

WILDFIRE SEASON IS HERE

Are you and your property ready?

It is never too late to improve your defensible space, home hardening, and prepare for fire. The following tips and resources are a great place to start!

DEFENSIBLE SPACE

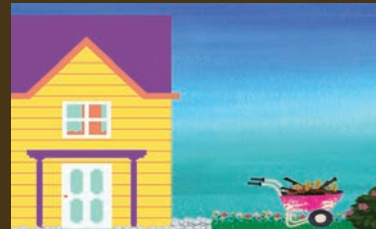
The buffer you create and maintain between your house and the wildland including your lawn, garden, and landscaping.

1. Remove dead plant materials, such as leaves, pine needles, and sticks from roofs and gutters.
2. Remove all vegetation and flammable materials from around and under decks.
3. Remove all dead plant materials from the first 30 feet around all structures.
4. Move firewood more than 30 feet away from structures.
5. Maintain and upgrade watering systems within the first 30 feet of your structure.

HOME HARDENING

Home improvements you can make to protect your house from wildfire.

1. Screen vents to reduce ignitions.
2. Enclose open eaves to protect attic spaces from embers.
3. Install screens over windows that open.
4. Replace fencing connecting to structures with noncombustible fencing materials



Tahoe Living with Fire's Home Retrofit Guide



ADDITIONAL RESOURCES

CAL FIRE's ReadyForWildfire.org



Trinity Journal Living with Wildfire Special Edition



UP-TO-DATE INFORMATION

WILDFIRE ACTIVITY

CAL FIRE Incidents

www.fire.ca.gov/incidents

Federal Incidents

www.inciweb.nwccg.gov

National Situation Map

www.maps.nwccg.gov

TRAVELING

Road Closures -

Caltrans QuickMap

www.quickmap.dot.ca.gov

National Smoke Map

www.fire.airnow.gov

North Coast
Smoke Advisories

www.ncuaqmd.org

TRINITY COUNTY



CAL FIRE Shasta-Trinity Unit
@CALFIRESHU

Trinity County Fire Safe Council
@TrinityFSC

Shasta-Trinity National Forest
@ShastaTrinityNF

Six Rivers National Forest
@SixRiversNF

Caltrans District 2
@Caltransdistrict2redding

Trinity County Office of
Emergency Services
@TrinityCoOES

North Coast Unified Air Quality
Management District
@ncuaqmd



Shasta-Trinity National Forest
@ShastaTrinityNF

Six Rivers National Forest
@SixRiversNF

CAL FIRE Humboldt Unit
@CALFIRE_HUU

CAL FIRE Shasta-Trinity Unit
@CALFIRESHU

Caltrans District 2
@CaltransD2

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Your Local Conservation District Working to Make Trinity County **FIRE SAFE**

Turn to Trinity County RCD for fire and fuels work on your property
Trinity County Resource Conservation District can help increase
your community's wildfire resilience and forest health!

As a not-for-profit organization, Trinity County RCD provides grant-funded
fuel reduction services free of charge to landowners within specified treatment areas.

Fuel reduction crews are also available for private hire through our countywide
fee-for-service program. Contact our Forest Health staff to get expert consultation and
price estimates for your project.

Trinity County RCD has reduced fuels on thousands of acres of private and public lands



Before Fuels Reduction



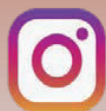
After Fuels Reduction

Trinity County RCD is currently working to implement projects proposed in the
Trinity County Community Wildfire Protection Plan (CWPP), funded by CAL FIRE.
You can view the 2010, 2015, and 2020 updates of the Trinity County CWPP on firesafetrinity.org.

*The Trinity County RCD is a non-regulatory special district of the state, solely funded by grants and fee-for-service
agreements. We are a proud member and coordinator of the Trinity County Fire Safe Council, which is funded through
Trinity County Title III and the California Fire Safe Council.*

*The Trinity County Fire Safe Council meets on the 4th Thursday of each month at 1pm.
Meeting details can be found on Trinity County Fire Safe Council Facebook and firesafetrinity.org.*

For more information on Trinity County RCD:



@trinityrcd



@TrinityRCD



tcrd



Trinity County RCD



Environmental Education with Local Youth

The Trinity County RCD Education & Outreach team made new strides this spring to provide environmental programming to students in the classroom. These place-based educational programs aim to teach kids about our local nature and inspire environmental stewardship.

