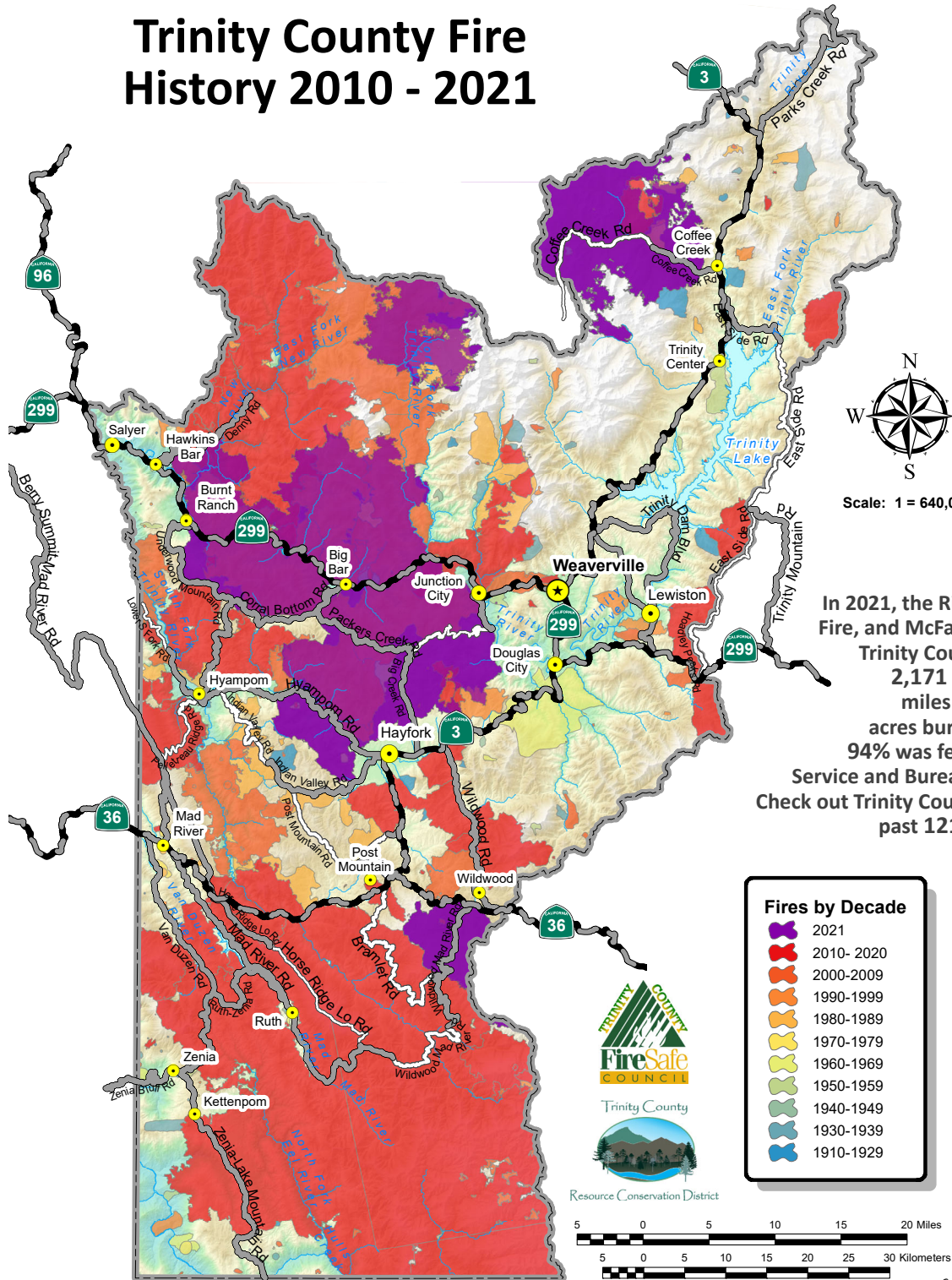


# Conservation Almanac

## Trinity County Fire History 2010 - 2021

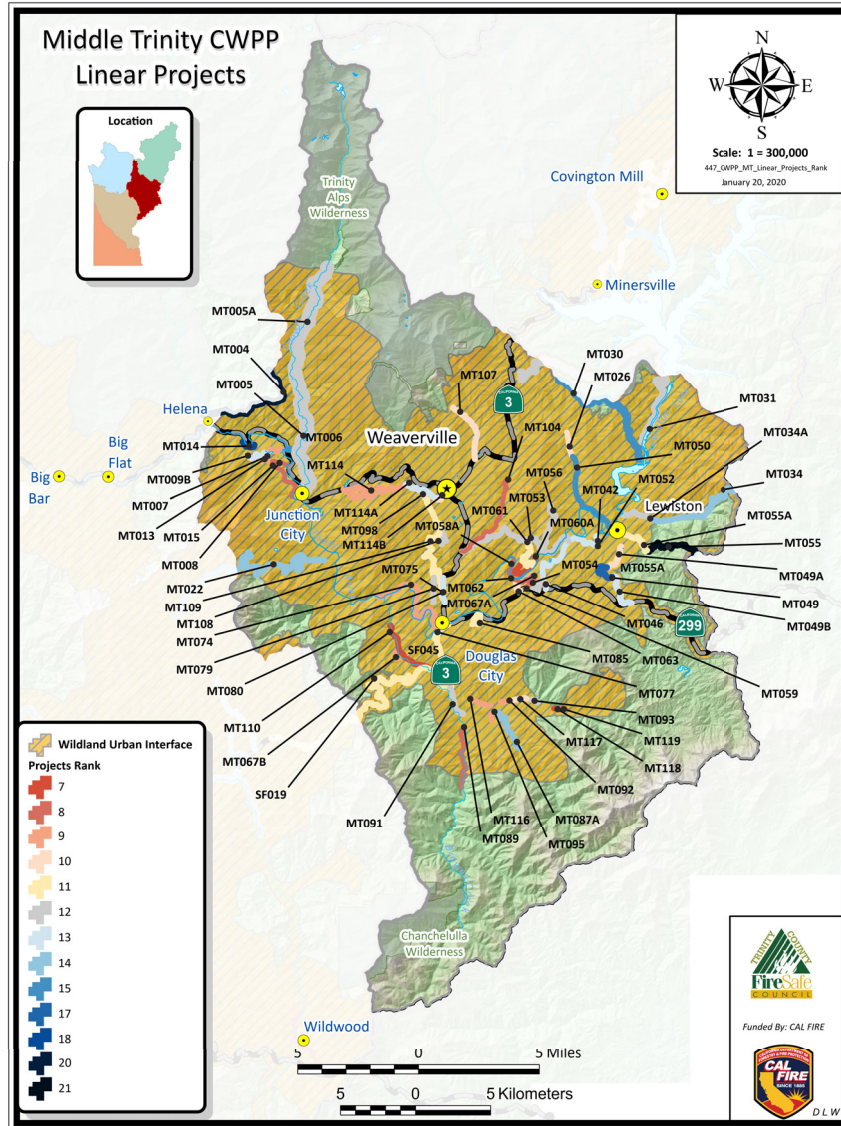


In 2021, the River Complex, Monument Fire, and McFarland Fire burned 17% of Trinity County. Fires burned around 2,171 miles of streams and 895 miles of roads. Of the 339,599 acres burned in the County, nearly 94% was federally owned (US Forest Service and Bureau of Land Management). Check out Trinity County's fire history over the past 121 years in the map below.

# Fuel Reduction in Trinity County: Identification to Implementation

For over 20 years, Trinity County RCD has been bringing funding into the county to implement much-needed fuel reduction work on both private and federal lands. Crews have thinned thousands of acres of forest and created hundreds of

miles of roadside shaded fuel breaks. This work has been provided at no cost to the public and helps to create a more fire safe Trinity County. How does the Trinity County RCD turn community-desired work into on-the-ground action?



Linear projects, which include ridgetop and roadside fuel breaks, located in the Middle Trinity region identified in the 2020 CWPP. Landscape treatments were identified separately for each region as polygon projects.

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## Step 1. Identify project areas

Most fuel reduction project areas come directly out of the Trinity County Community Wildfire Protection Plan (CWPP). The CWPP is updated every 5 years, with the last update completed in 2020. Through a series of public meetings across the county, CWPP projects are identified and ranked based on a number of criteria including proximity to Wildland-Urban Interface, wildfire hazard potential, and public priority. Sometimes partner organizations such as the Bureau of Land Management (BLM), US Forest Service (USFS), or other grantors identify priority project areas to be treated that are not captured in the CWPP.



# Fuel Reduction in Trinity County, cont.

## Step 2. Search and apply for funding opportunities

A number of local, state, and federal entities provide grants to organizations implementing fuel reduction projects. Funding opportunities are identified through competitive grant applications, cooperative agreements, and fee for service. Current grantors include CALFIRE, USFS, State Water Resources Control Board, and the Coastal Conservancy. As funding allows, staff move to Step 3.

