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LTEEC Partners With KOLO-TV

By John Cobourn

Heather Segale, LTEEC Environmental Education Coordinator, has accomplished one of the Steering Committee's most ambitious work plan priorities. She has forged an agreement with KOLO-TV News Channel 8, Reno's ABC affiliate, to present 90-second environmental news segments once each week during the evening news. The segments will begin airing Tuesday, Feb. 4, during the 5 p.m. news broadcast.

The Incline office of the University of Nevada Cooperative Extension is researching the series of educational segments. LTEEC has gathered input on content and relevant scientific research from Tahoe Basin scientists, public information officers and from the LTEEC Steering Committee. Well-known environmental reporter, Shelly Purdy, will host these segments, and KOLO-TV will grant free airtime, filming and editing.

Segale conceived of the TV media campaign, and the Steering Committee rated it as one of LTEEC's highest priorities for a



new program over a year ago. The idea gained momentum at LTEEC's annual meeting on May 15 when Jeff Hohensee of Tree People presented his "model for community outreach." Getting environmental educational messages out to large numbers of people through the popular media builds a foundation of "environmental literacy" in the general public. Since many LTEEC leaders embraced this educational model, Segale redoubled efforts to make the TV campaign a reality.

The messages will focus on the basic environmental issues at Lake Tahoe, particularly erosion control and other nonpoint source pollution remedies. Each segment will focus on a particular piece of Tahoe's environmental puzzle. Basic explanations of watershed hydrology, water quality parameters,

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

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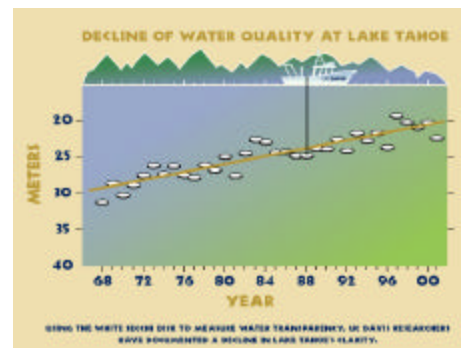
TMDL: A Water Quality Restoration Plan

A TMDL (Total Maximum Daily Load) is a water quality restoration plan, mandated by the federal Clean Water Act, designed to reduce the amount of pollution contributing to the decline of Lake Tahoe's clarity (see figure at right). Technically, a TMDL is defined as the amount of a specific pollutant that a water body can receive and still meet water quality standards. Research at Lake Tahoe has shown that it is the load or mass (kilograms per year) of fine sediment and nutrients, and not simply their concentration (milligrams per liter) in stream flow or runoff, that affects the long-term clarity trend.

TMDLs provide a framework mandated by the federal Clean Water Act to scientifically understand and control the sources of pollutants that impair lake clarity. In order to establish the TMDL, two years of research and monitoring data (see box to right) will be collected, interpreted, and combined with a wealth of historical data. The TMDL will form the basis for a comprehensive and collaborative lake clarity restoration plan. Once completed in 2007, it is anticipated that the TMDL will greatly enhance our scientific understanding of lake processes

and help guide the implementation of existing projects and programs such as the Environmental Improvement Program, as well as small-scale individual projects.

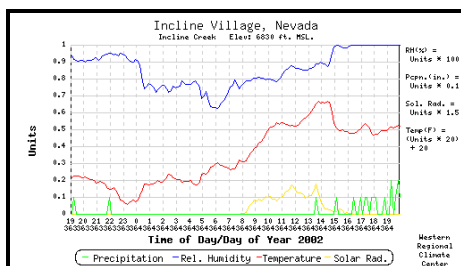
For more information visit http://www.swrcb.ca.gov/rwqcb6/TMDL/Tahoe/Tahoe_Index.htm on the Internet or contact Dave Roberts at DRoberts@rb6s.swrcb.ca.gov.



