

Conservation Almanac

Trinity County Resource Conservation District

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RCD Hires District Manager

Trinity County Resource Conservation District has a new District Manager. The vacancy was advertised last summer, and the Board of Directors hired Patrick Frost last November. Pat has extensive experience in resource conservation and management, having served for over 14 years with the St. Johns River Water Management District in Florida. Frost was on the water management district's senior management staff for 12 years, and was involved in managing water resources in a wide variety of ways. He is most proud of his role in the protection and restoration of the Wekiva River system near Orlando.

Frost received his bachelors degree in biology in 1976 from the University of San Francisco, and returned there for his masters degree after having served in the Peace Corps in El Salvador from 1976-78. His graduate work was in ornithology, but Pat began to focus on water resources management and wetlands ecology in Florida.

In addition to his most recent work with the water management district, Frost has experience with the Florida Department of Transportation, has worked as an adjunct instructor in the Department of Civil and Environmental Engineering at the University of Central Florida, provided volunteer technical support to Nicaragua's Ministry of Natural Resources, and was employed with an



Pat Frost, District Manager

engineering firm at Vandenberg Airforce Base.

Pat and his wife, Carol, have owned property near Covington Mill for several years, and had been looking for an opportunity to relocate to Trinity County. They moved from St. Augustine, Florida when he assumed his new position in mid-January. Both are outdoor enthusiasts, avid hik-

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Tree Planting and Maintenance Workshop Planned

Trees add beauty and character to our homes and towns. They provide shade from the summer sun, and habitat for backyard birds. Trees planted in towns and cities, away from their natural growing areas, are considered urban trees. As such, they have special maintenance needs.

According to the National Arbor Day Foundation, urban trees often go neglected by homeowners due to a common misconception that trees should be left alone, just as they are in the forest. What many of us do not realize is that the elements that support the growth and maintenance of trees in the forest are missing in an urban environment. Forest trees have each other to shield them from the wind, to prune their lower branches, and to help form their crowns. Urban trees, on the other hand, usually stand alone or in a small group. Therefore, they don't benefit from the self-maintenance found in a forest.

The sites selected to plant urban trees are often limited, and not always the best suited for the trees. Many trees are growing in poor, compacted soil, with less than optimal light, may be exposed to pollution, and are subjected to more foot traffic and vandalism than in a forest.

The care you need to give urban trees changes over time. For the first 3 to 5 years they need the following minimum care: a weekly, deep watering during the dry season; weeding and mulching the tree base; adjusting and

removing ties and stakes; and minimal pruning to remove dead or crossing branches. After this initial period, the trees need occasional pruning, which should be done by a professional arborist or a trained crew or volunteer. Extensive damage can, and does, occur when improper pruning methods are used. Improper pruning to control height, known as topping, is considered one of the worst practices, because of the permanent damage it does to the tree.

Well-cared-for trees live longer and provide many more benefits than do urban trees that are poorly maintained. According to a US Forest Service study, the larger leaf mass of mature trees allows them to provide more shade, energy conservation and carbon dioxide absorption. Uncared for trees are less healthy, developing weak branches with high susceptibility to wind, insects and disease.

There are numerous sources of information that can teach you how to properly care for your urban trees. Local nurseries, the California Department of Forestry and Fire Protection and the Trinity County RCD can help you identify suitable trees, their proper care, and how to identify insects and diseases. In addition, visit Internet sites, such as www.arborday.org and www.ufe.calpoly.edu, to learn more about this subject.

To further assist tree owners, a tree planting, pruning and maintenance workshop will be held on **Saturday, March 13th** at the Trinity County Library in Weaverville at 9 a.m. to 1:30 p.m. Bring a sack lunch. Topics will include proper planting, pruning, and care and maintenance of urban trees (fruit and nut trees will be included). The workshop will include classroom and field time. Mr. Warren Lytle from Shasta Col-

lege will be the instructor for this workshop. Tree care pamphlets and seedling trees will be given to all of the participants. Both a bare root apple and plum tree will be raffled off at the completion of the workshop. This is sponsored by the Trinity County General Services and the Planning Department, under a Proposition 70 urban forestry grant from California Department of Forestry.

If you have any questions, please call Brenda at (530) 623-1352; extension 3410.

