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Inside this issue:

<i>In the News...</i>	2
<i>Algae in Lake Tahoe</i>	2
<i>Pine Needles</i>	3
<i>Defensible Space</i>	3
<i>Fertilizer, Water Conservation & BMPs</i>	3
<i>Invasive Weeds</i>	4
<i>Living With Bears</i>	5
<i>Demonstration Gardens</i>	5
<i>Calendar of Environmental Ed. Events</i>	6-7
<i>Environmental Improvement Program</i>	8
<i>For Teachers and Students</i>	9
<i>About LTEEC</i>	11

LTEEC Annual Meeting

By John Cobourn,
University of Nevada Cooperative Extension

The third annual meeting of Lake Tahoe Environmental Education Coalition (LTEEC) on May 15 provided an opportunity to celebrate our progress and to question how we can improve our effectiveness. We opened the meeting by asking each of the 85 participants to describe the most exciting environmental education event of the year. More than 50 events were showcased, indicating the great energy we are putting into our diverse outreach activities.

We then asked our panel of Tahoe Basin leaders and educational experts what we need to change in our environmental education strategy to save Lake Tahoe.

Juan Palma, Executive Director, Tahoe Regional Planning Agency (TRPA), challenged LTEEC members to adopt a "systems thinking approach" and to create an overall environmental education strategy for the Basin. He used the metaphor of creating a musical score to illustrate the idea that all environmental educators, though playing



Catherine Parsons, Lauri Kemper, Steve Teshara, Michael Donahoe, Juan Palma, Kim Stokely, Jeff Hohensee, and Ed Gee discuss environmental outreach strategies at the LTEEC Annual Meeting

different parts, can play from the same sheet of music. This gives us a new goal to work toward in our collaborative, "orchestral" framework.

Ed Gee, Deputy Forest Supervisor, Lake Tahoe Basin Management Unit, U. S. Forest Service, stressed the need to educate multiple audiences about the Environmental Improvement Program (EIP). Many agency and private sector leaders agree that the public needs to lend its support to this comprehensive watershed restoration plan if we are to save the lake from eutrophication (turning green).

(Continued on page 10)

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) 832-4138
Fax: (775) 832-4139
Email: segaleh@unce.unr.edu



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In the News...

2002 Research Symposium

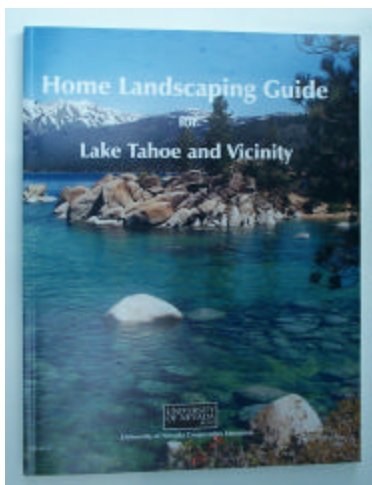
Current research efforts were highlighted at a recent symposium held at the North Tahoe Conference Center on May 13 and 14. The Symposium was organized by LTEEC's Higher Education and Research Subgroup. It was attended by 86 scientists, agency staffers and interested citizens. Progress on three dozen research topics were reported. More importantly, it provided an excellent opportunity for researchers with widely divergent interests to learn about and discuss each other's work. A compendium of research abstracts from the symposium is available on the LTEEC website (www.lteec.org).

LTEEC's Clean Water Team Hosts a Successful Event

The second annual Snapshot Day was held on May 4, with more than 250 volunteers gathering important visual data and water quality samples from 113 locations (from the Lake Tahoe Basin down the Truckee River watershed to Pyramid Lake). This constituted the largest effort ever to collect data from the entire watershed at a single point in time. The data is being compiled and will be released in the 2002 Snapshot Day report in the fall.

Incline Village Clean Water Team

The Incline Village Clean Water Team is completing monthly stream surveys on Rosewood, Incline, Deer, First and Second Creeks. Additional volunteers are needed to help. It is a great opportunity to learn about local water quality issues and methods used in monitoring water quality and to meet your neighbors. Call Sarah Tone for more information, (775) 832-1284.



*Home Landscaping Guide
Second Edition Due Out Soon*

Home Landscaping Guide – 2nd Edition Coming Soon

The second edition of the *Home Landscaping Guide for Lake Tahoe and Vicinity* is due out in July. This edition is revised to include information about the new pine needle mulch policy and new Best Management Practice (BMP) technologies. This book is available for a donation of \$5 at TRPA, University of Nevada Cooperative Extension, League to Save Lake Tahoe, and most local nurseries. You can receive a copy as part of a free BMP site evaluation by calling (775) 588-4547, Ext. 202, or (530) 573-2210.

