

2016 Annual Report

New Projects by Funding Source

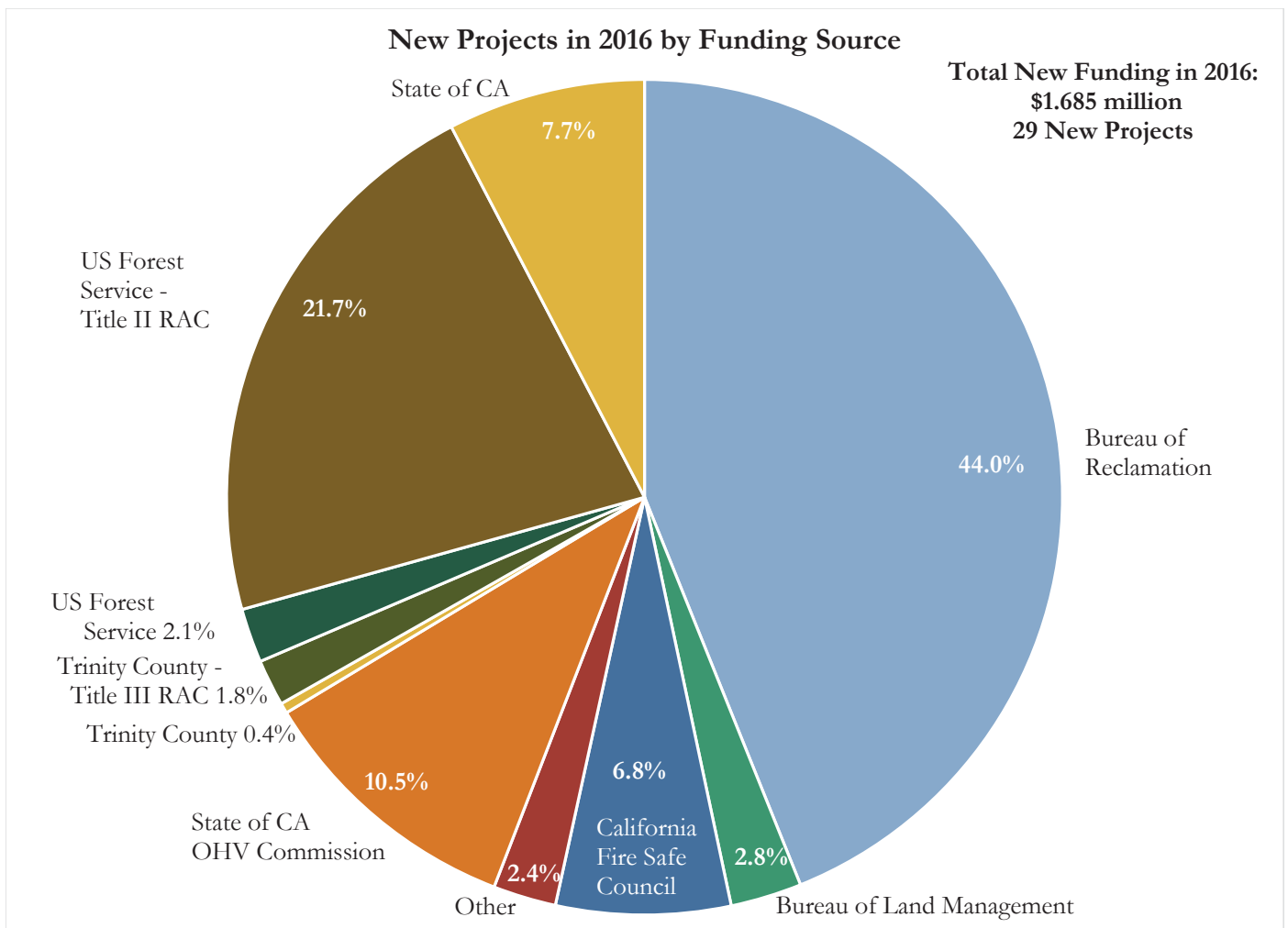
The Trinity County Resource Conservation District depends on our agency partners to fund the projects that benefit the residents of our County. We are a special district of the state, but receive no base funding from state or local revenues. Each year we review our new projects and summarize them here. This does not represent all of the projects we worked on during 2016, but only the new grants and agreements that were secured during the calendar year.

