Trinity County
Community Wildfire Protection Plan
Update 2010

Photo by Robin Stocum

Report to The Trinity County Fire Safe Council from
Trinity County Resource Conservation District and
The Watershed Research and Training Center

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Executive Summary

The Trinity County Fire Safe Council (FSC) developed the Trinity County Community Wildfire Protection Plan (CWPP) between 1999 and 2005. This effort began with a countywide process that resulted in the **Recommendations on Trinity County Values at Risk from Fire and Pre-Fire Fuels Treatment Opportunities drawn from Community Meetings 1999/2000 (February 2001)**. These recommendations were used to develop the CWPP, which was accepted by the Trinity County Fire Chiefs' Association, Trinity County Board of Supervisors and the California Department of Forestry and Fire Protection (CDF) in September 2005.

These two documents have guided the FSC, its member organizations and partners, in the selection and implementation of strategic fuels reduction projects and public outreach as they have sought to improve cooperation and coordination in all aspects of wildfire management in Trinity County. Members include representatives from local, state and federal land management agencies, non-governmental organizations including the local Volunteer Fire Departments (VFDs) and citizens. The FSC identified the need for a spatially explicit countywide fire management plan in 1999 to assist in prioritizing and coordinating at a landscape level activities such as pre-fire fuels reduction treatments, and has maintained this over-arching need as fundamental to its success ever since.

Historically, county or regional scale wildfire management planning efforts have often failed to involve or even acknowledge local residents' knowledge and expertise. FSC members felt very strongly that community input should drive the Trinity County Fire Management Plan development process with advice from local and regional expertise in fire management; in 1999 with funding support from the USFS Pacific Southwest Research Station and the CA Department of Water Resources, a team from the FSC began a process to capture community recommendations for the original planning effort. A series of community meetings and public workshops were held at Volunteer Fire Department Halls and community centers across Trinity County. Residents were asked to help identify and map features relevant to emergency response. Data noted included *e.g.* locked gates, bridges too weak to carry a fire truck, and water sources. Community members also worked with the team to locate and specify values at risk from fire in and around their communities. They made recommendations about pre-fire treatments, such as clearing defensible space around residences and constructing shaded fuel breaks along roadsides that could help to protect these values. Finally, they jointly developed a ranking system and a prioritized list of recommended projects. Data from these meetings was captured and entered into a Geographic Information System (GIS). The methods used to capture community input and recommendations from these meetings were presented in the original report.

The same strategy has been used in the 2010 CWPP Update, with 15 community meetings hosted by the Volunteer Fire Departments. Some significant elements have been added to the Update that were not a part of the original planning: an interface with the concurrent Humboldt County CWPP update; development of Wildland Urban Interface boundaries as defined in the Healthy Forest Restoration Act; and attention to treatments associated with large scale fires that have

occurred since 1999. These meetings were used to capture a variety of information, including the following:

- Status of project implementation of recommended treatments from the 2005 CWPP.
- Identification of projects to be implemented and their relative priorities for each community.
- Project maintenance needs.
- Updating the Defensible Space requirements from 30 ft around structures to 100 ft[1].
- Developing a spatially explicit definition of the Wildland Urban Interface (WUI) for each community at risk.

A second set of meetings were held with USFS and CAL FIRE agency staff involving fire prevention and fire suppression to help fine-tune project concepts and WUI boundaries at the landscape scale.

The projects resulting from the 2010 Update are blended with the 2005 CWPP projects and are presented for each of five divisions of the county: Down River, Mid-Trinity, North Lake, South County and South Fork.

Overriding project ideas and planning recommendations for Trinity County are:

1. Work to integrate fire management planning explicitly into the National Forest Management Act mandated planning process on the national forests and across jurisdictional boundaries to allow for landscape scale prioritization and implementation of pre-fire treatments.

   Immediate opportunities for coordination include:
   - Linking the Six Rivers and Shasta-Trinity National Forests' Road Management Plans to ensure that roads critical for access in case of fire are being maintained. Further, encourage cooperation among all jurisdictions (CalTrans, Trinity County, USFS, etc.) to manage and reduce roadside fuels;
   - Coordinating Six Rivers National Forest and Shasta-Trinity National Forest Fire Management and Trinity Alps Wilderness Management Plans.

2. Identify and publicize safety zones for each community in case of catastrophic fire.

3. Review the economic value of plantations (*e.g.*, through cost-benefit analysis). Participants noted that considerable expense has already gone into planting the trees and whether one wishes to pursue this type of silviculture in the future or not, the existing plantations are both important resources and, if untended, fire hazards. Too often scheduled maintenance thinnings are neglected. Consider proactive thinning and fuels reduction of plantations during their period of greatest vulnerability to fire (around year 7).

4. Understanding the concern of the increasing amount of fuel on the landscape as a result of fires, windfalls, insect, and disease outbreaks, and other events. These areas are given

[1] California law (PRC 4291) requires property owners and/or occupants to create 100 feet of defensible space around homes and buildings

priority in ranking of projects due to the risk they pose to adjacent values at risk including communities, associated infrastructure and adjacent forest resources. Resistance to control of fire in these areas is extreme and will tax limited fire fighting resources.

5. Develop methods for managing vegetation occurring next to or around forest demonstrating unique or valued characteristics, to better protect it from stand replacing fires. It was suggested that there are examples of this type of management working well on South Fork Mountain.

The Trinity County Board of Supervisors has been a strong voice advocating for landscape scale treatments that will help protect Trinity County's communities at risk. The 2005 CWPP, and hopefully this Update, will prove valuable as articulations of the County's perspective on landscape scale treatments and fire management issues. Federal land management agencies have used the 2005 CWPP to inform their pre-fire management planning, and this 2010 CWPP Update is intended to be similarly useful to those agencies as they gather community input for their fire planning processes. The community recommendations should be used by the Trinity County Planning Department and Planning Commission in updating the County's General Plan, especially the Safety Element.

The Trinity County Resource Advisory Committee (RAC) is a Federal Advisory Committee Act (FACA) chartered citizen-based committee appointed by the US Secretary of Agriculture under Title II of the Secure Rural Schools and Community Self-Determination Act. The RAC has used the existing CWPP to prioritize recommendations for forest health/fuels reduction projects and will likely use the 2010 Update to allocate funds for high priority projects on lands managed by the USFS. The Fire Safe Council, including the TCRCD and the WRTC, will continue fire management coordination efforts using the results of this Update to systematically promote implementation of the projects recommended by the community participants. Further, it will encourage public land management agencies to carry out the necessary pre-work, such as National Environmental Protection Act (NEPA), required before many recommended activities can be carried out. Trinity County VFDs, through the Chiefs' Association, and the FSC may also find the information helpful in the next phases of county level emergency response coordination e.g. sharing equipment to implement projects.

Declaration of Agreement

The Community Wildfire Protection Plan Update developed for Trinity County by the Trinity County Fire Safe Council:

- Was collaboratively developed. Interested parties and federal land management agencies managing land throughout Trinity County, included the communities in the vicinity of Big Bar/Big Flat, Burnt Ranch, Coffee Creek, Covington Mill, Douglas City, Hayfork, Hawkins Bar, Hyampom, Junction City, Kettenpom Valley, Lewiston, Mad River, Post Mountain, Ruth, Salyer, Trinity Center, Weaverville, Wildwood, and Zenia have been consulted.
- This plan identifies and prioritizes areas for hazardous fuel reduction treatments and recommends the types and methods of treatment that will protect land throughout Trinity County, including the communities in the vicinity of Big Bar/Big Flat, Burnt Ranch, Coffee Creek, Covington Mill, Denny, Douglas City, Hayfork, Hawkins Bar, Hyampom, Junction City, Kettenpom Valley, Lewiston, Mad River, Post Mountain, Ruth, Salyer, Trinity Center, Weaverville, Wildwood, and Zenia.
- This plan recommends measures to reduce the ignitability of structures throughout the area addressed by the plan.

The following entities mutually agree with the contents of this Community Wildfire Protection Plan:

_____ Date: 5/17/11

Judy Morris, Chairman of the Board
Board of Supervisors
County of Trinity

_____ Date: _____

Dave Loeffler, President
Trinity County Fire Chiefs' Association

_____ Date: 5/2/11

Rick Kyle, Shasta Trinity Unit Chief
California Department of Forestry and Fire Protection

5/23/11

_____ Date: 4-28-11

Jesse Cox, Chairman
Trinity County Fire Safe Council

_____ Date: 5-5-11

Barbara Darst, Chairman
Willow Creek Fire Safe Council

Acknowledgements

Planning Team Participants

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Pat Frost, Trinity County Resource Conservation District
Kelly Sheen, Trinity County Resource Conservation District

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Board of Supervisors
- Judy Pflueger
- Judy Morris
- Roger Jaegel
- Howard Freeman/Debra Chapman
- Wendy Otto

County of Humboldt:
- Cybelle Immitt, Planner
- Jerry von Dohlen, GIS Specialist

Shasta-Trinity CAL FIRE Unit:
- Andy Reiling
- Mark Rodgers

US Forest Service
Shasta-Trinity National Forest
Six Rivers National Forest

Bureau of Land Management
Redding Field Office

Local Fire Departments:
- Coffee Creek Fire
  - Roger Chatterton
- Douglas City Fire
  - Gene Benassini
- Down River Fire
  - Martin Dooly
- Hawkins Bar Fire
  - Gary Standley
- Hayfork Fire
  - Dave Loeffler
- Hyampom Fire
  - Joe Watkins
- Junction City Fire
  - Justin Kerwick
- Lewiston Fire
  - Mel Deardorff
- Post Mountain Fire
  - Jeff Brusatori
- Salyer Fire
  - Dave Murphy
- South Trinity Fire
  - Don Cole
- Trinity Center Fire
  - Roger Chatterton
- Weaverville Fire
  - Scott Alvord
- Zenia-Kettenpom Fire
  - Brian Craig

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The Trinity County Board of Supervisors, through Title III has committed Secure Rural Schools Act funding[4] to support The Trinity County CWPP Update 2010.

The California Department of Conservation, through the Watershed Coordinators grant program has also contributed funding to the 2010 update.

PLEASE COMMENT ON THIS DOCUMENT

Although a large number of people were involved in the community input process, we will continue to seek comments on the Trinity County Community Wildfire Protection Plan. It is, by necessity, a living document and there will always be suggestions for next steps in community involvement in fire management planning.

[4] Secure Rural Schools and Community Self-Determination Act of 2000

I. Introduction

Objectives

The intention of the Trinity County CWPP update is to collate new information and present the updated CWPP in a form useful to county planners, USFS land management staff, CAL FIRE, Volunteer Fire Departments and others who may use the data to promote fire management activities and fire safety in Trinity County. The following objectives guided the update process:

- Update and prioritize fire and fuels related projects;
- Create an online database where Geographical Information System (GIS) layers can be accessed by agencies or the public;
- Record project accomplishments;
- Update new policies and laws;
- Facilitate federal agency consideration of community priorities;
- Improve ability to protect lives and property from wildfire damage;
- Increase public awareness of consequences of living in a wildfire prone environment;
- Provide the public with clear steps they can take to reduce the risks associated with living in the Wildland Urban Interface/Intermix (WUI);
- Merge the goals and objectives of landowners with the needs and expectations of the community regarding wildfire risk reduction;
- Coordinate fire protection strategies across property boundaries; and
- Provide a tool to help coordinate grant funding and federal program budgets to achieve the most effective results with limited funding.

Plan Context

Healthy Forest Restoration Act Criteria for Certification as a Community Wildfire Protection Plan

The National Fire Plan directed federal agencies to "work directly with communities to ensure adequate protection from wildfires, and to develop a collaborative effort to attain the desired future condition of the land."[5] The key wildland fire management agencies in California have chosen to accomplish this effort through the California Fire Alliance (The Alliance). To this end the Alliance, on its website[6], encourages the development of Community Wildfire Protection Plans (CWPP), as defined by the Healthy Forests Restoration Act (HFRA). A community wildfire protection plan, as defined by the HFRA, means a plan for an at risk community that fulfills the following criteria.

Collaboration

A) The plan is developed within the context of the collaborative agreements and the guidance established by the Wildland Fire Leadership Council and agreed to by the

[5] http://www.cafirealliance.org/organization_history/

[6] http://www.cafirealliance.org/cwpp.php

applicable local government, local fire department, and State agency responsible for forest management, in consultation with interested parties and the Federal land management agencies managing land in the vicinity of the at-risk community.

This plan was collaboratively developed. Significant efforts were made throughout the planning process to collaborate with local, state, and federal land and fire management agencies. Leadership and guidance was provided by the Trinity County Resource Conservation District and Watershed Research and Training Center. CAL FIRE, USFS, Trinity County Volunteer Fire departments, and BLM managers were represented and provided presentations at the community meetings. Officials from both the Six Rivers and Shasta-Trinity National Forests were engaged in the collaboration. In addition, special efforts were made to gain experience and insight from professional foresters, both active and retired. Meetings were designed and conducted to maximize community input into the planning process.

Prioritized Fuel Reduction

B) The plan identifies and prioritizes areas for hazardous fuel reduction treatments and recommends the types and methods of treatment on Federal and non-Federal land that will protect one or more at-risk communities and essential infrastructure.

This plan identifies areas for hazardous fuel reduction treatments and prioritizes them using a ranking system. This plan also recommends the types and methods of treatment to reduce the risk of wildfire to communities and resources within the planning area.

New Policies

California Public Resources Code 4291

The California state legislature enacted California Public Resources Code 4291 (PRC 4291) in January 2005 to improve fire safety and to help prevent catastrophic fires. Under this law, property owners or those who control a property in mountainous areas, forest-covered lands or any land that is covered with flammable material must create at minimum a 100-foot defensible space (or to the property line) around their homes and other structures. The 100-foot defensible space includes a 30-foot clean zone (or to property line) and a 70-foot reduced fuel zone (or to property line). Creating the defensible space involves thinning and breaking up the continuity of ladder fuels and large areas filled with contiguous shrubs that can readily transmit fire.

II. Wildfire in Trinity County

Wildfire in California and Trinity County

In much of the Western United States, including California, fire is a natural disturbance regime that functions to cycle nutrients and renew ecosystems. Fire's integral role in maintaining ecosystem health, long a minority perspective, has gained ground in the past decade and influences current land management and public policy. This is in contrast to attitudes and understandings of the early 20th century when fire exclusion to "protect" forest and other resource values dominated the approach to managing fire on public lands and in private industrial forests.

In many California forests, the results of fire suppression and past practices such as logging, planting mono-cultures of economically valuable trees and failure to adequately manage such plantations, have resulted in unnaturally high accretion of fuels and increasingly unpredictable wildfires. Wildfires are now often of a scale and intensity beyond the range of historic variability (Agee, 1993; Skinner, et.al. 1996; Skinner, Taylor and Agee. 2006). The regional and landscape scale impacts of these fires include changes in vegetation patterns, loss of remaining old growth forest in reserves, adverse impacts to air quality and its associated effects on public health, economic losses and danger to human life. Trinity County has been no exception. According to CalFire and their Fire and Resource Assessment Program (FRAP) 105 wildfires occurred between 1999 and 2009 with approximately 433,835 acres burned. The 2008 fire season alone resulted in 265,000 acres affected, including about 94,000 acres within the WUI, around 17 weeks of severe smoke impacts, and 10 lives lost.

Increasing Costs of Catastrophic Wildfires

The high costs of catastrophic wildfires are particularly evident in the wildland urban interface (WUI). The October, 1991 Oakland-Berkeley Hills fire burned only 1,500 acres but killed 25 people and damaged or destroyed almost 3,000 structures with an estimated value of more than $1.5 billion (Plevel, 1997). Closer to home, the 1999 Big Bar Complex fire in Humboldt and Trinity Counties burned 125,000 acres of National Forest, Hoopa Valley Indian Reservation and private lands in 91 days. During that time air quality was so poor that the people living in the town of Hoopa had to be evacuated to the coast. Suppression costs were estimated at $110 million (Bryant, 2000). The estimated costs of the 2008 Firestorm in Trinity County are over $150,000,000 for fire suppression (Jaegel, 2009).

Again, fire, most frequently ignited by lightening in Trinity County, is a natural phenomenon of ecological renewal in this landscape. However, where fires encounter unnaturally high fuels loading in landscapes that have already lost a large proportion of fire resistant old growth forest and resilient vegetative mosaics, impacts on forests and watersheds can extend beyond the natural range of historic variability and begin to threaten ecosystem functions. One issue of concern with such intensive large scale fires is progressively increasing fuel loading caused by continued stem mortality after a fire. This situation occurred in many areas burned in the 2008 fires, where past fires contributed fuel to the conflagration. Additionally, soils denuded of protective vegetation cover erode into fish bearing streams and further threaten already endangered salmon and steelhead trout runs and degrade community water supplies.

Influencing Wildfire with Pre-Fire Treatments

Fuels, weather, and topography influence fire behavior. Since people cannot control climate, and topography, reducing fuel loading through pre-fire treatments is the most promising area in which people may influence wildland fire behavior (Agee, 1993; Agee et al. 2000).

A range of methods for fuels reduction have been developed including systematic slash disposal after logging, thinning overly dense stands from below, construction of shaded fuel breaks and prescribed fire. While there have been cases, such as the 1999 Lowden Fire, in which human error led to misapplications of these tools, all of these methods have been applied repeatedly with success in Trinity County. Further, per acre costs for treatments are increasingly quantifiable, making advanced planning more feasible, as evidenced by the focused efforts of the Trinity

County RAC to dedicate $1,275,517 since 2001 on fuels reduction projects on USFS lands in Trinity County.

Still, pre-fire treatments are expensive and a relatively small percentage of the landscape can and will be treated each year. These up front costs function as insurance payments with many of the associated questions. What type of insurance do we need – where shall we apply it? Which methods shall we apply and how intensively? How much are we willing to pay for insurance? Who will pay? Prior to the completion of the original CWPP most fuels reduction treatments in the Trinity area were opportunistic e.g. a shaded fuel break constructed on USFS managed lands in conjunction with a timber sale, or a 10-acre, trial, small diameter thinning from below followed by an understory burn. While a small area treated is thus made ready to meet a wildfire and much was learned from the implementation of these early projects, the overall effect is a random scattering of resources across the forested landscape. The original CWPP was an attempt to coordinate treatments at a landscape scale to ensure that one fuel break would be linked to the next and that the most problematic areas were treated first. Resources for pre-fire treatments continue to be scarce and it is important to use them as effectively as possible and to focus efforts on protecting those values of greatest importance to each community. Fires do not stop at property boundaries; coordinated efforts must involve all who have an interest in local land management including federal, state and local government agencies, private land owners and the general public. While industrial forest landowners and government agencies have worked on fire management planning to varying degrees within their own jurisdictions, the CWPP was the first effort to provide a comprehensive coordinated view of the entire Trinity County landscape; it was a systematic effort to capture local citizens' knowledge and recommendations. This Update builds on the success of the earlier planning effort, the decade-long implementation of strategic fuels reduction projects and adds the WUI dimension to setting priorities.

The Trinity County Fire Safe Council

In mid 1998, the County Board of Supervisors' Natural Resources Advisory Council appointed a sub-committee to address the issue of fire. This initiated the Trinity County Fire Safe Council (FSC) that has met on average monthly since. The FSC includes representatives from local Volunteer Fire Departments (VFD), Trinity County Resource Conservation District (TCRCD), the Watershed Research and Training Center (WRTC), the United States Forest Service (USFS), United States Bureau of Land Management (BLM), the California Department of Forestry and Fire Protection (Cal Fire), Safe Alternatives for the Environment (SAFE), Trinity County and others who have all signed a Memorandum of Understanding (MOU) to cooperate on fire management planning (Appendix 1). This MOU has been renewed twice.

The Trinity County Fire Safe Council, a model of collaborative community participation promoted by Cal Fire, benefited from several ongoing efforts in the formative years of the Fire Safe Council involving cross agency and community participation and capacity building. A Hayfork Fire Plan was developed in 1995 and 1996 in a joint effort by the WRTC, TCRCD, USFS, CDF and local residents. The coordination was funded by USFS PSW. That process led to a proposed plan to develop fuel breaks around the community of Hayfork and coordinated fuels reduction and fuel break construction efforts began with private landowners in two Hayfork area neighborhoods. CDF helped raise funds for that initial implementation which was then

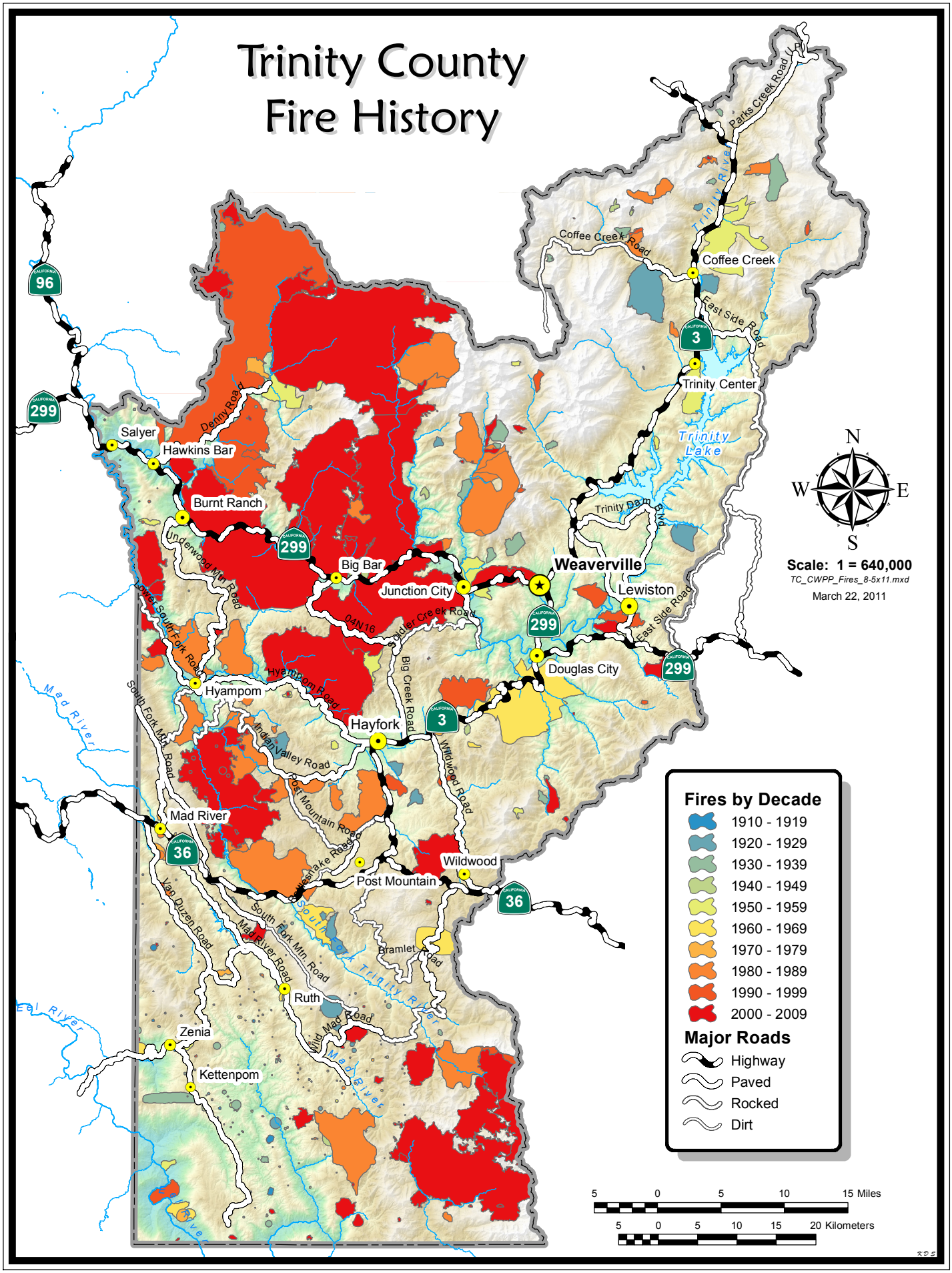
carried further by TCRCD in other demonstration projects and community-specific plans, including the East Branch Plan (Lancaster, 2000), East Fork Plan (Baldwin 2000) and Down River Plan (Baldwin 2005), Grass Valley Fire Management Plan (Baldwin 2003).

Other projects include WRTC and the USFS working to construct some of the identified fuel breaks on USFS managed land and pioneered efforts to make thinning from below for fuels reduction pay for itself through utilization of small diameter wood in manufactured wood products (Braxton-Little, 1998; Danks, 2000). In response to the increased projects and needs from the Firesafe Council, the WRTC and TCRCD have well-developed, in-house GIS capabilities, and provide most of the GIS support to local agencies and organizations in Trinity County.

Combined, the above mentioned efforts, along with others, served to develop the local organizational capacity and set precedents for working with private landowners and local residents to identify localized problems and reduce fuels hazards around structures and on private lands; for implementing fuels reduction projects on public lands using private non-profit resources; and for using GIS to address issues of community interest.

However, the initial pre-fire treatment projects were not spatially coordinated with respect to their location in the landscape, and therefore their ability to slow the spread of catastrophic fire was limited. The FSC felt that a new cooperative effort could allow FSC to carry out a strategic landscape analysis process to identify local residents' and agency and landowner priorities for pre-fire treatments that would allow coordination of existing efforts and more targeted future efforts. Such a coordinated series of recommendations could provide a basis for seeking funding support for carrying out more fuels reduction work and have the joint outcomes of protecting key values from catastrophic fire, while allowing for reintroduction of low intensity fire, and providing an ongoing source of employment doing the fuels reduction work.

In 1998 the WRTC and the TCRCD worked together to find funding support for this idea. They were able to raise funds from the USFS Pacific Southwest Research Station and the California Water Resources Control Board. Fire management planning is an ongoing effort. Initial recommendations were developed between 1999 -2001 and were used as the basis of the Trinity County CWPP (2005) derived from guidance in the Healthy Forest Restoration Act (2003) HFRA. The first steps envisioned by the Fire Safe Council, and funded through the initial grants, were to carry out demonstration fuels reduction projects on public and private lands in Trinity County concurrently with the county-wide, coordinated, fire management planning process.