Ranch and Watershed Planning Workshop

Trinity County ranchers and landowners are invited to participate in a workshop focusing on ranch planning with respect to water quality. The two day workshop will be held on **Saturday, April 24th and Saturday, May 1st** at the Trinity County Fairgrounds in Hayfork. The workshop will begin at 1 p.m. and adjourn at 4 p.m. Participants in the workshop will have the opportunity to develop information on water quality that can be incorporated into their ranch operation. The cost of the workshop, which normally is \$50 per ranch, has been reduced to \$20 through an EQIP riparian education grant and South Fork Trinity River Restoration Project funds. This workshop is sponsored by Trinity County Resource Conservation District, Natural Resource Conservation Service, and UC Cooperative Extension.

For more info call Don Coffin at 628-5495, Pat Frost at 623-6004, or Jim Spear at 623-3991 ext. 2.

GIS Mapping Project

Trinity County Resource Conservation District's GIS Data Manager, Kelly Sheen, contracted with Trinity County Planning Department to work on a Geographic Information System (GIS) mapping project during 1998. The purpose of the project was to create a geographically referenced spatial database of Assessor's Parcels (AP) for all of Trinity County for the Land Use Element of the County's General Plan and the E911 project compiled by Mary Arey with Trinity County Planning Dept. The first step of this project was

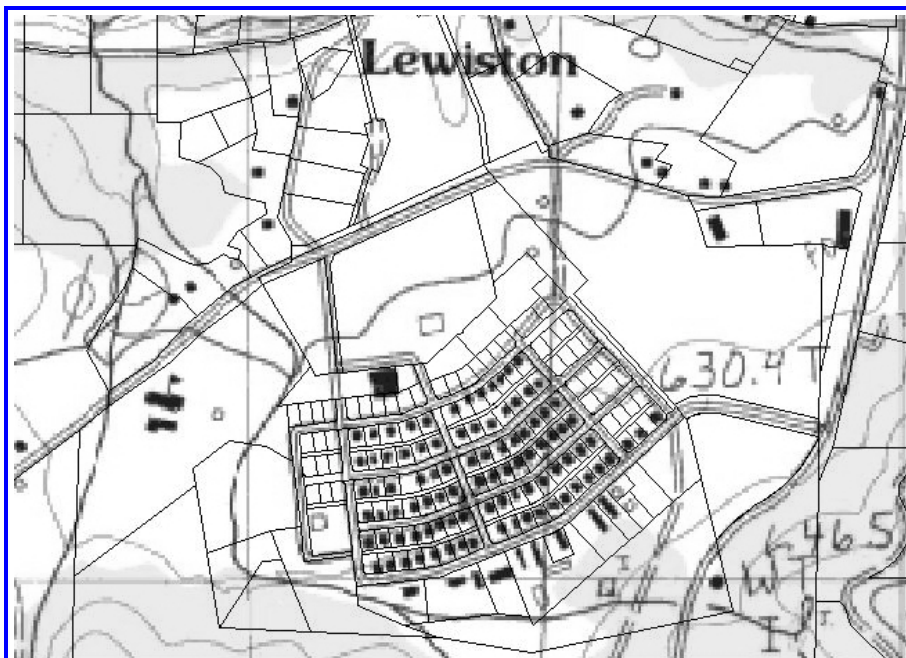
drawings previously created by the Planning Department, and Public Land Survey (PLS) coverages obtained from Shasta-Trinity National Forest, Six Rivers National Forest, Mendocino National Forest, and the California Department of Forestry.

Once all the available data were gathered, the four PLS coverages were combined and exported to a CAD drawing. All of the AP maps were integrated into this base map drawing. Existing digital drawings had to be cleaned significantly and manipulated by obvious landmarks such as roads, streams,

identifier. When all of the AP maps had been integrated, the entire drawing was once more cleaned, then finally exported to a GIS coverage for use by the Planning Department.

This project is now being used by the Emergency Response effort, and will be used by the County for the Trinity County General Plan, identifying land use issues and zoning. These new GIS maps will provide a significant benefit to the County through the identification of address and geographical location enabling better service for emergency fire and medical needs. Trinity County is one of the few, counties in California without an emergency household addressing system. This is due largely to the fact that Trinity County is made up of a large amount of federally designated land with small remote pockets of non-federal residential areas. In addition, the majority of roads leading to these pockets of residential areas in Trinity County are private roads, which are not named or addressed.

The lack of correct addresses and geographical locations, and in some cases, the total non-existence of addresses due to most roads not having a name and households therefore having no address, has presented a barrier to the dispatching of emergency services. The GIS mapping project is correcting this problem.