STEM Career Day, January 2021

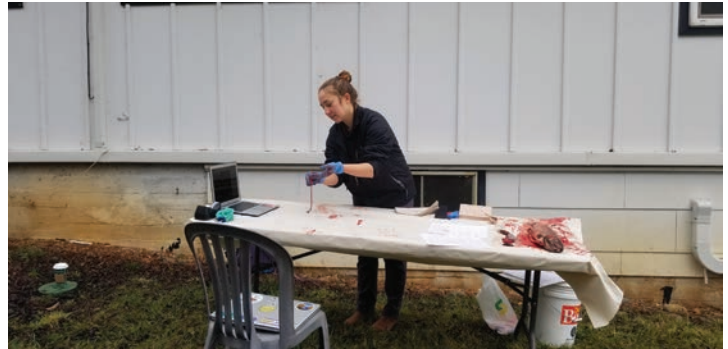
This annual event organized by Shasta County Office of Education serves 9th grade students across the North State. This year, the event was held virtually and Trinity County RCD participated with an engaging salmon dissection presentation to spark interest in natural resources. Staff also discussed careers in GIS, Information Technology, and Environmental Education with students offering ample space for questions. The event was a huge success!

Lessons with Students, May 2021

Staff led a series of environmental education lessons to 3rd & 4th grade students at Lewiston Elementary School, including activities that inspired kids to discover new things outdoors through observation, and adventure into the world of salmon anatomy through dissection! Staff also led an active salmon migration game with Lewiston Elementary School and students from the Douglas City After School Program. In the game, students pretended to be salmon, avoiding predators and obstacles on their migration from the Trinity River, to the ocean, and back. All of the lessons allowed kids to get outdoors during the day and learn while having fun!

River Day, June 2021

Trinity County RCD and Trinity River Restoration Program staff led a day of outdoor education with students from Trinity Center Elementary School! The event was held on lower Swift Creek and consisted of aquatic macroinvertebrate collecting, fish printing, games to learn about habitat, and exploring science through observations.



Maya Williams dissects a salmon virtually at the STEM Career Day in January



Students from Douglas City After School Program play a salmon migration game



Lewiston Elementary Students learning about salmon anatomy with a live dissection



Trinity Center Elementary School students collect and identify aquatic macroinvertebrates in Swift Creek

Environmental Education Week

If you follow Trinity County RCD on social media, you may have noticed the environmental education takeover this spring! Between April 19th and 23rd, fun facts, tips, and activities were released every day in honor of National Environmental Education Week, with the goal of educating the public and inspiring environmental stewardship.

All of the resources from Environmental Education Week can be found at tcrd.net/eb11. You can also follow Trinity County RCD on Facebook (@TrinityCountyRCD), Instagram (@trinityrcd) and Twitter (@TrinityRCD) for more educational content in the future!

Macro Monday



A graphic inspiring ways you can protect small organisms

Watershed Wednesday



Tips to protect our water resources

How well do you really know the Trinity River Watershed?



Test your knowledge of the Trinity River Watershed and its history! Maybe you'll even learn a little along the way.

