Trinity County Resource Conservation District Conservation Almanac & Annual Report

Trinity County Resource Conservation District Quarterly Newsletter

Spring 2023 Vol. XXXII No.1

Our Mission

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

Culvert upgrade on the 27N23 road in the Upper South Fork Trinity River, part of Shasta Trinity National Forest Headwaters Project. This project was overseen by Cynthia Tarwater, our Roads Project Manager. She has been with the district since 1992.

The Spring edition of the Conservation Almanac is the annual report of all Trinity County Resource Conservation District (RCD) project accomplishments in the previous calendar year.











Contained within this Spring edition of the Conservation Almanac, the Trinity County RCD's quarterly newsletter, is the annual summary of accomplishments throughout the 2022 calendar year. Operating as a Special District of the state district and a self-governing local agency, the Trinity County RCD collaborates with various partners to provide services and execute a diverse portfolio of natural resource projects on private and public lands throughout Trinity County.







2023 Annual Report



The Trinity County RCD relies solely on grants and agreements for its funding, without any tax-based revenue. New projects and funding sources are acquired each year through such agreements, varying in duration and scope. The charts above illustrate newly received project funding and program area distribution for 2022.

Dispatches from the TCRCD Roads Program

In 2022, the Trinity County RCD implemented the BAER (Burned Area Emergency Response) projects in response to the devastating August/McFarland Complex Fire on both the Shasta Trinity and Six Rivers National Forests. The objective was to ensure that culverted water crossings throughout the watershed were cleared of logs and debris and that burnt-out holes in the roads were repaired before winter storms.

A large project was also completed on the 27N23 road at the wilderness boundary in the Upper South Fork Trinity. The watershed restoration and road improvement projects were primarily carried out in the South Fork Trinity River above Forest Glen and the Mad River above Ruth Lake. The work on these roads encompassed stream crossing enhancements, fill failure repairs, cleaning culvert inlets, addressing burnt-out stump holes, brushing, improving road drainage and surfaces, constructing critical dips, rebuilding existing dips, and installing or repairing damaged signs.

A total of 110 miles of road improvements were accomplished across both forests. The USFS Shasta-Trinity and Six Rivers National Forests, the National Fish and Wildlife Foundation, and the California Parks and Recreation Off-Highway Motor Vehicle Recreation Division funded this work.





Stream crossing upgrade Before (top) and after (bottom)



Culvert replacement after fire



Before, during and after reconstruction on the Lassic Loop Road in the SRNF



The basin below Hell to Find lake was cleaned after the McFarland fire

In the spring of 2016, a significant precipitation event occurred in Trinity County, which eroded an entire section of California Highway 3, located approximately ten miles north of Weaverville. This caused both highway lanes to collapse, creating a massive gap just above Slate Creek. Subsequently, the landslide fell down the steep mountain into the creek below. This incident caused considerable transportation difficulties for northern Trinity County residents.

Later that year, after the reconstruction of CA Highway 3 and both stream banks of Slate Creek, Trinity County RCD entered into a five-year agreement with CalTrans to restore vegetation on the nearly three acres of U.S. Forest Service land affected by the landslide. Our Revegetation Program staff was responsible for reestablishing the riparian and upland canopy along the stream, which had been destroyed by the slide, to help enhance the functions of the aquatic environment. Planting native tree species aimed to provide shade, food, shelter, and sufficient nutrient input for aquatic organisms. Rare species' ranges overlap with the project location and have been historically observed near the site, including the federally listed foothill yellow-legged frog (*Rana boylii*). This further emphasizes the significance of restoration efforts in this area.

Revegetation activities commenced in 2017 and concluded in December 2022. The planting locations included an on-site area along both Slate Creek banks and a disposal area where loose soil would be safely placed. The plantings comprised approximately of 520 native trees and shrubs, as well as native forbs and grasses, which were broadcasted throughout both sites. Most of the plants were grown from seed or cuttings in the District's Native Plant Nursery at the Young Family Ranch. Among the seventeen woody plant species, the dominant trees planted include white alder (*Alnus rhombifolia*), Douglas-fir (*Pseudotsuga menziesii*), big-leaf maple (*Acer macrophyllum*), incense cedar (*Calocedrus decurrens*), and ponderosa pine (*Pinus ponderosa*). A drip irrigation system was employed to water all plants, which was completely removed in Fall 2022. Vigor monitoring data from the final year indicated a combined success rate of 97% (99% for riparian and 94% for upland) across both project sites, exceeding the minimum requirements of 70% success for riparian plantings and 50% success for upland plantings. Riparian vegetation has a robust growth rate and as depicted in the accompanying photos, the alder trees, in particular, have flourished to provide impressive canopy cover.