Sample Parcel Coverage Overlay with Topographic Background

data acquisition, which included the following; all Computer Aided Drafting (CAD) drawings of AP maps completed by the Assessor's Office, digital scanned images of hand drawn AP maps not yet in CAD format from CD-ROM, hard copies of all AP maps for reference, a digital USGS topographic map background image for the entire county also from CD-ROM, any useful CAD

and section corners to fit both the topographic background and the PLS base map drawing. This method of georeferencing was also applied to the hand-drawn AP maps, which were first digitized from the scanned images, cleaned, and then fitted into the base map drawing. As the AP maps were added, each parcel was labeled with its AP number as the unique

TRINITY RIVER WATERSHED FOREST HEALTH AND FUELS REDUCTION

TCRCD and the Watershed Research and Training Center (WRTC) were recently notified that their joint proposal to the State Water Resources Control Board's Safe, Clean, Reliable Water Supply Act (better known as Proposition 204) has been approved for funding. The project is entitled "Trinity River Watershed Forest Health and Fuels Reduction" and is intended to address water quality factors in the Trinity River by reducing risks of catastrophic wildfires and associated erosion and sediment loads in the Trinity River watershed. It will also help improve overall forest health on both private and National Forest System lands.

This project has been awarded \$400,000 over three years for activities, including: (a) coordinate strategic planning to reduce risk of catastrophic fire and protect watershed functions and forest health in the Trinity Basin, through participatory and collaborative work of the Trinity County Fire Safe Council (see related article) and Trinity County Natural Resources Advisory Council; (b) implement high-priority demonstration projects of vegetation management for fuels reduction on lands posing high risks for water quality impacts associated with catastrophic fire, including cost-effective forest thinning, shaded fuel break development, and removal of fuel loads (treating 100 acres of private property and 150 acres of US Forest Service land); (c) extend community outreach and education on reducing fire risk and fine sediment loads, and by fostering broad participation in identifying assets at risk and in firesafe planning, as well as workshops and consultation with land owners in priority locations for action; and (d) collaborative design and initial implementation of a long-term program to monitor and document effectiveness of all project

activities in achieving specified objectives.

In order to qualify for this source of funds, which is part of the Bay-Delta Tributary Watershed Program, TCRCD and WRTC made a case that protecting water quality in the Trinity Basin is crucial to achieving the goals of CALFED, since continued reliable water exports from the Trinity to the Bay and Delta system will ultimately depend on maintaining and improving water quality for aquatic habitat in the Trinity River and its tributaries. Since 1964, an average of one million acre-feet of Trinity River water per year has been exported to the Sacramento River via the Central Valley Project. Under expected future minimum flow requirements, the need to "flush out" fine sediments following catastrophic fire could significantly reduce the amount of water available for export from the Trinity system, thus decreasing reliable quantity and quality of water available to the Bay and Delta. Reducing factors that contribute to the extent and intensity of wildfires on private and US Forest Service lands in the Trinity River Basin will protect functions of a Delta tributary watershed, as well as improving forest health in the Trinity River Basin.

In light of budget cuts and loss of local capacity to respond to fires, reducing risks of fires through cost-effective, pre-fire, collaborative planning and treatments is increasingly important. Although 75% of Trinity County is federal land, federal and private ownerships are intermingled in the Trinity watershed. Therefore, improving effective collaboration among local, state, federal, and private interests is essential to reducing risks of fire to water quality. Fuels reduction and monitoring activities associated with this project will also contribute to local community well-being by supporting employment based on forest and watershed health, including strategic forest thinning and constructing

fuel breaks, monitoring, and processing small-diameter wood removed from project sites for sale to local value-adding industries.

The project is a pro-active, collaborative, education-oriented, and incentive-based approach that will help private landowners and citizens, public land managers, and fire protection agencies to reduce likelihood of, and prepare for, catastrophic wildfires in the Trinity River watershed. This project will encourage voluntary participation by multiple stakeholders, and provide incentives for participation by private landowners. Broad local participation in strategic planning to reduce risks of catastrophic fire and stream sedimentation, and in developing and demonstrating the use of cost-effective means of fuels reduction for watershed protection, will help build community capacity to undertake watershed and fire-related planning, to implement watershed and fire protection projects, and to monitor their effectiveness.