Yuck! Algae in Lake Tahoe

There are two major types of algae found in Lake Tahoe. Microscopic *Phytoplankton* are single-celled or multicellular filamentous or colonial “floating” algae that may appear as a greenish cloud suspended in the water. *Periphyton* is the collective term for the community of “hairy” attached algae, fungi and bacteria that you find on rocks and pier posts.

Throughout the year, field scientists from the Tahoe Research Group collect samples of algae from around Lake Tahoe. There are typical patterns of algae growth during the year with seasonal algae blooms peaking in the spring (February to May) and sometimes again in the late fall when lake mixing provides another influx of nutrients from below for algal growth. Inflow from groundwater, atmospheric deposition and runoff brings in nutrients that feed the algae. In addition, warm and calm weather provides an ideal environment for the algae to grow along the shoreline and in deeper water. Throughout the summer, algae grow in

both areas, but become limited by nutrient supply to some extent as the season progresses and snowmelt and stream flow decrease. When the sun is high in the summer sky, the phytoplankton are actually light-limited in two ways. In the surface waters, they are photo-inhibited by too much strong light. Farther down, around 40 feet to 60 feet, they find good light conditions for growth, and below that depth they become light-limited by not having enough light for growth. The numbers and types of algae and their growth rates continually change throughout the year in response to the environmental conditions.



*Periphyton Algae—
attached to rocks in Lake Tahoe*

Pine Needles: To Rake Or Not To Rake

The local fire chiefs and water quality experts have found common ground regarding the pine needle mulch issue in Lake Tahoe. While the threat of wildfire is real, raking your property down to bare soil can create ideal conditions for wind and water erosion, which threaten the clarity of Lake Tahoe. As a compromise, the following suggestions provide for adequate defensible space *and* best management practices:

- In areas more than 2 feet away from the base of the house, reduce thick layers of pine needles and leaves to a depth of 1 inch to 2 inches. Greater accumulations of pine needles and leaves create an unacceptable fire risk. Reducing the pine needles and leaves to less than a 1-inch layer may make the underlying bare soil more vulnerable to erosion. Take care to avoid disturbing the “duff layer” (the dark area at the ground

surface where needles and leaves are decomposing) if present. Pine needles, especially the dark, moist layer found underneath, hold the healthy topsoil on your property, which helps plants grow, conserves water, fights disease and keeps your landscaping looking great!

- Do not allow any pine needles or leaves to accumulate within 2 feet of the house or under decks. Consider using inorganic (rock) mulches or planting low fire hazard vegetation to cover bare ground in these areas.
- Remove pine needles and leaves from roofs, rain gutters, decks, driveways, lawns, flower beds, and other areas where doing so does not result in exposing bare soil. Also, remove dead needles, leaves and branches that are still attached to living trees and shrubs and are within 15 feet of the ground.

Defensible Space, Are You Prepared?

What is defensible space? What can you do to make your home defendable from wildfire? Are you prepared?

Defensible space is the area between a house and an oncoming wildfire where the vegetation has been modified to reduce the wildfire threat and to provide an opportunity for firefighters to effectively defend the house. Sometimes, a defensible space is simply a homeowner’s properly maintained backyard.

As more of us are building our homes nestled in the pine trees to enjoy the beauty of the environment and get away from city life, it has become increasingly important to take responsibility for the surroundings in which we live. Because we have chosen to live in the forest, we need to respect and maintain it. We need to keep it healthy and work to improve the forest around us.

Before wildfire threatens, design and

landscape your home with wildfire safety in mind. Select materials and plants that can help contain fire rather than fuel it. Use fire resistant or non-combustible materials on the roof and exterior structure of the dwelling. Plant fire-resistant shrubs and trees. For more information on fire-safe landscaping, refer to “Home Landscaping Guide for Lake Tahoe and Vicinity” and “Living With Fire” published by University of Nevada Cooperative Extension.

The Three R’s of Defensible Space:

- **Removal**—elimination of entire plants, particularly trees and shrubs (such as cutting down a dead tree)
- **Reduction**—removal of plant parts, such as branches or leaves (pruning dead wood, removing low tree branches, and raking dry pine needles)
- **Replacement**—replacing hazardous vegetation with less flammable plants



Remember you're not just fertilizing the lawn

Fertilizer Usage

When you're fertilizing the lawn, remember you're not just fertilizing the lawn. The rain washes fertilizer along the curb, into the storm drain, and directly into our streams and Lake Tahoe. This causes algae to grow, which decreases the clarity of the lake. So if you fertilize, please follow directions and use sparingly.

