Federal Interagency Partnership

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Federal Partnerships in the Lake Tahoe Basin

Established by Executive Order in 1997 to facilitate coordination of Federal programs to address environmental and economic concerns at Lake Tahoe

Tahoe Regional Executives (TREX)

Purpose: Facilitate regional coordination of Federal programs at Lake Tahoe and recommend final projects to the SNPLMA Executive Committee.

Members: Federal Agency Regional Executives.

Lake Tahoe Basin Executives Committee (LTBEC)

Purpose: Facilitate coordination of Federal programs to address environmental and economic concerns at Lake Tahoe.

Members: Bureau of Land Management (BLM), Bureau of Reclamation (BOR), Federal Highway Administration (FHWA), Natural Resources Conservation Service (NRCS), U.S. Army Corps of Engineers (USACE), U.S. Environmental Protection Agency (USEPA), U.S. Fish & Wildlife Service (USFWS), U.S. Forest Service (USFS), and the U.S. Geological Survey (USGS).

Lake Tahoe Federal Advisory Committee (LTFAC)

Purpose: Advise the Federal Partnership on how to best protect natural, recreational, and ecological resources in the Lake Tahoe Region.

Members: Twenty selected representatives from the public, local groups, and local agencies.

Partnership Coordination Team (PCT)

Purpose: Screen and prioritize Southern Nevada Public Land Management Act (SNPLMA) proposals for Lake Tahoe and provide Federal direction for the Environmental Improvement Program (EIP).

Members: Subcommittee of LTBEC and Tahoe Regional Planning Agency (TRPA) representation.

Tahoe Working Group (TWG)

Purpose: Evaluate PCT and TSC input and propose primary and secondary SNPLMA project lists and EIP funding.

Members: Subcommittee of LTBEC and LTFAC.

Tahoe Science Consortium (TSC)

Purpose: Identify monitoring possibilities for Capital Projects and provide scientific peer review of Research and Science proposals for SNPLMA.

Members: Scientific community at Lake Tahoe, including the Desert Research Institute; TRPA; University of California, Davis; University of Nevada, Reno; USEPA; USFS Pacific Southwest Research Station; USGS; and management agencies.

U.S. Department of Transportation Federal Highway Administration

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USGS Activities in the Lake Tahoe Basin

Lake Tahoe is famous for its alpine setting and deep, clear water. Over the last half century, clarity has declined by 30–40 feet or 1 foot per year. This decline in clarity has been attributed, in part, to nutrients and sediments delivered to the lake by its tributary streams and nutrients from ground-water inflow.

For decades, the U.S. Geological Survey (USGS) has been involved with a wide range of scientific research and monitoring activities in the Lake Tahoe Basin. Water-related activities include stream quantity and quality, ground-water levels and quality, and lake levels and quality. Mapping activities include topographic, bathymetric, and geologic; land-cover and land-use change delineation; and socioeconomic modeling.

The USGS Water Science Centers in Nevada (NWSC) and California (CWSC), Geology and Geography Disciplines, in cooperation with Federal, State and local agencies, are involved with the following:

Current Activities

Tahoe Decision Support System: The Tahoe Decision Support System (TDSS) tool is being developed to assist the Tahoe Regional Planning Agency (TRPA) with estimating the effects of policy decisions on local economic and environmental health.
http://www.nvwra.org/docs/journal/jnwra_2_article2_halsing.pdf

Land-Cover Characterization: A land-cover characterization study is being completed as part of a Nationwide study. The land-cover dataset includes information from LandSat satellites as well as many other sources such as census statistics.
http://geography.wr.usgs.gov/science/tahoe.html

Stream Monitoring: Nutrient, suspended-sediment, water-quality, and streamflow data are currently collected at 20 sites, in cooperation with TRPA and the University of California, Davis, and as part of the Lake Tahoe Interagency Monitoring Program (LTIMP). Runoff from the Gondola Fire area also is being monitored. These data are used to provide a consistent, long-term database and to identify trends throughout the Basin. Data are stored in the National Water Information System (NWIS) <http://waterdata.usgs.gov/nv/nwis> and are compiled annually.
http://nevada.usgs.gov/ADR/index.htm

Tim Rowe, USGS Hydrologist, presents results from a USGS study at Lake Tahoe. Photograph by M.L. Strobel, May 2004.