Local outreach and education programs will be coordinated by the Trinity County Fire Safe Council and its members. Education and outreach programs will bring together diverse groups of citizens with staff of local, state, and federal agencies, to facilitate open and timely communication and collaboration. The outreach and education program will be closely coordinated with existing countywide fire planning initiatives. The education program will provide forums for public discussion to identify assets at risk from wildfire and appropriate action priorities. This will be accomplished in conjunction with local implementation of activities required in the California Fire Plan (1996) by the California Department of Forestry and Fire Protection (CDF).

This project is intended to build on various ongoing local fuels reduction, firesafe, and emergency response planning initiatives.

Background GIS map depicts natural and human fire starts around Wildwood

These include firesafe outreach and planning as well as fuel reduction projects in the East Branch of East Weaver Creek, Hayfork, and Covington Mill, and ongoing landowner assistance by CDF, Stewardship Incentive Programs (SIP) and EQIP-funded government cost-sharing programs on private land, Hayfork Ranger District shaded fuel break project, fire management planning on private industrial timber holdings, Hayfork's Fire Management Plan, and development of a County-wide "911" emergency response system.

Emergency fire response in Trinity County has long relied on inter-agency cooperation among local Volunteer Fire Departments, the California Department of Forestry and Fire Protection, the US Forest Service and private landowners. While building on these ongoing efforts, this project will support even more effective public participation and inter-agency cooperation for strategic landscape-scale planning to reduce risks of catastrophic fire and of water quality impairment.

TRINITY COUNTY FIRE SAFE COUNCIL

As part of the process of preparing a proposal to obtain funds to implement fuels reduction projects it became apparent that it would be difficult to obtain funds if we could not show that there is an overall strategic plan for prioritizing fire risk in the watershed. A forum was deemed necessary to bring together the various vested interests and agencies to gather all available information and develop such a plan that would prioritize fire risk areas over the whole landscape rather than on a piecemeal basis. Fire Safe Councils exist in other communities in the state and are intended to be a consortium of local, state, and federal agencies, watershed based groups, industry, private landowners and seemed an appropriate avenue to address

our concerns and develop a strategic plan to minimize the risk of catastrophic fire in the county.

Reducing risks of wildfire to forest and watershed ecosystem functions, safety, and community assets through coordinated planning efforts and improved emergency response is something most individuals and agencies agree upon.

Our proposal to implement fuels reduction projects on private and public lands in the Trinity River Watershed included the development of a Memorandum of Understanding (MOU) for the Trinity County Fire Safe Council. Prior to submitting the proposal, the Trinity County Board of Supervisors approved of the idea of forming a Trinity County Fire Safe Council and signed the MOU. The Fire Safe Council is a subgroup of the newly formed Trinity County Natural Resources Advisory Council which is an ad-hoc advisory group formed to advise the Trinity County Board of Supervisors concerning natural resource issues in the County.

The following are highlights of the Trinity County Fire Safe Council MOU:

Purpose

The MOU establishes a proactive approach to address the risk of catastrophic fires in Trinity County by forming a Fire Safe Council to identify high risk areas and undertake strategic planning to reduce those risks on both private and public lands using a locally led planning process.

The MOU will help facilitate coordinated action with local, state, and federal agencies, watershed-based groups, industry and commercial associations, neighborhood associations, private landowners, and other concerned parties in programs that contribute to healthy ecosystem functions in Trinity County and its watersheds by reducing the risk of catastrophic fire.

Background

Over the past century, forest use, management, and fire suppression have significantly increased the volume and continuity of live and dead wood fuels near the forest floor. These fuels provide a "ladder" that connects surface fuels with the forest canopy. Consequently, risks of larger, more intense, catastrophic fires have increased.

Residential and recreational development in forest lands have increased the risk of fire, as well as the economic value of assets at risk from wildfire. In areas of adjoining private and public land ownerships, coordinating management is desirable and important for better assuring that ecosystem health can be maintained and restored.

Water supply and water quality require healthy watershed processes in the upper portions of tributary watersheds. Catastrophic fire is detrimental to watershed function and water quality. By killing vegetation, burning the organic matter in litter and soil, and forming impervious soil layers, severe fires accelerate runoff from the watershed. More water is discharged over a shorter period of time, peak flows are greater (contributing to increased flood hazards), and summer and fall streamflows are lower than those in less disturbed watersheds. Bare soils and increased runoff result in higher levels of sedimentation and landslides become more prevalent.

