



**NEVADA TAHOE
CONSERVATION DISTRICT**



**FY 2012 ANNUAL REPORT
July 1st, 2011 to June 30th, 2012**

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MISSION STATEMENT

“ TO PROMOTE THE CONSERVATION AND IMPROVEMENT OF THE LAKE TAHOE BASIN’S NATURAL RESOURCES BY PROVIDING LEADERSHIP, EDUCATION AND TECHNICAL ASSISTANCE TO ALL BASIN USERS.”

VISION STATEMENTS

Organization

“TO BE A HIGHLY RESPECTED AND EFFECTIVE CONSERVATION ORGANIZATION IN THE LAKE TAHOE BASIN WITH SUFFICIENT AND SUSTAINED FUNDING TO MEET OUR CONSERVATION EFFORTS.”

Natural Resource

“A NEVADA LAKE TAHOE BASIN WHERE NATURAL RESOURCES AND NATURAL BEAUTY ARE PROTECTED AND ENHANCED IN HARMONY WITH THE USE AND ENJOYMENT OF RESIDENTS AND VISITORS.”

DISTRICT SUPERVISORS*

SUPERVISORS – EXECUTIVE COMMITTEE

Glen Smith, Chair

Barbara Perlman-Whyman, Vice Chair

Cary Sarnoff, Secretary/Treasurer

SUPERVISORS

Maureen McCarthy, PhD

Lynn Endicott

Chris Freeman, Representing Carson City

John Breternitz, Representing Washoe County

***NTCD Board of Supervisors as of June 30th, 2012**

KEY DISTRICT STAFF

DOUG MARTIN – DISTRICT MANAGER

MARK THORPE – ADMINISTRATOR

**JASON BRAND – PROGRAM MANAGER, BACKYARD
CONSERVATION GROUP**

INTRODUCTION

Nevada Tahoe Conservation District

The Nevada Tahoe Conservation District (NTCD) is one of approximately 3,000 Conservation Districts functioning in all 50 States and U.S. Territories. Conservation Districts are subdivisions of State government and are unique locally led conservation agencies. Districts provide resource management and technical assistance to land occupiers (owners, renters, and producers) as well as work cooperatively with Federal, State, and Local governments in the delivery of conservation programs.

The Nevada Tahoe Conservation District is one of 28 Conservation Districts functioning under the auspices of Nevada Revised Statute, Chapter 548. The District is a Governmental Subdivision of the State of Nevada and a public body corporate created in 1976. Prior to July 1st, 1976 the land area that now makes up the NTCD was part of a larger Conservation District known as the Tahoe Verdi Conservation District. Local leaders realized the unique natural resource issues of the Lake Tahoe Basin and realigned District boundaries to create the NTCD. They believed the realignment would allow for more effective conservation management of Lake Tahoe's natural resources. Now the District encompasses all of the land in the Lake Tahoe Basin residing in the State of Nevada including portions of Douglas and Washoe Counties and the Carson City Rural Area.

The Nevada Tahoe Conservation District (NTCD) is Nevada Lake Tahoe's local conservation agency and source for technical assistance in the areas of erosion and conservation management. The District is a non-regulatory and grant funded agency that works closely with its Federal, State, and Local partners to deliver conservation programs to the Nevada Lake Tahoe Community. The District is guided by a Board of Supervisors made up of elected and appointed community leaders. The Board of Supervisors provides direction to the District's full time staff in carrying out the District's mission statement, vision statements, and guiding principles. As described in our mission statement, the District seeks to provide its constituents with superior technical assistance, educational resources, and conservation leadership with the goal of protecting Lake Tahoe's natural resources.

DISTRICT ADMINISTRATION AND OPERATIONS

Fiscal Year 2012 proved to be another very successful and busy year for the District in terms of administration and operations. Accomplishments throughout the year focused on developing relationships with Fire Defensible Space Programs and Forest Health Programs within and outside the basin. To that end, the district assisted both Nevada Tahoe Fire Protection Districts with technical tours and assimilation of erosion and fire protection programs through enhanced communications and outreach. In addition, the district has become involved with the University of Nevada, Cooperative Extension, Living with Fire Guidelines.