Ground-Water Monitoring: Shallow ground-water in South Lake Tahoe is being studied to determine potential transport of contaminants. A ground-water study in the Bijou Creek area of South Lake Tahoe was recently completed as was a ground-water/surface-water interaction study in the Trout Creek area. Data from these studies are stored in NWIS <http://waterdata.usgs.gov/nv/nwis> and are compiled annually <http://nevada.usgs.gov/ADR/index.htm>.

Cattlemans Detention Basin Effectiveness: The effects on ground-water quality and levels from the construction and operation of a stormwater detention basin along Cold Creek are being examined in partnership with El Dorado County, Calif. This project includes examining geochemical processes affecting water quality and using a numerical ground-water flow model to analyze ground-water/surface-water interactions. http://pubs.water.usgs.gov/sir2004-5254


View of Lake Tahoe looking west-northwest from Gondola Fire burned area; South Lake Tahoe, Calif., and Stateline, Nev., in foreground. Photograph by K.K. Allander, October 2002.

Water-Related Studies

Stream Monitoring: Streamflow and lake levels have been collected at various sites since 1900. Water-quality has been monitored at various times and sites since the 1970's. http://waterdata.usgs.gov/nwis

Monitoring of Lake Tahoe Basin Lakes: Nutrient and water-quality data were collected at five lakes and their outlet streams from 2002 to 2004. http://pubs.water.usgs.gov/of2004-1333

Organics Survey: Determined the presence of manmade organic compounds in selected tributaries, near their outlets, and at several Lake locations. Semipermeable membrane devices were installed at selected sites in 1998 and again in 2002–04.
http://pubs.water.usgs.gov/wrir994218

LTIMP Data Analysis: Nutrient and suspended-sediment loads, yields, and trends were calculated from 1988 to 1998 for 20 LTIMP sites.
http://pubs.water.usgs.gov/wri02-4030

Floodflow: Flood frequencies were studied at 46 stream sites in 1998 and 2002. http://pubs.water.usgs.gov/fs03-502

Precipitation-Runoff Simulations: Precipitation and associated runoff simulations were modeled for 15 subbasins as part of the Truckee-Carson Program.

Sediment Source and Channel Erosion: Sources, volume, characteristics, and production rates of sediment and transport of eroded material were studied in four basins from 1984 to 1987.
http://pubs.er.usgs.gov/pubs/wri/wri914054

Suspended Sediment and Nutrient Transport: Nutrient and sediment data were collected and analyzed from streams in the Edgewood and Glenbrook Creek and Incline Village areas, as well as along several highway locations in California, during the 1970's and 1980's.
http://pubs.er.usgs.gov/pubs/wsp/wsp2313

Nutrient and Trace-Metal Chemistry: Nutrients and trace metals were researched in the late 1980's and early 1990's as part of the USGS National Research Program.

Mapping/Digital-Data Products

Urban Dynamics: Remote-sensing techniques were used to analyze land-use change in the South Lake Tahoe area to provide a historical perspective of the change. http://pubs.usgs.gov/of/of01-418/

