



2017 Annual Report

Tahoe Resource Conservation District



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.

Table of Contents

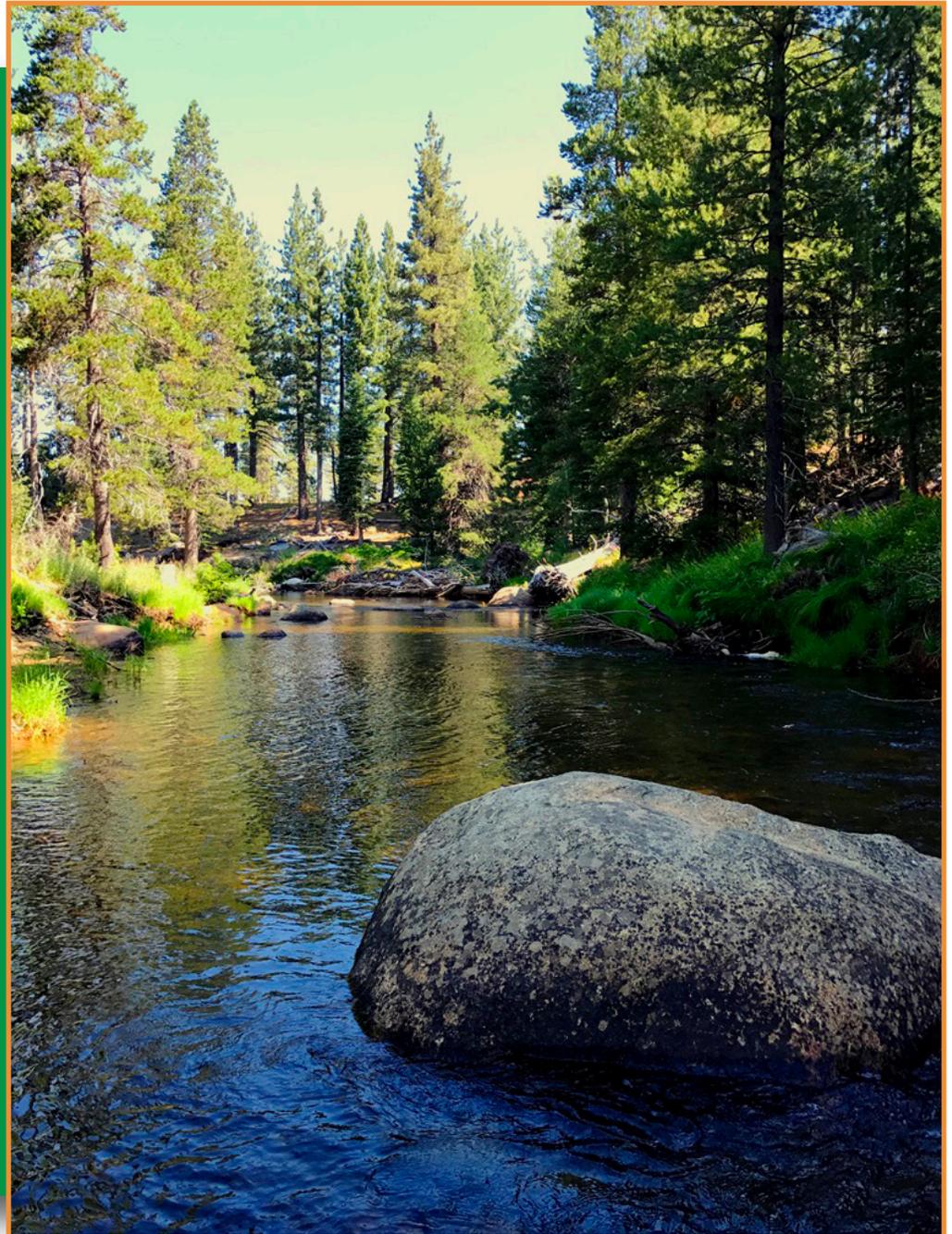
About Tahoe RCD	2
Where We Work	3
Letter from our Executive Director	4
Tahoe RCD by the Numbers	5
Stormwater Program	6
Aquatic Invasive Species Program	8
Landscape Conservation Program	10
Tahoe Conservation Partnership	12
Funding	14
Board, Staff & Partners	15