Trinity County
Fire History
Parks Creek Road
Trinity River
Coffee Creek Road
Coffee Creek
East Side Road
Trinity Center
Trinity Lake
Trinity Dam Blvd
Weaverville
Lewiston
Douglas City
Junction City
Big Bar
Burnt Ranch
Hawkins Bar
Salyer
Denny Road
Underwood Mtn Road
Lower South Fork Road
04N16
Ryder Creek Road
Hyampom Road
Hyampom
Big Creek Road
Hayfork
Wildwood Road
Indian Valley Road
Post Mountain Road
Rattlesnake Road
Mad River
South Fork Mtn Road
Van Duzen Road
Mad River Road
Ruth
Wild Mad Road
Bramlet Road
South Fork Trinity River
Eel River
Zenia
Kettenpom
Wildwood
Post Mountain
N
W
E
S
Scale: 1 = 640,000
TC_CWPP_Fires_8-5x11.mxd
March 22, 2011
Fires by Decade
1910 - 1919
1920 - 1929
1930 - 1939
1940 - 1949
1950 - 1959
1960 - 1969
1970 - 1979
1980 - 1989
1990 - 1999
2000 - 2009
Major Roads
Highway
Paved
Rocked
Dirt
5 0 5 10 15 Miles
5 0 5 10 15 20 Kilometers

III. Resources

Natural Resources

Natural resource assets include watersheds, forests and woodlands (both public and private), fisheries and wildlife resources, soils and erosion potential, and threatened and endangered species. Natural resources are highly valued by residents of the CWPP planning area for their contribution to the local quality of life, and as an asset that attracts tourism-related economic activity. Fire is part of the natural environment. However, when it occurs under certain conditions (i.e. extreme weather and/or unusually dense fuel loading) it can destroy natural assets which are highly valued by the community.

Agricultural and Timber Resources

Agricultural resources include rangelands, timberlands (both public and private), and cultivated farmlands. Agricultural lands are an important element of the Planning Area identity and economy. Although fire has been used as a tool in rangeland and timber management, wildland fire can have disastrous consequences to such resources, removing them from production and necessitating lengthy restoration programs.

Air Resources

Smoke generated by wildfire is comprised of visible and invisible emissions that contain particulate matter (soot, tar, water vapor, and minerals), gases (carbon monoxide, carbon dioxide, nitrogen oxides) and toxics (formaldehyde, benzene). Emissions from wildfire depend on the type of fuel, the moisture content of the fuel, the efficiency (or temperature) of combustion, and the weather. Public health impacts associated with wildfire include difficulty in breathing, odor, and reduction in visibility.

The CWPP Planning Area is prone to temperature inversions, which occur when a layer of warm air traps cool air near the surface and creates a lid that inhibits the vertical dispersion of smoke and other pollutants. The Megram Fire (Big Bar Complex Fire) burned 135,000 acres from late August to early November 1999, and resulted in the first air quality related state of emergency in California history. Smoke from the fire was trapped by an inversion layer between late September and early October, causing officials to close schools and encourage residents to leave the area. Those who remained in the affected area were encouraged to stay indoors.

Cultural Resources

Culturally sensitive areas are sites and regions of special importance to Native Americans, primarily riverbanks with outstanding religious or resource-producing importance. Many acres within the planning area are designated as culturally sensitive, with notable concentrations along the Lower Trinity River. While some locations are publicly identified, others are held as confidential information by local Native American organizations. Many cultural sites are at risk to incidents of wildfire. Fire can destroy artifacts and structures. At the same time, low-severity fire can clean an area of litter and ground fuel, exposing new cultural sites and artifacts without causing much damage. The discovery of these cultural sites can be a boon to archeologists and Native American groups, but can also present problems of looting and vandalism.

IV. The Update Process

The purpose of the original planning effort (1999 -2001) was to initiate a coordinated fire management planning process in which the residents of Trinity County were involved from the beginning. The CWPP Update process has honored that original purpose. In order to address this purpose, all available spatial data pertinent to fire in Trinity County including maps, aerial photos and Geographic Information Systems data layers were collected into a local data library. Then, in cooperation with the FSC and the local Volunteer Fire Departments, residents throughout the county were invited to a series of public meetings. At the public meetings participants shared their experiences and knowledge regarding site-specific data for emergency response; identified primary values at risk from wildfire at the local level; made location-specific recommendations for pre-fire treatment projects and assisted in the development of Wildland Urban Interface boundaries for their communities.

The methods applied to gather information with community participants are described in greater detail below, followed by a presentation and discussion of the results of the process to date and next steps indicated. The Fire Safe Council will distribute the information in this Update widely for at least a 30-day comment period before it is presented to the CWPP signatories (Trinity County Fire Chiefs Association, CAL FIRE and the Trinity County Board of Supervisors.)

Initial Planning Meeting

We began our process by holding an initial planning meeting on November 10, 2009 at the Weaverville Fire Department. Various agencies representatives, local organizations that play an integral role in community wildfire protection, and groups participating in the Fire Safe Council such as the US Forest Service, CAL FIRE, Bureau of Land Management, county planners, county officials, and volunteer fire chiefs participated in the process. We felt initial participation would be crucial to insuring that the CWPP update process would be effective and result in a plan that would successfully encompass the full range of potential uses and ensure that the CWPP continues to be a useful planning tool. At this meeting we gathered feedback and information on how the CWPP has been used, what updates would be useful in future planning, and ways to improve the availability and access to the CWPP for community planning, FS project planning, incident management teams, grant applications, and for CAL FIRE and private landowners.

Initial Planning Meeting, Weaverville Fire Hall

Data Collection

A data collection process began immediately to capture as much information relevant to fire management in the Trinity County landscape as possible from all available sources including state and federal agencies. This involved collecting all the most current Geographical Information System (GIS) layers including updates to infrastructure, recent management activity on public lands and implemented projects on private lands. The data gathering process began in 2009 and continued through 2010. Among other sources, data were drawn from the USFS, USGS, CDF, and from Trinity Community GIS and Trinity County RCD archives. We were very pleased with the high degree of cooperation in data sharing throughout the process. Data layers include topography, vegetation, roads, hydrology, property lines, USFS land allocation, historic fire starts, fire risk and hazard, among others. These data have been compiled and can be accessed and downloaded at www.tcrcd.net/fsc and are also available on CD ROM. For information on obtaining a CD ROM, contact the Trinity County RCD.

Community Input Meetings

Maps were produced from these data layers to use as a basis for working with community members in a series of meetings beginning in the winter 2010. Community meetings were hosted by the local volunteer fire departments throughout the original 5 Trinity County Fire-Safe Divisions (Down River, Mid Trinity, North Lake, South Fork and Southern Trinity). We sought

to work with as many members of the Trinity County communities and agencies as possible to gather pertinent information. We proceeded in several phases according to the type of information concerned.

Publicity to encourage broad participation was crucial. The meetings were publicized in the local newspaper and several press releases about the fire planning process were published (TCRCD archives).

At these meetings we sought to accomplish the following goals:

1. *Discuss the history and purpose of the CWPP and describe the update process to community members*
2. *Raise local awareness about fire hazards and risks*
3. *Identify values at risk*
   We worked across maps of the local area as systematically as possible to gather information from residents about wildfire hazards, resources at risk, potential hazard reduction projects and infrastructure needs. Participants noted locations of such features as housing developments, favored campgrounds, creeks supplying drinking water, power supply lines, stands of old growth forest or endangered species habitat. Once an initial list of all values had been compiled, the values were consolidated into project areas to link them into the surrounding terrain and facilitate the process of recommending treatments. For example, there could be a whole series of values at risk in and around a particular housing development. The development and its immediate surroundings became one project area that might later have several recommended activities associated with it.
4. *Identify and locate on the maps recommendations for landscape vegetation treatments to protect values at risk*
   After project areas had been identified, recommendations for treatments to protect these values at risk were made for each area. Recommendations might include fuels reduction work (thinning from below, ladder fuels reduction, controlled burning) or shaded fuel break construction. In some cases, as when a historic cabin is situated in a remote location, it was recognized that protection would not likely be feasible.
5. *Raise awareness and knowledge about Wildland Urban Interfaces (WUI) and determine community WUI boundaries*

At each community meeting an overview of the Fire Safe effort was presented; then participants reviewed maps of the local terrain developed from the GIS. Participants added missing information by marking reference points on the maps and explaining issues of concern to staff who recorded the information. Typical data gathered included water sources, inadequate bridges, road maintenance needs, and locked gates. After each meeting the new data was entered into the GIS database and maps were produced reflecting the new input.


Trinity County
CWPP Divisions
North
Lake
Down
River
Middle
Trinity
South
Fork
South
County
Coffee Creek Road
Coffee Creek
Parks Creek Road
Trinity Center
Trinity Lake
East Side Road
Trinity Dam Blvd
Weaverville
Lewiston
Junction City
Big Bar
Burnt Ranch
Hawkins Bar
Salyer
Denny Road
Underwood Mtn Road
Lower South Fork Road
Soldier Creek Road
04N16
Douglas City
Hyampom
Hyampom Road
South Fork Mtn Road
Big Creek Road
Hayfork
Indian Valley Road
Post Mountain Road
Wildwood Road
Mad River
Rattlesnake Road
Wildwood
Post Mountain
South Fork Trinity River
Bramlet Road
Van Duzen Road
Mad River Road
Ruth
Wild Mad Road
Zenia
Kettenpom
Eel River
N
W
E
S
Scale: 1 = 640,000
TC_CWPP_Divisions_8-5x11.mxd
March 22, 2011
California
Location
5 0 5 10 15 Miles
5 0 5 10 15 20 Kilometers

Wildland Urban Interface (WUI)

To develop a Wildland Urban Interface (WUI), Trinity County used existing WUI Boundaries described below by CAL FIRE (FRAP), the USFS, and BLM as a starting reference point for community input. Each agency used the following description to determine their WUI boundary:

BLM

BLM defined their Wildland/Urban Interface (WUI) Areas using housing density. The areas they developed are those falling within the Redding Field Office area of responsibility as follows:

- Primary WUI areas - 1/2 mile buffer of housing density layer
- Secondary WUI areas - 1.5 mile buffer of housing density layer

The housing density layer was created using Urban/Rural Areas based on Census Block data from 2000 US Census. Rural is less than 20 Housing Units per Acre (HSE). Urban is greater than or equal to 20 HSE/Acre.

USFS

USFS Shasta-Trinity National Forest

Using GIS, the Shasta-Trinity National Forest developed their WUI which created four zones, using the following methodology:

- Improvement Zone (Zone 1).
  - Plotted currently known structures
- Reduced Fuel Zone (Zone 2)
  - Create a 100-foot buffer around each structure which aligns with PRC 4291
- Defense Zone (Zone 3)
  - Create ¼ mile buffer around each structure
- Threat Zone (Zone 4)
  - Create 1 ½ mile buffer around each structure. The Districts were then asked to either extend or reduced the 1 ½ mile buffer to a place on the map that made sense (regarding fire movement, topography, weather, suppression areas such as roads, rivers and ridges, etc.).

CAL FIRE

Utilizing a Geographic Information System (GIS) approach CAL FIRE used three main components in the assessment of threat from wildland fire to Wildland-Urban Interface areas of California:

- Ranking fuel hazard
- Assessing the probability of wildland fire
- Defining areas of suitable housing density that lead to Wildland-Urban Interface fire protection strategy situations

These three independent components were then combined using GIS to identify wildland interface areas threatened by wildfire. In addition to mapping these areas, a list of communities was developed that summarized a non-spatial assessment of key areas within the vicinity of significant threat from wildland fire. A subset of that list was made that includes those communities that have a significant fire threat from nearby Federal lands. A buffer distance of

1.5 miles was used in the analysis to define "nearby" federal lands. More information regarding this approach is available at http://frap.cdf.ca.gov/projects/wui/525_CA_wui_analysis.pdf

Trinity County Methodology
The three agency-developed boundaries were combined, using the outer most reaches of each. These maps were presented to the communities for adaptation according to local community knowledge. Community members expanded and reduced the draft WUI boundaries to incorporate the following:

- Geography (used major ridges and roads as boundary lines)
- Climate conditions
- Weather patterns
- Local areas of concern such as watersheds that provide municipal water sources
- Ingress/egress (communities decided to include a buffer around major arterial roads because in many areas the major roads are the only ingress and egress available. The definition of *major arterial* roads as defined by the Trinity County Road Department was used.)

The WUI boundary information gathered at community meetings was digitized and refined WUI boundary maps were created for review during the revision and review/comment period.

WUI Caveats

- The WUI boundary as defined by the community is to be used for assistance in planning for forest health related projects and fire safe activities.
- The WUI boundary is based on current conditions and land use and should be updated as needed, using community input and the most current science.
- The boundary is not intended to be used for community planning such as zoning, building codes and subdivision requests.
- The boundary is not intended to be used by insurance agencies as a means for determining rates.

Revision and Review Process

Once community meetings had been held and information was gathered we revised maps with updated infrastructure information, new proposed project locations, completed project information and locations, and Wildland Urban Interface boundaries. These maps were taken to a second round of more targeted meetings held in each of the five Divisions. USFS, CAL Fire, BLM, VFD personnel, and some community members were involved in this process. These meetings were aimed at refining the information that was gathered at the community meetings.

Maps with information from the community meetings (projects, infrastructure data, WUI boundaries) were presented for review. Any additional edits were made to the maps.

After these meetings, the notes and map entries were compiled and sent back to meeting participants to be reviewed for accuracy.

In order to ensure comparability between meetings, the basic format for all meetings was the same. The number of community participants in the meetings was variable, but even where the turn out was not large, it included fire professionals with local knowledge and others with an active interest in fire management issues.

The final draft of the WUI boundary was sent to fire professionals, and local fire departments for review and comments. Feedback was gathered and a final public meeting was hosted by the TCFSC on 10-28-2010 to discuss input and finalize the WUI boundary.

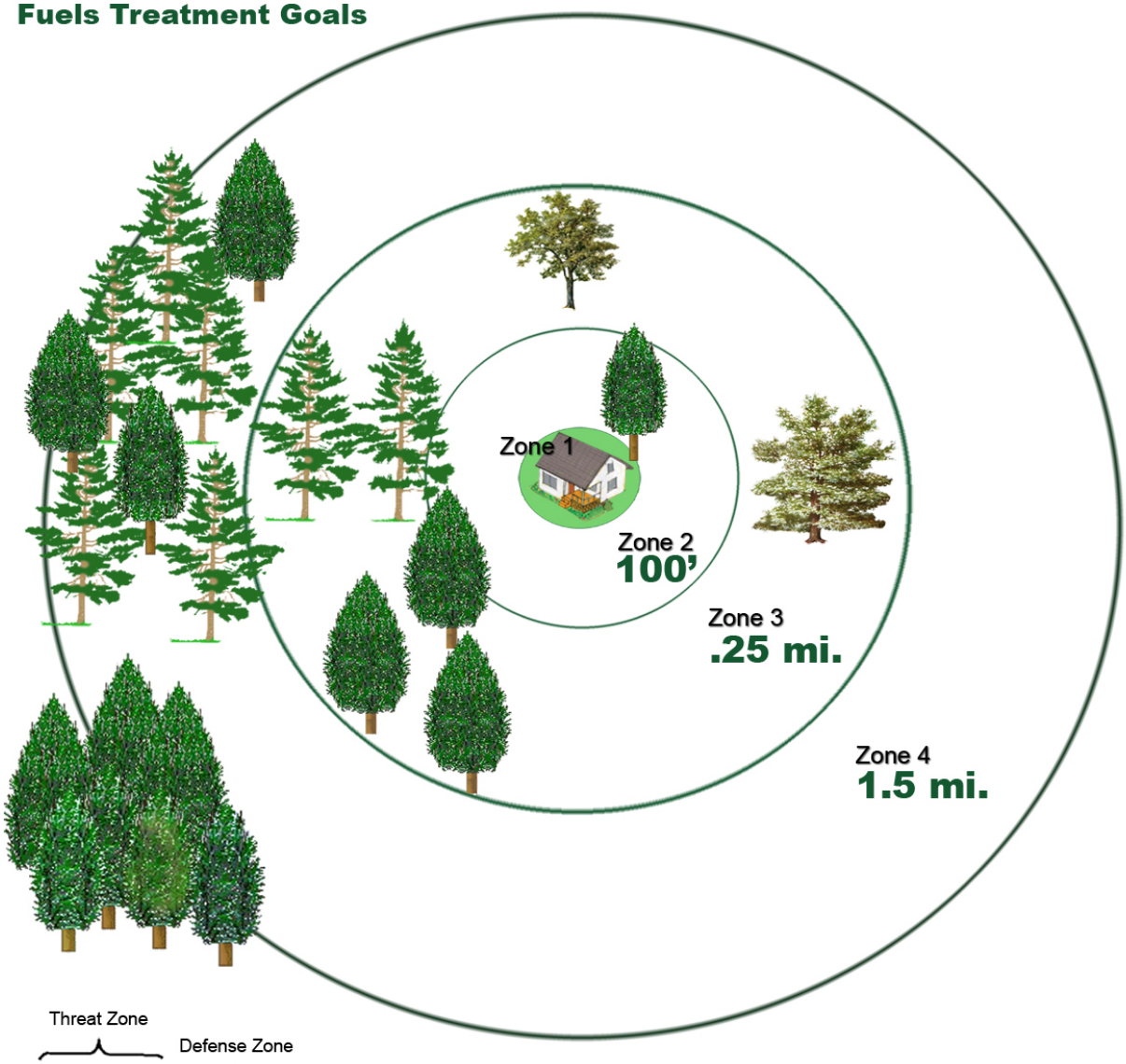
The focus of this meeting was to come to consensus on the Wildland Urban Interface definition and its purpose in the countywide CWPP. The GIS layer showing the proposed WUI boundaries was displayed and accompanied a description of how they were developed. The boundaries represent the combined work/strategies of the USFS, BLM and CAL FIRE, with local communities and fire/fuels professionals further refining the boundaries. The group reviewed the issues raised in emails by Tom Walz (SPI) and Mark Lancaster and the responses from Alex McBath, Arlen Cravens (USFS) and Nick Goulette (WRTC) and came to consensus regarding the following key components considered in the draft boundaries:

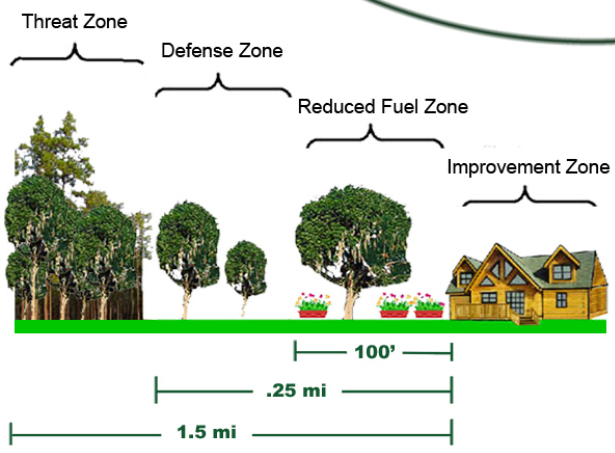
- Embedded in the boundary is the concept of 4 different zones as defined by Jack Cohen's work with an emphasis on the first 0.25 miles.
- These zones are based on infrastructure densities as described in a variety of papers and other recent CWPPs. These will be included in the literature cited.
- The boundaries take advantage of topographic features; include community water sources identified by communities.
- The purpose of the WUI is to help guide identification of fuels reduction/forest health projects, their design and prioritization, recognizing that there always will be more work to do than available funding.
- The WUI boundary needs to be "elastic" with periodic reviews and updates (a 5-year interval was recommended).
- The WUI boundary is simply a spatially explicit tool to help visualize potential strategies for reducing wildfire risk to communities and to track progress in meeting the goals of the CWPP.

The following description is important to keep in mind with discussing the WUI boundary:

The Wildland Urban Interface (WUI) is a general term derived from the Healthy Forest Restoration Act (HFRA) to describe the area where homes and wildland meet. The Federal Register (Region 5. January 4, 2001. Vol. 66, No.3. Pp. 751-754) defines the WUI as the "line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuel." The WUI boundaries established in this Trinity County CWPP Update were developed to help prioritize project planning and funding for pre-fire (prevention) projects to help aid in protecting communities at risk for wildfire. These boundaries and the progress in implementing priority projects will be reviewed regularly, and no less frequently than every 5 years, and the WUI boundaries amended as needed to reflect changes in conditions (e.g. new land development, recent wildfires, and new infrastructure such as community water systems).

