TRINITY COUNTY
COMMUNITY WILDFIRE PROTECTION PLAN
UPDATE 2020

Photo courtesy of the Watershed Research and Training Center

March 2021

REPORT TO THE TRINITY COUNTY FIRE SAFE COUNCIL
FROM TRINITY COUNTY RESOURCE CONSERVATION DISTRICT

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CAL FIRE CALIFORNIA CLIMATE INVESTMENT FIRE PREVENTION PROGRAM

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EXECUTIVE SUMMARY

Wildfire continues to be the number one hazardous threat to Trinity County. Respondents to a survey conducted for the *2015 Trinity County Hazard Mitigation Plan* ranked the threat of Wildfire 3.89 out of a maximum score of 4, the highest perceived threat, and outranking other threats such as drought, major road closures and floods. When analyzed, wildfire ranked first in vulnerability to the county with potentially large economic, social, infrastructure and development impacts (2015 Trinity County Hazard Mitigation Plan).

The Trinity County Fire Safe Council (FSC) developed the first comprehensive 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 first complete Trinity County CWPP, which was accepted by the Trinity County Fire Chiefs' Association (FCA), Trinity County Board of Supervisors and the California Department of Forestry and Fire Protection (CAL FIRE) in September 2005. The CWPP was updated in 2010 and became the primary document to guide 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. FSC members include representatives from local, state and federal land management agencies, non-governmental organizations including the local Volunteer Fire Departments (VFDs) and citizens. The *CWPP Update 2020* follows the same model as the *CWPP Update 2010 and 2015*.

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, activity such as pre-fire fuels reduction treatments, and has maintained this over-arching need as fundamental to its success ever since. The *CWPP Update 2020* continues to build upon and improve the spatial information gathered from the previous CWPP versions.

Historically, county or regional scale wildfire management planning efforts 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 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 fuelbreaks along roadsides that could help to protect these values. Data from these meetings was captured and entered into a Geographic Information System (GIS). Finally, the District developed a ranking system and a prioritized list of recommended projects which incorporated input from community members, the FSC, and FCA in the 2010 and 2015 editions. The *CWPP Update 2020* updates the ranking to use fire modeling, road assessments, and proximity to Wildland-Urban Interface (WUI) and previous projects to prioritize the projects. The methods used to capture community input and recommendations from these meetings were presented in the original report. The same strategy was repeated for the updates in 2010, 2015, and 2020, with 12 to 15 community meetings, most hosted by the Volunteer Fire Departments or Fire Safe Councils.

The update in 2010 added the following elements to the CWPP:

- Interface with the concurrent Humboldt County CWPP update.
- Development of Wildland Urban Interface (WUI) boundaries as defined in the Healthy Forest Restoration Act.
- Attention to treatments associated with large-scale fires that have occurred since 1999.
- Community meetings 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 feet around structures to 100 feet[1].
- Developing a spatially explicit definition of the Wildland Urban Interface for each community at risk.

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

Overall project ideas and planning recommendations from the 2010 CWPP update included the following:

- 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.
- Identify and publicize safety zones for each community in case of catastrophic fire.
- 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.
- 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 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 firefighting resources.

[1] California Public Resources Code (PRC 4291) requires property owners and/or occupants to create and maintain 100 feet of defensible space around buildings and structures.

- 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.

Building upon the 2005 and 2010 CWPP recommendations, the following planning and project recommendations were made in 2015:

- **Prescribed Fire**- controlled burning has become an important tool in Trinity County over the last 5 years. Fuel accumulations, species composition changes and loss of important wildlife habitat resulting from over 100 years of fire suppression have left much of Trinity County at a higher risk of loss from catastrophic wildfire. Prescribed burning addresses and minimizes the impacts of fire exclusion. When professionally planned and implemented during appropriate weather conditions, prescribed burns are an effective and appropriate fuels reduction/restoration treatment for many areas of Trinity County. Bringing fire back into the landscape by implementing multi-landowner, landscape scale cooperative prescribed burns will help to protect and preserve Trinity County residences, infrastructure, and natural resources for future generations.

- **General Plan**- In November 2014, Trinity County adopted an update to the Safety Element of the General Plan. This CWPP update reinforces the wildfire safety goals addressed in the Safety Element, including the following recommendations:

    - Fire hazard planning reviewed and conducted by the Trinity County Fire Safe Council and Trinity County Fire Chiefs' Association.
    - Coordinating with CAL FIRE in the development of policies regarding wildfire and review of the CWPP.
    - Using of Local Area Advisors as a resource during fire incidents.
    - Protecting and maintaining the transportation network is critical to public safety.

- **Hazard Mitigation Plan**- Mitigation Actions, as outlined in Table 4.2 of the Trinity County Hazard Mitigation Plan, need to be implemented. Wildfire specific actions include the following:

    - Centralized GIS mapping of water sources for firefighting, structure location, bridges and all county infrastructure and services necessary for emergency response.
    - Improve watershed and forest health through actions to reduce illegal water diversions, fire hazards and unsustainable agricultural practices.
    - Identify, develop and secure funding to bring existing repeater sites up to current standards.

- **Fire Borrowing**- With more than 8.5 million acres burned nationwide during the 2015 fire season it proved to be disastrous in terms of the loss of firefighter lives, homes and structures and natural resources. Unfortunately, it also was disastrous with regards to the budgets of the U.S. Departments of Agriculture and Interior. The U.S. Department of Agriculture's (USDA) Forest Service (Forest Service) transferred an additional $250 million of funding from non-fire accounts to pay for firefighting through the end of the Fiscal Year. The $250 million is in addition to the $450 million the agency had been forced to transfer since August 2015 to fund firefighting. The Forest Service released a report (August 2015) showing that over one-half of its budget is now spent on firefighting and other fire-related activities, up from one-sixth in 1995. By 2025, the agency conservatively forecasts that it will spend two-thirds of its budget on wildfires. This shift in resources from non-fire programs to firefighting has enormous implications on all agency activities, including recreation, research, watershed protection, rangeland management, and, importantly, fuels reduction. Similarly, in the U.S. Department of the Interior (Interior),

the growing costs of wildfire preparedness and suppression now account for 76 percent of the wildfire management program budget, and are reducing the amounts available for fuels management and restoration activities by the Bureau of Indian Affairs, Bureau of Land Management (BLM), National Park Service, and U.S. Fish and Wildlife Service. For our rural, forested county, BLM is an integral partner and these treatments are essential for reducing risks of catastrophic fires, for increasing the resiliency of lands to recover from fire, and protecting communities and infrastructure.

To solve the fire budget problem in the long term, Congress should take two actions. First, Congress must allow the firefighting spending to be scored as an adjustment to discretionary spending caps in bad fire seasons, in keeping with the treatment of other federal disaster response activities, instead of transferring resources from non-fire programs, including timber sale and fuels reduction projects, research and monitoring efforts, recreation and wildlife activities, and trail and visitor facility maintenance. Second, Congress must do this in a way that does not harm the agencies' ability to invest in fuels management and forest and rangeland restoration to make these lands less vulnerable and more resilient to catastrophic wildfire. Both of these actions are consistent with how the Nation treats other natural disasters (June 7, 2016 Trinity County Board of Supervisors' letter to U.S. Senator Maria Cantwell).

- **Build Local Capacity-** There is a need to increase local capacity for integrated forest and wildfire management. Federal and state agencies can assist by working with local organizations to increase the capacity to reduce hazardous fuels. Examples could include:
    - Long-term service contracts with federal and state agencies for fuels reduction that supports the development of a skilled workforce.
    - Contracting rules that allow for the local agencies to participate in wildfire suppression activities without penalizing project work.

- **Trinity County Collaborative Group-** Support the Trinity County Collaborative Group's (TCCG's) efforts to serve as an inclusive and successful natural resources, land management and economic development advisory group that supports safe and vibrant communities, thriving economies and ecological resilience, through sustainable resource use and stewardship practices. TCCG projects include the Roads and Plantations Pilot Project and the Joint Chiefs Program, a 3-year program of work with special funding. Joint Chiefs" projects include post-fire hazard reduction and several "Fire-Resilient Community" projects that blend community protection, ecological restoration and "All-Lands" strategies.

The *2020 Update* built upon the following elements*:*

- **Project Prioritization –** Prioritization methodology of projects remodeled to take on a more objective ranking system incorporates LandFire fire severity predictive modeling, proximity to the WUI, fire history, recent project history, and a road ranking score provided by assessments by CAL FIRE crews. The ranking systems works to prioritize projects that have not had recent fire return, are inside the WUI, are working to maintain or expand existing fuel reduction projects, and prioritize roads with higher vulnerability for life safety consequences.

- **Online Data Portal** – Public access to the geographic information systems data for the projects generated in the 2020 CWPP process as well as associated metadata has been produced as a part of this effort. This portal also includes the projects identified in the 2010 and 2015 updates, past projects by agency partners in Trinity County over the last five years, and future projects in the planning and implementation stages. This will provide access to all outside agencies to utilized identified projects for future funding opportunities and partnerships. (Will be made available by March 1, 2021).

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 previous CWPP updates and 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 CWPP to inform their pre-fire management planning, and the *CWPP Update 2020* is intended to be similarly useful to those agencies as they gather community input for their fire planning processes.

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 CWPP to prioritize recommendations for forest health/fuels reduction projects and will likely use the 2020 update to allocate funds for high priority projects on lands managed by the USFS once the Act is reauthorized. The TCCG and Trinity County Fire Safe Council, including the Trinity County Resource Conservation District and the Watershed Research and Training Center, 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, the 2020 update will encourage public land management agencies to carry out the necessary pre-work, such as National Environmental Protection Act (NEPA) analysis, required before many recommended activities can be carried out. Trinity County VFDs, through the Fire 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 2020* 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, including 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;
- 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; and
- 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:_____
Jeremy Brown, Chairman of the Board
Board of Supervisors, Trinity County

_____ Date:_____
Justin Kerwick, President
Trinity County Fire Chiefs' Association

_____ Date:_____
Bret Gouvea, Shasta-Trinity Unit Chief
California Department of Forestry and Fire Protection

_____ Date:_____
Carol Fall, Chairman
Trinity County Fire Safe Council

ACKNOWLEDGEMENTS

Planning Team Participants

Trinity County Resource Conservation District: Amelia Fleitz, Denise Wesley, Erik Flickwir, Elizabeth Sandoval, Maya Williams, Azalie Welsh, Charlie Holthaus (formerly), and Kelly Sheen.

BBW: Kenneth Baldwin

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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.

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 with 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."[2] 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[3], encourages the development of Community

[2] Previously available at www.preventwildfireca.org/Organization-History/

[3] Previously available at http://www.preventwildfireca.org/Community-Wildfire-Protection-Plans/

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 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. Trinity County Board of Supervisors, CAL FIRE, USFS, the Watershed Research and Training Center, and 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 FIRE SAFETY HOME HARDENING DISCLOSURES (AB-38 2019)

The California legislature passed Assembly Bill 38 requiring the Natural Resources Agency to conduct a review of regional capacity by county to improve forest health, fire resilience, and safety by July 1, 2021. The State Fire Marshal must develop a list of low-cost retrofits for home hardening by Jan. 31, 2020[4]. Furthermore, the bill requires that property sales within a high or very high fire hazard severity zone disclose to the buyer home hardening modifications made to the home and provide a list of features that make the home vulnerable to wildfire and flying embers after Jan. 1, 2021.

CALIFORNIA ELECTRICAL CORPORATIONS WILDFIRE MITIGATION PLANS (SB-901 2018)

Electrical corporations are required to develop a wildfire mitigation plan by January 1, 2020 and annually thereafter to minimize the risk of catastrophic wildfire. Each electrical corporation must identify areas where

[4] Low Cost Retrofit List available at http://www.readyforwildfire.org/wp-content/uploads/Low-cost-Retrofit-List-Final.pdf.

significant risk of catastrophic wildfire[5] could result from electrical lines or equipment and identify measures to minimize such risk. The plans are required to be presented at public meetings for all publicly owned electric utilities.

STRATEGIC FIRE PLAN FOR CALIFORNIA (2018)

The California Department of Forestry and Fire Protection (CAL FIRE) and the State Board of Forestry and Fire Protection (BOF) adopted a Strategic Fire Plan for California in 2018[6]. This plan is similar to the 2010 Strategic Fire Plan while updating the landscape conditions, priorities, goals and objectives. The Plan recognizes that fire will occur in California and works to answer the question of "how do we utilize and live with that risk of wildfire?" The 2018 Plan focuses on "(1) fire prevention and suppression activities to protect lives, property, and ecosystem services and (2) natural resource management to maintain the state's forests as a resilient carbon sink to meet California's climate change goals and to serve as important habitat for adaptation and mitigation."

WILDFIRE AND FOREST RESILIENCY ACTION PLAN (2021)

The Governor's Forest Management Taskforce released their action plan to address the changing climate in diverse ecosystems across California and provides strategies to improve California's resiliency[7]. The goals of the action plan are to increase pace and scale, strengthen community protection, manage forest for economic and environmental goals, and promote innovation solutions. This action plan comes as 75% of the largest fires in California recorded history were within the last 20 years.