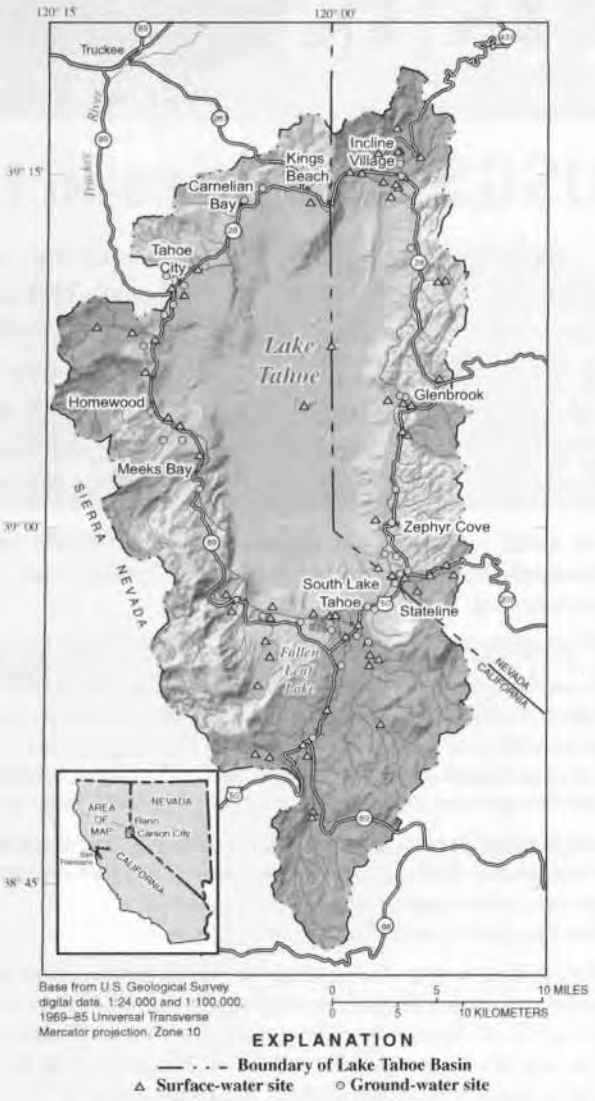
National Map—Lake Tahoe Pilot Project: Provides public access to high-quality geospatial data and information and integrates with TRPA's Tahoe Integrated Information Management System (TIIMS). http://nationalmap.gov/projects/tahoe.html or http://www.tiims.org

Lake Tahoe Data Clearinghouse: Designed to provide quick and easy access to geospatial data and information. http://tahoe.usgs.gov

Tahoe Environmental Geographic Information Systems: Developed numerous GIS coverages for TRPA from 1992 to 1995.
http://pubs.er.usgs.gov/pubs/wri/wri934182

Lake Tahoe Bathymetry: Bathymetry of Lake Tahoe was remapped in 1997; shallow regions were mapped in 2000. The two data-sets have been merged to show the complete bathymetry.
http://walrus.wr.usgs.gov/pacmaps/lt-index.html

Geologic Mapping: A fully attributed spatial database covering most of the basin has been completed at a scale of 1:24,000. Large-scale geologic information was compiled into a spatial database.



—Timothy G. Rowe, David Halsing, Gary L. Raines, Angelia M. Thacker, and Shannon C. Watermolen

For more information about these USGS studies contact:

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David Halsing, USGS Geography, Western Region
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Additional USGS Websites:

Activities in Nevada:	**http://nevada.usgs.gov**
Geology Discipline:	**http://geology.usgs.gov**
Geography Discipline:	**http://geography.usgs.gov**
California Water Science Center:	**http://ca.water.usgs.gov**

USGS Publications:

National:	**http://pubs.usgs.gov**
Nevada:	**http://nevada.usgs.gov/biblio/bibsearch.html**
California:	**http://ca.water.usgs.gov/archive/reports/**

U.S. Department of the Interior
U.S. Geological Survey

USGS Fact Sheet 2005-3047
Printed: June 3, 2005

US Army Corps of Engineers ®
Sacramento District

Corps Mission: Provide quality responsive engineering services to the nation including planning, design, and construction for the nations water resources and other civil works projects.

Agency Role in the Tahoe Basin: The Corps provides a diverse range of technical studies; design and construction assistance to non-Federal entities in the implementation of the Environmental Improvement Program (EIP) and other authorized programs. Examples of recent work include:

- Delineation of precipitation and runoff design criteria.
- Initiation of basin-wide infrastructure rehabilitation program.
- Round Hill GID sewer relocation/stream zone restoration.
- Pathway 2007 collaboration effort.
- Incline Village GID export line rehabilitation design (construction start in FY06).
- Tahoe Science Consortium restructuring efforts.
- TMDL Reduction Methodologies.
- Analysis of groundwater impact to pollutant load.
- Analysis of stream erosion impact to pollutant load.