Lake Tahoe Secchi Depth Chart

New Research and Monitoring Projects

- Reconstruction of historic meteorology – UC Davis
- Loading of fine sediment – Collective effort
- Stream channel erosion – USDA National Sedimentation Laboratory
- Groundwater – U.S. Army Corps of Engineers
- Sewer line exfiltration – U.S. Army Corps of Engineers
- Storm water runoff monitoring - Tahoe Research Group (TRG), Desert Research Institute (DRI)
- Statistical analysis of loading related to land use characteristics – Hydrokios Consulting, DRI, TRG
- Watershed modeling – Tetra Tech Inc. and others
- Biologically available phosphorus – University of Nevada, Reno
- Characterization and fate of lake particles – UC Davis
- Application of Clarity Model – UC Davis
- Storm water BMP evaluations and implementation feasibility – Geosyntech Consulting
- Establish air quality monitoring network – California Air Resources Board (CARB), TRPA and others
- Characterization of air quality emission sources – CARB
- Modeling of atmospheric deposition to Lake Tahoe – CARB
- Near-shore water quality – DRI
- Data management – TRPA



Online graphs and data from the real-time weather station

Incline Creek Weather Station Online

A real-time meteorological weather station is now up and running at Incline Creek near the Diamond Peak Ski area. You can access the continuous, real-time data at <http://www.wrc.dri.edu/weather/incc.html>. This meteorological station is supported in part by Incline Village General Improvement District (IVGID). The

online weather station is updated every 10 minutes with graphs, data tables, and historical weather and climate data, including air temperature, relative humidity, wind speed, wind direction, maximum wind gust, snow depth, solar radiation and more.

Environmental Improvement Program (EIP) Corner

EIP Update: Public Funding Authorized

Nevada Assembly Bill 285 provides for the periodic issuance of general obligation bonds of up to \$53.2 million to implement EIP projects during the period between July 1, 2001 - June 30, 2007. Recently, the Nevada Legislature took the next step and actually authorized the issuance of state bonds and the use of revenue in the amount of \$12.9 million for EIP projects during the period 2003-2005. Similarly, California has committed \$240 million in the future to implement EIP projects. Recently, California Proposition 50 was passed, which provides \$30 million for Lake Tahoe EIP projects.

Completed Nevada Projects

Jim Lawrence, Tahoe program manager, Nevada Tahoe Resource Team,

keeps track of the various EIP projects in Nevada. The total commitment for Nevada (\$82 million) includes projects in eight of the nine threshold categories (water quality, SEZ/soils, vegetation, fisheries, recreation, wildlife, and scenic quality with no project currently listed under air quality threshold). Water quality EIP projects completed to date in Nevada include:

Washoe County

- Incline Village #1 – drainage conveyance and runoff treatment, revegetation and sediment basins
- Incline Village Commercial – conveyance and runoff treatment
- Chateau/Country Club – revegetation, rock-lined ditches, retaining walls and rock slope protection

- Incline Village Tourist Water Quality – drainage conveyance and runoff treatment facilities
- Mill Creek Phase I – water quality treatment and erosion control

Douglas County

- Upper Kingsbury (Kingsbury Estates) – revegetation, slope stabilization, conveyance and runoff treatment
- Marla Bay – installation of sediment traps, water conveyance and treatment



Slope stabilization

Meeting the Local Requirements of the EIP: 2003 Contractor Workshop Expanded

Extensive scientific study indicates that implementation of best management practices (BMPs) is necessary to reduce the water pollution that is clouding Lake Tahoe. The five local agencies that comprise LTEEC's Partners in Conservation (PIC) are taking the lead on teaching private property owners how to design and install effective BMPs. For the fourth straight year, this group is offering a BMP Workshop to teach contractors, designers, landscapers and maintenance personnel how to install and maintain effective BMPs.

The 2003 Workshop presented by the Nevada Tahoe Conservation District, Tahoe Resource Conservation Dis-

trict, University of Nevada Cooperative Extension, Natural Resource Conservation Service and Tahoe Regional Planning Agency, will be held on March 19 at the North Tahoe Conference Center in Kings Beach.

Architects, engineers, contractors and builders who attend the workshop and one of two half-day field trainings will be listed on a list of "BMP Trained Professionals" that is handed out to homeowners each summer when they receive a free BMP site evaluation. The goal of the workshop is to enable more professionals to develop the skills to install BMPs for property owners. The basic concept is to increase both the supply of and demand

for effective BMP implementation throughout the Tahoe Basin.