Water Conservation

Please don't waste water - To irrigate your lawn efficiently and avoid overwatering, you should perform an “irrigation audit” (or “can” test) on your sprinkler system. If you are applying more than 1 and one-half inches of water per week in spring or fall, or more than 2 inches per week in July and August, you are overwatering and perhaps leaching nutrients down into the groundwater. For more information, call Bill Carlos, (775) 784-4848, or Waste Not Incline Village GID, (775) 831-8603.

Best Management Practices (BMPs)

Best Management Practices (BMPs), designed to prevent nutrient and sediment loading to Lake Tahoe, are required on all commercial properties, on the public roadways, and yes, even on our own private property. The Tahoe Regional Planning Agency (TRPA) recommends that you have your residence evaluated for BMPs. Typically, a BMP

(Continued on page 4)

Invasive Weeds in the Tahoe Basin



Group Targets "Triple Threat"

The Tahoe Basin Weed Coordinating Group, a multi-agency coalition of invasive weed experts, is asking the public's help in identifying and reporting sightings of three invasive weeds emerging in the Tahoe Basin.

Invasive weeds are nonnative plants that are prolific, highly competitive, and difficult to control. They displace native plants, decrease wildlife habitat, alter normal ecological processes, reduce recreational values, and cost us millions of dollars each year in treatment and production losses.

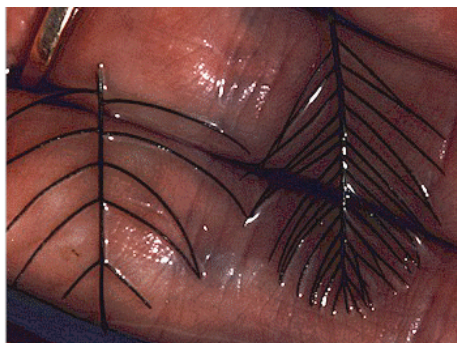
In the Tahoe Basin, one of the biggest threats from invasive weeds is their tendency to increase soil erosion and stream sedimentation, which can damage Tahoe's famed water quality.

While the Weed Coordinating Group is working to control all invasive weeds in the Basin, it is especially interested in finding new infestations of three particularly dangerous weeds, which the group has dubbed "Tahoe's Triple Threat." These weeds are:

- Spotted Knapweed
- Yellow Starthistle
- Diffuse Knapweed

If you think you have found any of these weeds in or around the Tahoe Basin 1) get an accurate description of the location, 2) do not pull or treat the weed, and 3) report the sighting to the appropriate county contact listed below:

Douglas County, (775) 782-9835
 Washoe County, (775) 784-4848
 Nevada County, (530) 273-2648
 Placer County, (530) 889-7372
 El Dorado County, (530) 621-5520



Eurasian Watermilfoil

Eurasian Watermilfoil

Eurasian Watermilfoil grows submerged in our lake, with vine-like stems from 6 feet to 9 feet long. It has feather-like leaves up to 1 and one-half inches long, whorled around the stems in groups of four. Broken-off plant fragments are capable of growing roots and starting new plants.

Why Should I Care About Eurasian Watermilfoil?

Eurasian Watermilfoil threatens our pristine lake. It quickly displaces native water plants. In New York's Lake George, it cut native water plant species in half in just two years! Its rapid growth and eventual decay degrades water quality and uses up oxygen

needed to support fish populations. For boaters, its dense matted growth restricts movement. Its vine-like stems wrap around propellers and may be sucked into water intakes. Most importantly, its decay releases phosphorous into the lake, supporting algae growth. Tahoe's blue water could become murky green very quickly if this weed is not stopped!

Efforts are underway to reduce the amount of Eurasian Watermilfoil in Lake Tahoe. You can help prevent further spread. Here's how:

- ◆ Remove all aquatic vegetation from your boat and trailer before launching at or leaving any boat ramp. Dispose of plant parts away from the lake or waterway.
- ◆ When leaving infested areas in Lake Tahoe, stop for a moment and run your boat in reverse. This helps knock off plant parts and leaves them in the infested areas, preventing spread.
- ◆ Pass the word among friends and neighbors so they'll help control this weed.

Best Management Practices (BMPs)

(Continued from page 3)

retrofit for a residential property entails measures such as spreading mulch over exposed soil areas, paving dirt driveways, and in some cases installing infiltration systems next to driveways and under roof driplines. To schedule a **free BMP site evaluation**, call TRPA, (775) 588-4547, Ext. 202 or your local Conservation District, (530) 573-2210.

Living With Bears

By Ann Bryant, Executive Director,
BEAR League

Bears are probably the most unforgettable wildlife encounter residents and visitors are likely to have in the Tahoe area. Bears are large and often misunderstood. Unfortunately, bears are paying for our lack of understanding and our mistakes with their lives. It is up to us to live in bear country respectfully and responsibly.

