

# Conservation Almanac

*Trinity County Resource Conservation District*

Spring 2004

Vol. XIII No. 2

## Recommended Trinity River Release Schedule for Water Year 2004

By: Doug Schleusner, Executive Director, Trinity River Restoration Program

Scientific studies conducted over the last 10 years on the Trinity River show that re-establishing a more natural hydrograph that varies from year to year is important to the success of the on-going restoration efforts. Variable flows of sufficient size can clean spawning gravels, build gravel/cobble bars, scour sand out of pools, provide adequate temperature and habitat conditions for fish and wildlife at different life stages, control riparian vegetation, and perform many other ecological functions. The basic intent of a flow schedule is to mimic the snow melt pattern of a given water year type. This means that flows (releases from Lewiston Dam) generally start to increase near the end of April and last from 1 to 3 months before ramping down to summer base levels.

Each year the U.S. Bureau of Reclamation determines the water year type for the Trinity River based on the amount of water that has flowed into Trinity Lake from October 1 to April 1, and the additional amount of water expected from rainfall and snowmelt for the rest of the year (through September 30). On April 7, the final runoff



**Spring Releases (6000 cfs) in May 2002**

forecast established 2004 as a “wet” water year within the Trinity River basin.

The Record of Decision (ROD) signed in December 2000 established the following volumes by water year type. In December 2002, a U.S. District Court capped annual releases at dry year volumes (regardless of water year classification) pending completion of a Supplemental

Environmental Impact Statement required by litigation, but a recent decision by the Ninth Circuit Court of Appeals allows for the release of the Normal Year flows this spring.

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Water Year Type	Water Volume for Trinity River (acre-feet)
Critically Dry	369,000
Dry	453,000
Normal	647,000
Wet	701,000
Extremely Wet	815,000

The Trinity River Restoration Program staff, also established in the December 2000 ROD, has the responsibility of developing the annual instream fisheries release schedule for Lewiston Dam. The Trinity River Flow Evaluation Study (TRFES) provides the scientific basis for scheduling the variable annual instream flows, including specific, measurable flow related restoration objectives and annual hydrographs by water year type. Staff recommendations also incorporate advice from technical representatives of the Trinity Management Council (TMC) and Trinity Adaptive Management Working Group (TAMWG). Specifically, these scientists and resource specialists agree that this year's restoration priorities should be: 1) Complete

mainstem river system, and 3) achieve substantial geomorphic benefits by flushing large accumulations of fine sediment that have been deposited over the past two years, move and redeposit gravel, and scour 1-2 year old riparian vegetation that has re-encroached along the channel's edge, all of which will improve habitat conditions throughout the system.

The recommended release schedule will achieve these objectives. Lewiston Dam releases will begin to increase on May 4<sup>th</sup> from 300 cfs to 6,000 cfs on May 16<sup>th</sup> and continue at that level until May 25<sup>th</sup>. The flows will then ramp down to 2,000 cfs by June 18<sup>th</sup> and hold at that level, until about July 9, finally reaching the summer base flows of 450 cfs on

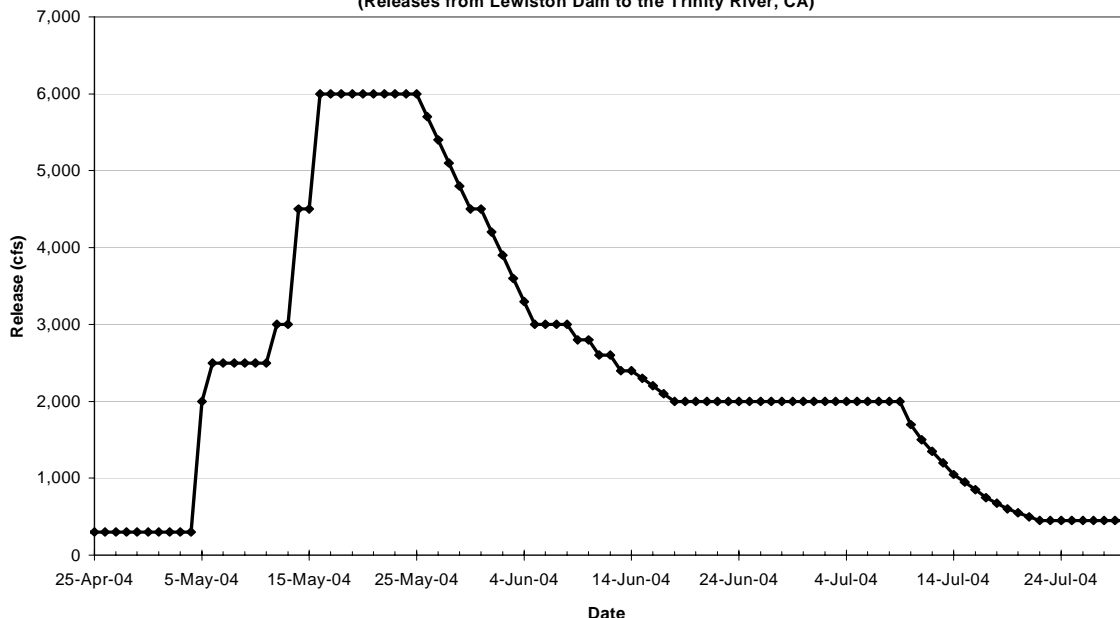
scheduled bridge replacements, 2) maximize Chinook smolt production by providing optimal rearing temperatures throughout the