Included in our accomplishments during the past year was the completion of the FY 2011 audit with an excellent rating (an unqualified or clean audit opinion). The audit showed a financial outlook for the District which continues to reflect a financial position of accountability. Internal controls are in place to insure the solvency of the District's funds.

The District submitted its Indirect Cost Rate with the Department of the Interior for the year 2013. The rate was approved in June 2012.

Other administration and operations accomplishments for fiscal year 2012:

- Successfully held eleven regular board meetings and five special board meetings
- Participation in national and state conservation programs
- Successfully completed two community grants from Carson City and Douglas County
- The FY 2011 audit was completed with one minor finding.
- Successfully met all deliverable requirements of the Conservation Commission

District Staff and Supervisors continued to provide support for the NvACD.

PROGRAMS:

WATER QUALITY AND EROSION CONTROL PROGRAM

PROGRAM OVERVIEW:

Scientists, researchers, and water quality specialists in the Lake Tahoe Basin have identified untreated storm water runoff, eroding soils, and impaired or disturbed stream environment zones (SEZ) as key threats to the water quality of Lake Tahoe. The District's Water Quality and Erosion Control (WQEC) Program is focused on identifying and correcting areas where point and non-point source pollution from stormwater runoff, eroding soils, and impaired SEZs are negatively impacting the quality of Nevada Lake Tahoe surface and ground waters.

In partnership with the Nevada Division of State Lands (NDSL) and other basin agencies, the District identifies and prioritizes critical areas and projects. Once projects have been identified, the District works diligently to assist project proponents in obtaining funding from Federal, State, and Local sources to design and construct the projects. During design, the District, NDSL, and the Natural Resources Conservation Service (NRCS) provide technical oversight to ensure the project meets the natural resource, water quality, and community objectives of the WQEC Program.

EPA funded project: Stormwater Load Reduction Planning

The purpose of this project is to develop a strategic plan for the Nevada jurisdictions of Washoe County, Douglas County, and NDOT, known as the implementing agencies, to meet stormwater pollutant load reduction targets under the Lake Tahoe Total Maximum Daily Load (TMDL) program. This project is the next step toward implementation of the TMDL in Nevada. Stormwater load reduction plans (SLRPs) are adaptable plans which specify the actions and strategies for improvements that each jurisdiction will implement in order to meet TMDL load reduction requirements for urban stormwater runoff. SLRPs for each jurisdiction will describe cost-effective strategies and on-the-ground actions that will provide a 34% load reduction from the jurisdiction's October 2004 baseline stormwater loads. The results of the load reduction modeling using the PLRM (Pollutant Load Reduction Model) and SLRP protocols will become the basis of developing implementation alternatives for the agencies and will include a timeline and preliminary cost estimates.

NDSL Funded Projects:

NTCD continues working on several Erosion Control (EC) Projects with NDSL under the State of Nevada Tahoe bond act. A significant revision to the program is a change from being part of the selection process for EC projects to being able to apply directly for funding for projects. NDSL is continuing funding to NTCD to have support on existing projects for technical expertise. Projects funded through this program focus primarily on erosion control, storm water runoff, and stream environment zone restoration. The cooperative effort between NTCD and NDSL has led to several design and implementation projects including the Glenbrook Creek Restoration Project.

The Nevada Tahoe Conservation District commenced design of the creek restoration with support from NDSL, The Glenbrook Project and the Glenbrook Homeowners Association (GHOA). The project is a stream and meadow restoration for Glenbrook Creek, in Glenbrook, Nevada. Glenbrook Creek is the 15th largest tributary to Lake Tahoe (by watershed area). It is fed by two unnamed tributaries above US Highway 50. The creek itself starts at a culvert below Highway 50 and parallels the Old Lincoln Highway. It flows through a canyon into the neighborhood of Glenbrook, passing first through the Glenbrook HOA, then Upper Meadows LP property, under Old US Highway 50, and through GHOA land before becoming a low gradient stream within a meadow. The meadow is owned by both GHOA and Lawrence Ruvo. Glenbrook Creek eventually enters a more developed area before ending at Lake Tahoe. The map in Figure 1 shows the location of Glenbrook Creek and the approximate Glenbrook Creek watershed.

