Dubakella Grow Site Reclamation

On a sunny day in September, District crew members headed out to the South Fork Trinity River Watershed to work in the woods. But this work wasn't run-of-the-mill chipping and fuels reduction. It was work to clean-up a trespass marijuana grow site on US Forest Service land.

In June 2016, this large trespass site was discovered on the Shasta-Trinity National Forest. Named the Dubakella site, it lies in the Salt Creek Watershed. Over 15,000 plants were removed from an area of just under three acres.







Dubakella Cistern before, during and after.

Research scientists from Integral Ecology Research Center (IERC) were brought into the site to document the magnitude of impact that this trespass grow had. During initial documentation of the site, an



estimated several thousand feet of irrigation line, numerous substantial water diversions, significant tree removal, hundreds of pounds of fertilizer and several containers of illegal and restricted use pesticides were recorded. The site was placed on a high-priority list for documentation and reclamation due to these factors, and correspondingly was placed as a site for long-term monitoring for potential legacy influences.

Under a grant from the California Department of Resources Recycling and Recovery (CalRecycle), TCRCD is able to work with IERC to clean up these blights on our forest lands. The Watershed Center, Trinity County Sheriff's Office and USFS are other partners who worked on this site. IERC also received funding through a Section 6 grant from the US Fish and Wildlife Service to the California Department of Fish and Wildlife.

Based on data gathered by IERC, reclaiming this site and removing the illegal cistern restored 11.25 million gallons of water to the watershed per growing season. Other totals from the site include: 430 pounds of fertilizer used at the site; 6.6 pounds of rodenticide; 1,540 pounds of trash removed and 1.88 miles of irrigation pipe removed.

Our crews worked hard as part of the team to clean up this mess. But every one of them said they felt good at the end of the day, knowing they helped clean-up our forest lands.



Crews wrapping up miles of irrigation piping.





The Young Family Ranch Board of Directors and the District's Board and staff would like to thank everyone who helped make the 2016 Brews and BBQ Fundraiser a success.

Our major sponsors – Tops

Market, Sierra Nevada Brewing Company and E. Clampus Vitus, Chapter 62 – make it possible to get the event started. But the event also owes it success to all of the local business and artists who donated items for the silent auction and the people who bid on those items, the individuals who volunteered their time, the Trinity County Sheriff's Auxiliary who staffed critical positions, the musicians who played to

the stars, and all of the people who came and enjoyed a beautiful evening at this iconic venue. Thank you! We look forward to doing it again in 2017!



October Spawning Day at Lewiston Hatchery



On Saturday October 22 about 30 people turned out for spawning day at the Lewiston Trinity River Hatchery.

Although salmon returns are still low, spawners were in the river, viewed in the fish ladder, and holding in the spawning pen.

Members of the public who came out for the free event had several different theories on why numbers are low, from the drought to over-fishing. Several families who attended the event were visiting from out of town, and all mentioned how much they enjoy the natural beauty of Trinity County.

This event was sponsored by the Trinity River Restoration Program.

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Trinity River Fish Hatchery

District Manager's Corner - Partners in Conservation

This organization – the Trinity County Resource Conservation District – is a workhorse. I've watched our staff make projects happen all season long and I can't be more proud of them. But just like a workhorse gets more done as part of a team, the District works as part of the local conservation team to reach our goals. We partner with federal, state and local agencies, non-profits and individuals throughout the county.

These partnerships represent more than just working relationships – they embody the sense of community that permeates this county.

Driven by the local desire to create on-the-ground improvements in our forests, the Trinity County Collaborative was instrumental in bringing in a \$550,000, three-year award from the Two Chiefs' Joint Landscape Restoration Partnership. This field season marked the first year of getting work done in our forests under this award.

Working with our non-profit partners at the Five Counties Salmonid Conservation Programs (5Cs) and the Watershed Research and Training Center (WRTC), the District supported and participated in a wide range of projects from sediment reduction work and trespass grow site clean ups, to training our field crew to be ready to provide support the next time we encounter a wildfire. WRTC is the local leader in prescribed burns and is an active supporter of the Northern

California Prescribed Fire Council, which receives funding from the California Klamath-Siskiyou Fire **Learning Network. The** partnerships here run deep and wide.

The District's partnership with the Bureau of Land **Management provides** reasonably priced firewood from the Weaverville



Community Forest. Our partnership with the US Forest Service provides a wide array of benefits to county residents - from chipping services to environmental education. CalFire has provided funding to keep our communities fire safe and Trinity River Restoration Program has provided funding to benefit our fish and wildlife.