The curriculum for the workshop has been expanded and updated again this year. PIC will offer concurrent sessions in three Tracks: Track 1 is for architects, landscape designers and engineers, and features sessions on BMP design and local permitting requirements. Track 2 is for BMP implementers and will focus on how to correctly install the BMPs required by a site evaluation. Track 3 will start after lunch and will target landscape maintenance personnel. Call the Tahoe Resource Conservation District, (530) 573-2754, for details.

Special Report: Lake Tahoe Air Quality

Meteorology and Air Quality in the Lake Tahoe Airshed

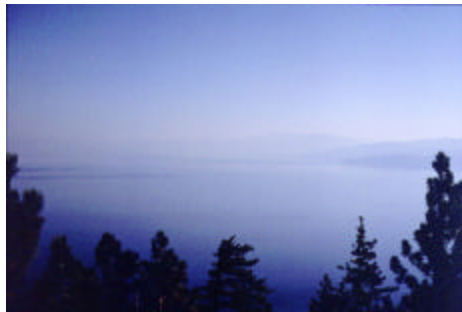
There are two meteorological regimes that affect air quality in the Lake Tahoe airshed. First, Lake Tahoe lies in a depression between the crests of the Sierra Nevada and Carson ranges. The bowl shape of the Basin has significant implications on air quality in the Region. Locally generated air pollutants are often trapped in the bowl by the Basin's frequent inversions. These inversions limit the volume of air that can be mixed, which in turn allows pollutants to accumulate to elevated concentrations. Inversions most frequently occur during the winter months in Tahoe, when a layer of wood smoke from residential heating can be seen over the Lake on many mornings, but they can occur throughout the year.

A second common meteorological event is atmospheric transport of pollutants from the Sacramento Valley and Bay Area. The location of Lake Tahoe directly to the east of the Sierra Nevada crest allows the prevailing westerly winds combined with local mountain up-slope winds, to bring air from the populated regions west of the Sierra into the Tahoe Basin. This pattern is usually strongest in summer, beginning in April, and usually ceases in late October (Cahill et al., 1987; Lake Tahoe Air Quality Research Scoping Document, TRPA, 2000).

Contact Jennifer Quashnick, TRPA, (775) 588-4547, for more information.

Thermal Inversions

A "thermal inversion" occurs when cold air is near the ground and there is



Poor visibility (60 k)



Good visibility (360 k)

a layer of warmer air above it. This happens because the cold air near the earth's surface, which is called stable air, is more dense than the warm air above it, so the colder air resists rising. Examples of thermal inversions include:

- Low level, or surface inversions, usually take place on a clear night, when the earth's surface radiates heat rapidly. If the air is clear, the ground, and the air directly above it, can be cooler than the air at higher altitudes.
- Another type of surface inversion takes place at night in valleys, when cold, dense air flows downslope under the influence of gravity, draining off the slopes and uplands, and into the valleys. The air in the valley bottoms is colder than the air above. Summer inversions in Tahoe are generally a result of this situation.

- Other types of inversions may also develop under various conditions.

Air Pollution From Automobiles and Snowmobiles

Mobile sources of pollution, such as automobiles, are significant sources of pollution in the Tahoe Basin. These sources emit carbon monoxide (CO), nitrogen oxides (NO_x), hydrocarbons (HCs), particulate matter (PM), and other pollutants. Most of these constituents impact not just human health, but also lake clarity. Traffic in the Basin is a result of both the local residential population, which increases slowly due to local restrictions on new development, and the tourist population, which has a significant, and sometimes overwhelming, impact on local traffic. The Tahoe Regional Planning Agency has adopted standards for transportation as it relates to air quality called "threshold indicators."

One indicator is traffic flow (as opposed to stop-and-go traffic), which can impact CO emissions. Another indicator is vehicle miles traveled (VMT), which impacts all pollutant concentrations, plus re-entrained road dust, which can make its way into the Lake, further reducing lake clarity. While transportation improvements have resulted in improved traffic flow (specific to an intersection in South Lake Tahoe), TRPA's "2001 Threshold Evaluation Report" indicates that Basin-wide VMT has increased. Since there are no limits on the number of vehicles entering the Basin, and development to the north, east and west of Lake Tahoe has skyrocketed in recent years, the number of nonresidents driving into the Basin is expected to

(Continued on page 5)

increase and to further impact Basin-wide VMT.

