Conservation Almanac

Trinity County Fire Safe Council – 20 Years of Advocacy



After the Oakland Hills Fire in 1991, fire safe councils began emerging throughout California. In 1998 the Trinity County Resource Conservation District (District) and Watershed Research and Training Center (WRTC) spearheaded an effort to highlight the risks

of catastrophic wildfire in the county. The Trinity County Fire Safe Council (FSC) was formed out of the broad belief that active forest management had many benefits including: more jobs in the woods, safer communities, and healthier watersheds.

Founding Members of the Trinity County Fire Safe Council

- Bureau of Land Management
- California Department of Forestry & Fire Prevention (now CALFIRE)
- Natural Resources Conservation Service
- Safe Alternatives for the Forest and Environment
- Shasta-Trinity National Forest
- Six Rivers National Forest
- Trinity Bioregion Group
- Trinity County Association of Realtors
- Trinity County Fire Chiefs Association
- Trinity County Planning Department
- Trinity County RCD
- Trinity County Resource Conservation & Development Council (Now Northwest CA RC&D)
- Watershed Research and Training Center

The District and WRTC got the support of the Trinity County Board of Supervisors, through its Natural Resources Advisory Council, to bring interested groups together to form the Fire Safe Council that embraced these key principals:

- Improve coordination among local, state, and federal agencies to develop long-term planning
- Coordinate data sharing through the relatively new field of GIS-based mapping
- Implement cost-effective fuels treatments across the landscape regardless of ownership
- Convene community meetings and increase community awareness of the issues
- Monitor progress

The Trinity County FSC assembled its first meeting on February 2, 1999 and has continued to advocate for creating more fire adapted communities ever since. The Trinity County FSC has:

- Developed one of the first Community Wildfire Protection Plans in the country and has regularly updated it every five years
- Secured millions of dollars of funding to help public land managers and private landowners, treat thousands of acres of forestlands and defensible space around hundreds of homes
- The Fire Safe Council model led to the formation of the Weaverville Community Forest and the Trinity County Collaborative, which have increased fuel reduction efforts in Trinity County

Clearly the 2018 summer fire season has been a stark reminder that there is much more to be done, and that we must continue to work together to implement the projects identified in the Trinity County Community Wildfire Protection Plan. If you are interested in helping, or want to learn more, visit www.tcrcd.net/fsc or come to a Fire Safe Council meeting held at 1pm on the 4th Thursday of every month in the District's conference room – Horseshoe Lane, Weaverville.

Contributed by Pat Frost



Fuels Reduction Projects

The 2018 fire season has been devastating for Northern California. While no amount of vegetation management can eliminate the risk of tragic wildfire events, fuels reduction projects - such as shaded fuel breaks, defensible space, and prescribed fire - play a significant role in mitigating the risk of catastrophic wildfire and its impact on our community.

The District has been busy with fuels reduction projects throughout Trinity County. You may have seen our crew in Trinity Center, where we completed 14 acres of shaded fuel breaks on 38 residential parcels. This project, funded through the California Fire Safe Council, provided much safer egress and ingress for a neighborhood with only one exit. You may also have seen our crew working on Oregon Street in Weaverville where we just finalized a 1.5-mile long roadside shaded fuel break along a critical corridor. Most recently, our fuels crew has been working on a shaded fuel break along USFS roads in southern Trinity, near Ruth.

Fuels reduction has been, and will remain, a fundamental part of the District's mission. We have several large projects planned for the next three years, including our State of California Timber Fund Grant, which will create 25 miles of roadside shaded fuel breaks in Junction City, Lewiston, Douglas City, and Weaverville. We are also planning programs that will enable us to assist private landowners

with defensible space and chipping.

Fuels reduction projects are made more effective by strong partnerships. We will continue to work closely with our state, federal, and nonprofit collaborators in the pursuit of a more fire resilient community.