## Step 3. Get landowner approval

Trinity County RCD staff work on both public and private lands. For private property, landowner approval is needed before crews can access and work on the land. For public lands owned by BLM or USFS, meetings are held with agency personnel to allow Trinity County RCD staff to implement projects.

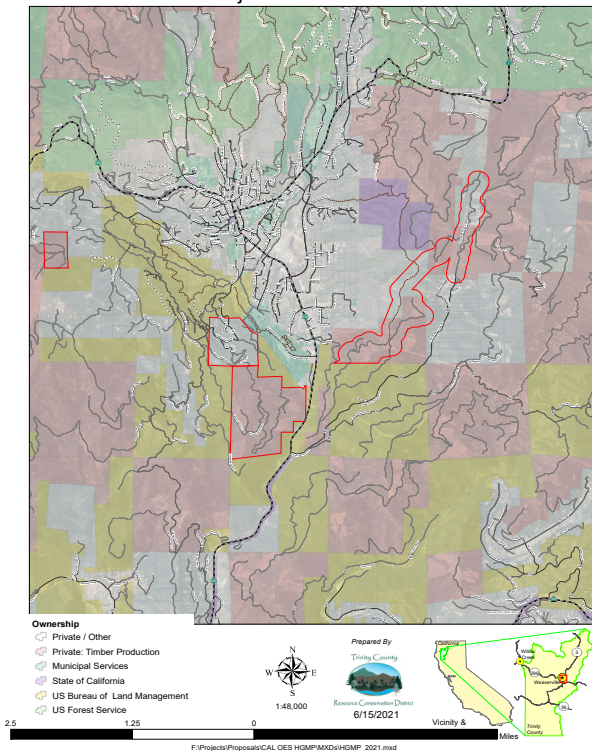
## Step 4. Environmental Compliance

On private lands, California Environmental Quality Act (CEQA) compliance is necessary to implement fuels reduction work. Environmental analysis occurs for project areas and documentation is sent to appropriate agencies. On public lands, National Environmental Policy Act (NEPA) compliance is necessary. None of this work can occur unless NEPA is done first. NEPA is generally completed by the USFS prior to staff searching for or receiving funds for a given project.

## Step 5. Crews treat the area based on project goals

Projects have different focuses and goals based on the area or grantor. Often, treatment includes forest thinning to create roadside shaded fuel breaks, defensible space and ingress/ egress improvements for a given area. All treatments help reduce fuels and moderate the risk of catastrophic wildfire.

Project Area- Weaverville



Map showing project areas identified on both public and private lands near the town of Weaverville.

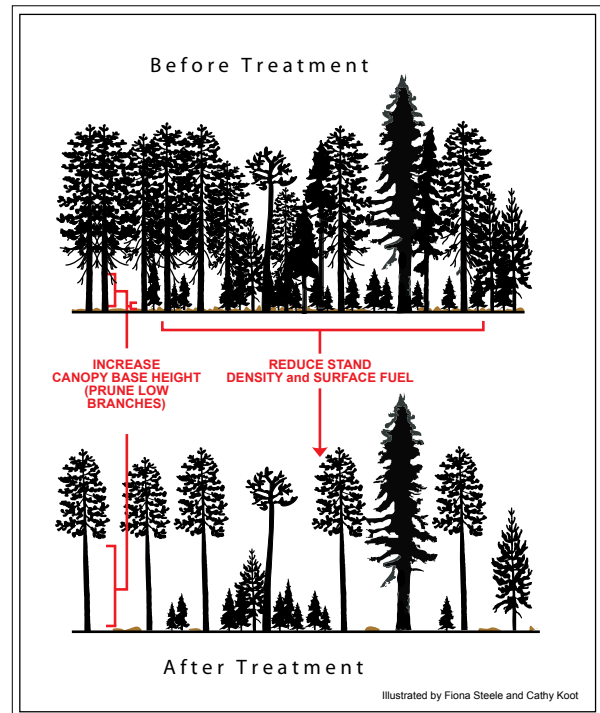


Diagram showing forest conditions before and after fuel reduction work. Fuel reduction aims to reduce ladder fuels and vegetation density to mitigate wildfire risk.



Crews construct a roadside shaded fuel break along Steiner Flat Road.



# Meet the Forest Health Crew

This year, the Forest Health crews have thinned approximately 410 acres of forest and created approximately 9.8 miles of shaded fuel breaks along Trinity County roads. Meet the hardworking, community-minded, chainsaw-loving individuals behind the work that is helping create a more fire safe Trinity County.