Although snowmobiles are not included in VMT calculations, they also emit a significant amount of pollution into the atmosphere. Since snowmobiles do not have the strict emission controls that most vehicles require, emissions per mile for a snowmobile are much higher than for a car. Recent estimates suggest that emissions from just seven hours of snowmobile use (a two-stroke engine) are comparable to emissions produced from driving a newer model car 100,000 miles (CARB 1999).

While snowmobile use has not resulted in exceeding any health standards in the Basin, pollutant levels in the immediate vicinity of snowmobile paths may be above established health standards and pose a health risk (Ingersoll 1999). Also, while the impacts of snowmobile use on Lake Tahoe have not been directly studied, research outside of the Basin suggests that some pollutants may deposit onto the snow, thus ending up in the Lake when the snow melts and drains to the Lake. The impacts of this to lake clar-

ity are unknown, but this kind of deposition may have a localized impact on aquatic life. Contact Jennifer Quashnick, TRPA, (775) 588-4547, for more information.

Keeping Warm and Breathing Clearly - Air Pollution From Wood Stoves

During cold weather, Lake Tahoe residents fire up wood stoves and stoke fireplaces to stay warm. Only dry, seasoned wood should be burned because fresh wood (such as leftover Christmas trees) does not burn as well. It can also emit more toxic air pollution than dry wood. Andrew Goodrich, director of air quality, Washoe District Health Department warns "pine needles and branches have a large amount of sap and other oils in them, which are released into the air when they are burned." Also, colored wrapping paper should not be burned. "When you burn paper that has been treated with special inks, you may be releasing toxics into the air we all breathe," explains Goodrich. "And if the paper has any type of metal in it, it's even worse."

Another way to help keep the winter air clean is to use EPA-approved wood stoves. Old, less efficient wood stoves, such as those installed in the 1980s or earlier, not only require more wood to generate the same amount of heat as a newer, more efficient stove, but also release significantly higher amounts of pollution into the air. Due to the excessive pollution emitted by the older wood heaters in the region, the TRPA adopted a wood heater retrofit program in 1993. This program requires that all wood heaters in any home sold, transferred or conveyed in the Tahoe Basin must meet certain emission standards for particulates. For example, if a home contains a nonconforming wood heater, it must be replaced with a conforming unit prior to sale. Pellet and gas stoves are popular, clean alternatives to wood heaters and can heat homes just as well. Wood smoke from residential heating poses a significant health risk since the smoke is often trapped at the bottom of the Basin due to winter inversions, resulting in higher concentrations of air pollution at the ground surface.



"The National Map" Lake Tahoe Area Pilot Project Underway

The U.S. Geological Survey (USGS) is developing "The National Map" to be a nationally consistent set of online, public domain, and geographic base information. "The National Map" will include digital orthorectified imagery; elevation data; vector data for hydrography; transportation; boundary and structure features; geographic names; and land-cover information.

The Lake Tahoe area pilot project involves the challenges and opportunities of integrating data across two states, eight counties, and several cities. The USGS is working with the Tahoe Regional Planning Agency to apply the pilot as the geographic underpinning to the Tahoe Integrated Information Management System, which will provide public access to a range of

area environmental information. This project will demonstrate the application of "The National Map" as a foundation for integrating, sharing, and using other data easily and consistently. Further information about the Lake Tahoe area pilot project is available from the USGS pilot project lead, Vicki Lukas, (650) 329-4288, or vlukas@usgs.gov.

Environmental Education Calendar of Events

February

Feb. 1: Legislative Workshop for the Environmental Community

Local environmentalists and budding activists can hone their skills for the upcoming legislative session at a special Legislative Workshop for the Environmental Community, 9 a.m. - 2:30 p.m. at the University of Nevada, Reno Student Union. Through lectures, panel discussions, and role-playing activities, participants will learn how to lobby and monitor bills, and what to expect from the 2003 legislative session. Registration is \$12 in advance, \$15 at the door and includes lunch. Contact Environmental Leadership, (775) 323-3433, <http://www.environleader.org>.