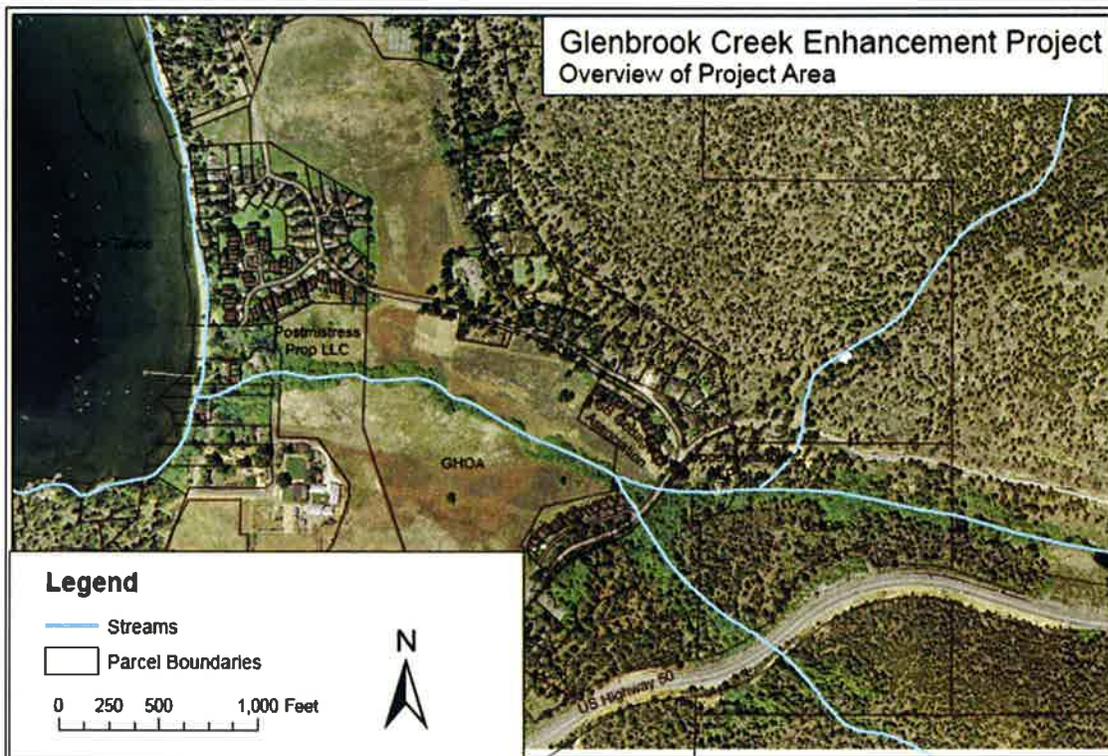


Figure 1. Overview of the Glenbrook Creek Watershed.

Fiscal Year 2012 ACCOMPLISHMENTS USDI BUREAU OF RECLAMATION GRANTS:

A Bureau grant was used to fund the final engineering for restoration of Rosewood Creek Area A (between Hwy 28 and Northwood). All environmental documentation and permits were completed and a contract bid document was prepared. With the help of Washoe County, the project was let for bid (and subsequently let in July, 2012). Additional funding support was provided by NDSL for a portion of the project



Rosewood Creek Erosion

MONITORING PROGRAM

PROGRAM OVERVIEW:

NTCD's environmental monitoring program is designed to provide answers to the scientific and natural resource questions of Lake Tahoe's resource managers. The program delivers these answers by the following means:

- Evaluation of environmental restoration projects
- Inventory of Basin-wide project accomplishments
- Inventory of Nevada's stormwater assets
- NDEP compliance monitoring
- Stream health and water quality
- Advanced stormwater treatment analysis

Fiscal Year 2012 ACCOMPLISHMENTS:

Rosewood Creek water quality monitoring: The sampling system below Northwood Blvd. is operational and is monitoring Rosewood Creek flow. Combined with an identical monitoring system operated by DRI downstream of SR28, the data collected will help determine the water quality benefit of constructing the restoration.