Fuel in the forest includes grasses, shrubs, branches, and trees; anything that will burn. Thinning and fuel breaks reduce fuels in the forest to mitigate the risk of severe wildfire.

**Mike Dunlap, Crew Supervisor**



Mike has lived in Trinity County for nearly 40 years, 18 of which have been spent working for the Trinity County RCD on the Forest Health crew. He enjoys working in the woods and helping the community. "It's rewarding – a lot of people appreciate the work we do."

**Jeff Eades, Crew Supervisor**



Jeff has lived in Trinity County for 6 years and has worked at the RCD for the past 3. "I love being outdoors. We get to be outside cutting to save our community, making the forest thrive, helping to get the fire engines up the road, and getting people an escape route from the fires. When the customers thank us and tell us we are doing a great job, they are appreciative of it and that's kind of what drives me...With the fires and how bad they've been, I'd say you couldn't do enough of this work."

**Jeff McGrew, Crew Supervisor**



Jeff has lived in Trinity County his whole life and has worked on the Trinity County RCD Forest Health crew for 11 years. He is passionate about helping the community, and he is proud to provide free fuel reduction work that lowers the chance of high severity wildfire. "Our work can help keep fire low to the ground by getting rid of ladder fuels, helping prevent fire from crowning into the upper tree area and spreading rampant through our area."

**Garrett Chapman, Crewmember**



Garrett has lived in Trinity County for nearly 15 years and this is his third season at the RCD. He appreciates the benefit the work has for the community. "I love to see people's houses be fire safe."

**Jack McGlynn, Crewmember**



Jack has been a resident for more than 50 years. He has spent over half of it working at the RCD in various capacities as a Forest Health crewmember, crew supervisor, and a Roads crewmember. Jack noted "This is preventative maintenance to hopefully not breathe in smoke every summer."



# Meet the Forest Health Crew, cont.

**Nick Sorrenson, Crewmember**



Nick has lived in Shasta and Trinity Counties for over a decade and this is his first season at the Trinity County RCD. He is motivated to do fuel reduction work because, "it helps people feel safe."

**Josh Scott, Crewmember**



Josh has lived in this area all his life and has been working at the RCD for 2 years. He loves working outside. "Just being in the woods every day, your scenery changes and there are always new challenges."

**James Marzolla, Crewmember**



James has lived in Redding his whole life and has been working at the RCD for the past 3 years. He loves the comradery and teamwork that comes with working on the crew. "Our County is always on fire. It is hard living in the smoke and all that, and we can help by just thinning out. It looks really cool. I call ourselves land beautifiers, and at the same time, it really does help with the fires."

**Kirk Wolfinbarger, Crewmember**



Kirk has lived in Trinity County his whole life and this is his first season at the RCD. "I'm a former wildland firefighter and I just love the outdoors." Much like wildland firefighting, Kirk gets to do meaningful work in the outdoors that helps protect communities from damaging wildfire.

**Shawlea Railton, Crewmember**



Chalet has lived in Trinity County for 3 years and this is his first season at RCD. "I'm from Louisiana born and raised so I'm used to hurricanes, not fires." Though he is new to fires, Shawlea knows the importance of fuel reduction in a place like Trinity County.

**Danny Wells, Crewmember**



Danny first moved up to Trinity County in 8th grade from Southern California. He left after high school, joined the military, and returned in 2011. "I love this community... it is kind of a little safe haven that we have up here. It's gorgeous and we have to keep it safe as much as possible"

**Dave Johnson, Project Coordinator**



Dave has lived in Trinity County for almost 30 years and has worked on and off at RCD for about 5 years. "I like the work because it is directly beneficial to the environment as well as the fire safety of the Trinity County communities. Plus, it's hecka fun!"

**Chris Cole, Project Manager**



Chris has lived in Trinity County for 23 years and has spent the last year and a half coordinating and managing the Forest Health program at the RCD. He is motivated "to keep local people employed with good honest work that helps protect communities. Fuel reduction work helps reduce the risk of catastrophic wildfire to keep vulnerable communities intact and thriving."



# Weaverville Summer Day Camp

Once again, the Young Family Ranch in Weaverville was filled with children and laughter for three weeks in July! After its cancelation in 2020, Weaverville Summer Day Camp returned this year complete with games, rafting, field trips, art projects, learning, and friendship! Camp would not have been possible without the support of volunteers, community donations, and partnering agencies.

The Trinity County RCD would like to extend heartfelt gratitude to Trinity River Community Partners, Bureau of Land Management, Friends of Trinity County Resource Conservation District, Schmidbauer Lumber, Ivan the Pack Mule and all of our individual donors for their generous contributions.



