

NRCS Working with Property Owner in Southern Trinity

Southern Trinity is the gem of the county offering great vistas, refreshing air, and a touch of serenity. It's dominated by mixed conifer forests, open hills, and oak woodlands. It's rugged, steep country- no place for the faint of heart or lack of stamina. The ground is extremely productive, evident of the remnant colossal tree stumps and towering conifers.

If you peer closely at the landscape you will notice that things are a little off. Douglas fir are piercing through and overtopping oak stands, the forests are extremely dense, overcrowded



Before thinning, the oak woodlands were crowded with conifers.

with excessive trees and brush, and vegetation is beginning to encroach and shrink the open hills. The landscape tells the story. Historically the land was managed by natural and human initiated fire. Lightning would start fires and without suppression these fires would move through the landscape burning understory fuels, and the large trees that had adapted to this natural process would go mostly unscathed by the low to moderate intensity fires.

Humans also helped facilitate this natural process. Native Americans would burn the landscape to maintain ecosystems favorable for wildlife and acorn production- a staple in the diet of humans and wildlife. When ranchers moved into the area, they carried on this management of the land. Fire was and still is the most beneficial tool nature offers to manage the land.

Historically wildfire was hardly catastrophic. Now after years of suppression unnatural conditions are conducive to devastation. Overtopping conifers are killing oaks and encroaching conifers are robbing the open hills of more than their great vistas.

The act of doing nothing is a great injustice. Without management, wildlife, humans, and our vast landscapes suffer.

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Transition to New District Manager

Trinity County RCD is currently in the process of hiring a new District Manager. Alex Cousins resigned as of July 1, 2015. While we are sad to see Alex leave, he is moving on to new opportunities, and we thank him for his years of service to the District. We wish him the best in all of his future endeavors.

The District will be guided by our Board of Directors with the help of long-time employees during this time of transition.



TCRCD Scholarship Winner

Congratulations to Yori Hook, 2015 Trinity High School graduate and in the top 10% of her class, the winner of the first Trinity County RCD scholarship. The purpose of this scholarship fund is to encourage and support high school seniors and continuing education students from Trinity County who are pursuing a degree in natural resources or conservation.

While the District had many successful student applicants to choose from, Yori's personal statement on her scholarship application reflects the type of applicant the District seeks for this scholarship. Yori wrote, "I plan on focusing my career choice towards water conservation and renewable energy, as both are essentially the cornerstone of our civilization. By joining efforts with others who share the same ideals as myself, I see no reason why I cannot make a difference in how and to what degree our resources are used."

Yori plans to attend Willamette University in Salem, Oregon and major in Environmental Policy.

In addition to the TCRCD scholarship, Yori also received awards from the Lions Club, Soroptimists, Rotary and Weaverville Garden Club.

Donations to the scholarship fund are tax duductable and can be made any time.



Yori Hook receives \$500 scholarship from TCRCD Board Member Colleen O'Sullivan.



TCRCD Conservation Scholarship Fund Donation

TRINITY COUNTY RESOURCE CONSERVATION DISTRICT SCHOLARSHIP FUND Make a tax-deductible donation today! We will mail you a receipt or you are welcome to

I	stop by the office.
I	Name:
I	Address:
I	
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Amount: \$_____ Please return to: TCRCD Scholarship Fund, PO Box 1450, Weaverville, CA 96093 530-623-6004 www.tcrcd.net

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With assistance from the Natural Resources Conservation Service (NRCS), a Southern Trinity rancher, Dave Albee, has a hopeful story. Working together with the NRCS, he has been able to implement landscape level restoration of oak woodlands, improve wildlife habitat, create a forest stand more resilient to wildfire, increase forage production and improve water quality for his cattle, reduce sediment delivery to watercourses through road improvements, and reduce populations of noxious weeds.

NRCS is under the US Department of Agriculture and works with private landowners to provide technical assistance with opportunities for financial incentive. NRCS works to apply



Open spacing between oaks will allow for healthier oak trees and improved wildlife habitat.



conservation on the land by identifying natural resource concerns and determining the best practices to address the issues.

