



**NEVADA TAHOE  
CONSERVATION DISTRICT**



**FY 2010 ANNUAL REPORT  
July 1<sup>st</sup>, 2009 to June 30<sup>th</sup>, 2010**

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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**

**Dan St. John**

**Lynn Endicott**

**Chris Freeman, Representing Carson City**

**Michael Olson, Representing Washoe and  
Douglas Counties**

**\*NTCD Board of Supervisors as of June 30<sup>th</sup>, 2010**

# **KEY DISTRICT STAFF**

**DOUG MARTIN – DISTRICT MANAGER**

**MARK THORPE – ADMINISTRATOR**

**SCOTT BROWN – SR. PROGRAM MANAGER, WATER  
RESOURCES GROUP**

**JASON BRAND – SR. 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 1<sup>st</sup>, 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 2010 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 2009 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 2011. The rate should be approved in September 2010.

Other administration and operations accomplishments for fiscal year 2010:

- Successfully held ten regular board meetings and three special board meetings
- Received a Certificate of Special Congressional Recognition for Outstanding Conservation District Award from Congressman Dean Heller
- Participation in national and state conservation programs
- The District Administrator received two Certificate of Completions for Human Resources training
- Hired an Environmental Scientist, and during FY2010 she successfully received her P.E. license
- Successfully completed two community grants from Carson City and Douglas County
- Created a scholarship fund for the two local high schools, and awarded two scholarships to two deserving individuals pursuing careers in Environmental Science/Natural Resources
- 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.

### **Fiscal Year 2010 ACCOMPLISHMENTS NDSL CONTRACT:**

NTCD, in partnership with NDSL, successfully implemented one project and completed engineering on another project under the WQEC Program during FY 2010. NTCD coordinated the twelfth round of funding for the State of Nevada WQEC Grants program recommending two projects receive state funding.

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 design and implementation work on the following projects:

#### **Design Work in FY '10**

Crystal Bay Phase 2  
Lake Village Phase 2

#### **Implementation Work FY '10**

Crystal Bay Phase 1

FY08 saw the completion of the existing NDSL contract with NTCD. NTCD completed several final reports for various project over the past few years and summarized the costs, accomplishments, and lessons learned from those reports.

**Fiscal Year 2010 ACCOMPLISHMENTS USDI BUREAU OF RECLAMATION GRANTS:**

Two Bureau grants were used to fund the final engineering for restoration of Rosewood Creek Area F (between College Dr. and Village Blvd). All environmental documentation and permits were completed. With the help of Washoe County, the project was let for bid and awarded in July 2008.



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 2010 ACCOMPLISHMENTS:**

A monitoring station with auto-sampler and solar power concluded data collection on the upper portion of middle Rosewood Creek to determine background concentrations prior to implementation of the SEZ restoration project. We are in the process of writing a final report with DRI for the three identical monitoring stations on middle and lower Rosewood Creek for NDSL and USFS.

Generation II of the Cultured Ecologies program began with site selection in August of 2007. The criteria was a site with continuous water flow and sufficient capacity to store stormwater runoff during summer storms. An existing stormwater basin was selected at the corner of County Club and Village Blvd in Incline Village. The system was operational in January 2008 and will continue through October 2008. A final report was completed in June 2010.

Water quality sampling for storm and spring snow melt events continues for the Stateline Stormwater Association. The new contract includes monthly sampling to ensure NDEP permit compliance.

Glenbrook HOA sought to validate the combined treatment of runoff from public (GHOA) property and private residences. The groundwater portion of the project was completed in 2009, but the surface water evaluation is on-going.

NTCD initiated a stream water quality monitoring program with Placer County in April 2007 that continued through June 2010. Two auto samplers and three other sites with continuous flow monitoring were deployed to provide the pre-restoration hydrology and water quality for the Lake Forest restoration project.

The BMP Project Inventory was completed and made available on-line. The effort was expanded in Douglas County to inventory and map individual stormwater assets in Tahoe-Douglas. Both projects were completed and final reports and product provided to NDSL, NDEP, USFS, and Douglas County.

A stormwater BMP maintenance handbook was created for NDSL and NDEP for Douglas County. This product included detailed descriptions of each major type of stormwater BMP, maintenance guidelines, inspection and maintenance forms for field personnel.

# 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 2010 Accomplishments:**

During FY 2010 the Backyard Conservation Program continued to expand 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 the 2011 fiscal year. Primary sources of funding include USDA Natural Resources Conservation Service (NRCS), Nevada Division of Environmental Protection (NDEP), Nevada Division of Forestry and Nevada Division of State Lands (NDSL).

One of the important accomplishments was the continued development of the North Lake Tahoe Demonstration Garden (NLTDG). During the past fiscal year in 2010, NTCD organized many classes and events at the garden. NTCD is currently working with the NLTDG to plan next season's activities and to finish some of the garden's development. This last season the NTCD and the NLTDG installed more interpretive signs. During the FY 2010 work started on fire defensible space elements and demonstrations. The garden is now basically completed and offers visitors great physical examples of properly installed and maintained BMPs.