Learning about composting with worms



Campers learn about Nor Rel Muk Wintu culture



Painting with watercolors



Creating ornaments for the US Capitol Christmas Tree



Giant slip n slide!



## Weaverville Summer Day Camp, cont.



Fun with parachutes and toys during Circus Nature

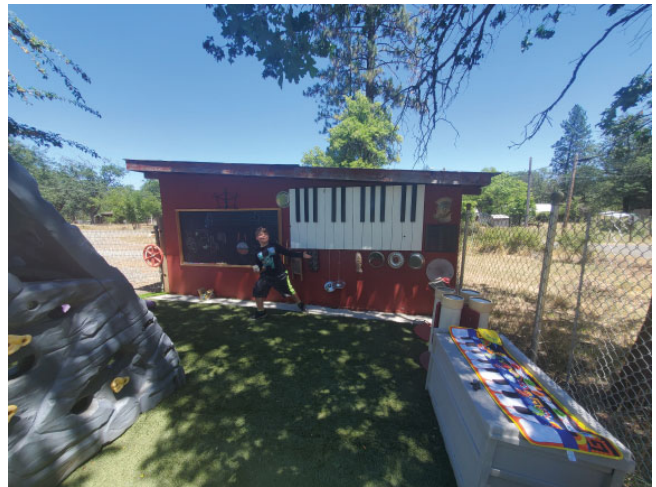


Hiking in the Weaverville Community Forest

## Linda Land, a new kid's zone, opens at the Young Family Ranch

On July 3rd, approximately 60 people gathered at the Young Family Ranch on July 3rd to celebrate the official opening of Linda Land, a new kid's zone memorializing Linda Maddox. Linda's legacy of advocacy for children and youth programs in the Trinity County community will be commemorated in a space for kids to play, create, and explore. Following the grand opening, Linda Land was enjoyed by summer campers for three weeks in July.

This was made possible by the Maddox Family, Young Family Ranch, Trinity County RCD, Trinity Lumber and Building Supply, Trinity Master Gardeners, Jerry Westbrook, Larry and Lynn Forero, Bob and Mike Moller from Vaca Creek Ranch, Keith Heryford, and Tim Arnet from Shasta Union High School Farm.





# Road Recovery in the August Complex Burn Scar

The August Complex of 2020 burned over one million acres across seven counties, including much of southern Trinity County, to become the largest wildfire in California history to date. Sparked by a series of lightning strikes, multiple fires grew together and spread rapidly across Mendocino National Forest, Shasta-Trinity National Forest, and the Six Rivers National Forest. Huge swaths of forest were severely burned, leaving a significant potential for erosion and road damage within the fire perimeter. A year after the August Complex was extinguished, Trinity County RCD and partners in natural resource conservation are hard at work on fire recovery.

After a severe fire, there are many changes to the forestland that can negatively impact roads. With most, if not all, of the vegetation in the forest burned, there is nothing to hold sediment in place and the risk of significant erosion is high. Hillsides where roads are built become unstable

and susceptible to collapse or blockage by debris slides. Additionally, fires can damage drainage features on the roads such as culverts, bridges, and gullies. Many roads used to access the August Complex fire area experience excessive use by large equipment, accelerating the wear and tear on the roads.

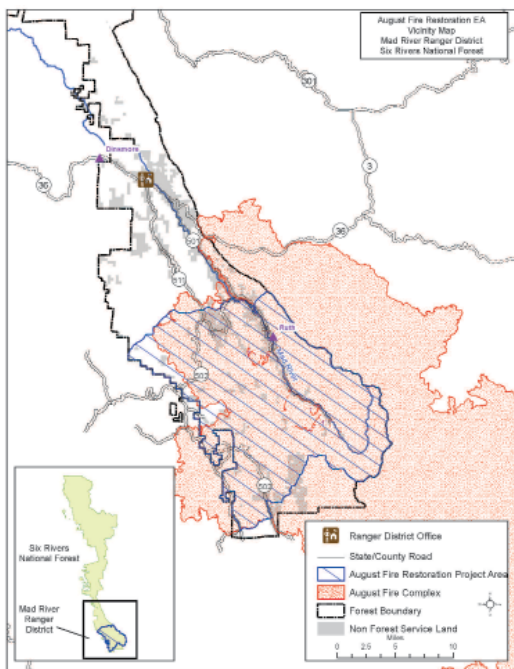
To improve the safety for drivers on roads, as well as minimize impacts of erosion on water quality and fish habitat in the watershed, Trinity County RCD has been working closely with the Six Rivers National Forest to treat impacted roadways. The project area includes roads in and adjacent to severely burned landscapes in southern Trinity County. Even as the 2021 fire season took off, impacting much of Trinity County, crews continued to work diligently on road restoration efforts, treating the effects of the 2020 fire season. Most of the high priority sites have been restored and the goal is to complete the rest by the end of this year.