Agency Program areas and responsibilities within the EIP: The Corps does not have specific areas of assigned EIP responsibility in the basin, but is capable of providing assistance in most threshold areas. The Corps currently provides assistance to non-Federal agencies, non-profits, and tribes through a variety of authorities and funding including Rural Nevada Section 595, Tahoe Restoration Section 108, Tahoe Watershed Section 503 and the Tahoe Partnership. The Corps provides assistance through performing work itself or through contractors, and in some circumstances, through reimbursement for work performed by project partners.

Point of Contact:

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FACT SHEET

USDA Forest Service, Lake Tahoe Basin Management Unit

August 2005

The Role of the Forest Service in the Lake Tahoe Basin

Established in 1973 from pre-existing lands of three separate National Forests, the Lake Tahoe Basin Management Unit (LTBMU) manages more than 160,000 acres or roughly 80% of the land base within the Lake Tahoe watershed. As such, the Forest Service is the largest land management agency within the basin. Within a unique regulatory environment, the LTBMU fulfills many traditional National Forest roles, as well as many that are more specific to the Tahoe Basin. The LTBMU has three important priority roles:

Ecosystem Conservation and Restoration. A principle reason for the establishment of the LTBMU was for the restoration and protection of the sensitive watershed system within the basin. The annual program of work includes numerous projects and activities that restore, conserve and monitor progress in watershed, habitat, fisheries and stream system restoration and conservation efforts. These activities have historically been the majority of the annual program of work, and directly benefit water quality, lake clarity and ecosystem integrity.

Fire-Fuels Management and Forest Ecosystem Restoration. Beginning in 1987, the LTBMU began work to reduce hazard fuels accumulations and overly dense forest stands, to reduce wildfire risks to communities, watersheds, water quality, habitats and other resources. Since that time, more than 38,000 acres of National Forest Lands (nearly ½ of the acreage needing treatment) has been treated to reduce catastrophic wildfire threats.

Fuels reduction work is often the first necessary step in returning forest stands to healthier and more diverse conditions. Fuels reduction work is expected to become a much greater percentage of the annual LTBMU program of work over the next five to ten years.

Recreation Management. Annually, between three and four million recreation visits take place on the LTBMU lands, and the Tahoe Basin is known world-wide as a year-round recreation destination. Numerous resorts and developed recreation facilities operate under special use permit with the Forest Service, contributing significantly to the local economy.

Recreation uses and pressures are both diverse and dynamic. Management challenges include intensive wilderness use, high urban density, complex community interfaces with access corridors into forest- lands, competition among uses and user groups, among many factors.

Contact:

Janine Clayton, Acting Forest Supervisor: (530) 543-2773

US Fish & Wildlife Service

Nevada Fish and Wildlife Office

Preserving The Biological Diversity Of the Great Basin, Eastern Sierra & Mojave Desert

Spring 2005

Inside this issue:

Making A Difference In Nevada

The U.S. Fish and Wildlife Service, Nevada Fish and Wildlife Office (NFWO), has the responsibility for implementing the Endangered Species Act of 1973, as amended. Program areas for the NFWO include endangered species, fisheries, environmental contaminants and the Partners in Conservation programs.

The NFWO's 60 employees are located in Reno, Las Vegas and the Lahontan National Fish Hatchery Complex in Gardnerville.

In addition to implementing the Endangered Species Act, the NFWO is also actively involved in state water issues that directly affect endangered species and wetlands and in the funding process for the Southern Nevada Public Land Management Act.

Wildlife Recovery Lands Acquisition Programs Helps Secure 460 Acres For Springfish Critical Habitat

Funding from the 2003 US Fish & Wildlife Recovery Lands Acquisition Program Grant in combination with Question 1 (a Nevada Division of State Lands program), was used to secure key habitats essential for recovery of the threatened Railroad Valley springfish *Crenichthys nevadae*. The acquisition of 460 acres in Nye County, locally known as Lockes Ranch, will protect source pools and/or outflows for three major spring systems containing populations and critical habitat necessary for the recovery of the springfish.

The property will be managed by Nevada Department of Wildlife for other important wildlife species in addition to the springfish and will provide excellent hunting and fishing opportunities.

