



ANNUAL REPORT

Fiscal Year 2022

**July 1st, 2021
to
June 30th, 2022**

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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

Cary Sarnoff, Chair
Bill Kelly, Secretary/Treasurer

SUPERVISORS

Maureen McCarthy
Barbara Perlman-Whyman
Greg Felton
Alexis Hill Representing Washoe County
Danny Tarkanian, Representing Douglas County
Doug Martin, Representing Carson City

DISTRICT STAFF

Meghan Kelly–District Manager/Senior Project Engineer
Dana Olson – Assistant District Manager
Domi Fellers – Environmental Scientist
Patrick Johnson – Staff Engineer
Eamonn Kerley – Project Engineer
Tia Belloumini – Engineering Technician (Intern)

*NTCD Board of Supervisors and Staff as of June 30th, 2022

INTRODUCTION

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 sub-divisions 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 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

Included in our accomplishments during the past year was the completion of the FY 2021 audit. The audit showed a financial outlook for the District which continues to reflect a financial position of accountability. Internal controls are in place to ensure the solvency of the District's funds.

The District submitted its Indirect Cost Rate with the Department of the Interior for the year 2023. The rate was approved in May 2022.

Other administration and operations accomplishments for fiscal year 2022:

- Successfully held nine regular board meetings.
- Participation in national and state conservation programs.
- Successfully met all deliverable requirements of the Conservation Commission.
- District Staff and Supervisors continued to provide support for the NvACD.

PROJECT UPDATES

WATER QUALITY AND EROSION CONTROL PROJECTS

Scientists, researchers, and water quality specialists in the Lake Tahoe Basin have identified untreated stormwater runoff, eroding soils, and impaired or disturbed stream environment zones (SEZ) as key threats to the water quality of Lake Tahoe. The District 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), Nevada Division of Environmental Protection (NDEP), Tahoe Regional Planning Agency (TRPA), the US Forest Service Lake Tahoe Basin Management Unit (USFS), the US Bureau of Reclamation (USBOR), jurisdictions such as the Nevada Department of Transportation (NDOT) and Douglas and Washoe County, as well as 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, local, and private sources to design and construct the projects. During project design, the District, its grantors, and a project-specific Technical Advisory Committee provide technical oversight to ensure the project meets the natural resource, water quality, and community objectives of the specific project and the region.

NTCD continues working on several Water Quality and Restoration Projects with NDSL, NDOT, TRPA, Douglas and Washoe County, the US Forest Service, and USBOR. The cooperative effort between these agencies has led to several design and implementation projects including the Rosewood Creek Restoration Project, the Burke Creek/Rabe Meadow Riparian Restoration Project, the Kahle Water Quality Basin Implementation Project, the Brautovich SEZ Restoration, and Park Rehabilitation Project, and highway drainage improvement projects throughout the Lake Tahoe Basin.

Rosewood Creek Restoration Project - Continuation

The purpose of the Rosewood Creek Restoration Project - Continuation is to continue to stabilize portions of the Third Creek watershed to reduce sediment loads to Lake Tahoe as well as expand healthy riparian areas. Nearly a half mile of creek was restored as part of a project completed in October 2015. A new project was authorized by the Bureau of Reclamation (BOR) to address a 400-foot section of creek just downstream from this restored reach. Design started on this reach in May 2017 and construction was completed October 2019. Physical and biological monitoring were completed Spring 2022 and the BOR Final Report is due September 30, 2022. Water quality monitoring was extended one year, due to unforeseen staffing delays due to COVID-19 restrictions and the challenges in collecting water samples due to dry water years in 2021 and 2022, through FY 2023 to determine the project's contribution to water quality improvements.



Photo monitoring of analog beaver dams in Rosewood Creek Continuation Area

NDOT Assistance

NTCD engineers assist NDOT Hydraulics with stormwater-related issues on Tahoe Basin highways upon request. NTCD engineers perform site visits, hydrology, conceptual designs, order necessary materials, and coordinate with a construction contractor, permitting agencies, and NDOT to implement the projects. NTCD has designed a large-scale area-wide treatment basin system for the Marla Bay/McFaul Creek watershed to be installed in 2023, has conducted an outfall inventory to inform future maintenance projects, and has repaired various drainage and erosion issues along SR28, SR431, and US-50.