Feb. 8: Tahoe Area Sierra Club Outing to Independence Lake

Join the Sierra Club for an intermediate cross-country ski to the Independence Lake overlook. Go on jeep trails to the top of Independence Ridge for an elevation gain of 2,000 feet and 12 miles of travel. Contact Glenn Polochko, (530) 587-5906.

Job Announcements

- District Conservationist (seasonal), Nevada Tahoe Conservation District. Contact Jackie Johnson via E-mail at jackie-johnson@ca.nacdn.org.
- Tahoe-Baikal Institute is seeking applicants for the 2003 10-week summer environmental exchange program in Lake Tahoe and Lake Baikal for undergraduate, graduate, and young professionals. Contact Tony Brunello, (530) 542-5599, www.tahoebaikal.org.

Feb. 11: Growing Native Plants in the Classroom

Join Sierra Watershed Education Partnerships (SWEP) and Michael Hogan at Kings Beach Elementary School 4 - 6 p.m. to learn how to grow native plants in the classroom (for teachers and classroom volunteers). Contact Christine McMorrow, SWEP, (530) 525-6692.

Feb. 14: Groundwater and Hydrostratigraphy of Lake Tahoe

Researchers will convene for a science symposium on Groundwater and Hydrostratigraphy of Lake Tahoe at the Reynolds Community Center in Incline Village 8:30 a.m. - 4 p.m. No charge. Open to the public. Contact Heather Segale, (775) 832-4138, for more information.

Feb. 16: Tahoe Area Sierra Club Outing to Page Meadows

Join the Sierra Club for a cross-country ski in Page Meadows, North Lake Tahoe. Easy to moderate skiing. Contact Shannon Raborn, (530) 320-1795, scraborn@aol.com.

Feb. 20: Tahoe Area Sierra Club Meeting

The Tahoe Area Sierra Club meetings are held at the Douglas County Fire Department (Elks Point Road), 7 - 9 p.m. on the third Thursday of every month. Contact Michael Donahoe, (775) 588-5466, <http://motherlode.sierraclub.org/tahoe/>.

Feb. 28: Service Learning Training

Join Sierra Watershed Education Partnerships and Jim Toole, National Service Learning consultant (for teachers and classroom volunteers). Location TBA. Learn more about Service Learning on Page 8. Contact Christine McMorrow, SWEP, (530) 525-6692.

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

March

March 7 - 8: GLOBE Training for Teachers

Join Sierra Watershed Education Partnerships (SWEP) to become a certified GLOBE teacher. Contact Jan Ellis, SWEP, (530) 546-5622, for more information.

March 8: Tahoe Area Sierra Club Outings

Join the Sierra Club for an intermediate cross-country ski to Sagehen Hills. Contact Glenn Polochko, (530) 587-5906.

March 13: Data Quality Management Training

Join the Clean Water Team for a technical training for those involved in coordinating volunteer water quality monitoring activities. The meeting will be held at the University of Nevada Cooperative Extension office in Incline Village. Contact Heather Segale, (775) 832-4138.

March 18: Geology of Lake Tahoe, Training for Teachers

Join Sierra Watershed Education Partnerships (SWEP) and Leslie Ames to learn about the geology of Lake Tahoe (for teachers and classroom volunteers). Location TBA. Contact Christine McMorrow, SWEP, (530) 525-6692.

(Continued on page 7)

Environmental Education Calendar of Events, continued

(Continued from page 6)

March 19: BMP Workshop for Contractors, Landscape Designers and Architects

The fourth annual BMP training workshops for contractors, sponsored by the Partners in Conservation (PIC), will be held March 19, at the North Tahoe Conference Center in Kings Beach. See Page 3 for more information. Contact Heather Segale, (775) 832-4138.

March 20: Tahoe Area Sierra Club Meeting

See Page 6, "Feb. 20" for details.

March 25: Bat House Building Workshop

Join Sierra Watershed Education Partnerships (SWEP) and ecologist Stewart McMorrow at Tahoe Lake Elementary School, 4 – 6 p.m., to learn how to build bat boxes (for teachers and classroom volunteers). All the information and materials needed to build, install and monitor a bat house on your campus will be provided. Contact Christine McMorrow, SWEP, (530) 525-6692.