We anticipate the continued success of this site following the achievements made during the restoration period. This project is among several revegetation agreements between the District and Caltrans since 2016. We highly value the strong partnership that we have developed in our ongoing land restoration endeavors in Trinity County.



Slip-out of CA State Route 3 above Slate Creek, 2016. (Photo courtesy of Caltrans North Region Environmental Stewardship)

Slate Creek Revegetation, cont.



Slate Creek after Caltrans prepped the site for revegetation by Trinity RCD



Slate Creek after revegetation, 2022. The tree canopy has flourished to provide essential resources such as shade, shelter, forage, and sufficient nutrient input for aquatic organisms

Hazardous Fuel Reduction

The TCRCD Forest Health program continued to expand our work to increase Trinity County's resilience to wildfire, both around communities and on a landscape scale. The department marked another major growth year in 2022, expanding capacity from three to four fuels reduction crews and from 2 to 3 administrative staff. Long-time crew members stepped up graciously to lead their own crews, and many excellent new hires have rounded out our team. We have also increased capacity by contracting portions of projects that are too large to complete in-house. Fuels reduction includes cutting, chipping, pruning, mastication, and burning excess fuels, especially around houses or along roads or other strategic wildfire suppression features. This work increases safety in the event of a wildfire by protecting homes and infrastructure and making roads safer for evacuation and emergency personnel. On a landscape scale, it makes fires more likely to burn at low intensity, which can have neutral or positive ecological impacts compared to the destruction caused by high-intensity fires. Reducing tree density also increases the health of forests by decreasing competition and water stress, which is particularly important in the face of climate change and ongoing drought.

Our fuels reduction work this year took place all over the county, including in and around Weaverville, Lewiston, Junction City, Covington Mill, Salyer, Douglas City, Hawkins Bar, and Kettenpom. A few highlights include:

- Crews and contractors completed large public-land units in the Reading and Indian Creek drainages that will improve oak woodland habitat on a landscape scale.
- Crews completed several weeks of work in the downriver communities of Salyer and Hawkins Bar, assisting with cleanup from storms in the winter of 2022 as well as wildfire preparedness.
- Crews completed fuels treatment of a high-priority unit at the intersection of Highway 3 and Guy Covington Road.
- Crews completed fuels treatments in the Junction City park, increasing fire safety of an important community space as well as the usability of the disc golf course and gathering areas.
- Free community chipping was completed throughout the county in May and October
- Crews assisted with prescribed fire treatments carried out by partners, including the Watershed Research and Training Center, the US Forest Service, and the Bureau of Land Management. One crew worked through the winter, primarily assisting with pile burning in the Weaver Basin.



Before (top) and after (bottom) fuels reduction in Guy Covington

Before (top) and after (bottom) fuels reduction in Indian Creek

Trinity County Fire Safe Council

The Trinity County Fire Safe Council (TCFSC) seeks to improve cooperation and coordination in all aspects of wildfire management in Trinity County. The TCFSC Memorandum of Understanding (MOU) was signed by all member organizations in 1999 and re-affirmed by signing Amendment 1 in 2003. Members include representatives from local, state and federal land management agencies, and non-governmental organizations, including the local Volunteer Fire Departments (VFDs) and citizens. The vision of the TCFSC is implemented through multiple community programs.

There was a new addition to team in April 2023 of Skylar Fisher, the new Trinity County Fire Safe Council Coordinator. Skylar joins after 3-years of coordination by Amelia Fleitz who has been instrumental to implementing various fuel reduction projects, maintaining the Council, and being an advocate for a more fire safe Trinity County.

In April 2023, the TCFSC updated its website to have a modern look and more user-friendly interface. The website includes the TCFSC's mission statement, a log of the biweekly newsletter, record of past and future meetings, the 2020 Community Wildfire Preparedness Plan, programs, and many other resources.



TCFSC booth at the Willow Creek Firewise Fair

There are multiple ways community members can get engaged with the TCFSC. The Neighborhood Ambassador Program creates a point of contact in local neighborhoods to coordinate workshops and workdays for Firewise and Fire Safe activities. There are currently 11 ambassadors within the program. The Local Area Advisor Program includes interested volunteers who are appointed by the Trinity County Board of Supervisors through the recommendation of the County Emergency Operations Manager. The Advisors assist local emergency response, US Forest Service (USFS) Ranger Districts, and Incident Management Teams during a wildfire crisis through providing local knowledge, landscape overviews, historical perspectives, and area citizens' concerns. There are 8 appointed Advisors within the program.