District Manager's Corner

Fall is in the air, the colors of our landscape are changing, and the field season is winding down for the District. You may have seen our crews working on fuels reduction projects in Trinity Center, up on Timber Ridge or Oregon Street in Weaverville, or out near Ruth. Our Roads department worked on restoration efforts in the Helena and Buck Fire burn areas doing road upgrades and decommissioning. Our Revegetation crew rehabilitated the Connor Creek area of the Helena Fire in Junction City, and started planting and slope stabilization

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efforts on the Big French Creek Slide project on Highway 299. We had Education and Outreach staff teaching our children for the three weeks of Summer Day Camp at the Young Family Ranch, getting their hands dirty with the sixth grade campers at Environmental Camp, sharing information at our booth during the Trinity County Fair, and organizing the 2018 Trinity River Salmon Festival. We participated in the 2018 Trinity River Clean-Up with several other agencies and members of the public, assisted in many trespass grow-site cleanups on

public lands, and performed maintenance on many miles of trails on the Weaver Basin Trail System. We worked on stream flow enhancement of Weaver Creek and its tributaries, and provided mapping services to CAL FIRE and the Trinity County Office of Emergency Services during the Carr Fire. The District brings millions of dollars into Trinity County through Federal, State, and local funding sources, providing jobs and opportunity to many people and businesses in the area. This is just a taste of the work we do here to serve our communities as Your *Local* Conservation District.

2018 Camps

Summer Day Camp

Weaverville Summer Day Camp was held for three weeks in July at the Young Family Ranch. Campers ages 5-12 experienced and learned about nature, forest stewardship, watershed health, farming, art, upcycle crafts, music, creating and eating healthy snacks, nature expeditions, tie dying, and

much more! All while making new friends and expressing their individual creativity in a fun and engaging camp environment.



Macroinvertebrate lesson

Camp was made possible with coordination and implementation from the District and support from Trinity River Restoration Program, Young Family Trust – Humboldt Area Foundation, Trinity Trust, Young Family Ranch, Bureau of Land Management, US Forest Service staff and the More Kids in the Woods project, Ascend Wilderness Experience, University of California Cooperative Extension Nutrition

> Education Program and Master Gardener's Program, Shasta College Foundation, and parent volunteers.



Hikes for older campers

Environmental Camp

Each year 6th grade students from Trinity Alps Preparatory and Hayfork Elementary School attend a three-day, two-night, Environmental Camp at the breathtakingly beautiful Bar 717 Ranch in Hyampom. They explore and have fun learning about all of the wonders of nature.

This year's educational topics were: water quality, stream flow, lichens, wildlife tracks and scat, silviculture, forestry,



Testing water quality

birding, macroinvertebrates, archery, botany, and more!

We appreciate all of the support that went into this camp including: school staff and volunteers, Bar 717 Ranch owners and staff, Trinity River Restoration Program, CA Department of Fish and Wildlife, US Forest Service, District staff, and other natural resource professionals who volunteered their own time to make this camp fun and educational.



Measuring stream flow

Trinity Bike Park and Trails

The District, in partnership with the California Conservation Corps (CCC), was awarded grant funds from the Caltrans Active Transportation Program to assist with the Trinity Bike Park Project and maintenance of the Weaver Basin Trail System. The project's goal is to help facilitate expansion of trail use in Trinity County by providing safe, fun, and affordable recreation facilities to encourage people to develop physical skills to utilize the Weaver Basin Trail System for recreational enjoyment and transportation.

The project provides funding for an 18-member CCC crew for two weeks, along with materials and supplies. In October, the crew constructed 450 feet of split rail cedar fencing, and a gravel pathway at the Trinity Bike Park site at Lowden Park in Weaverville. In addition, the crew worked for several days doing routine maintenance on portions of the US Forest Service managed lands within the Weaver Basin Trail System. This maintenance included sections of McKenzie Gulch Loop, Garden Gulch, East Weaver Campground, Rainbow-Hansen Mine Trail, and East Weaver Lake Trails. The CCC crew will be back to work here in May of 2019 for phase II fencing, trails, and signage at the Trinity Bike Park site. They will also perform spring maintenance on the Weaver Basin Trail System. Thank you to Trinity Trail Alliance volunteers who worked alongside the CCC crew.



CCC crew helping to build a gravel pathway and cedar fence around the Lowden Park picnic area at the Trinity Bike Park site



CCC crew members take a break during trail maintenance work on the McKenzie Gulch Trail to allow Trinity Trail Alliance hikers to pass by

2018 Road-Related Projects

The road department at the District has been busy completing a number of projects to improve road drainage and reduce sedimentation.