March 31 – April 2: 2003 California Parks Conference

Active and retired professionals from city, county, special district, state, and federal agencies who perform duties in park, recreation, forestry, land management, wildlife refuges, lakes, or watershed areas, as well as students and others seeking careers in these fields are encouraged to attend the 2003 Parks Conference at the Embassy Suites Tahoe Resort. Contact (800) 749-8749 for more information.

April

April 3: 9th Annual Lake Tahoe Basin Ecological Forum

The theme of the 2003 forum will be "Measuring and Monitoring Biological Integrity in the Sierra Nevada." Join research ecologists, natural resource managers, and other interested parties at the Lake Tahoe Community College Theater Arts Building to share knowledge, encourage new ideas, provide educational opportunities, and develop professional relationships. The forum is held annually to update natural resource professionals and lay



people on current ecological and biological research, monitoring programs, and management projects that are occurring in and around the Lake Tahoe region. Contact Shane Romsos, TRPA, (775) 588-4547, Ext. 216.

April 17: Tahoe Area Sierra Club Meeting

See Page 6, "Feb. 20" for details.

Mark Your Calendars for Future 2003 Events

May 3 - 4: Nevada Natural Resource Education Council Spring 2003 Conference

Nevada Natural Resource Education Council (NNREC) announces the Spring 2003 Conference to be held at the Clear Creek Youth Center, southwest of Carson City. The theme is "Partnerships Ignite Environmental Education." Contact Dan Allison, NNREC, (775) 741-5595, <http://nnrec.org/conference/>.

May 10: Annual Snapshot Day

Join the Clean Water Team for stream monitoring and participate in TMDL research. Contact Heather Segale, (775) 832-4138 for details.

October 7–11: North American Association for Environmental Education (NAAEE) Annual Conference

Captain Cook Hotel, Anchorage, Alaska
Thinking Globally While Acting Culturally is the theme of NAAEE's an-

nual conference. Thinking globally has long been a tenet of environmental education. Acting culturally is the celebration of differences among all of us and respecting how these differences can help us shape a more positive future. The conference will follow four cultural, diversity and global related strands along with a research strand. Strands will feature workshops, concurrent sessions, poster and interactive sessions. Visit <http://naaee.org/conferences/alaska/cfp2003.php> for more information.

K-12 Regional Coordinator Update

Community Visioning

Educators face many challenges in education such as language barriers, declining enrollment, overcrowding, failing infrastructures, proficiency tests and budget deficits. The Lake Tahoe Environmental Education Coalition (LTEEC), Adopt-a-Watershed (AAW) and Sierra Watershed Education Partnerships (SWEP) are working to help educators join forces to meet these challenges. We can work together to identify solutions to the toughest problems, find funding and other resources for our region and build a better future for our young people.

On Jan. 22 Adopt-a-Watershed and LTEEC convened a meeting at the North Tahoe Conference Center in Kings Beach to discuss and create a regional vision for enhanced education. Kim Stokely of Adopt-a-Watershed, a nationally recognized leader in education, facilitated the meeting. Results from the meeting will be available soon. Contact Jill Sarick, Adopt-a-Watershed regional coordinator, (775) 832-4167, for more information.

Urban Watershed Issues

Americorps volunteers and staff from California Tahoe Conservancy, the League to Save Lake Tahoe, Tahoe Regional Planning Agency, 4-H, Lake Tahoe Environmental Education Coalition, Sierra Watershed Education Partnerships, Nevada Tahoe Conservation District, Tahoe Resource Conservation District and Adopt-a-Watershed met in December to begin collecting curriculum on urban watershed issues. Topics include BMP's, storm water runoff, fertilizer use, native and non-native landscaping, water

ment, and more. The group plans to compile age appropriate and existing activities and curriculum to be used for teacher trainings, AmeriCorps and VISTA members, and Community Leaders in the Classroom (CLC) trainings. Anyone wishing to participate in this subcommittee should contact Jill Sarick at jill@adopt-a-watershed.org or (775) 832-4167.