Using a combination of mastication and chainsaw work, he is starting to reclaim oak woodlands and range ground invaded by Douglas fir and brush- a result of absence of wildfire. Within one year Dave noticed substantial growth of released oaks and grass thriving where it was once choked out. This is the ideal scenario to use prescribed fire to maintain these natural plant structures and communities. He hopes to use fire at a landscape level to do just that.

> Within the coniferous forest stands on the ranch he removes unhealthy and suppressed trees. This reduces tree density and competition for nutrients, space and light, in turn improving the health and vitality of trees and increasing growth for future selective timber harvests.

Installing new cross fencing has facilitated better grazing management. Dave has been able to develop springs and install troughs, thereby increasing water sources and improving water quality. All beneficial to the land, his livestock and wildlife.

By constructing road drainage features, replacing culverts, and rocking road surfaces on the ranch, Dave has reduced erosion and transport of sediment to watercourses. These conservation measures maintain access to manage the ranch and also improve water quality.

With NRCS technical and financial assistance, Dave has worked harder than words can convey to apply conservation on his ranch. He is shaping the land back to what it is used to be, to help create a healthier future.

Oak woodlands after thinning.

Cleaning up Off Highway Vehicle Routes in Trinity Coun

Beginning in 2012, the TCRCD began receiving funds from the California State Parks Off Highway Vehicle (OHV) Commission to remove brush from existing OHV routes on Shasta Trinity National Forest, South Fork Management Unit. The work includes brushing of routes for safety, removing wind fall trees, replacing damaged or missing signage, and identifying route tread improvements that may be needed.

There is a backlog of maintenance needs on many routes identified in the USFS Motor Vehicle Use Map (MVUM). The needed improvements range from simple brush removal to more complex upgrades at stream crossings. Most of the routes identified on the MVUM are not only for motorcycles, but all types of vehicles used to enjoy the forest. The TCRCD leveraged money provided by the Shasta-Trinity National Forest for route upgrades in the Grassy Flats area near Hyampom, Plummer Creek and Rattlesnake Creek near Forest Glen to expand the work with OHV funding to increase the miles of routes addressed. To date, the TCRCD has completed brushing and maintenance work on 78 miles of OHV routes.

Typically the TCRCD would inventory the route for sections needing improvement, use heavy equipment to address the route surfacing or culvert inlet cleaning at stream crossings, and the crew would brush the route for clearance. In some cases just brushing was needed, in other cases both equipment and brushing crews were employed to bring the route into compliance. MVUM maps and other publications are available at the Weaverville and Hayfork US Forest Service Ranger Districts.



Equipment at Work







Project Before



Project After



TCRCD crew members working on the project

TCRCD Welcomes Two New Employees

Please help the District in welcoming two new employees for 2015 – Dean Hevner, Bookkeeper, and Angie Snyder, Office Clerk.

Dean started his duties at the District in January. His experience with our existing accounting software at his previous job has been extremely helpful in his transition to his duties at the District. Dean looks forward to facing new accounting challenges and overcoming them through gained knowledge. Dean likes small town life in Trinity County and the cold mountain air. He keeps busy at home with all types of electronics. Angie started her duties at the District in April. She comes to the District with 8 years of experience in office work and enjoys keeping the office organized. "I am amazed and very impressed with the TCRCD. And I feel very honored to work with so many wonderfully genuine and caring people," she said.

Angie looks forward to learning as much as possible about the District to better assist the public with their questions as well as help her co-workers. Angie enjoys the four seasons that Trinity County offers, as well as all of the outdoor recreation opportunities. When not at work Angie spends time with her family and friends camping, hiking, swimming and "just being outdoors with good people."



Dean Hevner, Bookkeeper.



Angie Snyder, Office Clerk.



2015 Fun in the Field

A total of almost 100 children and adults benefited from the District's outreach programs last quarter with classroom lessons, two field trips and a hike.

Classroom lessons for Weaverville Elementary School's 4th and 5th grade students covered fire ecology and prescribed burns; oak woodland ecology and native tribal involvement in woodland management; and introduced students to the scientific method, data collection, and the concept of "control variables " in research, all prior to their field trip to two separate locations in the Weaverville Community Forest in April.