About the Tahoe Resource Conservation District

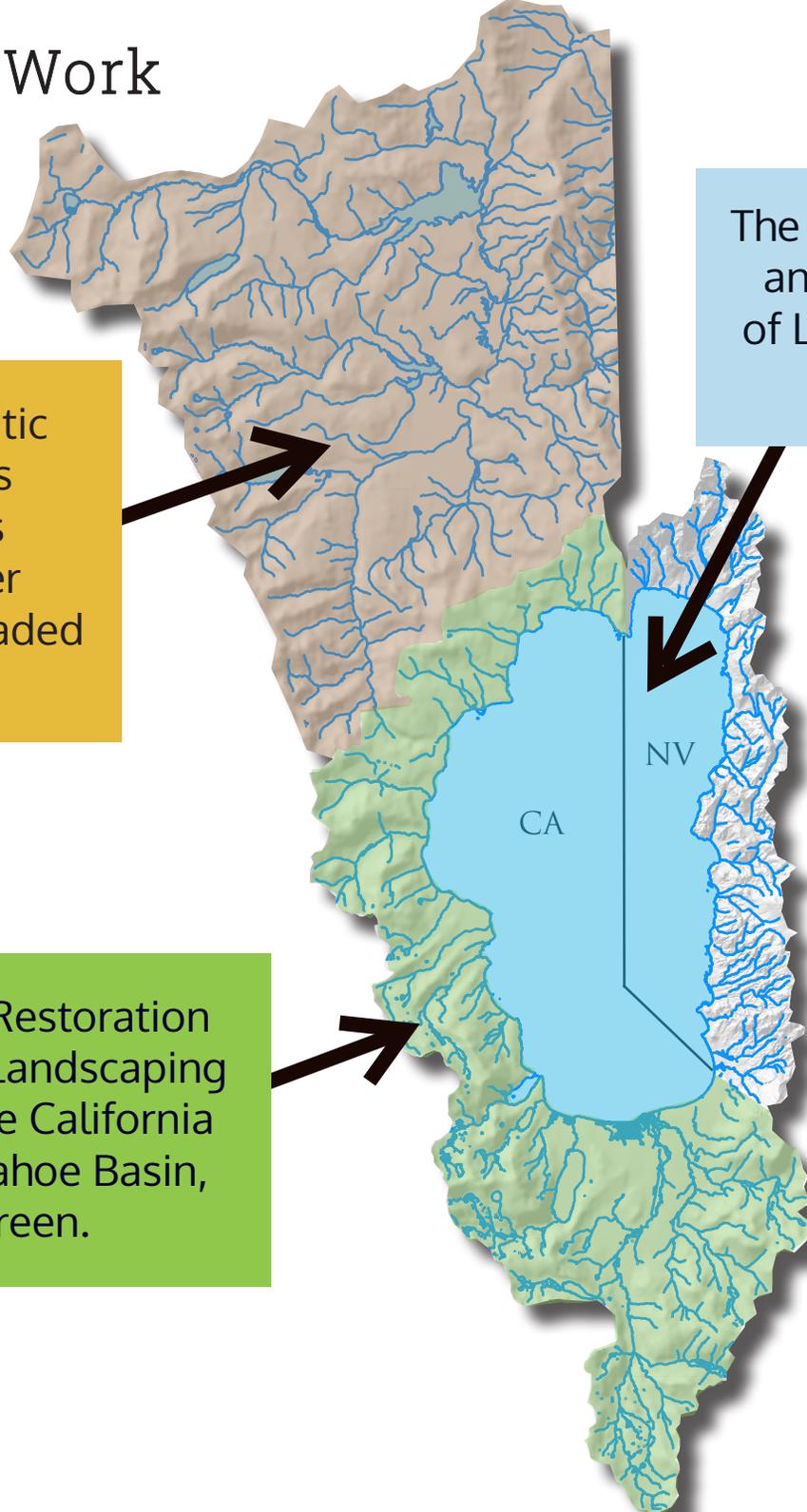
With over 3000 Conservation Districts spanning the United States, including nearly 100 in California alone; the Tahoe Resource Conservation District (Tahoe RCD) is one of the most influential conservation districts in the nation, playing a vital role in preserving the world-renowned resources and scenic 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 implementing 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 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 Executive Director

Dear Tahoe Basin Community and Visitors,

The completion of 2017 allows us to reflect on our accomplishments and look forward to another year of opportunity and successful conservation efforts. On behalf of all the Tahoe RCD staff, we sincerely thank all of our partners and community members for supporting us as we continue to evolve and grow into a leading conservation organization in the Lake Tahoe Basin. With a change in leadership in the past few months we embrace this opportunity to draw on the strength of our team and find innovative ways to serve our community.