As part of the TCFSC's commitment to improve wildfire preparedness and risk reduction, it holds monthly TCFSC meetings. There were 11 Regular meetings held in 2022, and across these meetings, there were 224 attendees. These meetings covered a wide range of topics, spanning from the 10-Year USFS Trinity Wildfire Crisis Landscape project to local fuel reduction implementation and outreach efforts. These meetings offer a monthly forum for various stakeholders to learn about and



Neighborhood Ambassador event in Rush Creek

provide information on projects and initiatives related to wildfire.

The TCFSC facilitates the Firewise Communities program to encourage local solutions for wildfire safety by involving homeowners, community leaders, planners, developers, firefighters, among others in the effort to protect individuals and property from wildfire risk. There are 14 certified Firewise Communities in Trinity County. These communities include: Big Flat & Big Bar, Burnt Ranch, Coffee Creek, Douglas City, Hawkins Bar, Hayfork, Hyampom, Junction City, Lewiston, Mad River, Post Mountain, Salyer, Trinity Center, and Weaverville. There were 9 Firewise Community meetings held in Fall 2022 to discuss evacuation zones, discuss fire safety concerns, and develop projects to improve the communities' resilience to wildfire.

It's been a busy 2022/2023 for the Trinity County Fire Safe Council. We look forward to future opportunities to table at community events, assist in the implementation of fuel reduction projects, and create a more fire safe Trinity!

2022 - A year of growth

In the winter of 2022 the Watershed Department had 4 staff – Program Manager Amelia Fleitz, Education and Outreach Project Coordinator Maya Williams, Conservation Planner Molly Breitmün, and Grizzly Corps Fellow Nicole Eastman. This fall was a year of building! We added Watershed Project Coordinator Annyssa Interrante, Grizzly Corp Fellows Miles Raymond and Charlie Curtin, Conservation Planner Jacob Johnson, Conservation Assistant Jessica Tye (part-time in the Watershed Department), and Education Coordinator Duncan McIntosh. We closed the year with 6.5 staff in the Watershed Department and swiftly added 2 more in early 2023.

With this growth, we were able to expand the number of projects in the Watershed Department. In the winter of 2022, the Watershed Department was overseeing 9 projects and has grown to currently manage 20 projects!

In 2022, we had some big accomplishments! We held the first Wildfire Preparedness Day Fair and the largest Salmon Festival, yet. We hosted the largest number of students at the Bar 717 Environmental Camp and had three great weeks at the Weaverville Summer Day Camp. We developed the curriculum and completed our first Youth in Sustainable Forestry Field Trips with Trinity Alps Highschool students. We participated in the Bigfoot Youth Education Forum and caught Beaver Fever, not giardia, but rather interest in beaver dam analogue surveys and began the process of inventorying sites in the Trinity Lake area that would be most suitable for beaver dam building. Along those lines we supported the Young Family Ranch and the Moon Lee Ditch Association through a Natural Resource Conservation Service EQIP application to pipe the ditch line to provide a more sustainable mechanism for the transfer of water. We continued to managed the Trinity County Fire Safe Council and Weaverville Community Forest Steering Committee. We translated Mendocino County RCD's Watershed Best Management Practices for Cannabis Growers and other Rural Gardeners 2018 edition into Hmong. We completed the Shasta-Trinity National Forest Fisheries Department field work in the North County for temperature monitoring, and coordinated the Spring Chinook and Summer Steelhead dive surveys on Canyon Creek, North Fork Trinity River, and New River. Throughout all of this, we maintained renewals for 13 Firewise Communities and consistently worked in these communities to prevent and prepare for wildfire.

This work is made possible by the involvement of our partners and funders. These groups include but are not limited to:

Bureau of Land Management: Redding Field Office, Bureau of Reclamation: Trinity River Restoration Program, CAL FIRE, California Association of Resource Conservation Districts, California Department of Conservation, California Fire Safe Council, CalRecycle, Friends of Trinity County Resource Conservation District, GrizzlyCorps Program (UC Berkeley), Humboldt County, National Association of Resource Conservation Districts, Natural Resources Conservation Services, Nor-Rel-Muk Wintu Nation, Shasta College Foundation, Sierra Pacific Industries, the Snyder-Highland Foundation, The Watershed Research & Training Center, Trinity County, Trinity County Chief's Association, Trinity County Disaster Council, United States Forest Service: Shasta-Trinity National Forest and Six Rivers National Forest, University of California Cooperative Extension, Weaverville Community Services District, Young Family Ranch Trust, and the Yurok Tribe. Thank you to all out local VOLUNTEER FIRE DEPARTMENTS for continuing to partner with us to improve fire preparedness for Trinity County!