Douglas County Assistance

NTCD engineers assist Douglas County Public Works with stormwater-related issues upon request from the Stormwater Program Manager. NTCD engineers perform site visits, hydrology, cost estimates, and conceptual designs and present this work to the County for use. This past year, NTCD engineers designed a stormwater decant facility for construction at the Minden Public Works Yard. NTCD also provides oversight of the County's Stormwater Maintenance Crew as requested. A portion of this funding assists the District with finding and applying for grants or other funding sources for priority County projects.

Bijou Park Creek Watershed Restoration Project

NTCD teamed up with consultants including Wildscape Engineering, Northwest Hydraulic Consultants, and Catalyst Environmental Solutions to complete this planning project for the City of South Lake Tahoe that will advance stormwater collection and treatment designs in the Bijou Park Creek Watershed. NTCD is assisting the team with TMDL modeling and conceptual engineering design.

Burke Creek/Rabe Meadow Riparian Restoration Project

NTCD is working with US Forest Service, the Tahoe Beach Club, and other stakeholders to address conservation issues in Rabe Meadow and along Burke Creek. The project will result in the full design and implementation of two to three projects over the next three years including the decommissioning of a ditch and realignment of Burke Creek near Nevada Beach and a restoration effort near Jennings Pond.

Brautovich SEZ Restoration and Park Rehabilitation Project

NTCD worked with Douglas County and other stakeholders to complete more than half of an acre of stream zone restoration and a park rehabilitation at Brautovich Park in Douglas County. The project was designed in Spring and Summer of 2020 and was constructed in late summer and fall of 2020. The restoration portion of the project is complete and the project is underwent irrigation and monitoring in 2021, and a new playground, bicycle, and dog park facilities were installed in 2022. The Project is receiving a "Best in Basin" award from the Tahoe Regional Planning Agency August 2022.

Marla Bay Water Quality Improvement Project Community-Based Watershed Strategy

The Marla Bay Water Quality Improvement Project (WQIP) will utilize the EPA watershed planning and implementation model and the guidelines from TRPA to assist private landowners and local jurisdictions with Total Maximum Daily Load (TMDL) implementation through a community-based watershed approach. The intent is to focus the community on implementation and maintenance of individual and merged BMPs for protection and restoration of water quality. Through an integrated strategy for community outreach, education, and information sharing, the project will increase the communities' knowledge of restoration objectives, opportunities for improving environmental stewardship, and continuation of the BMP retrofit program. This project will connect the private and public works Environmental Improvement Program (EIP) projects while being adapted to local community priorities for Nevada.

The project accomplishments will include:

- Watershed scale plan that identifies and prioritizes stormwater treatment opportunities, forest health opportunities, terrestrial invasive/noxious weed issues, beach conservation areas, and stream restoration opportunities
- Community outreach and stakeholder coordination (1 community meeting and 3 stakeholder meetings)
- Technical assistance to increase environmental stewardship on private property
- Engineer 50% plans for stormwater treatments on public roads
- Work collaboratively with the NDOT US-50 3R project throughout Project design
- Increase Lake Tahoe Nearshore and Pelagic Clarity
- Work toward achieving a potential 8 Lake Clarity Credits for Douglas County; load reductions required by the Lake Tahoe TMDL

NTCD began work on Marla Bay Water Quality Improvement project in October of 2021. Staff met with representatives from the Marla Bay GID and prepared base mapping in GIS and CAD for the project area, collected existing utility maps for the area, and completed a preliminary improvements design. NTCD staff staked out the proposed preliminary storm water retention basins adjacent to highway 50 and met with NDOT and Douglas County to review the design and layout in the field. Based on these meetings it was determined that the basins should be redesigned to treat more of the runoff from NDOT outfalls. A draft design of the updated basins was completed and hydrology calculations and mapping were updated to reflect the updated basins.