Wildland Urban Interface Zones
Fuels Treatment Goals



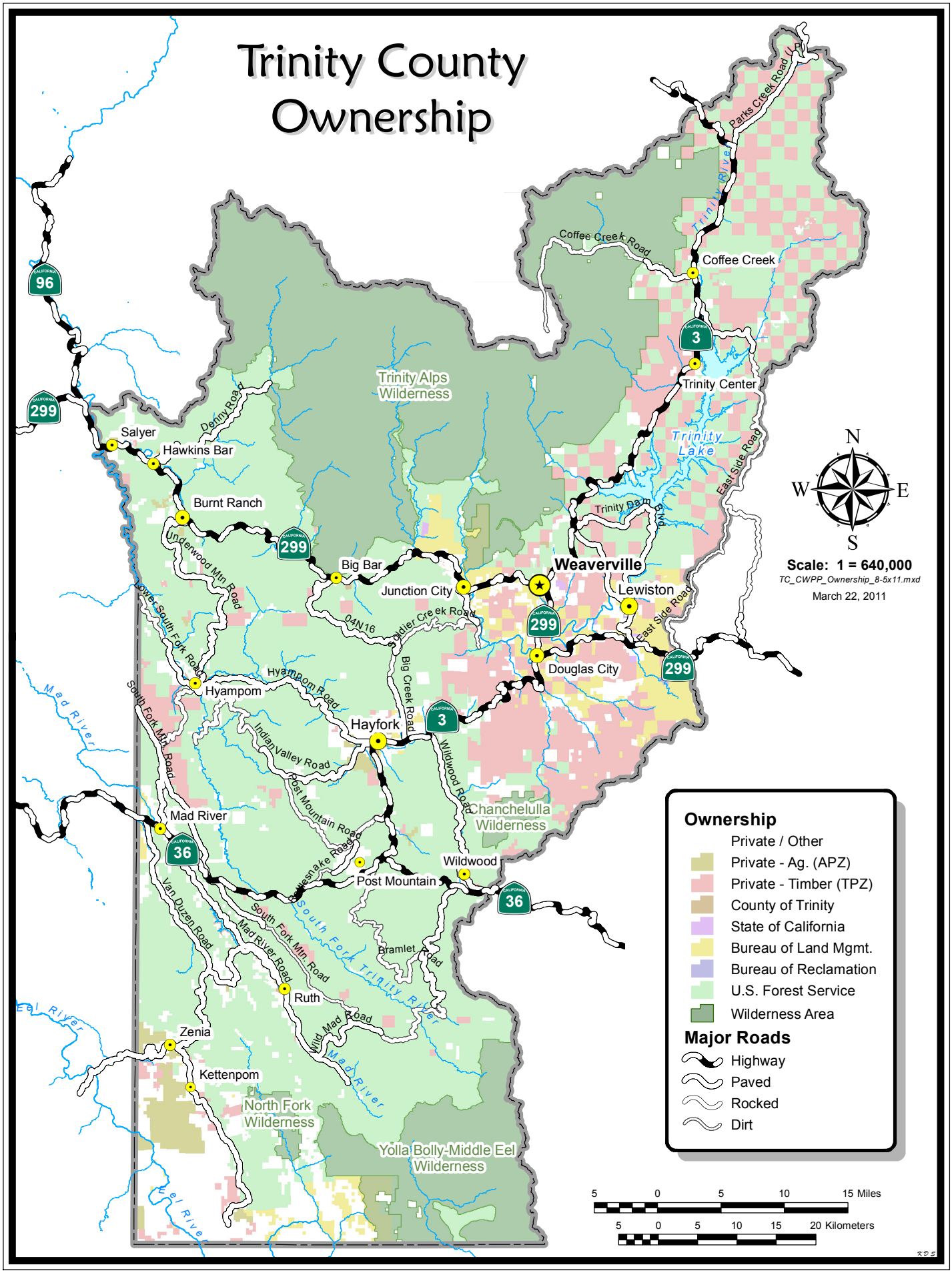


1. Improvement Zone
goal - Fire Resistant Structures / Improvements

2. Reduced Fuels Zone 100'
goal - Flame Length <2' w/ no crown fire

3. Defense Zone .25 mi.
goal - Flame Length <4' limit crown fire potential

4. Threat Zone 1.5 mi.
goal - Flame Length <8' bring crown fires to ground


Trinity County Ownership
Parks Creek Road
Trinity River
Coffee Creek Road
Coffee Creek
Trinity Alps Wilderness
Trinity Center
Trinity Lake
East Side Road
Trinity Dam Blvd
Denny Road
Salyer
Hawkins Bar
Burnt Ranch
Underwood Mtn Road
Big Bar
Junction City
Weaverville
Lewiston
Alder Creek Road
04N16
Lower South Fork Road
Hyampom
Hyampom Road
Big Creek Road
Douglas City
South Fork Mtn Road
Hayfork
Indian Valley Road
Wildwood Road
Post Mountain Road
Chanchelulla Wilderness
Mad River
Wildwood
Rattlesnake Road
Post Mountain
South Fork Trinity River
Van Duzen Road
South Fork Mtn Road
Mad River Road
Bramlet Road
Ruth
Wild Mad Road
Mad River
Eel River
Zenia
Kettenpom
North Fork Wilderness
Yolla Bolly-Middle Eel Wilderness
Eel River
N
W
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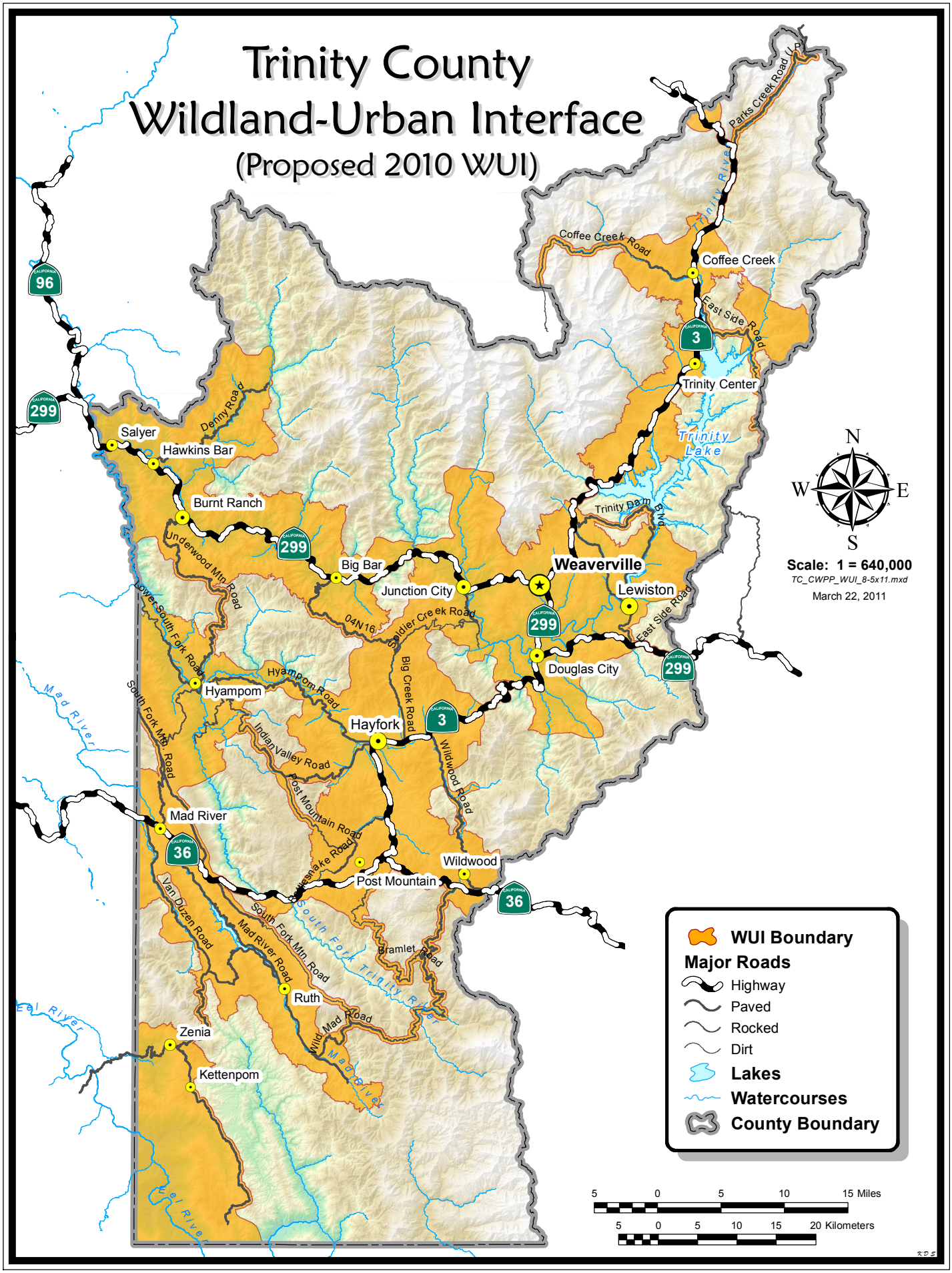
S
Scale: 1 = 640,000
TC_CWPP_Ownership_8-5x11.mxd
March 22, 2011
Ownership
Private / Other
Private - Ag. (APZ)
Private - Timber (TPZ)
County of Trinity
State of California
Bureau of Land Mgmt.
Bureau of Reclamation
U.S. Forest Service
Wilderness Area
Major Roads
Highway
Paved
Rocked
Dirt
5 0 5 10 15 Miles
5 0 5 10 15 20 Kilometers


Trinity County
Wildland-Urban Interface
(Proposed 2010 WUI)
Parks Creek Road
Trinity River
Coffee Creek Road
Coffee Creek
East Side Road
Trinity Center
Trinity Lake
Trinity Dam Blvd
Weaverville
Lewiston
East Side Road
Douglas City
Junction City
Big Bar
Burnt Ranch
Hawkins Bar
Salyer
Denny Road
Underwood Mtn Road
Lower South Fork Road
Hyampom
Hyampom Road
South Fork Mtn. Road
Mad River
Soldier Creek Road
04N16
Big Creek Road
Hayfork
Indian Valley Road
Post Mountain Road
Rattlesnake Road
Wildwood Road
Wildwood
Post Mountain
Bramlet Road
South Fork Trinity River
Mad River Road
Ruth
Wild Mad Road
Van Duzen Road
Zenia
Kettenpom
Eel River
Mad River
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Scale: 1 = 640,000
TC_CWPP_WUI_8-5x11.mxd
March 22, 2011
WUI Boundary
Major Roads
Highway
Paved
Rocked
Dirt
Lakes
Watercourses
County Boundary
5 0 5 10 15 Miles
5 0 5 10 15 20 Kilometers

Project Prioritization

The goal of this step was to help participants to differentiate among projects selected and identify priority areas to focus pre-fire management attention. In an approach adapted from similar participatory prioritization methodologies, categories with which to evaluate proposals were defined and then ranked using a matrix approach.

Originally projects were to be ranked using data showing fire risk and fire hazard, but as the analysis moved forward this method proved not to be as accurate across the landscape as hoped for. Data describing fire severity and fire risk varies depending on the managing agency, USFS Shasta-Trinity uses different data on public lands when compared to CAL FIRE's data on private lands. Similarly the data for Southern Trinity, which is mostly Six Rivers National Forest, differs from the data available from the Shasta-Trinity National Forest.

It was decided that the ranking of projects using key factors important to both community members and those involved with fire suppression would give a general ranking system sufficient for this broad level of planning. The two factors used are relationship to the Wildland Urban Interface and relationship to a previous wildland fire. The Wildland Urban Interface was chosen because projects with closer proximity to communities will benefit those communities more closely. Areas that have experienced previous fire may have a higher resistance to control and need consideration to reduce fuels and the effect of a wildland fire, especially if not treated for the 5 years immediately following a fire.

Projects were analyzed and given points ranging from 1-4 depending on their relative position to the WUI and previous wildland burn areas. If a project is completely within the WUI it will receive a (4) *Four*, and similarly if a project is completely within a previous wildland burn area it receives a (4) *Four*. A project that has more than 50% of its boundary within either of the two categories will be given a (3) *Three*, while a project with less than 50% of the boundary within, is given a (2) *Two*. These two numbers were then multiplied together to give a total ranking. The reason for multiplying rather than adding is to give more of a spread and variation in ranking.

Next Steps

The data gathered in community meetings remain to be ground-truthed through on-site visits. If there is interest, additional community meetings may be held through Trinity County VFDs.

V. Results - Summaries and Recommendations

Community meetings were held in Burnt Ranch and Willow Creek for the Down River Division; in Trinity Center and Coffee Creek for the North Lake Division; in Weaverville, Lewiston, Junction City and Douglas City for the Mid-Trinity Division; in Van Duzen and Ruth for the South County Division; and in Hayfork, Post Mountain, and Hyampom for the South Fork Division.

The purpose of the community meetings was to:

- Educate residents about living in a wildfire environment;
- Explain the Community Wildfire Protection Plan (CWPP) process; and
- Gather information about wildfire hazards, resources at risk, fire protection resources, and potential hazard reduction projects.

The intended outcomes were:

- The identification of local concerns and hazard mitigation projects on maps that could be used for capturing future project implementation funding;
- A basic understanding of fire safety and defensible space so that residents would be equipped to implement these concepts on their property and throughout their community;
- A basic understanding of local fire protection services available in each community; and
- Broad-based community participation in the CWPP process.

The results from the community meetings are summarized in this section. For each meeting the values at risk and activities proposed to protect these values are presented. A table displaying the ranking of proposed projects by category follows.

Several general recommendations emerged from the meetings that are relevant to the county as a whole. These additional recommendations for fire safe activities are also discussed.

A substantial amount of fire planning information was gathered at these workshops. The community identified fire planning features such as areas proposed for fuels reduction treatment. Protection resources were digitized into a GIS database. New maps were produced with the information to illustrate all of the fire planning features for review and refinement at the second set of workshops.

The second workshops brought community members back together to review the GIS maps generated from community input at the first workshop. Participants also continued to add new information to the accumulating fire planning data. Following the community meetings, project staff and volunteers met in groups and individually with key community members, Forest Service and CAL FIRE representatives, and local volunteer fire department personnel to review and provide feedback on the evolving community fire planning values and projects. Local fire departments also spent time on their own reviewing maps and data. Based on information and feedback generated at the sessions, the fire planning data was further refined. The Wildland Urban Interface and planning area boundaries were also further defined and refined during this part of the process.

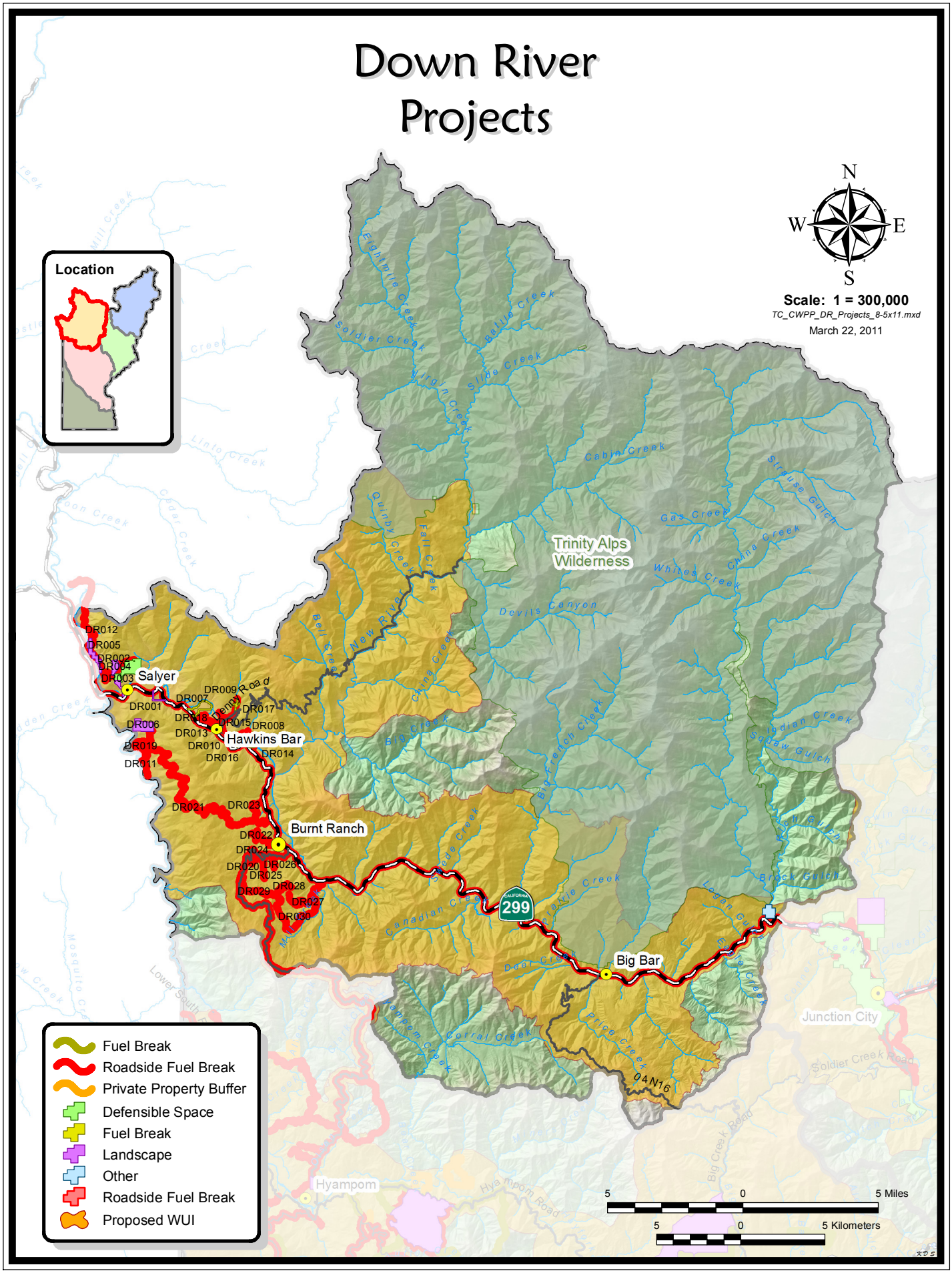
Down River

The Down River meetings were held in

Willow Creek, Trinity Valley Elementary School Gym

Burnt Ranch City, Burnt Ranch Elementary School Gym

Down River Community Meeting


Down River Projects
Location
N
W
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Scale: 1 = 300,000
TC_CWPP_DR_Projects_8-5x11.mxd
March 22, 2011
Trinity Alps Wilderness
Salyer
Hawkins Bar
Burnt Ranch
Big Bar
Junction City
Hyampom
299
DR001
DR002
DR003
DR004
DR005
DR006
DR007
DR008
DR009
DR010
DR011
DR012
DR013
DR014
DR015
DR016
DR017
DR018
DR019
DR020
DR021
DR022
DR023
DR024
DR025
DR026
DR027
DR028
DR029
DR030
Fuel Break
Roadside Fuel Break
Private Property Buffer
Defensible Space
Fuel Break
Landscape
Other
Roadside Fuel Break
Proposed WUI
5 0 5 Miles
5 0 5 Kilometers

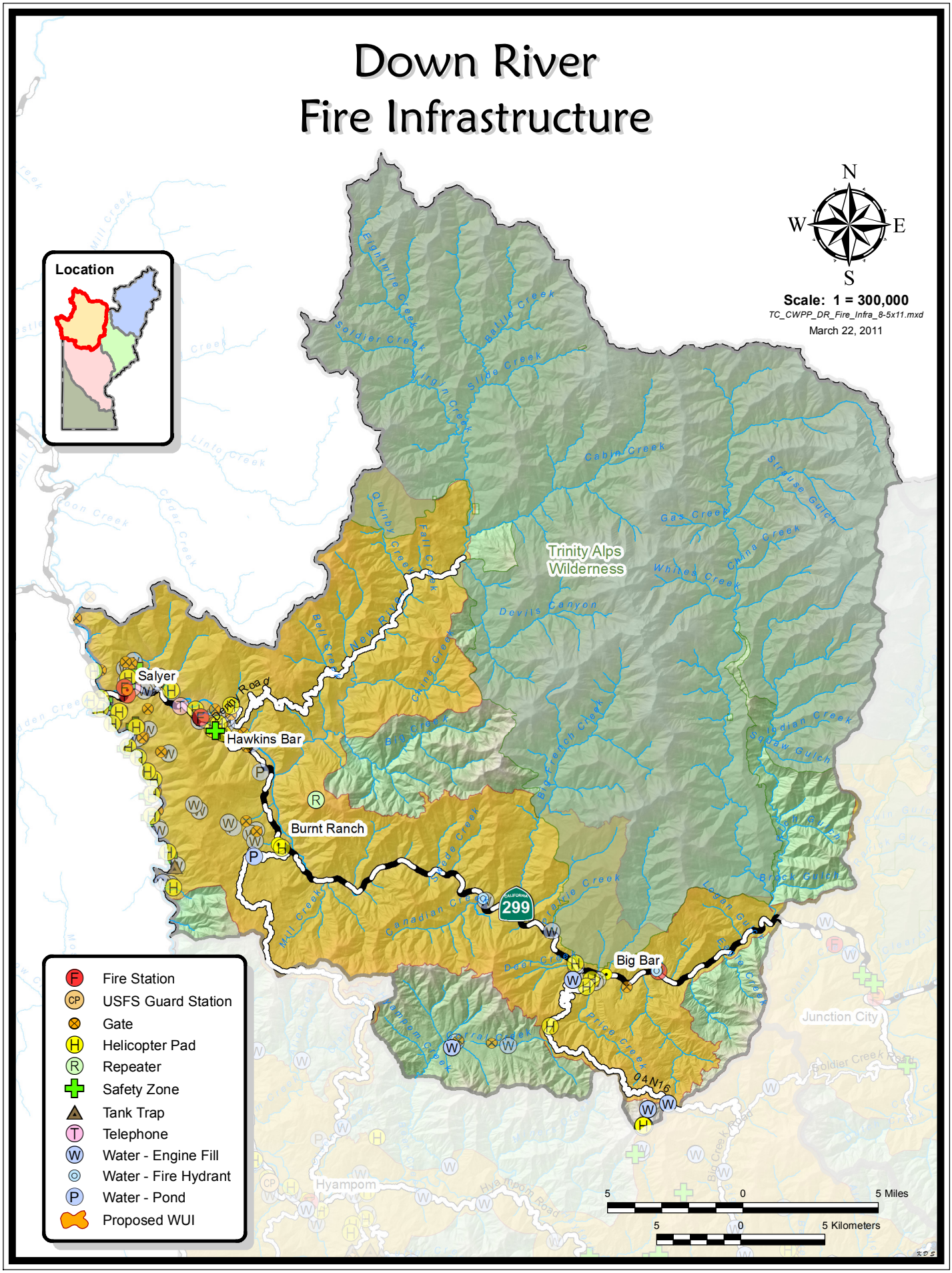
Down River Projects –Ranked based on their relationship to a previous burn and the Wildland Urban Interface (WUI) See page 24

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
4	Salyer	Landscape	Oden Flat Fuels Reduction	DR001		1	4	USFS
4	Salyer	Defensible Space	Rails Road Fuels Reduction	DR002	Homes need defensible space	1	4	PVT
4	Salyer	Landscape	Understory Burn Maintenance	DR003	Maintenance of Understory Burn	1	4	USFS
4	Salyer	Landscape	Understory Burn Maintenance	DR004	Maintenance of Understory Burn	1	4	USFS
4	Salyer	Landscape	Sign Tree Lane Fuels Reduction	DR005	Fuels Reduction	1	4	PVT
4	Hawkins Bar	Fuel Break	Suzie Q Shaded Fuel Break	DR007	Shaded Fuel Break	1	4	PVT
4	Hawkins Bar	Fuel Break	Pony Creek Fuel Break	DR008	Shaded Fuel Break	1	4	PVT/USFS
4	Hawkins Bar	Fuel Break	Wallen Ranch Shaded Fuel Break	DR009	Shaded Fuel Break	1	4	PVT/USFS
4	Hawkins Bar	Roadside Fuel Break	Fisher Road Shaded Fuel Break	DR010	Road Side Fuel Break	1	4	PVT/USFS

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
4	Salyer	Landscape	Ammonville	DR006	Break up continuity, Thin Understory	1	4	PVT
4	Burnt Ranch	Roadside Fuel Break	Fuels Reduction Project- 05N09	DR029		1	4	USFS
4	Burnt Ranch	Roadside Fuel Break	Fuels Reduction Project- 05N09B	DR028		1	4	USFS
4	Burnt Ranch	Roadside Fuel Break	Road Shaded Fuel Break- 05N15	DR025	Dennis Road	1	4	USFS
4	Burnt Ranch	Roadside Fuel Break	Fuels Reduction Project- 05N21/05N09	DR030		1	4	USFS/PVT
4	Salyer	Roadside Fuel Break	Campbell Ridge Road- CO 454	DR012	Poor ingress/egress-needs turnouts	1	4	Mixed
4	Hawkins Bar	Roadside Fuel Break	Coon Crk Road- CO 461/462	DR015		1	4	PVT
4	Hawkins Bar	Roadside Fuel Break	Denny Road- CO 402	DR013	Access to Trinity Village Subdivision	1	4	PVT/USFS
4	Burnt Ranch	Roadside Fuel Break	Dose Road Shaded Fuel Break	DR020		1	4	USFS/PVT

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
4	Hawkins Bar	Roadside Fuel Break	Fire Hall Road- CO 456/480	DR018		1	4	PVT/USFS
4	Hawkins Bar	Roadside Fuel Break	Fisher Road- CO 441	DR016		1	4	PVT/USFS
4	Burnt Ranch	Roadside Fuel Break	Friedrich Road Fuels Reduction Project- CO 432/05N17/05N21	DR027		1	4	USFS/PVT
4	Burnt Ranch	Roadside Fuel Break	Hennesy Road Roadside Brushing- CO 435	DR021		1	4	Mixed
4	Burnt Ranch	Roadside Fuel Break	Kaut Road Brushing Project- CO 434	DR026		1	4	PVT
4	Burnt Ranch	Roadside Fuel Break	Pony Express Way Roadside Brushing- CO 452/474/475/476	DR022		1	4	PVT
4	Hawkins Bar	Roadside Fuel Break	Pony Project	DR014		1	4	PVT
4	Salyer	Roadside Fuel Break	South Fork Road- CO 447	DR011	Poor ingress/egress-needs turnouts	1	4	TPZ/USFS
4	Burnt Ranch	Roadside Fuel Break	Underwood Mountain- CO 417/05N60	DR024		1	4	PVT/USFS

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
4	Burnt Ranch	Roadside Fuel Break	Veterens Road Brushing Project- CO 438	DR023		1	4	PVT/USFS
4	Hawkins Bar	Roadside Fuel Break	Wallen Ranch Road- CO 442/07N04	DR017		1	4	PVT


Down River
Fire Infrastructure
Location
N
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Scale: 1 = 300,000
TC_CWPP_DR_Fire_Infra_8-5x11.mxd
March 22, 2011
Trinity Alps Wilderness
Salyer
Hawkins Bar
Burnt Ranch
Big Bar
Junction City
Hyampom
299
Fire Station
USFS Guard Station
Gate
Helicopter Pad
Repeater
Safety Zone
Tank Trap
Telephone
Water - Engine Fill
Water - Fire Hydrant
Water - Pond
Proposed WUI
5 0 5 Miles
5 0 5 Kilometers

Mid Trinity

The Mid Trinity meetings were held in

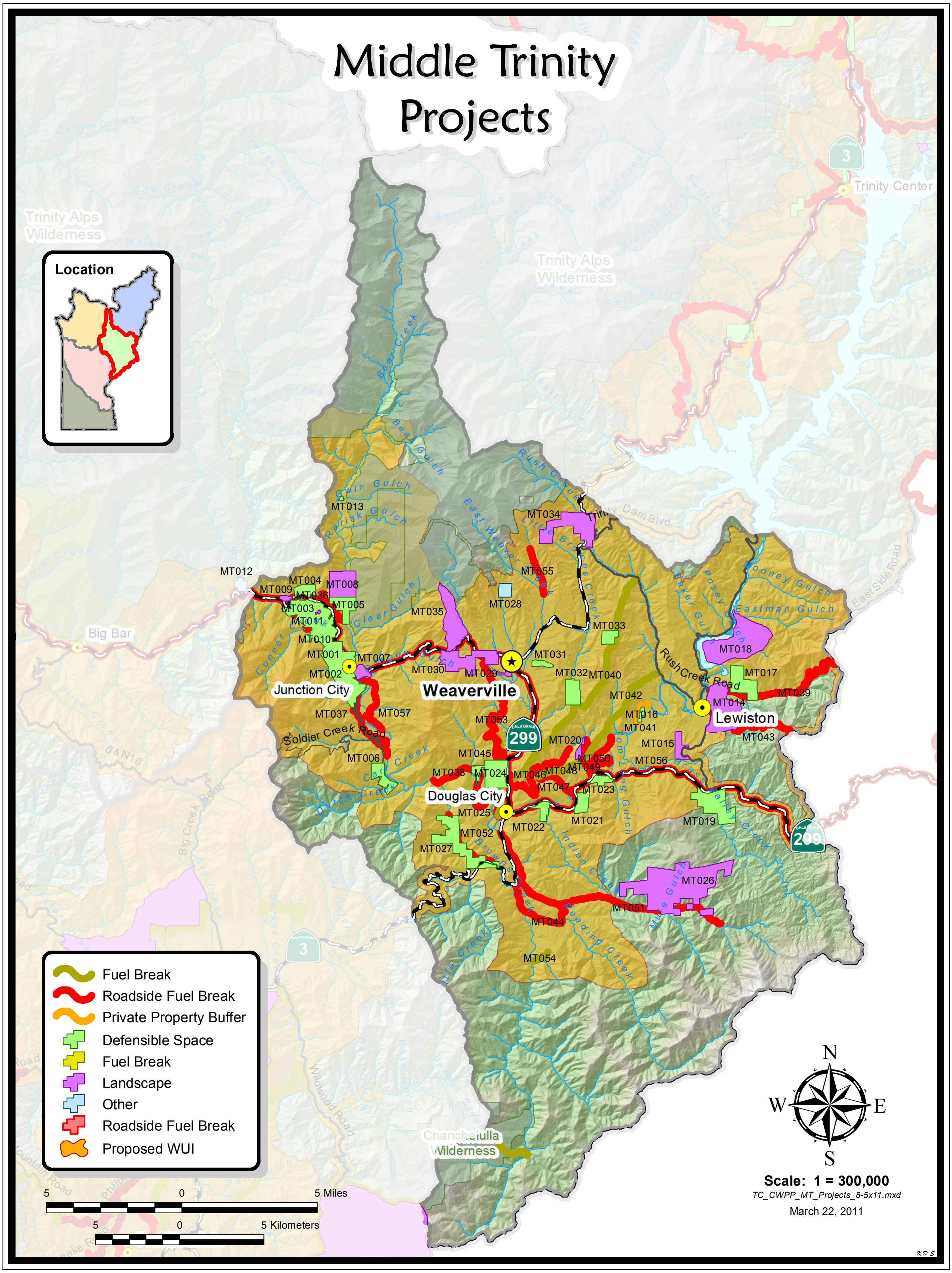
Weaverville, Weaverville VFD Fire Hall

Junction City, Junction City Fire Hall

Douglas City, Douglas City Fire Hall

Lewiston, Lewiston Community Center

Mid Trinity Community Meeting, Douglas City Fire Hall


Middle Trinity Projects
Location
Fuel Break
Roadside Fuel Break
Private Property Buffer
Defensible Space
Fuel Break
Landscape
Other
Roadside Fuel Break
Proposed WUI
Weaverville
Junction City
Douglas City
Lewiston
Big Bar
Trinity Center
Trinity Alps Wilderness
Chanchelulla Wilderness
Scale: 1 = 300,000
TC_CWPP_MT_Projects_8-5x11.mxd
March 22, 2011
5 0 5 Miles
5 0 5 Kilometers