We appreciate the work from our contractors, including but not limited to:

SHN Consulting Engineers and Geologists, Mark Arnold Archaeologist, Timberland Resource Consultants, Shayne Green Consulting, Stillwater Resources, William Rich and Associates, Registered Professional Forester Kenneth Baldwin, Bigfoot Hauling, the band Mojito, Damenation, Lewiston Stamps, and Rush Creek Designs.

We are always grateful for the support from our local landowners and the interest and drive that they have to continue restoring, managing, and preserving the natural resources of Trinity County. Thank you for all the support and active engagement! If you are interested in conserving or addressing projects on your own property please reach out to the District to find out what opportunities are currently available or could be available in the future to support our local ecosystems.



Miles Raymond & Charlie Curtin: GrizzlyCorps Fellows

Miles Raymond and Charlie Curtin, GrizzlyCorps Fellows, have worked with the Trinity County Resource Conservation District since September 2022. They work under the same broader goals and vision of the Trinity County Fire Safe Council (TCFSC) and Weaverville Community Forest (WCF), promoting community wildfire protection and stewardship of Trinity County's forested land. Under these two programs' umbrella, each has branched off to their own areas of interest to fulfill an important need in the community. With the end of their term nearing, Miles and Charlie reflect on the work they've accomplished.

Charlie Curtin

In working with the Weaverville Community Forest, Charlie has sought to increase community engagement to align with the WCF's mission of local involvement and decision-making on federal lands. Through the WCF Annual Public Meeting held in October, the community was given a platform to communicate their desires to federal partners in the management of the nearly 15,000 acres encompassed in the community forest partnership between TCRCD, the Bureau of Land Management (BLM), and the US Forest Service (USFS). Charlie also became involved in efforts to maintain and expand the Weaver Basin Trail System, spending time out in the field building trails. In working closely with the BLM, Charlie facilitated two bulk garbage cleanups in the WCF, removing two dump trailers worth of trash. Currently,



Charlie Curtin working on a fuel break

Charlie is diving into the BLM and USFS special use permitting process to create a streamlined framework for local business and organizations to utilize the WFC for their own events and needs. Through his work both behind the scenes and frontfacing, Charlie has strived to make the Weaverville Community Forest a more inviting space for the local community, both in its physical space and management process.

Miles Raymond

This year Miles has worked to expand the outreach of the Trinity County Fire Safe Council through the development of their Neighborhood Ambassador Program. This program works with volunteers across Trinity County who work to educate and provide resources to their communities about fire resilience and safety. Since the first training was held in the fall, there have been 12 ambassador sign ups with over six events happening. While the TCRCD plays a supporting role in these events, the ambassadors understand their community's strengths and weaknesses and create events to supplement their needs. Three of



our ambassadors have volunteered their time sharing information about the TCRCD's home assessment and chipping program with their neighbors. Hearing about these programs from a voice in the community has been an effective way to spread awareness. Katie Quinn, a Lewiston Neighborhood Ambassador, hosted the Lewiston Safety Day with help from the Lewiston Sparkies and Lewiston VFD. This event brought awareness to the TCRCD, other county programs, and brought the community together through food and a raffle. This spring, we look forward to our other Neighborhood Ambassador events. A big thank you to all of the people who have signed up for the program.

Miles Raymond working at the Trinity County Fire Safe Booth with Skyler Fisher



Trinity River Restoration Program 2022 Summary

The long-term goals of the Trinity River Restoration Program are to restore the form and function of the Trinity River; restore and sustain natural production of anadromous fish populations in the Trinity River to pre-dam levels; and to facilitate full participation by dependent tribal, commercial, and sport fisheries through enhanced harvest opportunities. In 2022, TRRP continued to pursue the program's long-term goals through a series of interrelated efforts in the basin. TRRP collaborates with the Trinity County RCD through a cooperative funding agreement to help broaden watershed stewardship and expand local engagement and participation opportunities.

Highlights of the restoration program's efforts in 2022 include:

- Putting the finishing touches on a new Science Plan, which will guide how the Program uses research, monitoring, and modeling to inform decision-making and changes to how we implement restoration activities.
- Initial construction began on the Oregon Gulch Restoration Project, the largest single-site the Program has ever constructed, which will increase the amount of riparian floodplain habitat in the restoration reach by over 30%.
- For the third consecutive year, restoration releases targeted the objectives of a critically dry water year.
- Grants were awarded to recipients working to increase dry season stream flows and improve fish passage in key tributaries.
- In collaboration with TCRCD, the Program launched a new and enormously successful public outreach effort, Science on Tap. The presentation-style event led by local scientists who focus on local science topics, is held at the Trinity County Brewing Company on the third Thursday of each month January-November.