Our dedicated and passionate staff have a lot to be proud of from sculpting the Fire Adapted Communities Program to leading the way in testing new technology for treating aquatic invasive plants. The Tahoe RCD excels in pioneering programs aimed at protecting the natural resources of the Tahoe Basin and building flourishing partnerships with federal, state, local and private organizations.

We are proud to serve our community and we look forward to the opportunities ahead. We welcome you to explore our hard work and join us as "We Do Conservation".

Sincerely,

Nicole Cartwright
Executive Director



Why do you like working at the Tahoe RCD?



Stacey: "I love working with the staff and the environment."



Neil: "I enjoy working with the land and projects that benefit the environment"



Nicole Shaw: "The inspiration of the people and culture of conservation"



Tahoe RCD by the numbers...

1,296 water quality samples collected

Protected **13** acres of Conservancy land from future degradation

Registered **525** non-motorized paddlers as Tahoe Keepers

2,880 defensible space inspections tracked in online database

10 years of protecting Lake Tahoe from aquatic invasive species

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

1st agency to test the efficacy of UV light in treating aquatic invasive weeds

Completed **9** CA Rapid Assessment Methodology (CRAM) measurements to assess health of riparian areas

11 stormwater locations monitored, including **7** meteorological stations

Hosted and presented at over **30** events, workshops & trainings

Conducted monitoring on **4** restoration sites to evaluate project effectiveness

Restored **51,123** square feet of impacted lands

Performed **11** Rapid Assessment Methodology (RAM) measurements to determine road conditions at stormwater monitoring locations