Mid Trinity Projects –Ranked based on their relationship to a previous burn and the Wildland Urban Interface (WUI) See page 24

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
16	Junction City	Landscape		MT009	Partially Burned Trees	4	4	PVT/BLM
16	Junction City	Other		MT012	Cultural Importance - Helena Town Site	4	4	PVT
16	Lewiston	Landscape		MT015	Heavy Fuels and Snags (Lowden Fire 2000)	4	4	BLM
16	Douglas City	Roadside Fuel Break	CO 335/337/338	MT044		4	4	Mixed
12	Weaverville	Landscape		MT035	Glennison Gap, Plantation Maintenance	3	4	Mixed
12	Weaverville	Landscape		MT030	Historic Fires Rd Side/Fuels Reduction	3	4	PVT
12	Junction City	Defensible Space		MT004	Scoth Broom also	3	4	PVT
12	Weaverville	Roadside Fuel Break	Hwy 299	MT056	Hwy 299	3	4	Mixed
8	Junction City	Landscape		MT007	Heavy Fuels - Junction City Park	2	4	TC

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
8	Junction City	Other		MT010	Invasive Weeds -Scotch Broom	2	4	PVT
8	Junction City	Defensible Space		MT005	Defensible Space Needed	2	4	PVT
8	Junction City	Defensible Space		MT001	Poor Access, Defensible Space, Unimproved Lots	2	4	PVT/BLM
8	Lewiston	Landscape		MT014	Brush Field	2	4	Mixed
8	Douglas City	Defensible Space		MT027		2	4	PVT
8	Douglas City	Roadside Fuel Break	B Bar K Road- CO 334	MT052		2	4	Mixed
8	Lewiston	Fuel Break	Brown Mtn	MT040		2	4	Mixed
8	Junction City	Roadside Fuel Break	CO 413/ 414/415	MT037		2	4	PVT
8	Junction City	Roadside Fuel Break	CO 419/420	MT036	Power House/Valdor Road	2	4	BLM/PVT

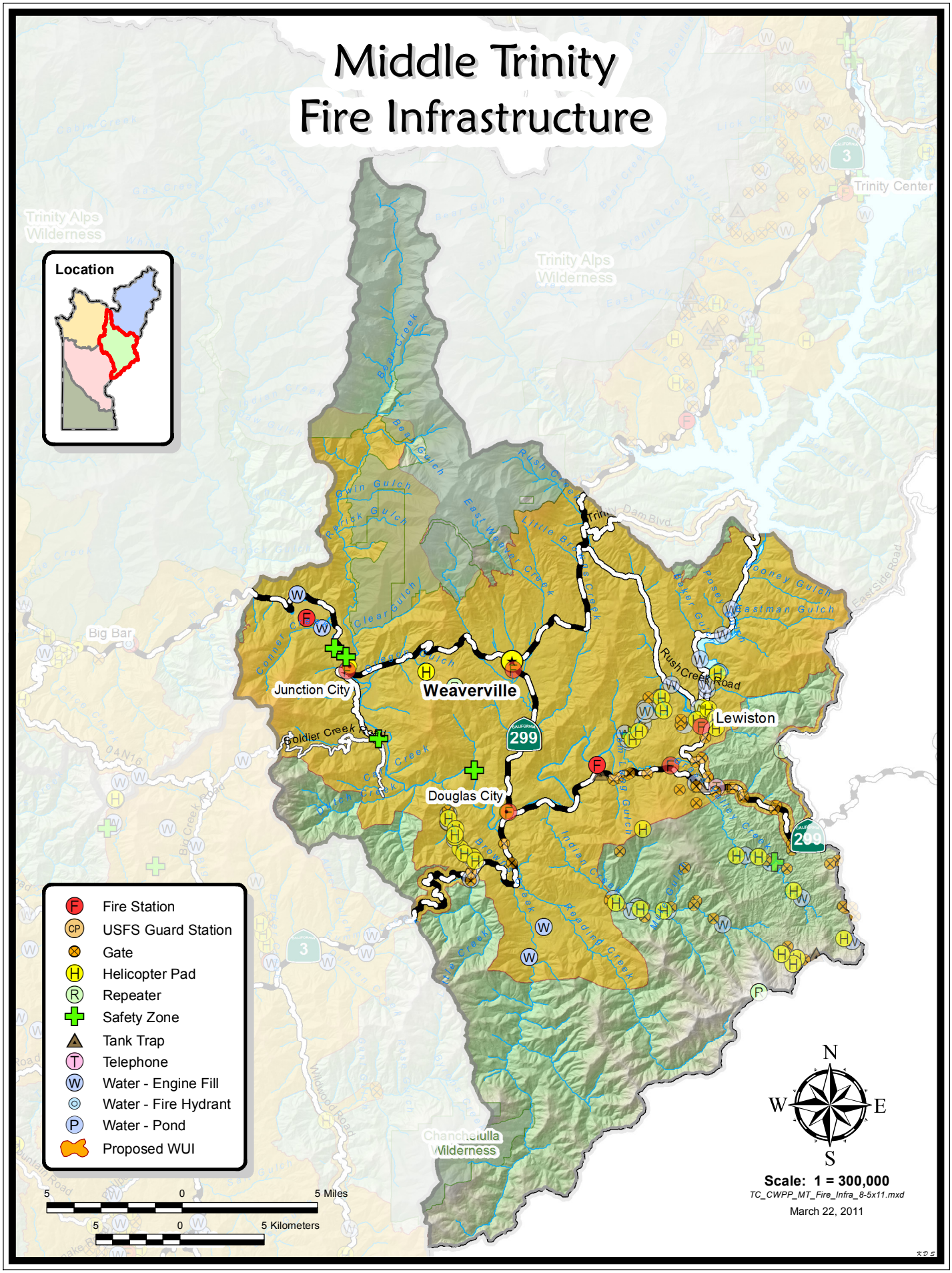
RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
8	Lewiston	Fuel Break		MT042		2	4	Mixed
4	Junction City	Landscape		MT008	Heavy Fuels - BLM	1	4	BLM
4	Junction City	Landscape		MT002	Gompa - Fuels Along Road Etc.	1	4	PVT
4	Junction City	Defensible Space		MT003	Acorn Lane - Dead Trees, Elderly Couple with Brush	1	4	PVT
4	Junction City	Landscape		MT011	Fuels Reduction Needed	1	4	PVT
4	Junction City	Defensible Space		MT006	Check for Defensible Space	1	4	PVT
4	Weaverville	Other		MT028	Rx Burn on Private Land (Fuels Reduction)	1	4	PVT
4	Weaverville	Landscape		MT029	Defensible Space High Tree Mortality	1	4	Mixed
4	Weaverville	Defensible Space		MT031	Homes, diffcult to defend from fire	1	4	PVT/CA

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
4	Weaverville	Defensible Space		MT032	No Water, High Density of Homes	1	4	PVT
4	Weaverville	Defensible Space		MT033	Fuels Reduction/Defensible Space	1	4	PVT
4	Weaverville	Landscape		MT034	Fuels Reduction/ingress-egress/roads/density	1	4	PVT
4	Lewiston	Landscape		MT018	Heavy OHV Use	1	4	Mixed
4	Douglas City	Landscape		MT020	Previous Fire, Heavy Fuels	1	4	BLM
4	Douglas City	Defensible Space		MT021	Vitzthum Phase II (Widen Road, Pull Outs, Fuels)	1	4	PVT
4	Douglas City	Defensible Space		MT022		1	4	PVT
4	Douglas City	Defensible Space		MT023	HIgh Risk - VFD will not respond to fire	1	4	PVT
4	Douglas City	Defensible Space		MT024		1	4	PVT

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
4	Douglas City	Other		MT025	Heritage Fruit Trees	1	4	BLM
4	Junction City	Defensible Space		MT013	Historic Site	1	4	PVT
4	Lewiston	Defensible Space		MT016		1	4	PVT
4	Weaverville	Roadside Fuel Break	East Branch Road	MT055	1 way in/1 way out/Heavy Fuels	1	4	Mixed
4	Douglas City	Roadside Fuel Break	Indian Creek Road- CO 336	MT051		2	2	Mixed
4	Junction City	Roadside Fuel Break	Sky Ranch Road- CO 412	MT057		1	4	PVT/BLM
4	Douglas City	Roadside Fuel Break	Steel Bridge Road- CO 218	MT047		1	4	Mixed
4	Junction City	Roadside Fuel Break	Steiner Flat Road- CO 221	MT038		1	4	BLM/PVT
4	Douglas City	Roadside Fuel Break	Tucker Hill Road	MT053		1	4	Mixed

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
4	Douglas City	Roadside Fuel Break	Union Hill Road- CO 219	MT046		1	4	Mixed
4	Lewiston	Private Property Buffer		MT041		1	4	USFS
4	Douglas City	Fuel Break		MT045		1	4	Mixed
4	Douglas City	Fuel Break		MT048		1	4	Mixed
4	Douglas City	Roadside Fuel Break	PVT Road	MT049		1	4	BLM/PVT
4	Douglas City	Roadside Fuel Break	CO 176/PVT Road	MT050		1	4	PVT/BLM
4	Douglas City	Fuel Break		MT054	Fire Line 64 Summit Fire, connet to SPI Clear Cut	1	4	Mixed
3	Lewiston	Defensible Space		MT017		1	3	PVT
3	Lewiston	Roadside Fuel Break	Deadwood Road- CO 211	MT039	Deadwood Road	1	3	Mixed

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
2	Lewiston	Defensible Space		MT019	International Order of Odd Fellows	1	2	PVT
2	Lewiston	Roadside Fuel Break	Lewiston Turnpike- CO 212	MT043		1	2	Mixed
1	Douglas City	Landscape		MT026		1	1	PVT


Middle Trinity
Fire Infrastructure
Location
Trinity Alps Wilderness
Trinity Center
Big Bar
Junction City
Weaverville
Lewiston
Douglas City
Rush Creek Road
Goldier Creek Road
299
3
Chanchelulla Wilderness
Fire Station
USFS Guard Station
Gate
Helicopter Pad
Repeater
Safety Zone
Tank Trap
Telephone
Water - Engine Fill
Water - Fire Hydrant
Water - Pond
Proposed WUI
5 0 5 Miles
5 0 5 Kilometers
N
W
E
S
Scale: 1 = 300,000
TC_CWPP_MT_Fire_Infra_8-5x11.mxd
March 22, 2011

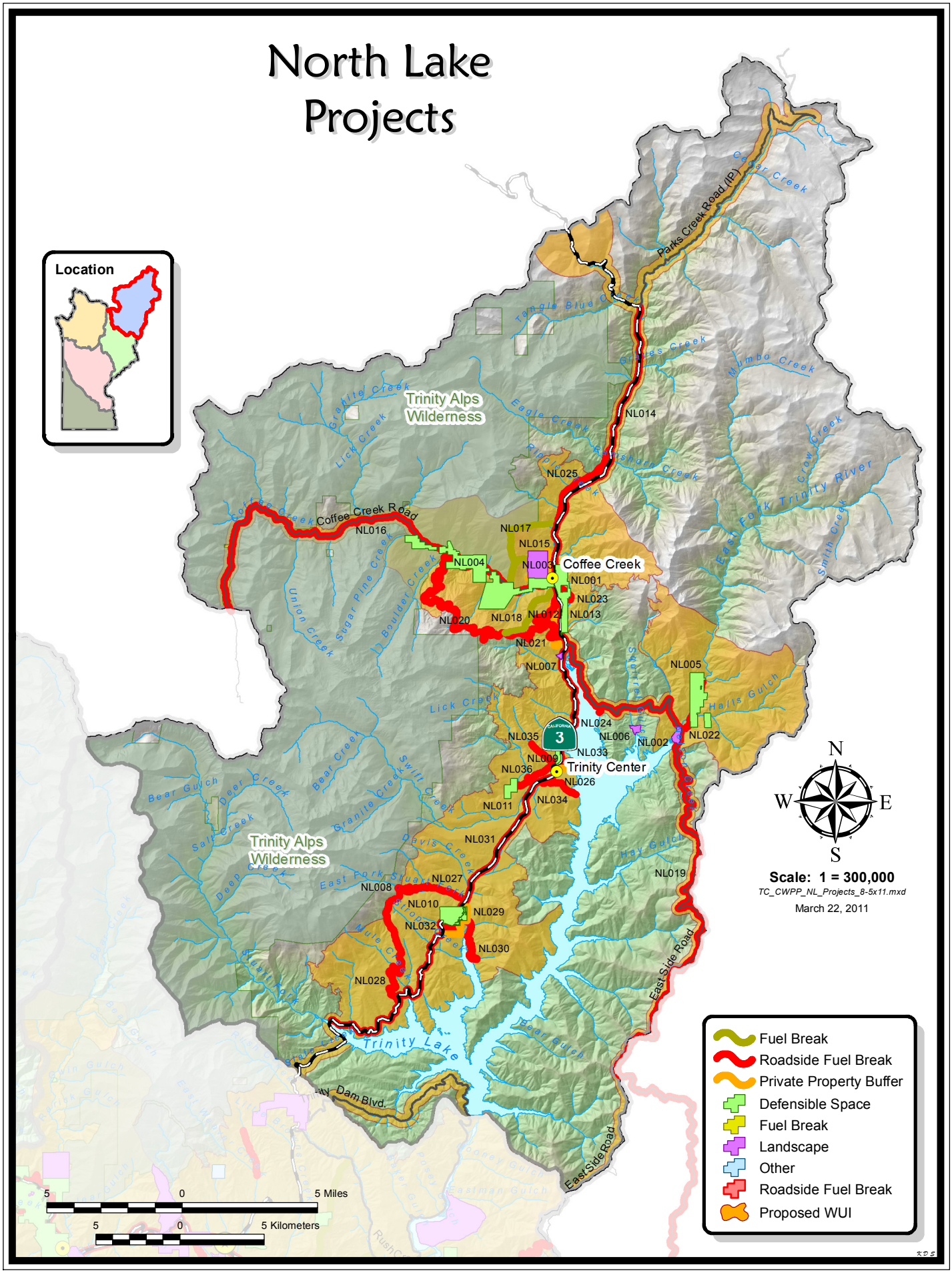
North Lake

The North Lake meetings were held in

Coffee Creek, Coffee Creek Community Center

Trinity Center, Trinity Center Fire Hall

North Lake Community Meeting, Coffee Creek Community Center


North Lake Projects
Location
Trinity Alps Wilderness
Trinity Alps Wilderness
Coffee Creek Road
Parks Creek Road (IP)
Coffee Creek
Trinity Center
Trinity Lake
East Side Road
East Side Road
Dam Blvd.
NL001
NL002
NL003
NL004
NL005
NL006
NL007
NL008
NL009
NL010
NL011
NL012
NL013
NL014
NL015
NL016
NL017
NL018
NL019
NL020
NL021
NL022
NL023
NL024
NL025
NL026
NL027
NL028
NL029
NL030
NL031
NL032
NL033
NL034
NL035
NL036
N
W
E
S
Scale: 1 = 300,000
TC_CWPP_NL_Projects_8-5x11.mxd
March 22, 2011
5 0 5 Miles
5 0 5 Kilometers
Fuel Break
Roadside Fuel Break
Private Property Buffer
Defensible Space
Fuel Break
Landscape
Other
Roadside Fuel Break
Proposed WUI

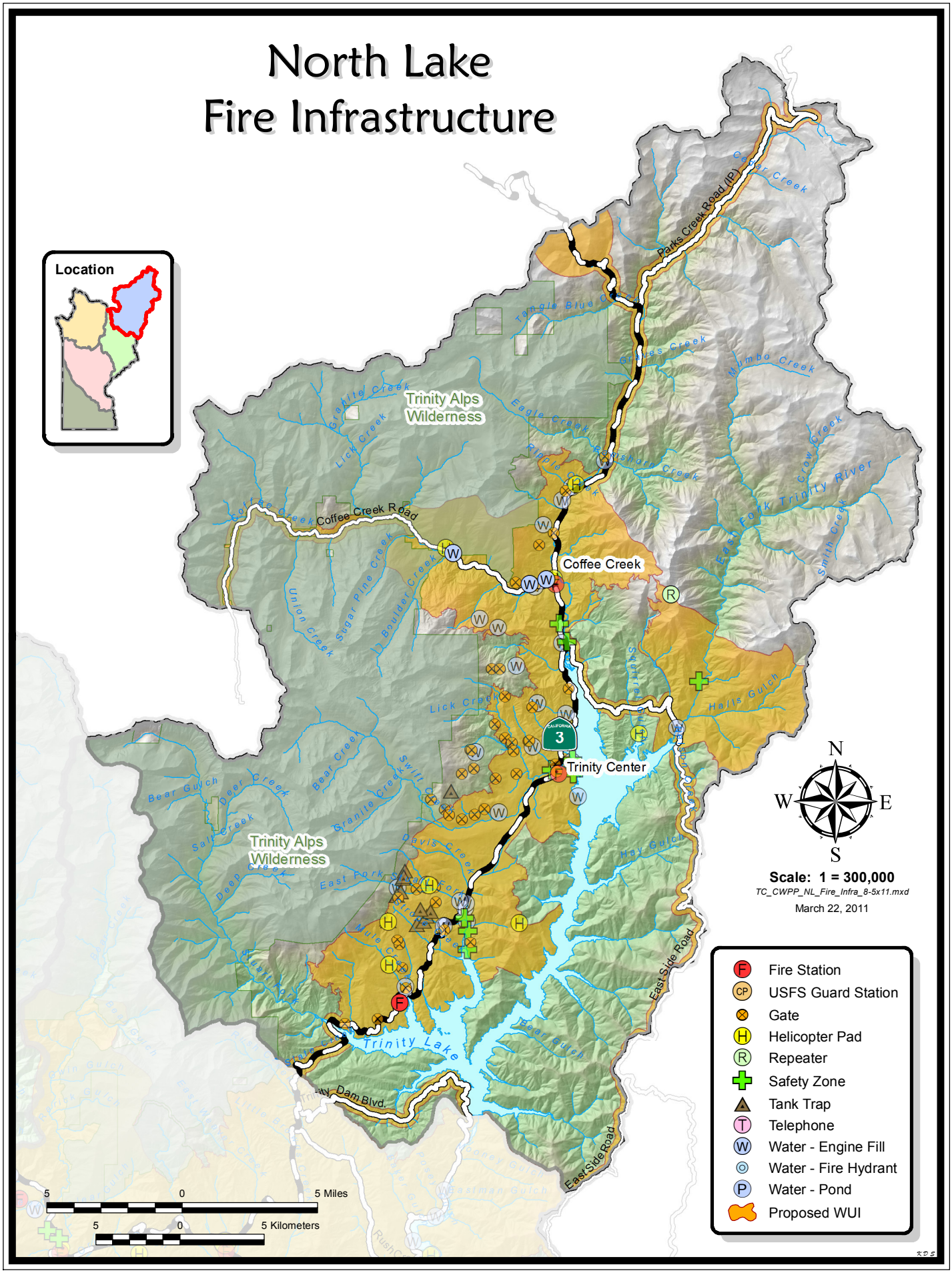
North Lake Projects –Ranked based on their relationship to a previous burn and the Wildland Urban Interface (WUI) See page 24

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
12		Roadside Fuel Break	TC 02/TC 11/PVT	NL034		3	4	Mixed
12	Coffee Creek	Roadside Fuel Break	37N19Y/37N42Y/37N53	NL020		3	4	Mixed
8	Coffee Creek	Defensible Space		NL005		2	4	PVT
8	Coffee Creek	Defensible Space		NL004		2	4	PVT
8	Covington Mill	Roadside Fuel Break	Guy Covington Drive- CO 160/35N14Y	NL030		2	4	Mixed
6	Coffee Creek	Roadside Fuel Break	East Side Road- CO 106	NL019		2	3	Mixed
4	Coffee Creek	Landscape		NL003		1	4	USFS
4	Coffee Creek	Defensible Space		NL001		1	4	PVT
4	Coffee Creek	Landscape		NL002		1	4	USFS

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
4	Trinity Center	Defensible Space		NL009		1	4	PVT
4	Covington Mill	Defensible Space		NL010		1	4	Mixed
4	Trinity Center	Defensible Space		NL011		1	4	PVT
4	Coffee Creek East	Landscape		NL007		1	4	USFS/PVT
4	Coffee Creek	Roadside Fuel Break	Carrville Loop- CA 152	NL013		1	4	PVT
4	Coffee Creek	Roadside Fuel Break	Coffee Creek Road- CO 104	NL016		1	4	PVT/USFS
4	Coffee Creek	Roadside Fuel Break	East Fork Road- CO 120	NL022		1	4	PVT/TPZ
4	Coffee Creek	Roadside Fuel Break	Mann Road- CO 131	NL023		1	4	PVT/USFS
4		Roadside Fuel Break	North Fork Cut Off- CO 124	NL033		1	4	PVT/USFS

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
4	Trinity Center	Roadside Fuel Break	Rainer Road- CO 134/35N23Y	NL028		1	4	USFS
4		Roadside Fuel Break	PVT Road	NL032	150' To Be Completed June 2010	1	4	PVT
4	Trinity Center	Roadside Fuel Break	CO 115/35N10	NL027		1	4	Mixed
4	Trinity Center	Roadside Fuel Break	Hwy 3	NL031		1	4	Mixed
4		Roadside Fuel Break	PVT Road	NL035		1	4	PVT/TPZ
4		Roadside Fuel Break	CO 123/PVT	NL036		1	4	TPZ/PVT
4	Trinity Center	Private Property Buffer		NL026		1	4	USFS/PVT
4	Coffee Creek	Private Property Buffer		NL029		1	4	USFS
4	Coffee Creek	Fuel Break		NL017	Work with SPI	1	4	Mixed

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
4	Coffee Creek	Private Property Buffer		NL012		1	4	USFS
4	Coffee Creek	Private Property Buffer		NL015		1	4	USFS
4	Coffee Creek	Fuel Break		NL018		1	4	TPZ/USFS
4	Trinity Center	Roadside Fuel Break	PVT Road	NL024		1	4	TPZ/USFS
4	Trinity Center	Roadside Fuel Break	CO 135/140	NL025		1	4	Mixed
4	Coffee Creek	Roadside Fuel Break	Hwy 3	NL014		1	4	Mixed
4	Coffee Creek	Roadside Fuel Break	37N52/37N52G/PVT	NL021		1	4	USFS/PVT
1	Trinity Center	Landscape		NL008	Water Source and Dispersed Camping	1	1	USFS
1	Coffee Creek East	Landscape		NL006	Squirrel Flat	1	1	USFS/TPZ


North Lake
Fire Infrastructure
Location
Trinity Alps Wilderness
Coffee Creek Road
Coffee Creek
Trinity Center
Parks Creek Road (IP)
East Side Road
Trinity Lake
Dam Blvd.
Scale: 1 = 300,000
TC_CWPP_NL_Fire_Infra_8-5x11.mxd
March 22, 2011
Fire Station
USFS Guard Station
Gate
Helicopter Pad
Repeater
Safety Zone
Tank Trap
Telephone
Water - Engine Fill
Water - Fire Hydrant
Water - Pond
Proposed WUI
5 0 5 Miles
5 0 5 Kilometers

