

Tahoe Resource Conservation District 2014 Annual Report



WE DO CONSERVATION



VISION

USE SCIENCE AND COLLABORATION TO ENSURE THE BALANCE BETWEEN PEOPLE, NATURAL RESOURCES AND THEIR COMMUNITY.

MISSION

THE MISSION OF THE TAHOE RESOURCE CONSERVATION DISTRICT IS TO PROMOTE THE CONSERVATION, STEWARDSHIP AND KNOWLEDGE OF THE LAKE TAHOE REGION'S NATURAL RESOURCES BY PROVIDING LEADERSHIP AND INNOVATIVE ENVIRONMENTAL SERVICES TO ALL STAKEHOLDERS.

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Truckee River Invasive Weed Control: Catherine Howard Photography

Restoration Program: California Tahoe Conservancy staff

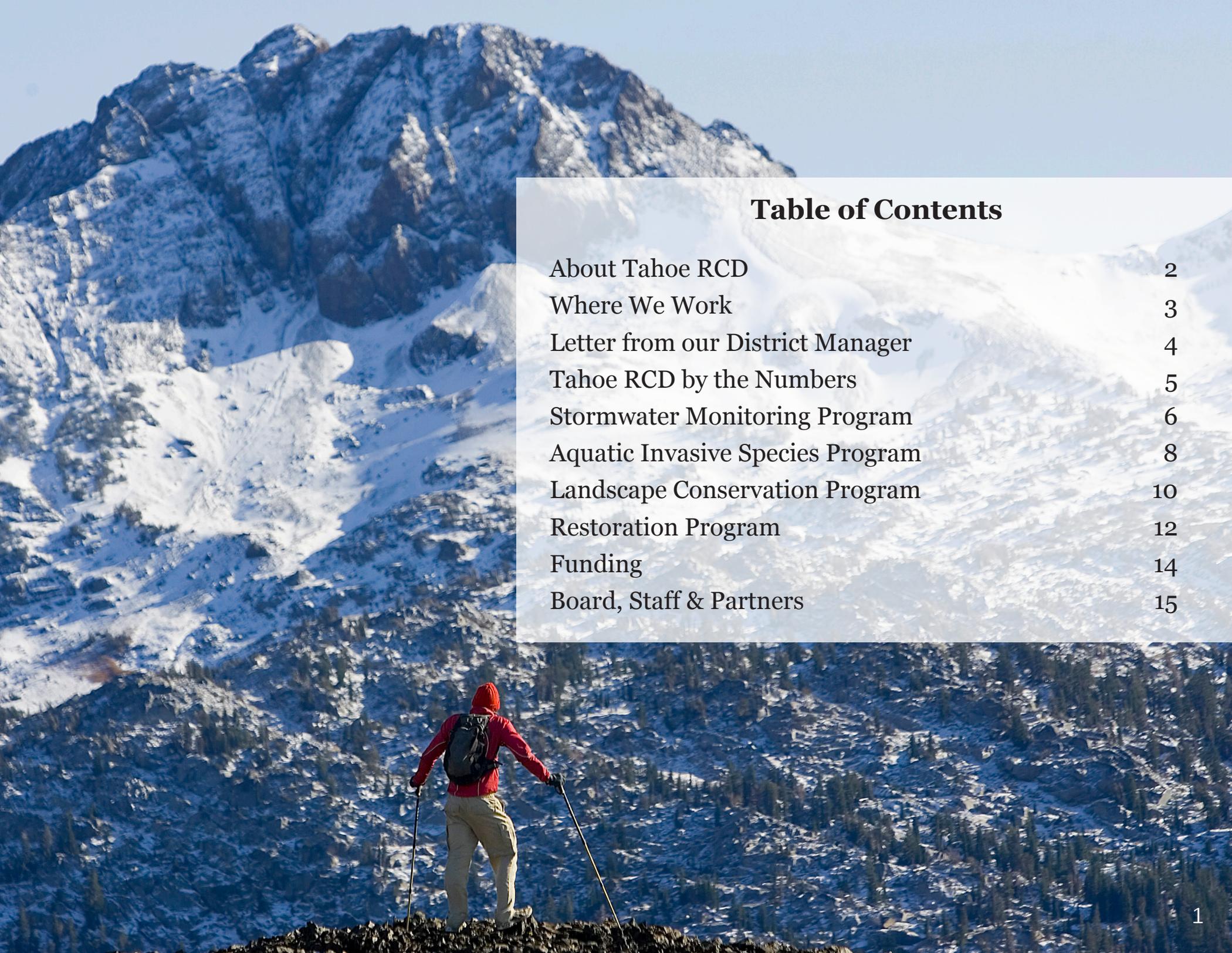


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About the Tahoe Resource Conservation District