It is important to have correct information on the proper way for humans to live and vacation in bear country, without negatively impacting the bears:

- All wild bears inhabiting California and Nevada are black bears, no matter what color. The last grizzly bear was killed in the 1920s. Our bears do not eat people, are basically shy, and prefer to avoid confrontation. However, they are opportunistic and will look for an easy meal of garbage, pet food, pie on a window sill, etc.
- The most important rule of all is **NEVER FEED THE BEARS!** Once a bear finds food on your property, it will never forget and will return many times hoping for a repeat performance. Such bears often must be destroyed (a fed bear is a dead bear). Bears follow their noses and are thinking of food whenever they aren't asleep. Be sure to never intentionally feed bears and make it a habit to keep anything edible (such as garbage, pet food, compost piles, etc.) completely inaccessible all the time. It is now illegal to put garbage out before the morning of trash collection in anything other than a metal bear-proof garbage enclosure.
- Black bears naturally fear people. However, some of our bears have forgotten this because we have been too nice to them. If bears come into your yard, you should yell, throw things at them, bang pots and pans, and generally make them feel unwelcome. A bear will not waste time or effort



*"Rudy" California Black Bear
Photo courtesy of BEAR League*

where it isn't getting fed and especially where it is being picked on. This is called "aversive conditioning" and it works to keep our bears safe!

The BEAR League is available to help you with bear related questions or concerns, (530) 525-PAWS (7297).

Visit Your Local Demonstration Gardens

The North Lake Tahoe Demonstration Garden, located on the Mountain Campus of Sierra Nevada College, is scheduling free Green Thumb Thursday classes again this summer. The classes are at 6 p.m. at corner of College Blvd. and McDonald Drive in Incline Village.

The South Lake Tahoe Demonstration Garden, on the campus of Lake Tahoe Community College, is also open seven days a week for you to learn about landscaping and BMPs at Lake Tahoe.

These gardens demonstrate fundamental principles of successful landscaping and gardening at Lake Tahoe, where the growing season is short, rich soil is



scarce, and reliable information on high-altitude gardening is in short supply. But, there is more to the garden than simply learning how to landscape your property. You can conserve water, control soil erosion, enhance water quality, and understand how we can protect and enhance this beautiful place we call home.

Contacts:

North Lake Tahoe Demonstration Garden
Margaret Solomon at (775) 831-8437

South Lake Tahoe Demonstration Garden
Frances Brady, LTCC, (530) 541-4660 ext. 219

Green Thumb Thursday Classes at the North Lake Tahoe Demonstration Garden

- June 27: Native Wildflowers and Flowering Shrubs Found in the Tahoe Basin; Julie Etra
- July 11: Native and Adaptive plants Found at Local Nurseries; Dan Yori, High Sierra Gardens
- July 18: Container Gardening for Decks and Patios; Lainie Thompson
- July 25: Composting and Season Extenders for the Tahoe Garden; Class Leader TBA

Environmental Education Calendar of Events

June

June 27: Green Thumb Gardener Series—Visit the North Lake Tahoe Demonstration Garden at 6 p.m. for a free workshop on “Native Wildflowers and Flowering Shrubs Found in the Tahoe Basin” taught by Julie Etra. Contact: Mimi Komito, (775) 831-8711

June 28: Incline Village Clean Water Team—Join the Incline Village Clean Water Team at Aspen Grove Community Center, Incline Village, to help monitor Rosewood, Incline, Deer, First and Second Creeks. It is a great opportunity to learn about local water quality issues, practice methods used in monitoring water quality and meet your neighbors. Contact: Sarah Tone, (775) 832-1284

June 29: Fredericks Cabin Volunteer Day—Join the Tahoe-Baikal Institute and U.S. Forest Service for a volunteer work day to help fix up the old Fredericks Cabin located near Fallen Leaf Lake. Contact: Caroline Cincotta, (530) 542-5599

June 29 (10:00 a.m. - 2:00 p.m.): Lake Tahoe Demonstration Garden Workshop Day—Visit the Lake Tahoe Demonstration Garden on the campus of the Lake Tahoe Community College (South Lake Tahoe) for workshops on local gardening, native plants, fertilizer management, shade gardening, turf selection, best management practices, composting and more. In addition, California Native Plant Society will be selling a wide variety of native plants. Contact: Lisa O'Daly, (530) 542-6021

Summer Hikes & Outings

LTEEC has compiled a list of guided hikes and outings scheduled for the Lake Tahoe area this summer. This includes hikes sponsored by the Tahoe Rim Trail Association, Tahoe Area Sierra Club, League to Save Lake Tahoe, California Native Plant Society and Tahoe Wilderness Institute. You can access the list on our website at www.lteec.org.

