

Roads, Rain and Runoff

Most Trinity County residents welcome autumn rains after a long, dry summer season. However in those times when the winter rains keep coming relentlessly and relief turns to anxiety, poorly constructed rural roads can unleash vast amounts of soil and rock erosion and cause substantial road damage. In our mountainous terrain, this eroding debris washes down slope, ultimately landing in streams as sediment. Too much sediment from erosion pollutes streams, creating harmful stream conditions, impacting the health of fish and other aquatic life.

Local organizations also have a wealth of knowledge and resources regarding road construction and maintenance, including:

Natural Resource Conservation Service - provides technical assistance and sometimes financial assistance through a cost-share program. 623-3991.

Five Counties Salmonid Conservation Program - conducts road upgrade and maintenance work in five counties of northern California, including Trinity County. 623-3967, www.5counties.org.

Trinity County Resource Conservation District - works primarily on public forest road upgrades and decommissions, but also offers consultations for private property owners. 623-6004, www.tcrd.net.

The Watershed Research and Training Center - provides advice and technical assistance to landowners. 628-4206, www.thewatershedcenter.com.

Also in this issue: 2013 Salmon Festival



check it out on page 6...

Rural roads built with little or no design knowledge, along with poorly maintained roads, are typically the greatest human caused source of sediment pollution in our watersheds. Roads intercept rainwater sheeting over a hillside. If they aren't built and maintained properly, that water can become concentrated – for example, a long ditch carrying a lot of water – and cause problems such as:

- Undermining the cutbank, causing sediment to fall into the ditch and into the water, which ends up in our streams.
- Overwhelming a culvert, which can plug the inlet and possibly saturate the road fill, causing the road fill to blow out and release a large amount of sediment.

Nearly every road “problem” presents a unique set of circumstances and requires a specialized “fix.” If your new neighbor above your property builds a poorly-designed road which then creates a landslide onto your property, you will need a different set of solutions than if you simply have recurring potholes in your road. Both problems can be fixed but the best solution consists of prevention, planning, and expertise.

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Students Connect with Outdoor Classes

Chemistry experiments and dissecting fish eyes topped the list of the most favorite activities for students participating in environmental education in September. A total of 85 students from four schools attended two different outdoor learning events.

Trinity Preparatory Academy’s (TPA) sixth grade students attended their annual Environmental Camp at Bar 717 Ranch outside of Hyampom in mid-September. Study topics included water quality, birds, soils, stream ecology and dynamics, archery, journals and painting. While studying water quality, students were introduced to testing for dissolved oxygen content using a simplified chemistry kit. Several said they liked “doing the science experiment.”

This three day experience is made possible by Trinity County Office of Education, TPA-sponsored fundraisers, and sponsorships from the Trinity County Resource Conservation District, California Department of Conservation and Trinity River Restoration Program.



Searching for aquatic life in Hayfork Creek at Environmental Camp.



Students at Environmental Camp filled free time with lawn games and crafts.



Coffee Creek School hosted River Day in late September with students from Trinity Center and Douglas City joining the creekside sessions. Students learned about water quality, stream characteristics, aquatic insects, the salmon life cycle and fish anatomy, all on the banks of Coffee Creek. The fish anatomy and dissection station was popular with most students and attracted a fair number of “meat bees” as well.



Students used nets to catch aquatic insects in Coffee Creek and then used a “key” to determine which species they had caught.

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The fish dissection station was “great” and “gross” all at the same time.

Agencies and Acronyms: Reading the Alphabet Soup

A significant number of state, federal and local agencies and entities reside in Trinity County. The ones listed here engage in some form of conservation and watershed restoration work to protect and enhance our abundant natural resources. Cooperation, coordination and partnerships between these organizations provide leverage to increase the amount of work that can be completed in the county. Following is a list of a few of these, including their acronyms:

Local entities:



Trinity County Resource Conservation District (TCRCD) formed in 1956 as a special district of the state of California. It is governed by an appointed board of directors and receives grant funding from state, federal, local and non-governmental entities. TCRCD's mission is to assist people in protecting, managing, conserving, and restoring the natural resources of Trinity County through information, education, technical assistance and project implementation programs.