July 22. This represents a total volume of 647,000 acre-feet compared to 453,000 acre-feet released last year. The bridge construction schedule is being modified to accommodate the recommended releases. The primary effect on the construction schedule is that instream work cannot commence before mid-July 2004, resulting in a completion date of November 15 rather than September 15. Even so, bridges will be capable of passing higher flows in 2005 if allowed by the courts.

This year's release schedule was reviewed by the Trinity Management Council (TMC) on April 14 and again the week of April 26<sup>th</sup>. After it was approved, it was forwarded to the Bureau of Reclamation's Central Valley Operations Office, which will operate the Trinity River Division as closely to the proposed schedule as technically feasible. The daily release schedule is available on the Reclamation's website at: [www.mp.usbr.gov/cvo/](http://www.mp.usbr.gov/cvo/).

The figure below illustrates the release schedule for the available 647,000 acre-feet of water.

**TMC Approved Release Schedule for WY 2004**  
**Revised 4-28-04 for a Normal Year Water Volume**  
 (Releases from Lewiston Dam to the Trinity River, CA)



## Local Group Takes Action on Hayfork Basin Trails and Fuel Breaks

When is a recreational trail also a line of defense against wildfire? When the Hayfork Action Team saw the opportunity to rebuild and repair the trail system in, and around, the Hayfork area. They quickly realized that these old trails, roads or jeep trails not only provide important recreation, but meet a critical need to provide fire access into areas with no access, or would provide fuel breaks identified in the Fire Safe Council's Fire Management Plan.

The Hayfork Action team has now completed the first of a two-phase project administered by the Watershed Research and Training Center in Hayfork. Crew members, all from the Hayfork area, received training in trail maintenance, rock and log construction of water bars, retaining walls, causeways, chainsaw and crosscut saw use, trail planning and layout; working under trying conditions; personal and crew relations and many other valuable workplace job skills. The project has restored a portion of the historical trail system around Hayfork for recreational use and provided fire access and fuel breaks in areas that



**Main Tule Trail -- Before**

were hard or impossible to get to with vehicles.

The 6-person crew worked for 10 weeks to complete 5.3 miles of foot trail maintenance, 3.7 miles of road brushing, 8.4 miles of jeep trail brushing, under the direction of a US Forest Service trail supervisor for training, layout, project supervision and support (pack stock, vehicles). The project was implemented in the

Tule Divide Drainage with the objective of linking trails to roads to provide loop systems for access by recreational groups or fire crews. Trail rider groups out of the Indian Valley Station, hikers, and mountain bikers periodically use these trails.

Training provided during the first year will enable the crew to operate efficiently and with less supervision as they begin Phase 2 during the summer of 2004 with funds from the Trinity County Resource Advisory Committee. Depending upon the condition of trails currently being surveyed, approximately 26 miles of trail work is planned for this year.

For more information about this project or to see a map of the proposed 2004 trail system or the draft Hayfork Area Trails Master Plan, please call the Watershed Research and Training Center at (530) 628-4206.



**Main Tule Trail -- After**

## Trinity County Fire Safe Council Hosts Regional Workshop

Who would have thought that over 50 people would converge on Weaverville to attend the first Northwestern California Regional Fire Safe Council Meeting? Well that's just what happened when the Trinity County Fire Safe Council (TCFSC) opened the doors to the Weaverville Fire Hall on April 3<sup>rd</sup> to host this first-ever gathering of fire safe councils. Representatives from Fire Safe Councils (FSCs) big and small came from all over northern California to share their experiences in helping their communities be more fire safe. Three members from the California Fire Safe Council were on hand to learn about the challenges facing some of the State's most rural fire safe councils in Del Norte, El Dorado, Humboldt, Mendocino, Modoc, Siskiyou, and Trinity counties. The countywide fire safe councils were joined by members of smaller, but no less effective, community-level FSCs from Avenue of the Giants, Diablo, Klamath River, Lake Head, Lower Mattole, Mt. Shasta Area, Orleans/Somes Bar, Old Shasta and Salmon River.

