### **Rose Owens Retires from Board**

The Trinity County Resource Conservation District board member Rose Owens, retired this summer. A board member since 1992, we will miss her insight and active participation. Rose, a long-time county resident, has resided in Hayfork since 1946. She is a Trinity High School graduate and her family owned and operated a sawmill and logging company. Rose retired from Trinity County Office of Education in 1996 after working there for nearly 25 years.

Rose also serves on the Trinity Public Utilities District Board and is executive director of the Roderick Senior Center. Her friends at the Roderick Center were amazed at how involved Rose was in the community and she responded "I wanted to be involved and I somehow found the time to do it."

Thank you Rose for your service and commitment to the Trinity County RCD!

Rose receiving an award for her years of service with Trinity County RCD



### **District Summer Roads Projects**

This summer was a busy time for the District roads crew, who diligently worked to maintain and decommission roads to reduce sediment delivery to our creeks and rivers, and to make the forest more accessible to the public.

The District started the season on a US Forest Service road maintenance project located in the East Fork of the South Fork Trinity River. This project was funded by the CA Off Highway Vehicle (OHV) Commission and the Trinity County Resource Advisory Committee (USFS RAC). The project included brushing of roads, logouts, cleaning of stream crossing culvert inlets, road drainage improvements and sign work. This project improves public access to many roads that were previously blocked by brush and trees, and reduces sediment delivery to the South Fork Trinity River.

Continued, page 2 -



Before After



## District Summer Roads Projects, cont.



The crews then started and completed a road maintenance project in the Lance Gulch watershed to improve road drainage on tributaries to Lance Gulch; and place rip rap at the inlet and outlet of the main crossing of Lance Gulch at Brown's Ranch Road. In addition, maintenance was performed on a sediment basin on private land near **Buckhorn Summit that captures decomposed granite from** Highway 299, bound for Little Grass Valley Creek. This basin has been cleaned annually for over 15 years. These projects were funded by the Trinity River Restoration Program to capture sediment and reduce sediment delivery to the river.



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## trict Summer Roads Projects, cont

Several roads were also decommissioned this summer: two in the Trinity/Lewiston Lake area and one near Stuarts Gap in the East Fork of the South Fork Trinity River. The roads were identified by the USFS through environmental assessment as roads to be removed from their system of roads; two of the three were impassable to vehicles due to brush or other reasons. After decommissioning, all disturbed areas were seeded and mulched; trees and riparian plants will be planted this fall or next spring to encourage stream channel recovery. This project will eliminate road failure risk and was funded by the CA OHV Commission and the Trinity County USFS RAC.



Note truck on road before decommissioning and culvert pipe below it.



Road being removed, but culvert still intact.



Road is removed, land is re-contoured, and stream is free-flowing again.



Each set of photos (above and below) show before and after images of decommissoned roads.



## 2017 Environmental Camp

**Every September sixth grade students from the Trinity Preparatory Academy in Weaverville attend Environmental** Camp at Bar 717 near Hyampom. The students experience three days learning about and exploring the natural world; and two nights sleeping in three-walled, open air platforms.

Learning stations are set up around the camp from the clear waters of Hayfork Creek to the open meadows above the ranch. This year the students studied water quality, stream flow, macroinvertebrates, lichens, birds, archery, orienteering, art, plus two new additions: animals, and tracks and scat.





The Trinity County Resource Conservation District 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, California Department of Fish and Wildlife, Watershed Research and Training Center, TRRP and local citizens all provide time and materials to make this camp memorable. Without the subsidy provided by Bar 717 for use of the facilities and the fundraising by TPA, the camp would not be possible. Special thanks go to the parent chaperones who spend every hour, from the time the bus leaves Weaverville until it returns, watching over the safety of the students and assisting in their learning experience.





## 2017 Environmental Camp, cont.













At this year's Trinity River Salmon Festival we welcomed back the return of the salmon and the return of the giant salmon tent! We also had the Turtle Bay Exploration Park Live Animal Show come back for a second year, which was an attraction and educational experience for people of all ages.