Looking at our funding partners as an aggregate, our largest source of funding for 2016 was received from federal

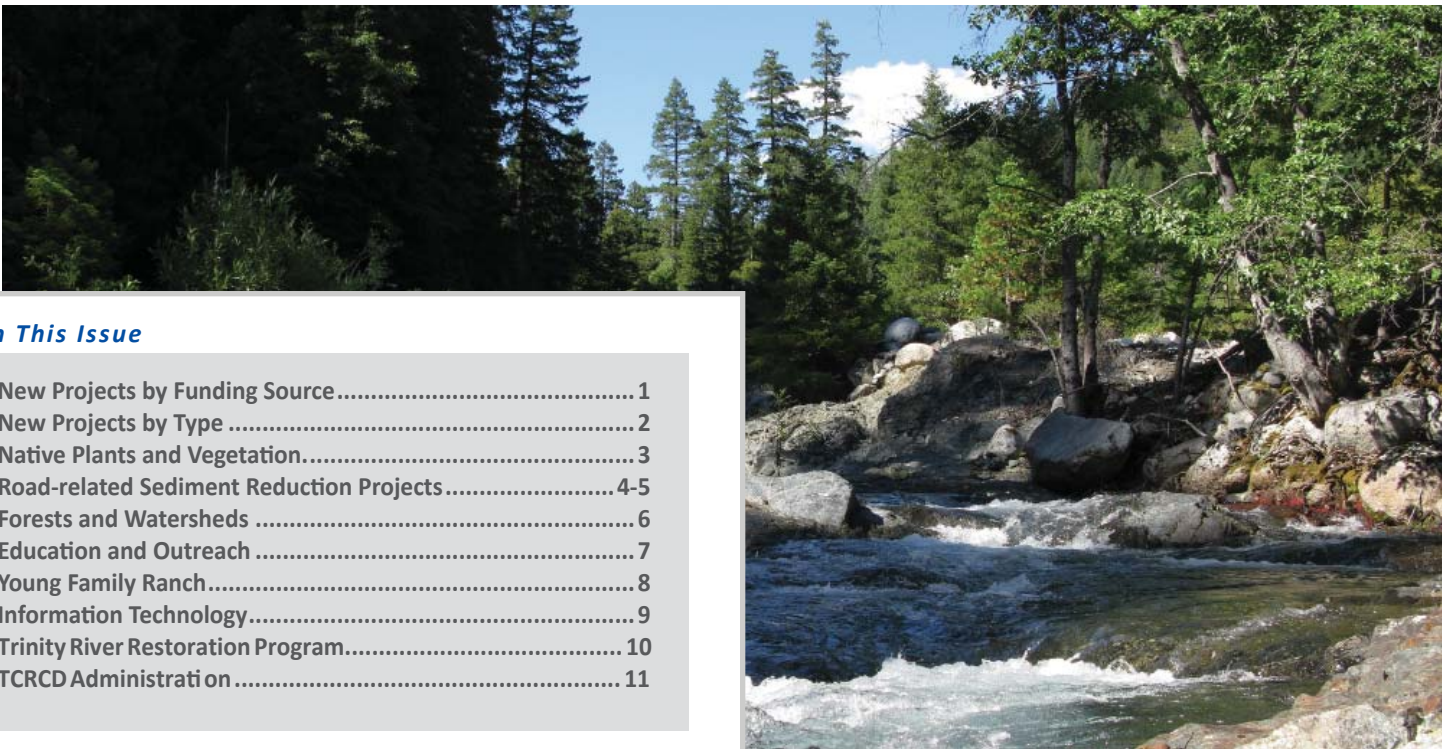
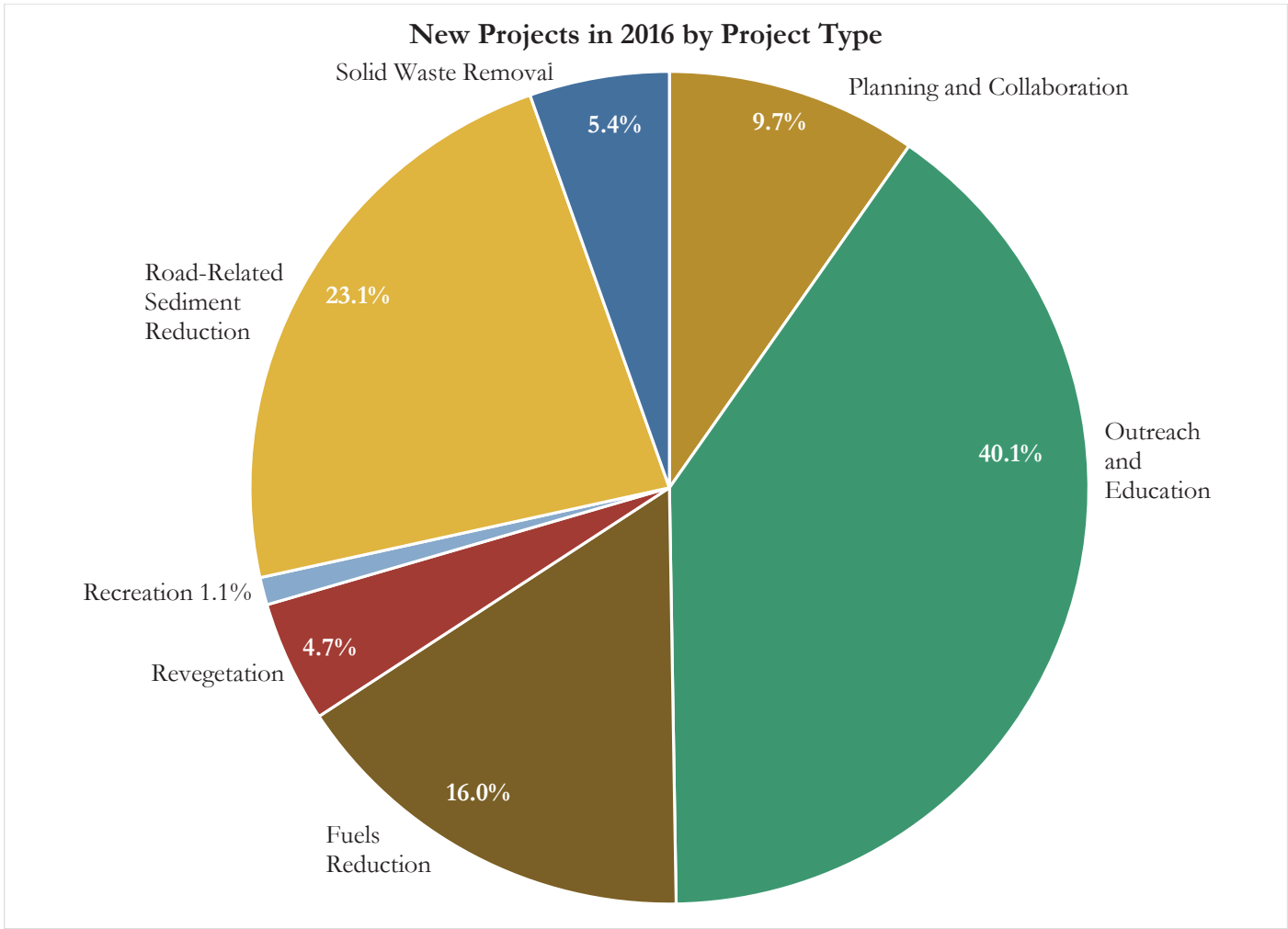
agencies (US Forest Service, Bureau of Reclamation and Bureau of Land Management) for a combine total of 70.6%, followed by the State of California with a total of 25%, with the remaining 4.4% coming from the County and other miscellaneous sources.