Nevada Service Learning Grant

Tahoe Truckee Service Learning Partnerships, Sierra Nevada College, Sierra Watershed Education Partnerships and Adopt-a-Watershed were awarded a grant from Community Higher Education and School Partnerships (CHESP) Nevada Service Learning Partnership to implement a collaborative Service Learning (SL) program between the college and local school district. Funding will allow the creation of a Service Learning binder to be



used in SNC classes, SL stipends for new in-service teachers and recognition awards for outstanding teachers implementing high quality service learning projects.

Service Learning is a teaching strategy that integrates meaningful service to the community into the school curriculum. This experiential method gets students out of the classroom and into the school community and the community at large, where they learn to use their academic knowledge to address real needs.

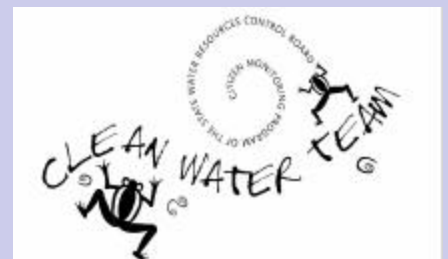
Snapshot Day 2002 Report Released

The "2002 Snapshot Day Report" was released in October of 2002 during the Clean Water Team's Annual Volunteer Appreciation Dinner. The Lake Tahoe Environmental Education Coalition hosted this year's dinner party with generous support from John Kleppe, Ph.D. of the UNR Electrical Engineering Department.

More than 300 volunteers participated in the annual stream-monitoring event, which took a look at our entire watershed from Lake Tahoe to Pyramid Lake. Generally, water in the Lake Tahoe Basin was clean. However, there were a few problematic creeks or "hotspots" that we will continue to

monitor. Take a closer look at the "2002 Snapshot Day Report" on the LTEEC Web site at www.lteec.org.

Planning for the 2003 Snapshot Day event is currently underway. This year citizens may be asked to help gather data as part of the larger TMDL program. See Page 2.



Tahoe Basin Weed Coordinating Group Plans Activities for 2003

By Susan Donaldson, Weed Group Chair,
University of Nevada Cooperative Extension

The Tahoe Basin Weed Coordinating Group completed an extremely successful first year in which over 300 weed infestations were mapped, 26,400 Dalmatian toadflax plants and 2,500 spotted knapweed plants were pulled, and numerous other invasive weeds were removed or treated with herbicides. In December, the group reviewed its priority list of weed species and developed a strategic plan for the coming year. The priority weeds are listed at right in groupings that reflect the need for control. In 2003, a primary focus will be the eradication of spotted knapweed in the Basin. To get involved or to request weed training for your group or agency, call Donaldson, (775) 784-4848. Effective weed control depends on participation by all landowners and managers.

Immediate control by mechanical methods:

- Musk thistle
- Scotch thistle
- Yellow starthistle
- Diffuse knapweed

Immediate control by chemical methods:

- Canada thistle
- Russian knapweed
- Spotted knapweed
- Tall whitetop



Spotted Knapweed on Highway 50



Spotted Knapweed

Practice containment to prevent expansion of existing populations:

- Bull thistle
- Klamathweed
- Dalmatian toadflax
- Yellow toadflax
- Oxeye daisy

Provide public education to stop intentional planting or spread:

- Scotch, French, Spanish brooms
- Eurasian watermilfoil
- Oxeye daisy
- Dalmatian and yellow toadflax

Meet Greg Crofton, Tribune Environmental Reporter

In February of 2002 Greg Crofton became the environmental reporter for the Tahoe Daily Tribune. The Tahoe World and North Lake Bonanza also regularly carry his stories. Crofton came out west after earning a graduate degree in journalism from the University of Mississippi "because of this



Greg Crofton, Environmental Reporter

area's beauty and for the skiing," but his job has kept him so busy he hardly has time to enjoy the outdoors. Prior to working the environmental beat, he was a Tribune staff writer on crime and courts. Crofton wouldn't call himself an environmental enthusiast, but he is learning to like writing and reporting about these complex issues. He says "it has taken a while to get up to speed with topics related to Lake Tahoe's environment, and there are plenty of topics to choose from including TMDLs, county allocations, and declining water clarity."

"The environmental reporting in Tahoe's regional newspapers is tremendously valuable for educating the gen-

eral public about issues in the basin," says John Cobourn, University of Nevada Cooperative Extension.