The Watershed Research & Training Center (WRTC) Since 1995 the WRTC has been working to revitalize the economy of Hayfork, formerly dependent on the timber industry. The mission of the 501(c)3 non-profit is to promote a healthy forest and a healthy community. The WRTC focus is to rebuild the local economy based on an ethic of land stewardship and restoration.



Northwest California Resource Conservation and Development Council (NWCRC&D) is a non-profit 501(c)3 corporation sponsored by County Board of Supervisors and Resource Conservation Districts representing the counties of Trinity, Humboldt and Del Norte. Its mission is to enhance the ability of area residents to develop diverse opportunities through utilization of available resources.



The Five Counties Salmonid Conservation Program (5C) formed in 1997 with Del Norte, Humboldt, Mendocino, Siskiyou, and Trinity Counties collaborating in response to the federal listing of coho salmon as a threatened species. 5C is administered by the NWCRC&D. The primary 5C goal is "to strive to protect the economic and social resources of Northwestern California by providing for the conservation and restoration of salmonid populations to healthy and sustainable levels and to base decisions on watershed rather than county boundaries."



Trinity County (TC) government's mission is to serve the public with integrity in an effective and efficient manner in order to create and sustain a safe, healthy, and productive environment by partnering with citizens, business and governmental agencies; and supporting the responsible management and utilization of the county's natural resources in a sustainable manner while conserving the natural environment for present and future generations.



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 established a proactive coordinated approach to address the risk of catastrophic fires on both private and public lands. Created by the TCFSC, the Trinity County Community Wildfire Protection Plan (CWPP) guides the implementation of forest health projects.

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Agencies and Acronyms: Reading the Alphabet Soup, continued



Weaverville Community Forest (WCF) is an award-winning partnership between the BLM, USFS and TCRCD to manage 13,000 acres of federal land as a community forest. Using a federal contracting tool called Stewardship Contracting, federal partners have entered into ten-year stewardship contracts with the TCRCD to actively manage these lands for forest health objectives. This forest is located within the Weaverville Basin.

State entities:



California Department of Forestry and Fire Protection (CAL FIRE) oversees enforcement of California's forest practice regulations, which guide timber harvesting on private lands. CAL FIRE encourages and implements fuels management projects to reduce the threat of uncontrolled wildfires. CAL FIRE promotes conservation and the importance of trees and forests.



California Department of Fish and Wildlife (formerly "Department of Fish and Game") (CDFW) has the mission to manage California's diverse fish, wildlife, and plant resources, and the habitats upon which they depend, for their ecological values and for their use and enjoyment by the public. CDFW manages the fish hatchery in Lewiston.



The Department of Water Resources (DWR) is responsible for managing and protecting California's water. DWR works with other agencies to benefit the state's people, and to protect, restore and enhance the natural and human environments.



State Water Resources Control Board (SWRCB) mission is to preserve, enhance and restore the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations. The five-member State Water Board allocates water rights, adjudicates water right disputes, develops statewide water protection plans, establishes water quality standards, and guides the nine Regional Water Quality Control Boards located in the major watersheds of the state. The North Coast Regional Water Quality Control Board serves Trinity County.



University of California Cooperative Extension (UCCE) provides a bridge between local issues and the power of UC research. In Trinity County, staff focus is on the 4-H Youth Development Program, nutrition and healthy lifestyle education through CALFresh, and the Master Gardener program. UC Advisors provide programs on forestry, water conservation, livestock, pest management and food safety.

Federal entities:



Bureau of Reclamation (USBR) is a federal agency under the US Department of the Interior, which oversees water resource management, specifically as it applies to the oversight and operation of the diversion, delivery, and storage projects that it has built throughout the western United States for irrigation, water supply, and attendant hydroelectric power generation. USBR operates the Trinity, Lewiston and Buckhorn Dams and the Trinity Power plant.