There are over 3000 Conservation Districts across the country, including nearly 100 in California alone. The Tahoe Resource Conservation District (Tahoe RCD) is one of the most influential conservation districts in the nation, playing a vital role in preserving the world-renowned resources and scenic beauty of the Lake Tahoe Basin.

Pressures from development, recreation and tourism have impacted the natural resources in the Lake Tahoe Basin and conservationists have responded by implementing a collective Environmental Improvement Program (EIP). The Tahoe RCD has been an instrumental partner in helping to implement the EIP. With a staff that grows to over 50 during the summer field season, the Tahoe RCD plays an integral role in protecting and restoring our alpine home for the enjoyment of future generations.

Our efforts focus on stormwater monitoring, erosion control, aquatic invasive species, landscape conservation, forest management, and stream restoration.



Where We Work

The Truckee Aquatic Invasive Species Program serves the Truckee River watershed area, shaded in tan.

The Aquatic Invasive Species Program and Stormwater Program cover all of Lake Tahoe, in both California and Nevada.

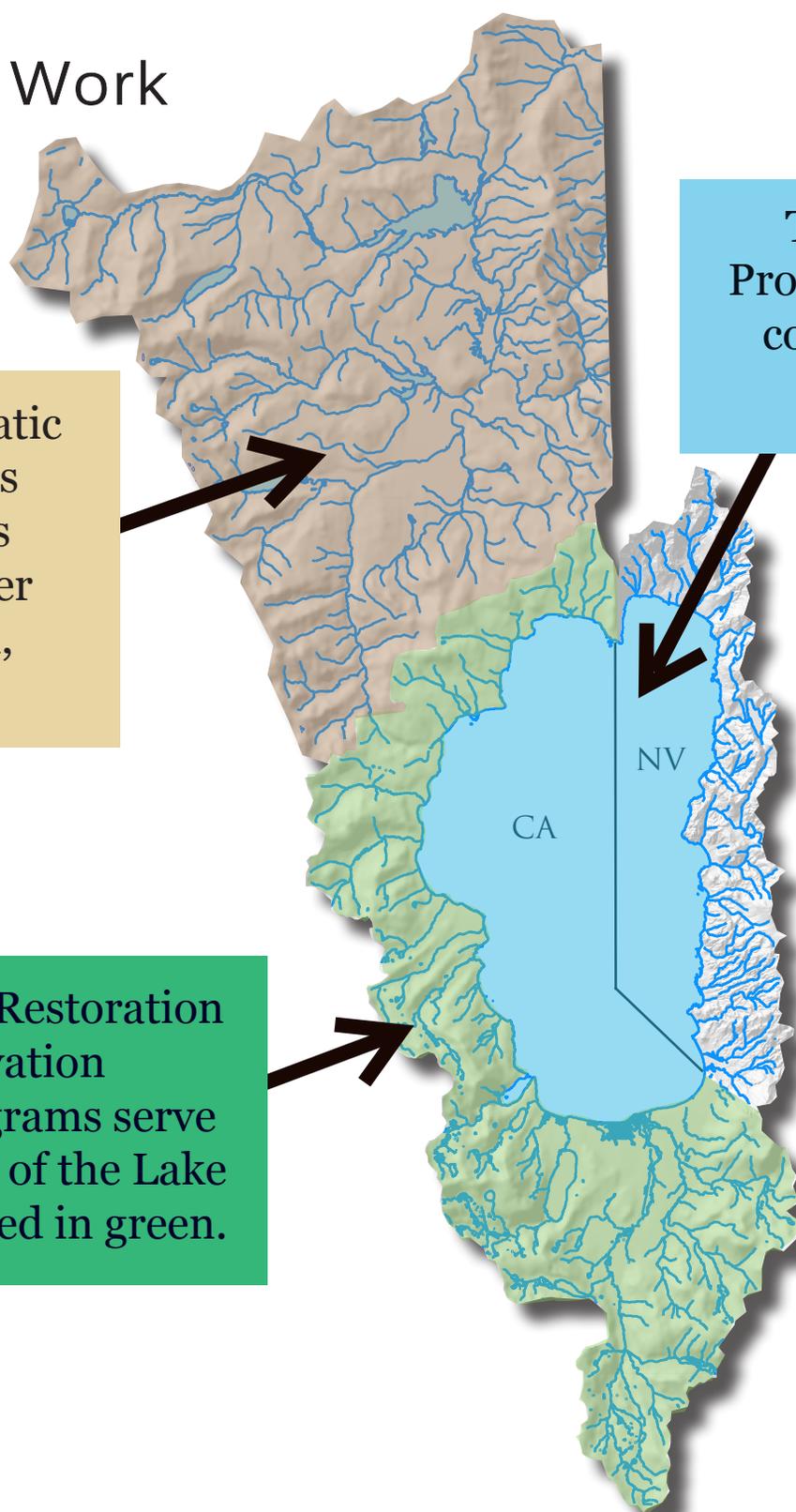
The Tahoe RCD's Restoration and Conservation Landscaping Programs serve the California side of the Lake Tahoe Basin, shaded in green.