Crofton is aware that the position of environmental reporter gives him an influential voice in the Tahoe Basin. He says his job is "to find newsworthy stories and to clarify, not necessarily say what sources want said." Crofton is happy with his job. "Journalism allows me to write every day. Each day goes by in a flash and there is plenty of variety. I know a lot about Lake Tahoe and I get paid to learn about it."

Contact Greg Crofton at the Tahoe Daily Tribune, (530) 541-3880, or gcrofton@tahoedailytribune.com.

KOLO TV Weekly Environmental Education Segments (continued)

(Continued from page 1)

ecosystem management, and ways to reduce pollution will be featured through on-site shooting, interviews with Tahoe experts, graphic illustrations and other visual aids. During the first 12 weeks, segments will be introductory in nature, with more detailed and diverse content being presented later in the year. Information about Tahoe's all-important Environmental Improvement Program will be included in many segments, with a focus on erosion control and collaboration between the many partners.

Segale and John Cobourn will also write an article on the topic of each news segment to appear in Tahoe area newspapers that week. Both the articles and TV spots will provide

Web site addresses where the public can learn more about each topic and what Tahoe agencies are doing to address these issues.

While the focus of this environmental education series will be the Lake Tahoe Basin, the viewing audience will include most of Western Nevada. Concepts pertaining to Lake Tahoe can be applied to neighboring watersheds. The goal is not only to increase the public's understanding about how we can protect Lake Tahoe, but also to share information about how these issues are relevant to all viewers. Increasing "grass roots" environmental literacy could lead to improved environmental protection throughout the region.

While the University of Nevada Cooperative Extension and the University of California, Davis support LTEEC's general operation, they are not currently funding individual programs. Since LTEEC does not require membership dues from its participants, funding sources for programs must always be sought. (Fundraising was the highest ranked priority of the Steering Committee in 2002). A breakthrough for this TV campaign was the commitment by the U.S. Forest Service to provide additional support.

LTEEC wants to thank all of its grant funding agencies, which include the U.S. Forest Service, Nevada Division of State Lands, and Nevada Division of Environmental Protection, for making our programs possible.

Tahoe Environmental Research Center Proposed

Researchers at the University of California, Davis, were the first scientists to raise the alarm that cobalt-blue Lake Tahoe was turning green. In the 1950s, UC Davis converted the 1924 Fish Hatchery at Tahoe City into makeshift labs to conduct the scientific studies needed in the basin. Since then, the pioneering research done by UC Davis, UNR and other public organizations has helped us to understand the basin's ecological problems and their causes. If we are to restore the basin's health, yet continue to live, work and play here, more advanced research is needed. Policy makers are asking for scientific information to help them balance environmental protection with human activities, and to help them identify the most beneficial, efficient use of tax dollars.

To identify the best solutions, Tahoe

scientists urgently need a modern research center. UC Davis has raised \$13 million in private funds to build such a center and has identified a building site in Lake Forest. In addition to the new research center, the university will restore the old Fish Hatchery and convert it to a public education center.

The new research center would be located on one acre within a 4.7-acre site about one-quarter mile southeast of the hatchery. Before UC Davis chose this site, it established strict criteria for the center location. After two years of examining more than 20 plots of land, a parcel owned by California State Parks proved to be the only one that met those criteria and that was environmentally acceptable. The woods, beach and existing footpaths on the property will remain free and open to the public.



Fish Hatchery Building to be converted for use as Environmental Education Center (top) and artist rendering of proposed Research Center (bottom)

About the Lake Tahoe Environmental Education Coalition (LTEEC)

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.



COOPERATIVE EXTENSION
Bringing the University to You

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
- 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
- USDA 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.

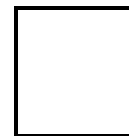
Tahoe Basin Weed Coordinating Group

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:

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LTEEC Hits the Airwaves

News Channel 8 KOLO-TV (Reno's ABC affiliate) has partnered with LTEEC to provide informative and educational news on the environment. In the coming weeks we will be explaining some of the issues facing the Lake Tahoe ecosystem and what you can do to help. **Watch for these news segments beginning Tuesday, Feb. 4 during the 5 p.m. newscast.**