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US Fish and Wildlife Service (USFWS) is a bureau within the Department of the Interior whose mission is to work with others to conserve, protect and enhance fish, wildlife and plants and their habitats for the continuing benefit of the American people.



Trinity River Restoration Program (TRRP) is a multi-agency program created by the Record of Decision (ROD) in 2000, which outlines the plan for restoration of the Trinity River and its fish and wildlife populations. The Program is administered by two US Department of Interior agencies: the Bureau of Reclamation and the US Fish and Wildlife Service. Other partner agencies include California Resources Agencies (CA Departments of Water Resources and Fish and Wildlife), National Marine Fisheries Service, US Forest Service, Hoopa Valley Tribe, Yurok Tribe and Trinity County.



United States Forest Service (USFS) Established in 1905, the Forest Service is an agency of the US Department of Agriculture and manages over 70% of the land in Trinity County. Trinity County has parts of three National Forests within its boundaries: Shasta-Trinity, Six Rivers and Mendocino National Forests.



Bureau of Land Management (BLM), a US Department of Interior agency, manages 15.2 million acres of public lands in California - nearly 15% of the state's land area. BLM California also administers millions of acres of subsurface mineral estates. The BLM's multiple-use mission is to sustain the health and productivity of public lands for the use and enjoyment of present and future generations. The local office, BLM-Redding, manages 250,000 acres of public land within Butte, Shasta, Siskiyou, Tehama, and Trinity Counties.



Natural Resources Conservation Service (NRCS), an agency of the US Department of Agriculture, was originally established by Congress in 1935 as the Soil Conservation Service. NRCS has expanded to become a conservation leader for all natural resources. NRCS works with landowners through conservation planning and assistance designed to benefit the soil, water, air, plants, and animals that result in productive lands and healthy ecosystems. The Trinity County NRCS office is located in the Weaverville Tops Supermarket shopping center.



Kevin Cahill (l) and Alex Cousins (r) installing one of the four wetland gauges in the Weaver Basin Wetlands. Pat Frost assists in the background.

Wetlands Benefit from New Partnership

The Weaver Basin Wetlands on Industrial Park Way, offer new teaching tools thanks to a recently-formed partnership with the Shasta College Foundation.

Staff gauges, which measure water depth, were installed in late September.

Pat Frost, biology teacher at the Trinity Campus of Shasta College, proposed the staff gauge project to the Foundation's Trinity County Board of Regents with an eye toward using the wetlands for hands-on college biology classes. Weaverville Elementary School currently uses the wetlands as part of the fourth grade curriculum.

Members of the local regents joined the TCRCD, Five Counties Salmonid Restoration Program and Foundation staff to install the gauges, which were purchased by the Foundation.

2013 Salmon Festival



California Department of Fish and Wildlife employees volunteered to be "slimed" by children tossing sponges.



Free use of children's costumes during the Salmon Festival sparked imaginations.



Making fresh apple cider was a family affair.



Water conservation was the theme of the 5C's educational display.



Timber Ridge was one of the bands performing live music at the festival.



A future kayaker checking out the gear.



Father and son had a good time at the festival.



Cute as a bug's ear!



Susan Cousins (l) and Carol Fall (r) show off the bounty grown at the Young Family Ranch.

Artists of all ages made fish prints to celebrate salmon.



This Cub Scout tried on the eagle costume.



A lively atmosphere defined this year's Salmon Festival, which celebrated the return of the salmon to their ancient spawning grounds in Trinity County.

The Highland Art Center Meadow in Weaverville came alive on October 12 with five bands performing engaging music from 10 a.m. until after closing time.

The day opened with a traditional

tribal blessing by Sonny Hayward of the Nor-Rel Muk Wintu. The event offered informational displays, children's activities, local farm produce, fresh cider, artist's wares and plenty of tasty food. This family-friendly event drew hundreds of people to historic downtown Weaverville, with many observers commenting that it was better attended than any in recent memory.

Across the street, the 6th Annual Dutch Oven Cook-off at the Jake Jackson Memorial Museum claimed the day a success as it offered samples to a sell-out crowd.