10,638 watercraft inspected for invasive species

Intercepted **39** boats carrying aquatic invasive species

performed **5,033** decontaminations on at risk watercraft

126 parcels surveyed for migratory birds

158 stormwater runoff events monitored

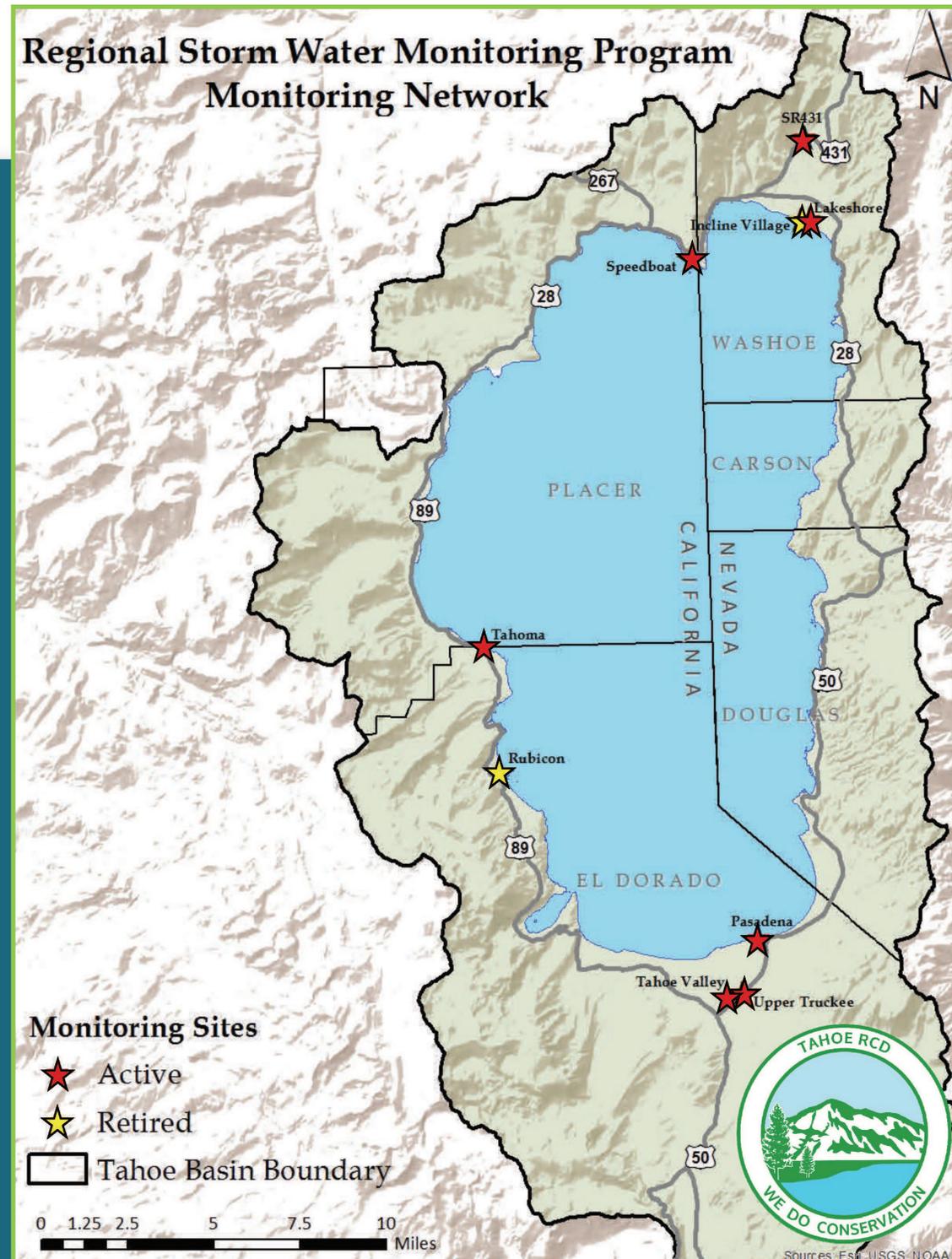
Stormwater Monitoring Program

Now in its fifth year, the Regional Stormwater Monitoring Program (RSWMP) focuses on monitoring stormwater runoff in urban catchments around the Lake Tahoe Basin. This data is used to assess whether improved stormwater management practices are having a positive impact on stormwater quality and to track progress towards Lake Tahoe Total Maximum Daily Load (TMDL) goals.

Through established partnerships with counties and transportation departments in California and Nevada, this program seeks to conduct stormwater monitoring in support of the one lake-one plan paradigm.

Program Highlights:

- 11 stormwater monitoring locations and 7 meteorological stations around the Lake
- Successful monitoring of stormwater runoff events at all sites over all seasons and precipitation types
- Submittal of fourth annual stormwater monitoring report to local jurisdictions and regulatory agencies
- Successful implementation of an outreach campaign to educate the public on the importance of managing urban runoff to reach Lake Tahoe clarity goals





CONSERVATION SPOTLIGHT: Technology and Stormwater Monitoring

New for the 2017 stormwater monitoring season, all of our sites were outfitted with remote monitoring equipment, allowing us to monitor these sites from computers and even smartphones. The new remotely accessible equipment allows our team to view and manage what is happening at our monitoring sites in real time. Our scientific monitoring team deploys in the most inclement of weather and the severity of the 2017 winter storms brought downed trees and dangerous road conditions. However, with the new remote stations in place, staff were able to navigate and manage these sites while staying safe.

Technology and Stormwater Monitoring Highlights:

- Increase in reliability of stormwater data management and reporting
- Ability to monitor activity in real time during storm events
- 158 storm events monitored

Aquatic Invasive Species Program

Tahoe RCD works with partners, stakeholders and community members to protect the Lake Tahoe Basin and Truckee River Watershed from aquatic invasive species (AIS) by coordinating and implementing prevention, monitoring, and control efforts throughout the region.

Watercraft are the primary vectors for spreading AIS and inspections intercept those threats before they enter the water. Over 15,000 motorized and 2000 non-motorized vessels a year are cleared through this program annually. Due to the successful efforts of the AIS program, there have been no new introductions of aquatic invasive species since the program began in 2007. We will continue to educate public and private marinas, anglers and paddlers about responsible boating practices and the importance of being ***Clean, Drained, and Dry.***

This program looks forward to celebrating 10 years in 2018.