The US Fish & Wildlife Recovery Lands Acquisition Program provides funds to states for acquisition of lands for endangered and threatened species.

Lockes Ranch, Nye County, Nevada

"The Railroad Valley springs fish is the only fish species native to the thermal spring system of the Railroad Valley in Nye County. "We feel fortunate that we were able to use these limited funds for acquiring this critical springfish habitat," said Bob Williams, Field Supervisor for the NFWO. "It would not have been possible without our project partners, the Nevada Department of Wildlife and the Trust for Public Land."

"The Trust for Public Land played a vital role in this project by skillfully negotiating the sale of this important property," said Doug Hunt, Deputy

Acquisition (continued)

The Railroad Valley springfish *Crenichthys nevadae*

Administrator for the Nevada Department of Wildlife . "We look forward to working together on other important properties in Nevada where US Fish & Wildlife Recovery Lands Acquisition funds can be used in combination with NDOW's Question 1 Bond funds."

The Railroad Valley springfish still occur in six known historical habitats; four thermal springs near Locke's Ranch (Big, North, Hay Corral, Reynolds) and two thermal springs on the Duckwater Shoshone Indian Reservation (Big Warm and Little Warm). The average total length of the Railroad Valley springfish varies between 23-39mm (.9-1.5 inches), depending on the spring it occupies.

Employee Spotlight

Bridget Nielsen Samples At Indian Springs In White Pine County

Developing partnerships requires patience, perseverance, an extroverted personality, and the ability to "think outside the box". Bridget Nielsen embarked on a tremendous challenge when she became interested in developing partnerships for the NFWO with Tribes and private landowners. Over the last five years, she has been instrumental in the success of the partnership programs in Nevada.

Bridget's work with the Nevada Department of Wildlife has resulted in the submission of two highly successful Recovery Lands Acquisition grant requests that have enabled the state of Nevada to acquire important habitat essential for the recovery of the threatened Railroad Valley springfish and bull trout. Another grant is pending to acquire lands to protect the habitat for the endangered desert dace.

Her coordinated efforts to restore habitats for endangered and threatened species in Nevada has also led to the completion of the first Safe Harbor Agreement in Nevada. The endangered White River spinedace was reintroduced into historic habitat on private lands under this agreement.

Bridget graduated in 1991 with a Bachelor's degree in Biology and Environmental Science from the University of California at Santa Cruz. Following graduation, she secured a term position with the now U.S. Geologic Survey, Biological Resources Division in Reno, Nevada, working in desert fish research. She came to the NFWO in 2000, as the lead for the recovery of listed desert fish species such as the Railroad Valley Springfish, White River spinedace, and the Clover Valley speckled dace.

The Partners for Fish and Wildlife Program in Nevada has grown from expending less than $30,000 per year in 2001, to over $175,000 in fiscal year 2005. In addition, she was able to obtain an additional $300,000 from other agencies. These funds have restored and enhanced habitat for species such as the endangered White River spinedace, endangered Southwestern willow flycatcher, threatened Lahontan cutthroat trout, and endangered Sulphur Springs buckwheat in addition to many highly localized, endemic species of fish and plants.

In 2005, the NFWO assisted private landowners in the development of proposals for the Private Stewardship Proposal Program totaling over $250,000. Nevada's federally recognized tribes were able to obtain grants totaling more than $600,000 in 2004 and over $300,000 in 2005.

Desert Tortoise Recovery Office Established

The NFWO has established a Desert Tortoise Recovery Office (DTRO) to help insure better coordination between scientists and managers on decisions that affect the threatened desert tortoise (*Gopherus agasssizii).*

Recovery efforts for the desert tortoise have been underway since it was listed as threatened in August 1980 under Endangered Species Act of 1973 (as amended). The desert tortoise occurs in Arizona, Nevada, California and Utah. Managers applaud the coordination of the widespread recovery and research efforts by the new office.

"The DTRO will facilitate increased scientific understanding and improve the recovery progress for the desert tortoise," said Roy Averill-Murray, Desert Tortoise Recovery Coordinator.