Land and resource management in the upper portions of tributary watersheds have substantially modified watershed processes by making it more susceptible to catastrophic fire. This has affected the reliability of high-quality water inflows to the Trinity River and its tributaries. Catastrophic fires also increase risks of fine sediment runoff.

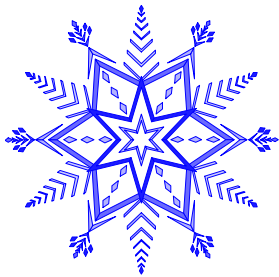
The California Department of Forestry & Fire Protection and the US Forest Service are already engaged in steering the process of planning for fire safety, and other signatories are pursuing a variety of activities aimed at reducing risk of wildfire. The Trinity County Fire Safe Council will aid in co-

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ers and paddlers. Of course the move to Trinity County has meant that they will be trading in their Florida canoe for kayaks and a raft. Pat has kept his birdwatching skills honed over the years, having led and participated in wildlife surveys throughout central Florida.

Pat is looking forward to combining his water management experience in Florida with the expertise of the Resource Conservation District to serve the residents of Trinity County in solving the wide range of resource challenges in the county.



Trinity River Video Available

The video, "The Waters of Those Mountains: Restoring the Trinity River" is completed. Copies are available through the producer, Emelia Berol, (707) 826-1963, or trillium@humboldt1.com.

This half hour video was produced in 1998 and gives an overview of the ecological problems caused by the construction of the dams on the Trinity River: impacts to the fishery, a history of the Trinity River Restoration Program and interviews with scientists and others involved in the restoration program.

A donation of \$15 is requested to help with duplication and distribution costs. Checks can be sent to Trinity Video Project, P.O. Box 4201, Arcata, CA 95518.



Weaverville Basin Trail News

This past year has been exciting for the Weaverville Basin Trail System. Strong local support has provided a solid foundation on which to build and solidify our trail system into the next century. In December, the District hired Scott Morris as a part time Trails Coordinator with funding provided by a US Forest Service CERT grant to guide the development and implementation of the trail system master plan. Below is a list of projects that the Trail Committee is currently working on.

TRINITY GATEWAY PROJECT

In 1997 we joined forces with Trinity County Public Works and Planning Departments to acquire an Environmental Enhancement and Mitigation Grant from Caltrans. This grant will provide paved and landscaped parking for Lee Fong Park, the Lee Ranch House and Cultural Center, the Jake Jackson Museum, the Highland Art Center and the Weaverville Joss House. In addition, this off-street parking area will display an informational kiosk featuring the southern, northern and down river areas of Trinity County, thus providing a true gateway to Trinity County. The parking area will also serve as a trailhead for the Weaverville Basin in-town trail system.

WEAVERVILLE BASIN TRAIL MASTER PLAN DEVELOPMENT

The CERT Grants are federal dollars allocated to help offset negative economic impacts to timber dependent counties by the listing of the Northern Spotted Owl. The Trail System has needed a clear blueprint for its overall development and management. This is particularly important when it comes to securing future grants for implementing trail work. This master plan will be the long term business plan for the trail and will focus primarily on the proposed in-town sections of the trail system from Lee Fong Park to the Trinity Alps Industrial Park, from Lowden Park to Browns Ranch Road and then down along the East Weaver Creek levee to the confluence of West Weaver Creek and Sydney Gulch. These sections are proposed to be hard

surface, multi-use trails similar to the Sacramento River Trail in Redding.

US FOREST SERVICE SESQUICENTENNIAL GRANT

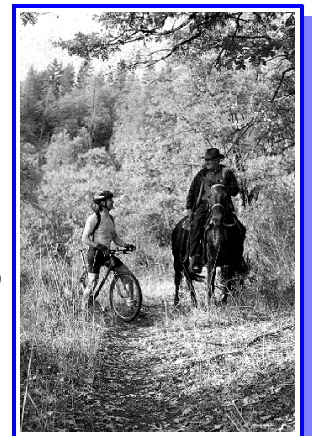
This grant is designed to help celebrate California's 150 years of statehood and its cultural and historical diversity. The Weaverville Basin Trail Committee, with the much appreciated assistance of the Trinity County Resource Conservation District, has developed a very handsome self-guided brochure featuring a number of historical points of interest and a very detailed map of the entire Weaverville Basin Trail System. This is due out March 1st.