Trinity County has always turned to the expertise of the Trinity County Fire Safe Council, and its partner, the Trinity County Fire Chiefs' Association, to review the background data and in the development of locally important objectives, goals and policies in the Safety Element as well as this update of the Trinity County CWPP.

[5] Trinity Public Utilities Wildfire Mitigation Plan available at https://www.trinitypud.com/wildfire-preparedness/

[6] 2018 Strategic Fire Plan for California available at https://osfm.fire.ca.gov/media/5590/2018-strategic-fire-plan-approved-08_22_18.pdf

[7] California's Wildfire and Forest Resilience Action Plan available at https://fmtf.fire.ca.gov/media/cjwfpckz/californiawildfireandforestresilienceactionplan.pdf

II. FIRE IN TRINITY COUNTY

Trinity County is located in a fire adapted area. The vegetation types, combined with a pronounced annual dry period, result in conditions that favor fire. Frequent fire has influenced the rich ecosystem diversity here. From the ecological communities of the valleys, oak woodlands, and riparian areas, to the mixed conifer forests, hills and mountains, this diversity blankets the Trinity County landscape. Within this richness lies a deep relationship, between all of the ecosystem types found here and fire ("pyrodiversity"). The natural fire regime found here is represented by frequent mixed-severity fires (approximately every 5 to 15 years). These frequencies of fires are also known as the "fire return interval." In some areas, in particular grasslands and oak woodlands, fire may have occurred on a much more frequent basis. The range of fire return intervals and intensities has been a major environmental driver, helping to shape the flora and fauna since the end of the last ice age. Fire, like rain, floods and drought, is one of the most important environmental processes that governs the ecological diversity of Trinity County.

It is widely understood that for the last 10,000 plus years, prior to European settlement (nearly 170 years ago in Trinity County), Native Americans used fire for a variety of different resource objectives. Fire was an essential tool used to help create an abundant landscape that sustained generations of native people. Fire was used to generate basket weaving materials and for many other cultural uses. Fire was also used to increase foraging habitat for deer and elk and to manage insects and disease. As described by M.K. Anderson in *Tending the Wild: Native American Knowledge and the Management of California's Natural Resources:*

> *"The majority of plant species that local California Indians relied on for food and medicine and for making cordage, basketry, and tools thrive only in full sun or partial shade. The areas where the favored plants occurred frequently were burned so as to keep them open and decrease competition from weeds. Ecologically, fire was used to maintain earlier successional stages that these species require".*
>
> *"…traditional management systems have influenced the size, extent, pattern, structure, and composition of the flora and fauna within a multitude of vegetation types throughout the state. When the first Europeans visited California therefore, they did not find in many places a pristine virtually uninhabited wilderness but rather a carefully tended "garden" that was the result of thousands of years of selective harvesting, tilling, burning, pruning, sowing, weeding, and transplanting."*
>
> *"…deliberate burning increased the abundance and density of edible tubers, greens, fruits, seeds, and mushrooms; enhanced feed for wildlife; controlled the insects and diseases that could damage wild foods and basketry material; increased the quantity and quality of material used for basketry and cordage; and encouraged the spouts used for making household items, granaries, fish weirs, clothing, games, hunting and fishing traps, and weapons. It also removed dead material and promoted growth through the recycling of nutrients, decreased plant competition, and maintained specific plant community types such as montane meadows." (Anderson, 2005, p. 136).*

This extensive use of fire has led to a broad range of ecosystem processes, plant adaptations, and symbiotic relationships. For example, frequent fire helps with rapid nutrient recycling, reduces fuel loading, increases browse for some wildlife, thins small trees, and creates conditions for regrowth. Many of the plants found in Trinity County are fire followers, becoming established in recent fire footprints, and/or have specific adaptations that help the plants cope with, and flourish in, a frequent fire environment. These plant adaptations include, but are certainly

not limited to, the thick bark of conifers such as mature Ponderosa pine (*Pinus ponderosa*) and Douglas-fir (*Pseudotsuga menziesii*) that can withstand the heat of low-moderate intensity fire. Other trees, such as canyon live oak (*Quercus chrysolepis*) and Oregon white oak (*Quercus garryana*) sprout following fire, while many species of plants like western redbud (*Cercis occidentalis*) and knobcone pine (*Pinus attenuata*) require fire to aid in reproduction.

Figure 1. Carr Fire smoke visible from Weaver Bally Lookout on July 26, 2018 (photo courtesy of USFS Johanna L Ostling).

WILDFIRE IN CALIFORNIA AND TRINITY COUNTY

The acreage that was burned by California's earliest humans may have been significant; fire scientists Robert Martin and David Sapsis estimate that between 5.6 million and 13 million acres of California burned annually under both lightning and indigenous people's fire regime (Anderson, 2005, p.136). In addition to Native American burning, early settlers, ranchers, and timber companies continued the practice on a large scale. For example, "*among the strong advocates of light burning were members of the Walker family and the Red River Lumber Company. From 1909 to 1913 they made a thorough test of light burning on nearly 1 million acres of pine lands under their management. Thirty-five men from Redding, CA were hired to do light burning when conditions were suitable. This group became known as the "needle scratchers." When they could not burn, they piled rocks in the cavities of fire scared trees and threw in dirt to keep those trees from catching fire. They also removed logs from near the trunks of trees and used other tactics to lessen the damaging effects of light fires. The cost of burning was, then reported, about 30 cents per acre (inflated to $7.30 in 2016)"* (Biswell, 1989, p. 95-96). This amount of fire on the landscape resulted in ecosystems that were resilient and generally void of large scale and destructive wildfires.

Beginning in the early 1900's, negative attitudes of fire on the landscape led to federal policies that required immediate suppression of all fire on the landscape. At the same time, Native Americans were being forcibly

removed from their land, putting an end to thousands of years of careful land management. These policies effectively eliminated frequent fire regimes for decades, both human caused and natural. As a result of fire suppression and elimination of intentional fire use, logging and the development of mono-culture tree plantations, the landscape began to change. In Trinity County, this has led to an unnaturally high accumulation of fuels and increasingly high intensity wildfires.

Fire is now under-represented on the landscape, and every year we increase our fire deficit (the number of acres that should be subjected to fire, but are not). In fact, many places in Trinity County have not had a fire in over 100 years, resulting in an increased wildfire risk. It can be estimated, based on historic fire regimes, that most of the county has missed at least 5 to 10 fires in the last 100 years. California is in the 96th and 98th percentiles for states with homes at risk and wildfire likelihood. Trinity County is in the 98th percentile of counties in California for homes at risk and 100th percentile for wildfire likelihood (Wildfire Risk to Communities, Figure 3).

Some areas, in particular around grasslands that were intentionally burned by Native Americans and then ranchers, may have missed upward of 100 fires. This overall lack of fire on the landscape has contributed to conditions that threaten our communities and ecosystems. Today, wildfires are now often of a scale and intensity beyond the range of historic variability (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, adverse impacts to air quality, economic losses and danger to human life.

Figure 2. Smoke from the August Complex on September 27, 2020 (photo courtesy of Kale Casey, Alaska Incident Management Team)

Trinity County	California

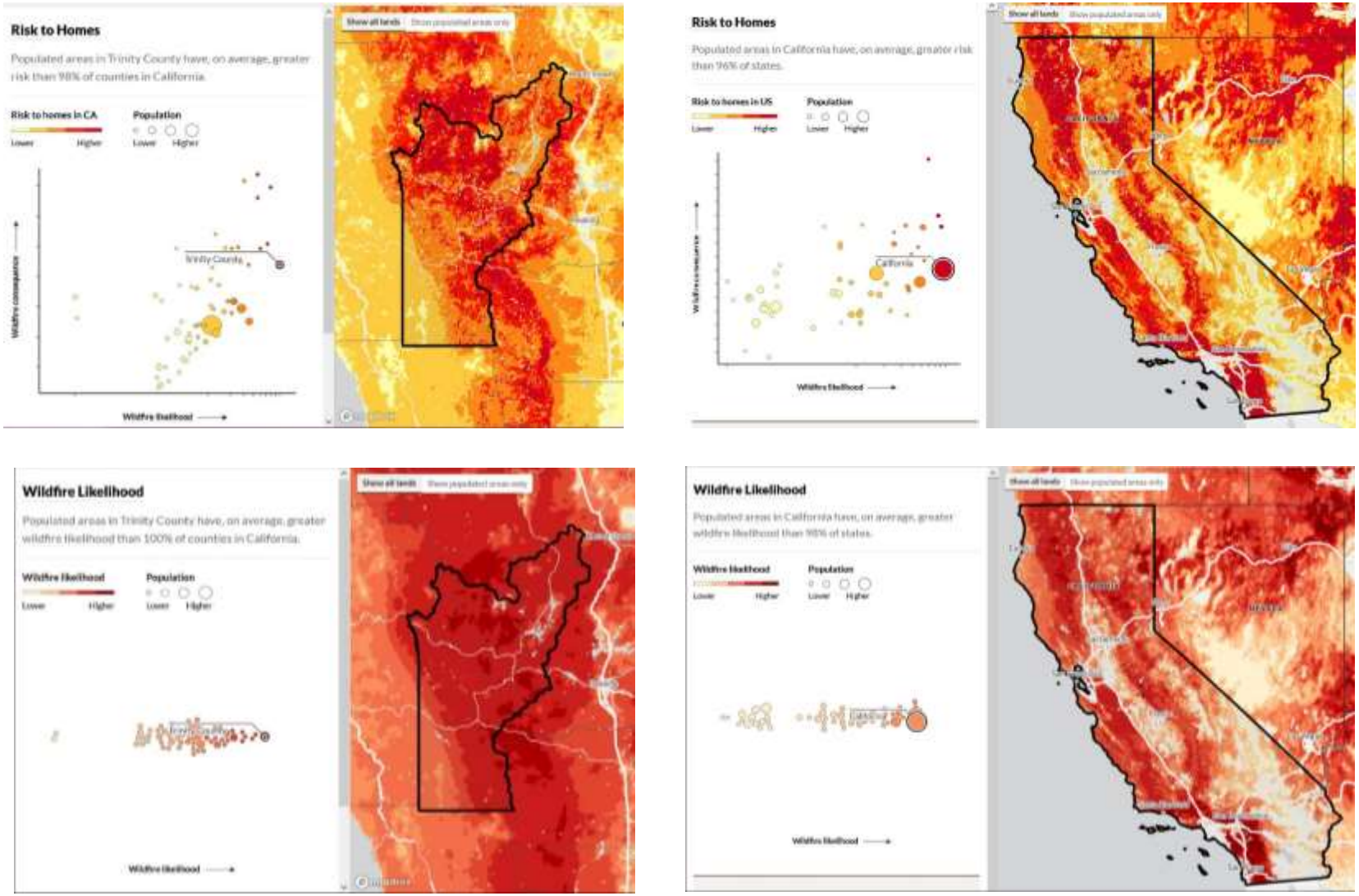


Figure 3. Wildfire Risk to Communities has mapped the risk to homes and wildfire likelihood across the United States, included in this figure are Trinity County and the state of California (https://wildfirerisk.org).

INCREASING COSTS OF CATASTROPHIC WILDFIRES

Nationally the federal cost of fire suppression has increased on average by 27% over the past 5 years (Table 1). The cost of damaged structures and fire suppression will continue to increase as "*the overall growth and expanded spatial footprint of California's population has increased fire frequency while also increasing the economic value at risk*" (California Council on Science and Technology, 2020). However, certain values are unquantifiable such as the cost of health impacts or ecosystem services as a result of catastrophic wildfires or increased fire return frequency. These costs will increase as we start to see conversion of evergreen forests converting into chaparral scrublands then into grasslands, leading to more frequent and severe fires across the landscape.

Table 1. Federal number of fires, acres burned and total cost for federal fire suppression in 2016-2019 by year and the 5 and 10 year averages (NWCG, 2020).

Year	# Fires	Acres Burned	Total Federal Cost
2015	68,151	10,125,149	$ 2,130,543,000
2016	67,595	5,503,538	$ 1,975,545,000
2017	71,499	10,026,086	$ 2,918,165,000
2018	58,083	8,767,492	$ 3,143,256,000
2019	50,477	4,664,364	$ 1,590,000,000
		5-yr average	$ 2,337,931,600
		10-yr average	$ 1,843,759,100

Due to drought, pests, higher than average temperatures, and high winds, recent wildland fires have exhibited critical rates of spread during the 2018 Carr (Shasta County), 2017 Thomas (Ventura and Santa Barbara County), and 2019 Camp (Butte County) fires. The Camp Fire grew more than 5,000 acres in 3 hours, approximately the speed of one football field every three seconds. The 2019 Camp Fire is currently the most destructive and deadliest fire in California recorded history, with 85 deaths, 18,804 structures destroyed, and over $150 million spent in fire suppression. This fire destroyed approximately 95% of all structures in Paradise and Concow, with the total damages estimated at $16.5 billion.