Our work covers:

Seven Counties: El Dorado, Placer, Sierra and Nevada Counties in CA; Douglas, Washoe and Carson City Rural Counties in NV

Two Cities: City of South Lake Tahoe and Town of Truckee

Two National Forests: Lake Tahoe Basin Management Unit and Tahoe National Forest





A Letter from our District Manager

Dear Tahoe Basin Community and Visitors,

The completion of 2014 marks another year of hard work and accomplishment at the Tahoe Resource Conservation District (Tahoe RCD). Our dedicated staff have excelled in unprecedented ways; leading programs in aquatic invasive species, stormwater, landscape conservation and restoration. Our commitment to building strong partnerships, coupled with our ability to provide leadership to the community has been a catalyst for our continued success at implementing conservation measures throughout the Tahoe Basin. Working collaboratively toward common goals is the primary objective for the Tahoe RCD, because together we have a brighter future; full of positive energy, momentum, progress, and achievement.

The Tahoe RCD was launched into 2015 with a new motto “We Do Conservation,” because it’s at the heart of everything we do.

With Appreciation,

Kim Boyd
District Manager



Why do you like working at the Tahoe RCD?



Cara: “Because I like science.”



Chris: “Ability to help others become stewards of our environment”



Sarah: “The Staff! Everyone truly loves the environment.”

Tahoe RCD by the numbers...

442 water quality samples analyzed

225 Erosion Control BMP Evaluations & Technical Site Visits

Registered **793** non-motorized paddlers as Tahoe Keepers

43 vegetation consultations with homeowners

1st Stormwater Symposium and **3rd** annual Aquatic Invasive Species Public Forum

Over **3,000** adults and children reached through events and educational programs

Over **40,000** interactions with boaters through the Tahoe Watercraft Inspection Program

213 miles traveled on foot for surveying migratory birds

14 stormwater locations monitored, encompassing **8** urban catchment outfalls and **4** stormwater treatment BMPs

Hosted and presented at over **50** events, workshops & trainings

2 pollutant load reduction models (PLRM) built to determine amount of regulatory credits

40 acres of land treated for invasive weeds with **1,400** invasive weeds removed

11 dry basins evaluated for proper function using BMP Rapid Assessment Method (RAM)