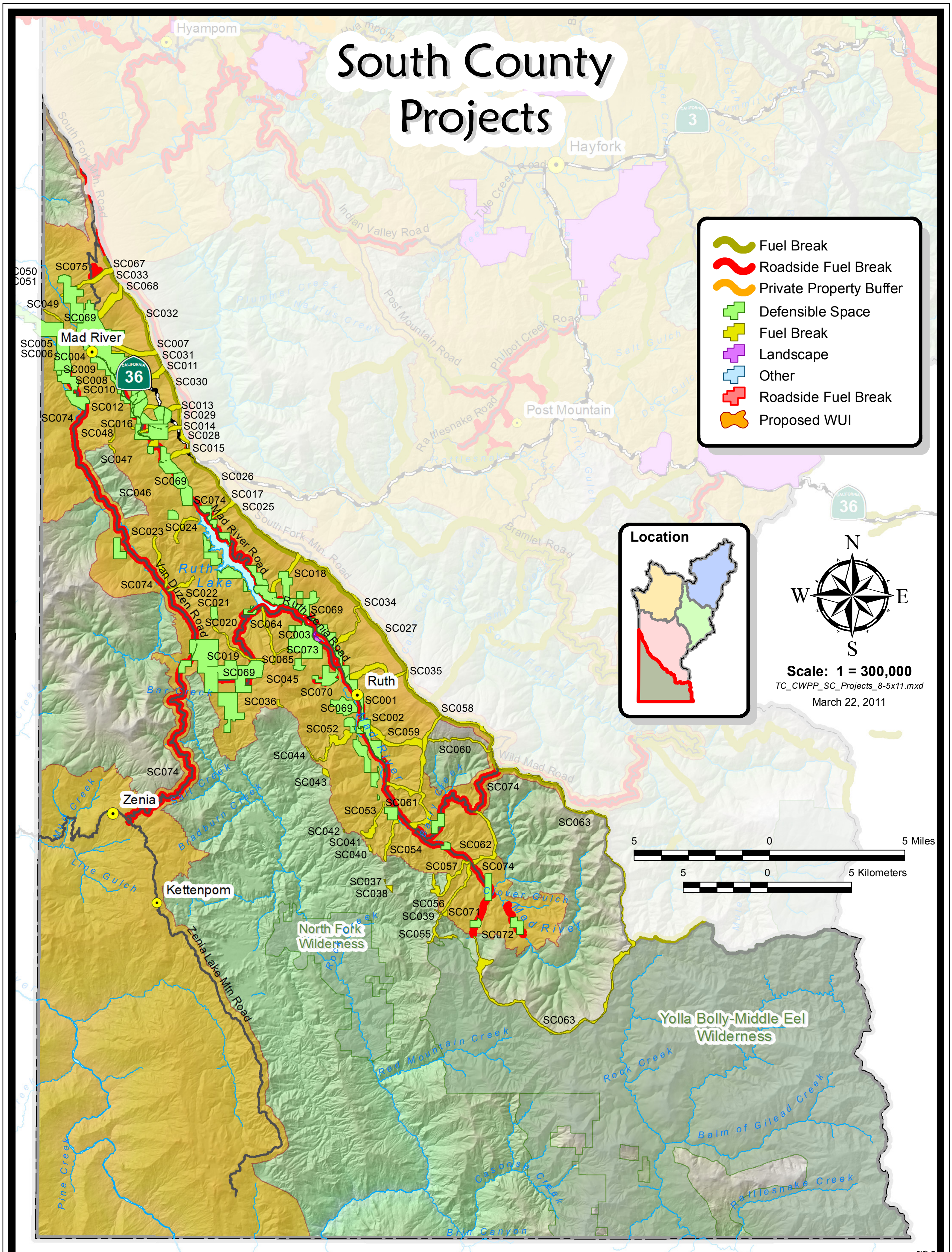
South County

The South County meetings were held in

Van Duzen Community Center

Ruth Fire Hall

South County Community Meeting, Van Duzen Community Center


South County Projects
Fuel Break
Roadside Fuel Break
Private Property Buffer
Defensible Space
Fuel Break
Landscape
Other
Roadside Fuel Break
Proposed WUI
Location
N
S
W
E
Scale: 1 = 300,000
TC_CWPP_SC_Projects_8-5x11.mxd
March 22, 2011
5 0 5 Miles
5 0 5 Kilometers
Hyampom
Hayfork
Post Mountain
Mad River
Ruth
Zenia
Kettenpom
Ruth Lake
North Fork Wilderness
Yolla Bolly-Middle Eel Wilderness
Indian Valley Road
Post Mountain Road
Rattlesnake Road
Bramlet Road
South Fork Mtn. Road
Mad River Road
Van Duzen Road
Ruth Zenia Road
Wild Mad Road
Zenia Lake Mtn Road
Red Mountain Creek
Rock Creek
Balm of Gilead Creek
Rattlesnake Creek
Pine Creek
Line Gulch
Bar Creek
Clover Gulch
Mad River
36
3

South County Projects –Ranked based on their relationship to a previous burn and the Wildland Urban Interface (WUI) See page 24

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
12		Fuel Break		SC018		3	4	USFS/PVT
12		Fuel Break		SC051		3	4	Mixed
8	Ruth	Landscape		SC003	Heavy Brush-Prescribed Fire Possibility	2	4	PVT
8		Fuel Break		SC010		2	4	PVT/USFS
8		Fuel Break		SC012		2	4	PVT
8		Fuel Break		SC017		2	4	USFS/PVT
8		Fuel Break		SC019		2	4	PVT/USFS
8		Fuel Break		SC025		2	4	USFS
8		Fuel Break		SC027		2	4	USFS

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
8		Fuel Break		SC030		2	4	USFS/PVT
8		Fuel Break		SC068		2	4	PVT/USFS
8		Defensible Space		SC069		2	4	PVT
8	Ruth	Roadside Fuel Break	PVT Road	SC071	South Fork Mad River Rd	2	4	PVT/USFS
8	Ruth	Roadside Fuel Break	CO 501/502/511/29N30	SC074	Possible Escape Route	2	4	Mixed
6		Fuel Break		SC058		2	3	USFS
6		Fuel Break		SC062		2	3	USFS
4	Ruth	Landscape		SC001	Draw Full of Manzanita between 2 houses	1	4	PVT
4	Van Duzen	Other		SC005	Van Duzen Community Center	1	4	TC

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
4	Van Duzen	Other		SC006	Van Duzen School	1	4	TC
4	Mad River	Other		SC004	Community Value Post Office, Burger Barn	1	4	PVT
4	Ruth	Defensible Space		SC002		1	4	PVT
4		Fuel Break		SC007		1	4	USFS/PVT
4		Fuel Break		SC008		1	4	PVT/USFS
4		Fuel Break		SC009		1	4	PVT/USFS
4		Fuel Break		SC011		1	4	PVT/USFS
4		Fuel Break		SC013		1	4	PVT/USFS
4		Fuel Break		SC014		1	4	PVT/USFS

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
4		Fuel Break		SC015		1	4	USFS/PVT
4		Fuel Break		SC016		1	4	USFS
4		Fuel Break		SC020		1	4	PVT/USFS
4		Fuel Break		SC021		1	4	PVT/USFS
4		Fuel Break		SC022		1	4	USFS
4		Fuel Break		SC023		1	4	USFS
4		Fuel Break		SC024		1	4	USFS
4		Fuel Break		SC026		1	4	USFS
4		Fuel Break		SC028		1	4	USFS

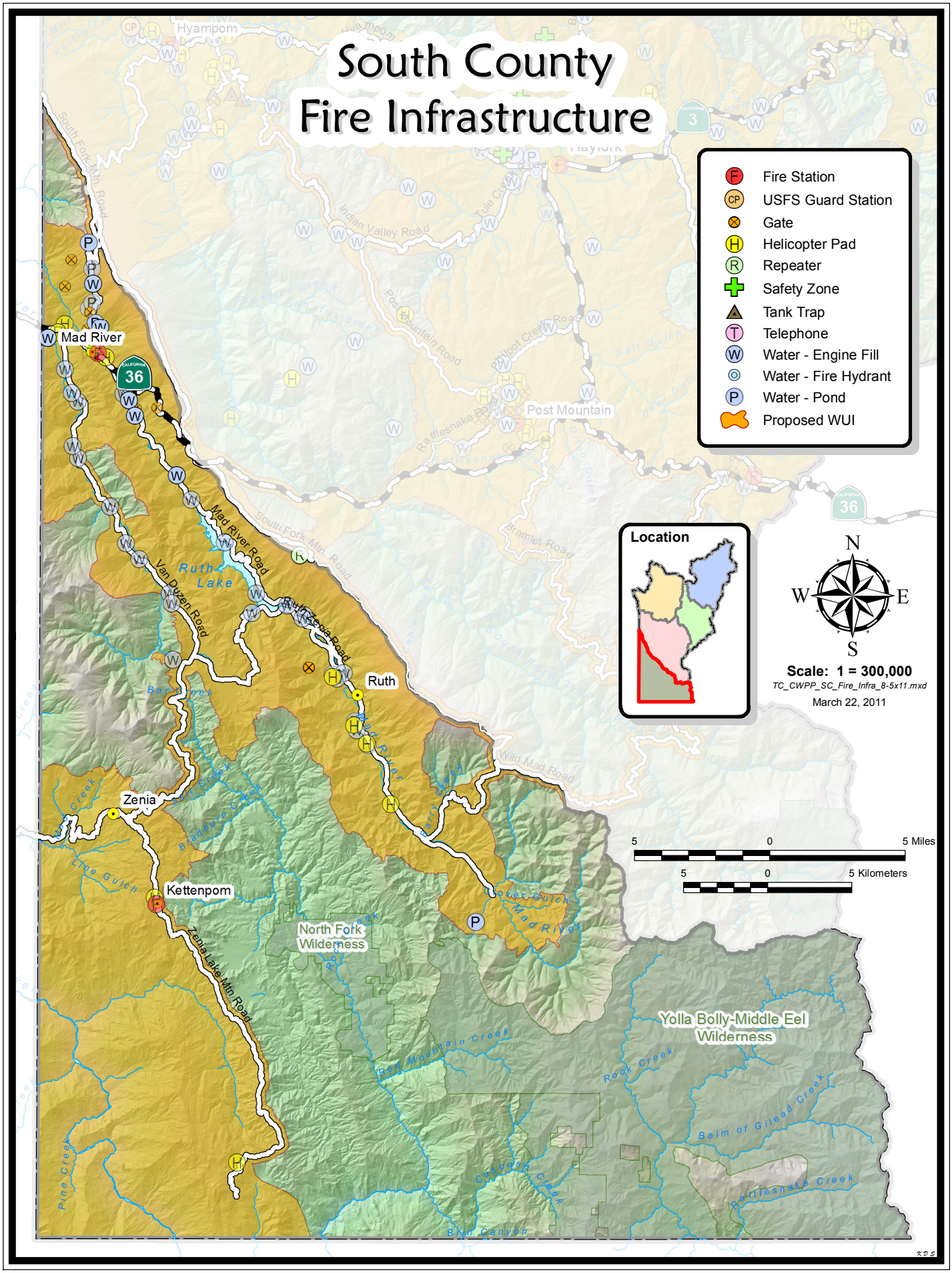
RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
4		Fuel Break		SC029		1	4	PVT/USFS
4		Fuel Break		SC031		1	4	USFS
4		Fuel Break		SC032		1	4	USFS
4		Fuel Break		SC033		1	4	USFS
4		Fuel Break		SC034		1	4	USFS/PVT
4		Fuel Break		SC035		1	4	USFS/PVT
4		Fuel Break		SC041		1	4	PVT
4		Fuel Break		SC045		1	4	USFS
4		Fuel Break		SC048		1	4	PVT

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
4		Fuel Break		SC049		1	4	PVT/USFS
4		Fuel Break		SC050		1	4	USFS/TPZ
4		Fuel Break		SC052		1	4	USFS/PVT
4		Fuel Break		SC053		1	4	USFS/PVT
4		Fuel Break		SC056		1	4	USFS
4		Fuel Break		SC059		1	4	USFS/PVT
4		Fuel Break		SC061		1	4	USFS
4		Fuel Break		SC063		2	2	USFS
4		Fuel Break		SC064		1	4	USFS

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
4		Fuel Break		SC065		1	4	USFS
4		Fuel Break		SC066		1	4	PVT
4		Fuel Break		SC067		1	4	Mixed
4	Ruth	Roadside Fuel Break	PVT/27N53	SC072	Anna Grace Ln	1	4	PVT/USFS
4	Ruth	Roadside Fuel Break	PVT Road	SC073		1	4	PVT
4	Ruth	Roadside Fuel Break	PVT Road	SC070	Rodeo Grounds	1	4	PVT
4	Mad River	Roadside Fuel Break	PVT Road	SC075	Hastings Tie Road	1	4	PVT
3		Fuel Break		SC036		1	3	PVT
3		Fuel Break		SC043		1	3	USFS

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
3		Fuel Break		SC044		1	3	USFS
3		Fuel Break		SC046		1	3	USFS
3		Fuel Break		SC047		1	3	USFS/PVT
3		Fuel Break		SC054		1	3	USFS/TPZ
3		Fuel Break		SC057		1	3	USFS
3		Fuel Break		SC060		3	1	USFS
2		Fuel Break		SC040		1	2	PVT/USFS
2		Fuel Break		SC055		1	2	USFS
1		Fuel Break		SC037		1	1	PVT

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
1		Fuel Break		SC038		1	1	PVT
1		Fuel Break		SC039		1	1	USFS
1		Fuel Break		SC042		1	1	PVT


South County
Fire Infrastructure
Fire Station
USFS Guard Station
Gate
Helicopter Pad
Repeater
Safety Zone
Tank Trap
Telephone
Water - Engine Fill
Water - Fire Hydrant
Water - Pond
Proposed WUI
Location
N
W
E
S
Scale: 1 = 300,000
TC_CWPP_SC_Fire_Infra_8-5x11.mxd
March 22, 2011
5 0 5 Miles
5 0 5 Kilometers
Hyampom
Mad River
36
Ruth Lake
Mad River Road
Van Duzen Road
Ruth
Zenia
Kettenpom
Zenia Lake Mtn Road
North Fork Wilderness
Yolla Bolly-Middle Eel Wilderness
Post Mountain
Indian Valley Road
Rattlesnake Road
South Fork Mtn. Road
Bramlet Road
Wild Mad Road
Lower Mad River
Rock Creek
Balm of Gilead Creek
Rattlesnake Creek
Pine Creek
Brim Canyon

South Fork

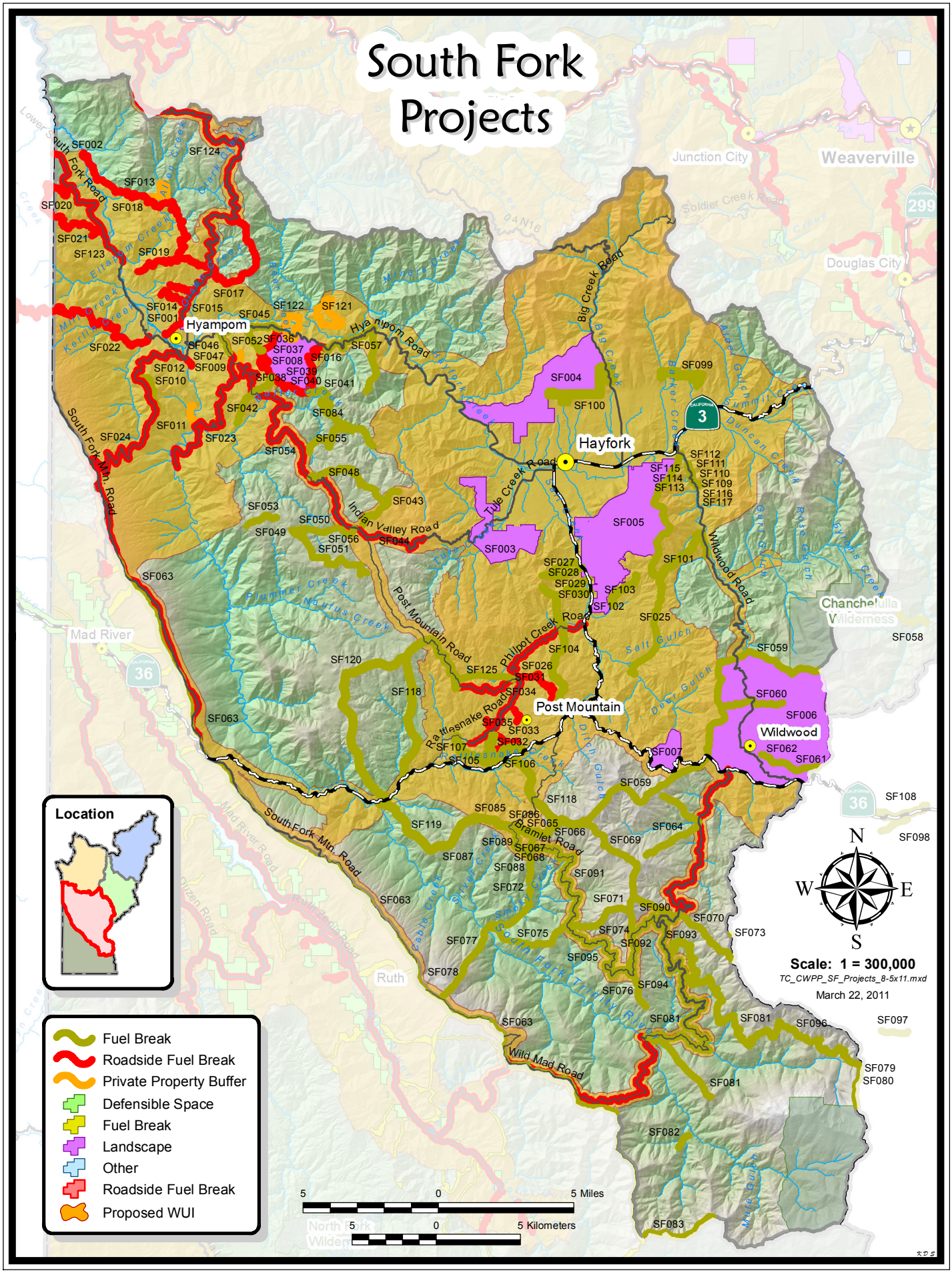
The South Fork meetings were held in

Hayfork

Hyampom

Post Mountain

Hayfork Community Meeting, Hayfork Library


South Fork Projects
Junction City
Weaverville
Douglas City
Hyampom
Hayfork
Post Mountain
Wildwood
Mad River
Ruth
Chanchelulla Wilderness
Location
Fuel Break
Roadside Fuel Break
Private Property Buffer
Defensible Space
Fuel Break
Landscape
Other
Roadside Fuel Break
Proposed WUI
N
S
E
W
Scale: 1 = 300,000
TC_CWPP_SF_Projects_8-5x11.mxd
March 22, 2011
5 0 5 Miles
5 0 5 Kilometers

South Fork Projects –Ranked based on their relationship to a previous burn and the Wildland Urban Interface (WUI) See page 24

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
16	Hyampom	Landscape		SF001	Heavy Manzanita Fuels	4	4	USFS
16		Roadside Fuel Break	Indian Valley Road-02N10	SF056		4	4	USFS
16		Roadside Fuel Break	Indian Valley Road-02N10	SF044		4	4	USFS
16	Hyampom	Fuel Break		SF010		4	4	TPZ/USFS
16	Hyampom	Private Property Buffer		SF011		4	4	USFS
16	Hyampom	Roadside Fuel Break	03N47	SF014		4	4	USFS
16	Hyampom	Roadside Fuel Break	03N36/03N36E	SF019		4	4	USFS
16	Hyampom	Roadside Fuel Break	04N20	SF020		4	4	USFS
16	Peanut	Fuel Break		SF027		4	4	USFS/PVT

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
16		Fuel Break		SF038		4	4	USFS
12	Wildwood	Landscape		SF007	Heavy Fuels on downside of Hwy 36	3	4	USFS
12		Roadside Fuel Break	Indian Valley Road- 02N10	SF054		3	4	USFS
12	Hyampom	Roadside Fuel Break	Lower South Fork Road- CO 311	SF123		3	4	PVT/USFS
12	Peanut	Roadside Fuel Break	Rattlesnake Road- CO 353	SF026		3	4	Mixed
12	Hyampom	Roadside Fuel Break	03N54/CO 327/PVT	SF015		3	4	USFS/PVT
12	Hyampom	Roadside Fuel Break	04N13&14/04N20/PVT	SF021		3	4	USFS/PVT
12	Peanut	Fuel Break		SF028		3	4	USFS/PVT
12	Peanut	Fuel Break		SF030		3	4	USFS/PVT

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
12		Fuel Break		SF052		3	4	USFS
8	Peanut	Landscape		SF005		2	4	USFS
8	Hayfork	Landscape		SF003	Tule/McAlexander	2	4	USFS
8	Hayfork	Landscape		SF004	Miners Fire	2	4	USFS/PVT
8	Hyampom	Roadside Fuel Break	St John Road CO- 316	SF023		2	4	USFS/PVT
8	Hyampom	Roadside Fuel Break	PVT Road	SF012		2	4	USFS/PVT
8	Hyampom	Roadside Fuel Break	04N09/04N24/PVT	SF018		2	4	Mixed
8	Hyampom	Roadside Fuel Break	03N14/PVT	SF022		2	4	TPZ/USFS
8	Hyampom	Roadside Fuel Break	03N10/06N01/04N12	SF024		2	4	Mixed

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
8	Hayfork	Fuel Break		SF025	King-Salt Fuel Break	2	4	USFS/PVT
8	Peanut	Fuel Break		SF029		2	4	USFS/PVT
8		Fuel Break		SF060		2	4	USFS
8		Fuel Break		SF063		2	4	USFS/PVT
8		Fuel Break		SF099		2	4	USFS
8		Fuel Break		SF101		2	4	USFS
8		Fuel Break		SF103		2	4	USFS
8		Fuel Break		SF104		2	4	USFS
8		Fuel Break		SF108		2	4	USFS

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
8	Hyampom	Private Property Buffer		SF121		2	4	USFS
8	Hyampom	Private Property Buffer		SF122		2	4	USFS
6	Wildwood	Landscape		SF006		2	3	Mixed
6	Hyampom	Landscape		SF008	Grassy Flats Watershed	2	3	USFS/PVT
6	Hyampom	Roadside Fuel Break	03N08/03N20/03N21	SF016		2	3	USFS
6	Hyampom	Roadside Fuel Break	03N05/04N03/04N18	SF017		3	2	USFS
6		Fuel Break		SF057		2	3	USFS
6		Fuel Break		SF059		2	3	USFS
6		Fuel Break		SF048		3	2	USFS

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
4	Trinity Pines	Roadside Fuel Break	Rattlesnake Road- CO 353	SF034		1	4	PVT/USFS
4	Hyampom	Roadside Fuel Break	Underwood Mountain Road- 05N60/CO 327	SF124		1	4	USFS
4	Hyampom	Private Property Buffer		SF009		1	4	USFS
4	Trinity Pines	Roadside Fuel Break	CO 354/02N07	SF031		1	4	USFS/PVT
4	Trinity Pines	Roadside Fuel Break	PVT Road/30N57	SF032		1	4	PVT/USFS
4	Trinity Pines	Roadside Fuel Break	FS Road	SF033		1	4	USFS
4	Trinity Pines	Roadside Fuel Break	PVT Road	SF035		1	4	PVT/USFS
4		Fuel Break		SF053		4	1	USFS
4		Fuel Break		SF061		1	4	USFS

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
4		Fuel Break		SF062		1	4	USFS
4		Fuel Break		SF065		1	4	USFS
4		Fuel Break		SF067		1	4	USFS
4		Fuel Break		SF086		1	4	USFS
4		Fuel Break		SF088		1	4	USFS
4		Fuel Break		SF089		1	4	USFS
4		Fuel Break		SF090		1	4	USFS
4		Fuel Break		SF091		1	4	USFS
4		Fuel Break		SF092		1	4	USFS

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
4		Fuel Break		SF094		1	4	USFS
4		Fuel Break		SF095		1	4	USFS
4		Fuel Break		SF100		1	4	USFS
4		Fuel Break		SF102		1	4	USFS
4		Fuel Break		SF105		1	4	USFS
4		Fuel Break		SF106		1	4	USFS
4		Fuel Break		SF107		1	4	USFS
4		Fuel Break		SF109		1	4	USFS
4		Fuel Break		SF110		1	4	USFS

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
4		Fuel Break		SF111		1	4	USFS
4		Fuel Break		SF112		1	4	USFS
4		Fuel Break		SF113		1	4	USFS
4		Fuel Break		SF114		1	4	USFS
4		Fuel Break		SF115		1	4	USFS
4		Fuel Break		SF116		1	4	USFS
4		Fuel Break		SF117		1	4	USFS
4		Fuel Break		SF118		2	2	USFS
4		Fuel Break		SF119		2	2	USFS

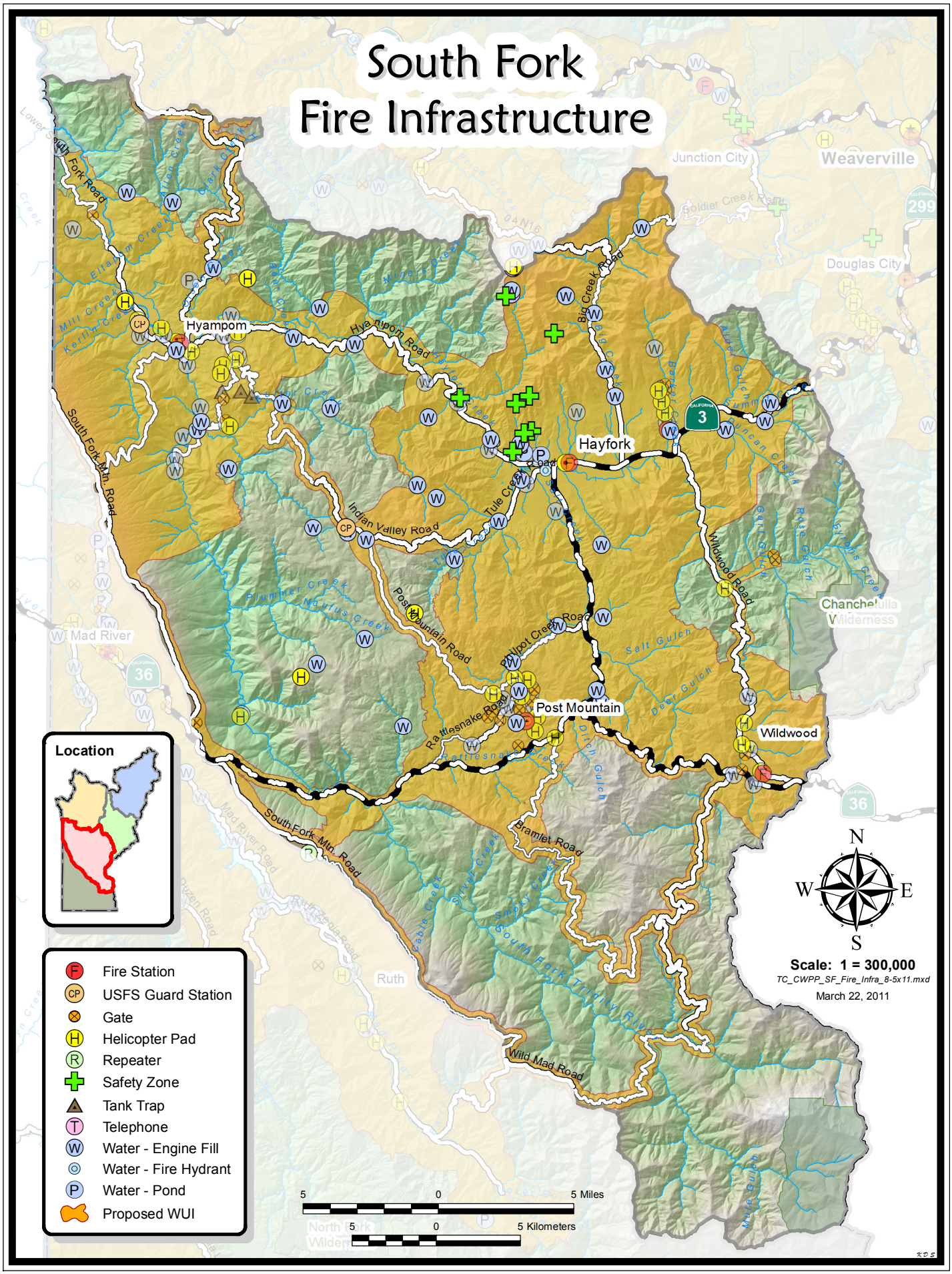
RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
4		Fuel Break		SF120		2	2	USFS
4		Fuel Break		SF037		1	4	USFS
4		Fuel Break		SF036		1	4	USFS
4		Fuel Break		SF042		1	4	USFS
4		Fuel Break		SF043		1	4	USFS
4		Fuel Break		SF045		1	4	USFS/PVT
4		Fuel Break		SF046		1	4	USFS
4		Fuel Break		SF047		1	4	USFS
4		Fuel Break		SF049		4	1	USFS