Stateline Stormwater Association: The SSWA contract is on a month-to-month basis until the service is re-bid.

Sweeper Study: The final report for the Incline Village Sweeper Study is undergoing revision with the assistance of Nicole Beck at 2nd Nature. The scope of the revisions will determine if additional funds for NTCD are required.

OTHER PROJECTS: (FY 2012)

Washoe County Support Services

Description: Provide GIS, Inventory, and modeling support (time and materials) to Washoe County to help complete a series of products for the TMDL including defining and characterizing an Urban Planning Catchment, mapping all stormwater assets, running several Pollutant Load Reduction Model (PLRM) configurations.

Community Watershed Partnership

Description: NTCD in partnership with NRCS completed a CWP project in portions of the Kingsbury/Edgewood Creek Drainage which included a needs assessment within the communities.

Hybrid BMP Project

Description: After completion of the design and construction of the project NTCD is now conducting monitoring of the several small LID infiltration features within the Washoe County right of way along Village Blvd. between Ace Ct. and Golfers Pass to augment the existing EIP conveyance and treatment system. The idea is that by adding treatment systems not constrained by the 20 year/1 hour sizing requirement (because a TRPA-approved EIP system is already in place), a substantial fraction of the stormwater can be removed from the road and infiltrated. A final report will be prepared in FY 2013.

Washoe County Stormwater Asset Inventory

Description: Completion of work was done regarding location and mapping of all stormwater assets in the Tahoe Basin operated by Washoe County and NDOT (including in Carson City (rural) and Douglas County). The preferred approach is to geo-locate CAD drawings in a GIS map. Next is to project PDF or TIFF files in GIS and trace the line work. Finally, we will hand-draw any other asset not found in drawings. Two additional aspects include identifying stormwater outfalls and characterizing them. The final aspect is to assess the performance of key stormwater treatment assets.

Douglas County Stormwater Asset Inventory

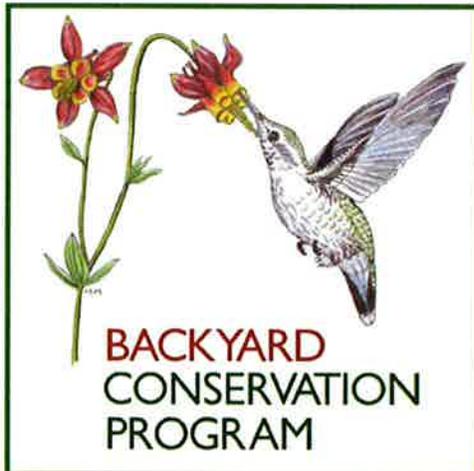
Description: The Douglas-Tahoe Stormwater System Asset Inventory represents an initial effort to compile and accurately present a large amount of data on the stormwater infrastructure of many of the Douglas-Tahoe jurisdictions. This is Version 1 of the region's stormwater asset inventory. The Douglas County Community Development – Engineering will expand and refine the inventory database and maps in the future following a project to accurately field map all existing BMPs in the Douglas County region of Lake Tahoe (Douglas-Tahoe). The Version 1 asset inventory database, GIS map files, and report are available from Douglas County Community Development – Engineering.

The US Forest Service-Lake Tahoe Basin Management Unit, Nevada Division of Environmental Protection (NDEP), Nevada Division of State Lands (NDSL), Douglas County, and Kingsbury, Round Hill, and Cave Rock General Improvement Districts (GIDs) funded this work in 2008 to develop, among other tasks, an inventory of Lake Tahoe Environmental Improvement Program (EIP) projects and assets in Douglas County. The scope of work included development of an inventory of all stormwater assets (using MS Access® 2007) with estimated age, some photos, and key features as needed to provide for future development of life-cycle costs. The assets were also to be geo-referenced in a Geographic information system (GIS) (using ArcMap® 9.3.1) where Computer-Aided Design (CAD) data was available.