Trinity County has been no exception to large-scale destructive wildfires. "*After highly effective fire suppression through much of the 20th century, large lightning complexes began escaping initial attack and expanding into long-burning widespread events beginning with the "siege of '87". Additional large lightning complexes have occurred in 1999, 2008, and 2015*" (Smith, Joshua et al., 2016, p. 13). This was not unlike the lightning siege of 2020.

Table 2. Acres burned in Trinity County due to wildfires between 2016 and 2020 with a total of 509,500 acres.

Year	Acres Burned (rounded to nearest 10)	% of Trinity County burned
2016	30	0.0%
2017	40,100	2.0%
2018	31,000	1.5%
2019	2,370	0.1%
2020	436,300	21.3%
TOTAL	**509,500**	

In 2020, California experienced 5 out of the top 6 largest wildfires since 1932. Smoke from fires across California settled in valleys and low-lying areas, causing health concerns for people and creating major impacts for outdoor industries. Tourism in Trinity County is centered around businesses that provide rafting, hiking, boating, fishing, and camping. Reduced air quality from wildfire smoke contributed to decreases in the tourism industry in Trinity County during the 2017 Helena, 2019 Carr and Delta, and 2020 August Complex fires. Fires can have economic benefits, often bringing in more fire personnel which translates to spending at local businesses. However, these impacts are concentrated in specific sectors, specifically grocery stores, restaurants, and hotels.

Trinity County had over 436,340 acres burned in 2020, representing 21.3% of the land area and 56% of the acres burned in the largest fires recorded in Trinity County (Table 2, Figure 4). This was due largely in part to the August Complex, which burned over 1.03 million acres across 7 counties, and made history as the largest recorded fire in California. The August Complex was comprised of 38 separate lightning fires that burned together in late August. Across the entire burn area, 935 structures were destroyed and there was 1 death. In Trinity County a total of 683 structures were destroyed (73% of all structures reported), 282 residential and 400 outbuildings. Despite the vast land area that the fire covered, in the August Complex North Zone, the soil burn severity was high in only 8% of the area.

The high costs of catastrophic wildfires are particularly evident in the Wildland Urban Interface (WUI). All of the developed areas within Trinity County are located within the WUI. The Helena Fire burned 21,962 acres and destroyed 72 homes in the community of Junction City.

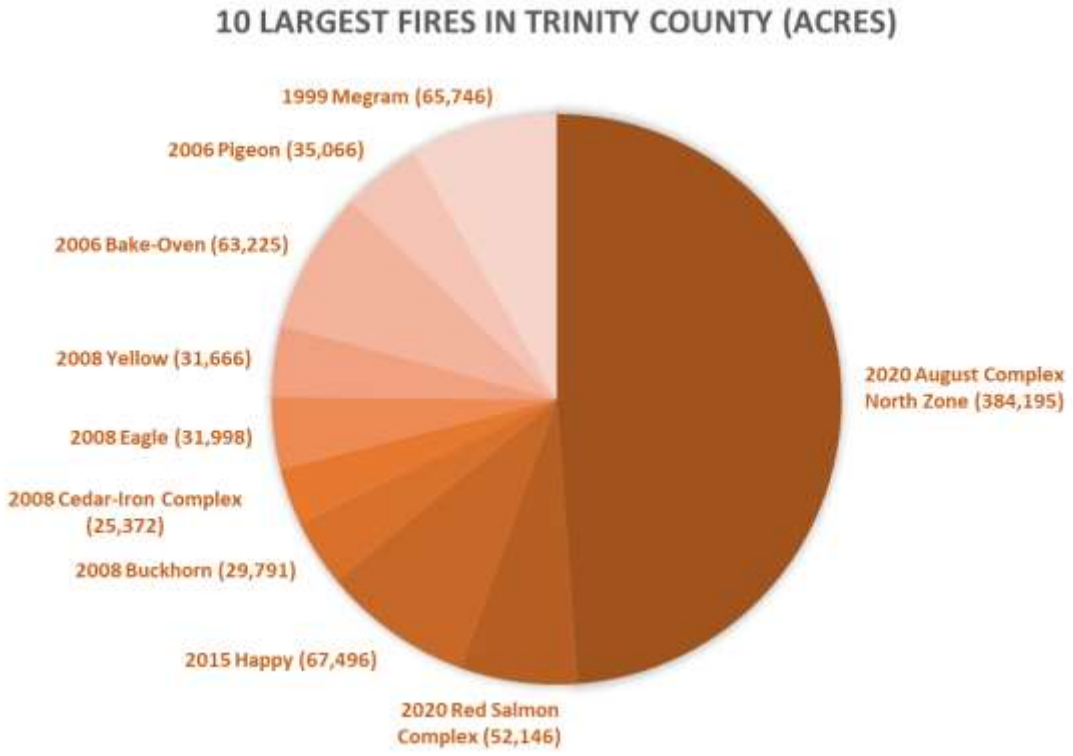


Figure 4. The largest fires in Trinity County recorded history include the 2020 August Complex, 2020 Red Salmon Complex, 2015 Happy, 2008 Buckhorn, 2008 Cedar-Iron Complex, 2008 Eagle, 2008 Yellow, 2006 Bake-Oven, 2006 Pigeon, and 1999 Megram Fires.

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 et al., 2000). This idea has had a significant influence on the pre-fire work accomplishments in Trinity County since 2010, over 10.4 million dollars have been leveraged to complete fuels treatments and educational programs throughout the county. Trinity County RAC alone has dedicated approximately $2,342,501 since 2001 ($1,066,984 from 2010 to 2015) on fuels reduction projects on USFS lands in Trinity County. In the last year, the WRTC has brought over $1 million for fuels reduction treatments to Trinity County. In the last 5 years, the TCRCD has brought over $2.9 million to the County for fuel reduction treatments.

A range of fuels reduction methods have been implemented throughout the county to create safe conditions for firefighting and to protect communities, natural resources, and critical infrastructure. These methods include individual and combined practices that focus on strategically reducing fuel loading on the landscape. These methods include; pre-commercial thinning, shaded fuelbreak construction, prescribed burning, strategic mechanical thinning, strategically-placed landscape area treatments, roadside hazard tree removal, and fuel reduction within the "Home Ignition Zone".

PRE-COMMERCIAL THINNING (PCT) is a thinning method, generally within homogenous tree plantations and/or fire excluded areas, conducted before trees reach a merchantable size. PCT is used to release over-crowded stands to prevent stagnation, decrease the risk of insects, disease, and fire, and increase the growth of residual trees. Follow-up slash disposal is recommended as part of any PCT in order to reduce the risks of wildfire. Activity fuels are generally piled and burned and/or lopped and scattered within the project area.

A SHADED FUELBREAK is a forest management strategy used for mitigating the threat of wildfire in areas where natural fire regimes have been suppressed. "*A shaded fuelbreak is created by altering surface fuels, increasing the height to the base of the live crown and opening the canopy by removing trees... These combined practices should result in (a) lower fire intensity, (b) less probability of torching, and (c) lower probability of independent crown fire*." (Agee, et al., 2000). Surface fuels are generally treated by pile burning, chipping, and/or broadcast burning. Shaded fuelbreaks require a regular treatment interval (variable depending on site conditions) to ensure the qualities of the initial investment are maintained over time.

Figure 5. Before (left) and after (right) fuel reduction treatment along Top of the Grade, Douglas City, CA (TCRCD, 2020).

PRESCRIBED FIRE, or controlled burning, is a restoration technique that addresses fire deficits in fire-dependent landscapes through the deliberate application of fire, helping to restore healthy ecosystems and reduce the risk of large-scale wildfire. Prescribed burns are implemented to meet many objectives, including, but not limited to, reducing surface and ladder fuels, reducing conifer encroachment, and to improve wildlife habitat. Prior to ignitions, control lines (areas where the fire will not spread such as roads and dozer lines) are identified and/or created in order to fully surround the intended burn unit. Units are ignited during favorable weather conditions that are appropriate to achieve burn objectives while reducing smoke impacts and the threat of escape.

STRATEGIC MECHANICAL THINNING is an approach to fuels reduction that combines commercial timber harvesting with service work that reduces the threat of wildfire. This practice takes advantage of revenues associated with forest thinning to help pay for strategic fuels reduction work that reduces the threat of wildfire to communities and critical infrastructure.

STRATEGICALLY-PLACED LANDSCPAE AREA TREATMENT is an approach were equations derive the optimal shape and size of fuel reduction treatments. Research shows that this treatment style is often the most efficient method of treating frequent-fire forests to lessen the severity of wildfires (Finney 2001; Schmidt et al. 2008; Tubbesing et al. 2019).

ROADSIDE HAZARD TREE REMOVAL is accomplished to increase the safety, both for firefighters and the public, along major road corridors. Hazard trees are trees that are dead, have defects in roots, trunk, or branches that make them likely to fall, potentially causing injury, property damage, and/or access issues. Hazard tree removal, prior to wildfire events, creates safer conditions for firefighters, while also reducing the risk of spotting should one be ignited by a fire.

The HOME IGNITION ZONE (HIZ) is composed of a house and its immediate surrounding, up to 200 feet away. The HIZ can be broken up into four sub-zones; Fire Free Zone, Structural Protection Zone, Defensible Space Zone, and Wildland Fuel-Reduction Zone. The ignition potential of the HIZ largely influences the effectiveness of protection during a wildfire. Within these zones, fuels reduction (by means of several different methods including, but not limited to, raking, PCT, pruning, prescribed fire, chipping, mastication, etc.) is meant to minimize fire intensities and rates of spread. Collaboration between several partners within Trinity County have helped complete fuels reduction projects within the HIZ of many neighborhoods.

Fuels reduction activities can be one, or a combination of several, practices mentioned in this section. Still, pre-fire treatments are expensive and a relatively small percentage of the landscape can and will be treated each year. Influencing wildfire by collaborating on pre-fire treatments has taken a major foothold since the completion of the 2010 CWPP update. Today, it is common for several organizations to collaborate on projects, helping to increase the number and size of project areas, building local capacity to complete work, and making more funding available to partners. For example, funding for the Weaver Basin Community Protection Project was made available through a collaboration by WRTC, TCRCD, and the USFS. In the last 5 years, CAL FIRE, Sierra Pacific Industries, Trinity Public Utilities District, Weaverville VFD, and Trinity Center VFD have participated in developing and implementing additional multi-landowner, multi-jurisdictional projects. Within Trinity County there are many more examples of collaboration. These examples include, but certainly are not limited to; cooperating agreements, interagency and inter-organizational training, grant writing, cooperative burning, and interagency / inter-organizational field crews. This cooperation and resource sharing is helping to get more done with limited funding than could have otherwise been accomplished.

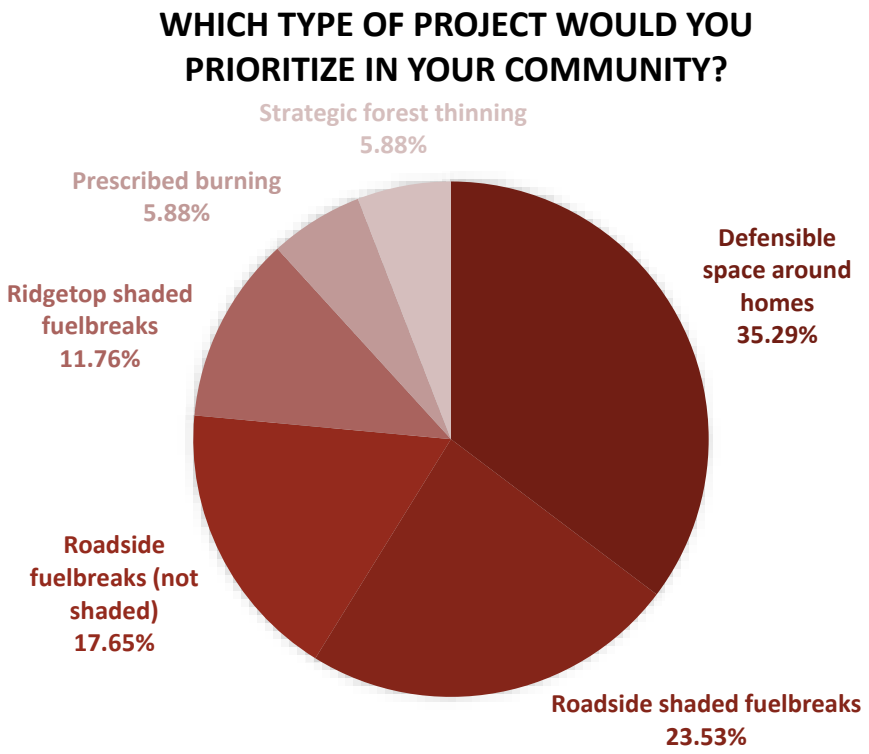


Figure 6. In the 2020 CWPP Survey, respondents prioritized defensible space, roadside shaded fuelbreaks, and roadside fuelbreaks without shading for work in their community over strategic forest thinning, prescribed burning, and ridgetop shaded or unshaded fuelbreaks (n=16).