July

July 11 (8:30 p.m.): Wildflowers of the Sierra Nevada—Author/photographer Laird Blackwell will present a free program on wildflowers of the Sierra Nevada at the Lake of the Sky Amphitheater, South Lake Tahoe. Contact: U.S. Forest Service, Taylor Creek Visitor Center, (530) 573-2674

July 11: Green Thumb Gardener Series—Visit the North Lake Tahoe Demonstration Garden at 6 p.m. for a free workshop on “Native and Adaptive Plants Found at Local Nurseries” taught by Dan Yori of High Sierra Gardens. Contact: Mimi Komito, (775) 831-8711

July 13 - 21: Tahoe Wilderness Institute Backcountry Program—The Tahoe Wilderness Institute Backcountry Program is an eight-day interdisciplinary learning adventure. With wilderness as both subject and classroom, participants study geology, literature, art, mountaineering, biology, and backcountry navigation. The Institute's hands-on, cooperative approach fosters a holistic understanding of our natural surroundings. Contact: Shawn Butler, (530) 541-4660 ext. 525, or Lake Tahoe Community College to register

July 18: Green Thumb Gardener Series—Visit the North Lake Tahoe Demonstration Garden at 6 p.m. for a free workshop on “Container Gardening for Decks and Patios” taught by Lanie Thompson. Contact: Mimi Komito, (775) 831-8711

July 18: Tahoe Area Sierra Club Meeting—The Tahoe Area Sierra Club meets from 7 p.m. to 9 p.m. on the third Thursday of each month at the Tahoe Douglas Fire Department, Zephyr Cove. Contact: Michael Donahoe, (775) 588-5466. Website: <http://motherlode.sierraclub.org/tahoe/>

July 19, 20, 21, 27 & 28: Natural History of Lake Tahoe class (PHS 114) is available at Lake Tahoe Community College again this summer. Class is taught by John Roos, University of Nevada Cooperative Extension, and provides 3.0 credits. The class will be exploring several sites around the Tahoe Basin. Contact: John Roos,

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

(775) 832-4142, or Lake Tahoe Community College to register

July 19: Weed Awareness Tour—The Tahoe Basin Weed Coordinating Group is dedicated to preventing and controlling invasive weed species in the Basin by sharing resources and information and standardizing methods of treatment and data collection. The weed awareness tour will show attendees various invasive weeds in the Tahoe Basin. Contact: Sue Donaldson, University of Nevada Cooperative Extension, (775) 784-4848

July 20: Invasive Weed Phone-In Day—Community members are encouraged to phone-in information about possible invasive weeds sightings in the Tahoe Basin. Contact: Sue Donaldson, University of Nevada Cooperative Extension, (775) 784-4848

July 25: Green Thumb Gardener Series—Visit the North Lake Tahoe Demonstration Garden at 6 p.m. for a free workshop on “Composting and Season Extenders for the Tahoe Garden.” Contact: Mimi Komito, (775) 831-8711

July 25: Bats - Flyers of the Night Sky “Bat Woman” Pat Winters will bring her live bats for a free evening program, “Bats: Flyers of the Night Sky,” at the Lake of the Sky Amphitheater, South Lake Tahoe. Begins at 8:30 p.m. Contact: U.S. Forest Service, Taylor Creek Visitor Center, (530) 573-2674

July 30: Star Trek (Star Program)—Interpretive/Naturalist Gay Eitel will conduct her “Star Trek” (star program) beginning at 8:30 p.m. at the Lake of the Sky Amphitheater, South Lake Tahoe. Contact: U.S. Forest Service, Taylor Creek Visitor Center, (530) 573-2674

Environmental Education Calendar of Events, continued

August

August 1 - 4: Tahoe Wilderness Institute (TWI) Weekend Field Program—Students choose from a variety of sessions that focus on specific conservation issues and efforts tied to the Lake Tahoe Basin. Contact: Shawn Butler, (530) 541-4660 ext. 525, or Lake Tahoe Community College to register

August 1: Tahoe-Baikal Institute (TBI) "Frienderaiser" Event—This year's event will honor Dwight Steele and his more than 30 years of dedicated service to protect Lake Tahoe. The guest speaker will be Richard Goldman, environmental philanthropist, Richard and Rhoda Goldman Foundation. Please join TBI and our 2002 TBI Exchange participants for this exciting event at Heavenly Valley Ski Resort on "top of the Tram" at 5:30 p.m. Contact: Tony Brunello, (530) 542-5599. Website: <http://www.tahoebaikal.org>

August 2: Children's Environmental Science Day—Visit Sand Harbor for a free community event for children (ages 8 and older) that includes hands-on science activities designed to create an awareness of the unique ecology of beautiful Lake Tahoe. Activities include 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 Homblower to view lake studies done by UC Davis Tahoe Research Group, crafts from The League to Save Lake Tahoe, and much more. Children will be provided a pizza, cookie, and soda lunch, T-shirts,

and lots of interesting materials to take home with them. Contact: Heather Segale, (775) 832-4138

August 4: Donner Summit Wetlands and Old Growth hike led by John Cobourn from 9:30 a.m. to 2:30 p.m. Call Truckee Donner Land Trust, (530) 582-4711.