TAKE THE QUIZ

A fun, educational quiz about the Trinity River Watershed

Aquatic Macroinvertebrates and Stream Health



A Trinity County Nature Series video that teaches you how to collect macroinvertebrates and analyze stream health

Interpretive Self-Guided Nature Hikes



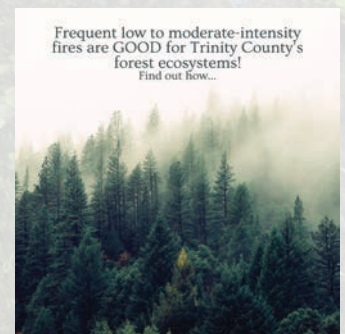
Two interpretive, self-guided nature hikes featured wildflowers, trees, and other natural highlights in the weaver basin

Native Plants Tuesday



Examples of posts featuring the best native plants for pollinators and worst invasive plant species in Trinity County

Fire Ecology Friday



Posts highlighting the importance of fire in healthy forests and fire adapted ecosystems

Trinity County RCD through the GIS lens

Trinity County RCD staff accomplish a diverse set of natural resource objectives with focuses on native plant restoration, forest and watershed health, fuels reduction, road inventories, educational programming with students, and much more. Cross-cutting all of Trinity County RCD's programs is Geographic Information Systems (GIS), which put simply is anything that involves maps, mapping, or geospatial analysis. GIS is an essential tool in the natural resource world in every step of a project from start to finish.

Knowing where to implement projects is one of the first steps in natural resource work, and GIS is used extensively across Trinity County RCD in the planning phases. In general, maps that show land cover, vegetation types, and ownership help our staff identify where certain projects could be focused, and if crews will need special permissions to access the land. However, different programs utilize GIS to accomplish specific goals.

The road-related sediment reduction program focuses a significant amount of work on culverts to restore roads and reduce erosion. Improperly sized culverts restrict the full capacity of the streams from safely running underneath the road, resulting in increased erosion of roads and streams. GIS is widely used to calculate the watershed acreage above a culvert, to make sure the structure will be able to handle a 100-year flow event. Stacked culverts are also identified to ensure smaller culverts are always placed above larger culverts heading down a hill. If culverts are deemed improperly sized based on GIS data, those will be added to the list of potential project sites for upgrading once funding becomes available.

In the past year, two major plans were completed by the Trinity County RCD that involved significant mapping of community input. In the Trinity County Active Transportation Plan, school officials and the public identified locations for crosswalks, signage, and bike paths to allow kids to get to school safely. In the Community Wildfire Protection Plan, community members from across the county identified areas that needed defensible space improvements, fuel breaks, or evacuation route upgrades in the event of a fire. These projects were all identified on maps and input using GIS. In addition, GIS has been used to model fire behavior and identify high risk areas so staff can make informed decisions about what areas to prioritize for fuel reduction. After a major fire, like the recent August Complex, burn-severity maps help staff target the worst burned areas for restoration.

GIS is a main component of field data collection utilized by every crew at Trinity County RCD. There are a number of data-collecting applications and tools that staff use and they all incorporate geospatial data to keep track of the work that's being done. For rare plant surveys, Trinity County RCD



In 2019, members of the Big Bar, Big Flat, and Del Loma communities marked projects on maps to be prioritized in the 2020 CWPP update

Trinity County RCD through the GIS lens, cont.

staff take GPS points to mark what species are found, their population density, and phenology. To identify noxious weeds for treatment, GIS data can inform what areas or plants should be prioritized. Forest Health crews completing fuel reduction projects actively track their progress in the field. Roads crews conducting road inventories take data on road features and the state of culverts. Data that is georeferenced allows natural resource professionals to return to a site later for restoration, treatment, or simply before and after comparison.

After a project is completed, maps are an essential tool for reporting and outreach. Trinity County RCD relies on grant funding to complete natural resource conservation objectives and maps are a great way to convey to grantors clear goals beforehand, and what has been accomplished after. Staff have made maps to fulfill educational and outreach

objectives as well, including of the Trinity River Watershed to show natural, historical, and recreational hotspots. Most recently, two self-guided nature hike maps were made for trails in the Weaver Basin to inspire people to get outside and learn about the local flora. In publications such as the Weaverville Community Forest (WCF) Strategic Plan Update, 11 maps covering natural features, fire information, and recreation, inform organizations and community members what kinds of values the WCF has and where future management should be focused.

In nearly every natural resource project at the Trinity County RCD, maps and mapping are vital to planning, implementation, and outreach. Whether we are reducing fuels in the forest, surveying for invasive plants, restoring mountain roads, or trying to engage the local communities, we could not do our jobs without GIS.