Grantee Funding & Accomplishments

The Program awarded \$809,307 in the fiscal year 2022 to three projects within the Trinity watershed. The grantees put forward \$264,870 in matching funds for a total conservation impact of \$1,074,177. We are excited to expand on these three awarded projects conducted by local entities focused on watershed restoration.

The Watershed Research and Training Center was awarded \$439,542.39 in FY22 for "Resiliency in the Greater



Before (left) phots of the remnants of tailing piles from dredge mining and during (right) showing removal progress at Oregon Gulch restoration site.

Trinity River Watershed This local organization is tasked to plan and implement four storage tank arrays and establish long-term forbearance agreements to reduce annual water withdrawals from key tributaries to the Trinity River during the summer low-flow period. The project will increase the quality and quantity of natural temporal habitats crucial to the survival of anadromous fishes and aquatic organisms in the Trinity River Watershed.

The Yurok Tribe was funded \$104,182.67 for "Oregon Gulch Culvert Replacement" in FY22. Replacing the Oregon Gulch culvert under Sky Ranch Road in Junction City will open over five miles of suitable salmonid spawning and rearing habitat. Funding will assist the Tribe in completing 90% of design plans, coordinating with regulatory and conservation agencies, and obtaining environmental approvals to proceed with the replacement.



The Watershed Research and Training Center has completed five storage and withdrawal projects in 2022 with two on deck. (The Watershed Research & Training Center)





The Yurok Tribe has been awarded funding to design and work through compliance for replacement of the Sky Ranch Road culvert on Oregon Gulch. (Elliot Sarnacki, Reclamation)



The culvert that will be replaced with an arched culvert at a USFS campground in Weaverville. (5 Counties Salmonid Conservation Program)



A Hoopa Tribal Fisheries employee looks over a large wood installation at Supply Creek. (Justin Alvarez, Hoopa Valley Fisheries Department)



After construction on 30N16B. (Trinity County RCD)

Northwest California Resource Conservation & Development Council was funded \$265,582.08 for the "East Branch East Weaver Creek Barrier Removal" project. The project will replace a road crossing with an arch culvert at a USFS campground and community trail system to open a migration pathway for anadromous fish. The project will restore access to 1.2 miles of habitat to all life stages of salmonid species in the Trinity River watershed.

In addition to the three new watershed projects mentioned above, three projects that were granted Program funding were completed in 2022. Read below for each of these project accomplishments and updates.

The Supply Creek berm removal project was a 2020 TRRP watershed grant awarded to the Hoopa Valley Tribal Fisheries Department to restore habitat for salmonid species in Supply Creek. The project, located in downtown Hoopa, CA, near the elementary school, increased tributary habitat for Chinook and steelhead salmon by removing an 8,000 cubic-foot man-made berm that sat in the center of the creek's floodplain. Additionally, crews used engineered plans from McBain and Associates to cut 70 meters of new channel to split the creek's flow. Post channel enhancement, rock, and log jam wood features were placed to encourage 35% of the flow to move into the side channel. After construction, revegetation crews went out to place cluster plantings of native species such as Arroyo Willow, Red Willow, and Cottonwood.

Roads have long been identified as the greatest source of controllable fine sediment delivery to river systems affecting anadromous fisheries of the Trinity watershed. Trinity County RCD completed two road decommissioning projects granted by the Program in 2022. The Southfork & Mainstem Trinity River Road Decommissioning Project near Hyampom, CA, included the deconstruction of two roads, botany and wildlife surveys, and revegetation of trees and riparian vegetation which will discourage sediment transport and erosion into the South Fork and Mainstem Trinity River.

Within the Tunnel Gulch Watershed, the Five Counties Salmonid Conservation Program identified a sediment reduction area within the Carr Fire footprint near Deadwood Creek and was awarded watershed grant funding from the Program to mitigate sediment run-off that was occurring from an unmanaged road. Crews



rocked 9 stream crossings and critical dips within the road and installed an additional 24 rolling dips, which provide adequate drainage for the road length.

24 rolling dips were installed to reduce sediment runoff and improve road drainage. (Five Counties Salmonid Conservation Program)

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Trinity County RCD Board Meetings

Third Wednesday 5:30 PM Open to the Public

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Kelly Sheen, District Manager

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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 led by a volunteer board of directors.

The Trinity County RCD Vision

The Trinity County RCD 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.



Botany Crew Maryann Perdue Arvel Reeves Jack McGlynn Tyler McKinley



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