The District is proud to work with our partners and all of our employees appreciate the opportunity to continue our relationships into the future.

See page 2 to review how this funding is applied to our program areas.



2016 New Projects by Project Type



In This Issue

New Projects by Funding Source.....	1
New Projects by Type	2
Native Plants and Vegetation.....	3
Road-related Sediment Reduction Projects.....	4-5
Forests and Watersheds	6
Education and Outreach	7
Young Family Ranch.....	8
Information Technology.....	9
Trinity River Restoration Program.....	10
TCRCD Administration	11

Native Plants and Vegetation

Native Plant Nursery Moves to Young Family Ranch

For years the TCRCD has operated a native plant nursery at the Indian Creek Ranch, a small private ranching operation located near Douglas City. While functional, the nursery was in desperate need of repair; the improvised shade structure, constructed of PVC tubing, was starting to crack and sag; the nursery benches were beginning to rot; and agricultural weeds from the adjacent cow pasture were invading the nursery area. On more than one occasion, the cow herd had found a way inside the fenced nursery area and feasted on native plants. Access to the nursery required opening three separate gates, navigating a minefield of cow paddies, and avoiding eye contact with the resident guard llama.

Considering these challenges, the RCD elected to move operations to the Young Family Ranch in Weaverville. The new location is far more convenient for nursery maintenance and for crews to pick up plants for restoration projects. It is also more compact, efficient, and provides the opportunity to develop new and more dependable nursery infrastructure (and one far less susceptible to bovine browsing). It is our hope that this new location will inspire the community to learn about native plants and the restoration work the RCD is doing throughout the county – we're always looking for volunteers!

A significant amount of work was required at YFR to accommodate the new nursery. First, inmate crews leveled and terraced the sloped terrain, creating the flat area



necessary to grow containerized plants. Second, a retaining wall was constructed to hold the terrace in place and prevent erosion. Third, weed-mat and drain rock were spread over the growing area, to prevent weed infestations and create a clean nursery environment. Finally, nursery benches were constructed of redwood and Douglas-fir to elevate potted plants and create a more ergonomic working environment.

