



ANNUAL REPORT

Fiscal Year 2020

**July 1st, 2019
to
June 30th, 2020**

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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
Doug Martin, Representing Carson City, Vice Chair
Cary Sarnoff, Secretary/Treasurer

SUPERVISORS

Maureen McCarthy, PhD
Bob Cook
Barbara Perlman-Whyman
Marsha Berkgigler, Representing Washoe County
Dave Nelson, Representing Douglas County

DISTRICT STAFF

Meghan Kelly–District Manager/Senior Project Engineer
Dana Olson – Assistant District Manager
Domi Fellers – Environmental Scientist
Patrick Johnson – Staff Engineer

*NTCD Board of Supervisors and Staff as of June 30th, 2020

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 2019 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 2021. The rate was approved in May 2020.

Other administration and operations accomplishments for fiscal year 2020:

- Successfully held seven 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 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 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 for 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 to address a 400 foot section of creek just downstream from this restored reach. Design started on this reach in May 2017 and construction is occurring in September and October 2019. Monitoring is ongoing through FY 2021 to determine the project's contribution to water quality improvements.



New channel, culvert, and floodplain at Rosewood Creek Area A SEZ Restoration continues to undergo monitoring

Kahle Water Quality Implementation Project

This project had been on Douglas County's priority list for a number of years and was specifically identified in the 2014 Burke Creek Rabe Meadow Master Plan by NTCD. Leftover USFS SNPLMA funding from the Burke Creek Crossing and Realignment Project was moved to this project and match was secured from Douglas County TRPA Mitigation Funds, NDOT, and NDSL to design and install this \$1.4 million dollar project which included 1400' of storm drain pipe and large wet basin. Both treatments are appropriately sized for the design storm in the area and have resulted in considerable improvements to water quality. NTCD designed, permitted and bid the project with internal staff and construction of the project was completed in October 2018. The District conducted visual monitoring of vegetation success during the field season of 2019 and closed out the project during the spring of 2020.

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 also designed a stormwater decant facility to be installed in spring 2021, prepared a training for NDOT Maintenance staff for best practices for TMDL compliance in the Lake Tahoe Basin, and is conducting an outfall inventory to inform future maintenance projects.

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. 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 projects over the next two years including the decommissioning of a ditch and realignment of Burke Creek near Nevada Beach and a restoration effort near Jennings Pond. As part of this project, NTCD oversaw the repair of a trail in the spring of 2020.

Brautovich SEZ Restoration and Park Rehabilitation Project

NTCD is working with Douglas County and other stakeholders to complete more than a 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 is currently under construction. The project will be complete in Fall of 2020 and undergo some monitoring in 2021.

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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 2021 load reduction milestone and reaching for 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. Additional, NTCD participates in program improvements 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, prepares the data for entry into the Lake Tahoe Stormwater Tools, records the data in NTCD's excel worksheet, scans all field data sheets and turns the data over to CDM Smith and Michael Baker International for review and data entry into Lake Tahoe Stormwater Tools. 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 registration and declaration process.

Rosewood Creek Water Quality Monitoring

NTCD received additional funding to continue monitoring on 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 2021.

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 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, that 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 Monitoring

NTCD is the lead Pollutant Load Reduction Model (PLRM) modeler for the Lower Wood Creek (LWC) Phase I 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. NCE is currently working on the 90% Design Plans for a paired down project due to lack of construction funds, but NTCD's PLRM results are mostly complete for the full project design. There should be minimal changes to the PLRM results once registration occurs. The LWC Water Quality Improvement Project is on a fast track for construction in 2021 with BMP Registration by Water Year 2022.

2020 Nearshore Human Health Assessment

The Tahoe Regional Planning Agency (TRPA) and Lahontan Regional Water Quality Control Board (Lahontan) collaborated again in 2020 to execute a Nearshore Human Health Assessment for Lake Tahoe. The 2020 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), monitored 7 beach locations over a 10-week period. The monitoring provides an assessment of human health risks associated with lake-water contact during recreational activities. The monitoring was completed on September 3, 2020 and the project will wrap up by December 2020.

Zephyr Cove Growing Domes

Two growing domes were erected at the Zephyr Cove Elementary School to provide hands-on learning to the students at the school. NTCD provided engineering, irrigation and other technical assistance for this project. This work is being completed with help from private funds secured from Lisa Maloff.

Invasive Weeds

The District continues to be involved with the Lake Tahoe Basin Weed Coordinating Group (LTBWCG) by attending to quarterly meetings.

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 lake front 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 improved 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. Douglas County also provides NTCD with legal support through its District Attorney's office.

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 \$10,000 of engineering funds 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.

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 NTCDD 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 Cross Adaptive Management Working Group and Executive Committee
- Lake Tahoe Basin Weed Coordinating Group

FUNDING

Nevada Tahoe Conservation District funding during FY 2020 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
Tahoe Transportation District

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

PRIVATE

National Association of Conservation Districts
Wildscape Engineering, Inc.
Glenbrook Private Homeowners
Barton Health
Tahoe Beach Club
BNY Mellon Trust of Delaware
Sustainable Community Advocates
South Shore Transportation Management Association

A comprehensive overview of the District's finances is available in our FY 2020 annual audit. A copy of which is available at the district.