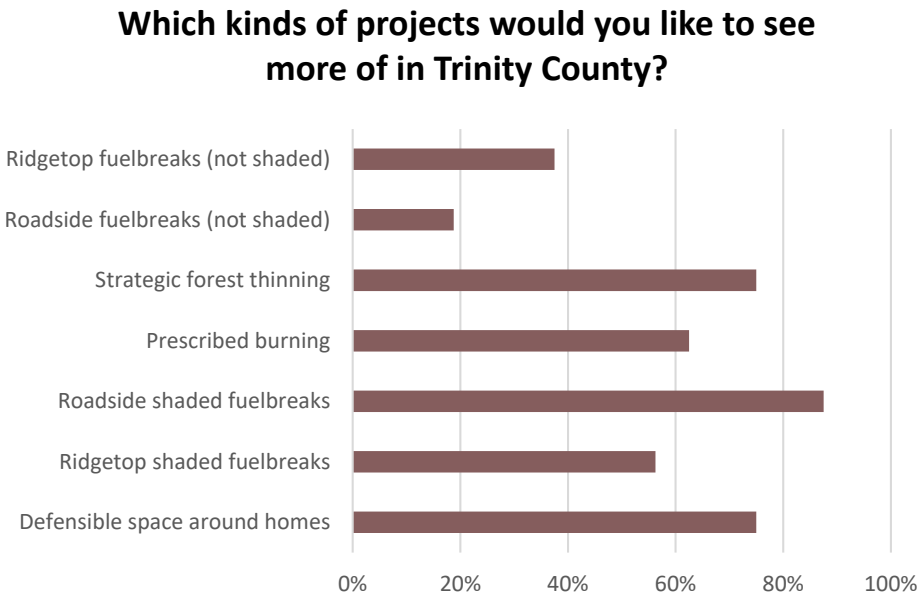


Figure 7. In the 2020 CWPP Survey, respondents identified which projects they would like to see more of in Trinity County, roadside shaded fuelbreaks were most valued, with defensible space and strategic forest thinning tied for second (n=16).

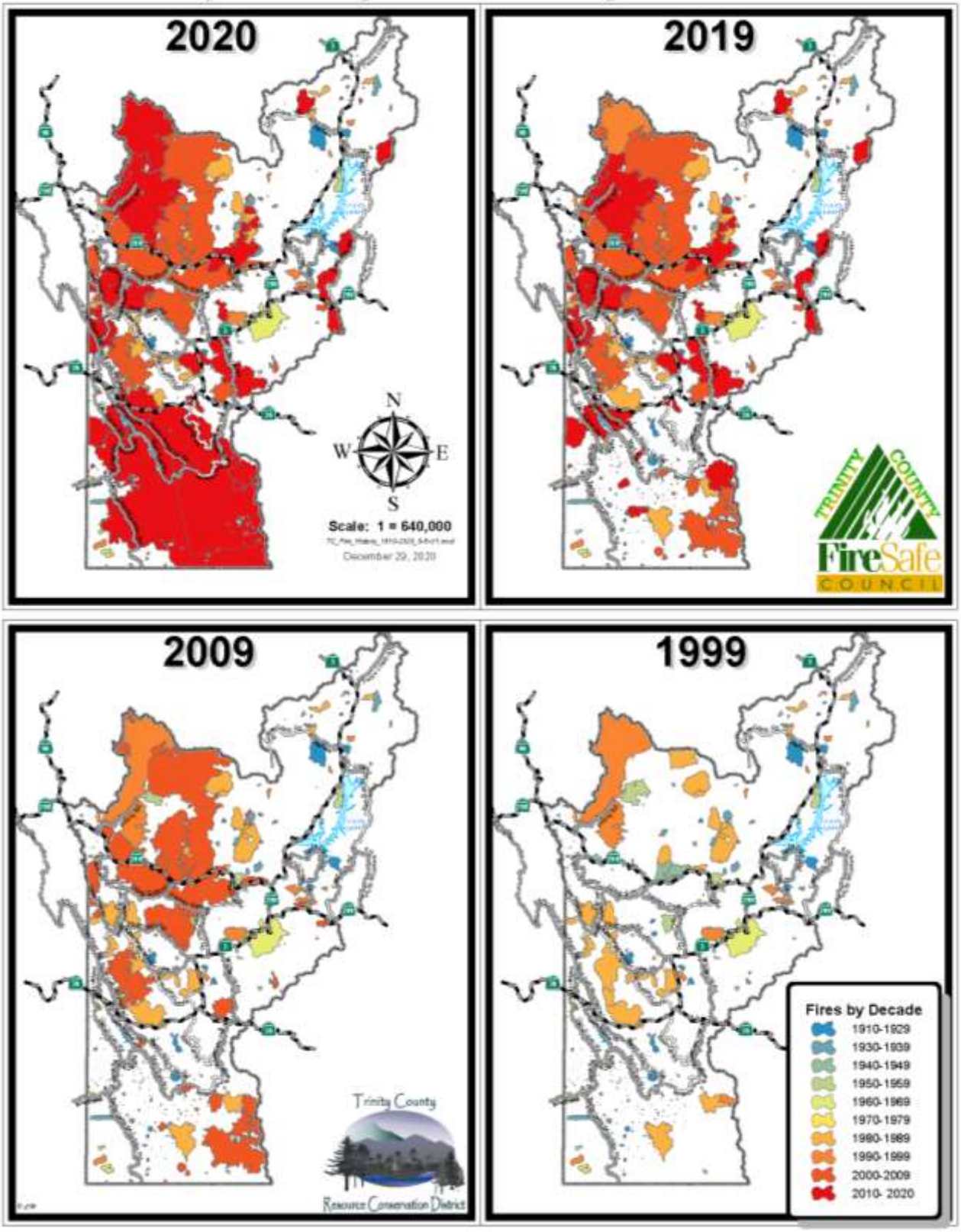
THE TRINITY COUNTY FIRE SAFE COUNCIL

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 then. The FSC includes representatives, who have all signed a Memorandum of Understanding (MOU) to cooperate on fire management planning, including local volunteer fire departments (VFDs), Trinity County Resource Conservation District (TCRCD),Watershed Research and Training Center (WRTC), United States Forest Service (USFS), United States Bureau of Land Management (BLM), California Department of Forestry and Fire Protection (CAL FIRE), Safe Alternatives for the Environment (SAFE), Trinity County and others. This MOU has been renewed twice.

The FSC, a model of collaborative community participation promoted by CAL FIRE, has benefited from several ongoing efforts in the past 20 plus years. These efforts align with the goals of the National Wildfire Cohesive Strategy (Cohesive Strategy) to create and maintain 1) Resilient Landscapes, 2) Fire Adapted Communities, and 3) Safe and Effective Wildfire Response. Interagency / inter-organizational coordination and community participation have played a key role in implementing these three goals by the FSC. Some of the early efforts of the FSC include coordinated fuels reduction and fuelbreak construction projects on private and public lands. Some of these projects include pioneering efforts to make thinning from below for fuels reduction pay for itself through utilization of small diameter wood in manufactured wood products (*CWPP Update 2010*). The 2010 CWPP update, through extensive coordination between partners and the public, helped to identify priority fuels reduction and community protection projects throughout the county. Through this effort coordinated, funding for and implementation of fuels reduction and forest demonstration projects have occurred on both private and public land. These projects utilize local crews from WRTC, TCRCD, CAL FIRE, BLM, USFS, VFDs, and landowners resulting in an increased capacity to complete this type of work.

In the past 20 years the FSC has worked locally, regionally, and nationally on community wildfire protection issues. The FSC has continued to coordinate and share resources for fundraising, training, project implementation, and more. In particular, the FSC has taken an "All-Lands" approach to our fire and fuels issue. Through this "All-Lands" approach, supported by the Cohesive Strategy, the FSC has developed and implemented projects that span multiple ownerships, both private and public at the landscape level. In addition, the FSC has supported and implemented thousands of acres of manual and mechanical fuels reduction and forest health projects. Further, in the last 15 years through coordination of several partners, including CAL FIRE, BLM, USFS, WRTC, TCRCD, and several VFDs, prescribed fire projects have been implemented within the WUI. In addition, the FSC has built their capacity, through coordinated trainings and experiential learning, to implement complex prescribed burns and a variety of restoration projects at the landscape level.

Trinity County Fire History 1910- Present



III. RESOURCES

NATURAL RESOURCES

Natural resource assets include watersheds, forests and woodlands (both public and private), fisheries and wildlife resources and soils. Natural resources are highly valued by residents of the CWPP planning area for their contribution to the local economy, quality of life, and as an asset that attracts tourism-related economic activity. As described in Section II, fire is an integral part of the natural environment, but when it occurs under changed conditions (i.e. extreme weather, increase in stand density and/or unusually dense fuel loading) it can destroy natural assets.

In a landscape where fire continues to be the dominant form of forest disturbance, the most effective way to minimize negative impacts of catastrophic fire on natural resources and ecosystems "is to protect the evolutionary capacity of these systems to respond to disturbance" (Gresswell, 1999), which means allowing fire to once again play its role in the ecosystem.

AGRICULTURAL AND TIMBER RESOURCES

Agricultural resources include rangelands, timberlands (both public and private), and cultivated farmlands. They are an important element of the planning area identity and economy. High-intensity wildland fire can remove timberland and rangeland from production and necessitate lengthy restoration programs. For example, in cattle ranches wildfire can quickly sweep through large areas of grassland, potentially damaging grazing habitat for the season. However, the same grasslands also benefit from wildfire as new growth and essential nutrient recycling resulting from a wildfire replenishes the burned-over area. Further, timber yield is improved by prudent use of prescribed fire (e.g. in site preparation, landing piles, slash disposal and broadcast burns). In addition to timber yields, other ecosystem services are benefited.

Agricultural lands that are managed for food crops are not at great risk from wildfire because of the heavy management that takes place there. However, fruit and nut tree orchards could sustain damage from direct flame contact or even the heat of a wildfire. Although the understory vegetation tends to be eliminated in orchards, making it very difficult for a fire to move through, the heat of a fire could damage trees, plants and other critical infrastructure that is used in such agricultural opperations. The loss of a year's harvest is not the only wildfire impact for agricultural products, in the cannabis and wine industry the crops may be tainted from wildfire smoke and deposited ash decreasing the value of the product.

AIR RESOURCES

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

Trinity County is located in the North Coast Air Basin. The North Coast Air Basin is comprised of three air districts, the North Coast Unified Air Quality Management District (AQMD), Mendocino County AQMD, and the Northern Sonoma County APCD (North Coast Unified Air Quality Management District, n.d.).

The North Coast Unified Air Quality District continuously monitors airborne particulates within Trinity County. The low population density and limited number of industrial and agricultural installations all contribute to Trinity County's generally good air quality. Only Humboldt County in the North Coast Air Basin is currently designated as nonattainmet for the State 24-hour PM_{10} standard for particulate matter, which is the class of air pollution of primary concern. Prescribed fires and with "an ever-increasing level of concern, catastrophic wildfires" be primary sources for particulate matter (Trinity County Planning Department, 2014).

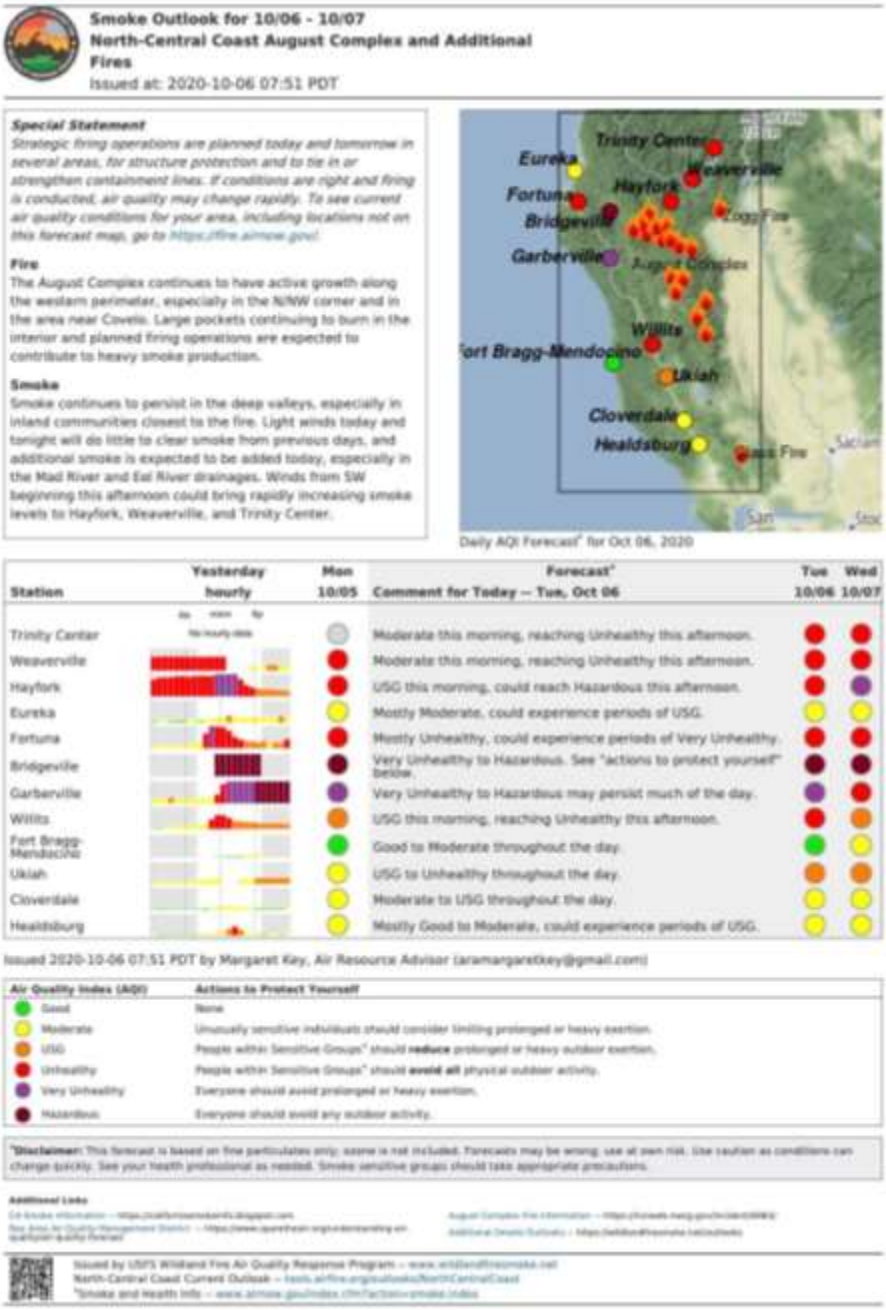


Figure 8. Air quality for North Central Coast during the August Complex for October 6 and 7, 2020. Air quality ranges from unhealthy to moderate in Trinity County with projections for very unhealthy in Hayfork.