All of these agencies, and the people who staff them, make the partnerships work. Because they want it to get done. And we want it to get done. That's what it's about - wanting to work together on a shared project with a shared goal. Because that's how partners in conservation make it happen. And that's how we get work done in Trinity County.







This year's Trinity River Salmon Festival saw a spike in attendance thanks to a new addition to the entertainment line-up: the Turtle Bay Exploration Park Live Animal Show. This educational show thrilled old and young alike. The festival also included an aquarium of live fish, art and craft activities, agency information, art and craft vendors, traditional smoked salmon by members of the Wintu tribe, and local squash and veggies for sale by the UC Master Gardeners. In a fun twist of serendipity, the animals from Turtle Bay were treated to the left over winter squash from the Master Gardeners' booth! This community festival would not be possible without the support and funding of the Trinity **River Restoration Program.**







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Sixth grade students from Hayfork Elementary School and Weaverville's Trinity Preparatory Academy attended environmental camp at Bar 717 near Hyampom in mid-September. HES students attended a one day field trip, while TPA students spent two nights and three days at camp. TCRCD receives funding from the Trinity River Restoration Program to create curriculum, find and coordinate volunteer presenters and teach at this Trinity County institution. The US Forest Service, Natural Resources Conservation Service, Watershed Center and local citizens all provide time and materials to make this camp memorable.















Weaverville Community Forest Firewood Sale

Affordable firewood for sale by the District was made available in November, through an event that took place last September. More should be available in January-February 2017.

The September 2015 Little Brown's Creek wildfire south of Weaverville along Highway 299 burned 35 acres on Bureau of Land Management (BLM) property holdings. Luckily, no structures were damaged and there were no personal injuries.

Those 35 acres happen to lie within the Weaverville Community Forest (WCF), a 14,000 + acre designated community forest which is the result of a stewardship agreement between the BLM, US Forest Service, and the District. The USFS also has holdings within the WCF.

The Firewood sale began in mid-November. It will continue into 2017, based on availability.

The TCRCD is the public face of the WCF. A central theme of the WCF is to improve forest health and fire-safe conditions, including improved resistance to wildfire. One of the desired outcome within the WCF strategic plan is to make firewood available to the community through forest health projects.

All revenues from the firewood sale help fund additional stewardship projects in the Community Forest, ranging from forest thinning and fuels reduction to trail construction and maintenance.

For more information about the firewood sale, check tcrcd.net or call 623-6004. Vouchers are for sale Monday -Thursday.



District Welcomes Ian Erickson

Ian Erickson joined the TCRCD in September, 2016 as the Revegetation Project Coordinator. Ian brings over five years' experience implementing restoration projects throughout northern California and the Pacific Northwest, having worked for such organizations as the City of Portland and the Sonoma County Water Agency. Most recently, Ian was involved with invasive species management projects in Oregon, including mapping, treatment and monitoring of noxious weed populations. His experience also includes advising vegetation management activities in riparian zones, developing planting plans, and conducting sensitive species surveys.

"It's an honor and a pleasure to work in such a beautiful environment, with a committed, thoughtful, and resilient community," he said. "I look forward to collaborating with our local, state, and federal partners on the natural resources issues facing Trinity County."



lan is excited to join the RCD team and explore the unique, diverse, and beautiful landscapes found within Trinity County. His favorite pastimes include backpacking, fishing, and gardening. Ian is an AmeriCorps alum, a Certified arborist, and holds a B.S. in Environmental Planning from Humboldt State University.

2016 Road-related Watershed Restoration Projects

The TCRCD roads department had a busy implementation season. Our goal is to reduce the connectivity of roads to stream crossings. By disconnecting watercourses from road networks and improving road drainage, sediment delivery to creeks is reduced, resulting in improved fish habitat.

We started our road work in mid-March of 2016 by finishing the River Complex Bare Area Emergency Response (BAER) project started for the US Forest Service last October; this area includes Ironside Mountain Road, Big French Creek Road, small connector roads and several roads near Denny Road. BAER projects are initiated after wildfires as an emergency watershed stabilization program used to respond to fire damage. The River Complex BAER included stream crossing improvements to protect the road network, installation of stand pipes to reduce culvert plugging, and a variety of other road improvements.

The District completes road work in the South Fork Trinity River Watershed every year, and this year was no exception. We started and completed road upgrades in the Plummer Creek Watershed in June, with funding from the USFS. In July a road decommissioning project, funded by the USFS Trinity County Resource Advisory Committee (RAC) and the



Before





During



After

California Off Highway Vehicle Commission, was completed in Red Mountain Creek. Other work included work in the Sims Fire area downstream of Hyampom with road upgrades, culvert replacements and one small decommissioning project. The Sims Watershed Restoration project was funded by the USFS. Our final project in the South Fork this season involved three road decommissions in the Prospect Creek Watershed, funded by the California Department of Fish and Wildlife and USFS.