7,025 watercraft inspected for invasive species

Performed **4,723** watercraft decontaminations on high risk watercraft

35,675 square feet treated to control aquatic invasive plants

210 parcels surveyed for migratory birds

27 stormwater runoff events monitored

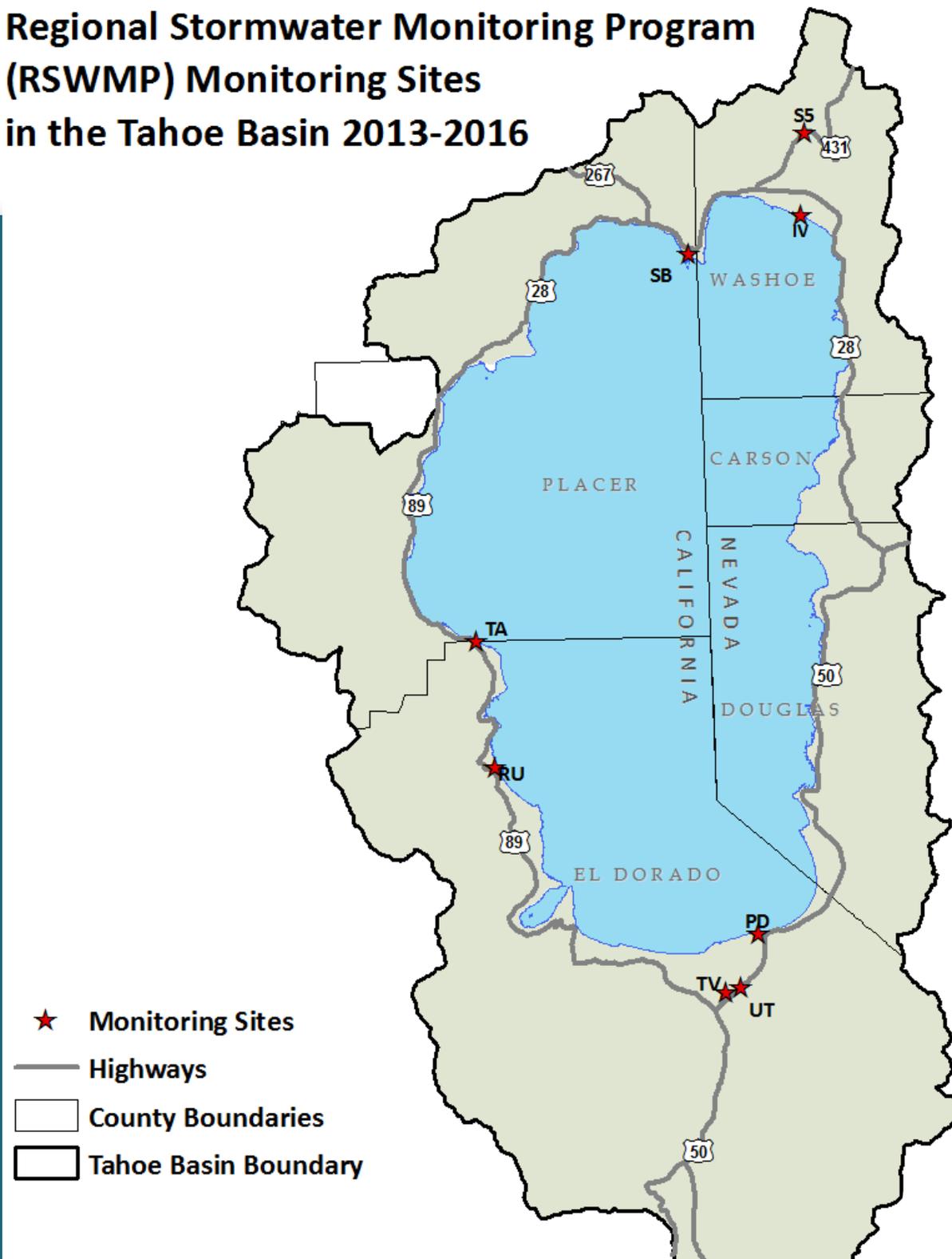
Stormwater Management Program

The Tahoe RCD Stormwater Program monitors runoff from roadways and the built environment around Lake Tahoe. The primary focus of this program is to identify water quality benefits realized through implementing the Environmental Improvement Program and the Lake Tahoe Total Maximum Daily Load Program--designed to reduce pollutants entering Lake Tahoe. Through science, education and partnership collaboration the Tahoe RCD is leading the way toward achieving restoration goals in Lake Tahoe.