Installation of a culvert at an eroded stream crossing



A replaced culvert allowing for improved water flow without causing road erosion



Roads within the Blue hashed area were targeted for post August Complex restoration



A repaired hole in the road created by a burned-out stump



# Meet Nicole & Bethany, this year's TCRC D GrizzlyCorps Fellows

Meet the newest members of our team! Nicole Eastman and Bethany Llewellyn are this year's GrizzlyCorps Fellows placed with the Trinity County RCD. They will be working closely with the Trinity County community to develop plans that will increase climate resiliency of our forests and watersheds.

Nicole and Bethany are both excited to be in Trinity County with the rich opportunities for outdoor recreation and exploration. They hope to take advantage of all that the Trinity Alps and Trinity River region have to offer.

Welcome Nicole and Bethany!

## Nicole Eastman

Nicole grew up in Cleveland, Ohio before attending North Carolina State University to study Conservation Biology. Nicole will be assisting with the development of a watershed plan for the North Lake region of Trinity County that will give her the opportunity to apply her experience with water quality monitoring, environmental policy, and community outreach. She is excited to be taking the lead on this project from the beginning to coordinate with communities and incorporate their priorities into the watershed plan!



## Bethany Llewellyn

Bethany is from Corvallis, Oregon and went to the University of Puget Sound studying Biology and Environmental Policy. Bethany will be steering implementation of the 2021-2028 Weaverville Community Forest Strategic Plan and helping to develop a long-term plan for fuels reduction in this region. She is excited to be on the front lines of fire issues, serving and connecting with the community and land!

*GrizzlyCorps is a new AmeriCorps program launched in 2020 designed by Project Climate at UC Berkeley's Center for Law, Energy & the Environment in partnership with CaliforniaVolunteers. The program sends recent college graduates into rural communities across California to promote regenerative agri-food systems and fire and forest resilience.*



## Flow Variability in a Regulated River System

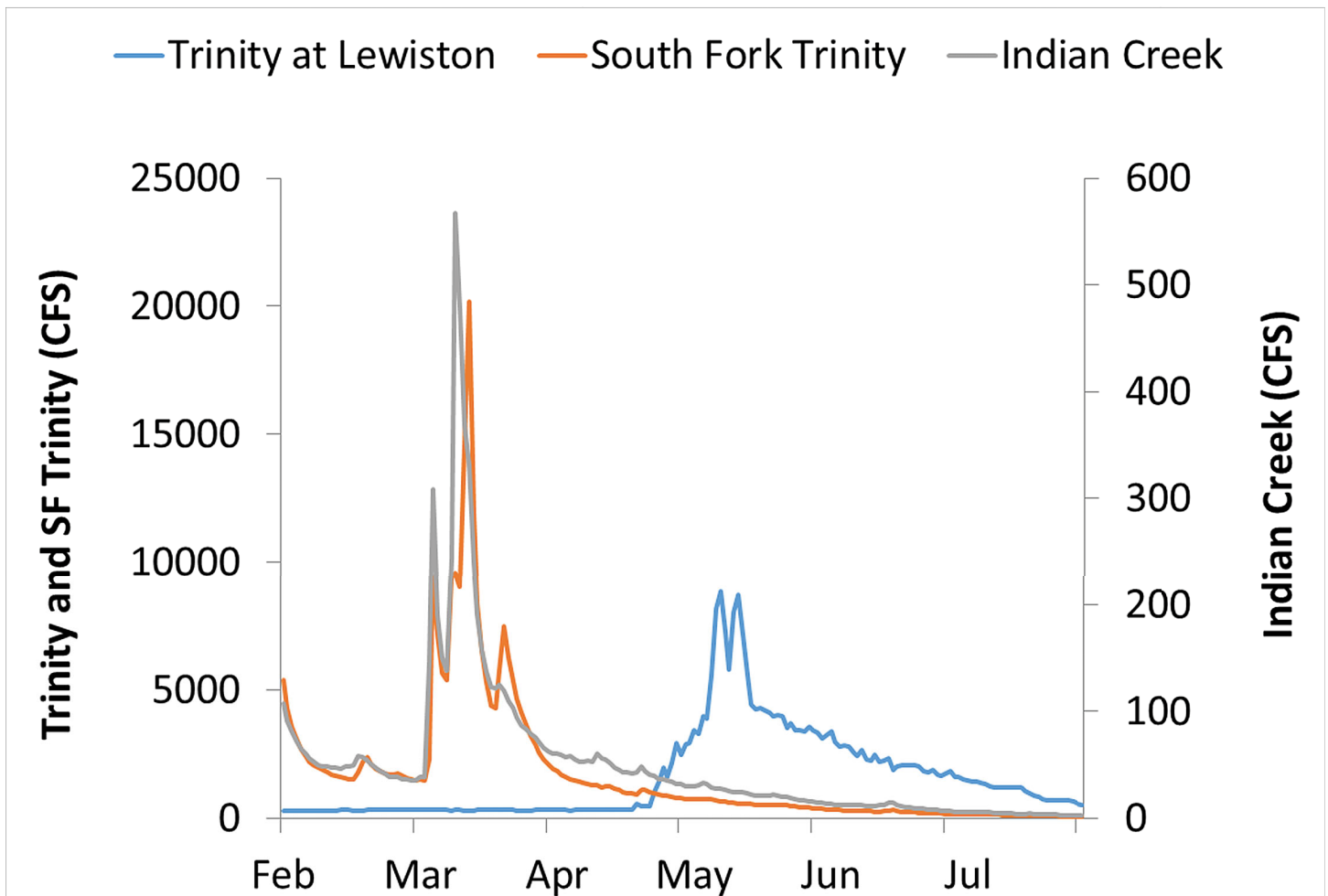
### A high flow restoration release from Lewiston Dam.