Climate change is affecting fire severity, frequency and behavior. In addition, climate change is leading to longer fire seasons due to warmer and more extreme fire regimes (Westerling et al., 2006, Whitlock, 2004, Scholze et al., 2006). The reduced moisture content of drought-stressed vegetation increases flammability over a longer period of the year, resulting in an active burning period that starts earlier and last longer (Trinity County Planning Department, 2014). The 2014 Safety Element of the Trinity County General Plan estimates the area burned by wildland fires in Northern California will increase by at least 100 percent. This has proven to be correct, with adverse effects on air quality especially during summer and fall. However, unlike prescribed burning, in which burn managers pay mitigation fees for emmissions that may be produced, the smoke produced by wildfires, even under human-caused, altered fire regimes, are not managed (accounted for) by the AQMD. Green house gas (GHG) release associated with prescribed burning does not compare to, and in fact, may reduce GHG release during a catastrophic wildland fire, resulting in a cleaner and healthier air basin.

Alternative methods of non-combustible fuels reduction, like mastication and chipping as fuel-powered forms of treatment, have relatively minor releases of GHG from their engines. However, mastication and chipping are not feasible in the majority of the planning area due to steep terrain. Research at the Teakettle Experimental Forest in the southern Sierra shows that thinning alone without fire produces more CO_2 from associated decomposition from fungi and bacteria (respiration) over time than CO_2 output from thinning followed by prescribed fire, or burning alone (Ma et al., 2004).

Figure 9. Six Rivers National Forests' dozer operator adds woody debris into CAL FIRE's air curtain burner, utilized for fuels reduction throughout the Mad River Ranger District.

Through a partnership with the CAL FIRE Humboldt-Del Norte Unit the Six Rivers NF began utilizing an air curtain burner to reduce fuels across the landscape in 2019. This is one example of repurposing the aircurtain burners which were originally utilized to address the beetle kill in the Sierra-Nevada Mountain Range. An air curtain promotes a secondary burn in which the particles rising in the smoke are trapped under the air curtain and cycled through to reburn. The air curtain burner results in a very clean burn and produces biochar which can be sold as an agricultural ammendment. Air curtain burners can reduce up to 80% of greenhouse gas and particulate matter emissions. This system is one tool which allows land managers to continue burning outside the traditional burn windows.

INVASIVE SPECIES

Another threat to community fire safety is invasive and exotic species (Dombeck et al., 2004). The introduction of exotic plants has altered plant communities, subsequent fuel types, and fire regimes (Brooks et al., 2004). Himalayan blackberries (*Rubus armeniacus*) and other non-native plants such as yellow starthistle (*Centaurea solstitialis*), Scotch broom (*Cytisus scoparius*), tree of heaven (*Ailanthus altissima)* and spotted knapweed (*Centaurea maculosa*) can establish and quickly colonize disturbed or severely burned areas, all of which can be found in the 2017 Helen Fire burn scar. The young regrowth of Himalayan blackberry with higher fuel moisture content can retard fire spread, but old patches with dead canes and foliage may cause higher intensities. Exotic grasses cure earlier in the summer fire season and increase fine flashy fuels across the landscape. Star thistle and Scotch broom can increase flammability and dominate areas following fires. Season and frequency of burns can either increase or decrease presence and abundance of exotic invasive species. As a result of suppression efforts, the establishment, abundance and spread of invasive plants has been promoted, which due to limited travel routes and steep terrain, had no invasive plant occurences prior to the fires. Exotic pathogens, such as *Phytophthora lateralis* (Port Orford-cedar root rot) and *Phytophthora ramorum* (sudden oak death) present the greatest threat to modifying vegetation community composition and structure possibly resulting in an increase in fuel load and wildland fire danger.

CULTURAL RESOURCES

Culturally sensitive areas are sites and regions of special importance to Native Americans. These areas can include, but are not limited to, burial sites, village sites, gathering areas, and travel routes. Many acres within the planning area are designated as culturally sensitive, with notable concentrations along the Trinity River and its many tributaries. Many artifacts and structures are at risk to incidents of high-intensity wildfire; which also poses a threat to oak woodlands that provide acorn-gathering sites. At the same time, low-intensity fire can clean an area of litter and ground fuel, reducing insect damage to mast crops, enhancing grassland sites for basket making materials, and freeing ceremonial gatering places from conifer encroachment. In addition, frequent low-intensity fire can improve yields and help with regeneration of oak trees, hazel, elderberry and huckleberry for nut and berry gathering.

Post-settlement assets (historical) are abundant within the county. The California Gold Rush of the late 1840's contributed greatly to the kind and number of historical assets that are found within the County. Water ditches, can dumps, homesteads, and other mining-era artifacts can be found throughout much of the County. High-intensity fire poses a threat to these assets as well as historic downtown areas and valued historical buildings (such as barns, schools, and churches).

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 2020 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.

AGENCY PLANNING MEETING

A special CWPP agency planning meeting was held on September 9, 2019, 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, Natural Resources Conservation Service, county planners, county officials, and volunteer fire chiefs participated in the process. Participation was 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 feedback and information was gathered 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, USFS project planning, incident management teams, grant applications, and for CAL FIRE and private landowners.

DATA COLLECTION

A data collection process began immediately to update 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. Among other sources, data were drawn from the USFS, USGS, CAL FIRE, WRTC and TCRCD archives. There has been a high degree of continued cooperation in data sharing throughout the process. Compiled data can be accessed through an ArcGIS online portal on www.tcrcd.net/fsc (to be available by March 1, 2021). For access to specific data files please contact the TCRCD.

In the *2020 CWPP Update*, linear projects such as ridgetop and roadside fuelbreaks were evaluated separately from polygon (landscape treatment) projects.

COMMUNITY INPUT MEETINGS

Using the 2010 update process as a template for the 2020 community meetings, maps were produced from the collected GIS data layers to use as a basis for working with community members in a series of meetings beginning during the winter of 2019. Community meetings were hosted by the local volunteer fire departments throughout the original 5 Trinity County Fire-Safe Divisions (Down River, Middle Trinity, North Lake, South Fork, and South County). Project organizers sought to work with as many members of the Trinity County communities and

agencies as possible to gather pertinent information. The process 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, on social media and through several press releases about the fire planning process.

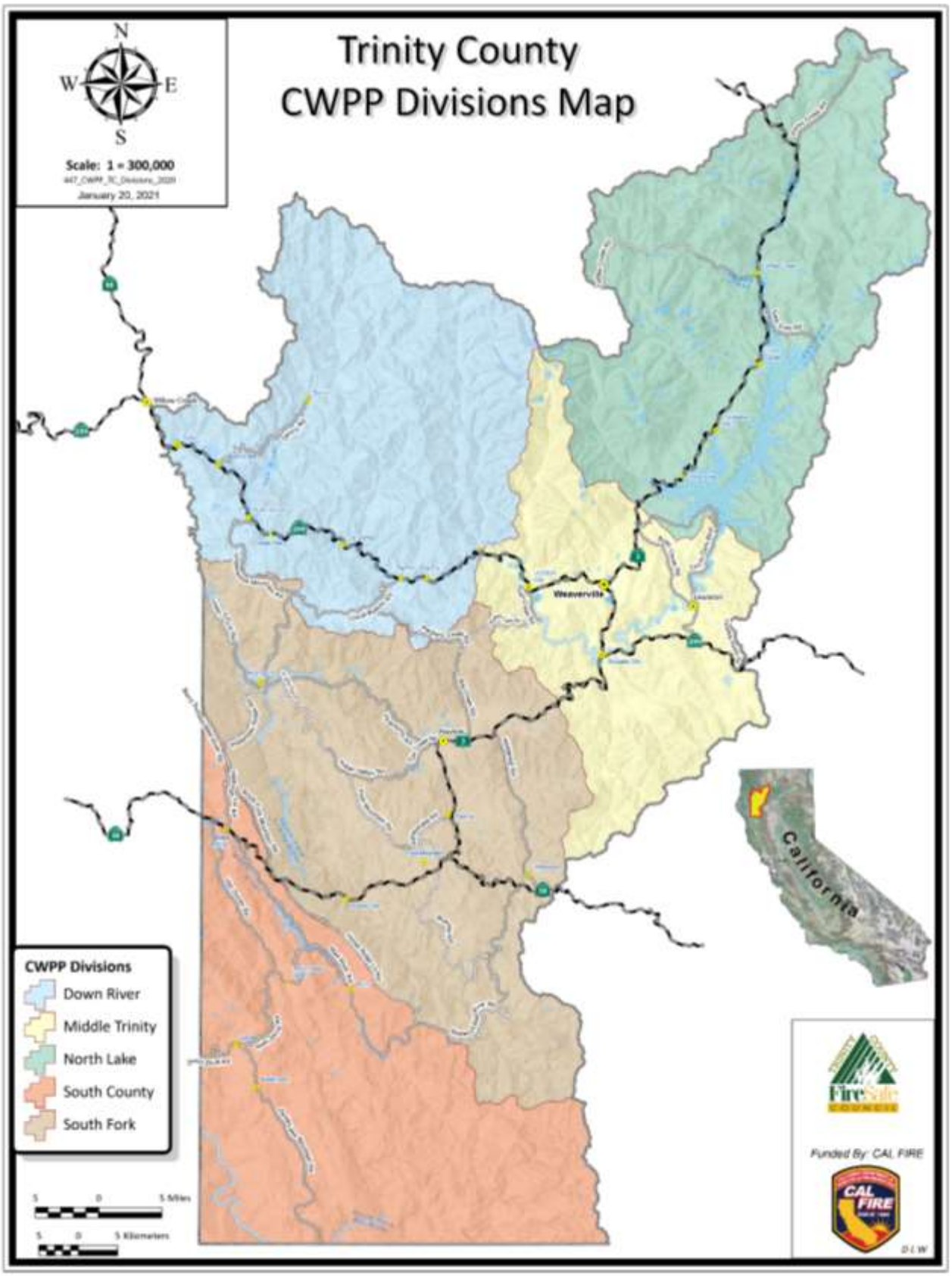
At the community meetings, organizers sought to accomplish the following goals:

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:

   Community members 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 fuelbreak construction. In some cases, as when an 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).

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 organizers 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 Map
N
W
E
S
Scale: 1 = 300,000
January 20, 2021
Weaverville
California
CWPP Divisions
Down River
Middle Trinity
North Lake
South County
South Fork
5 0 5 Miles
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FireSafe
Funded By: CAL FIRE
CAL FIRE

WILDLAND URBAN INTERFACE (WUI)

The 2010 update developed a Wildland Urban Interface (WUI) definition for Trinity County that is still current for the 2020 update. The Trinity County WUI builds off of compiling the BLM, USFS, and CAL FIRE WUI boundaries and incorporating Trinity County specific rules. Below, 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 – 0.5-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 fewer than 20 Housing Units per acre. Urban is greater than or equal to 20 Housing Units per acre.

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 0.25 mile buffer around each structure
- Threat Zone (Zone 4):
  - Create 1.5 mile buffer around each structure. The Districts were then asked to either extend or reduced the 1.5 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:

- 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 was previously available at http://frap.fire.ca.gov/projects/wui/525_CA_wui_analysis.pdf.

TRINITY COUNTY METHODOLOGY

In the previous CWPP updates the three agency-developed WUI boundaries were combined using the outer most reaches of each. In 2010, these maps here 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 into a GIS database and refined WUI boundary maps were created for review during the revision and review/comment period.