Mark your calendars for next year's festival – October 11, 2014.



Another future actor trying on one of the children's costumes.

Roads, Rain and Runoff, continued

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Some select prevention actions include:

- Be informed of the serious short- and long-term impacts caused by driving heavy equipment on your road – especially if it's unpaved.
- If heavy equipment is used, hire a knowledgeable and experienced contractor.
- Schedule construction and maintenance work for the dry season.
- Do not leave exposed soils unprotected over the rainy season. Cover all graded/disturbed roads with gravel and use grass seed and/or straw mulch as cover on any surface alongside the road that is exposed.
- Keep existing vegetation whenever possible. Plants provide the cheapest, most effective form of erosion control. But, do watch for invasive plants, which are a pest and reduce the quality of wildlife habitat in the area. For more information on identifying and tackling invasive plants, please visit: www.tcrd.net/noxious_weeds.htm
- Maintain existing water control features on your roads such as water bars, rolling dips, ditches, culverts, outsloped sections, etc. If none of these features exist on your road, chances are you need to install new erosion control features.
- Changing the shape of the road can dramatically reduce maintenance requirements/costs and can also reduce erosion. "Outsloping" the road surface allows water coming down the hillslope to continue naturally, uninterrupted by the road.
- Slow down water runoff and catch sediment where muddy water leaves the road by building simple check dams out of rocks, logs, brush, etc.

Road building in mountainous terrain requires specialized knowledge and experience. Few "Do-it-Yourselfers" possess the expertise to complete a well designed road that does not cause major erosion. Well built roads produce much less erosion and also have the added benefits of costing much less in annual maintenance and being easier and safer to drive on in wet weather.

UC Davis offers a free, downloadable guide packed with road-related information. It can be downloaded at:

Rural Roads: A Construction and Maintenance Guide for California Landowners, <http://anrcatalog.ucdavis.edu/pdf/8262.pdf>

This guide and others and more resources are available at the University of California Rural Roads Webinar Resources webpage: http://ucanr.edu/sites/forestry/Webinars/Rural_Roads_Webinar_Series/Rural_Roads_Webinar_Resources/



This road was constructed with no culvert pipe to let the water pass. Therefore the stream has cut down through the road fill, eroding the fill and contributing sediment pollution to the stream.



Rolling dips are designed to catch runoff and direct it away from the road surface into a carefully selected location.

Photo: 5 Counties Salmonid Conservation Program.

Article contributed by Josh Smith, The Watershed Research and Training Center.

Burnt Ranch All Lands Pilot Project

A few Burnt Ranch landowners benefited from the kick-off of the All Lands Pilot Project in September when Trinity County Resource Conservation District (TCRCD) crews completed chipping of woody debris on their property at no cost.

The remainder of the fuels reduction work will take place during spring 2014.

The purpose of the project is to reduce the risk of catastrophic wildfire by increasing fire resiliency in and around the Burnt Ranch community on both public and private lands.

With funding provided by a grant from the Cooperative Fire Program of the U.S. Forest Service, Department of Agriculture, Pacific Southwest Region, through the California Fire Safe Council, there is no charge to landowners for work done by TCRCD crews as part of this project. The Natural Resource Conservation Service (NRCS) is also supporting this project.

The District will implement fuels reduction and chipping work on private property in the Burnt Ranch community with written permission from landowners.

If you would like more information, or are interested in taking part in this community project, please contact John Condon, TCRCD Project Coordinator, (530) 623-6004 or email: jcondon@tcrd.net.



This project made possible by the following:



South Fork Trinity River Events

Fall was a busy season in the South Fork Trinity River (SFTR) Watershed for events made possible through a grant from the California Department of Conservation. The Watershed Center and TCRCd worked together to provide fun and educational events including two public hikes, an elementary school field trip and the Second Annual Salmon Gathering.

The first of the “Explore Trinity!” hikes took place on September 28, with 18 people exploring the South Fork National Recreational Trail outside of Forest Glen. Another hike took place in conjunction with the Second Annual Salmon Gathering on November 2. Hikers sighted bald eagles and spawning salmon on the Wintun Flats trail in Hyampom on November second.