Activities of the DRTO will: 1) increase research activities outlined in the Recovery Plan and assessment; 2) assist in coordination between managers and research scientists; and 3) track and report new information about the efficacy of management actions.

Desert Tortoise

Marble Bluff Fish Passage Moves Record Numbers Of Cui-ui

This year, the Marble Bluff Fish Passage Facility at Pyramid Lake, Nevada, operated by the Nevada Fishery Resource Office (NFRO) staff, moved record numbers of spawning cui-ui above Marble Dam into the Truckee River. The spawning migration began in late March and continued through May.

Approximately 2,000 of the cui-ui went through the redesigned fish passage facility every five minutes at the peak of the migration. "This years above average snow-pack supported a large cui-ui migration for spawning in the Truckee River," said Lisa Heki, the Service's Fisheries Program Manager. "We have over one million fish above Marble Bluff Dam, which is a record for the facility." This years run follows a four-year drought with only small runs in 2002 and 2003, with no runs at all in 2001 and 2004.

"I'm extremely encouraged with the age and quality of the fish that came through this year," said Heki. "There was a good mix of very healthy, large size males and females averaging from five to eight pounds."

The cui-ui were listed as endangered in 1967 and were on the original Endangered Species List when the Act was passed in 1973. The cui-ui are only found in Pyramid Lake and use the lower portions of the Truckee River for spawning. Cui-ui are known to be long lived. A female with viable eggs was documented to be 51 years old.

It is hoped that the cui-ui migration will also have a positive impact on the successful fledging of white pelicans nesting Anaho Island in the Pyramid Lake area. Pelican fledgling success over the past four years has been low since the pelicans were dependent on cui-ui runs for nourishment.

The fish lock at Marble Fish Passage Facility was reconstructed in 1998 into a fish lock system using expertise from the NFRO and Bureau of Reclamation engineering skills. The thirty-foot high lock operates similar to an elevator, lifting the fish up above the dam into the Truckee River. The Bureau of Reclamation maintains the fish lock and it is operated by the NFRO. The Pyramid Lake Paiute Tribe has land management responsibilities for Pyramid Lake.

William Cowan weighs, measures, and checks overall condition of cui-ui as they pass though the Marble Bluff Fish Passage.

Preserving The Biological Diversity Of the Great Basin, Eastern Sierra & Mojave Desert

US Fish & Wildlife Service
Nevada Fish & Wildlife Office
1340 Financial Boulevard, Suite 234
Reno, NV 89502

Phone: 775-861-6300

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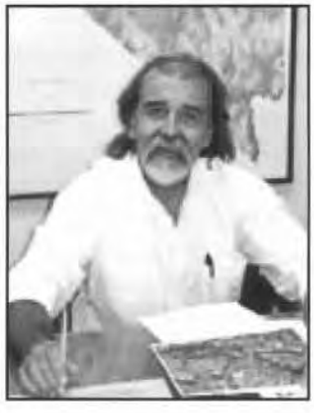
Working with others to conserve, protect and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people.

We're on the web!

http://nevada.fws.gov/

A Message From The Nevada Fish & Wildlife Field Supervisor



I am pleased to provide you with this update of Fish & Wildlife Service activities in the State of Nevada. We are committed to working with local communities and our partners to restore and protect species and their habitats in Nevada.

It is with great pleasure I announce the establishment of the Desert Tortoise Resource Office and the selection of it's Coordinator, Roy Averill-Murray. This office will be instrumental in the coordination and recovery efforts for the desert tortoise throughout the Mojave.

I invite you to learn more about the many partnership programs offered by the Fish & Wildlife Service. Our program in Nevada has expanded and grown in popularity over the last five years. I have highlighted one of Wildlife Recovery Lands Acquisition Program Grants in this update. This success would not have been possible without our partners.

I look forward to sharing information with you in the future as we move forward together to protect and enhance Nevada's species and their habitats.