The Trinity River Restoration Program funded two road improvement projects in the in the Weaverville basin this season. One on South Roundy Road, and the other on Blue Rock Road.







Sims watershed restoration work replaced undersized 24" corrugated metal pipe (top photo on right), with a 48" pipe arch.

The District also completed projects for the Bureau of Land **Management and Trinity PUD.**

Improving and upgrading roads lowers annual maintenance costs and proves economical in the long run. 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 and cause problems such as:

- Excessive sediment run-off.
- 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.

Trinity County property owners can also benefit from well-maintained roads on their property. Cost savings are guaranteed by doing it right the first time.

The TCRCD can assist landowners with recommendations and advice as funding allows.





Before and after construction of rocked rolling dip on Roundy Road to reduce erosion.

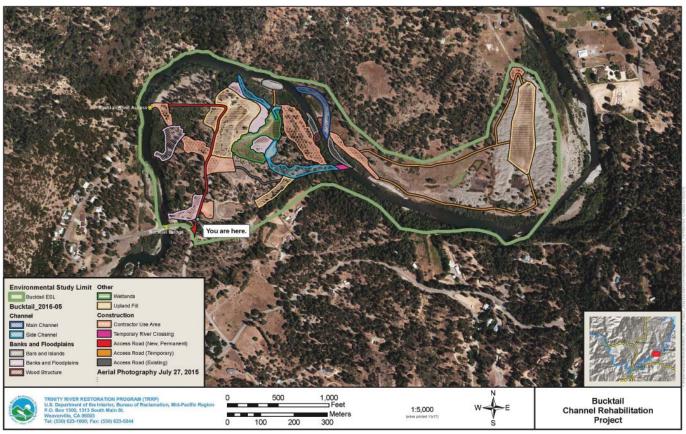
Applying Lessons Learned to Bucktail Rehab Project on Trinity River

During the summer of 2016, the Trinity River Restoration Program (TRRP/Program) undertook a major channel rehabilitation project upstream of Bucktail Bridge, near Lewiston. Two of our partner agencies, the Yurok and Hoopa Valley Tribes, constructed this project. The Program had previously done some work at Bucktail, but have since learned a lot about how channel rehabilitation can work with restoration flows to improve river functions. Based on our past experience, a much improved design was implemented this year at Bucktail.

Like all current TRRP projects, Bucktail includes a mix of features designed to both promote healthy river processes, as well as jumpstart restoration by directly creating habitat. These features were constructed with lessons that we have learned along the way. For example, two areas of floodplain lowering in the downstream area of the project

were constructed to be much more topographically, and thus ecologically, complex than many past projects. Rather than lowering the floodplain to one level or slope, various benches and uneven pothole-like areas were built into the floodplain. This irregular ground surface will not only provide habitat for fish at a range of flows, but also promote a diversity of riparian (e.g. willow and cottonwood) and wetland plants. This will in turn improve habitat for wildlife out of the river as well.

Another key feature of this site includes enhancing an existing shallow, warm wetland - a remnant of old mining practices. Two side channels, which will themselves provide spawning and rearing habitat for salmon and steelhead, were built to provide an inflow and outflow of cold water to the wetland. Wetlands are an important part of the river system, as they provide foraging and holding habitat for young fish, chorus frogs, and western pond turtles.



Project site map for Bucktail channel rehab.

In addition to the cold water inflow and creation of an outflow, the wetland itself was enhanced by building a "beaver dam analog", which is basically a man-made beaver dam built from natural materials. In theory, the pond created by the man-made beaver dam will raise the water table and support wetland and riverine plants and, ideally, will be taken over and maintained by actual beavers. In less than two weeks after installation of the structure, beavers had already moved in! The pond also features some basking logs for turtles and snags for bird and bat roosting.

While the big features and loud heavy equipment get the most attention on TRRP projects, a critical component of our success is revegetation. This year we began cutting, digging, and replanting vegetation from the site, which would otherwise have been chipped and used as mulch. We are also actively restoring large areas of uplands which were disturbed during construction, using topsoil from the project site and plantings to create a diverse, healthy forest in areas once dominated by gravel piles from historic mining.

The Program hopes to conduct one or more public field trips to the site in Spring/Summer of 2017. Stay tuned!



New Side Channel at Bucktail.



Man-made "beaver dam analog" at Bucktail site.



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

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

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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.

Colleen O'Sullivan, and Greg Lowden.

- Watershed Improvement

- Wildlife Habitat
- Fuels Reduction

This issue of the Conservation Almanac is funded in part by grants from the



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