you know of community groups who were not included in our first round of discussions and feel that their perspective would be valuable to include in this document? To receive a copy of this document, contact Sarick, (775) 832-4167 or jill@adopt-a-watershed.org.

Leadership Development for K-16 Education

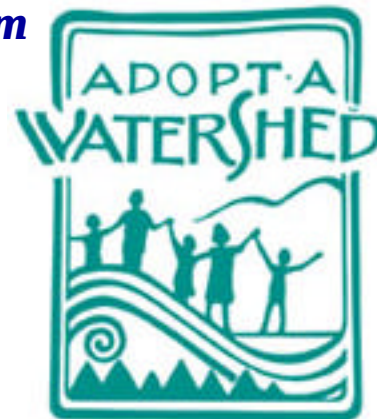
Leadership Teams are forming in South Lake Tahoe and Nevada communities for place-based and watershed education programs. Leadership Teams are comprised of community leaders, teachers, students, parents, administrators and others interested in promoting the development of enduring and high quality place-based service learning programs. Issues, concerns and opportunities likely to be raised include No Child Left Behind,

educational standards and proficiency tests, fundraising, project support and staffing, and professional development. Public support and involvement in K-16 education is critical; budget deficits, declining infrastructures and increasing emphasis on testing are resulting in changes to our public school character. Please make your voice heard. No meeting dates have been set, but we have tentatively agreed to meet sometime Aug. 4 — 15. If you are interested in sitting in on these discussions, please contact Sarick, (775) 832-4167 or jill@adopt-a-watershed.org.

Sierra Watershed Education Partnerships (SWEP) Update

Thanks to tremendous support from our partners and teacher enthusiasm, Sierra Watershed Education Partnerships has had an extremely successful 2002-2003 school year in the Tahoe-Truckee Unified School District (TTUSD) in Placer County. Our community partnerships continue to be the backbone of our programs, and this year we had more classrooms than ever participating in community projects. In addition to our community-based watershed projects and professional development, SWEP is supporting an ever-growing Watershed Education Leadership Team and this spring hosted a very successful fundraiser, Run for the Rivers 10k Fun Run.

More than 60 teachers have been directly involved in watershed projects this school year. That translates into over 2,100 students throughout the TTUSD learning about their watershed and community through hands-on experiences. Projects have ranged from water quality monitoring and native grass restoration to watershed-



inspired art and poetry projects. Not only are these hands-on projects teaching students about their watershed and all that it contains, but community projects are a valuable way to reinforce classroom learning.

SWEP expanded the professional development opportunities for teachers and community partners by hosting workshops designed to engage educators in science exploration with students, while incorporating disciplines such as math, social studies, art and language arts. A Community Leaders in the Classroom workshop was hosted for resource professionals and other nonformal educators working with youth in our community. With over 150 people trained this year, these were valuable learning opportunities for everyone involved.

Through a generous scholarship from Adopt-A-Watershed, SWEP has been able to send a team of teachers, administrators and resource professionals to an intensive eight-day leadership institute, hosted by Adopt-A-Watershed. This group of committed individuals forms the Tahoe Watershed Education Team which helps to guide K-12 watershed education efforts in the Tahoe-Truckee area by hosting workshops, supporting student projects, and mentoring new participants.

Toadflax: It's Not Just a Funny Name!

The sun is shining, the ground is warm, and weeds are growing, especially the toadflaxes. Nope, no relation to amphibians! These two yellow-flowering weeds are spreading fast within the basin. Dalmatian toadflax (*Linaria genistifolia* spp. *dalmatica*), an attractive plant that grows to 3 feet tall, has heart-shaped leaves that clasp the stems. The yellow flowers resemble those of snapdragons, and have an orange-bearded throat. Yellow toadflax (*Linaria vulgaris*) tends to be shorter and has long narrow leaves that are lance-shaped. The flowers are similar to those of Dalmatian toadflax, and the color has led to the common name "butter-and-eggs." Both species are aggressive perennials with extensive, deep root systems. They reproduce both by horizontal or creeping rootstocks, and by seed. As a mature Dalmatian toadflax plant can produce up to 500,000 seeds per year, infestations may spread rapidly. To make the matter worse, the two species can hybridize to

create an intermediate species. Control is difficult, but hand-pulling, removing as much of the root as possible, can be used on young plants in small infestations before they go to seed. Bag the plants securely and dispose of them in the trash. Chemical control is complicated by genetic variability of the plants. If you spot these weeds, please call Sue Donaldson, (775) 784-4848, to report a location and receive additional control recommendations.