Sincerely,

Robert D. Williams

NRCS Natural Resources Conservation Service

South Lake Tahoe Field Office

August, 2005

'Backyard Conservation Program' Assists Thousands of Private Landowners at Lake Tahoe

NRCS supports the *Backyard Conservation Program* with professional resource staff oversight and funding. Each year, thousands of private landowners receive science-based technical assistance on conservation issues vital to Lake Tahoe's future. Staff from the **Tahoe Resource Conservation District** and the **Nevada Tahoe Conservation District** implement the program by meeting with landowners and developing Conservation Plans, and conducting outreach and education activities.

NRCS is assisting the Tahoe Regional Planning Agency in implementing the *Best Management Practice Retrofit Program* (EIP 16), on private residential lands. This program targets reducing urban stormwater runoff before it reaches downstream water pollution control facilities. Scientists estimate that about one-third of the sediment and attached nutrients contributing to the loss of clarity of Lake Tahoe originate from urban runoff.

Homeowner's installation of BMP's is a major part of the private contribution to the EIP.

Slotted drain and drywell to infiltrate driveway runoff.

Program accomplishments since 2003:

- 3,700 Site Evaluation Plans
- 24,350 homeowners received outreach materials on BMP's
- 56 public workshops with hundreds of attendees
- BMP demonstration projects, including the Lake Tahoe and the Sierra Nevada Community Colleges
- Purchase and distribute the UNR Cooperative Extension's *Home Landscaping Guide* to landowners

USDA is an equal opportunity employer and provider.

SNPLMA and the BMP Retrofit Program

NRCS received $500,000 from the Southern Nevada Public Lands Management Act from Round 5 land sales and awarded $415,000 to the two Conservation Districts at Lake Tahoe to expand the delivery of the *Backyard Conservation Program*, targeting BMP Retrofit of residential parcels.

Soil Survey Update for the Tahoe Basin

The update of the *Lake Tahoe Basin Soil Survey* is nearing completion; this data is integral to the Pathway 2007 planning effort, to various Science & Research models, and to Environmental Improvement Projects. Digital release of the update is expected in April, 2006.

Support to Nevada Tahoe Bond Act

NRCS provides engineering assistance to the Technical Advisory Committee for Bond Act EIP projects for local erosion control and stream restoration.

SNOTEL and Water Forecasting

NRCS maintains and monitors 15 SNOTEL sites at Tahoe to capture real-time data on snow accumulation. Part of a network of 700 SNOTEL stations, they provide data vital for water-forecasting in the West.

NRCS Chief Bruce Knight (center) collects a SNOTEL sample with Bill Wilson (l) of NACD and Dan Greenlee

For over 25 years, NRCS has provided technical assistance on conservation issues to private landowners and government agencies in the Lake Tahoe Basin. NRCS participated in the design and construction of $50 million worth of remedial erosion control and stream restoration projects to protect Lake Tahoe.

jane.schmidt@ca.usda.gov (530) 543-1501 (101)

Bureau of Reclamation Activities in the Lake Tahoe Basin

The Bureau of Reclamation (Reclamation) operates the Lake Tahoe Dam and thereby controls the top six feet of Lake Tahoe. Reclamation thus has an interest in the water quality of the lake to protect the beneficial uses of the water. Development in the Lake Tahoe basin has altered stream and terrestrial habitats, reducing fish and wildlife populations and increasing sediment input into streams. Increased sedimentation in tributary streams reduces the clarity and water quality of Lake Tahoe.

The Bureau of Reclamation has been actively involved in environmental restoration in the Tahoe Basin since 1997 when it awarded a grant to the Tahoe Resource Conservation District to assist with various aspects of the Trout Creek Watershed Enhancement Project. In 1998, Reclamation provided $20,000 through a cooperative agreement to the City of South Lake Tahoe for harvesting of seed and mulch material which was used to provide native seed for re-vegetation and fill material to restore the old Trout Creek channel and disturbed areas.

Beginning in 1999, Reclamation began receiving substantial funds through Congressional appropriations for activities at Lake Tahoe. Reclamation provided $490,000 through a cooperative agreement to the City of South Lake Tahoe for construction of 3,100 feet of new channel on Trout Creek (Phase I). The purpose of the project was to improve the functioning of the stream by stabilizing the channel from excessive bank erosion, increasing stream length and floodplain areas, enhancing retention of flood waters in the wet meadow to promote settling out of sediment on the floodplain, and improving water quality and in-stream habitat for fish and invertebrate species. This will result in a decreased load of sediment and contaminants from this stream into Lake Tahoe, thereby helping to slow the rate of loss of clarity in the lake.