While nursery operations have shifted completely to the Young Family Ranch, there is still a significant amount of work required to finalize the nursery; an automated, table-top irrigation system is the most pressing need, followed by a shade structure to protect fragile seedlings from the sun. These projects will likely be completed in Spring of this year. Thank you to the California Department of Transportation (CalTrans) and the US Forest Service for supporting the native plant nursery.

Other vegetation projects in 2016 included work on the Slate Creek Slip-out north of Weaverville on Highway 3, scotch broom and noxious weed removal in several areas of the County, and revegetation and plant maintenance down river. Funding for these projects was received from CalTrans, USFS, and Trinity County.

If you are interested in volunteering at the RCD native plant nursery, please contact Ian Erickson at 623-6004.

TCRCD Road-related Sediment Reduction Projects

US Forest Service

The TCRCD, in cooperation with the US Forest Service, (USFS) completed several road improvement projects in 2016. We began the summer with continued implementation of road improvements on USFS roads affected by the 2015 River Complex fire. We then completed more improvements in the Plummer Creek watershed in the South Fork Trinity. Finally road improvements, including eight culvert replacements, were completed in the Sims Fire area near Hyampom. In total we brushed, cleared culvert inlets, installed upsized culverts

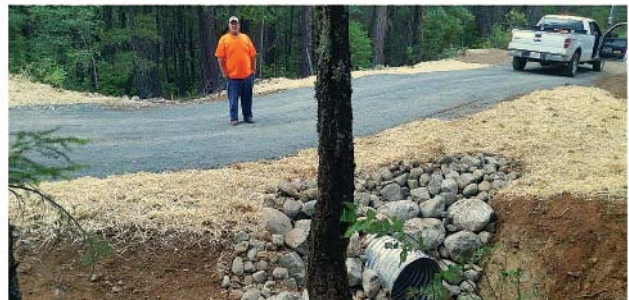
and completed basic maintenance on approximately 100 miles of USFS roads. About 10 miles of USFS roads were also decommissioned, some in the Sims Fire area near Hyampom and a few in the Smoky/Prospect Creek watersheds near Pine Root Saddle. After decommissioning was completed all disturbed areas were seeded with native grass and mulched with certified weed-free straw. Later in the fall, all stream crossings excavated were replanted with riparian species and conifers. This work was funded by the USFS, Trinity County RAC, California Off-Highway Vehicle Commission and California Department of Fish and Wildlife.



Road 28N66 after 48" corrugated metal pipe was excavated from mainstem of Prospect Creek.

Weaverville Basin

The District completed a road improvement project on South Roundy Road off Highway 3 North. This road is used by the public, the USFS for the Browns Stewardship Project and also provides power line access. We upsized or installed new culverts at five sites, applied rock surfacing on the road and constructed several rocked rolling dips to disperse surface flows off the roadway.



South Roundy Road under high flows in February 2017.

South Roundy Road MM 0.44 where an undersized 12" mining pipe was replaced with a 30" corrugated metal pipe and a critical dip to eliminate diversion potential.

Sediment Projects, cont.

The TCRCO also completed a repair to the China Gulch stream crossing on private land on Blue Rock Road. In 2014 the TCRCO, with funding from TRRP, completely rebuilt this stream crossing with the largest pipe that the site could accommodate. In early 2016 the site was tested with two separate overtopping events. The crossing held, but

experienced some erosion at the edge of the road due to woody debris that floated across the roadway. To address the problem, a concrete sill was poured along the outside edge of the road and slurry added between rip rap at the outlet. Both of these projects were funded by Trinity River Restoration Program.



January 20th, 2016: China Gulch overtopped the roadway twice, causing damage to the outboard edge of Blue Rock Road as shown to the right.



Left to right: After January 2016 overtopping event and the eventual repair in June 2016.

Grass Valley Creek

The Bureau of Land Management requested help from TCRCO to address undermined footings on a bottomless arch culvert on the mainstem of Grass Valley Creek. The 3-day project included initial hand placement of rock under footings and inside the culvert. Afterwards, heavy equipment was used to place rip rap on each side of abutments in order to more effectively direct the creek to the culvert entrance.



Before, during and after abutment repair on bottomless arch culvert from Upper Grass Valley Creek, view downstream.

Forests and Watersheds

Fuels Reduction

The District fuels reduction crew kept busy on several projects in 2016, from Covington Mill in the North Lake area to Junction City and Down River.

Working with the California Conservation Corps, the District treated about five acres on private lands in the Oregon Mountain area with fuels reduction. This project was funded through the California Fire Safe Council's hazardous fuels reduction program. From there our work shifted north, with fuels reduction and forest health projects near Lake Forest Estates. After private property owners limbed and stacked ladder fuels, our crews chipped the materials. This effort was funded by the US Forest Service Resource Advisory Committee (RAC) under Title II funding to help make our County fire-safe. Community chipping projects were also funded by the Trinity County USFS RAC with Title III funding.