The annual Day at the Wetland for WES 4th grade students took place in early May and allowed students to learn about wetlands and migratory birds, soils, amphibians, botany, hydrology, and applying scientific curiosity.

The Weaver Basin Wetlands, a restored wetland owned by Trinity County and under a conservation easement with the Natural Resources Conservation District (NRCS), is located on Industrial Way, at the east edge of Weaverville off Hwy. 299.

These environmental education events were made possible through funding from the Trinity River Restoration Program (TRRP), National Environmental Education Foundation and Hands on the Land mini grant, California Community Forests Foundation, Redding Rancheria Community Fund of the Shasta Regional Community Foundation, and resource professionals from the Trinity County RCD, TRRP, NRCS and the US Forest Service.



Students gathered 'round to discuss field exploration during Day at the Wetlands.



Day at the Wetland student making field observations and notes.



Students test water levels at Day at the Wetlands.



At the Day at the Wetland soils station, getting "dirty" is part of the fun.



Before their field trip, WES students learned how to read a map legend and found Weaver Basin Trails close to their homes.





Students visited an oak woodland research plot in the Weaverville Community Forest on the first stop of their field trip.

Students compared the prescribed burn landscape with that burned in the 2014 Oregon Wildfire near the Taylor Street trailhead on the second stop of their field trip.





After their field trip, students examined soil samples using hand-held microscopes purchased through funding from the Redding Rancheria.





Young data collectors at the April field trip.



Through a grant from the International Mountain Biking Association (IMBA) and Subaru, the IMBA Trail Care Crew team, Lani Bruntz and Jordan Carr, visited Weaverville and taught two workshops on April 24th and 25th.

The first two-hour workshop titled "Better Living Through Trails" was geared toward community leaders, especially members of the Chamber of Commerce, local business leaders, and natural resource managers. It was well attended with nearly 30 people. The presentation explored the positive relationships between communities and their trail systems. Lani and Jordan did a fantastic job explaining the economic significance of trails and outdoor recreation on the local, regional and national levels. They highlighted many success stories where small rural communities developed a destination trail resource, bringing in visitors and recreational users and adding tourism dollars to the local economy as well as improving quality of life for local residents, bikers and nonbikers alike.

The second workshop was "Trail Building School" starting with a three-hour classroom session leading into an afternoon of hands-on trail building and field instruction. Volunteers worked on re-routing the "Misery Hill" section of the Jackass Ridge Trail. The workshop taught IMBA's philosophies and trained local volunteers and land managers how to build and maintain sustainable, fun single track trails.





Trail building during the IMBA April workshop.



Volunteers ready to get started on the re-routing of "Misery Hill" on the Jackass Ridge Trail.

District Benefits from New Greenhouse

The District's native plant program received a big boost this year with the purchase and installation of a new greenhouse. The greenhouse is located at the Young Family Ranch. The California Department of Transportation (Caltrans) provided funding through a current contract for the greenhouse. In recent years the District has partnered with Caltrans on two projects, including planting natives to stabilize the hillside above the China Wall, and planting wetland and riparian vegetation to mitigate for habitat lost during the construction of the China Slide Curve Improvement Project.

Historically, the RCD has used container stock purchased from native plant nurseries, often from locations as far away as the north end of the Central Valley. With grant money from Caltrans we have begun to grow native plants for two new Caltrans projects occurring along highway 299 near Burnt Ranch. The plants we are growing were started from seeds collected close to the project sites. These plants are inherently well adapted to the local climate and elevation of their future home and we expect that they will thrive after planting. Caltrans supported the purchase of the greenhouse with the goal that we will continue to provide locally sourced native plants for their projects in the future.

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Some of the native plants started in the greenhouse this spring include big leaf maple, white alder, mountainmahogany and deer brush. Now that summer temperatures have arrived, these plants have been moved to our shade house to withstand the summer heat. Even though we are growing native plants, special care must be taken to keep them healthy since they are growing in containers. The District is also currently partnering with the Trinity River Restoration Program to care for nursery stock that will be used on TRRP's upcoming restoration projects. Beyond supporting these restoration efforts, we plan to expand our selection of native plants that will be available to the public.



Mountain Mahogany seedlings grown at the District's new greenhouse.



New District greenhouse purchased through a current Caltrans contract.