In 2017, aquatic invasive plant surveys and control projects were implemented at the following locations around Lake Tahoe.

- Truckee River
- Tahoe Vista Boat Launch
- Crystal Shores Marinas
- Nevada Shoreline
- Lakeside Beach
- Lakeside Marina
- Fleur du lac Marina

In total, 30 acres were surveyed by divers for the presence of aquatic invasive plants (Eurasian watermilfoil & curly-leaf pondweed). All plants detected during surveys were removed.



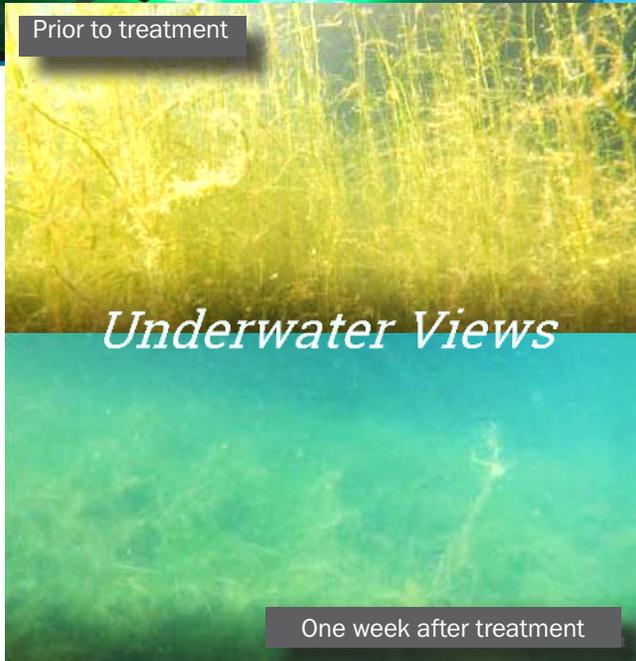
Tahoe RCD staff conducting an inspection with a customer

CONSERVATION SPOTLIGHT:

Ultra Violet Light Pilot Control Project

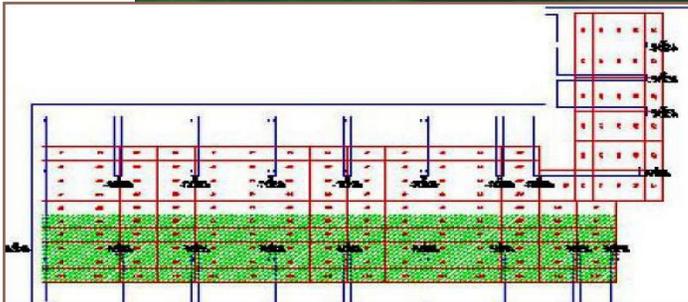


Prior to treatment



Underwater Views

One week after treatment



The Tahoe RCD, in collaboration with Inventive Resources Inc., announced that for the first time, ultraviolet light would be tested in the waters of Lake Tahoe to kill aquatic invasive plants. This initiative was made possible through funding from the California Tahoe Conservancy and Tahoe Fund.

New research shows that ultraviolet (UV) light (100-280nm) could be an effective method to eliminating aquatic invasive plants. UV light works by damaging the DNA and cellular structure of invasive plant life currently threatening the health of Lake Tahoe. While this technology will require further field testing to determine its full potential, UV light could augment the currently available methods Tahoe RCD already uses especially in low water years, tight spaces within marinas, or river systems.

Highlights of the UV Pilot Control Project:

- Project occurred at Lakeside Beach and Marina on the South Shore of Lake Tahoe
- Marina boat slips were divided into quadrants
- Each area was tested at different lengths of treatment time, varying intensities, and heights

This groundbreaking project is scheduled to be completed in 2018, with post treatment effectiveness monitoring.

Landscape Conservation Program

A view of the 2007 Angora fire



In 2017 the Landscape Conservation Program focused on the successful development and implementation of the Fire Adapted Communities (FAC) Program. This program aims to provide leadership for the Tahoe Network of Fire Adapted Communities and connects fire district personnel with residents, brings neighborhoods together to work toward a common goal of comprehensive fire defensible space, and helps to increase protection from the threat of wildfire.