The purpose of this data and GIS inventory is to provide jurisdictions in Douglas-Tahoe with a listing and graphical display of the current stormwater assets they manage. This information is intended to help the jurisdictions manage their assets in conjunction with recommended inspection and maintenance practices and maintain records of such. Further, as jurisdictions assess the condition of these assets, this information should be useful in planning for replacements or improvements to meet future needs, including the Total Maximum Daily Load (TMDL) requirements.

BACKYARD CONSERVATION PROGRAM

BACKYARD CONSERVATION PROGRAM and CONSERVATION PLANNING GROUP



Program Overview:

The Nevada Tahoe Conservation District, in cooperation with the USDA Natural Resources Conservation Service (NRCS) and Nevada Division of Environmental Protection (NDEP) provides private landowners with conservation education, technical assistance, and whole parcel conservation plans through the Backyard Conservation Program (BCP). Conservation plans for private parcels include recommendations for runoff management and stormwater treatment, slope stabilization, soil protection, noxious weed removal, re-vegetation with native and adapted plants, water and fertilizer management, pest management, wildlife habitat improvements, forest management and reduction of fire hazards. NTCD promotes the program through a Community Watershed Planning process in individual communities that include workshops, educational publications, and on-site visits with homeowners.

The Backyard Conservation Program enables property owners to implement effective land management, reducing sediment and nutrient impacts on water quality in Lake Tahoe. The program also assists landowners to comply with local ordinances and Basin-wide water quality strategic plans such as the Environmental Improvement Program's project number 16: Best Management Practices (BMP) Retrofit Program.

Fiscal Year 2012 Accomplishments:

During FY 2012 the Backyard Conservation Program (BCP) continued to develop the technical assistance and services provided by the program. A number of program goals were achieved during the year.

The BCP has been successful in securing funding for most of 2013 fiscal year. Primary sources of funding include USDA Natural Resources Conservation Service (NRCS), Nevada Division of Environmental Protection (NDEP), Nevada Division of Forestry (NDF), Nevada Division of State Lands (NDSL) and possible funding from United States Environmental Protection Agency (US EPA).

One of the accomplishments was the continued assistance of the North Lake Tahoe Demonstration Garden (NLTDG). During the fiscal year in 2012, NTCD organized many classes and assisted with events at the garden. NTCD will continue working with the NLTDG to plan next season's activities and continue with the garden's development. During the FY 2012 work was completed on fire defensible space elements and demonstrations. Elements of a ground cover demonstration were added with UNCE lead John Cobourn. The garden is now basically completed and offers visitors great physical examples of properly installed and maintained BMPs.

The Conservation Planning Group (CPG or BCP) continues toward completion of work on deliverables for the 2011-2012 "Invasive Weed Abatement" grant from the Nevada Division of State Lands' "Lake Tahoe License Plate Program". Through this grant the NTCD entered into an interlocal agreement with Douglas County to conduct the treatment and mapping of invasive weeds within the right of way with in Washoe County within the Lake Tahoe Basin. The CPG has worked with NDSL and successfully implemented this work and scope over the past eight field seasons. The project successfully treated large areas of invasive weeds within the "right of way" on the Nevada side of Lake Tahoe's basin.



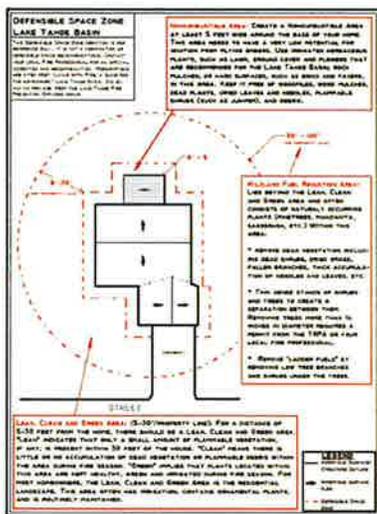
Invasive Weeds - Bull Thistle and Skeleton Weed