Saxon Creek Aquatic Organism Passage Project

The Saxon Creek Aquatic Organism Passage Project, Phase 2, is a follow-up project to Phase 1 completed in 2018 which replaced a failing road culvert with a bridge and realigned and restored 140 feet of channel upstream of Fountain Place Road. Phase 2 will complete the restoration of an additional 934 feet of stream channel to achieve the project goals outlined above. Phase 2 will also perform necessary adaptive management on Phase 1 of the restoration.

The goal is to build upon Phase 1 of the Project by restoring the section of channel downstream from the Fountain Place road crossing and performing adaptive management on the upstream section of the channel to achieve hydrologic and geomorphic continuity and provide for suitable passage conditions for the target aquatic species through the entire restored reach. The target aquatic organisms include juvenile salmonids and the Paiute sculpin (*Cottus beldingi*) species.

NTCD will provide planning, engineering, permitting, bidding services, construction oversight, and overall project management. The Project is slated to be constructed in 2022. During fiscal year 2022 final design, permitting, and bidding were completed.

Marlette SR28 Crossing and Realignment and Water Quality Improvement Project

The Marlette Creek SR28 Crossing Realignment and Water Quality Improvement Project is a multi-phase project with the goal of improving stream function, water quality, and fish habitat and providing erosion control and

stormwater treatment at directly connected outfalls from State Route 28. NTCD will provide planning, engineering, permitting, bidding services, construction oversight, and overall project management. This multi-phase project is slated to be constructed in 2023 and 2024 and is currently in design and permitting. During fiscal year 2021 and 2022, surveying, modeling, biological assessments, conceptual designs, and preliminary permitting was completed.

This restoration project will coordinate with planned NDOT stormwater improvements on SR28, modify or replace an existing culvert below SR 28, repair channel incision, improve riparian vegetation and reduce conifer encroachment, realign a portion of the creek to reduce road embankment erosion, remove remnant structures within Marlette Creek and the South Fork of Marlette Creek, and reconfigure a culvert crossing on the South Fork of Marlette Creek.

The Project seeks to achieve the following objectives:

1. Improve water quality by eliminating untreated stormwater runoff from SR 28 from entering Marlette Creek
2. Improve in-channel and riparian habitat by stabilizing the bed and banks of both the South Fork and main branch of Marlette Creek.
3. Expand habitat for native fish by providing fish passage under SR 28.
4. Control adjacent erosion and protect vital highway infrastructure on a scenic recreation corridor by stabilizing road shoulders and realigning the creek, if necessary.

Mason Valley Conservation District Walker River

Mason Valley Conservation District (MVCD) identified 720 linear feet of unstable riverbank on the West Walker River in Lyon County for restoration. NTCD will design restoration plans to stabilize the stream banks and bed.

Zephyr Cove Elementary School Playground Project

NTCD provided planning, engineering, permitting, bidding services, construction oversight, and overall project management for the regrading, drainage improvements, and play area rehabilitation at a local elementary school. The project was designed and permitted in Spring of 2021 and construction was completed in September 2021.

Cave Rock State Park Erosion Control Project

The State of Nevada owns various parcels within the Lake Tahoe Basin. The Nevada Division of State Lands (NDSL) is tasked with managing the protection of resources at these parcels. Cave Rock State Park (CRSP) was established in 1967 as a boat launch and parking area and has since become a popular recreation site on Lake Tahoe's east shore. Due to the construction of US-50 influencing the creation of the State Park, much of the land surrounding the park is designated as US-50 right-of-way. In 2016, the Nevada Department of Transportation (NDOT) completed a retrofit of the Cave Rock Tunnel for US-50 and blocked off some of the street parking that was occurring for pedestrian access into CRSP. Social trails from years of access are prominent on the southeastern edge of the park.