The idea for this regional workshop grew out of the Fire Wise workshop that was held in Fortuna last November. Local Fire Safe Council members Ingrid Landis (Post Mountain PUD), Scott



Eberly (Trinity Resource Conservation & Development Council) and Kelly Sheen (Trinity County RCD) attended the Fortuna workshop. Fire Safe Councils in rural areas can feel isolated and it was realized that there is a need for regional networking among Fire Safe Council representatives to foster cross training, and collect information for the California FSC to strengthen its support for local councils.

The purpose of the meeting was to 1) support regionalized networking among Fire Safe Council representatives, 2) foster cross-training in the variety of Fire Safe Councils functions, and 3) collect information for the California FSC to strengthen support for county and local FSCs.

Fire Safe Councils vary significantly in how they are structured, how long they have been operating, how involved their communities and government may be, and the number and types of projects that they implement. They also have many similarities – a mission to educate residents on how to make their communities safer places to live, make their forests healthier, and to work cooperatively to implement high-priority fuels reduction projects.

Each fire safe council summarized its work, and highlighted its primary challenges. Many issues were raised during the two days including permitting issues, getting community involvement, funding, project planning and prioritization, workforce, agency support, landowner agreements, treatment prescriptions, monitoring, and maintenance of projects once they have been completed.

The RCD and USFS led participants on a tour Sunday afternoon that featured several fuels reduction projects that have been high priorities of the Trinity County Fire Safe Council to protect the community of Weaverville. Stops included the Conservation District's Oregon Street roadside shaded fuel breaks and defensible space project, the Oregon Mountain fire, and a project along a Forest Service road that treated a plantation with a machine called a masticator.

This workshop was a good start at building partnerships among state, county, and local fire safe councils. The group identified opportunities to work together, support needs from the California Fire Safe Council, a list of effective communication and networking strategies, and the need to work together to affect public policy regarding fire safe issues.

The generous funding from the California Fire Safe Council, Collaborative Learning Circle, and the SiskiyouFSC sponsored this meeting. Barracks were provided by the US Forest Service and California Department of Forestry and Fire Protection. Meeting space was graciously provided by the Weaverville Fire Department.



## RCD Working With the Trinity River Restoration Program

The Trinity River Restoration Program will be taking some big steps in the next year or so – replacing four bridges between Lewiston and Douglas City to allow higher spring flows to be released from Lewiston Dam during wetter years (See Page 2 of this Issue), and stream bank (riparian) and wetland restoration at demonstration sites near Junction City.

The RCD entered into an agreement with the Restoration Program to support the restoration and enhancement of approximately 44 sites along the Trinity River that are important parts of the overall plan to restore the river for anadromous fisheries (salmon). In some cases, like the bridges, the vegetation along the banks of the river needs to be removed to allow for the construction of the new bridges, but done so in ways that minimize the erosion of the banks and disturbances to wildlife. The District crew was able to complete the removal of the willows, cottonwoods and alders with a softer touch than would be possible with heavy equipment – and they were able to collect plant material that will be saved for replanting the banks after the bridge construction is completed.



Dr. Bob Sullivan, the Wildlife Biologist for the Restoration Program in Weaverville, guided the timing of this spring's work to prevent disturbing migrating birds that nest in areas along the river.

The District is working closely with staff at the Weaverville Office of the Restoration Program and project scientists to design the first of the restoration sites – one near Junction City that is independent of the releases from Lewiston Dam – that should be constructed in 2005.

The RCD was chosen to help with the stream bank and wetland restoration projects, because of its experience designing and implementing habitat restoration using native plants. The District will

assist in the overall design of restoration plans and the specific layout for replanting sites. The District also has considerable experience growing native plants from locally-collected seed and will be expanding its facilities to meet the Restoration Program's needs. The nursery will be expanded. The District will be working with the Trinity High School's vocational education program to provide students hands-on experience with growing native plants in the High School nursery and the District has started an "orchard" for growing trees like cottonwood and some larger willow species. In fact, many of the cuttings taken at the bridge sites have now been installed near the Hamilton Ponds on property owned by the State of California to get the orchard started.



## Decomposed Granite Giveaway Day

The RCD hosted its annual Decomposed Granite (DG) Giveaway Day at the Hamilton Ponds, near Lewiston, on April 24th. There were nearly 40 different vehicles that came for this free material that will be used for a variety of projects including: road base for driveways, in gardens as a soil amendment, walking paths, backfill for foundations, general leveling of lots, as well as horse, llama, and goat corrals. Over 250 cubic yards of DG sand was given away to people from Lewiston, Junction City, Weaverville, Douglas City, and Hayfork.