The Nevada Division of Environmental Protection - Reducing Our Impact through Community Education and Best Management Practices (NDEP – Carson Valley) was completed in the fall of FY2012. This project provided CPG staff time to aid in the reduction of NPS pollution through the implementation of community based education, hands-on training, and implementation of best management practices (BMPs) in the Carson River Watershed. The integrated components of the program included: a) community outreach campaign utilizing local media sources; b) development of a publication with useful information on such topics as NPS

pollution, floodplains, and tips on how to build on and/or landscape properties in ways that save water, reduce run-off and help protect from fire and flooding; c) technical assistance and hands-on training for permanent BMPs for property owners; and d) training for county staff and conservation districts on the design and implementation of BMPs to enable the continuation of this program and add potential funding and program opportunities to local conservation districts. The NTCD assisted in the planning and presentations at three separate outreach events. This past year tasks also include the implementation of BMPs at a demo site located on private property within Carson City.

As of June 30th 2012 the Tahoe Regional Planning Agency (TRPA) has mailed a total of 800 enforcement letters to residents. In the past letters were sent to priority one watersheds in Incline Village. This field season letters were sent again to private property owners within lower Kingsbury. In accordance with our agreement with the TRPA, NTCD's BCP provided technical assist with enforcement properties again for the 2012 field season. The BCP staff has assisted 640 properties with full BMP Site Evaluations or other Technical Assistance. In all the NTCD has assisted 217 of these enforcement properties to gain "Certificates of Completion" from TRPA.

In an effort to be consistent with recommendations the NTCD, NRCS and TRPA - BMP evaluators continued to work on collaboration with the Fire Protection Districts and Fire Safe Council Chapters. Together the groups have identified different options for working together and for delivering the same message to homeowners and public on current Fire Defensible Space recommendations. BMP Evaluators and Fire Defensible Space Evaluators continue using the current "Living with Fire" guidelines when making recommendations for Fire Defensible space and BMPs. Conservation Districts continue to hand out information with site plans about the FDS zones.



The CPG staff helped coordinate and present information at the 2012 Contractors Workshop at the Sierra Nevada College and the Contractors Refresher Workshop at TRPA. Presentations were given to contractors on the correct techniques and technology for proper installation of BMPs. The target audience is professionals who install BMPs.

The CPG led the coordination of the outdoor session this year. The Contractors Workshop had 105 participants. The Refresher Workshop had 48 participants.



The CPG has also continued work with Nevada Division of Forestry (NDF) to conduct outreach and education on forest health measures and Fire Defensible Space. The grant pays for the CPG to coordinate outreach activities and including the creation of self guided educational trails and biomass utilization. This funding also provides for the creation of 2 native plant demonstration sites. One site was located at the NTCD office and will be utilized for classes and outreach once fully completed in the fall of 2012. The other site is located in Incline Village at the public Library.

The Nevada Tahoe Conservation District's CPG attended Tahoe Yellow Cress meetings. The CPG has obtained funding to lead in the outreach and education efforts to inform lake front homeowners about Tahoe Yellow Cress. Work performed toward these efforts is funded by NRCS. The funding paid for NTCD to conduct these activities and work with the AMWG group on the goal of maintaining habitat for Tahoe Yellow Cress. Coordination activities concluded in June of 2012 and the grant was closed. During the project period, NTCD sent out letters to lakefront homeowners at the beginning of June 2011 and continued fielding calls through the summer and fall of 2011. The letters were informative and let homeowners know that the NTCD can assist in helping interested homeowners with conservation practices on a volunteer basis.



Tahoe Yellow Cress

Another important accomplishment of the past year included completion of **125** BMP site evaluations facilitation of BMP implementations on **165** private residences resulting in a Final Certificate issued from TRPA (source control with site constraints and full storm water infiltration), **319** homeowners received technical assistance over the phone and the delivery of technical assistance to **508** homeowners on a variety of conservation issues. The total assistance provided is over **968** contacts with homeowners.