Mountain mahogany seeds at maturity near Lewiston Lake

Enjoying the Trinity River-Why do the flows change in summer?

Few destinations can top the Trinity River for summertime fun: fishing, swimming, camping, and picnicking along the river's beautiful banks attract visitors and local residents alike. In July, the flows that are released from the Trinity and Lewiston Dams have gone down to what is known as a "summer baseline" volume. This amount of water, which is flowing at a rate of 450 cubic feet per second (cfs), mimics what average flows were like in summer, before the dams were put in during the early 1960's.

The Trinity River Restoration Program is rehabilitating the habitat in and around the Trinity River, using the variable restoration flows along with watershed restoration, sediment management, riparian mitigation and mechanical channel restoration methods, to create a more natural river environment for native fish and wildlife species. After the dams were constructed, about 90% of the water above the dams was diverted to the Central Valley, disrupting the natural processes that kept the river in a healthy, dynamic state. Over the next several decades, the Trinity River lost much of its ability to support the life cycles of salmon, steelhead, and other species that depended in it.

After many years of studying the effects of the dams, recommendations were made that led to a Record of Decision (ROD) that authorized restoration flows to the Trinity River, depending on what "water year" type was predicted.

What is a "water year"?

A water year begins in October and runs through September. A forecast is made around April 1st each year - based on a combination of snow pack measurements and modeling of historic conditions using statistical and hydrological methods.



Critically dry

Extremely wet



The spring time water releases are just a fraction of natural flows once found in the Trinity River. The limited water available in any given year is used in the most efficient way to benefit salmon and steelhead, other aquatic species, and riparian plants.



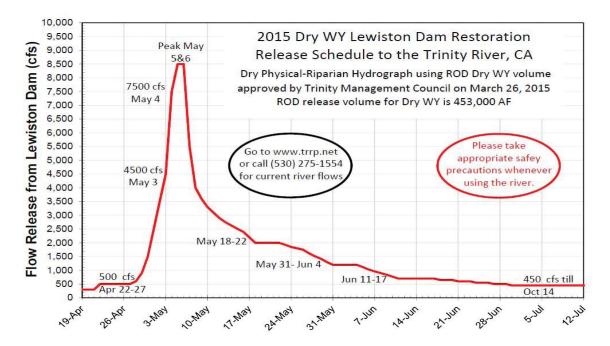
Every year, the California Department of Water Resources forecasts the water year type, based on current snowpack and meteorological modeling. There are five categories of water year type named in the ROD. The chart below shows how much water can be released, according to Water Year type:

Water Year Type	Restoration Release ⁱ Water Volume (acre feet)	Probability ⁱⁱ of Occurrence
Extremely Wet	815,000	12% in any given year
Wet	701,000	28% in any given year
Normal	647,000	20% in any given year
Dry	453,000	28% in any given year
Critically Dry	369,000	12% in any given year

Water Year Type and Restoration Release Water Volume.

¹ Source: US Fish and Wildlife Service; Hoopa Valley Tribe. 1999. Trinity River Flow Evaluation Final Report. Department of Interior. ¹¹ Probability of occurrence based on data from 1912 to 1994.

Once the forecast is made, the TRRP Flow Workgroup presents several hydrograph (a chart showing the amount of water flowing down the river over a period of time) proposals to the Trinity Management Council (TMC), the Programs' decision-making body, who then weigh specific water year objectives and broader Program goals to determine the final flow recommendation in early April. The hydrograph for 2015 was based on the forecast of a Dry Water Year. It has a brief, high peak that was designed to move Trinity River tributary delta deposits that had not experienced high flows since 2012, the start of the current drought. It also flushes accumulated fine sediments through the system for cleaner spawning gravels, which benefits fish productivity and overall health.



Trinity County



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

Resource Conservation District

Established 1956

District Board Meetings

Third Wednesday 5:30 PM Open to the Public

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.

TCRCD Office **The TCRCD Vision**

Number One Horseshoe Lane PO Box 1450 Weaverville, CA 96093

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.

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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 Colleen O'Sullivan, and Greg Lowden.

- Watershed Improvement
- Water Supply and Storage

- Wildlife Habitat
- Fuels Reduction

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