The Festival began with a blessing from Sonny Hayward of the Nor-Rel-Muk Wintu tribe, followed by Trinity Tribal drumming. The day progressed with more great music from Rainy Day Picnic, Merit Parcel and Philosopher's Tone. The Festival also included art and crafts activities, agency information, and traditional smoked salmon by members of the Wintu tribe. This community festival would not be possible without the support and funding of the Trinity River **Restoration Program.** 











# 2017 Trinity River Salmon Festival, cont.













## **Trinity River Tributary Snorkel Surveys**

If you happen to be on one of the Trinity River's rugged and remote tributaries in the late summer and come across a group of neoprene-clad individuals floating face down in the river, don't panic. It's likely that they are involved in a cooperative effort to survey for adult spring-run Chinook

salmon (Oncorhynchus tshawytscha) and adult summer steelhead (O. mykiss). In addition to their ecological importance in the watersheds, early migrating salmon populations help sustain the recreational fishing industry and are essential to indigenous cultures in the region.



Survey participant snorkeling the South Fork Trinity River.

The annual survey supports population trend analysis for summer steelhead and spring-run Chinook from the major tributaries of the Trinity River. These surveys require people to get in the water and count individual fish. Staff and volunteers from the California Department of Fish and Wildlife (CDFW), US Forest Service, US Fish and Wildlife Service (FWS), National Marine Fisheries Service, Yurok Tribal Fisheries Program, Hoopa Valley Tribal Fisheries, the

Bureau of Reclamation, and the Watershed Research and Training Center (among other agencies) complete the surveys every year. Many of these surveys have been completed annually since 1978.

Each tributary surveyed, including South Fork Trinity and New Rivers, are divided into reaches ranging from two to seven river miles, encompassing many areas likely to hold adult Chinook salmon and steelhead. Generally, two or three swimmers float (or, more often, crawl and stumble) along uneven boulder-strewn sections of the river in search of fish.

Snorkel surveys involve divers swimming in the river and visually counting each adult fish. The surveys generally take two to three days to complete and are done in late summer—an ideal time to be looking for adult fish in Trinity River tributaries. On the New River dives, some teams have to backpack into the Trinity Alps Wilderness in order to survey the upper sections of the river.

Can you spot the fish in this photo taken on the New River?



## Trinity River Tributary Snorkel Surveys, cont.

Every survey participant is given a safety briefing on potential water hazards, such as foot entrapment. Much of the work requires walking (wearing neoprene and heavy wading boots) through shallow water. During one safety talk, fish biologist Derek Rupert, who has participated in these surveys for five

years, told the assembled crews "the most dangerous thing you're going to do today is walk." As hip, knee, rib, and elbow bruises attest, the most hazardous part of the job can be walking in shallow water over slick river rock.



Participant navigating a survey reach on the New River.

Management agencies have been able to effectively track population trends in Trinity River tributaries from these fish count surveys. It is an intensive effort that requires boots on the ground and eyes in the water.

The count on the South Fork Trinity from August 2017 included 20 adult summer steelhead, 15 adult Chinook salmon, and 1 grilse (jack) Chinook salmon. The running average for the South Fork from data available prior to this year, was 77 adult steelhead, 292 adult Chinook salmon, and 30 jack Chinook salmon. The August 2017 New River count included 326 adult steelhead, 32 adult Chinook salmon, and 2 jack Chinook salmon. The running average for the New River prior to 2017 was 790 adult summer steelhead, 7 adult Chinook salmon and 34 Chinook jacks.

Despite the wet year and favorable stream conditions, the preliminary numbers from 2017 continued a downward trend for spring-run Chinook salmon and steelhead. Numbers from 2017 are among the lowest on record; with 2016 also posting low abundances. In many cases divers resorted to counting turtles, frogs and dead lamprey.

Continued Next Page-

#### Riffles

Riffles, runs and the deep pools typically make for ideal salmon habitat in these streams, and make up the areas where divers are most likely to see adult salmon and steelhead.

**Riffles** are areas where fast-moving water breaks over cobbles, boulders, and gravel. **Runs** are areas where the river is still flowing quickly, but are deeper than riffles. **Pools** are areas of slow-moving currents that form due to deep scouring of the stream bed over time, and are great places to spot larger Chinook salmon and steelhead.