August 8: John Muir "Vagabond John"—Actor Bill Ritch will perform as John Muir in "Vagabond John," 7:30 p.m. at the Lake of the Sky Amphitheater, South Lake Tahoe. Tickets are \$5 for adults and \$3 for children. Contact: U.S. Forest Service, Taylor Creek Visitor Center, (530) 573-2674

August 15: Tahoe Area Sierra Club Meeting—The Tahoe Area Sierra Club meets from 7 p.m. to 9 p.m. on the third Thursday of each month at the Tahoe Douglas Fire Department, Zephyr Cove. Contact: Michael Donahoe, (775) 588-5466

August 17 - August 18: Sierra Nevada Alliance Conference: Water Connections - The Future of the Sierra. Join Sierra Nevada Alliance at Camp Richardson for two days of workshops, field trips, and amazing speakers to learn and discuss how forests, wildlands, wildlife habitat, and rivers, lakes and streams could be affected by future water demands. Let's unite to determine viable, long-term solutions to protect the Sierra. Contact: Sierra Nevada Alliance, (530) 542-4546. Website: <http://www.sierranevadaalliance.org>

August 22: McAvoy Layne Portrays Mark Twain—McAvoy Layne will portray Mark Twain in a family show beginning at 7:30 p.m. at the Lake of the Sky Amphitheater,

South Lake Tahoe. Tickets are \$5 for adults and \$3 for children. Contact: U.S. Forest Service, Taylor Creek Visitor Center, (530) 573-2674

August 27: Star Trek (Star Program) - Interpretive/Naturalist Gay Eitel will conduct her "Star Trek" (star program) beginning at 8:30 p.m. at the Lake of the Sky Amphitheater, South Lake Tahoe. Contact: U.S. Forest Service, Taylor Creek Visitor Center, (530) 573-2674

September

September 6 - September 8: Join the Tahoe Rim Trail Association for the California Trails & Greenways Conference "Trails: Our American Heritage" at Granlibakken Resort, Tahoe City. Contact: Shannon Raborn, (775) 588-0686. Website: <http://www.tahoerimtrail.org>

September 23 - October 31: Kokanee Salmon Environmental Education Program Location: Taylor Creek, South Lake Tahoe The Kokanee Salmon Environmental Education Program is a fall program based on the life cycle of the Lake Tahoe Kokanee Salmon. Third- and fourth-grade students are led on guided tours of the Rainbow Trail to Taylor Creek to witness firsthand the spawning ritual of the salmon. Contact: Mike St. Michel, U.S. Forest Service, (530) 573-2600 Ext. 2611

September 28: Tahoe Forest Stewardship Day—Join the League to Save Lake Tahoe for the annual forest restoration project. Contact: Dan Sussman, League, (530) 541-5388. Website: <http://www.keptahoeblue.org>



Last year's Children's Environmental Science Day at Sand Harbor

Mark Your Calendars for Future 2002 Events

For our full calendar, please visit our website at www.lteec.org and click on the [Calendar](#).

Coming Soon:

October 5 - October 6: Lake Tahoe Kokanee Salmon Festival

October 7 - October 10: Sierra Nevada Science Symposium

October 18: National Water Monitoring Day

October 18: Snapshot Day Volunteer Appreciation Party at Valhalla

October 20: Truckee River Day

Programs to Protect Tahoe's Environment

Environmental Improvement Program (EIP) Going Strong

Since the Presidential Forum in 1997, most lake restoration efforts at Tahoe have been integrated into a package called the Environmental Improvement Program or EIP. Full implementation of these hundreds of capital improvement projects is considered critical by Tahoe Basin leaders if we are to reverse the steady decline in our lake's water quality.

Please Excuse the Inconvenience – EIP Construction

While implementing projects of the Environmental Improvement Program, there will be some inconveniences. You can expect recreational impacts such as increased vehicle traffic, trail crews, construction, and noise from chain saws, trucks and tree chippers. We thank you for your patience and cooperation. Remember, these projects are designed to benefit Lake Tahoe, the surrounding forests, streams, recreation and wildlife for the future.