National Environmental Protection Act (NEPA) requirements for a shaded fuel break along six miles of Mainline Road in the Grass Valley Creek Watershed was completed in 2016. Total treatment on this project will include approximately 73 acres, with 40'-100' on each side of the road receiving treatment. Treatment began in the fall of 2016 and should be completed in 2017.

Forest Stewardship

The Bureau of Land Management (BLM) completed a categorical exclusion for a firewood sale from the Browns Fire which burned approximately 35 acres on BLM and Sierra Pacific Industries properties just outside of Weaverville in 2015. The Weaverville Community Forest Steering Committee met twice to discuss how a firewood sale could be equitably distributed to the public, with sales made during fall 2016.

University of California Extension forester Ryan DeSantis toured the BLM Weaverville Community Forest with TCRCD staff to look at potential monitoring sites in the oak woodlands. Funding was secured from the UC Cooperative Extension (Humboldt County) office to do Oak Woodland restoration research.

The District continued working with the BLM in Grass Valley Creek (GVC) Watershed during 2016. BLM had planned a forest

health thinning sale in this watershed and the District worked with contractors on behalf of BLM on the sale layout, cruise and NEPA requirements. Road maintenance and bridge repair were also performed on the seven-mile long road into the sale in anticipation of log trucks using the road. When advertised in September, expected bids were not received.

The District held the 4th annual tour of the GVC Watershed for a group of Humboldt State University students in April 2016. The group saw examples of the highly erosive soils in the GVC Watershed and effective treatments the District has implemented throughout the years.

Watershed Coordination

The District coordinates the Trinity River Watershed Council (TRWC) through funding from Trinity River Restoration Program and the Bureau of Reclamation. The TRWC brings together all of the agencies and stakeholders working on watershed restoration, rehabilitation, and natural resources management with the goal of improved water quality and ecological resilience in the watershed. With funding from Reclamation, the District began expansion of the TRWC in the fall 2016.

Other Watershed Related Projects

Through a grant from CalRecycle, the District cleaned up one trespass marijuana grow site on public lands managed by US Forest Service in 2016. The grow site was reclaimed and remediated with removal of several miles of irrigation piping, tons of garbage, and infrastructure that had been blocking flow from a natural spring.



Education and Outreach

Our 2016 education and outreach lineup covered everything from specific educational programs solely created and implemented by the District, to support of multi-agency events designed to reach the broadest possible audience.

This newsletter, Conservation Almanac, was delivered to all who requested it by mail and email. Copies are also available at all branches of the Trinity County Library, several businesses, and the Chamber of Commerce display inside Tops Market in Weaverville. As technology evolves, we continue to add new ways to provide information people need to protect, manage, conserve and restore the natural resources found in Trinity County. Our Facebook page, Trinity County-RCD, offers immediate electronic coverage and feedback.

A quick review of our 2016 education and outreach efforts indicate that we reached about 500 students through classes, camps, field trips and student focused-events. Our all-age outreach and education efforts reached over 300 adults through a variety of outlets including the Plant and Seed Exchange, Bird Watch Walks, the Trinity River Restoration Program sponsored Trinity River Salmon Festival, and the Trinity County Fair.

Highlights for TCRCD youth education and outreach in 2016 include:

- Award of a \$500 scholarship to Ethan Fagan, THS graduate
- Three, week-long Summer Day Camp sessions at the Young Family Ranch
- Three day, two night Environmental Science Camp for Weaverville sixth grade students at Bar 717 Ranch; and a one day camp for Hayfork sixth grade students, both sponsored by TRRP
- River Days for Hayfork, Hyampom and Douglas City students
- Oak woodlands, fire ecology, and wetland classes and field trips for Weaverville fourth and fifth grade students



Douglas City student examining aquatic macroinvertebrates at Natural Bridge.



Weaverville sixth grade students looking at a tree corer sample at Environmental Camp.

Highlights for all-age education and outreach in 2016 include:

- Coordination of the Trinity County Collaborative community meetings and field trips
- Coordination of Trinity County Fire Safe Council meetings and the 2015 Community Wildfire Protection Plan (CWPP) Update
- Continuation of the “Explore Trinity!” hiking series in coordination with the Watershed Research and Training Center

During 2016 the District received funding and assistance for conservation education and outreach from Trinity River Restoration Program (TRRP), US Forest Service, Young Family Ranch Trust, Natural Resources Conservation Service, Bureau of Land Management, Redding Rancheria, California Fire Safe Council, Trinity Trust, UC Cooperative Extension, Watershed Research and Training Center and individual contributors.