Since 2004, the Trinity River Restoration Program (TRRP) has been developing spring hydrographs (flow schedules) to coordinate restoration releases from Lewiston Dam. These restoration releases begin as early as April 15 each year and are the first flow increases the Trinity River receives above winter baseflow since the previous October. TRRP uses restoration releases to mimic the natural variability that occurs in a free-flowing river to meet numerous management objectives intended to benefit salmon, steelhead, and their habitats.

Restoration releases have been an important tool used to restore the natural character of the Trinity River. Evaluation of how flow management is currently performed has led TRRP

to reconsider the timing of restoration releases so they better match the season when higher flows from snowmelt and rain would naturally occur. The hydrograph below shows the timing of natural flow increases on the South Fork Trinity and on Indian Creek, both of which are tributaries that flow into the Trinity River. The season of peak flow on these tributaries is February and March, but the Trinity River, which is regulated by Lewiston Dam, does not start restoration releases until late April.

Why does this matter? Pacific salmon evolved – and thrived – in dynamic river systems that had late winter flow peaks and considerably lower summer flows for millions of years. This seasonal variation of river levels likewise affects water temperature, food production, and habitat availability.



This hydrograph compares the timing of natural flow increases on the South Fork Trinity River and Indian Creek, to flow releases on the Trinity River



# Trinity River Restoration Program, cont.



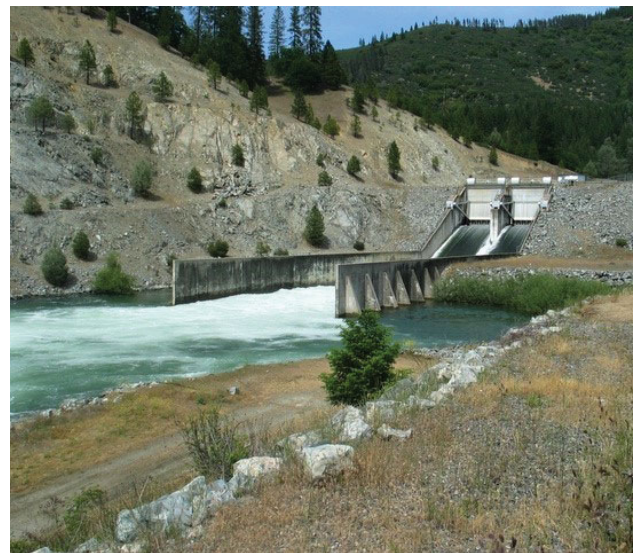
In short, mimicking the environmental conditions that salmon evolved to succeed in might make all the difference to the continued success of salmon in the Trinity River, especially for the young salmon that hatch and grow in the upper river from February through May each year.