Strong partnerships with local Fire Districts are essential to the program's success. The *Living with Fire* program at University of Nevada Cooperative Extension works with Tahoe RCD staff to develop outreach materials, provide workshops, assist with press releases, advertisements, and outreach to support the program.

Together with our partners we look forward to developing communities across Tahoe that are educated, empowered, connected, and adapted to living with fire in the Wildland Urban Interface (WUI).

Program Highlights:

- Provided comprehensive community outreach at 7 public events
- Recruited 20 neighborhood leaders
- Hosted a FAC workshop at the Meyers community celebration of the 10 year Angora fire anniversary featuring the time series photographic research of Dr. Peter Goin, documenting the recovery of the forest and community impacted by the fire

A home that survived the 2007 Angora Fire due to defensible space practices



CONSERVATION SPOTLIGHT: Defensible Space Database

Tahoe RCD worked with the California Department of Forestry and Fire Protection (CAL FIRE) to launch a fire defensible space inspection database for the entire Lake Tahoe Basin.

The database is customized to meet the needs of local Fire Districts and CAL FIRE personnel for tracking compliance with Public Resources Code 4291 in California and the 2012 WUI Code in Nevada. Defensible space inspection data can now be collected in the field on a tablet or smartphone and the ability for real time data, bringing tremendous efficiencies to this process.

The database allows users to analyze defensible space compliance status of private developed properties, alongside hazardous fuels treatment status on public lands, undeveloped properties within the surrounding neighborhoods all in an easily navigated interactive map.

We will continue to fine-tune and adapt the database to meet the needs of our partners.



In the Database:

- 2,880 defensible space inspections stored in 2017 from 7 sources in 2 states across 5 counties, including 2 CAL FIRE divisions

Tahoe Conservation Partnership

The Tahoe RCD continues to be a valuable partner in managing California Tahoe Conservancy (CTC) lands through a Joint Powers Agreement finalized in 2010. This 25+ year relationship of restoration and land management allows Tahoe RCD and CTC staff to collaborate and manage approximately 4,700 parcels, totaling nearly 6,500 acres on the California side of the Lake Tahoe Basin.

This tremendous responsibility includes forest habitat enhancement and hazardous fuel reduction, resource protection and restoration, streambank stabilization and monitoring, property inspection and maintenance, and aquatic invasive species management. In addition before major maintenance is done our team of wildlife specialists is deployed to observe bird habitats in accordance with the 1929 Migratory Bird Treaty Act (MBTA) to ensure these sensitive habitats are not disturbed.

Program Accomplishments:

- Thinned 2 acres for fuels reduction and forest health purposes
- Restored 245 feet of stream channel
- Completed 112 maintenance projects
- Completed 126 MBTA surveys



Crews repairing fences for public safety and habitat protection



CONSERVATION SPOTLIGHT:

Hazardous Tree Removal



Staff removing hazardous trees from urban Conservancy lots

Sierra Nevada forests are facing unprecedented tree mortality rates due to a combination of drought, disease, and pest infestations. Of particular concern amongst local agencies and the community are dead and dying trees near and within community centers, neighborhoods, and recreation areas.

Trees that are considered hazardous are those that pose a risk of falling on to personal property or public infrastructure, or have the potential to cause harm to the public due to the above conditions. Once identified by Tahoe Conservation Partnership staff as hazardous the crew members work diligently to remove the tree and mitigate the hazards.