Young Family Ranch

Activities at the Young Family Ranch (YFR) in 2016 included planting and maintaining an extremely productive garden that benefited hundreds of community residents; hosting the 8th Annual Plant and Seed Exchange and the second YFR BBQ fundraiser; providing a location and financial support for the Weaverville Summer Day Camp; providing a location for the Weaverville Elementary School's third grade Pioneer Craft Day; and supporting several community organizations by offering meeting spaces for a nominal fee.

The YFR is a three-acre farm dating to 1898 that sits above downtown Weaverville on Oregon Street. Its grounds contain the 1950's era ranch house, old barns and the new pavilion, and includes fruit trees, vegetable gardens, lawns and paddocks. The District is contracted by the YFR board of trustees to maintain the ranch, manage day-to-day operations

and to coordinate programs, events and other uses and activities to benefit the public. The District also writes and submits grant proposals to obtain funding for public programs and improvements at the Ranch.



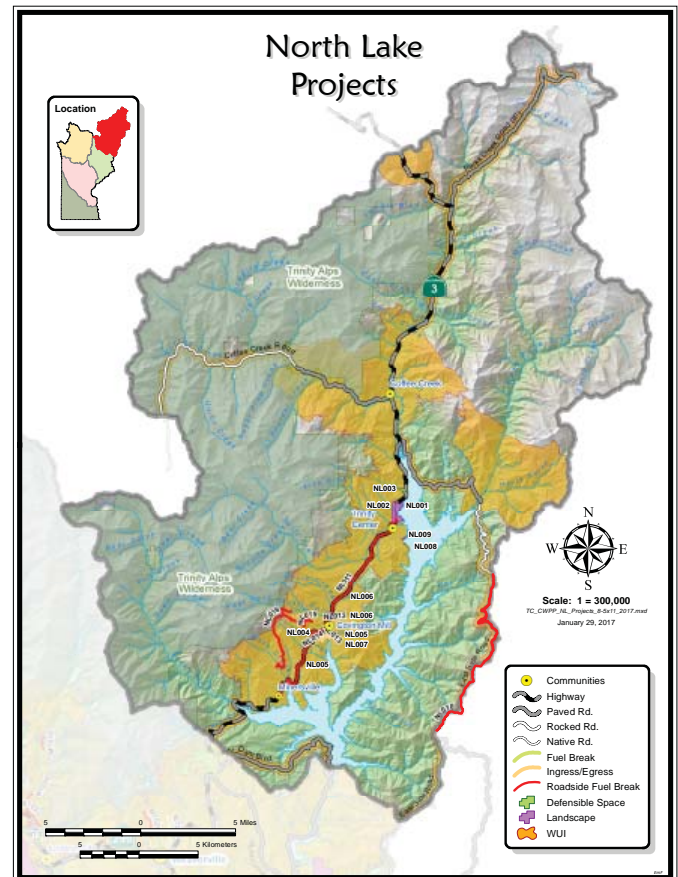
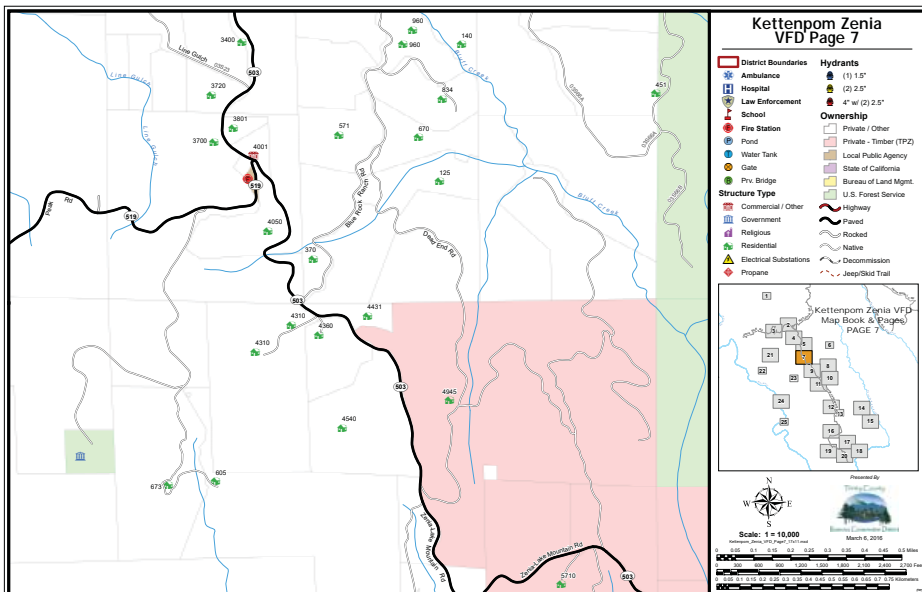
During 2016 the Ranch garden produced a plentiful crop of squash, tomatoes, beans, carrots, beets, potatoes, apples, and various other edibles, which were donated and used to demonstrate nutritional recipes at the Weaverville Farmers Market, Golden Age Center, Roderick Senior Center, Shascade Community Services, Weaverville Summer Day Camp, local food banks, area schools and the YFR BBQ Fundraiser.