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
4	Trinity Pine	Fuel Break		SF125		1	4	USFS
3	Hyampom	Other		SF002	Cultural Importance - Mule Bridge	3	1	USFS
3		Fuel Break		SF051		3	1	USFS
3		Fuel Break		SF068		1	3	USFS
3		Fuel Break		SF074		1	3	USFS
3		Fuel Break		SF076		1	3	USFS
3		Fuel Break		SF082		3	1	USFS
3		Fuel Break		SF085		1	3	USFS
3		Fuel Break		SF087		3	1	USFS

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
2	Hyampom	Private Property Buffer		SF013		1	2	USFS
2		Fuel Break		SF064		1	2	USFS
2		Fuel Break		SF066		1	2	USFS
2		Fuel Break		SF070		1	2	USFS
2		Fuel Break		SF071		1	2	USFS
2		Fuel Break		SF078		1	2	USFS
2		Fuel Break		SF050		1	2	USFS
1		Fuel Break		SF055		1	1	USFS
1		Fuel Break		SF058		1	1	USFS/PVT

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
1		Fuel Break		SF069		1	1	USFS
1		Fuel Break		SF072		1	1	USFS
1		Fuel Break		SF073		1	1	USFS
1		Fuel Break		SF075		1	1	USFS
1		Fuel Break		SF077		1	1	USFS
1		Fuel Break		SF079		1	1	USFS
1		Fuel Break		SF080		1	1	USFS
1		Fuel Break		SF081		1	1	USFS/PVT
1		Fuel Break		SF083		1	1	USFS

RANK	Community	Project Type	Project Name	Project ID	Comment	Previous Burn Score	WUI Score	Ownership
1		Fuel Break		SF084		1	1	USFS
1		Fuel Break		SF093		1	1	USFS
1		Fuel Break		SF096		1	1	USFS
1		Fuel Break		SF097		1	1	USFS
1		Fuel Break		SF098		1	1	USFS
1		Fuel Break		SF039		1	1	USFS
1		Fuel Break		SF040		1	1	USFS
1		Fuel Break		SF041		1	1	USFS


South Fork
Fire Infrastructure
Junction City
Weaverville
Douglas City
Hyampom
Hayfork
Wildwood
Post Mountain
Ruth
Mad River
Chanchelulla Wilderness
Hyampom Road
Indian Valley Road
Post Mountain Road
Rattlesnake Road
Bramlet Road
Wild Mad Road
South Fork Mtn. Road
Wildwood Road
Bid Creek Road
Location
Fire Station
USFS Guard Station
Gate
Helicopter Pad
Repeater
Safety Zone
Tank Trap
Telephone
Water - Engine Fill
Water - Fire Hydrant
Water - Pond
Proposed WUI
5 0 5 Miles
5 0 5 Kilometers
N
W
E
S
Scale: 1 = 300,000
TC_CWPP_SF_Fire_Infra_8-5x11.mxd
March 22, 2011

VI. County-Wide Issues and Recommendations

The following recommendations made in community meetings are relevant to the fire management process throughout the county:

1. Work to integrate fire management planning explicitly into the National Forest Management Act mandated planning process on the national forests and across jurisdictional boundaries to allow for landscape scale prioritization and implementation of pre-fire treatments. Agencies should also look at areas of concern based on their land use plans.

2. Immediate areas for coordination include:
    a. Linking the Six Rivers and Shasta-Trinity National Forests' Road Management Plans to ensure that roads critical for access in case of fire are being maintained. Further, encourage cooperation among all jurisdictions along any and all roadsides to reduce fuels;
    b. Coordinating Six Rivers National Forest and Shasta-Trinity National Forest Fire Management and Trinity Alps Wilderness Management Plans;
    c. Identify and publicize for each community safety zones in case of catastrophic fire.
    d. Coordination between fire prevention programs or personnel and land organizations, and local VFDs to address wild fire issues

3. Coordinate with staff on the Lower Trinity Ranger District, Six Rivers NF on fuels reduction treatments. Projects should take advantage of topographic features, including ridgeline shaded fuel breaks, especially those with multiple access points.

4. Considerable expense has gone into plantations and which are neglected. Existing plantations are both important resources and, if untended, fire hazards. Consider proactive thinning and fuels reduction of plantations during their period of greatest vulnerability to fire.

5. Encourage the Shasta-Trinity National Forest to keep the water tenders and Fire Fighting equipment at local guard stations such as the Big Bar Guard Station and Hyampom Guard Station.

6. Continue to expand Volunteer Fire Departments capacities throughout the County.

7. Work with Volunteer Fire Departments to increase needed items such as fire protection equipment, community outreach tools, and firefighting water sources (and ensure access).

8. Ensure that the increased amount of fuel resulting from fire, windfall, insect and disease outbreaks, and other events, should be used as a factor to focus priority fuel treatments.

Additional Recommendations for Fire Safe Activities

The most frequently recommended methods of pre-fire treatment identified through this process were general fuels reduction efforts, followed by shaded fuel break construction and maintenance, and stand and plantation thinning. Recommendations for individual landowners to treat their own fuels and for neighborhood groups to work together to reduce fire hazard and emergency response problems were also stressed. In addition to these recommendations participants raised several additional issues that are broadly relevant to the area as a whole.

Participants noted the importance of taking a landscape scale view of fire hazard and the importance of maintaining existing fuel breaks. It was also noted that large accumulations of standing dead fuel exist on past burns and that fuels treatments in those areas should be considered, especially near communities. These areas pose an increased Resistance to Control (How much time and effort will it take to control a fire). This issue of was practically stressed in the South Fork Division.

Further we should focus on past burns and consider fuels treatment and maintenance in those areas. We need to maintain our fuel breaks so that they can be used for future fires. We also need to know where all of the old fire lines in the area are and figure out a way to make that information accessible to firefighters and other people making decisions during fire incidents.

Specific firefighting techniques were also mentioned such as burnouts. There is a general dislike for burning from below vs. from a ridge top down during a fire event.

Project Suggestions

Implementing a system of strategic fuel breaks along ridges and roadsides is suggested as an extremely productive and agreed upon strategy for creating a more fire-safe community.

It was suggested that efforts be put towards connecting private roads to allow for more than one egress. Specific examples are Farmer Ranch Road and Barker Valley Road in Hayfork.

When preparing an area for a prescribed burn, lop and scatter first and then treat with fire to get more thorough results.

It is suggested that SPI be contacted in conjunction with the residents of the Barker Valley neighborhood to discuss possible burning operations on SPI land adjacent to that neighborhood. (This could potentially be done in conjunction with the Hayfork Neighborhood Protection Project that is being run by the WRTC.)

There are some bridges that need signage to indicate their load capacity. After further discussion, it is suggested that where possible a ford be rocked into the creek bed and heavy equipment be diverted to that crossing during a fire event limiting the stress on infrastructure and the potential for a bridge to fail cutting off access completely.

While projects that are strategic are important, it's also important to adjust a project's ranking based on access, shared funding, diverse objectives, and not just hazard fuels.

VII. Conclusions and Next Steps

The results of this effort to capture recommendations from Trinity County communities and professional fire managers can be used by the FSC to provide the basis for a fire management plan for the Trinity County landscape. This draft report will be circulated throughout the county for comments that will be incorporated in the final report. The Fire Safe Council will present this report to the Natural Resources Advisory Council and the Trinity County Board of Supervisors.

The Trinity County Board of Supervisors may find this report valuable as it seeks to ensure that the voice of the county is heard in public land managers' decisions about fire management. Further it is hoped that the USFS and BLM will find this report useful as they gather community input to their fire planning process. The community recommendations may assist the Trinity County Planning Department in updating the County's General Plan Safety Element. The Fire Safe Council including the TCRCD and the WRTC will continue with its fire management coordination efforts using the results to systematically promote implementation of the projects recommended by the community participants. Further, it will encourage public land management agencies to carry out the necessary pre-work such as National Environmental Protection Act (NEPA) Environmental Assessments required before many recommended activities can be carried out. Trinity County VFDs and the FSC may also find the information helpful in the next phases of county level coordination of emergency response such as sharing equipment to implement projects.

Appendices

Appendix A - Meetings

Community Meetings

County Divisions	Locations of the meetings	Date of Meeting	Number of meetings
Down River (including the communities of Salyer, Hawins Bar, Burnt Ranch, Big Bar, and Willow Creek)	Burnt Ranch Elementary School gym	2-10-10 3-5-10	2
	Trinity Valley Elementary School cafeteria (Willow Creek)	2-8-10 3-1-10	2
Mid Trinity (including the communities of Douglas City, Lewiston, Weaverville, and Junction City)	Douglas City Fire Hall	2-16-10	1
	Lewiston Community Center	2-9-10	1
	Weaverville Volunteer Fire Department	2-18-10	1
	Junction City	3-3-10	1
North Lake (including the communities of Coffee Creek, Trinity Center, Covington Mill, Lake Forest Dr, Long Canyon & surrounding areas)	Trinity Center IOOF Hall	3-2-10	1
	Coffee Creek Community Center	2-11-10	1
South County (including the communities of Mad River, Ruth, Kettenpom, Zenia & surrounding areas)	Ruth Fire Hall	2-13-10	1
	Van Duzen Community Hall	2-13-10	1
South Fork (including the communities of Hayfork, Hyampom, Wildwood, Peanut, Forest Glen, and surrounding areas)	Hayfork High School Library	3-9-10 5-19-10	2
	Hyampom	2-2-10	1
	Post Mountain	3-13-10	1

Review Committee Meetings

County divisions	Locations of the meetings	Date of Meeting	Number of meetings
Down River (including the communities of Salyer, Hawkins Bar, Burnt Ranch, Big Bar, and Willow Creek)	Burnt Ranch Elementary School gym	11-9-10	1
	Trinity Valley Elementary School cafeteria	11-8-10	1
North Lake (including the communities of Coffee Creek, Trinity Center, Covington Mill, Lake Forest Dr, Long Canyon & surrounding areas)	Trinity Center IOOF Hall	8-12-10	1
South County (including the communities of Mad River, Ruth, Kettenpom, Zenia & surrounding areas)	Mad River Fire Hall	9-14-10	1
South Fork (including the communities of Hayfork, Hyampom, Wildwood, Peanut, Forest Glen, and surrounding areas)	Hayfork Ranger Station	4-27-10	1

Join the Blue Dot Brigade

OK, you've done the most important things to protect your home from wildfire – established 100' of defensible space, provided safe access and turnarounds for firefighters, and set up a hydrant or accessible water supply.

Would firefighters be able to locate your hydrant or water supply in the dark or under smoky conditions?

Mark your firefighting water supply with a blue reflector!

Mark **only** water supplies that are set up specifically for firefighting, such as:

- Hydrants with 2 ½" National Standard male thread
- Swimming pools or ponds that that can be accessed by a large fire engine with a short hose

Don't mark just any water supply.
See reverse side for more information.
Please don't endanger your firefighters!
Check with your local VFD to learn what to mark and to obtain free blue reflectors.

Firefighting Water Supplies

Water is one of the limiting factors in fighting fires. Having a water tank, swimming pool or pond nearby is not enough – the water must be accessible to firefighters. Consider this:

1. There are 2 basic types of water sources: draft and pressurized.

2. In most draft systems, the fire engine has to suck water into its pump, where it's pressurized for firefighting. Draft water sources can be a swimming pool, pond or water tank. Because a fire engine's suction hose is very short, the fire engine must be able to park within 7 feet of the source. Both the parking location AND the approach to it must be a hard surface capable of holding a 14' tall, 40,000-pound vehicle.

3. The better choice is a pressurized system, using gravity or a pump. Gravity systems are the most desirable for fire protection, since they can work when the power goes out.

   In a gravity system, water is stored in an elevated tank or tanks before it is needed. The tank is kept full and water is brought down to a hydrant through a large diameter pipe (3" or more). An elevated tank provides 1 pound of pressure for every 2.3' in elevation. A tank 80' uphill provides 35 pounds of pressure – the minimum needed to protect a home from fire.

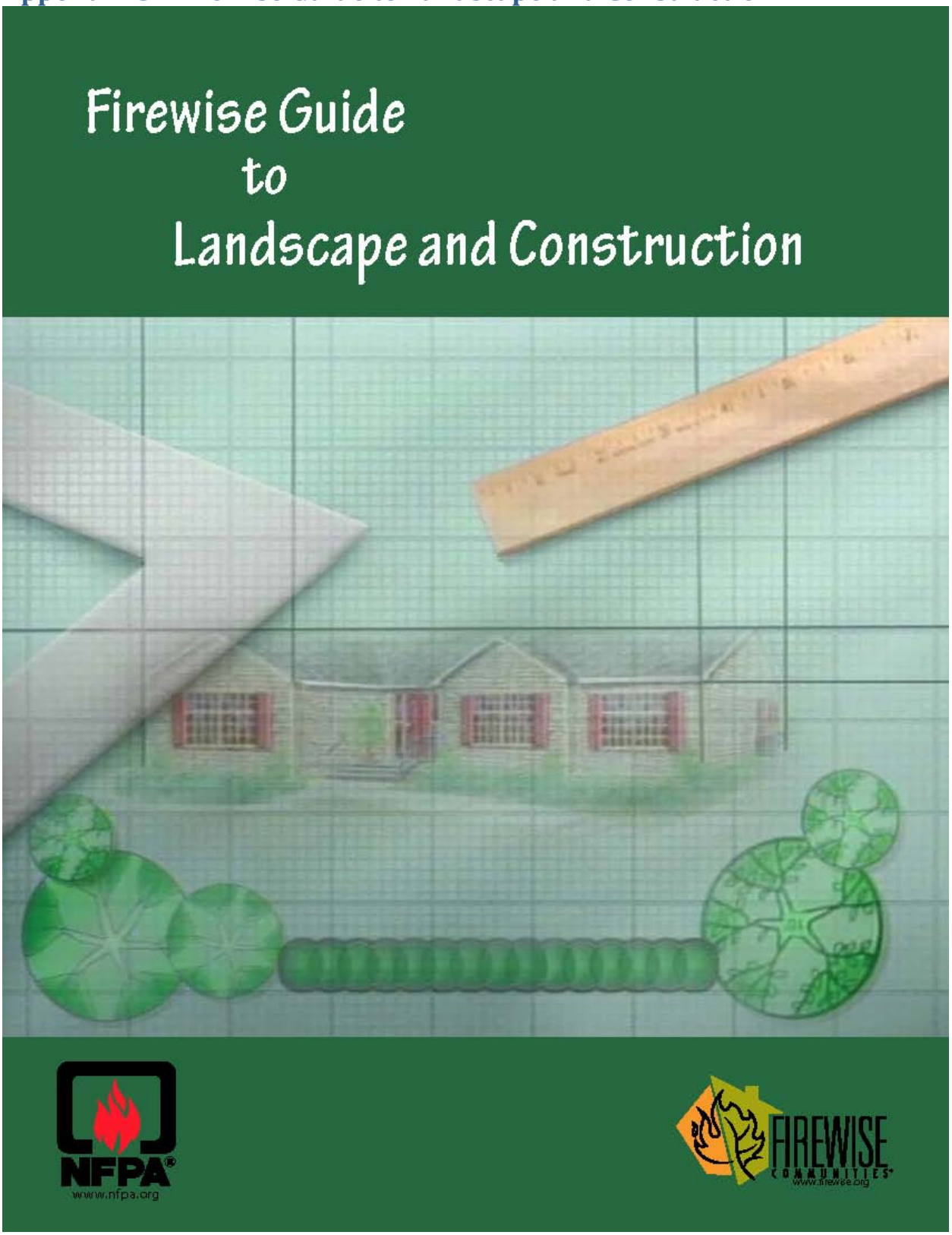
4. Portable water pumps can be used with tanks, pools, ponds or streams. Pumps should be pre-fitted with 1 ½" or 2 ½" male National Hose pipe thread fittings on their discharge sides and must have suction hoses long enough to reach the water.

5. Hydrants should be located about 50' away from your house. At this distance, if the house is on fire, the hydrant can probably still be reached. Hydrants must be very sturdy. Fortify PVC pipe so that it can withstand heavy weights and pressures. Hydrants should be 18-24" high and placed 4-12' from any road. Protect your hydrant from vehicles with barriers, but make sure that firefighters can park near it.

6. Install round blue reflectors to guide firefighters to your firefighting water supply. Do not use blue reflectors for any other purpose – this could lead to confusion and endanger firefighters.

Abridged from "Water, water everywhere", Forestland Steward, Summer 2008. Published by the CA Forest Stewardship Program. http://ceres.ca.gov/foreststeward/pdf/34-Foreststeward-Sum08.pdf. Contact your local fire department for more information about firefighting water supplies.

Appendix C - Firewise Guide to Landscape and Construction



Guide to Landscaping

The primary goal for Firewise landscaping is fuel reduction — limiting the level of flammable vegetation and materials surrounding the home and increasing the moisture content of remaining vegetation. This includes the entire 'home ignition zone' which extends up to 200 feet in high hazard areas.

Use the Zone Concept

Zone 1 is the 30 feet adjacent to the home and its attachments; Zone 2 is 30 to 100 feet from the home; Zone 3 is 100 to 200 feet from the home.

Zone 1 (All Hazard Areas) *This well-irrigated area encircles the structure and all its attachments (wooden decks, fences, and boardwalks) for at least 30 feet on all sides.*

1) Plants should be carefully spaced, low-growing and free of resins, oils and waxes that burn easily.
2) Mow the lawn regularly. Prune trees up six to ten feet from the ground.
3) Space conifer trees 30 feet between crowns. Trim back trees that overhang the house.
4) Create a 'fire-free' area within five feet of the home, using non-flammable landscaping materials and/or high-moisture-content annuals and perennials.
5) Remove dead vegetation from under deck and within 10 feet of house.
6) Consider fire-resistant material for patio furniture, swing sets, etc.
7) Firewood stacks and propane tanks should not be located in this zone.
8) Water plants, trees and mulch regularly.
9) Consider xeriscaping if you are affected by water-use restrictions.

Use grass and driveways as fuel breaks from the house.

Use faux brick and stone finishes and high-moisture-content annuals and perennials.

Zone 2 (Moderate and High Hazard Areas) Plants in this zone should be low-growing, well-irrigated, and less flammable.

1) Leave 30 feet between clusters of two to three trees, or 20 feet between individual trees.
2) Encourage a mixture of deciduous and coniferous trees.
3) Create 'fuel breaks', like driveways, gravel walkways and lawns.
4) Prune trees up six to ten feet from the ground.

Use groupings of potted plants that include succulents and other drought resistant vegetation.

Zone 3 (High Hazard Areas) Thin this area, although less space is required than in Zone 2. Remove smaller conifers that are growing between taller trees. Remove heavy accumulation of woody debris. Reduce the density of tall trees so canopies are not touching.

Maintaining the Firewise Landscape

- ✓Keep trees and shrubs pruned six to ten feet from the ground.
- ✓Remove leaf clutter and dead and overhanging branches.
- ✓Mow the lawn regularly and dispose of cutting and debris promptly.
- ✓Store firewood away from the house.
- ✓Maintain the irrigation system regularly.
- ✓Familiarize yourself with local regulations regarding vegetative clearance, debris disposal, and fire safety requirements for equipment.

Create a cinder block wall around the perimeter of your yard and use grass and slate to break up the landscape.

The use of pavers and rock make for a pleasing effect and creates a fuel break.

The roof is the most important element of the home. Use rated roofing material.

Cover openings with 1/8" metal screen to block fire brand sand embers from collecting under the home or deck.

Use non-flammable fencing if attached to the house such as metal.

"When considering improvements to reduce wildfire vulnerability, the key is to consider the home in relation to its immediate surroundings. The home's vulnerability is determined by the exposure of its external materials and design to flames and firebrands during extreme wildfires. The higher the fire intensities near the home, the greater the need for nonflammable construction materials and a resistant building design." – Jack Cohen, USDA-Forest Service

Use Rated Roofing Material. Roofing material with a Class A, B or C rating is fire resistant and will help keep the flame from spreading. Examples:

- ✓ Composition shingle
- ✓ Metal
- ✓ Clay
- ✓ Cement tile

Use Fire-Resistant Building Materials on Exterior Walls. Examples include:

- ✓ Cement
- ✓ Plaster
- ✓ Stucco
- ✓ Masonry (concrete, stone, brick or block)

While vinyl is difficult to ignite, it can fall away or melt when exposed to extreme heat.

Use Double-Paned or Tempered Glass. Double-pane glass can help reduce the risk of fracture or collapse during an extreme wildfire. Tempered glass is the most effective. For skylights, glass is a better choice than plastic or fiberglass.

Enclose Eaves, Fascias, Soffits and Vents. 'Box' eaves, fascias, soffits and vents, or enclose them with metal screens. Vent openings should be covered with 1/8" metal screen.

Protect Overhangs and Other Attachments. Remove all vegetation and other fuels from around overhangs and other attachments (room additions, bay windows, decks, porches, carports and fences). Box in the undersides of overhangs, decks and balconies with noncombustible or fire-resistant materials. Fences constructed of flammable materials like wood should not be attached directly to the house.

Anything attached to the house (decks, porches, fences and outbuildings) should be considered part of the house. These act as fuel bridges, particularly if constructed from flammable materials.

1) If a wood fence is attached to the house, separate the fence from the house with a masonry or metal barrier.
2) Decks and elevated porches should be kept free of combustible materials and debris.
3) Elevated wooden decks should not be located at the top of a hill. Consider a terrace.

Use glass skylights; plastic will melt and allow embers into the home.

Enclose eaves and soffits.

Enclose under decks so firebrands do not fly under and collect.

I can make my home Firewise® by:

Use sprinklers or garden hoses regularly to keep vegetation moist.

Use a concrete patio instead of a wooden deck and rubber mats instead of natural fiber.

Use pebbles instead of mulch near the home's foundation where possible.

FWC-200-08-PH

Appendix D - Homeowners Checklist

OUTSIDE

1 Design/Construction

(For new Wildland Urban Interface Construction or Remodels)

- ❑ Use ignition resistant construction (effective January 1, 2008) for roofs/roof assemblies, gutters, vents, desks, exterior walls, exterior windows.
- ❑ Enclose the underside of eaves, balconies and above ground decks with fire resistant materials
- ❑ Show your 100 feet Defensible Space on plot plan
- ❑ Build your home away from ridge tops, canyons and areas between high points of a ridge
- ❑ Consider installing residential sprinklers
- ❑ Make sure that electric service lines, fuse boxes and circuit breaker panels are installed and maintained per code
- ❑ Contact qualified individuals to perform electrical maintenance and repairs

2 Access

- ❑ Make sure that your street name sign is visibly posted at each street intersection
- ❑ Post your house address so it is easily visible from the street, especially at night
- ❑ Address numbers should be at least 3 inches tall and on a contrasting background
- ❑ Identify at least two exit routes from your neighborhood
- ❑ Clear flammable vegetation at least 10 feet from roads and five feet from driveways
- ❑ Cut back overhanging tree branches above access roads
- ❑ Construct roads that allow two-way traffic
- ❑ Make sure dead-end roads, and long drive ways have turn-around areas wide enough for emergency vehicles
- ❑ Design bridges to carry heavy emergency vehicles
- ❑ Post clear road signs to show traffic restrictions such as dead-end roads, and weight and height limitations

3 Roof

- ❑ Install a fire resistant roof. Contact your local fire department for current roofing requirements
- ❑ Remove dead leaves and needles from your roof and gutters
- ❑ Remove dead branches overhanging your roof and keep branches 10 feet from your chimney
- ❑ Cover your chimney outlet and stovepipe with a nonflammable screen of 1/2 inch or smaller mesh

4 Landscape

- ❑ Create a **Defensible Space** of 100 feet around your home. It is required by law
- ❑ Create a **"LEAN, CLEAN and GREEN ZONE"** by removing all flammable vegetation within 30 feet immediately surrounding your home
- ❑ Then create a **"REDUCED FUEL ZONE"** in the remaining 70 feet or to your property line

  You have two options in this area:

  A. Create horizontal and vertical spacing between plants. The amount of space will depend on how steep your property is and the size of your plants.