The Conservation Planning Group (CPG) worked on the National Forest Foundation (NFF) since the grant proposal was approved. The Sierra Nevada Alliance is the lead for the grant with CPG's Eric Winford head of coordination. This grant paid for the CPG to help the community around the Angora Burn area conduct forest restoration activities. Following the outreach and education efforts, local citizens and community groups participated in restoring up to 105 National Forest System urban intermix parcels located within and adjacent to the subdivisions most heavily impacted by the Angora Fire. Citizens were trained to plant and maintain approved vegetation in these urban parcels. This work was conducted in FY 2009. In the FY 2010, CPG was lead on this project and met with other partner groups on several

occasions to work on planning and the development of a winter work plan. Monitoring and follow up activities did continue through the FY 2010 season.



The Conservation Planning Group has also been working on deliverables for the “Invasive Weed Abatement” grant from the Nevada Division of State Lands’ “Lake Tahoe License Plate Program”. Through this grant the NTCD hired a private contractor to conduct the treatment and mapping of invasive weeds within the right of way with in Washoe County and Nevada State Parks lands of the Lake Tahoe Basin. For Invasive Weed Treatment in Douglas County the NTCD entered into an agreement with Douglas County to pay for the work completed by their staff in the Lake Tahoe Basin. The CPG has worked with NDSL and successfully implemented this work and scope over the past five field seasons. The project has 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**

This summer BCP staff taught a Best Management Practices Course at the Lake Tahoe Community College. This course examined the regulations, importance, and implementation of Best Management Practices in the Tahoe Basin. This is not the first time we have coordinated these types of classes but the need still remains. The class was well received with future classes being looked into.

The CPG finished work and assessments on the BMP Monitoring Program. The CPG examined BMP effectiveness of private residential BMPs. This project was designed to test the

construction of BMPs, long-term effectiveness of BMPs and the physical hydrology metrics within these systems. Three main questions to be answered through monitoring were: (1) Was the BMP constructed and installed according to the recommendations given by NTCD? (2) How effective was the BMP at capturing, infiltrating and treating storm runoff? (3) What maintenance needs and requirements are necessary to uphold BMP functionality through time? During the fall of 2009 the CPG finished field assessments and the write up of results. Through the study it appears there is a conclusion that now seems safe to draw. NTCD feels it is safe to say when BMPs are installed as a Site Evaluation recommends (using on-site Ksat measurements) the BMPs do function as anticipated.

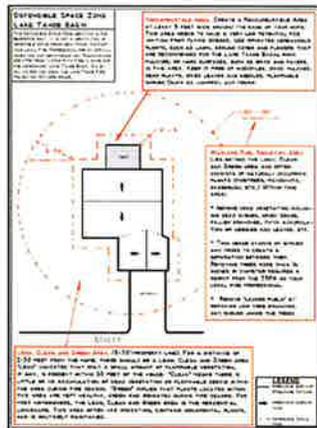


Nevada Division of Environmental Protection - Educational Outreach Video on TMDL Implementation, BMPs and Defensible Space (NDEP Video) is complete. This grant paid for the CPG to collaborate with other partners and plan a film and outreach video with focus on the importance of the TMDL. During the FY 2010 the TAC worked with E-Motion (the contractor) to make final edits and complete the filming of the video. The CPG attended many meetings with other groups to identify the focus and guide the contractor in their efforts. The CPG worked with E-Motion on the final edits and locations of shots. The video is now complete and being distributed to partners groups.

The Nevada Division of Environmental Protection - Reducing Our Impact through Community Education and Best Management Practices (NDEP – Carson Valley) has been moving along throughout the past year. This project provides 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 include: 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. Currently the NTCD has assisted in the planning and presentations at two separate outreach events. Future tasks include the implementation of BMPs at demo sites located on private properties within Carson City.

In an effort to be consistent with recommendations the NTCD, 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 now hand out information with site plans about the FDS zones.



The Tahoe Regional Planning Agency (TRPA) has mailed a total of 706 enforcement letters to residents within the priority one watershed in Incline Village and this field season 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 2010 field season. BCP staff has assisted 383 properties with full BMP Site Evaluations and 120 other properties with Technical Assistance. The BCP has assisted 559 enforcement properties in all and visited some of these properties several times.

The CPG staff helped coordinate and present information at the 2010 Contractors Workshop at Lake Tahoe Community 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 assisted with the coordination of the outdoor session this year. The Contractors Workshop had 45 participants. The Refresher Workshop had 44 participants.



The CPG has also started 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.

Another important accomplishment of the past year included completion of **219** BMP site evaluations (source control with site constraints and full storm water infiltration), facilitation of BMP implementations on **228** private residences resulting in a Final Certificate issued from TRPA, **651** homeowners received technical assistance over the phone and the delivery of technical assistance to **348** homeowners on a variety of conservation issues. The total assistance provided is over **1,446** contacts with homeowners.

During FY 2010 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 2010:

- Continued Community Watershed Planning in the Kingsbury General Improvement District and Glenbrook communities.
- Continued expansion of program to shift focus from stormwater BMPs to Conservation Planning and forest health.
- Presentations to several homeowners associations and community groups



# COMMUNITY PARTNERSHIPS

During Fiscal Year 2010, 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 Attorneys 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 2010 was provided by Local, State and Federal partners including:

## LOCAL

Washoe County  
Douglas County  
Carson City  
Placer County, CA  
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 – 2009 annual audit. A copy of which is available at the district or the offices of the Nevada Division of Conservation Districts