Trinity County RCD is honored to present the recipients of the 2021 Natural Resources Scholarship!

Tesla Ehlerding

Tesla is from Weaverville, where she has been involved in a number of athletics, most notably swimming. She is a competitive and awarded individual swimmer, as well as a respected leader among her fellow athletes. Tesla has carried herself with resilience, determination, and focus throughout her time at Trinity High School. She has been a committed member of the Future Business Leaders of America, where she has held a number of local leadership roles. Tesla will be pursuing higher education in Engineering in the fall.



Vrai Coty

Vrai Coty lives in Hayfork where he has learned to appreciate the importance of community, agriculture, and natural resource conservation. Vrai loves to hike in the Trinity Alps, raft and swim in the rivers, and engage with his community. He has participated in the Future Farmers of America program for the past four years where he was able to learn and grow as a leader. Vrai is graduating from Hayfork High School and plans to attend Butte Community College in the fall to pursue a career as a firefighter and arson investigator. He hopes to protect people in communities, like Hayfork, from devastating wildfire.

Congratulations Vrai and Tesla! We wish you luck on all future endeavors.

Weaverville Community Forest Strategic Plan Update

The Weaverville Community Forest (WCF) Steering Committee published the 2021-2028 WCF Strategic Plan update earlier this year. The Plan was updated over the course of the past year and a half with ample opportunity for community input and review. Four objectives were identified that will help to guide management of the WCF for the benefit and enjoyment of the community. Each objective includes recommended guidelines to work toward desired outcomes identified by the Steering Committee.

- 1. Collaborative Decision Making:** The Strategic Plan seeks to increase community participation in the management of the WCF. Additionally, the “Responsible Agencies” (Bureau of Land Management, US Forest Service, and Trinity County RCD) are tasked with improving communications within their organizations regarding the WCF and Steering Committee.
- 2. Responsible Forest Management:** The Strategic Plan suggests various activities to achieve a healthy forest, encompassing topics from wildlife to ecosystem resilience in the face of natural disturbance. As an example, some forest management goals include managing fuel to reduce likelihood of wildfire, enhancing aesthetic quality of forested areas without sacrificing forest health, increasing streamflow in the Weaver Basin, and maintaining local economic benefits by providing timber to Trinity River Lumber Company.
- 3. Consistent Education, Demonstration, and Engagement Opportunities:** The Strategic Plan outlines opportunities to create learning experiences for all ages using the WCF as a “living classroom” and field trip destination. One goal is to improve WCF engagement with local schools to get more students in the forest learning about the natural environment and potential natural resource management career paths. Another priority is to provide quality, place-based outdoor education for adults, including demonstrations of various forest management techniques for landowners and managers.
- 4. Accessible Community and Cultural Use:** The Strategic Plan addresses recreational opportunities as well as cultural uses of the WCF. Goals here include increasing accessibility and awareness of Cultural opportunities including gathering edible or medicinal plants, wildfire viewing, and fishing. Maintenance and improved signage are also prioritized. Additionally, the Strategic Plan advocates for continued exploration of the best ways to manage group campgrounds and picnic areas, and to work with OHV users while mitigating environmental and community impacts.



A prescribed burn in the WCF



Youth engaging in outdoor education programs in the WCF



Improved signage is a main priority in the WCF Strategic Plan Update

To learn more about the WCF or get involved, please reach out to Amelia Fleitz at the Trinity County RCD [afleitz@tcrd.net; (530) 623-6004 ext. 208] or check out tcrd.net/wcf.

Hayfork Pollinator Project

In March of 2021, staff from the Trinity County RCD and the Watershed Research and Training Center installed 20 *Asclepias speciosa* (showy milkweed) plants in a specially-prepared plot in Hayfork. The site had been tarp-solarized for a year to eliminate yellow starthistle seedbank as showy milkweed is not able to compete against invasive weeds and non-native annual grasses that plague most disturbed soils. Prior to this milkweed planting, nearly two hundred herbaceous and woody plants were previously installed on the same lot of county land adjacent to Hayfork Creek just north of Hayfork High School. Plant species were selected for hosting native pollinating insects in larval stages, providing abundant nectar for foraging adults, and for providing desirable plant materials for tunnel-nesting native bees.