The California Invasive Weed Awareness Coalition (CALIWAC) is sponsoring a "decision makers" Invasive Weed Tour originating from the State Capitol on July 25 as part of California Invasive Weed Awareness Week. The target audience is legislators (or their capitol legislative staffers); water districts (in Sacramento region and statewide water associations); and state agency leaders who may need additional education on invasive weed issues. Sacramento Weed

Warriors, CALIWAC Educational Committee, California Exotic Pest Plant Council, and Lake Tahoe Basin Weed Management Association are organizing the tour.



Yellow Toadflax (above left) and Dalmatian Toadflax (above right)

Research Buoys

UC Davis' Department of Civil and Environmental Engineering, the Tahoe Research Group, and NASA's Jet Propulsion Lab in Pasadena, California have installed a network of research and monitoring buoys on Lake Tahoe. These research platforms are equipped with several types of lake, atmospheric



One of six large research buoys on Lake Tahoe

and weather monitoring equipment for the purpose of informing scientists and the public about midlake conditions throughout the year. Visit <http://laketahoe.jpl.nasa.gov> for up-to-date lake information.

The data collected on wind speed and direction, air and water temperature, humidity and several other variables are transmitted automatically to land-based stations for downloading into data-banks. Additionally, the buoys are used to collect data on atmospheric deposition of nutrients from snow, rain, and dust, as well as air particulate and gas samples. Perhaps the most important function of the buoys, however, is their role not on a local or regional scale, but on a global one. They and their surface reflectance temperature measurements are part of the NASA earth-observing system satellite and remote sensing pro-

gram. Lake Tahoe was chosen as a "validation site" for the satellites because it provides a large surface area with a relatively uniform temperature (compared to a terrestrial landscape) and because its 6,000-foot elevation reduces the amount of interference to the satellite sensors when collecting data caused by atmospheric moisture, cloud cover, dust, etc.

These studies are directed by Simon Hook, Ph.D., of NASA; Geoff Schladow, Ph.D., of UC Davis; and John Reuter, Ph.D., and Charles Goldman, Ph.D., of the Tahoe Research Group and their many colleagues. Routine monitoring, maintenance, repairs, sampling and inspections are done by Bob Richards aboard the UC Davis boat "R/V John Le Conte." For more information contact Richards, Tahoe Research Group, (530) 583-3279.

Annual Meeting

(Continued from page 1)

But is the public excited, supportive, and involved? Some longtime Tahoe observers, such as Leo Poppoff, doubt it. He has written about this question, and he currently believes that possibly a majority of Tahoe residents no longer trust Tahoe's agencies to do an effective and fair job of protecting the lake. Does the general public truly know why installing BMPs on their properties can protect the lake in the future? Do they view the EIP or TRPA's rules and regulations as necessary steps to a sustainable economy and environment for the next generation? Or, do they see agency outputs as just more studies, more projects, more plans, and more restrictions on their recreational interests and private property rights?

Can Public Outreach and Environmental Education Make a Difference?

There are many creative people working to educate the public about the issues at Lake Tahoe. Some agencies have public information officers that work with local media to inform the public about their programs and projects. A local task force is also working on creating the Tahoe Interagency Information Management System (TIIMS), a web-based library telling the story of the struggle to

save one of the most beautiful subalpine lakes in the world.

LTEEC supports all programs to get science-based information into the hands of the general public. We believe that if the public has the facts, and can consider the alternatives, they can make well-informed decisions that will affect the future of the lake. Our Steering Committee has embraced the need to improve the overall "environmental literacy" of the public in order to enable them to make those decisions. Because some personal inconveniences and sacrifices may be needed to reverse the decline in Tahoe's water quality and other environmental resources, the public must understand that these short-term costs will yield long-term benefits for the environment, the economy and the community. Education needs to occur in our schools, through the media, and at our public events.

We Need to Showcase Successes and to Fill Information Gaps

There are many challenges ahead for those who want restoration programs such as the EIP to succeed. Because it is so complicated, the many agencies who implement its projects must assign staff time to get the word out about restoration success stories. Even LTEEC often has difficulty obtaining and publishing before-and-after photographs and clear explanations of the purpose of restora-

tion projects. We must also improve our post-project monitoring of effectiveness, whether of small-scale BMPs or large capital improvement projects. The public needs to be shown how projects can be improved each year through monitoring and adaptive management.

Because community education is a big, difficult and sometimes discouraging task, we must also appreciate the progress that has been made. In the 1960s, during the population explosion stimulated by the 1960 Olympics, planners predicted that by 2000, there could be half a million people living in the Tahoe Basin. Freeways were almost certain to ring the lake, connecting the many urban centers. If this had occurred, the cumulative watershed effects would almost certainly have reduced the lake's water quality much more severely than current conditions. Indeed, the past two years of lake clarity measurements by the Tahoe Research Group of UC, Davis have shown significant improvements. While this may be due in part to recent dry winters, it could also be a result of the combined effects of the thousands of BMPs that have been implemented by Tahoe agencies and residents.