Regional Stormwater Monitoring Program:

- 14 stormwater monitoring locations
- Held first Stormwater Symposium to inform interested stakeholders and the general public of issues related to stormwater in Lake Tahoe
- Successful monitoring of stormwater runoff events at all sites over all seasons and precipitation types

Regional Stormwater Monitoring Program (RSWMP) Monitoring Sites in the Tahoe Basin 2013-2016





Storm drain monitoring site at
Pasadena Ave in South Lake Tahoe

CONSERVATION SPOTLIGHT: Stormwater Monitoring

More than 70 percent of all fine sediment and between 15-35 percent of nutrients entering Lake Tahoe come from our roadways and built environment. Monitoring changes in stormwater runoff over time will help the Basin better understand the treatment effectiveness achieved by implementing millions of dollars of stormwater projects and infrastructure upgrades.

Highlights of the Stormwater Program

- Coordinated stormwater jurisdictions in California and Nevada to develop a “one lake one plan” approach to ensure collaboration and information sharing
- Established 14 monitoring sites throughout the Lake Tahoe Watershed
- Developed a comprehensive literature review of monitoring techniques used in the Basin
- Built scientific capacity to compare ‘monitored’ water quality data to ‘modeled’ water quality
- Developed an outreach campaign to get residents and visitors involved in making a difference

Aquatic Invasive Species Program



Tahoe RCD staff performing an inspection and decontamination

The Aquatic Invasive Species (AIS) Program focuses on aquatic invasive species prevention, monitoring and control. Tahoe RCD works with partners and stakeholders to protect the Lake Tahoe Basin from invasive species through: education, research, prevention, early detection, surveys and removal.

Tahoe RCD implements the Tahoe Boat Inspection Program and Truckee Regional AIS Prevention Program. Staffed by Tahoe RCD employees, the goal of both programs is to prevent the introduction of harmful AIS, such as quagga and zebra mussels, that cause negative environmental and economic impacts on industries, communities and native species populations.

Watercraft are the largest vector for spreading aquatic invasive species into new waterways. Lake Tahoe's mandatory inspections help stop AIS before they enter our water. Similar to Lake Tahoe's watercraft inspections, the Tahoe RCD coordinates the Truckee Regional AIS Prevention Program. This program provides inspections and decontaminations for all boats entering water bodies in the Truckee River Watershed (Boca, Stampede, Donner and Prosser). Over the past year, Tahoe RCD assisted local jurisdictions in creating local ordinances in the fight against AIS introductions. Watercraft inspections are now mandatory at Donner Lake and in all water bodies throughout Sierra County.

2014 AIS Survey and Control Projects:

- Monitoring and control for invasive plants in the Truckee River
- Removal of invasive plants in Crystal Shores (east) marina
- Survey and treatment of invasive plants in Emerald Bay

CONSERVATION SPOTLIGHT:

Truckee River Invasive Weed Control



The Tahoe RCD pioneered a project on the Truckee River to control the aquatic invasive plant, Eurasian watermilfoil, which has been growing prolifically since the late 1990s, and likely entered the Truckee River following the overflow of the dam in 1997.

Tahoe RCD and our partners, specifically California Department of Parks and Recreation and Tahoe Regional Planning Agency, have developed highly effective control strategies for open water aquatic plant removal. Control strategies include laying down bottom barriers to kill the plants by eliminating light, and using diver-assisted hand removal to physically remove plants and roots. Control frequently includes the strategic deployment of both methods.

Highlights of the Truckee River Invasive Plant Removal Project:

- Total Treatment Area includes; Lakeside of the Tahoe City Dam to Alpine Meadows Road
- Removed 3,200 gallons of invasive weeds thus far
- Invasive plant control efforts will increase public safety, improve water quality, and increase enjoyment for locals, visitors and business owners



Volunteer weed pull in October 2014



We anticipate continuing our efforts to control aquatic plants in the Truckee River for several years to come. From our efforts in Emerald Bay, we know that invasive plant populations can be reduced, and with continued treatments we will be able to better manage populations in the future. Funding for this project has been provided by the Community Foundation of Western Nevada/Truckee River Fund, California Department of Parks and Recreation, and the Tahoe Fund.