#### Grilse

**Grilse (jacks)** are salmon that return to spawn in their native stream after one year in the ocean environment.

## Trinity River Tributary Snorkel Surveys, cont.



Dead lamprey on the South Fork Trinity River 8/16/2017.

Fortunately, as the largest undammed Wild and Scenic River in California, the South Fork Trinity River holds potential to rebound and support healthy runs of spring-run Chinook salmon. And much like the New River, the South Fork watershed is largely within public lands. Along with the dozens of summer adults in the Salmon River, the wild springrun Chinook salmon in the South Fork Trinity and New Rivers are some of the last remaining populations in the Klamath River watershed.

Previously, it was thought that fall-run Chinook and winter steelhead could evolve to take the place of spring-run fish if they go extinct. However, early migrators may have increasing



A foothill yellow-legged frog found during the snorkel survey.

biological and management importance in light of a recent study out of UC Davis. Researchers found that spring-run Chinook salmon and summer steelhead migrate earlier in the year because of the existence of a single gene variation, which cannot easily re-evolve if lost.

The management implications for this finding are important because spring Chinook salmon and summer steelhead are not protected separately from their later-migrating counterparts, even though the early migrating populations are severely low. Challenging in-river and ocean conditions during the past several drought years are likely factors to this year's poor return.

### **Kelly Sheen Appointed District Manager**

The Trinity County RCD Board of Directors announced at the October 18 monthly meeting that Kelly Sheen has been appointed the new District Manager.

Kelly began working for the District more than 20 years ago doing data entry and Information Technology (IT) management. In the years that followed, his interest in computers and geography led him to build the District's Geographic Information Systems (GIS) department into a regionally recognized powerhouse. In 2015 Kelly was Interim District Manager after the position had been vacated, then appointed to the position of Assistant District Manager.

Kelly spent his youth in Weaverville and fondly remembers hiking the trails in Trinity County. After graduation from Trinity High School, he studied architecture and worked in an architectural firm in the Bay Area for several years, before returning to Weaverville to settle in and raise his family.

"I am honored to take on the position of District Manager, and humbled by the opportunity to continue to serve this organization and our community. The abundance and

beauty of our natural resources has always been an inspiration to me, and I look forward to taking an active role in its stewardship." said Sheen.



## West Weaver Creek Channel and Floodplain Rehabilitation Project

After nearly five years from conception, construction on the West Weaver Creek salmon habitat rehabilitation project was completed this fall. The project area is about 1.5 miles west of downtown Weaverville and covers a little over two acres on both public and private land. The public portion of the project is on land managed by the US Forest Service within the Weaverville Community Forest.

This is an in-stream habitat and floodplain rehabilitation project in a highly degraded area of West Weaver Creek, suffering from effects of historic mining and past wildfires. The project adds stream complexity and traps sediment through installation of large wood structures, in-stream boulders and cobble, step pools, riffles, and boulder cascades. The floodplain is re-connected to the creek and two secondary side channels were constructed for additional habitat at high flows. Revegetation with native plants will begin in November.

Completion of this project would not have been possible without funding from California Department of Water Resources through prop 84 and the Trinity River Restoration Program. The District also received support through partnerships and program work with the North Coast Resource Partnership, Yurok Tribal Fisheries Department, California Department of Fish and Wildlife, US Forest Service, the North Coast Regional Water Quality Control Board and the NOAA Restoration Center. Additional thanks go to the private property owners at the project site; Environmental Science Associates - our worthy team of consultants who provided endless advice and technical support; and McCullough Construction, Inc. who made the years of planning and preparation become a reality.





Progression of work at West Weaver Creek project site from left to right. Note the snag with the red arrow for a reference point.







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

30 Horseshoe Lane PO Box 1450 Weaverville, CA 96093

#### V

Telephone (530) 623-6004 FAX 623-6006

#### E-mail: info@tcrcd.net Internet: www.tcrcd.net

#### 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, Morgan Rourke, 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 topic.

- 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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