In the 2020 CWPP Update, the TCRCD expanded the 2010 WUI boundaries to account for population growth and residential expansion. For this update, BLM, CAL FIRE, and USFS WUI boundaries were again reviewed. It was identified that there were a few stand-alone sites that the USFS had designated WUI that were not contiguous the rest of the WUI polygon, those sites were removed. Then all the verified residences were added to the map and buffered by ½ a mile. When three or more of the ½ mile buffers overlapped then those areas were added to the WUI boundary. Then the buffers were smoothed out to the nearest ridge, road, or river. Roads were then analyzed to be included into the WUI to provide safe ingress and egress to residential areas disconnected from WUI boundaries.

Intermix is defined as an area with more than one house within 40 acres. Address points were buffered by 40 acres, if the buffers overlapped they were included in the Intermix. These areas were then buffered out to the nearest ridge, road, or river to develop the intermix footprint.

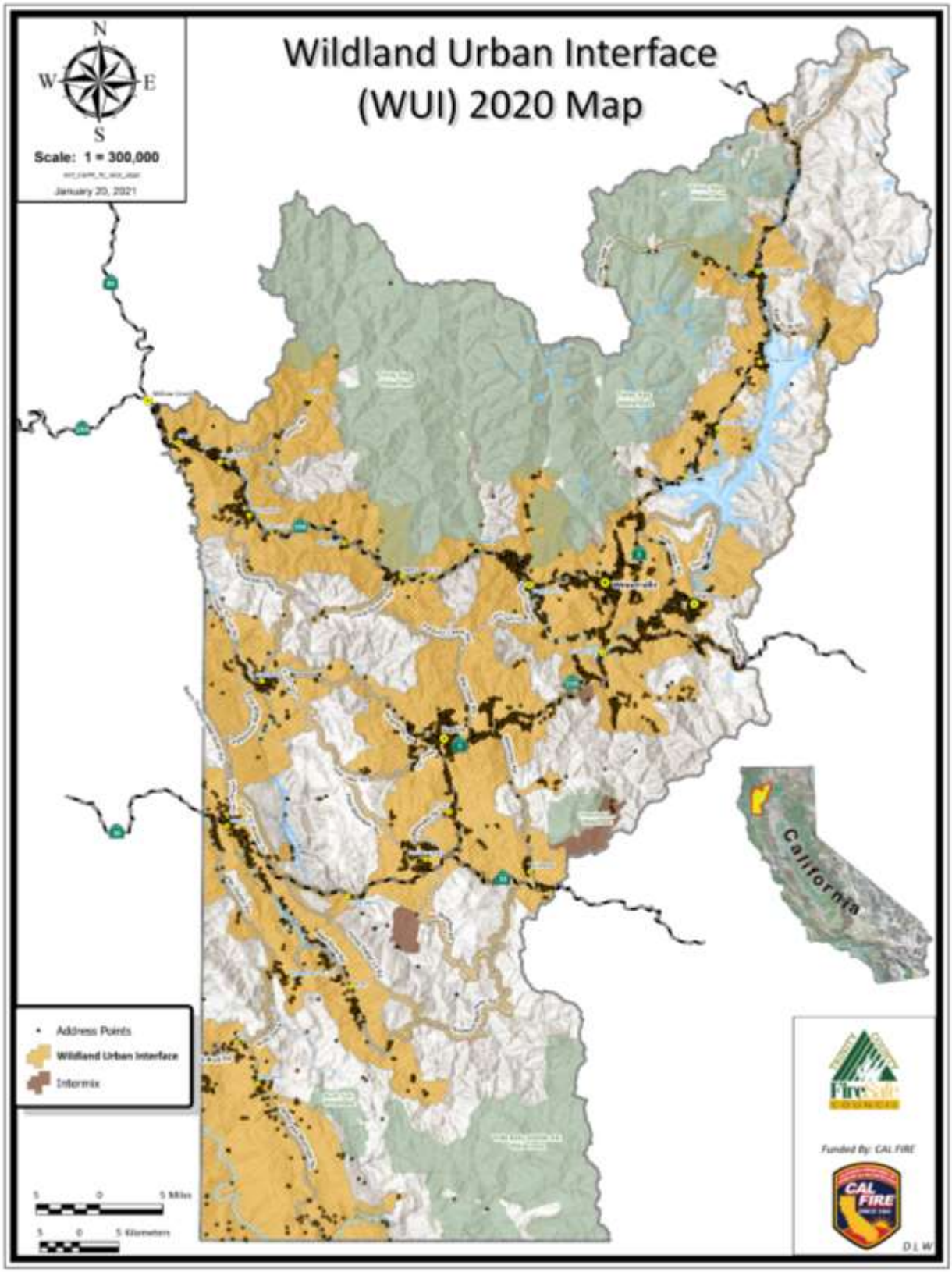
WUI Caveats

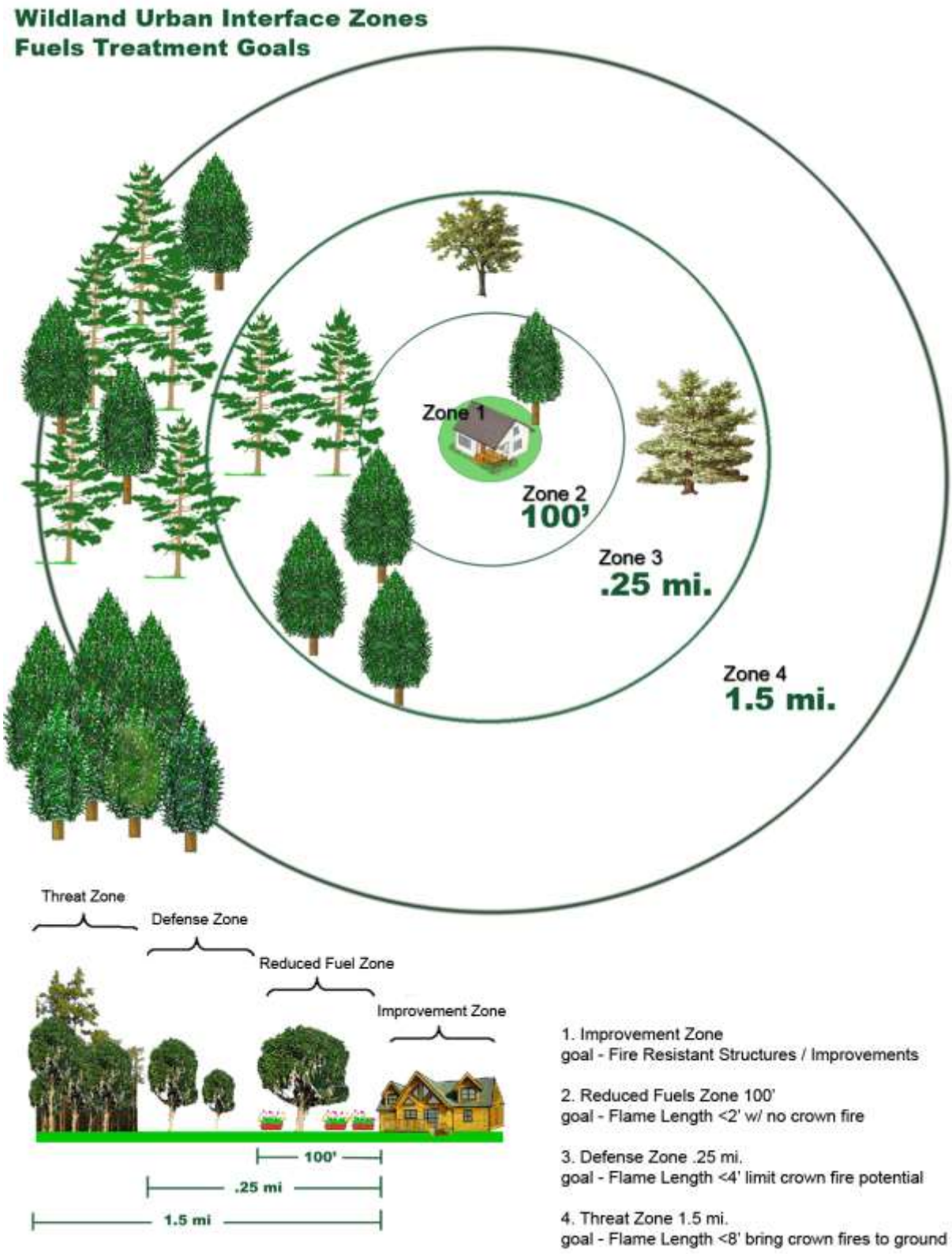
- The WUI boundary as defined by the community is to be used for assistance in planning for forest health related projects and fire safe activities.
- The WUI boundary is based on current conditions and land use and should be updated as needed, using community input and the most current science.
- The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

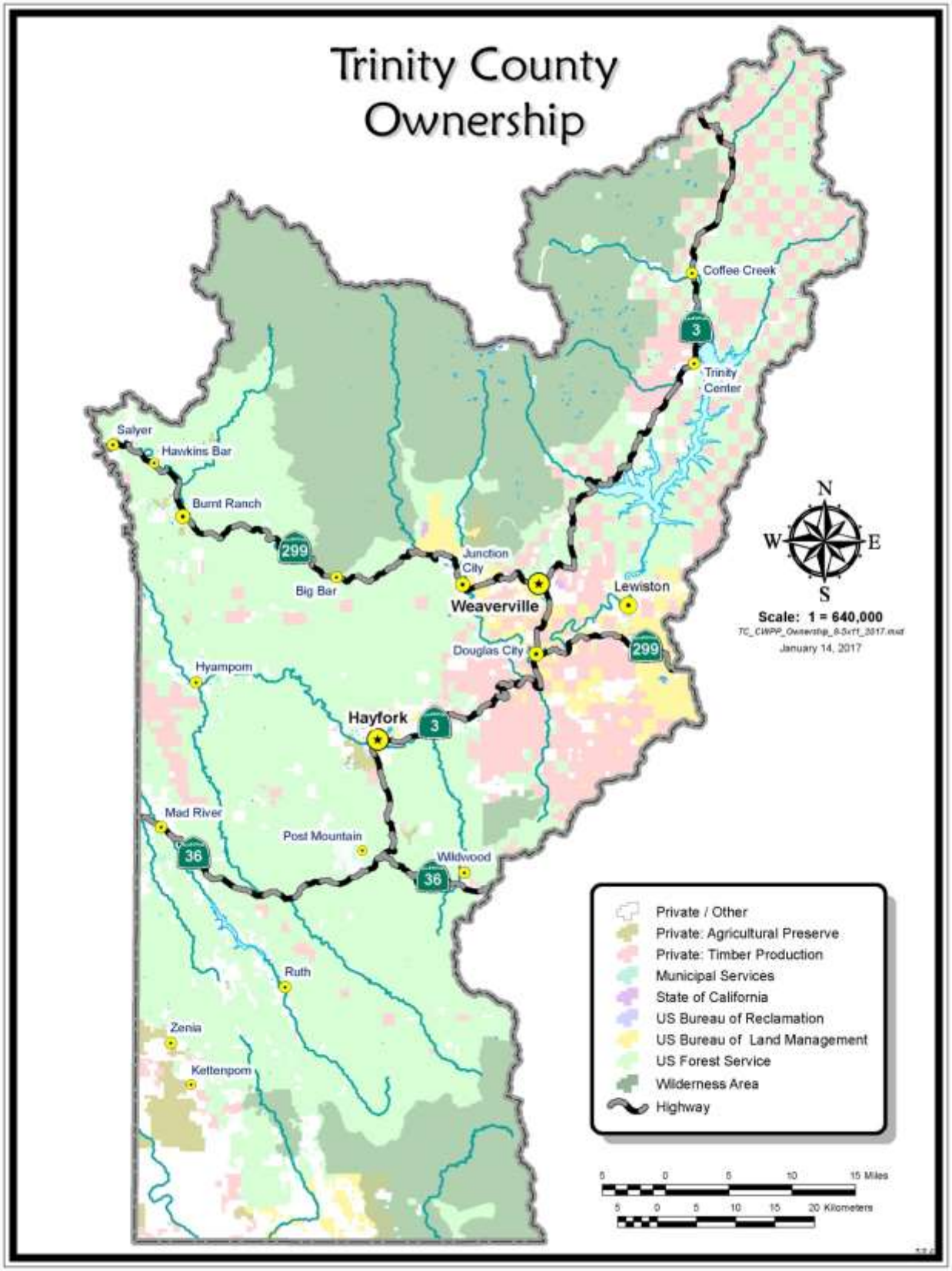
- The boundary is not intended to be used by insurance agencies as a means for determining rates.
- Embedded in the boundary is the concept of 4 different zones as defined by Jack Cohen's work with an emphasis on the first 0.25 miles.
- These zones are based on infrastructure densities as described in a variety of papers and other recent CWPPs. These will be included in the literature cited.
- The boundaries take advantage of topographic features and 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 when 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
(WUI) 2020 Map
N
W
E
S
Scale: 1 = 300,000
January 20, 2021
California
Address Points
Wildland Urban Interface
Intermix
5 0 5 Miles
5 0 5 Kilometers
Funded By: CAL FIRE
CAL FIRE
D L W


Wildland Urban Interface Zones
Fuels Treatment Goals
Zone 1
Zone 2
100'
Zone 3
.25 mi.
Zone 4
1.5 mi.
Threat Zone
Defense Zone
Reduced Fuel Zone
Improvement Zone
100'
.25 mi
1.5 mi
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
Coffee Creek
3
Trinity
Center
Salyer
Hawkins Bar
Burnt Ranch
299
Junction
City
Big Bar
Weaverville
Lewiston
Douglas City
299
Hyampom
Hayfork
3
Mad River
36
Post Mountain
Wildwood
36
Ruth
Zenia
Kettenpom
N
W
E
S
Scale: 1 = 640,000
TC_CWPP_Ownership_8-5x11_2017.mxd
January 14, 2017
Private / Other
Private: Agricultural Preserve
Private: Timber Production
Municipal Services
State of California
US Bureau of Reclamation
US Bureau of Land Management
US Forest Service
Wilderness Area
Highway
5 0 5 10 15 Miles
5 0 5 10 15 20 Kilometers

V. PROJECT PRIORITIZATION

The 2020 CWPP Update methodology diverges from previous updates as it moves to analyze the landscape and prioritize projects objectively through GIS processing techniques. This process assigns scores of 1-5 (1 having the highest priority) for the following categories: for a proposed project's proximity to the WUI, recent fire history, proximity to essential infrastructure, past project continuity, wildfire hazard potential, and for projects along roadways an ingress/egress score. The score for each of these factors is summed to generate the final score for each project and determine the priority rank. Projects with lower overall scores will have a higher priority.