Landscape Conservation Program



Demonstration garden showcasing native and adaptive plants

The Landscape Conservation Program focuses on offering hands-on technical assistance to homeowners to create functioning lake-friendly landscapes in the form of erosion control Best Management Practices (BMP), vegetation consultations, invasive weed removal, and tours of our demonstration gardens.

Our technical services provided to homeowners aids in infiltrating stormwater runoff and complying with the TRPA BMP Retrofit ordinance.

Site Specific BMP Technical Assistance:

- Design plans and conduct final inspections
- Slope stabilization
- Driveway treatments
- Fire wise landscaping

Vegetation Consultations:

- Native and adapted plant selection
- Water conservation
- Soil education
- Pest management

Demonstration Garden Displays:

- Best Management Practices
- Composting
- Outdoor vegetable garden
- Rain garden
- Native and adapted plants



Volunteers working at Evans Family Demonstration Garden

CONSERVATION SPOTLIGHT: Evans Family Demonstration Garden

After the devastating Angora fire in 2007, the Evans family granted the Tahoe RCD use of the land where their house once stood, to develop a garden where the community could learn about and enjoy the beauty of Tahoe’s native plants and environment.

The Evans Family Demonstration Garden has blossomed into their vision and so much more, becoming an illustration of successful environmentally friendly landscaping techniques and providing a venue for community inspiration and education. This garden has been used as an educational classroom for students all around the nation by educating students about Lake Tahoe’s natural environment through hands-on experience.

Garden projects have been lovingly tended to by our staff and made possible through generous donations, volunteer efforts and partner agency collaboration.

At the Demonstration Garden:

- Lake-friendly landscape design
- Fire-wise landscaping
- Water-efficient landscaping & irrigation efficiency
- Best Management Practices
- Tahoe native & adapted plants
- Soil restoration & re-vegetation
- Vegetable gardening & composting
- Wildlife habitat enhancement
- Pest management
- Turf alternatives