## Considering a New Approach

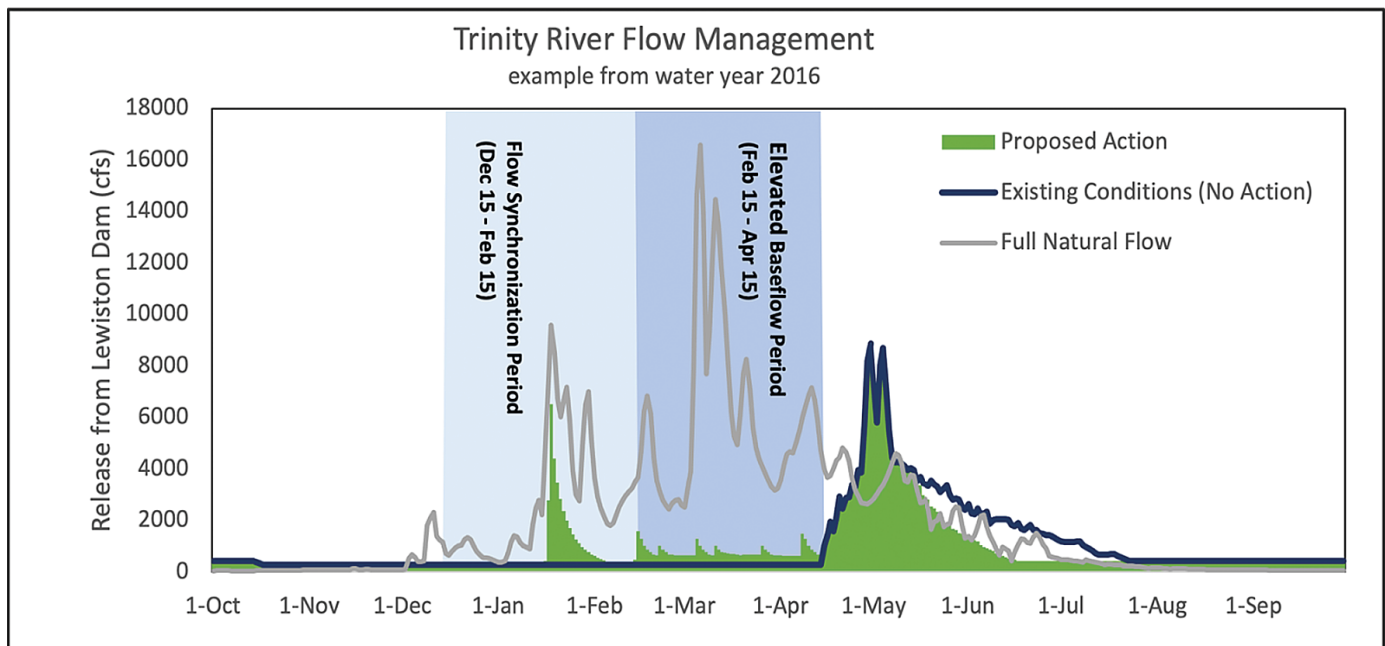
TRRP is currently evaluating the first new flow management action since restoration releases began in 2004. The idea is to begin to reconsider how Lewiston Dam releases are managed by shifting a portion of the water that is typically released after April 15 (blue line) to late winter/early spring so restoration releases from Lewiston Dam can be synchronized to the season of naturally high runoff. The grey line represents “full natural flow,” meaning the timing and amount of water that would have flowed into the Trinity River but instead is held in Trinity Lake. Under the new proposed flow action (in green), TRRP would recommend moving between 16% to 27% of the river’s annual allocation from the dams to the December 15 – April 15 timeframe.

Young salmon are expected to benefit the most from this new flow action. Elevating flows shortly before salmon hatch and while they’re in the upper river will increase the amount of nursery areas available to them. Juvenile salmon prefer

flooded areas outside of the river channel as nursery habitat that is slower, shallower, and warmer. The macroinvertebrate prey they eat likewise thrive in these conditions. The goal is to have juvenile salmon that grow quicker and get bigger before they make their journey to the ocean in the hopes that healthier juveniles equate to better ocean survivability and more returning adults to the Trinity River.



Lewiston Dam

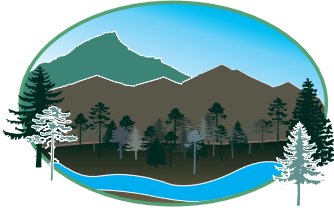


Hydrograph showing the natural, existing, and proposed timing of flow releases from the Lewiston dam into the Trinity River



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

Trinity County



## 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**

(530) 623-6004  
FAX 623-6006

**E-mail: [info@tcrd.net](mailto:info@tcrd.net)**

**Internet: [www.tcrd.net](http://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 led by a volunteer board of directors.

### **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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