Highlights:

- Removal of 79 hazardous trees on the California side of the Lake Tahoe Basin

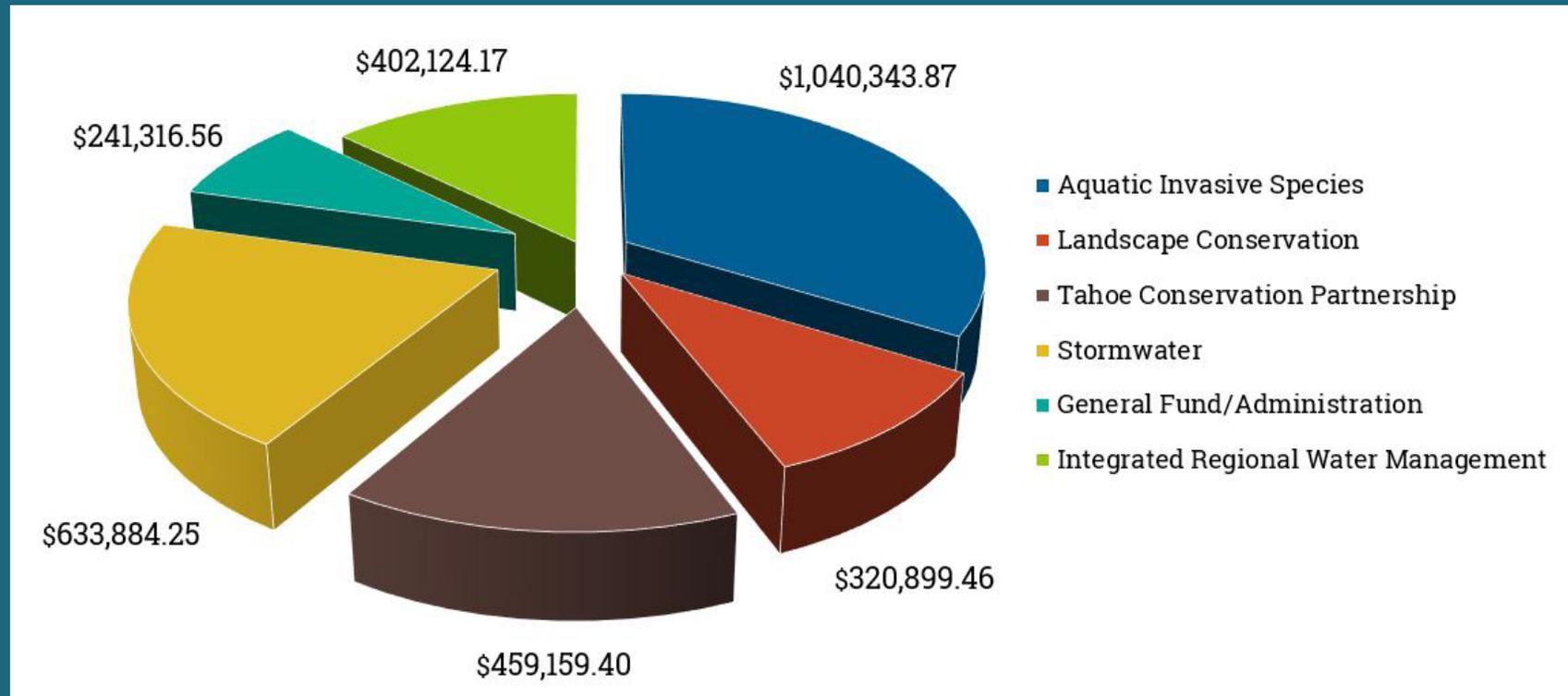


Funding

Tahoe RCD Fiscal Year 16/17 Funding

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 through the Tahoe Conservation Partnership.



Board & Staff

Board of Directors (currently active)

Carl Ribaldo - President
Shelly Thompsen - Vice President
Harold Singer – Director
Martin Goldberg – Director
(active in 16/17)
John Thiel - Director
Danielle Hughes - Vice President

Staff (Year-Round)

Nicole Cartwright - Executive Director
Mollie Hurt - Director of Programs
Meg Peart - Human Resources/
Grants Coordinator
Tori Walton - Grants Manager
Stacey Hubert - Bookkeeper
Andrea Buxton - Program Manager
Christopher Kilian - Program Manager
Nicole Shaw - Program Manager
Cara Moore - Water Resources Scientist
Sarah Bauwens - Outreach Specialist
Aaron Willis - Watercraft Inspector
Ryan Williams - Watercraft Inspector
Glen Seaborn - Watercraft Inspector
Michael Weatherford - Watercraft Inspector
Neil Church - Land Management
Crew Supervisor
Sarah Werick - Land Steward

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





www.facebook.com/tahoercd



www.twitter.com/tahoercd