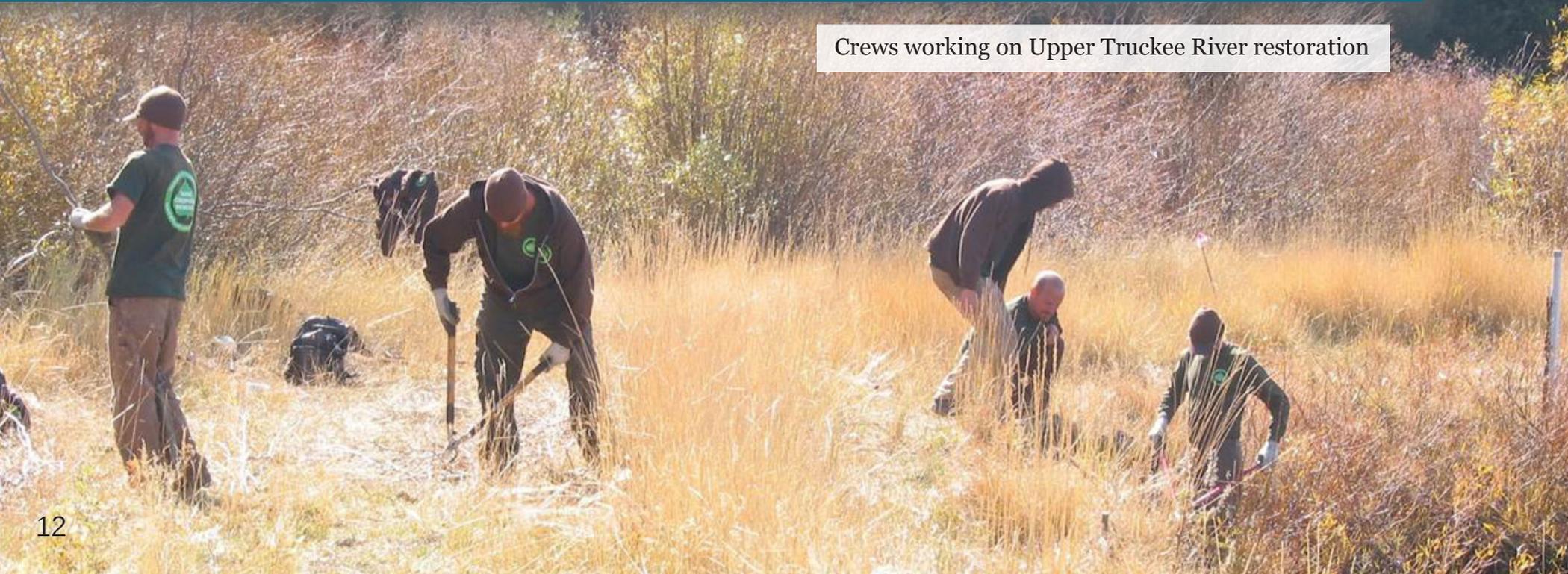
Restoration Program

The Tahoe RCD continues to be a valuable partner in managing California Tahoe Conservancy's (Conservancy) lands through our Joint Powers Agreement finalized in 2010. This agreement further strengthens a 20+ year relationship of restoration and land management. Stewardship of the Conservancy's 6,500 acres of mostly small lots requires year-round maintenance and inspection. Tahoe RCD and Conservancy staff protect these lands by restoring stream zones, removing hazard trees, thinning overgrown forests, building and repairing fences, and revegetating degraded areas. The Conservancy's Land Management Program and Forest Habitat Enhancement Program work to manage nearly 5,000 parcels. Most recently this partnership has also included conducting habitat surveys, bird surveys, bioassessment monitoring and terrestrial invasive plant surveys.

Accomplishments to Date:

- Completed more than 90,700 property inspections
- Implemented more than 500 resource restoration projects
- Removed over 4,258 hazard trees

Crews working on Upper Truckee River restoration



CONSERVATION SPOTLIGHT:

Bird Surveys



While surveying, staff found a yellow warbler (above) and a Northern flicker nest (below).



Beginning in 2013, through our partnership with the California Tahoe Conservancy, Tahoe RCD staff has been conducting point counts and nest searches to detect and protect breeding birds on Conservancy lands around the Lake Tahoe Basin. Surveys are conducted in accordance with the Migratory Bird Treaty Act. Prior to implementation of forest thinning, restoration, or basic land maintenance projects, biologists conduct point counts (identifying birds by sight and sound) in project areas, and observe bird behavior to locate active nests of birds. When an active nest is discovered, a non-disturbance buffer is established around the nest, within which no work can be conducted while the nest is active.

Highlights:

- Surveyed 210 parcels for active nests
- Established non-disturbance buffers for 22 active nests