Some of the EIP projects occurring this summer include:

- *State Route 760 Elks Point Drive Erosion Control* — Revegetation and runoff construction is underway by Nevada Department of Transportation (NDOT) on Elks Point Drive leading down to Nevada Beach.
- *State Route 28 Water Quality Improvements* — Construction on the east shore is currently underway including slope stabilization, conveyance, runoff treatment, parking removal and control. Be prepared for up to 20-minute delays if traveling through this area.
- *Angora Creek Restoration* — This California State Parks Department project will redirect Angora Creek back into its original channel and includes 2 acres of Stream Environment Zone (SEZ) restoration, 0.5 acres of meadow habitat improvement, and 0.1 acres of riparian and stream habitat improvements.
- *Highway 89- 15th Street to Current USFS Bike Path* — El Dorado County Department of Transportation will construct a class-one bicycle trail to connect 15th Street with the southern end of the U.S. Forest Service bicycle trail to Camp Richardson.
- *Sugar Pine Point State Park Day Use Improvements* — This California State Parks project involves development of day use areas, lake access, and installation of entrance and kiosk signage. In addition, new parking and rest-

room facilities will be built. These recreation improvements will also enable Best Management Practices to be installed at Sugar Pine Point State Park.



Clockwise from top: Bike path, stream, Lahontan Cutthroat Trout

What You Can Do To Protect Water Quality

- Hike or ride only on existing trails.
- Use fertilizers and lawn chemicals sparingly.
- Water carefully and avoid runoff. Yard chemicals and fertilizers can wash into ditches and storm drains. Use lawn and garden chemicals carefully, according to their labels, to avoid excess or unneeded application.
- Use phosphate-free laundry detergent.
- Take household hazardous wastes to the fire department or an appropriate recycler.
- Recycle used automotive oil. Never dump oil, paint, antifreeze or other chemicals into a storm drain or ditch. Oil dumped on the ground or in the street can pollute groundwater, streams and the lake.
- Don't litter.
- Clean up after pets.
- Wash cars at a commercial car wash that filters and recycles wash & rinse water.
- Don't ride mountain bikes on muddy dirt roads or trails. Don't ride across streams. Use bridges instead, or walk your bike across.
- Never pour any chemicals or dirty water down storm drains.
- Don't use two-stroke engines for boating. Properly service engines and motors in vehicles and watercraft.
- Report water polluters.

For Tahoe Area Teachers and Students...

K-12 Regional Coordinator Named

Jill Sarick was recently named Adopt-a-Watershed Regional Coordinator for the K-12 watershed education program in the Tahoe/Truckee watersheds. Jill will work with Adopt-a-Watershed under a Proposition 13 grant to oversee the planning, implementation, and administration of its environment-based education programs in the Tahoe Basin. She plans to foster relationships with all the school districts in the Basin. Her goal is to enhance and evaluate the success of K-12 environmental education at Lake Tahoe. In addition, we are excited to name Ms. Sarick leader of LTEEC's K-12 Watershed Education subgroup. Congratulations Jill.



Sierra Watershed Education Partnerships (SWEP) Announces New Programs

As the school year ends, Sierra Watershed Education Partnerships (SWEP) is busy expanding its support for Tahoe Truckee Unified School District teachers and students with some exciting new programs.

This summer, SWEP will be working with the School-to-Work program to create a summer internship program for students interested in pursuing environment-based careers. These students will be working with various agencies, nonprofits and community groups to learn the basics of water quality monitoring, data collection, and resource management.

SWEP has created the Teacher's Interpretive Hike Series for teachers and others who want to incorporate the environment as a tool for learning. This is an exciting opportunity to explore the local area with resource professionals and experts, focusing on specific aspects of our unique watershed. Participants will gain ideas and information on how to interpret nature and science in the field with students.

For more information about SWEP or the programs it supports, please contact Christine McMorrow, program manager, (530) 525-6692, or Jan Ellis, project director, (775) 831-6071.

Conservation Through Education

Educating our youth about environmental issues in the Lake Tahoe Basin is crucial to protecting our environment. The primary mission of Marine Research and Education (MR&E) is to provide an environmental education program promoting the conservation of natural resources in the Lake Tahoe Basin in simple, easy to understand methods and language. The MR&E program is an exciting, hands-on experience intended for children K-12 and other community organizations. The program consists of two segments; an "on land" classroom and an "on the water" classroom aboard the vessel 'Prophet.' Students learn about the ecology of the Tahoe Basin through a model of the lake and how elements like surface runoff, erosion, and pollution affect the quality and clarity of the water, and use real scientific methods like Secchi disc monitoring, plankton trawling, microscope viewing and water quality testing to help apply knowledge gained inside the classroom. For more information, call Laura Selden, (530) 544-7409.