WUI PROXIMITY

The proximity of a proposed project is considered to prioritize projects within the WUI. Projects were analyzed and given points ranging from 1 to 5 depending on their relative position and proximity to the WUI.

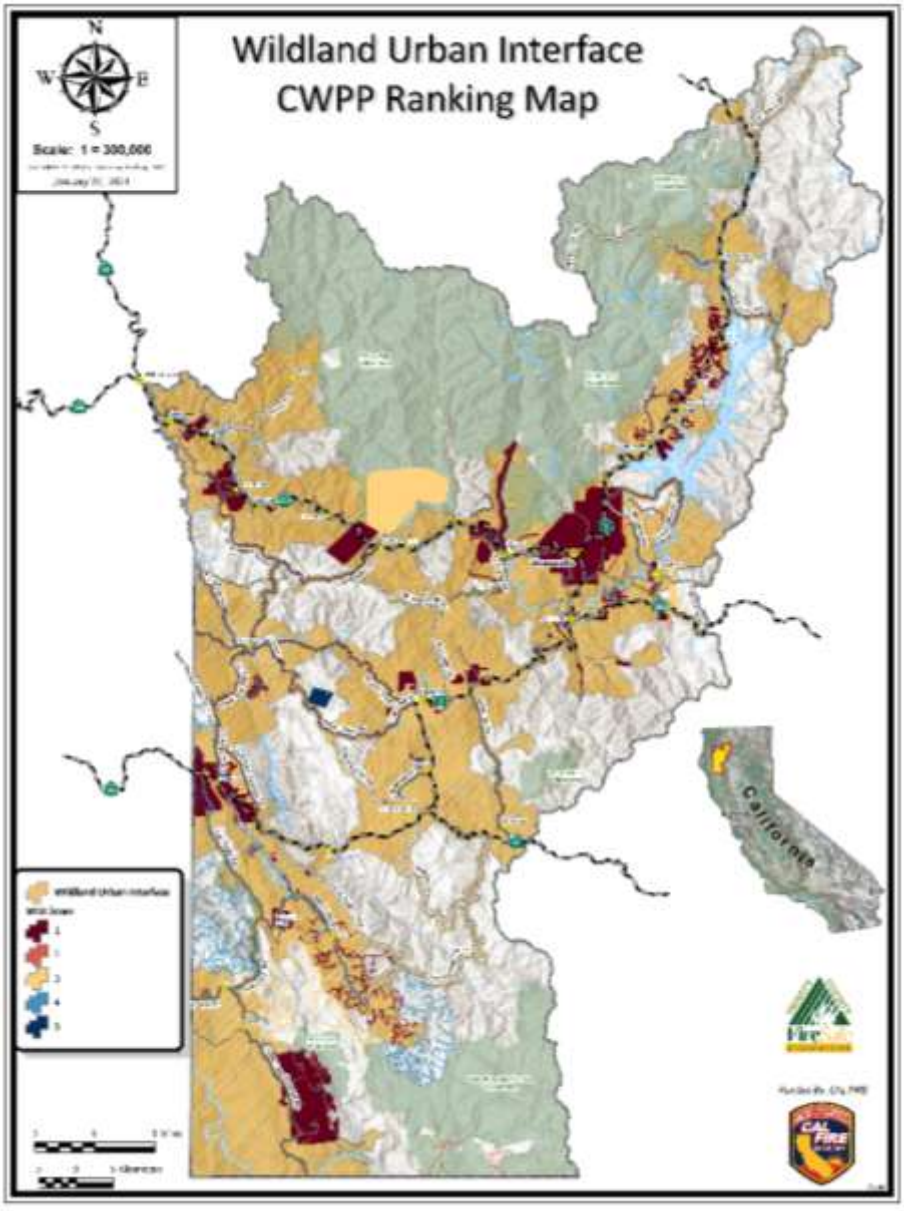
1: > 75% in WUI

2: 51- 75% in WUI

3: 26- 50% in WUI

4: 1- 24% in WUI

5: Outside of WUI



FIRE HISTORY

Fire history of an area can reflect the overall fuel loading but also indicate what the relative fire return interval is within an area. For this analysis areas without recent fire history are given priority. Fire history was determined using FRAP 2020 Fire Perimeter data, and each project was ranked, with the most recent fires being given the lowest score. The ranking scheme is as follows:

1: Prior to 2000 or no history

2: 2000-2004

3: 2005- 2009

4: 2010- 2014

5: 2015- 2020

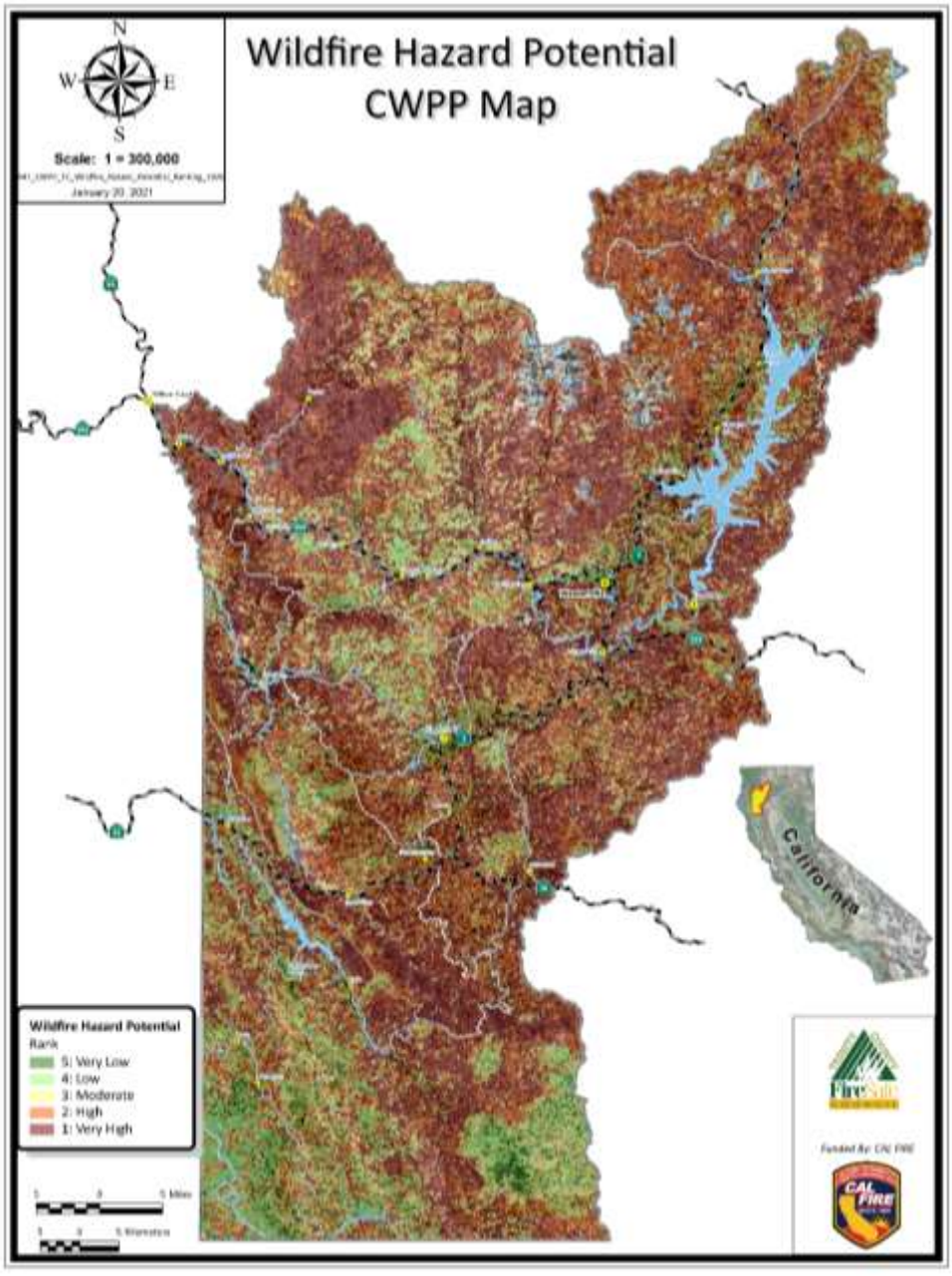
Methods:

Linear projects were buffered to a distance based on community recommendations. When no buffer was assigned, a default of 150' was applied. *Linear projects were* assigned the lowest number fire history ranking when the line was adjacent to (2) different fire history categories.

When a *linear* or *polygon* project is located within one or more categories, the project was assigned a rank according to the majority of the project. For example, if 40% of a project lands inside the most recent August Complex boundary with a rank of 5, and 60% lands outside of the boundary with a rank of 3, then the project is assigned the lower rank of "3".

WILDFIRE HAZARD POTENTIAL (WHP) DATASET

The Landfire Wildfire Hazard Potential dataset is incorporated to address the concern of high severity fire impacts from wildfires. This dataset is utilized to prioritize projects that would treat areas with higher severe fire potentials. "*To create the 2018 version, spatial estimates of wildfire likelihood and intensity were generated in 2016 with the Large Fire Simulation system (FSim), as well as spatial fuels and vegetation data from LANDFIRE 2012 and point locations of fire occurrence from FPA (ca. 1992 – 2013). With these datasets as inputs, we produced an index of WHP for all of the conterminous United States at 270-meter resolution. We present the final WHP map as five WHP classes of very low, low, moderate, high, and very high. On its own, WHP is not an explicit map of wildfire threat or risk, but when paired with spatial data depicting highly valued resources and assets such as structures or powerlines, it can approximate relative wildfire risk to those specific resources and assets. WHP is also not a forecast or wildfire outlook for any particular season, as it does not include any information on current or forecasted weather or fuel moisture conditions. It is instead intended for long-term strategic fuels management*" (USDA Forest Service, Fire Modeling Institute).



Methods:

From the original WHP raster, which was classified into the above 7 values: very low, low, moderate, high, and very high WHP classes, the re-classified system (below) was developed to meet our project prioritization ranking objectives. The WHP data Re-Classification was further divided into 5 ranks for consistency with this analysis, and the median score was used for the final ranking.