Information Technology

With the threat of wildfire being ever-present in our communities, the Volunteer Fire Chiefs Association, Emergency Responders, and Sheriff's Department funded a project to replicate the Weaverville Fire Protection District's map book for each of the Volunteer Fire Departments throughout the county. The Weaverville map book project, completed in 2014, had been funded by the Trinity County Fire Safe Council. It is a detailed, atlas style map book that includes all labeled streets, physical addresses, and locations of infrastructure features such as hydrants, water sources, gates, and hazardous materials, all contained in a single, easy to use source. Because of the importance of such a document in the event of an emergency, the District was asked to complete a map book for the response areas of each of the other Volunteer Fire Departments (VFDs) in the County. Map books for Hayfork, Lewiston, Douglas City, Junction City, Hawkins Bar, and Salyer were created in 2015. The project was completed in the first quarter of 2016 with map books being created for Down River, Trinity Center, Coffee Creek, Post Mountain, Hyampom, Southern Trinity, and Kettenpom/Zenia VFDs.

District staff also provided GIS mapping support to the Trinity County Planning Commission in its effort to provide recommendations to the Board of Supervisors for consideration in the creation of an urgency ordinance for the short term regulation of commercial cannabis cultivation. This ordinance was being written in response to the passage of the Medical Marijuana Regulation and Safety Act (MMRSA) and the Adult Use of Marijuana Act (AUMA) in California. The support consisted of various analysis' regarding zoning of private parcels, setback buffers, and interactive visualization of various scenarios at Planning Commission meetings.



CWPP Update

The Trinity County Community Wildfire Protection Plan (CWPP) was updated for the third time in 2016 and GIS played a substantive role in that process. Community meetings were hosted by each of the VFDs and large format maps were produced to capture local knowledge of vital infrastructure features such as water sources, gates, unmapped roads, and areas of fire breaks and fuels reduction. Potential projects were mapped by hand, and all of this data was then digitized and used in the project ranking and mapping for the final document.

Volunteer Fire Department Map Book Example

Trinity River Restoration Program

The Trinity River Restoration Program (TRRP or Program) is a collaboration among federal, state, county, and tribal partners. The Program was established by the U.S. Department of Interior in 2000, "to restore and maintain the Trinity River's anadromous fishery resources." Restoration is needed due to adverse impacts to the Trinity River, primarily from dams and historic mining and logging.

In order to achieve this restoration goal, TRRP is mandated to restore the processes and attributes of a healthy river system (while retaining Trinity and Lewiston Dams' supply of water to the Central Valley Project).

There are five primary components to this restoration work outlined in the Record of Decision (ROD) of 2000:

- Restoration flow releases from Lewiston Reservoir (total volumes are determined by 5 fixed water-year categories determined each year by the California Department of Water Resources)
- Channel rehabilitation
- Sediment management (i.e. gravel augmentation)
- Watershed restoration (primarily fine sediment management projects)
- Adaptive management



Juvenile Salmon in the Trinity



Channel rehabilitation project on the Trinity River

The 2016 TRRP channel rehabilitation project at Bucktail, near Lewiston, was designed and constructed to interact positively with restoration flows in order to increase fish and wildlife habitat. The work completed at Bucktail took into account lessons learned from past projects, with early results showing improved floodplain and habitat features. In addition, the Program provided improved road access to the boat launch as part of the project.

Combined with restoration flows, river channel rehabilitation activities are intended to restore the river over time by allowing the river to maintain the functions of a healthy river system. Through 2016, the Program has conducted channel rehabilitation work at 33 of the 47 sites described in the Flow Evaluation Report of 1999.

In addition to implementing restoration flows and mechanical rehabilitation projects, the Program continued sediment management, monitoring, assessments, and environmental compliance activities in 2016.

To better understand how Program actions effect juvenile Chinook salmon production, in 2016 the Program neared completion of the Stream Salmonid Simulator (S3), a draft fish production model. In this case, the S3 "model" is a computer program that uses existing information to improve future decision making. The S3 model is being developed by the US Fish and Wildlife Service in collaboration with the US Geological Survey, Columbia River Research Laboratory, Dr. Thomas Hardy from Watershed Systems Group, Inc., and Texas State University.