  B. Large trees do not have to be removed as long as all of the plants beneath them are removed.
- ❑ Remove lower tree branches at least six feet from the ground
- ❑ Landscape with fire resistant plants
- ❑ Maintain all plants with regular water, and keep dead braches, leaves and needles removed.
- ❑ When clearing vegetation, use care when operating equipment such as lawnmowers. One small spark may start a fire; a string trimmer is much safer

5 Yard

- ❑ Stack woodpiles at least 30 feet from all structures and remove vegetation within 10 feet of woodpiles
- ❑ Above ground Liquefied Petroleum Gas (LP-gas) containers (500 or less water gallons) shall be located a minimum of 10 feet with respect to buildings, public ways, and lot lines of adjoining property that can be built upon. - CFC 3804.3
- ❑ Remove all stacks of construction materials, pine needles, leaves and other debris from your yard
- ❑ Contact your local fire department to see if debris burning is allowed in your area; if so, obtain a burning permit and follow all local air quality restrictions

6 Emergency Water Supply

- ❑ Maintain an emergency water supply that meets fire department standards through one of the following:
  - a community water/hydrant system
  - a cooperative emergency storage tank with neighbors
  - a minimum storage supply of 2,500 gallon on your property (like a pond or pool)
- ❑ Clearly mark all emergency water sources
- ❑ Create easy firefighter access to your closest emergency water source
- ❑ If your water comes from a well, consider an emergency generator to operate the pump during a power failure

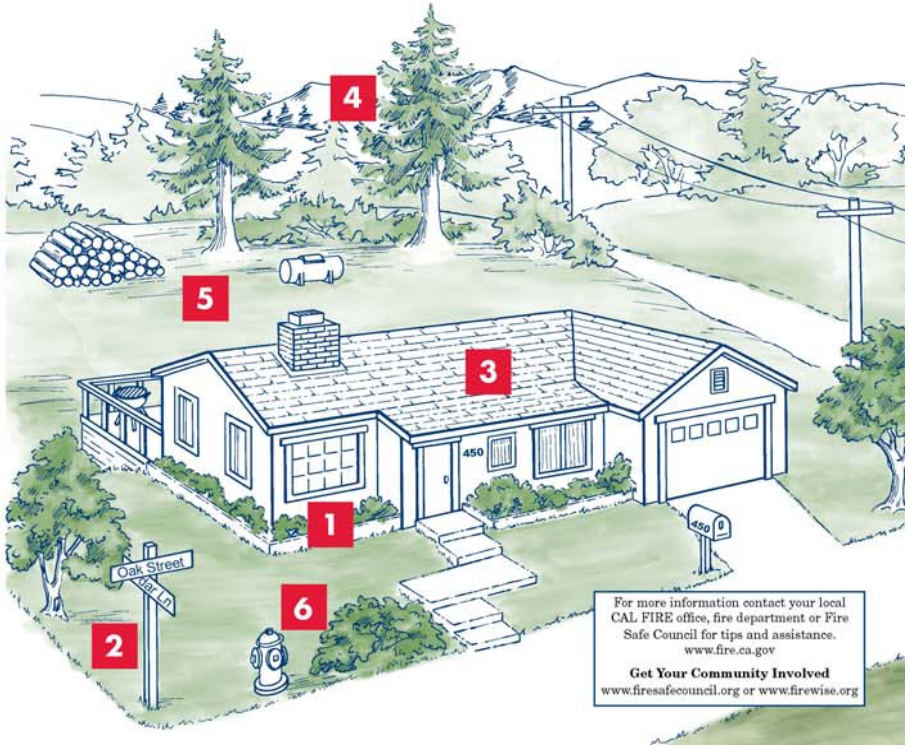
March 2009

California Department of Forestry and Fire Protection

Homeowners Checklist

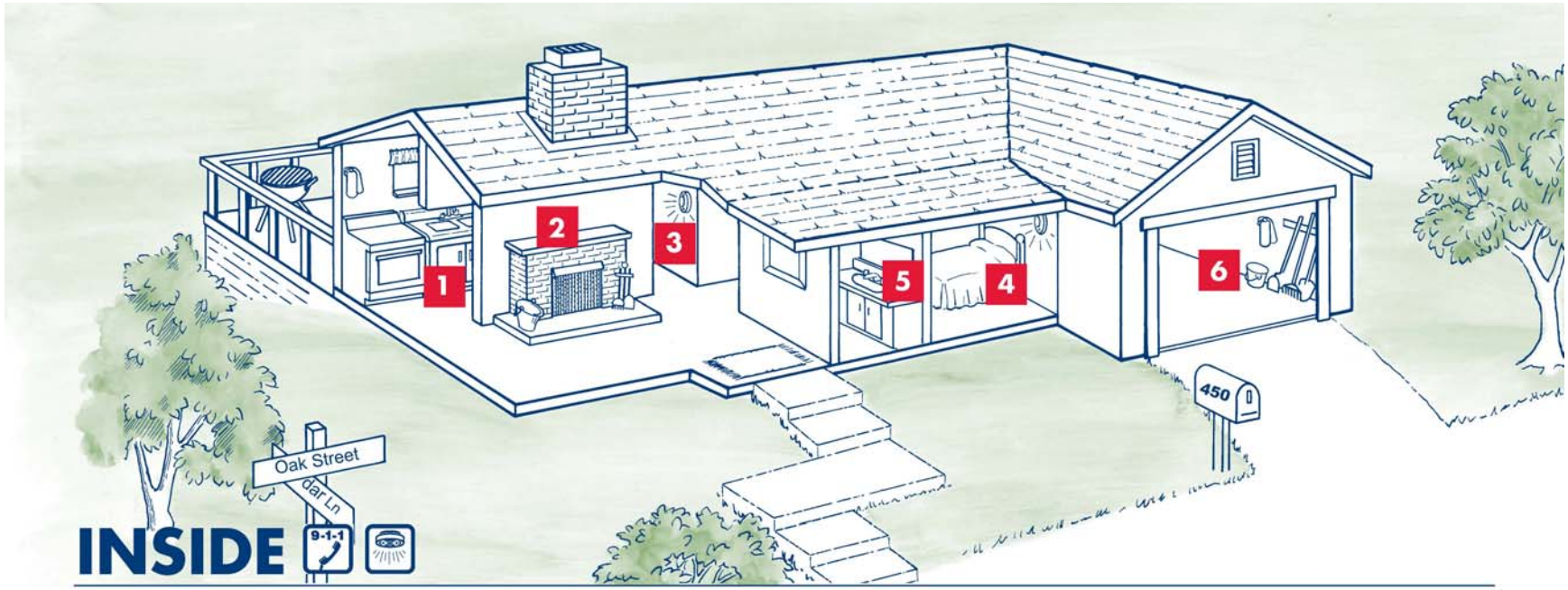
www.fire.ca.gov

How To Make Your Home Fire Safe



For more information contact your local CAL FIRE office, fire department or Fire Safe Council for tips and assistance.
www.fire.ca.gov

Get Your Community Involved
www.firesafecouncil.org or www.firewise.org



1 Kitchen

- ❑ Keep a working fire extinguisher in the kitchen
- ❑ Maintain electric and gas stoves in good operating condition
- ❑ Keep baking soda on hand to extinguish stove-top grease fires
- ❑ Turn the handles of pots and pans away from the front of the stove
- ❑ Install curtains and towel holders away from stoveburners
- ❑ Store matches and lighters out of reach of children
- ❑ Make sure that electrical outlets are designed to handle appliance loads

2 Living Room

- ❑ Install a screen in front of fireplace or wood stove
- ❑ Store the ashes from your fireplace (and barbecue) in a metal container and dispose of only when cold
- ❑ Clean fireplace chimneys and flues at least once a year

3 Hallway

- ❑ Install smoke detectors between living and sleeping areas
- ❑ Test smoke detectors monthly and replace batteries twice a year, when clocks are changed in the spring and fall
- ❑ Replace electrical cords that do not work properly, have loose connections, or are frayed

4 Bedroom

- ❑ If you sleep with the door closed, install a smoke detector in the bedroom
- ❑ Turn off electric blankets and other electrical appliances when not in use
- ❑ Do not smoke in bed
- ❑ If you have security bars on your windows or doors, be sure they have an approved quick release mechanism so you and your family can get out in the event of a fire

5 Bathroom

- ❑ Disconnect appliances such as curling irons and hair dryers when done; store in a safe location until cool
- ❑ Keep items such as towels away from wall and floor heaters

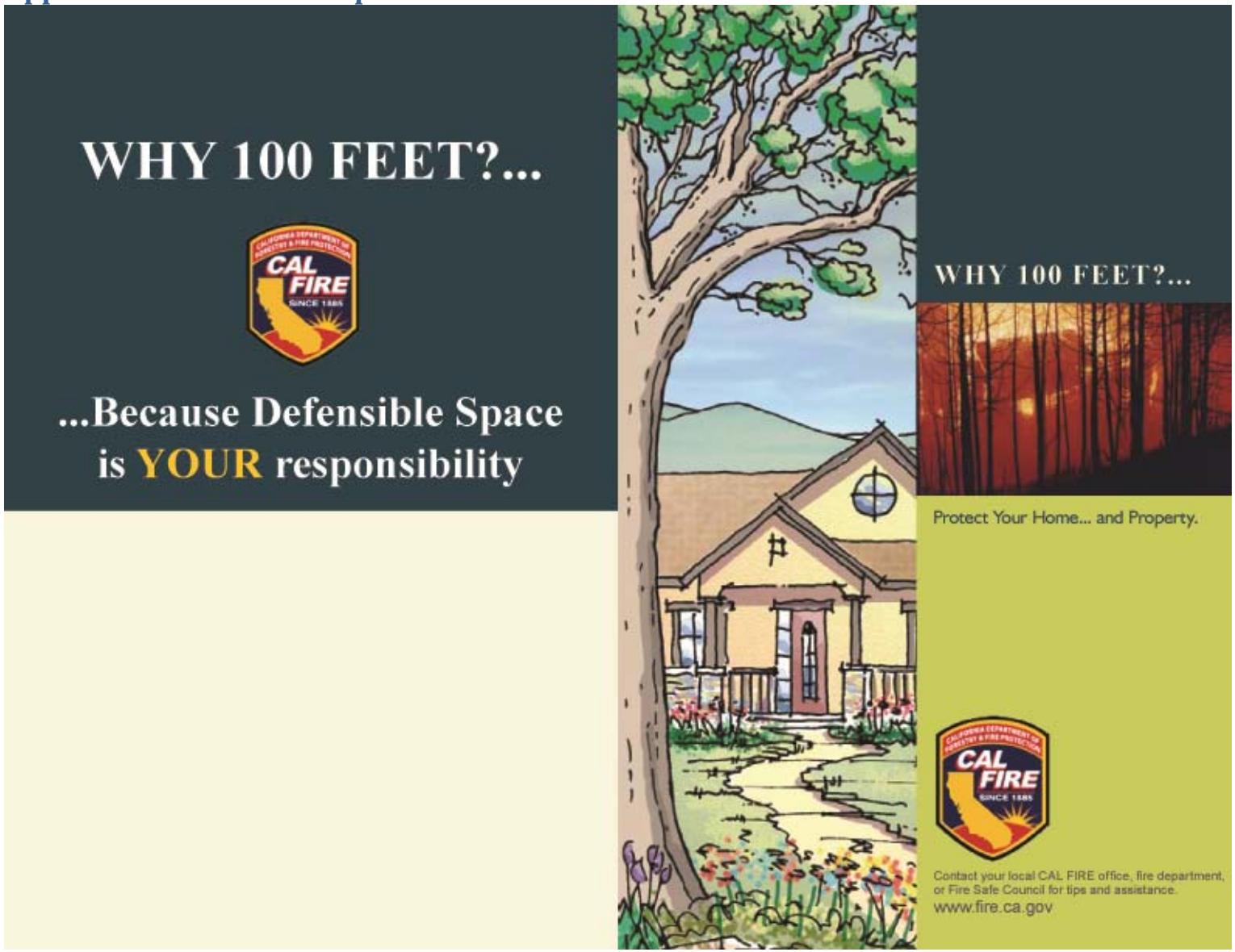
6 Garage

- ❑ Mount a working fire extinguisher in the garage
- ❑ Have tools such as a shovel, hoe, rake and bucket available for use in a wildfire emergency
- ❑ Install a solid door with self-closing hinges between living areas and the garage
- ❑ Dispose of oily rags in Ⓤ Underwriters Laboratories approved metal containers
- ❑ Store all combustibles away from ignition sources such as water heaters
- ❑ Disconnect electrical tools and appliances when not in use
- ❑ Allow hot tools such as glue guns and soldering irons to cool before storing
- ❑ Properly store flammable liquids in approved containers and away from ignition sources such as pilot lights

*Disaster Preparedness

- ❑ Maintain at least a three-day supply of drinking water, and food that does not require refrigeration and generally does not need cooking
- ❑ Maintain a portable radio, flashlight, emergency cooking equipment, lanterns and batteries
- ❑ Outdoor cooking appliances such as barbecues should never be taken indoors for use as heaters
- ❑ Maintain first aid supplies to treat the injured until help arrives
- ❑ Keep a list of valuables to take with you in an emergency; if possible, store these valuables together
- ❑ For safety, securely attach all water heaters and furniture such as cabinets and bookshelves to walls
- ❑ Have a contingency plan to enable family members to contact each other. Establish a family/friend phone tree
- ❑ Designate an emergency meeting place outside your home
- ❑ Practice emergency exit drills in the house (EDITH) regularly
- ❑ Make sure that all family members understand how to STOP, DROP AND ROLL if their clothes should catch fire

Appendix E - Defensible Space



WHEN CREATING DEFENSIBLE SPACE, KEEP THESE SAFETY TIPS IN MIND:

- All equipment with an internal combustion engine must be equipped with an approved and operable spark arrestor.
- Metal blades striking rocks can create sparks and start fires. Use caution.
- To protect water quality and habitat do not remove vegetation associated with water, avoid using heavy equipment near waterways and do not clear vegetation near waterways to the bare mineral soil. Keep soil disturbance to a minimum.

OTHER HINTS TO SECURE A LEAN, CLEAN AND GREEN ZONE:

- Select less flammable plants for your Lean, Clean and Green Zone:

  Shorter plants (less than 2 feet) are safer than taller ones.

  If kept green, herbaceous plants (grass and non-woody flowers) are better choices than shrubs and trees.

  If planting shrubs and trees, choose deciduous (trees that shed their leaves) ones over evergreens. Avoid planting juniper, pine and palms.
- Remove tree limbs that are touching the house or deck, or are within 10 feet of the chimney. If limbs are encroaching on overhead lines, contact your telephone or power company for removal.
- Use hard surfaces (concrete, stone, asphalt, brick, etc.) in your landscaping.
- Clear ALL flammable vegetation from within 10 feet of propane tanks.

YOUR RESPONSIBILITY:

California law (PRC 4291) requires property owners and/or occupants to create 100 feet of DEFENSIBLE SPACE around homes and buildings.*

YOUR GOAL — TO CREATE A:

Lean, Clean and Green Zone

An area of 30 feet immediately surrounding your home.

Reduced Fuel Zone

The fuel reduction zone in the remaining 70 feet (or to the property line).

**Compliance to PRC 4291 is required by any person who owns, leases, controls, operates or maintains a building or structure in or adjoining any mountainous area, forest-covered lands, brush-covered lands, grass-covered lands or any land that is covered with flammable material and is within the State Responsibility Area. PRC 4291 requires 100 feet of Defensible Space (or to the property line if less than 100 feet) from every building or structure that is used for support or shelter of any use or occupancy.*

Owner, lessee or operator must also comply with all existing environmental protection laws and must obtain all necessary permits. Contact your local resource or planning agency officials to ensure compliance with federal, state and local requirements.

TWO ZONES MAKE UP THE REQUIRED 100 FEET OF DEFENSIBLE SPACE:

1. Lean, Clean and Green Zone

An area of 30 feet immediately surrounding your home.

2. Reduced Fuel Zone

The fuel reduction zone in the remaining 70 feet (or to the property line).

COMPLY WITH THE LAW AND HELP SAVE YOUR HOME BY CREATING DEFENSIBLE SPACE.

Follow these guidelines:

1. Create a Lean, Clean and Green Zone

Remove all flammable vegetation and any dead or dying plants within 30 feet of each building or structure.

You may keep single trees or other vegetation that are trimmed of all dead and dying foliage and are well pruned and maintained.

2. Decrease Fuel in the Reduced Fuel Zone

Surface litter consists of fallen leaves, needles, twigs, bark, cones, pods, small branches, etc. Remove loose surface litter so it does not exceed a depth of three inches.

Make It Safe: Logs, Stumps and Snags

- All logs and stumps should be removed unless they are embedded in the soil. If you keep an embedded log, remove nearby vegetation.
- A standing dead tree (snag) may be kept for wildlife providing there is only one snag per acre, and if the snag were to fall, it would not reach buildings or structures and would not land on roadways or driveways.

Provide Fuel Separation and Treatment

- Guidelines for fuel treatment as published by CDF are designed to reduce the spread of wildfires.
- Choose option 2a or 2b. The best option for your property will be based on its characteristics (slope, vegetation size, vegetation type-brush, grass, trees, etc. — and other fuel characteristics). Properties with greater fire hazards will require larger separation between fuels. For example, a property on a steep slope with larger vegetation will require greater spacing between trees and shrubs than a level property that has small, sparse vegetation.

2a: Grasses

Ideally, grass should not exceed four inches in height. In situations where these fuels are isolated from other fuels or where necessary to stabilize soil, grasses and forbs may reach a height of 18 inches.

2a: Horizontal Clearance for Shrubs and Trees

Uncleared ground fuels provide an open freeway for the rapid spread and increased intensity of fire.

Clearance between shrubs should be 4 to 40 feet depending on the slope of the land and size and type of vegetation. Check the chart below for an estimation of clearance distance. Any questions regarding requirements for a specific property should be addressed to your local fire official.

Minimum Horizontal Clearance

SHRUBS	TREES
From edge of one shrub to the edge of the next	**From edge of one tree canopy to the edge of the next**
Flat to mild slope *(0% to 20% slope)* *Two times (2x) the height of the shrub* *(Two shrubs 2' high should be spaced 4' apart)*	Flat to mild slope *(0% to 20% slope)* 10 feet
Mild to moderate slope *(20% to 40% slope)* *Four times (4x) the height of the shrub* *(Two shrubs 2' high should be spaced 8' apart)*	Mild to moderate slope *(20% to 40% slope)* 20 feet
Moderate to steep slope *(greater than 40% slope)* *Six times (6x) the height of the shrub* *(Two shrubs 2' high should be spaced 12' apart)*	Moderate to steep slope *(greater than 40% slope)* 30 feet

2a: Vertical Clearance for Shrubs and Trees

Low branches create "ladders" from the ground fuels to the trees.

To determine the proper vertical clearance between shrubs and the lowest branches of trees, use the formula below.

Minimum Vertical Clearance

3X HEIGHT OF SHRUB = MINIMUM VERTICAL CLEARANCE

Example: A five foot shrub is growing near a tree.
3 x 5 = 15 feet of clearance needed between the top of the shrub and the lowest tree branches.

3x height of shrub to lowest branches of tree.

Note: A grouping of vegetation may be treated as a single plant if the foliage of the grouping does not exceed 10 feet in width. For example, three individual manzanita plants growing in a cluster with a total foliage width of 8 feet can be "grouped" and considered as one plant.

2b: Defensible Space with Continuous Tree Canopy

To achieve Defensible Space while keeping a larger stand of trees with a continuous tree canopy, adhere to the guidelines below:

- Prune lower branches of trees to a height of six to 15 feet from the top of the vegetation below (or the lower 1/3 of branches for small trees). Properties with greater fire potential such as steeper slopes or more severe fire danger will require pruning heights in the upper end of this range.
- Remove all ground fuels greater than four inches in height. Single specimens of trees or other vegetation may be kept if they are well-spaced, well-pruned and create an overall condition that avoids the spread of fire to other vegetation or to structures.

June, 2007

Appendix F -Acronyms

Alliance	California Fire Alliance
AED	Automated External Defibrillator
BLM	Bureau of Land Managment
BLS	Basic Life Support
Cal Fire/CDF	California Department of Forestry and Fire Protection
CHP	California Highway Patrol
CSD	Community Services District
CWPP **DOF**	Community Wildfire Protection Program Depends on Funding
EMT	Emergency Medical Technician
FACA	Federal Advisory Committee Act
FLASH	Fire-adapted Landscapes and Safe Homes
FPD	Fire Protection District
FRA	Federal Responsibility Area
FRAP	Fire and Resource Assessment Program
FSC	Fire Safe Council
GIS	Geographic Information System
HazMat	Hazardous Materials
HFRA	Healthy Forests Restoration Act
LAL	Lightning Activity Level
LOS	Level of Service
LT	Long Term
MOU	Memorandum of Understanding
MFPP	Master Fire Protection Plan
MTWA	Mainstem Trinity Watershed Analysis
NEPA	National Environmental Policy Act
NF	National Forest
NFPA	National Fire Protection Association
OES **OG**	Office of Emergency Services Ongoing
OSHA	Occupational Safety and Health Administration

PPE	Personal Protective Equipment
RAC	Resource Advisory Committee
RTE	Route
SAFE	Safe Alternatives for the Environment
SR	State Route
SRA	State Responsibility Area
SRNF	Six Rivers National Forest
ST	Short Term
TCRCD	Trinity County Resource Conservation District
TCS	Traffic Accidents
USFS	United States Forest Service
USDA	United States Department of Agriculture
VFD	Volunteer Fire Department
VMP	Vegetation Management Program
WCK	Willow Creek
WRTC	Watershed Research and Training Center
WUI	Wildland Urban Interface

Appendix G - Glossary

Apparatus: Fire apparatus includes various types of firefighting vehicles. For the purposes of the Humboldt County Master Fire Protection Plan, fire apparatus includes wildland fire engines, rescue vehicles, ladder and aerial trucks, engines, and water tenders.

Aspect: The compass direction toward which a slope faces.

Automatic Aid Agreement: An agreement between two or more agencies whereby the agencies are automatically dispatched simultaneously to predetermined types of emergencies in predetermined areas.

Benefit Assessment: An assessment of taxes levied on the property owners in a district who enjoy a "special benefit". Proposition 218 establishes a strict definition of "special benefit." For the purposes of all assessment acts, special benefit means "a particular and distinct benefit over and above general benefits conferred on real property located in the district or the public at large. General enhancement of property value does not constitute 'special benefit.'" In a reversal of previous law, a local agency is prohibited by Proposition 218 from including the cost of any general benefit in the assessment apportioned to individual properties. Assessments are limited to those necessary to recover the cost of the special benefit provided the property.

Brush: A collective term that refers to stands of vegetation dominated by shrubby, woody plant, or low-growing trees.

Brushfire: A fire burning in vegetation that is predominantly shrubs, brush, and scrub growth.

Community at Risk. Wildland interface (see definition below) communities in the vicinity of Federal lands that are at high risk from wildfire. (See list in Federal Register, January 4, 2001).

- **CSD:** Community Services District. CSDs are sometimes called "junior cities" and are authorized under §61000 of the Government Code. CSDs can provide a broad range of municipal services including fire protection to unincorporated areas. CSDs are governed by a five member elected Board of Directors and receive revenue from taxes and fees. In cases where a CSD is responsible for fire protection in Humboldt County, services are provided by a volunteer fire department with facilities and funding provided by the CSD.

Dead Fuels: Fuels with no living tissue in which moisture content is governed almost entirely by atmospheric moisture (relative humidity and precipitation), dry-bulb temperature, and solar radiation.

Debris Burning: Any fire originally set for the purpose of clearing land or for burning rubbish, garbage, range, stubble, or meadow burning.

Defensible Space: An area, either natural or manmade, where material capable of causing a fire to spread has been treated, cleared, reduced, or changed in order to provide a barrier between an advancing wildland fire and the loss to life, property, or resources. In practice, defensible space is defined as an area with a minimum of 100 feet around a structure that is

cleared of flammable brush or vegetation. Distance from the structure and the degree of fuels treatment vary with vegetation type, slope, density, and other factors.

Detection: The act or system of discovering and locating fires.

Direct Attack: Any treatment of burning fuel, such as by wetting, smothering, or chemically quenching the fire or by physically separating burning from unburned fuel.

Direct Protection Area: Fire protection responsibility areas as delineated for state, federal, and local agencies.

Dispatch: The implementation of a command decision to move a resource or resources from one place to another.

Extreme Fire Behavior: "Extreme" implies a level of fire behavior characteristics that ordinarily precludes methods of direct control action. One or more of the following is usually involved: high rate of spread, prolific crowning and/or spotting, presence of fire whirls, strong convection column. Predictability is difficult because such fires often exercise some degree of influence on their environment and behave erratically and/or dangerously.

Federal Responsibility Area: Areas within which a federal government agency has the financial responsibility of preventing and suppressing fires (see also State Responsibility Area and Local Responsibility Area).

Fine (Light, Flash) Fuels: Fast-drying fuels, generally with a comparatively high surface area-to-volume ratio, which are less than ¼-inch in diameter and have a time-lag constant of one hour or less. These fuels readily ignite and are rapidly consumed by fire when dry.

Fire Behavior: The manner in which a fire reacts to the influences of fuel, weather, and topography. Common terms used to describe behavior include: smoldering, creeping, running, spotting, torching, and crowning.

Fire Hazard: What will happen when a fire occurs based on fuel loading, resistance to control, vegetation types, etc. A high hazard is indicated by dens, flammable vegetation, e.g. thickets of second growth, untreated plantations, and brush fields.

Fire Management Plan (FMP): A strategic plan that defines a program to manage wildland and prescribed fires. The plan is supplemented by operational plans such as preparedness plans, preplanned dispatch plans, prescribed fire plans, and prevention plans.

Fire Regime: The combination of fire frequency, predictability, intensity, seasonality, and size characteristics of fire in a particular ecosystem.

Fire-Return Interval: The number of years between two successive fire events at a specific site or an area of a specified size.

Fire Risk: The Likelihood of a fire starting based on slope, position, past history of lightening strikes, places near recreational populations

Fire Safe: Action(s) that moderate the severity of a fire hazard to a level of "acceptable risk". In a broader context this term describes the state of lessened severity or action(s) that moderate the severity of a fire hazard or risk, while protecting structures and surrounding property from fire, whether fire is inside the structure or is threatening the structure from exterior sources.

Fire Season: 1) Period(s) of the year during which wildland fires are likely to occur, spread, and affect resource values sufficient to warrant organized fire management activities. 2) A legally enacted time during which burning activities are regulated by state or local authority.

Fire Severity: The effect of fire on plants. It is dependant on intensity and residence of the burn. An intense fire may not necessarily be severe. For trees, severity is often measured as percentage of basal area removed.

Fire Safe Standards: Standards adopted by ordinance for the purpose of establishing a set of standards that will result in fire safe development within a specified area.

Firewise: An interagency program designed to encourage local solutions for wildfire safety by involving homeowners, community leaders, planners, developers, firefighters, and others in the effort to protect people and property from the risk of wildfire (www.firewise.org).

FPD: Fire Protection District. Districts authorized under §13800 of the California Health and Safety Code to provide fire protection and emergency medical services. Fire Protection Districts are generally governed by a five member elected Board of Directors.