Marine Research and Education would like to invite members of the Tahoe Basin community out on the lake for our water quality testing trips. Until recently, our outings have been open only to educational field trips for K-12 students. Now we have opened the first Monday of each month to members of the community who would like to join us aboard the Prophet. Come out, learn about the lake, and help us gather data.



Students aboard the Marine Research & Education boat "Prophet"

LTEEC Readies for Spring and Summer Events (continued)

(Continued from page 1)

Lauri Kemper, Lahontan Water Quality Control Board, Catherine Parsons, League to Save Lake Tahoe, and Kim Stokely, Adopt-A-Watershed, urged LTEEC to create more experiential education opportunities for the Basin's school children. Kemper asserted that every school child at Lake Tahoe should have an environmental education excursion out on Lake Tahoe. Stokely spoke of the pressing need to develop new leaders who can take watershed education into the public schools. To assist this effort, Adopt-A-Watershed has secured a grant to hire a Regional Coordinator to work with Lake Tahoe school teachers. Jill Sarick has been hired for this position and she will start in early July!

Steve Teshara, Lake Tahoe Gaming Alliance, and Michael Donahoe, Tahoe Area Sierra Club, both emphasized the importance of increasing ridership on public transportation in the Basin. The heavy use of private cars and trucks in the Basin has adverse impacts on both the air quality and water quality of Lake Tahoe. Donahoe urged local businesses to create "jackpots" that would include free shuttle rides to the Tahoe Rim Trail, boat rides on the lake, or trips up the new gondola.

Our keynote speaker was Jeff Hohensee, education director, Tree People, a large environmental education group based in Southern California. Hohensee listened to the ideas raised by panel members and the audience and offered an "outside expert's" assessment of our current direction and our future potential. Hohensee noted that several panelists and others had spoken of the critical need to inspire a sense of personal responsibility for environmental stewardship in all resi-



Jill Sarick, Emily Husted and Heather Segale pose during lunch aboard the Tahoe Queen

dents and visitors at Tahoe. He noted that this is a tall order, but said that we have the potential to reach this goal. LTEEC's mission to improve the "overall effectiveness" of environmental education at Lake Tahoe means learning has to "stick" in order to have a real impact on people's lives. We must create not only knowledge and skills but also the motivation and value system to make a difference for the lake. That is a stated objective of LTEEC.

Hohensee stressed that this kind of community education must include the general public as well as the schools and teachers. Our "core values" (reducing pollution of Tahoe's air and water) must be delivered in an educational "system" that includes constant media attention, fun personal experiences, service learning, education about issues, and development of new community leaders. These "planks" must all be orchestrated in order to make the key messages stick.

Hohensee pointed out that public and private sectors agree that the economy of our region hinges on the continued exceptional purity of Lake Tahoe's water. We already have general support from all levels of government and

most residents and visitors. In fact, 89 percent of north shore Lake Tahoe residents rated "protection of air and water quality" as either very important (72 percent) or moderately important (17 percent) in the Parasol Foundation's 2000 Community Needs Assessment, which concluded, "this issue was by far rated as the most important by the greatest percentage of residents."

Reaching agreement on an overall strategy for environmental education for the Basin has always been a core concept of LTEEC. Hohensee noted that the current structure, mission, goals, objectives and workplan, which have been created by the 25 member LTEEC Steering Committee, already constitute the essential elements of such an overall strategy. He encouraged us to form a small "task force" to work with these elements and others to produce a relatively short document that can be reviewed and revised by the membership within three or four months. Anyone wishing to assist with this discreet task should contact us, and we will schedule a meeting prior to our next meeting of the Steering Committee, which will be in late August or early September.

Have a great summer and keep in touch!



Brendan Ferry, Marianne Boccuzzi, Jennifer Heath and Abby O'Keefe outside on the deck of the Tahoe Queen

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.

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.



COOPERATIVE EXTENSION
Bringing the University to You

Participating Partners

- 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
- Lahontan Audubon Society
- League to Save Lake Tahoe
- Nevada Conservation Corps
- Nevada Division of Environmental Protection
- Nevada Division of State Lands
- 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 Resource Conservation District
- Tahoe Rim Trail Association
- U. S. Fish and Wildlife Service
- 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 is comprised of various working groups or sub-groups. Each group is led by one or two individuals with a passion for the group's mission, as summarized below. Please call us if you would like to join our efforts!

Partners in Conservation

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

Environmental Improvement Program (EIP) Outreach

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

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 scientists 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.

Citizens' 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 defensible space messages in the community.

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.

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) 832-4138
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

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