The Trinity County RCD (TCRCD) is a non-regulatory special district self-governed by five volunteer directors appointed by the Trinity County Board of Supervisors. The TCRCD serves all of Trinity County and receives grant funding from local, regional, state and federal partners. These entities recognize that locally-led projects yield the greatest benefits. Project involvement by the TCRCD enhances public trust and provides greater cost-effectiveness. This approach generates local jobs and enhances the local economy. Employees of the District carry out the day-to-day operations, guided by priorities and policies set by the TCRCD board.

Meet our Board of Directors:

Colleen O'Sullivan, board member since 2002. Colleen graduated from Humboldt State University in 1984 with a Bachelor's degree in Natural Resource Planning. Her interests lie in protecting and enhancing the abundant natural resources of Trinity County, which she feels is compatible with intelligent and thoughtful growth. In 2013 the California Association of Resource Conservation Districts bestowed a top statewide award to Colleen as RCD Director of the Year. The state association pointed to her steady leadership of the local district, noting that during her tenure, TCRCD has been at the forefront in natural resources management and education throughout the County. The award noted her efforts in helping to establish the 13,000-acre Weaverville Community Forest on forestlands

administered by the US Forest Service and the Bureau of Land Management

Gregory Lowden, board member since 1992. Greg has been a resident of Weaverville since 1967. He graduated from Trinity High School in 1969. After a tour of duty with the U.S. Army, he attended Shasta Junior College in Redding, graduating with an AA degree in history in 1974. He has been employed as a surveyor with Hunt Land Surveying, Inc., since 1978. Active in community affairs, he is a member of the Weaverville Lion's Club and the Weaverville Basin Trails Committee.

Rose Owens, board member since 1992. Rose, a long-time county resident, has resided in Hayfork since 1946 and is a Trinity High School graduate. She worked for the Trinity County Office of Education for nearly 25 years, retiring in 1996. Her family owned and operated a sawmill and logging company. Rose also serves on the Trinity Public Utilities District Board and is executive director of the Roderick Senior Center.

Mike Rourke, board member since 1996. Mike teaches agriculture at Trinity High School (THS), where he has taught for over 20 years. His subjects include animal science, plant science, forestry, natural resource management, agriculture business management, and agriculture mechanics. He has been recognized as the "Outstanding Agriculture Teacher" in northern California for having the "Outstanding Agriculture Program" at THS. He currently farms the roughly 900-acre Rourke Ranch in partnership with his wife, father, and mother. The ranch includes 100 acres of irrigated pasture, plus timberland, rangeland, and wildlife habitat.



Board members left to right: Gregory Lowden, Mike Rourke, Colleen O'Sullivan, Rose Owens and Patrick Truman.

Patrick Truman, board member since 1984. Patrick is currently a sales associate/property manager with Realty World/Trinity River Realty in Weaverville. Patrick is past President of the CA Association of RCDs and represents the state association on the National Association of Conservation Districts Board of Directors.

Trinity County



Resource Conservation District

Established 1956

Trinity County Resource Conservation District
P.O. Box 1450
Weaverville, CA 96093



District Board Meetings

Third Wednesday
5:30 PM
Open to the Public

TCRCD Office

30 Horseshoe Lane
PO Box 1450
Weaverville, CA 96093

Telephone

(530) 623-6004
FAX 623-6006

E-mail: info@tcrd.net

Internet: www.tcrd.net

The Trinity County Resource Conservation District (TCRCD) is a special district set up under state law to carry out conservation work and education. It is a not-for-profit, self-governing district whose board of directors volunteer their time.

The TCRCD Vision

TCRCD envisions a balance between utilization and conservation of our natural resources. Through economic diversity and ecosystem management our communities will achieve and sustain a quality environment and healthy economy.

The TCRCD Mission

To assist people in protecting, managing, conserving and restoring the natural resources of Trinity County through information, education, technical assistance and project implementation programs.

TCRCD Board of Directors are
Mike Rourke, Rose Owens, Patrick Truman,
Colleen O'Sullivan, and Greg Lowden.

The RCD is landowners assisting landowners with conservation work. The RCD can guide the private landowner in dealings with state and federal agencies. The RCD provides information on the following topics:

- Forest Land Productivity
- Watershed Improvement
- Water Supply and Storage
- Educational Programs
- Erosion/Sediment Control
- Wildlife Habitat
- Soil and Plant Types
- Fuels Reduction

This issue of the *Conservation Almanac* is funded in part by grants from the Trinity River Restoration Program, Young Family Ranch Trust, California Fire Safe Council, US Forest Service and the Trinity County Resource Advisory Council.

Printed on Recycled Paper with Vegetable Inks



This institution is an equal opportunity provider in accordance with Federal Law and U.S. Department of Agriculture policy, this institution is prohibited from discriminating on the basis of race, color, national origin, sex, age, or disability.