During FY 2012 the program continued to emphasize the importance of multi-resource conservation planning. The following are examples of projects and priorities implemented by the District during Fiscal Year 2012:

- Continued Community Watershed Planning in the Kingsbury General Improvement District and Glenbrook communities.
- Continued expansion of program to shift focus from Single Family Residential stormwater BMPs to Area Wide Conservation Planning and forest health.

COMMUNITY PARTNERSHIPS

During Fiscal Year 2012, funding was provided by each of the three local county governments within NTCD's boundaries to support NTCD's conservation efforts. The funds provided by Douglas and Washoe Counties, and Carson City has and will continue to be essential to NTCD operations.

DOUGLAS COUNTY BOARD OF COMMISSIONERS

NTCD applied for a community grant from the Board of Douglas County Commissioners. The grant was approved, and received, for \$10,000.

CARSON CITY BOARD OF SUPERVISORS

NTCD also applied for and received a community grant from the Carson City Board of Supervisors. Although there are very few developed areas within the Carson City Rural Area, the Board of Supervisors has recognized the benefits of protecting Lake Tahoe Basin natural resources, for the thousands of residents and visitors who vacation and recreate in the basin. The District supports the City's engineering department with residential BMP information.

WASHOE COUNTY BOARD OF COMMISSIONERS

Washoe County provides NTCD with legal support through its District Attorney's office. During the past year the District worked closely with the District Attorney's office to develop cooperative agreements and contracts which were used to provide funding to many of our local partners.

THE FUNDING PROVIDED BY WASHOE AND DOUGLAS COUNTIES AND CARSON CITY IS AN ESSENTIAL PART OF THE NEVADA TAHOE CONSERVATION DISTRICT'S ABILITY TO CONTINUE OPERATIONS AND WE CAN NOT THANK THEM ENOUGH FOR THEIR SUPPORT.

LOCAL SUPPORT

Several GIDs and HOAs provided financial support to assist with a special study regarding the creation of a stormwater district. Those supporters included Kingsbury GID, Roundhill GID, Skyland GID, Cave Rock GID, Logan Creek HOA and Glenbrook HOA.

OTHER PARTNERS

NTCD is involved in several other partnerships in addition to our Community Partnerships. NTCD currently has Memorandums of Understanding with the USDA Natural Resources Conservation Service, the United States Environmental Protection Agency, the Nevada Division of Environmental Protection, the Nevada Division of State Lands, and the Tahoe Regional Planning Agency. We are fortunate to have such a diverse and engaged group of partners who are dedicated to natural resource issues at Lake Tahoe.

Working groups are also an important partnership NTCD is actively involved with. Our current participation includes:

- Lake Tahoe Interagency Monitoring Program
- Lake Tahoe Environmental Education Coalition
- Lake Tahoe Weed Coordinating Group
- Stormwater Quality Improvement Committee
- Nevada Tahoe Water Suppliers Association
- TRPA Pathway Technical Working Groups
- TRPA Pathway Forum
- Lake Tahoe Federal Advisory Committee
- Nevada Stormwater Association
- Tahoe Interagency Executive Committee
- Nevada Fire Safe Council
- Washoe Tribe of Nevada
- UNCE
- Parasol Foundation
- Bonanza Community Meeting Forum
- Nevada Biomass Working Group

FUNDING

Nevada Tahoe Conservation District funding during FY 2012 was provided by Local, State and Federal partners including:

LOCAL

Washoe County
Douglas County
Carson City
Glenbrook HOA
Cave Rock, GID

STATE

NV Division of State Lands
NV Division of Conservation Districts
NV Division of Environmental Protection
NV Division of Forestry

FEDERAL

USDI Bureau of Reclamation
USDA Natural Resource Conservation Service
USDA Forest Service

Private

Stateline Stormwater Association
Private Agreement

A comprehensive overview of the District's finances is available in our FY – 2011 annual audit. A copy of which is available at the district or the offices of the Nevada Division of Conservation Districts