The goal of the the Project is to address, repair, and prevent erosion issues at Cave Rock State Park. The objectives are as follows:

1. Eliminate user-created trails at CRSP by preventing access through fencing, and repairing existing erosion through a mix of slope stabilization and revegetation.
2. Assess the existing Tahoe yellow cress enclosure at CRSP for possible relocation or expansion.
3. Determine and record the CRSP boundary ownership.
4. Coordinate with the Nevada Department of Transportation on permitting, fencing, and erosion repairs at CRSP.

NTCD began working on this project in May 2021 and is acting as the overall project manager, designer, and construction inspector. NTCD staff completed the design of the erosion control project in the fall of 2021 and during design it was determined that installing a permanent fence in NDOT right-of-way would not be feasible

due to driver safety concerns. As a result, a temporary construction fence was installed to prevent pedestrians from accessing the state park through the repair zone. NTCD solicited construction bids for the erosion control in early fall of 2021 and construction began in November of 2021 during a window of dry weather. NTCD staff completed post-construction monitoring from December 2021 to May 2022, and in June of 2022, with the Great Basin Institute, completed revegetation planting and temporary irrigation. With the erosion control construction complete, NTCD staff will continue to periodically monitor the revegetation and erosion control effectiveness. NDSL has requested that as part of the monitoring NTCD make any necessary repairs to the temporary construction fence that was installed.

Natural Resources Conservation Service Engineering Technical Support

This is an agreement with NRCS to provide engineering technical assistance for the Environmental Quality Incentives Program (EQIP). The Nevada NRCS has limited engineering staff to provide necessary assistance causing delays past programmatic deadlines or construction windows. This agreement will use NTCD's engineering staff to assist Nevada NRCS so these deadlines can be met.

NTCD will be responsible for all design aspects, final designs, and pre-construction meetings following NRCS standards. This agreement is for a minimum of 22 projects in the 18-month granting period.

NTCD staff started work on the first project in January of 2022 and has completed 5 of 10 projects provided by NRCS to date. NTCD staff holds monthly coordination meetings with the NRCS project manager and continuous communication regarding individual projects with NRCS staff. The projects that NTCD has completed to date have covered a variety of project types, including irrigation pivot, irrigation water pipeline, livestock pipeline, concrete-lined ditches, and culvert replacements design. Work is ongoing with the remaining projects, and it is expected that NRCS will be providing additional projects after the 10 projects are completed.

Hicks Parcel Erosion

The Hicks Urban Parcel (APN 131-233-03) was acquired by the State of Nevada under the sensitive lands program in 1989. In the past few years, the site has experienced large-scale surface erosion. A trail exists at the uppermost edge of the parcel and Incline Creek flows at the lower edge of the parcel. The parcel is flanked on one side by public lands and on the other three sides by privately-owned parcels.

NTCD completed a topographic survey of the site in July of 2021 and retained Lumos and Associates to do a geotechnical study of the site and provide stabilization recommendations. After reviewing stabilization recommendations, NTCD developed design alternatives and estimated costs for 3 options and provided these recommendations to NDSL. It was decided to follow through with the most economical construction option due to the specific site conditions and setting. NTCD contracted the Great basin Institute to provide hand crews for minor hand grading, erosion control, revegetation, and temporary irrigation on the failed slope. Construction began in June of 2022 and took seven days to complete. NTCD coordinated with the adjacent apartment property manager to secure irrigation water for the site and continues to monitor the project.

Community Watershed Planning Projects

Through a partnership with the Environmental Protection Agency, NTCD is completing landscape-scale and area-wide conservation planning projects on the Nevada side of the Lake Tahoe Basin. NTCD will develop and plan community-based watershed strategies with private and public landowners in coordination with the public agencies responsible for stormwater and forest health management. Because previous rounds of funding have laid the groundwork for community watershed planning, the project has identified three specific focus areas and targeted goals for each:

1. Develop Community Watershed Plan for Edgewood Creek Watershed.
Goal: Work with commercial private properties adjacent to Edgewood creek to complete their BMPs and obtain certificates of completion from the TRPA.
2. Complete development of community-based watershed strategies for the Burke Creek Watershed.