We performed a variety of road improvements in the Brock and Rich Gulch watersheds (North Fork Trinity River) within the Helena Fire area including brushing roads that had become overgrown. This project was funded by the Bureau of Land Management (BLM).

Roads were decommissioned in mid-June on the Musser Hill area in the Weaverville Basin through the USFS Browns Stewardship project. Trees will be planted this fall.

We addressed nearly 40 roads in the South Fork of the Trinity River in the area between Stuart Gap and Forest Glen. This work was funded by the USFS and the CA Off-Highway Motor Vehicle Recreation Commission (OHV). We conducted various road improvements with the goal of sediment reduction, and to improve access for the public. Maintenance of these roads included brushing vegetation, and removing logs and rocks that were blocking the road entirely.

After the Buck Fire started in September, the District was requested to assist the USFS with post-fire road rehabilitation including: rock surfacing, rolling dips, burnt tree removal from roadways, and inspection of culverts for flow restrictions. In Rattlesnake Creek near Highway 36 at Post Mountain, a road completely washed away due to a plugged culvert at a stream crossing. This site was repaired with funding from OHV. We removed vegetation and checked culvert conditions at stream crossings on three other roads in that area.

In early fall, our projects led us to Junction City to address road maintenance issues in the Helena Fire area specifically on Hocker Meadow Road, and its many associated spur roads. This project will involve rock surfacing, cleaning all culvert inlets, rocking rolling dips, and several culvert replacements at stream crossings where the existing culvert is undersized for the site. This project is funded by the US Forest Service.

The District is assisting the BLM in the severely burnt areas of upper Grass Valley Creek as a result of the Carr Fire (see photo in header). The roads that were used to access the fire for suppression are being addressed with emergency erosion control before it rains. Grass Valley Creek is comprised of decomposed granite soils which are infamous for erosion.

Take the time now to address your road maintenance needs before it rains. Remember: an ounce of prevention is worth a pound of cure!



Washed out stream crossing repair due to plugged culvert at Rattlesnake Creek



Culvert replacement project at Hocker Meadow Creek





Annual Trinity River Salmon Festival

This year was the 20th Anniversary of the Trinity River Salmon Festival. The festival started off with a traditional Tribal Blessing and song by Sonny Hayward from the Nor-Rel-Muk Wintu Nation to welcome the return of the salmon. Entertainment included musical guests Don Hall, the Conrad Gulch Ramblers, and Philosopher's Tone. The Turtle Bay Exploration Park came with their special animal show where people of all ages enjoyed learning about the native animals of northern California. Raku pottery firing in the Meadow at Studio G was a delight. There were many activities including salmon printing, button making, produce from the Master Gardener's and Young Family Ranch Youth Garden, native plants from the Trinity County Resource Conservation District's native plant nursery, traditionally smoked salmon by the members of the Wintu Tribe, the return of the large Salmon tent, many vendors, and more.

This event was sponsored by the Trinity River Restoration Program and the Trinity County Chamber of Commerce. A special thanks to the California Conservation Corps for their volunteer efforts.









Trinity River Public Float

The day was hot and the river cold – a perfect combination for an educational float on the Trinity River. The Trinity River Restoration Program (TRRP) and Trinity County Resource Conservation District (District) led a free public float on the Trinity River on July 19, 2018 in an effort to show residents changes on the river that can't be seen anywhere except from a boat. The trip started at Steel Bridge and ended below



2018 Trinity River Clean-up

On September 22, 2018 more than 40 volunteers from far and wide combined efforts to remove waste from the Trinity River, Highway 299, and the North Fork of the Trinity River on Helena Road. Volunteers collected trash in kayaks, rafts, and on foot.

A total of 27 miles of Trinity River were cleaned including over one-third ton of trash, half a ton of metal, and sixty Junction City. TRRP staff answered any and all questions from the participants including ones relating to TRRP river restoration efforts, strategies, goals, and objectives; and how the TRRP works to create conditions that contribute to a healthy river. Questions about the fish and wildlife that were observed along the river were often asked by the 30 people who attended this event.



pounds of recycling to a grand total of almost 1,800 pounds of waste.

The Trinity River Clean-Up was hosted by the US Forest Service and sponsored by TRRP, the District, and Caltrans District 2. This event was in commemoration of National Public Lands Day and the California Coastal Clean-Up.