THE LAGRANGE CLASSIC MOUNTAIN BIKE RACE

When we heard there was a possibility this extraordinary mountain bike race might be canceled due to a lack of help, we asked to pitch in. We are excited to say that the Weaverville Basin Trail Systems biggest event; The LaGrange Classic, rides again! The event is scheduled for June 19th and 20th, with the cross-country race on Saturday and the downhill race on Sunday.

MEETINGS AND WORK-DAYS

The Weaverville Basin Trail Committee meetings are held the first Wednesday of every month, at 7 p.m. in the TCRCD Conference Room. Our workdays (we call it play) are held on the second Saturday following our Wednesday meetings. Look for the notice in the Trinity Journal under community events for time and place. To become a supporter of the Weaverville Basin Trail, send your annual \$10 tax-deductible donation to the TCRCD.



Environmental Quality Incentives Program (EQIP) Funds Available

The Natural Resource Conservation Service (NRCS) has received money for conservation projects in the South Fork Trinity River and Eel River watersheds. The conservation funds, authorized through the Farm Bill's Environmental Quality Incentives Program (EQIP), are offered in priority areas where there are significant natural resource needs and objectives. Environmental enhancements that are encouraged through EQIP include improvements to creeks and streams, livestock operations, forest health and wildlife habitat. EQIP is a new program for farmers and ranchers who face serious threats to soil, water, and related natural resources.

Landowners in the South Fork Trinity River (includes Hayfork) and Eel River (including Zenia and Kettenpom communities) are able to apply for cost-shares (up to 75%) for a wide variety of conservation practices such as erosion control, fencing, livestock water developments, fuels reduction and fire protection practices, brush clearing and range and pasture seeding. As funding is limited, applications will be ranked based on total environmental benefit and cost.

Please contact the local NRCS office at (530) 623-3991 if you are interested in applying for a conservation project. Applications are due by March 26, 1999.



Riparian Fencing Project in Hayfork

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ordination and long term planning at the local level.

Goal

The shared goal of the MOU is to reduce the risk of catastrophic fire in Trinity County by establishing priorities for reducing risk of catastrophic fire on a landscape-level scale in order to improve forest health, water quality and quantity, and community well-being.

Objectives

Undertake strategic planning to address and prioritize fire hazards in Trinity County utilizing a locally led planning process with all stakeholders based on a landscape-level analysis of risk factors and action priorities.

Focus efforts by aggressively pursuing prevention of catastrophic fire through vegetation management, controlled burning, land use planning, and forest health programs.

Priority Tasks for Coordinated Action

- 1) Improve coordination among local, state, and federal resources for long term planning, pre-fire management, and emergency response.
 - Facilitate active communication among all parties engaged in planning or other activities to reduce and respond to risks of wildfire in Trinity County.
 - Develop means to identify and fully utilize local knowledge and capabilities in coordinated planning and fire response.
- 2) Coordinate activities with regard to GIS-based mapping of data important to fire management and risk assessment in Trinity County.
 - Mapping will include assets at risk, local fire history and response effectiveness, vegetation type, slope, aspect, roads, streams, fire breaks (planned, implemented, and maintained), prescribed burns, and emergency response initiatives.
 - Identify data gaps, prioritize

data needs, and coordinate activities to obtain critical information.

- Prioritize community projects based on analysis of fire risk hazard.
- 3) Work cooperatively to develop and implement cost-effective means of fuels reduction/thinning, fuel breaks, prescribed burning, and other appropriate projects.
 - 4) Convene community meetings to familiarize local community members with on-going efforts and encourage their active involvement.
 - Follow-up outreach at the local level.
 - Educate landowners about the risk of fuels buildup and the need for appropriate treatment.
 - Conduct workshops and distribute newsletters.
 - 5) Develop a monitoring program that will involve all interested parties, based on ecosystem principles, and take into account watershed, forest, and community assets and values at risk from wildfire.
 - Track progress and evaluate effectiveness.

The Trinity County Fire Safe Council held its first meeting on Tuesday February 2, 1999 at the Trinity County Office of Education. The Fire Safe Council will be meeting again in the near future to continue the process of seeking reasonable solutions to minimizing the risk of catastrophic fires within Trinity County. If you are interested in being involved in this effort please contact Bill Britton at CDF, P.O. Box 1296, Weaverville, CA 96093 or call (530) 623-4201.