Goal: Determine appropriate maintenance strategies for the Kahle Drive Complete Street Project that will enhance implementation of the Lake Tahoe TMDL.

3. Work with Lake Tahoe Nevada fire districts to prioritize and plan for forest health practices in and adjacent to Lake Tahoe Nevada streams (SEZs)

Goal: Work with Tahoe Douglas Fire Protection District and/or North Lake Fire Protection District to identify areas near streams that are untreated for forest health, assess at least 5 miles of stream corridor using existing data and field-collected data, and create a stream corridor forest management plan for one or both Districts that includes priority treatment areas, opportunities to use harvested materials on site for channel restoration, permit materials, and partnership opportunities.

Project Updates:

1. NTCD has nearly completed BMP design plans for three (3) commercial private properties adjacent to Edgewood Creek. The final funds will conduct a land survey for one of the properties to move forward with BMP implementation, finalize a cost estimate and reach out to the property owners with updated design plans and cost estimates. NTCD must also contract with TRPA as TRPA was able to procure implementation funding to implement these area-wide treatments.
2. NTCD worked toward finalizing 90% design plans for the Kahle Complete Streets Project, which is within the Burke Creek Watershed. NTCD has lobbied for and received additional funds for project implementation all while keeping key stakeholders up to date on project implementation. NTCD prepared a draft RFP for the waterline design along Kahle Drive after discussing it with Kingsbury GID and NV Energy. NTCD will continue to participate in the US 50 Corridor Planning effort and hold stakeholder meetings for Kahle Drive as needed. NTCD will continue to pursue funding for Kahle Complete Street and Burke Creek/Rabe Meadow restoration projects and advance the Kahle Drive plans to 90% design level. NTCD will continue to meet with key stakeholders including Kingsbury and Oliver Park GIDs, Douglas County, Barton Health, Tahoe Beach Club, and NDOT to assure that designs in the area blend well together.
3. NTCD worked with Tahoe Douglas Fire Protection District and the North Lake Fire Protection District to identify areas near streams that are untreated for forest health. NTCD created a priority matrix, using five different criteria. NTCD needs to complete the last of the field visits to complete the priority matrix and then create a stream corridor forest management plan that outlines priority treatment areas. NTCD has created Community Watershed Planning Forest Health Implementation Projects within TRPA's EIP Tracker, along with submitting for grant opportunities. Within the stream corridor forest management plan, NTCD will outline steps taken and steps needed to pursue the correct permits, funding options, and project partners.

MONITORING AND MODELING PROJECTS

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
- Pollutant Load Reduction Modeling
- Sediment Load Reduction Planning

Lake Clarity Crediting Program Registration & TMDL Implementation

The Lake Clarity Crediting Program Registration and TMDL Implementation project provides support to Washoe County and NDOT to comply with their individual Interlocal Agreements with NDEP. The ILAs document the specific obligations and commitments of attaining the load reduction milestones associated with the Lake Tahoe

TMDL using the Lake Clarity Crediting Program (LCCP) Tools. The project will assist Washoe County and NDOT in meeting the annual load reduction targets and attaining the 15-year 2026 milestone by registering pollutant controls such as stormwater treatment BMPs, private parcel BMPs, and road operations. Registrations and credit attainment show commitment to the TMDL goal of improving Lake clarity. The project will review existing and create new PLRM models as needed and refine inputs, perform the required rapid assessment methodology (RAMs), help determine inspection and maintenance frequency for specific treatment BMPs, register the catchments in the Lake Tahoe Stormwater tools and obtain awarded credits. Additionally, NTCD participates in program improvement meetings and program advisory committees since LCCP is based on an adaptive management approach.

Caltrans LCCP Support

NTCD performs the Road RAM for Caltrans on an annual basis and provides Lake Clarity Crediting Program (LCCP) support when needed. To comply with the LCCP, Caltrans must perform Road RAM a minimum of four (4) times annually, with the option to perform additional RAMs if directed by Caltrans or CDM Smith. NTCD collects the field data for entry into the Lake Tahoe Stormwater Tools and provides CDM Smith road condition score updates for annual compliance. With NTCD's extensive knowledge and daily use of the LCCP Stormwater Tools interface, NTCD has been able to assist Caltrans, CDM Smith and Michael Baker International navigate the LCCP registration and declaration process.