Trout Creek prior to restoration activities.

As an example of environmental improvement activities, Reclamation has contributed funds, in partnership with several other entities to restore Trout Creek by channel reconfiguration and bioengineering methods.

Since 2000, Reclamation has provided over $11.5 million to local, regional and State entities in both California and Nevada to accomplish environmental improvement projects in the Lake Tahoe basin. Funded projects have included Upper Truckee River restoration, fire risk assessment and planning, stream environment zone restoration, assistance to local Resource Conservation Districts for Backyard Conservation Program implementation, localized watershed assessments and fish passage improvements.

U.S. Department of Transportation

Federal Highway Administration (FHWA)

705 N. Plaza St., Ste. 220
Carson City, NV 89706

Mission or Vision Statement
Improving Transportation for a Strong America

FHWA Role in the Tahoe Basin
Provide funding, oversight, and technical assistance for transportation planning and projects approved by the Tahoe Metropolitan Planning Organization (TMPO).

FHWA Program Areas and Responsibilities within the Environmental Improvement Program
Agency actions are constrained to those projects identified in the TMPO's transportation plan and program.

For More Agency Information:
www.fhwa.dot.gov

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EPA Lake Tahoe Water Quality Activities
Lake Tahoe Environmental Forum • 20/21 August 2005

Since the early 1970s, the U.S. Environmental Protection Agency (EPA) has had a role at Lake Tahoe. EPA has worked with the states of California and Nevada to support areawide water quality planning and wastewater pollution control projects. EPA grants constructed the wastewater treatment plants in the Tahoe Basin, all of which pump treated effluent out of the basin for reuse elsewhere. EPA was involved, as were other federal agencies and the States, in developing the initial water quality management plans, pursuant to Clean Water Act Section 208, to address erosion control and surface water management for the purpose of preventing nutrient enrichment and consequent accelerated eutrophication of the crystal clear waters of Lake Tahoe. Moreover, air quality plans have been prepared that serve as points of reference for the Tahoe Regional Plan and for environmental threshold carrying capacities that guide the activities of the Tahoe Regional Planning Agency (TRPA).

EPA's current involvement at Lake Tahoe centers on developing the Total Maximum Daily Load (TMDL) for Lake Tahoe. EPA's place-based staff at Lake Tahoe contribute to this effort. These staff also work with federal, state and local entities to optimize federal activities at the lake especially to coordinate with the federal partners and TRPA on the Environmental Improvement Program (EIP).

EPA has provided over $29 million to Lake Tahoe projects and programs since Fiscal Year 1997. More recently, EPA is working with the federal partnership and local stakeholders to implement EIP projects through the Southern Nevada Public Lands Management Act (SNPLMA) funding. EPA is actively involved in two EIP projects: the Lake Tahoe TMDL and the Tahoe Science Consortium.

Lake Tahoe TMDL

The Clean Water Act gives EPA the responsibility to protect water quality by setting standards that protect the beneficial uses of our nation's waters. The states identify those waters not achieving water quality standards and develop a TMDL in order to reduce the pollutants from its sources and thereby restore beneficial uses.

The Lake Tahoe TMDL will identify all sources of nutrients and fine sediment entering the lake and calculate the amount of pollutant reductions needed in order to improve the lake's clarity. EPA's role is to work with and assist the states in developing the TMDL. EPA has provided over $6 million to support development of the Lake Tahoe TMDL.

Tahoe Science Consortium

The EPA has been working with research institutions and agencies in the basin to develop the Tahoe Science Consortium (TSC). The TSC will contribute to restoring Lake Tahoe, its watershed and air basin by providing the best scientific information possible for management of the basin's natural resources.

The TCS provides the opportunity to broaden the scope of research and heighten the collaboration among the agencies and the community of scientists. EPA supports the TSC through SNPLMA resources and has committed dedicated staff to this effort through EPA's Office of Research and Development.