Salmon Spawning Season

Contributed by the Trinity River Restoration Program

Fall along the Trinity River means changing colors, and not just the leaves on the trees. Salmon returning to their natal streams also take on new colors as all of their energy goes to spawning.

Throughout the spawning season, fisheries technicians and biologists are hard at work in the field collecting data and in

the office analyzing that information.

Specifically, the redd, or salmon nest, and carcass surveys are done on the Trinity River each year through a collaborative effort between members of the Trinity River Restoration Program:, U.S. Fish and Wildlife Service's Arcata Office, California Department of Fish and Wildlife, Hoopa Valley Tribal Fisheries Department, Yurok Tribal Fisheries Program,

Redds are nests dug in the stream gravel by salmon that have escaped the harvest and have returned to spawn in the river. Salmon redds can be spotted when they are freshly created in areas with good water clarity.

A mature redd can be identified by a round or oval area in the streambed showing freshly turned gravel, with a dip on the upstream end of the redd, excavated gravels covering the incubating eggs in the center, and fine materials at the downstream edge.

To count redds and carcasses, fisheries staff walk or float along sections of river that are divided into **reaches**, which refers to a portion of river being surveyed. Reaches are typically defined using previously mapped concentrations of redds with boundaries at distinguishable landmarks.

A visible redd identified during a survey on the Trinity River.

and the U.S. Forest Service Shasta–Trinity National Forest.

The surveys require a unique set of skills and experiences. Not only can it be hard for the inexperienced eye to spot redds, it also requires the ability to distinguish old, previously counted redds from newly dug redds. All while meticulously recording the data with GPS units and geo-referenced software.

Prior to conducting the surveys, the river is divided into multiple sections, or reaches, and each reach is generally

surveyed on a weekly or bi-weekly basis in order to gather data throughout the spawning season. This information is then combined with additional data which helps biologists accurately estimate the number of salmon and steelhead that have successfully returned from the ocean to spawn.

During redd surveys, two pairs of fisheries staff raft (and walk) through the pre-determined reaches to identify and record where nests have been made in the gravel of the river bed and collect information on salmon carcasses. Dead fish







are identified, sexed, inspected for monitoring tags, and measured. After the carcass information is collected, the fish are typically placed just out of the main river channel to avoid duplicate counting and to provide nutrients to the soil.

The survey crews distinguish previously counted redds from new, uncounted redds in several ways. A crew member tasked with spotting and marking redd locations carries a satellite-connected handheld tablet with the location of previously marked redds. Newly formed redds appear lighter in color than the undisturbed channel, and may remain discernable for a period of days to weeks. An adult fish near a redd is also a clue because Chinook salmon will stay by their redd to guard it from other fish.

Biologists have used redd surveys to estimate Chinook salmon escapement for decades, and have been completing them on the Trinity since 2002. The information collected is also useful for showing the location and abundance of where salmon are spawning in the river over time.

By using the known number of fish that are marked at California Department of Fish and Wildlife weirs throughout the fish migrating period, a ratio of tagged to untagged fish provides an accurate population assessment when combined with other data such as the salmon redd and carcass surveys.

Accurate estimates of the number of adult fish escaping harvest to spawn are essential for effective management and conservation.

Escapement refers to the estimated number of fish that actually returned to spawn. Some of these fish spawn in natural areas within the river, and others return to hatcheries. In 2017, an estimated 16,216 Chinook salmon returned to spawn within the Trinity River Basin; 10,583 were natural spawners and 5,633 were spawned at Trinity River Hatchery.



A Salmon can be seen guarding a redd

Trinity County



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

Resource Conservation District

Your Local Conservation District Established 1956

The Trinity County Resource Conservation District 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.

District Board Meetings

Third Wednesday 5:30 PM Open to the Public

30 Horseshoe Lane

The District's Vision

The District 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 District's Mission

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

PO Box 1450 Weaverville, CA 96093

District Office

Telephone

(530) 623-6004 FAX 623-6006

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The District's Board of Directors are Mike Rourke, Morgan Rourke, Patrick Truman, Colleen O'Sullivan, and Greg Lowden.

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

- Forest Land Productivity
- Watershed Improvement
- Water Supply and Storage
- Educational Program

- Erosion/Sediment Control
- Wildlife Habitat
- Soil and Plant Types
- Fuels Reduction

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