Rosewood Creek Water Quality Monitoring

NTCD received additional funding to continue monitoring Rosewood Creek with the goal of quantifying the restoration's impact on meeting the Tahoe TMDL. The water quality sampling systems above Northwood Blvd. and below SR28 continue to be operational and are monitoring Rosewood Creek flow above and below the Area A restoration. With the new funding, an additional monitoring station above SR28 was installed to separate the impact of SR28 road runoff. Additionally, NTCD will conduct a fish count, macroinvertebrate monitoring, cross-section surveying, photo monitoring, and remote sensing photo comparison to compare flood plain water connectivity before and after the creek restoration. These efforts will continue through FY 2023.

TRCD Implementer's Monitoring/NDOT

A pollutant source analysis conducted by the Lahontan Regional Water Quality Control Board (Water Board) and Nevada Division of Environmental Protection (NDEP) identified the largest source of fine sediment particles to Lake Tahoe as urban stormwater runoff, comprising 72 percent of the total fine sediment particle load. Based on the pollutant source analysis, the seven Lake Tahoe Basin jurisdictions were determined as the main Lake Tahoe stormwater dischargers. The California jurisdictions were issued a National Pollutant Discharge Elimination System permit (permit) by the Lahontan Water Board in August 2011. The Nevada jurisdictions including NDOT entered into Inter-local Agreements (ILAs) with NDEP shortly after, which required them to reduce pollutant loads to Lake Tahoe from urbanized areas within their jurisdictions. The permits and ILAs encouraged the jurisdictions to work collaboratively to fulfill the regulatory requirements. The seven (7) jurisdictions have since then partnered together to form the Implementers' Monitoring Program (IMP), a coordinated effort for implementing capital improvement projects and improving management actions to reduce pollutant loads to Lake Tahoe to meet the TMDL standard. The Tahoe Resource Conservation District (Tahoe RCD) was hired by both the IMP and NDOT to establish a coordinated network of long-term monitoring sites for collecting reliable information on urban stormwater runoff to track pollutant load reduction progress under the Lake Tahoe TMDL using RSWMP protocols. These sites provide critical information related to changes in stormwater quality status and trends in response to implementing water quality improvement projects and improved management actions in urban catchments. The Tahoe RCD contracted with NTCD to provide water quality monitoring and lab work assistance to the Tahoe RCD for work contracted by Lake Tahoe jurisdictions. The NTCD/Tahoe RCD contract is renewed on an annual basis.

Lower Wood Creek Water Quality Construction Management and Phase 2

NTCD is the lead Pollutant Load Reduction Model (PLRM) modeler for the Lower Wood Creek (LWC) Phase I and II Water Quality Improvement Project. NTCD completed both the Baseline and Existing Conditions Technical

Memo documenting all PLRM and GIS shapefile refinements and the Alternatives Technical Memo documenting all PLRM and GIS shapefile refinements for the design treatment BMPs alternatives. Washoe County completed constructing Phase I of the project with Phase II scheduled for summer 2023. Because both Phases I and II design was complete to 50% design, NTCD's PLRM results should be mostly complete for both phases with minimal changes to the PLRM results once registration occurs. NTCD staff will continue to assist the County and their consultant with Lake Clarity Crediting Program-related modeling and reporting, attend technical advisory meetings as well as internal design team meetings, perform construction management for Phase II, and register both Phases I and II with the Lake Tahoe Info Stormwater Tools once the project is constructed (Water Year 2024). Prior to registration, NTCD will perform the appropriate BMP RAM and condition inspections (parcel BMP verifications) required for registration. Project coordination, data sharing, and open communication with the consultant are key to a successful project.