Students from Hyampom Arts Magnet and Hayfork Elementary Schools participated in a “Salmon Spawner” field trip on October 28. Two classes from Hayfork joined Hyampom’s students for the outdoor activities held on the banks of Hayfork Creek. Seventy students participated in the day-long excursion.

The Second Annual Hyampom Salmon Gathering drew more than 60 people to the Hyampom Community Center on the first Saturday of November. The public event offered information on the health of the SFTR Watershed. Discussion focused on the diminished spring-run Chinook salmon population and factors contributing to that decline. After the presentations attendees carpooled to fall-run Chinook spawning sites on the SFTR. As of November 2, the return of fall-run Chinook spawners was dramatically lower than observed at the first Hyampom Salmon Gathering in 2012. The dry weather may be just one contributing factor to this year’s lower return.



A group from the Salmon Gathering walk along the South Fork looking for spawners and redds (salmon nests). Photo: Piper McDaniel.



Fresh bear track on the banks of the South Fork seen during the November 2 hike.



Hikers starting out on the September 28 outside of Forest Glen.

District Manager's Corner

A Message from District Manager, Alex Cousins

When I began my career at the TCRCD I was given three pages filled with rows and columns of acronyms and definitions, including TCRCD. Thinking it was a joke, I looked through the list and found BLT, so I knew it was somewhat of a prank. As it turns out, the jargon used on a daily basis in our world of natural resource management and quasi-governmental and governmental agencies originates from these acronyms.

Fast forward five years and I can speak natural resource "acronym-ese" as fluently as anyone. But that only works when dealing with someone who also speaks this unique dialect. So we make attempts, when possible, to ensure that everyone knows what we are saying when we ramble off 'We had a TRWC meeting at the TRRP to discuss the South Fork CRMP'*. It gets even worse when an acronym is pronounced as a word (a backronym) like "Crimp" (CRMP).

Sending a clear message in "acronym-ese" doesn't always happen, so we thought it would be helpful to spell out the agency and organization acronyms and provide a brief description of their jobs. Take a look at the agencies listed in this newsletter and see if you recognize them and what they do, and maybe someone who works for them. Most of these organizations are located in Trinity County and work together on a variety of projects; each brings a unique set of skills and resources, either leading the effort or providing support.

I hope this article helps you make sense of these mysterious acronyms and what the organizations do. If you have any questions feel free to call or stop by the offices of the lettered business and ask what they are up to. Behind those letters are people who live in your neighborhood and work in our county.

* Translation: 'We had a Trinity River Watershed Council meeting at the Trinity River Restoration Program to discuss the South Fork Coordinated Resource Management Plan.' No joke.

Alex Cousins



Prescribed Burn Season Starts

Residents in the Weaver Basin may have noticed smoke on October 25 when the US Forest Service Trinity River Management Unit began a prescribed burn on 70 acres at Five Cent Gulch in the Weaverville Community Forest.

Prescribed burns are scheduled between October 2013 and May 2014 in several locations throughout Trinity County. The purpose of prescribed fire is to reduce the risk of catastrophic wildfire and enhance the quantity and quality of wildlife habitat. A controlled burn also releases predictable smoke emissions, whereas wildfires produce more uncontrolled emissions.

Before a torch hits the ground, specific weather conditions have to be present for the planned burn to take place. The weather must allow firefighters to manage fire growth and direction, and be favorable for good smoke dispersal.

For further information on this season's prescribed burns, contact Lara Graham, Fuels Planner, with the US Forest Service Weaverville Ranger Station at 623-2121.



October 25 prescribed burn on Five Cent Gulch creeps below the oaks.



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

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District Board Meetings

Third Wednesday
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TCRCD Office

Number One
Horseshoe Lane
PO Box 1450
Weaverville, CA 96093

Telephone

(530) 623-6004
FAX 623-6006

E-mail: info@tcrd.net

Internet: www.tcrd.net

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

The TCRCD Vision

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

The TCRCD Mission

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

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

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

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

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