Fuel: Combustible material. Includes vegetation such as grass, leaves, ground litter, plants, shrubs, and trees that feed a fire. (See Surface Fuels.)

Fuel Bed: An array of fuels usually constructed with specific loading, depth and particle size to meet experimental requirements; also commonly used to describe the fuel composition in natural settings.

Fuel-break: A natural or constructed barrier used to stop or check fires that may occur, or to provide a control line from which to work.

Fuel Load: The amount of available and potentially combustible material, usually expressed as tons/acre.

Fuel Loading: The volume of fuel present expressed quantitatively in terms of weight of fuel per unit area.

Fuel Moisture (Fuel Moisture Content): The quantity of moisture in fuel expressed as a percentage of the weight when fuel is thoroughly dried at 212 degrees Fahrenheit.

Fuel Reduction: Manipulation (including combustion and/or removal of fuels) to reduce the likelihood of ignition and/or to lessen potential damage and resistance to control.

Fuel Type: An identifiable association of fuel elements of a distinctive plant species, form, size, arrangement; or other characteristics that will cause a predictable rate of fire spread or difficulty of control under specified weather conditions.

Ground Fuel: All combustible materials below the surface litter (including duff, tree or shrub roots, punchy wood, peat, and sawdust) that normally support a glowing combustion without flame.

Hazard Reduction: Any treatment of a hazard that reduces the threat of ignition and fire intensity or rate of spread.

Hazardous Fuels Reduction: Any treatment that reduces the amount of hazardous fuels.

Healthy Forests Restoration Act (HFRA): A portion of the 2003 President's Healthy Forests Initiative intended to reduce hazardous fuels on public and private lands. Establishes Community Wildfire Protection Plans and sets standards for those plans.

Heavy Fuels: Fuels of large diameter (such as snags, logs, and large limb wood) that ignite and are consumed more slowly than flash (fine, light) fuels.

Home Ignition Zone: This zone principally determines the potential for home ignitions during a wildland fire; it includes a house and its immediate surroundings within 100 to 150 feet.

Ignition Management: A program that includes fire prevention program activities that are aimed at preventing the ignition of wildland fires and/or reducing damage from fires. Components include law enforcement, public education, engineering, fuels modification, and fire-safe planning.

Incident: A human-caused or natural occurrence, such as wildland fire, that requires emergency service action to prevent or reduce the loss of life or damage to property or natural resources. Incident management teams also handle other non-fire emergency response, including tornadoes, floods, hurricanes, earthquakes, and other disasters or large events.

Initial Attack: The actions taken by the first resources to arrive at a wildfire in order to protect lives and property and prevent further extension of the fire.

Interface Community. (Defined in the Federal Register, January 4, 2001) The Interface Community exists where structures directly abut wildland fuels. There is a clear line of demarcation between residential, business, and public structures and wildland fuels. Wildland fuels do not generally continue into the developed area. The development density for an interface community is usually three or more structures per acre, with shared municipal services. Fire protection is generally provided by a local government fire department with the responsibility to protect the structure from both an interior fire and an advancing wildland fire. An alternative definition of the interface community emphasizes a population density of 250 or more people per square mile.

Intermix Community: (Defined in the Federal Register, January 4, 2001) The Intermix Community exists where structures are scattered throughout a wildland area. There is no clear line of demarcation; wildland fuels are continuous outside of and within the developed area. The development density in the intermix ranges from structures very close together to one structure per 40 acres. Fire protection districts funded by various taxing authorities normally provide life and property fire protection and may also have wildland fire protection responsibilities. An alternative definition of intermix community emphasizes a population density of between 28–250 people per square mile.

Ladder Fuels: Fuels which provide vertical continuity between strata and allow fire to carry from surface fuels into the crowns of trees or shrubs with relative ease. They help initiate and assure the continuation of crowning.

Large Fire:

1) Cal Fire defines a fire burning more than 300 acres as a large fire.

2) A fire burning with a size and intensity such that its behavior is determined by interaction between its own convection column and weather conditions above the surface.

Level-of-service standard (LOS standard): Quantifiable measures against which services being delivered by a service provider can be compared. Standards based upon recognized and accepted professional and county standards, while reflecting the local situation within which services are being delivered. Levels-of-service standards for fire protection may include response times, personnel per given population, and emergency water supply. LOS standards can be used to evaluate the way in which fire protection services are being delivered, for use in countywide fire planning efforts.

Light Fuels: See Fine Fuels.

Litter: Top layer of the forest, scrubland, or grassland floor, directly above the fermentation layer, composed of loose debris of dead sticks, branches, twigs, and recently fallen leaves or needles, little altered in structure by decomposition.

Live Fuels: Living plants, such as trees, grasses, and shrubs, in which the seasonal moisture content cycle is controlled largely by internal physiological mechanisms, rather than by external weather influences.

Local Agency: Pursuant to Government Code §56054 means a city, county, or district. For the purposes of the Fire Plan, a Local Agency refers to a city or special district that provides fire protection.

Local Responsibility Area: Lands in which the financial responsibility of preventing and suppressing fires is primarily the responsibility of the local jurisdiction.

Mutual Aid Agreement: A reciprocal aid agreement between two or more agencies that defines what resources each will provide to the other in response to certain predetermined types of emergencies. Mutual aid response is provided upon request.

National Fire Protection Association (NFPA): An international non-profit organization whose mission is to reduce the worldwide burden of fire and other hazards on the quality of life by providing and advocating scientifically-based consensus codes and standards, research, training and education.

Peak Fire Season: That period of the fire season during which fires are expected to ignite most readily, to burn with greater than average intensity, and to create damage at an unacceptable level.

Personal Protective Equipment (PPE): Equipment and clothing used and worn by all firefighting personnel in order to mitigate the risk of injury from, or exposure to, hazardous conditions encountered while working.

> Structure PPE, or Bunker Gear, includes NFPA/OSHA compliant helmet, goggles, hood, coat, pants, boots, gloves, pocket tools, and Self Contained Breathing Apparatus.
>
> Wildland PPE includes 8-inch laced leather boots with lug soles, fire shelter, hard hat with chin strap, goggles, ear plugs, aramid shirts and trousers, leather gloves, and individual first aid kits.

Prescribed Fire: A fire ignited under known conditions of fuel, weather, and topography to achieve specific objectives.

Prevention: Activities directed at reducing the incidence of fires. Include public education, law enforcement, personal contact, and reduction of fuel hazards.

Resistance to Control: How much time and effort it will take to control a fire, can be based on flame length, heat per unit (BTU), fuel loading and arrangement, vegetation type and slope

Stand-Replacing Fire: A fire that kills most or all of the trees in a section of forest.

State Responsibility Area: Defined in California Public Resources Code § 4125 – 4127 as lands in which the financial responsibility of preventing and suppressing fires is primarily the responsibility of the state. State Responsibility Areas are defined by code:

> § 4126. The board shall include within state responsibility areas all of the following lands:
> (a) Lands covered wholly or in part by forests or by trees producing or capable of producing forest products.
> (b) Lands covered wholly or in part by timber, brush, undergrowth, or grass, whether of commercial value or not, which protect the soil from excessive erosion, retard runoff of water or accelerate water percolation, if such lands are sources of water which is available for irrigation or for domestic or industrial use.
> (c) Lands in areas which are principally used or useful for range or forage purposes, which are contiguous to the lands described in subdivisions (a) and (b).
>
> § 4127. The board shall not include within state responsibility areas any of the following lands:
> (a) Lands owned or controlled by the federal government or any agency of the federal government.
> (b) Lands within the exterior boundaries of any city, except a city and county with a population of less than 25,000 if, at the time the city and county government is established, the county contains no municipal corporations.
> (c) Any other lands within the state which do not come within any of the classes which are described in Section 4126.

Structure Fire: Fire originating in and burning any part or all of any building.

Suppression: All the work of extinguishing or containing a fire, beginning with its discovery.

Surface Fuels: Loose surface litter on the soil surface, normally consisting of fallen leaves or needles, twigs, bark, cones, and small branches that have not yet decayed enough to lose their identity; also grasses, forbs, low and medium shrubs, tree seedlings, heavier branchwood, downed logs, and stumps interspersed with or partially replacing the litter.

Vegetation Type: A standardized description of vegetation. The type is based on the dominant plant species and the age of the forest. It also indicates how moist a site may be and how much fuel is likely to be present.

Wildland Agency: Any federal, tribal, state, or county government organization participating in wildland fire protection with jurisdictional responsibilities.

Wildland Fire: Any non-structure fire, other than prescribed fire, that occurs in the wildland.

Wildland-Urban Interface (WUI): The zone where structures and other human developments meet, or intermingle with, undeveloped wildlands.

Woody biomass: Trees and woody plants, including limbs, tops, needles, leaves, and other woody parts, grown in a forest, woodland, or rangeland environment, that are the by-products of management, including restoration and hazardous fuel reduction treatments.

Appendix H –Trinity County Resolution on National Forest Fuels and Vegetation Ordinance, and associated documents

TRINITY COUNTY
Board of Supervisors
P.O. BOX 1613, WEAVERVILLE, CALIFORNIA 96093
PHONE (530) 623-1217 FAX (530) 623-8365

March 1, 2011

Trinity County has developed and commented on many fire and fuels projects proposed for the Shasta-Trinity and Six Rivers National Forest and are in the process of updating our Community Wildfire Protection Plans countywide. A major concern for the County is the increasing amount of fuel on National Forest Lands as a result of fires, windfall, insect and disease outbreaks, and other events.

We find that fuel loads on much of the landscapes in the county greatly exceed the natural range of variability and pose a tremendous risk to our communities and natural resources. With in this assessment area these events have left a significant fuel problem primarily on National Forest landscapes. If untreated these problems will only grow worse over the next several decades and will remain significant risks for up to 80 years or more.

When assessing fuel treatment, these areas should be given priority due to the risk they pose to adjacent values at risk including communities, associated infrastructure and adjacent forest resources.

Resistance to control of fire in these areas is extreme and will tax limited national, state and local resources and put local fire forces at risk until the conditions are improved. Many communities are starting to use resistance to control factors to focus on priority areas for fuel treatments.

Please reference Trinity County Resolution on National Forest Fuels and Vegetation Ordinance attached.

JUDY MORRIS, Chairman
Trinity County Board of Supervisors

JUDY PFLUEGER DISTRICT 1 | JUDY MORRIS DISTRICT 2 | ROGER JAEGEL DISTRICT 3 | DEBRA CHAPMAN DISTRICT 4 | WENDY OTTO DISTRICT 5

IN THE BOARD OF SUPERVISORS
COUNTY OF TRINITY, STATE OF CALIFORNIA
5th day of February 2008

RESOLUTION NO. 2008-006
DECLARING A STATE OF EMERGENCY RELATED TO THE EXTREME WILDFIRE RISK IN TRINITY COUNTY

The following Resolution is now offered and read:

WHEREAS, the Trinity County Board of Supervisors has previously adopted local statutes for vegetation management due to our topography, climatology and the unnatural accumulation of fuels within our boundaries; and

WHEREAS, the accumulated fuel load on National Forests in Trinity County is a threat to public safety, health and economic stability due to the probability of catastrophic fires; and

WHEREAS, for the past several years the air quality in many portions of Trinity County posed significant health hazards to our citizens due to wildland fires within the County and adjoining counties; and

WHEREAS, exorbitant amounts of money are spent each year fighting fires in our national forests; and

WHEREAS, research and modeling has revealed that in 1999 during the Megram Fire in Trinity and Humboldt Counties, the carbon emissions (CO_2 equivalents) were 12,379,000 metric tons. This is the equivalent of 2,254,0000 passenger vehicles on the road per year; and

WHEREAS, it is the duty of the Trinity County Board of Supervisors to protect and promote the safety and wellbeing of our residents; and

WHEREAS, the Trinity County Board of Supervisors has a fiduciary responsibility to protect the private property of our constituents bordering the national forests; and

WHEREAS, the Trinity County Board of Supervisors believe that measures must be taken to alleviate the fuel loads and lessen the danger of wildland fires;

NOW, THEREFORE, BE IT RESOLVED that in order to protect the citizens of Trinity County from further harm both physical and economic, and restore the natural balance of our forest lands, the Trinity County Board of Supervisors hereby declares an ongoing state of emergency within Trinity County with respect to the extreme fire dangers occurring on our public lands and the lack of progress in mitigating these risks;

BE IT FURTHER RESOLVED that the Trinity County Board of Supervisors hereby requests that the U.S. Forest Service develop forest management plans consistent with Trinity County ordinances, resolutions and policies and that strategies be developed and implemented to reduce the fuel loads on the National Forest lands within Trinity County.

Upon motion of Supervisor Jaegel, seconded by Supervisor Morris, and on the following role call vote, to-wit:

AYES: Supervisors Morris, Jaegel, Pflueger, Freeman and Reiss
NOES: None
ABSENT: None
ABSTAINING: None

The foregoing resolution is hereby adopted:

ANTON R. JAEGEL, Chairman
Board of Supervisors

ATTEST:

WENDY G. TYLER
Clerk of the Board of Supervisors

APPROVED AS TO FORM AND LEGAL EFFECT:

County Counsel

Dated: 2/13/08

ORDINANCE NO. 1300
AMENDING TITLE 8 OF THE TRINITY COUNTY CODE
PERTAINING TO HEALTH AND SAFETY, FOR VEGETATION MANAGEMENT,
AND DECLARING CERTAIN VEGETATION,
AND CERTAIN WASTE MATERIALS A PUBLIC NUISANCE,
AND PROVIDING FOR THE REMOVAL THEREOF

WHEREAS, Health & Safety Code Section 17958.7 requires that the County of Trinity before making any changes or modifications pursuant to Section 17958.5 make express findings that such changes or modifications are needed due to climatic, geographic, or topographic conditions; and

WHEREAS, the National Environmental Policy Act of 1969 ("the Act") requires that the responsible federal official issuing an Environmental Impact Statement obtain the comments and views of the appropriate Federal, State, and local agencies,

WHEREAS, the Board of Supervisors of the County of Trinity does herewith find that the County has certain climatic, geologic, and topographical features that can have a deleterious effect on emergency services such as fire protection and emergency medical services, and

WHEREAS, the Board of Supervisors finds that the modifications and changes to the Uniform Codes are reasonably necessary because of the following local climatic, geological, and topographical conditions, with an emphasis on public safety and community protection;

1. Trinity County is situated in south-central Klamath Mountains. Elevations range from 440 to 9025 feet above sea level. The climate is characterized by warm, dry summers and cool, wet winters. Thunderstorms occur in the dry season and lightning is a common cause of fire in the Klamath Mountains. The terrain is steep, deeply dissected, and complex.

2. The majority of homes in Trinity County are within the Wildland-Urban Interface (WUI), and are considered high risk for fire hazard.

3. The seasonal climatic conditions during the late summer and fall create numerous serious difficulties regarding the control of and protection against fires in Trinity County. The hot, dry weather typical of this area in summer and fall, often accompanied by high winds, frequently results in wildfires that threaten or could threaten Trinity County. Natural vegetation occurring in our region is extremely flammable.

4. The topography of Trinity County presents problems in delivery of emergency services, including fire protection. Some of those problems include hilly terrain with narrowed, winding roads, preventing rapid access and orderly evacuation. Many of these hills are covered with highly combustible or flammable natural vegetation. In addition to access and evacuation problems, the terrain makes delivery of water extremely difficult. Many areas are served by water pump systems subject to failure in fire, and other power failure situations.

WHEREAS, Section 50022.1 through 50022.10, inclusive, of the Government Code provide authority for the adoption by reference of codes, or portion of such codes; and

WHEREAS, the Knutson-Vanderberg Act of 1930 enabled the creation of a trust fund that collects a percentage of money from timber sales. Money from the fund can be used for reforestation, timber stand improvements, wildlife habitat work, and other resource improvements; and

WHEREAS, the health and safety of Trinity County and the residents thereof require the adoption of the following Ordinance; and

WHEREAS, the formation of this Ordinance is as directed by the Health and Safety Code of the State of California, Division 12, Part 5, Abatement of Hazardous Weeds and Rubbish Sections 14875 and 14876, and Part 6, Abatement of Hazardous Weeds and Rubbish, Alternative Procedures Section 14930 through 14931.

NOW THEREFORE, the Board of Supervisors of the County of Trinity State of California, ordains as follows:

SECTION I: That Title 8 County Code be amended by adding a new Chapter 8.68 as follows:

"8.68.010 Title This chapter shall be known and cited as the "vegetation management ordinance" of the county.

8.68.020 Findings The Board finds that the County has certain climatic, geologic, and topographical features that can have a deleterious effect on emergency services such as fire protection and emergency medical services.

8.68.030 Definitions For the purposes of this chapter the following words and phrases shall have the meanings as described in this section:

(a) "VEGETATION" is material that in its natural state will readily ignite, i.e., burn and transmit fire from native or landscape plants to any structure or other vegetation. Vegetation includes dry grass, brush, weeds, dead or dying timber, fire-prone trees, litter or other flammable vegetation that creates a fire hazard.

(b) "DEAD, DYING OR DISEASED TREES" include pest or pathogen infested trees, that have been severely damaged or killed by fire, abandoned or neglected groves or other trees, which are in a dying condition or no longer living, if such conditions increase fire hazards. .

(c) "PARCEL" means any contiguous quantity of land in the possession of, or owned by, or recorded as the property of, or under management of, the same person or entity and which is located in the unincorporated area of the County of Trinity.

(d) "WILDLAND-URBAN INTERFACE (WUI)" WUI is an area within or adjacent to an at-risk community that is identified in the recommendations to the Secretary of Agriculture or Secretary of the Interior in a Trinity County Community Wildfire Protection Plan.

(e) "WASTE MATERIAL" is unused or discarded matter having no substantial market value, which is exposed to the elements and is not enclosed in any structure or otherwise concealed

from public view, and which consists of such matter and material as rubble, asphalt, other combustible material, and stock piled dead vegetation.

(f) "HAZARDOUS FIRE AREA" is land which is covered with grass, grain brush or forest, whether privately or publicly owned, which is so situated or is of such inaccessible location that a fire originating upon such land would present an abnormally difficult job of suppression or would result in great and unusual damage through fire or resulting erosion.

8.68.040 Certain Vegetation, And Other Items Declared a Public Nuisance The following items are hereby declared a public nuisance:

(a) Excessive amounts of dry grass, stubble, brush, litter, dead or dying trees, or other flammable material, or overly dense forests which endangers the public safety by creating a fire hazard in a wildland-urban interface area.

(b) Cultivated areas and useful vegetation, and pasture will not be declared a public nuisance. However, if the Board's designee determines it necessary to protect adjacent improved property from fire exposure, an adequate firebreak may be required.

(c) Any accumulation of dry grasses or other flammable vegetation within one hundred (100) feet of any occupied structure, as required by Public Resource Code section 4291.

(d) Any accumulation of dry grasses or other flammable vegetation within thirty (30) feet of any aboveground flammable liquid or combustible gas vessel.

(e) Trees, if determined to increase the fire hazard, due to mortality, insect infestation, disease, excessive density or lack of maintenance standing or on the ground.

(f) Dead and/or dying groves and/or forests, standing or on the ground.

(g) Concentrations of vegetation as described in this ordinance of greater than 20 tons per acre.

8.68.041 Waste Material, Vegetation, Dead, Dying or Diseased Trees Declared a Public Nuisance Waste material, vegetation, and dead, dying or diseased trees as herein defined, which by reason of its location and character would materially hamper or interfere with the prevention or the suppression of fire upon the premises or adjacent premises, or the abatement of a nuisance as defined by Sec. 12510, Health and Safety Code, is hereby declared a public nuisance.

8.68.050 Notice to Abate Hazard If it is determined that a public nuisance or fire hazard as herein defined exists on any property, lot or premise, vacant or occupied, the Board's designee will cause a notice to be issued to abate such nuisances.

Such notice will be headed: **"NOTICE TO ABATE HAZARD"** which shall, in legible characters, direct the abatement of the nuisance or fire hazard and refer to this article and section for particulars. Notice to Abate Hazard served by means other than posting as provided by this article will contain a description of the property in general terms reasonably sufficient to identify the location of the nuisance.

For parcels owned or controlled by public agencies, the County shall provide Notice to said entity, require the area be included in the county Community Wildfire Protection Plan and request that the nuisance be abated in accordance with the Healthy Forest Restoration Act of 2003.

When appropriate, the County may request cooperating agency status on federal actions regarding this ordinance.

8.68.051 Service of Notice to Abate Hazard The notice required by Health and Safety Code sections 14890-14896 may be served in any of the following manners:

(a) By personal service on the owner, occupant or entity in charge or control of the property.

(b) By regular first class postage prepaid mail addressed to the owner or entity in charge and control of the property, at the address shown on the last available assessment roll, or as otherwise known.

(c) By posting at a conspicuous place on the land or abutting public right-of-way and insertion of an advertisement at least once a week for a period of two weeks in a newspaper of general circulation in Trinity County. Such newspaper advertisement will be a general notice that property in Trinity County has been posted in accordance with this article and contains a general statement of the effect of such posting. The date of such newspaper advertisements will not be considered in computing the appeal periods provided by this article, which shall not commence until 14 days after the date of the last such newspaper advertisement.

8.68.060 Right of Appeal to Board of Supervisors Within thirty (30) days from the date of posting, mailing or personal service of the required notice, or end of publication period as stated above, the owner or entity occupying or controlling such property affected may appeal to Trinity County Board of Supervisors. Such appeal will be in writing and will be filed with the Clerk of the Board of Supervisors. At the regular or adjourned meeting of the Board, not less than five (5) days nor more than thirty (30) days thereafter, it will proceed to hear and pass upon such appeal, and the decision of the Board of Supervisors thereupon will be final and conclusive.

8.68.070 Time Limit for Removal of Nuisance It will be the duty of the owner, the agent of the owner, or the entity in possession of any property in Trinity County to abate the nuisance or fire hazard as stated within thirty (30) days from the date of notification as provided herein, or in case of an appeal to the Board of Supervisors, within thirty (30) days from the determination thereof, unless the same is sustained. For parcels owned or controlled by public agencies, the entity shall issue a Notice of Intent to prepare an environmental assessment or categorically exempt the abatement within thirty (30) days of notification or Board determination. If available, Knutson-Vanderberg trust funds shall be used for such abatement work.

8.68.080 Abatement of Nuisance If the owner or entity in possession of the property fails or neglects to abate the nuisance as herein defined, within the time specified in the article, the Board's designee may cause such nuisances or fire hazard to be abated. Private contractors may do the abatement work. A report of the proceedings and an accurate account of the cost of abating the nuisance or fire hazard on each separate property will be filed in the Board of Supervisors' Office.

8.68.090 Expense of Abatement Report and Hearing The County Auditor will keep an account for the costs of abatement plus an administrative fee for each parcel abated as defined in the Trinity County Fee ordinance. A written itemized Abatement Report showing the cost of removal and abatement of hazards shall be prepared for the Board's approval. At least three (3) days prior to the date of the hearing a copy of the report will be posted in a public place at the offices of Trinity County Board or Supervisors, showing the date and time of the hearing. A copy of the report and notice of hearing date will be sent to the last known owner of the parcel as listed in the County Assessor's Office.

At the specified date and time, the Board will receive the report. In considering the report, the Board will hear it and any objections of the property owners or entity in control of the property liable to be assessed for the work of abatement. After receiving the report and hearing the objections, if any, the Board may make such modifications in the report, as it deems necessary, after which, by Board action, the report shall be confirmed. After the report has been confirmed, the County will seek cost recovery from the property owner entity in control of the property prior to implementing the provisions of Section 8.68.100 of this Ordinance.

8.68.100 Government Code Provisions Adopted, and Collection of Assessments The provisions of Section 39580 through 39586, inclusive, of the Government Code of the State of California are incorporated by reference and made a part of this Ordinance and shall be followed in determining the existence of a nuisance and need for and cost of abatement thereof. The County Auditor shall enter each assessment in the County Tax Roll opposite the parcel of land. The amount of the assessment shall be collected at the time and in the manner of ordinary property taxes. If delinquent, the amount is subject to the same penalties and procedure of foreclosure and sale as is provided for ordinary property taxes.

8.68.110 Forest Practice Act and County Plan Compliance Any project undertaken to comply with the requirements of this ordinance, whether by the landowner or on behalf of the County as a nuisance abatement, shall comply with the California Z'berg-Nejedly Forest Practice Act, Public Resources Code sections 4511 et seq., as amended from time to time, as well as the Trinity County General Plan, applicable community plans and their goals, objectives and policies, as amended from time to time.

8.68.120 Violation The owner, occupant, entity in control of the property, or their agent of any property within Trinity County who will permit or allow the existence of a public nuisance as defined in this Ordinance, upon any lot or premise owned, occupied, or controlled by him or her, or who shall violate any of the provisions of this Ordinance, shall be guilty of a misdemeanor and upon conviction thereof be subject to a fine of not more than Five Hundred Dollars ($500.00), or to imprisonment for a period not exceeding six (6) months, or both."

SECTION II: This ordinance shall take effect and be in full force and effect thirty (30) days after its passage and before the expiration of fifteen (15) days after passage of this ordinance, it shall be filed with the California Building Standards Commission and it shall be published once with the names of the members of the Board of Supervisors voting for and against the ordinance in the Trinity Journal, a newspaper of general circulation published in the County of Trinity State of California.

Introduced at a regular meeting of the Board of Supervisors held on the 19th day of September 2006, and passed and adopted by the Board of Supervisors of the County of Trinity State of California, on the 3rd day of October 2006, by the following roll call vote, to-wit:

AYES: Supervisors Reiss, Jaegel, Freeman and Morris
NOES: None
ABSENT: Supervisor Chambers

William E Chambers

WILLIAM E. CHAMBERS
Chairman of the Board of Supervisors
of the County of Trinity, State of California

ATTEST:

WENDY G. TYLER

Wendy G. Tyler
Clerk of the Board of Supervisors, County of
Trinity, State of California

By Kelly Frost
Kelly Frost, Deputy

APPROVED AS TO FORM AND LEGAL EFFECT:

J Palla

Jeanette Palla, County Counsel
Dated: 10.10.06

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