2022 Nearshore Human Health Assessment

The Tahoe Regional Planning Agency (TRPA) and Lahontan Regional Water Quality Control Board (Lahontan) collaborated again in 2022 to execute a Nearshore Human Health Assessment for Lake Tahoe. The 2022 assessment included total coliform and *Escherichia coli* (*E. coli*) bacteria monitoring. The Nevada Tahoe Conservation District (NTCD), in partnership with the Tahoe Resource Conservation District (Tahoe RCD), is monitoring 8 beach locations over a 10-week period. The monitoring provides an assessment of human health risks associated with lake-water contact during recreational activities. Additionally, NTCD partnered with the Lahontan Water Board to collaborate on sampling efforts and compare field sampling methods and laboratory analysis methods. The data can be found in the California Environmental Data Exchange Network (CEDEN). The monitoring will be complete on September 2, 2022, and the project will wrap up by December 2022.

Invasive Weeds

The District continues to be involved with the Lake Tahoe Basin Weed Coordinating Group (LTBWCG) by attending quarterly meetings and assisting with its annual weed training.

Through a grant from the United States Forest Service, NTCD has been able to start working with Placer and Douglas County on treating priority weed populations. Douglas County treated roadsides in the Tahoe basin in fall 2021 and is continuing to treat these areas through 2023. This funding is also being used for community outreach including printing 1000 copies of the Invasive Weeds of the Tahoe Basin booklet that is used extensively by field staff and the general public.

Tahoe Yellow Cress

The NTCD attended quarterly Tahoe yellow cress Adaptive Management Working Group meetings. This fiscal year, the District had limited funding for outreach and education efforts to inform lakefront homeowners about Tahoe Yellow Cress. It did continue to work with partners on a Safe Harbor Agreement application in hopes to develop a program to improve conservation of Tahoe yellow cress on private properties.



Tahoe Yellow Cress

COMMUNITY PARTNERSHIPS

Funding by our community partners has been essential to NTCD operations. The general fund funding provided by Douglas and Washoe County enables NTCD to leverage a small amount of funding into larger projects. General fund assistance is critical for activities like grant writing and project planning and a consistent long-term commitment is desired.

Douglas County Board Of Commissioners

NTCD received \$25,000 in general financial assistance this fiscal year to support the District's conservation efforts.

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.

Washoe County Board Of Commissioners

NTCD received \$25,000 of general financial assistance to support the District's conservation efforts. Washoe County continues to partner with NTCD on various projects in the Lake Tahoe Basin including the Catchment Registration Projects. Washoe County also provides NTCD with legal support through its District Attorney's office.

Other Partners

NTCD is involved in several other partnerships in addition to our Community Partnerships. During FY 2020, NTCD has Memorandums of Understanding or contracts with the USDA Natural Resources Conservation Service, the Nevada Division of Environmental Protection, the Nevada Division of State Lands, Tahoe Resource Conservation District, Nevada Department of Transportation, 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
- South Tahoe Environmental Education Coalition
- Lake Tahoe Basin 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
- Washoe Tribe of Nevada
- University of Nevada Cooperative Extension
- Parasol Foundation
- Tahoe Yellow Cress Adaptive Management Working Group and Executive Committee
- Lake Tahoe Basin Weed Coordinating Group

FUNDING

Nevada Tahoe Conservation District funding during FY 2022 was provided by Local, State, and Federal partners including:

LOCAL

Washoe County
Douglas County
Tahoe Resource Conservation District
Tahoe Regional Planning Agency
City of South Lake Tahoe

STATE

NV Division of Conservation Districts
NV Division of Environmental Protection
NV Department of Transportation
California Department of Transportation

FEDERAL

USDA Bureau of Reclamation
USDA Forest Service
US Environmental Protection Agency

PRIVATE

National Association of Conservation Districts
Tahoe Beach Club
BNY Mellon Trust of Delaware
Sustainable Community Advocates
Zephyr Cove Elementary School Parents' Club
Growing Spaces

A comprehensive overview of the District's finances is available in our FY 2021 annual audit. A copy of which is available at the district.