Hydrologists, limnologists and community leaders around the world are watching to see if we can save Lake Tahoe. The answer is in our collective hands.

National Survey

(Continued from page 2)

percent of kids but a growing 23 percent of adults.

Schools are placing more emphasis on standards of learning and standardized testing and this may be squeezing environmental education farther out of the classroom which may signal a sharper focus on other educational venues and approaches.

The people of America and the world need more environmental literacy. It is important, at many levels, providing a richer understanding of science and the natural world, developing more respect for the health and needs of people, a sense of protection for otherwise defenseless creatures and natural systems, and guidance on how to better serve our communities.

The Green Gauge Report is available for a fee through Roper ASW at www.roperasw.com.

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

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About the Lake Tahoe Environmental Education Coalition (LTEEC)



COOPERATIVE EXTENSION
Bringing the University to You

LTEEC is sponsored by University of Nevada Cooperative Extension and University of California Cooperative Extension. Our mission is to provide support and leadership to improve the overall effectiveness of environmental education at Lake Tahoe by facilitating groups working together to educate and motivate the public about how to protect the Lake Tahoe environment.

LTEEC's partner organizations cooperate in a number of ways to reach out to diverse audiences with consistent, science-based messages. We have identified nine program areas or subgroups that enable educators and agencies with similar goals to join forces and coordinate activities. Subgroups include:

Media Campaign

Using television, radio and print media to present environmental issues and information to the general public.

Partners in Conservation

Assist homeowners in implementing Best Management Practices (BMPs) to control erosion and runoff from landscapes.

Earth Day Festival Planning Committee

Provide a forum for local groups to present their programs to the general public during the Earth Day Festival.

Environmental Improvement Program (EIP) Outreach

Educate residents about Lake Tahoe's Environmental Improvement Program (EIP).

K-16 Watershed Education Program

Help teachers and schools integrate environmental education into the classroom and enhance student learning.

Higher Education and Research

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

Citizens' Monitoring: The Clean Water Team

Engage citizens in watershed stewardship and monitoring of environmental indicators.

Fire Prevention and Forest Health

Form Fire Safe Councils to enlist community members to make their homes, neighborhoods and communities fire safe.

Tahoe Basin Weed Coordinating Group

Prevent and control invasive weed species in the Basin by sharing resources and information and standardizing methods of treatment and data collection.

The LTEEC chair and environmental education coordinator solicit input and direction from the LTEEC Steering Committee, which consists of active representatives from the nine subgroups and from our most involved partner organizations. We regularly review our work plan and evaluate our effectiveness.

Currently, we facilitate communication within and between the subgroups and assist them with scheduling and organizing certain meetings. We help the subgroups plan various collaborative events and publicize all such environmental education opportunities in our events calendar, which is published in our quarterly newsletter and on our Web site. Our TV, radio and newspaper media campaign and our publications make science-based information on environmental issues available to the broad "grass-roots" audience of the general public. We endorse the concept that a more informed public will take greater responsibility for supporting and improving natural resource management throughout the Tahoe Basin watershed.

Participating Partners

- Adopt-a-Watershed
- California Conservation Corps
- California Native Plant Society
- California State Parks
- California State Water Resources Control Board
- California Tahoe Conservancy
- Desert Research Institute
- Lahontan Regional Water Quality Control Board
- Lake Tahoe Community College
- League to Save Lake Tahoe
- Nevada Conservation Corps
- Nevada Division of Environmental Protection
- Nevada Division of State Lands
- Nevada Fire Safe Council
- Nevada State Parks
- Nevada Tahoe Conservation District
- Parasol Foundation
- Sierra Nevada College
- Sierra Watershed Education Partnerships
- Tahoe Area Sierra Club
- Tahoe-Baikal Institute
- Tahoe Basin Fire Safe Council
- Tahoe Regional Planning Agency
- Tahoe Resource Conservation District
- Tahoe Rim Trail Association
- U.S. Fish and Wildlife Service
- USDA Forest Service
- USDA Natural Resources Conservation Service
- University of California, Davis, Tahoe Research Group
- University of Nevada, Reno
- Waste Not, Incline Village General Improvement District

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Under the Lake Tahoe license plate program, the Department of Motor Vehicles is authorized to issue a special license plate. The proceeds from the sale of those plates will be used solely to support programs for the preservation and restoration of the Lake Tahoe Basin's natural environment.