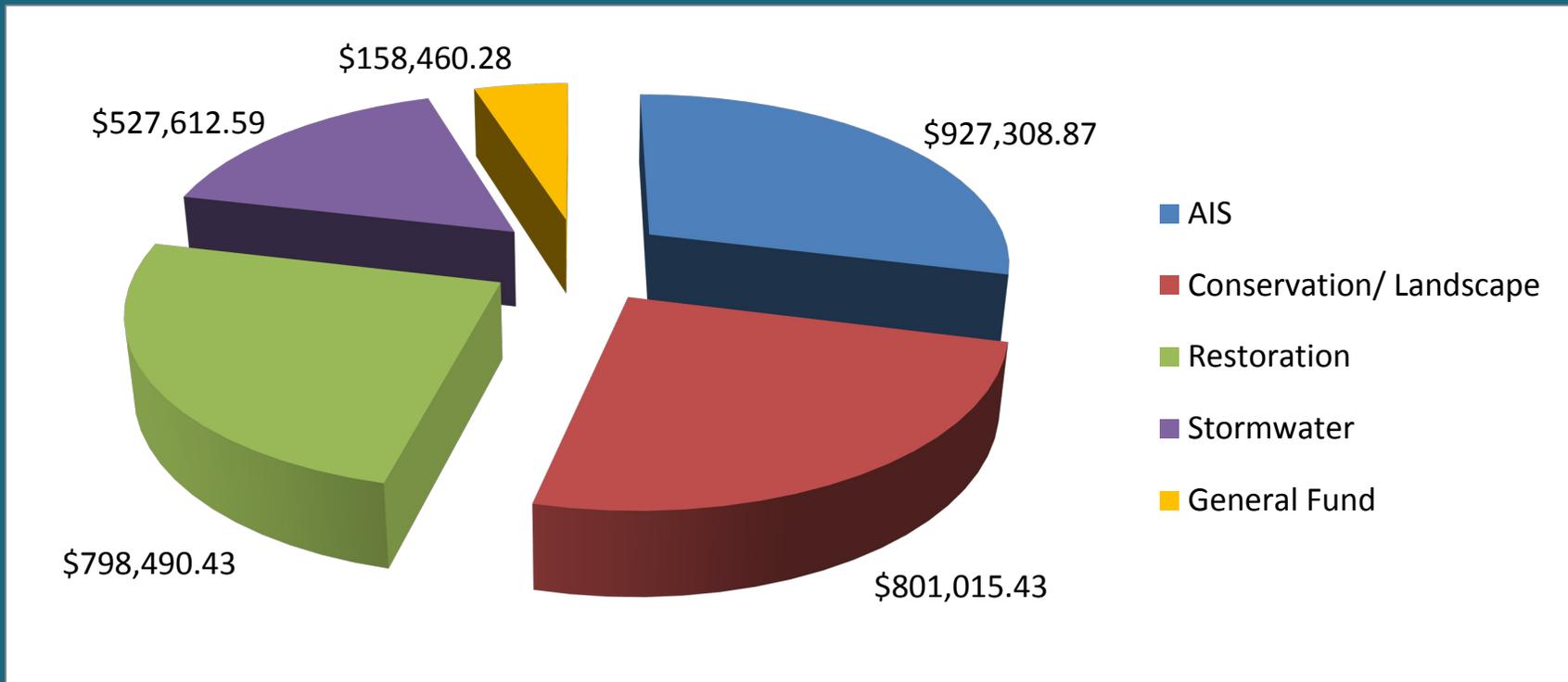
In 2015, the Tahoe RCD is anticipating conducting California spotted owl, northern goshawk, willow flycatcher, American marten, and bat surveys in suitable habitat on Conservancy lands.

Funding

Tahoe RCD Fiscal Year Funding 2014

The Tahoe RCD is supported by diverse funding sources that enable us to fulfill our mission and implement projects within each of our program areas. Each year, we secure federal, state, local and private funds that provide for meaningful, impactful, and transparent expenditure of these funds.

Through a Joint Powers Agreement with the California Tahoe Conservancy, the Tahoe RCD administers staff to perform a variety of land management activities, such as forest enhancement and urban lands restoration projects on Conservancy property.



Board & Staff

Board of Directors

Carl Ribaudo, President

Garry Bowen – Vice President

Robert Anderson – Director

Replaced by: Harold Singer (Nov. 14')

William Boosman – Director

Replaced by: Martin Goldberg (Oct. 14')

Paul Sciuto – Vice President/Treasurer

Replaced by: John Thiel (Nov 14')

Staff (Year-Round)

Kim Boyd, District Manager

Kim Gorman, Director of Programs

Mollie Hurt, Director of Programs

Holly Payne, Human Resources/Bookkeeper

Tori Walton, Grants Coordinator

Jennifer Cressy, Program Coordinator

Andrea Buxton, Program Coordinator

Nicole Cartwright, Program Coordinator

Teresa Crimmens, Program Coordinator

Chris Kilian, Operations Coordinator

Cara Moore, Water Resources Scientist

Matt Driscoll, Environmental Scientist

Jennifer Greenberg, Environmental Scientist

Krissy Harman, Conservation Technician

Sarah Bauwens, Conservation Technician

Oscar Atkinson, Conservation Technician

Jodi Schmitz, Watercraft Inspector

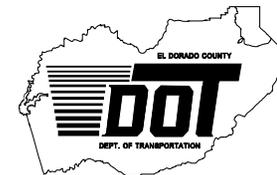
Ryan Williams, Watercraft Inspector

Zak Lance, Watercraft Inspector

There are many agencies, businesses and research institutions that partner with the Tahoe RCD to make our programs possible. These are our key partners:



University of Nevada, Reno





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