A bed of showy milkweed planted along Hayfork Creek

Milkweeds are the exclusive host of the monarch butterfly, which is now included on the California Department of Fish and Wildlife's Terrestrial and Vernal Pool Invertebrates of Conservation Priority List. Monarch butterflies are also identified as a Species of Greatest Conservation Need in California's State Wildlife Action Plan. Here are the other species planted and the invertebrates they support:

- *Rubus leucodermis* (white bark raspberry). Numerous beneficial insects.
- *Lupinus albifrons* (silver bush lupine). Host to butterflies: arrowhead blue, northern cloudy-wing.
- *Symphoricarpos albus* (snowberry). Numerous beneficial insects.
- *Sambucus nigra ssp. caerulea* (blue elderberry). Native bees, predatory insects, hummingbirds. Host to elderberry longhorn beetle.
- *Ceanothus cuneatus* (buck brush). Native bees, predatory insects. Host to butterflies: spring azure, echo blue, pacuvius duskywing, California tortoiseshell, pale swallowtail, hedgerow hairstreak.

- *Ceanothus integerrimus* (deer brush). Same as buck brush, above.
- *Ribes roezlii* (Sierra gooseberry). Zephyr angelwing (butterfly), hummingbirds, native bees. Host to butterflies: tailed copper, hoary comma, oreas comma.
- *Salvia sonomensis* (Sonoma sage). Native bees, hummingbirds, butterflies.
- *Lonicera hispidula* (pink honeysuckle). Bumblebees, hummingbirds.
- *Eriophyllum lanatum* (woolly sunflower). Native bees. Butterflies: Gorgon copper.
- *Rosa californica* (California wild rose). Native bees, bumblebees, butterflies.
- *Amelanchier alnifolia*, (service berry). Many beneficial insects. Host to Weidmeyer's admiral (butterfly).
- *Cercis occidentalis* (western redbud). Native bees, bumblebees.
- *Eriogonum fasciculatum* (California buckwheat). Native bees, predatory insects. Host to butterflies: Mormon metalmark, bramble hairstreak, Comstock's hairstreak, Bernardina dotted-blue, small dotted-blue, Acmon blue, lupine blue.

While the western monarch has faced a steep population decline in the last two years, the best way to support remaining butterflies with vegetation is to promote or provide late season nectar sources for the fall migrating adults. Efforts to de-fragment the breeding habitat is also especially helpful. Please check out citizen science applications such as Monarch Joint Venture and Western Monarch Milkweed Mapper to get involved! Contact Kaety Howard at Trinity County RCD (khoward@tcrd.net) to learn more.



A young showy milkweed plant

Rotary Screw Traps for Fish Population Monitoring

Contributed by James Lee, Science Coordinator,
Trinity River Restoration Program

If you enjoy spending time in our local rivers and streams, sooner or later you'll see a rotary screw trap at work. Rotary screw traps are large, floating machines designed to safely catch young salmon and steelhead as they swim downstream to the ocean (Figure 1).

Juvenile salmon and steelhead tend to travel downstream along the riverbank, just under the water's surface when they head to the ocean. Rotary screw trap operators take advantage of this by anchoring the traps along the water's edge. Water and fish flow through the cone of the trap (Figure 2), causing the cone to rotate. The rotation makes a distinctive sound, not unlike a windmill, and the motion activates a cleaning mechanism which separates the debris that enters the trap from the fish. The fish are deposited into a live box at the downstream end of the trap (Figure 3).

Fishery biologists use rotary screw traps to take a sample of the population of fish in a stream, checking the traps daily while they are in use. All fish are identified and counted, and a subset is measured and weighed (Figure 4). The total number of fish captured over the sampling season is used, along with statistical computations, to estimate the total number of juveniles produced.