This decomposed granite was dredged from Hamilton Ponds last fall as part of the Trinity River Restoration Program's effort to reduce sediment from entering the Trinity River. The Hamilton Ponds were constructed in 1984 near the mouth of Grass Valley Creek.

These ponds were designed to catch sand before it enters the channel of the Trinity River where it can bury gravels that are important salmon habitat. The ponds are dredged almost every year to maintain their effectiveness in trapping the decomposed granite. So look for another DG Giveaway Day next spring.

# Wildfire Awareness Week May 10-16, 2004

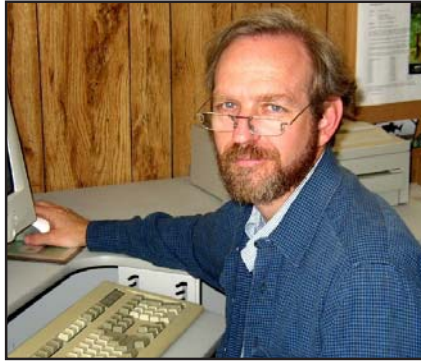


The Trinity County Fire Safe Council is active in promoting defensible space and fire prevention throughout the year, but Wildfire Awareness Week is when we really need residents' help---before fire season starts. Protect Your Home, Your Property, and Your Community from Wildfire.

- √ Properly maintain all outdoor plants by regularly removing dead branches, leaves and needles
- √ Create a "defensible space" around your home by removing all flammable vegetation at least 30 feet and replacing it with fire resistant plants
- √ Clear away flammable vegetation within 10 feet of all woodpiles
- √ Post your house address at the beginning of the driveway, or on the house where it is EASILY visible from the road

**Defensible Space is YOUR  
Responsibility!!**

## District Manager's Corner --Pat Frost



When I came to the District in 1999 one of the first things I received was a two-page list of terms that I would need to know to do my job. Every field of work has its own set of words – plumbers and carpenters talk in terms that may seem foreign to those of us who aren't involved in construction every day.

Those of us working in conservation also have a vocabulary that is specific to our work, and it is easy for us to forget that not everyone will have a working knowledge of these words, known as jargon. I was reminded of this recently when I sat down in front of the microphone in the studio at the KWCA radio station in Weaverville to begin an interview about the District. I had to think about wildfire prevention and the health of our streams in terms that the listeners would understand, not in the terms that a forester or a fisheries biologist would use.



The *Conservation Almanac* is much the same as that radio broadcast. We have to think about what we say and how we say it. Sometimes there is no alternative word for a scientific term. So, starting with this issue, we will include some definitions or at least our way of describing some of these technical terms. This issue has some interesting stories about the restoration of the Trinity River and we'll start there with the way I try to understand some of these terms.

**Hydrograph:** You'll find a graph on Page 2 that shows how the Bureau of Reclamation will release water from Lewiston dam. It shows amounts of water flowing down the river between May and July. So you can think of a hydrograph as just that – the change in the amounts of water in a stream over a period of time.

**Cubic feet per second (cfs):** Think of yourself standing on the bank of a stream that is one foot wide and one foot deep and visualize that volume of water or a box that is one foot on each side that travels past you ever second. One cubic foot of water is 7.5 gallons of water.

**Acre-foot:** This is another way to look at a volume of water. A parcel of land that is about 208 feet square with one foot of water covering that parcel would be 1 acre-foot. 1 acre-foot of water is about 326,000 gallons.

**Riparian:** This word refers to stream banks and usually is used when talking about the plants that grow along the edges of streams – plants like willows, alders and cottonwoods and the animals that live amongst those plants.

I hope you enjoy this issue of the *Conservation Almanac* and let us know how we can improve our newsletter. You can reach us at 530-623-6004 or you can email me at [pfrost@tcrd.net](mailto:pfrost@tcrd.net).

# *Trinity County* RESOURCE CONSERVATION DISTRICT

Established 1956

## District Board Meetings

Third Wednesday  
5:30 PM

Open to the Public

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*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 non-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**

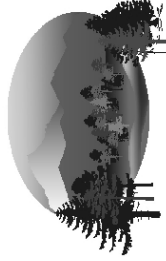
*To assist people in protecting, managing, conserving and restoring the natural resources of Trinity County through information, education, technical assistance and project implementation programs.*

Trinity County Resource Conservation

District

P.O. Box 1450

Weaverville, CA 96093



## **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**
- **Erosion/Sediment Control**
- **Watershed Improvement**
- **Wildlife Habitat**
- **Water Supply and Storage**
- **Soil and Plant Types**
- **Educational Programs**



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