Why is this number important to fishery biologists on the Trinity River?

Previous studies have determined that salmonid populations on the Trinity River are limited by the amount of juvenile rearing habitat. Restoration work on the Trinity aims to restore the amount of rearing habitat available to increase the survival of juvenile fish in the river, and subsequently, the number of outmigrating juveniles. The lengths and weights of sampled fish allow scientists to assess if juveniles are growing satisfactorily while they are in freshwater. It is also important to monitor when the majority of the outmigrating population passes through the screw trap site, to see how well river flows are providing cues to tell the fish to head to sea at the right time.

There are two rotary screw traps on the mainstem Trinity River which have been in operation for several decades. The one photographed for this article operates at Pear Tree Gulch, near Junction City and just upstream of the confluence of the North Fork Trinity River. The other is located near Willow Creek, just upstream of the Hoopa Valley Indian Reservation. Both traps operate about five days each week for most of the year except during high water periods in the winter. The traps are operated



Figure 1. A rotary screw trap fishes the Trinity River downstream of Junction City

Trinity River Restoration Program, cont.



by the Hoopa Valley Tribe, Yurok Tribe, and US Fish and Wildlife Service, with most of the funding provided by the US Bureau of Reclamation. Population estimates from the screw traps show that naturally-produced Chinook Salmon smolts have increased substantially since restoration work began on the Trinity. Approximately twice as many smolts are being produced for each spawner now, as compared to the 1980's and 1990's.

Information about fish growth and outmigration timing is also used as the basis for adaptively managing dam releases to the Trinity River.

Thanks to Hoopa Valley Tribal Fisheries employees Chad Martel, Jessie Yanez, and David Ruiz for their assistance with this article.

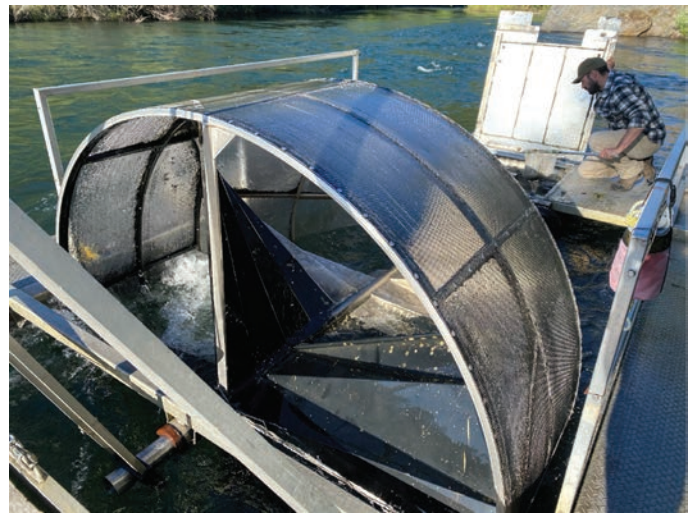


Figure 2. The cone rotates, separates fish from debris, and deposits fish in the live box at the trap's downstream end



Figure 3. A view of the live box with the day's catch of juvenile Chinook Salmon, steelhead, and Klamath River lampreys



Figure 4. Hoopa Valley Tribal Fisheries Department biologists identify, measure, and weigh a juvenile steelhead that was captured in the rotary screw trap

Trinity County RCD
P.O. Box 1450
Weaverville, CA 96093



Resource Conservation District

Your Local Conservation District

Established 1956

Trinity County RCD Board Meetings

Third Wednesday
5:30 PM
Open to the Public

Trinity County RCD Office

30 Horseshoe Lane
PO Box 1450
Weaverville, CA 96093

Telephone

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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 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.

Mission Statement

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

The Trinity County RCD of Directors are :

Greg Lowden, Heidi Carpenter-Harris, Josh Brown, Kent Collard, and Mike Rourke.

The Trinity County RCD is landowners assisting landowners with conservation work.

The TCRCD can guide the private landowner in dealings with state and federal agencies. The TCRCD 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

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