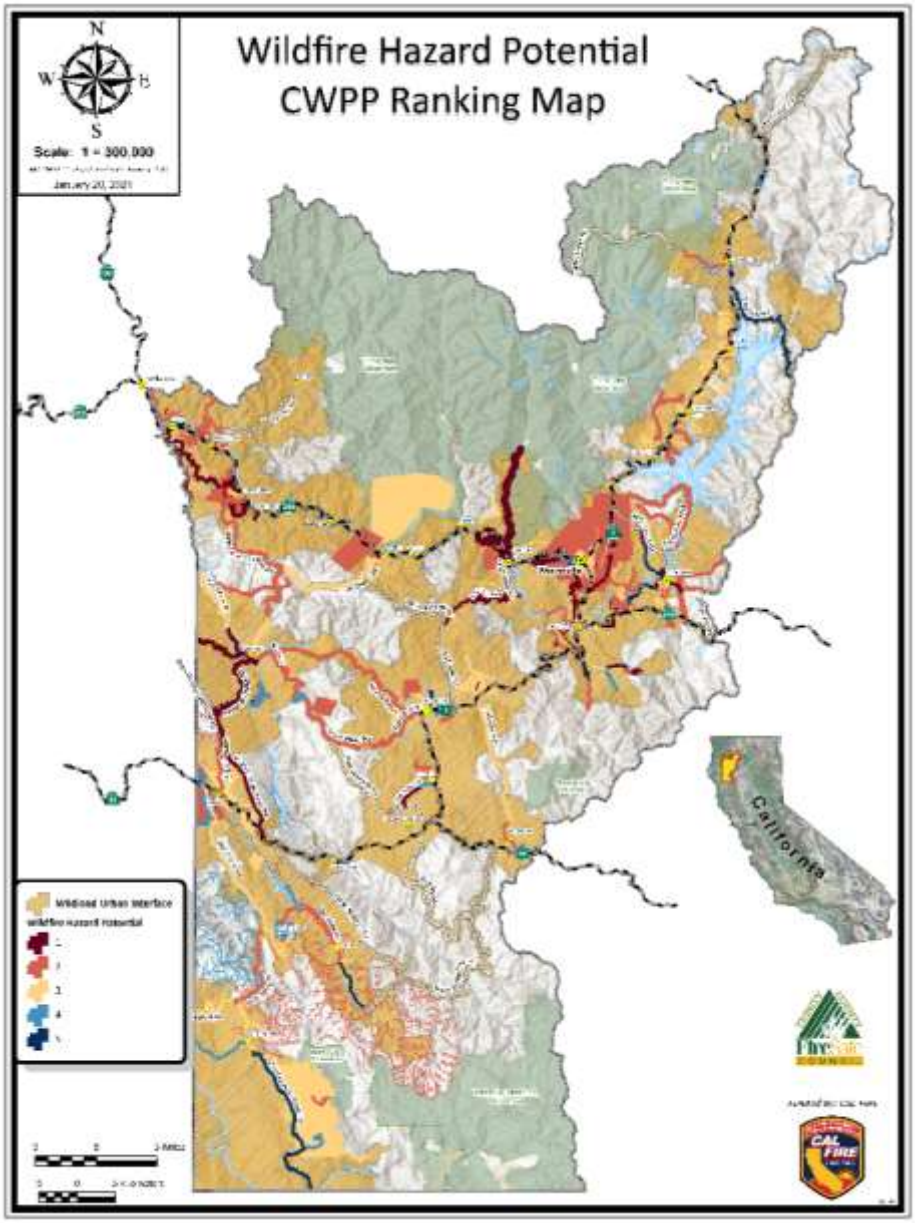
1: Very High Priority

2: High Priority

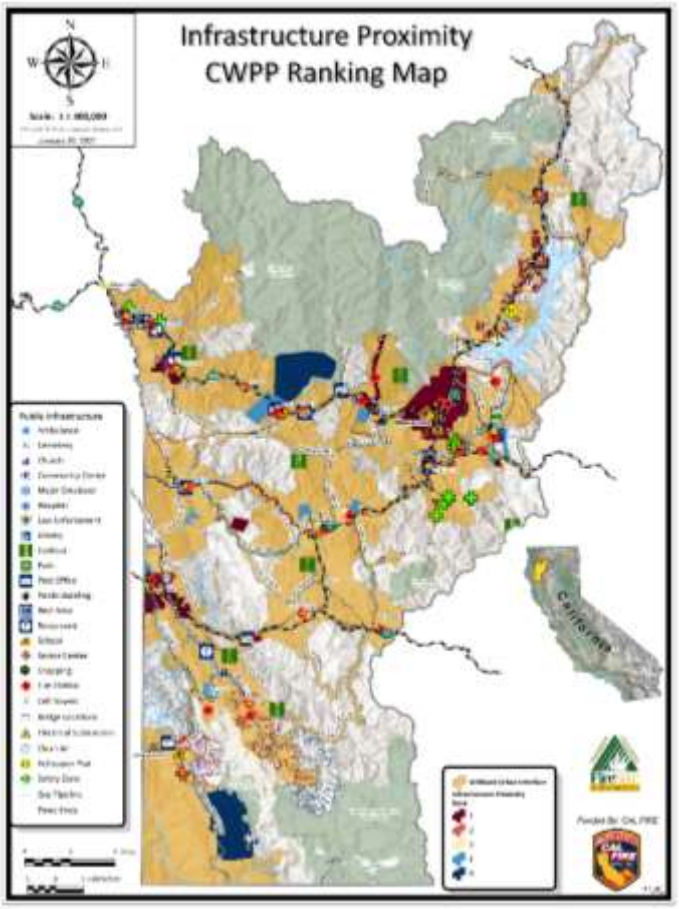
3: Moderate Priority

4: Low & Very Low Priority

5: Non- burnable & Water



INFRASTRUCTURE PROXIMITY (IP)



Protecting the County's infrastructure before a wildfire will support safety, communication, and supply chain during wildfire and improve the County's resiliency after the wildfire.

Proximity to infrastructure was ranked as follows:

1: > 75% Within 100' of buffer

2: > 75% Within 100-500' of buffer

3: > 75% Within 1000' of buffer

4: > 75% Within 1 mile of buffer

5: > 1 mile

Methods:

Buffers of 100 ft., 500 ft., 1000 ft., and 1 mile were applied to the public infrastructure points layer. For areas that fell into multiple buffer ranges, an average of the two rankings was chosen, with a higher weighting going towards the lowest score. When there is an equal area that falls into more than one buffer, the lowest rank was chosen. Some of the difficulties with this method, are that a project area might only have a small portion in the lowest ranking area (for example), but the purpose of the project is to protect infrastructure nearby.

The following infrastructure types were included in this analysis:

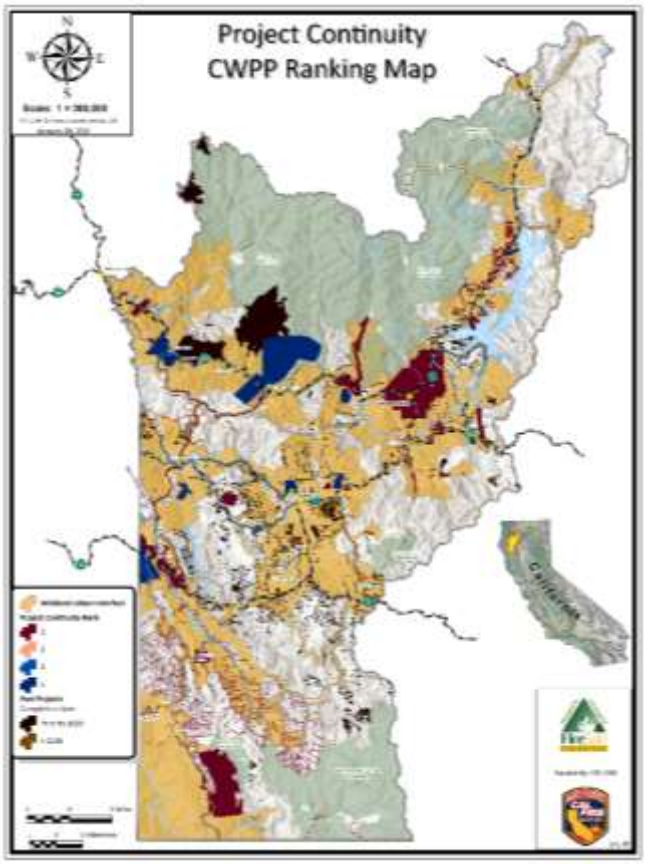
Airport	Employer	Lookout	School
Airport Safe Zone Water	Fire Truck Accessible Bridge	Park	Senior Center
Ambulance	Fisheries	Police Stations	Shopping
Bridge	Culvert- Ford	Pond	Fire Station
Campgrounds	Gas Pipeline	Ponds for Helicopter	Tank Trap
Cell Tower	Gate	Post Office	Telephone
Cemetery	Guard Station	Power Lines	Telephone Poles
Church	Health Clinic	Power Poles	Water Drafting
Cistern	Helicopter Pad	Public Building	Water Facilities
Clean Air Facility	Helispot Access	Pump Houses	Water Feature
College	Hospital	Rest Area	Water Pump
Community Center	Hydrants	Restaurant	Water Source
Dams	Law Enforcement	Repeater	Water Standpipe
Dry Water Source	Library	Restrooms	Water Tank
Electrical Substations	Lodging	Safety Zone	

PROJECT CONTINUITY

The goal for this factor is to prioritize projects returning to a recently treated area for continued maintenance, or to build upon existing projects, and also to prioritize starting new project areas. Proposed projects will receive the following score when they fall within a past project boundary using the following criteria:

1: Within ¼ mile of a project completed within the last 5 years or is in a new project area
2: Within ½ mile of a project completed within the last 5 years
3: Within ¼ mile of a project completed over 5 years ago
4: Within ½ mile of a project completed over 5 years ago

Proposed projects are assigned the lowest project area value.

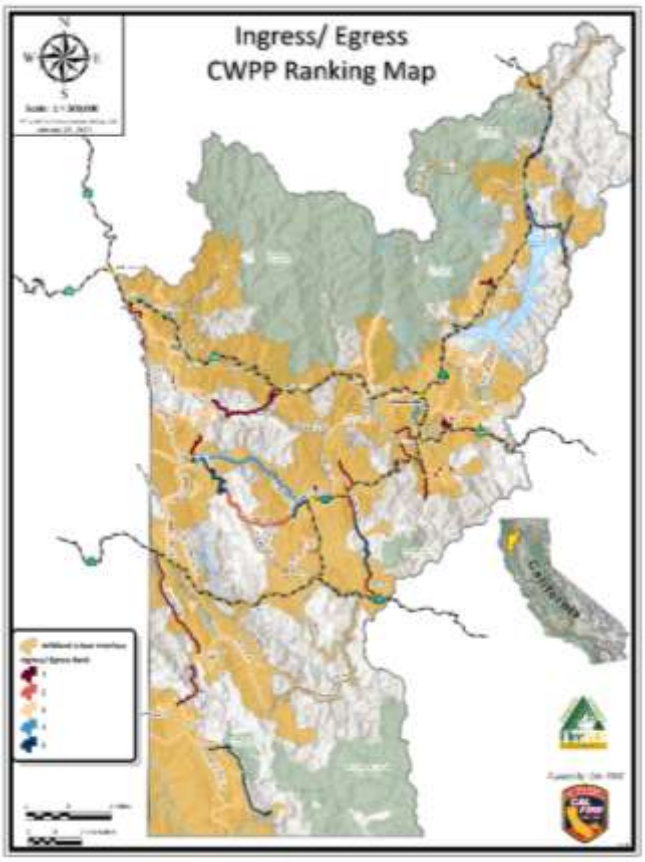


Previous Project Types

Biomass Removal	Jackpot Burning	Road Work
Broadcast Burn	Landscape Thinning	Roadside Fuelbreak
Burn Piles	Machine Pile Burn	Roadside Fuels Management
Chemical	Maintain Transition Zone	Roadside Shaded Fuelbreak
Chipping	Mastication	Safety Zone Access
Commercial Thin/ Biomass Removal	Mastication/Mowing	Shaded Fuelbreak
Compacting/Crushing of Fuels	Noxious Weeds	Thin/Prune/Pile
Control of Understory Vegetation	Precommercial Thin / Understory Veg. Control	Thinning
Defensible Space	Prescribed Burn	Thinning and Hand Piling Hazardous Fuels
Escape Route	Prescribed Fire	Tree/ Veg Removal
Evacuation Route	Prune/Thin/Chip	Vegetation Management
Fuelbreak	Pruning	Understory
Fuels Management	Pruning to Raise Canopy Height and Discourage Crown Fire	Underburn
Fuel Reduction	Ridgetop Fuelbreak	Upland- Heavy Thin / Light Pruning
Hand Pile	Ridgetop Shaded Fuelbreak	Wildfire - Fuels Benefit
Hand Thinning/Chipping	Riparian- Light Thin / Heavy Pruning	Wildlife Habitat
Impassable Road	Road Maintenance - Vegetation Reduction	Yarding- Fuels Removal

INGRESS/EGRESS RANKING

The ingress/egress ranking is derived from the CAL FIRE Shasta-Trinity Unit roads inventory for Trinity County and only applies to *linear* road projects.



Factors with the most complete datasets that were included in this assessment were:

Fuel Rating Flame Length
Slope Class
Road Position on Slope
Length of Road
Residences
Access
Road Rating
Road Speed

Methods:

For scoring the total CAL FIRE factors sum was converted to a 5-point scale. Roads lacking data from the CAL FIRE surveys were ranked as a 3. When a *linear* project involves multiple roads, then a score based on an average rank was used.

The linear projects which are not ingress/ egress are ranked using the same scale as *polygon* projects.

As an example:

SF016 is located on both:

Sunshine Meadow Way	*Barker Valley Rd*
3,800 ft.	11,423 ft
Rank= 4	Rank= 1
25%	75%
3,800/15,223ft= 25%	11,423/ 15,223= 75%

Sunshine Meadow Way & Barker Valley Rd Rank total= 5

3,800+ 11,423 ft= 15,223 ft

.75*1= .75

.25*4= 1

1+ .75= 1.75

Total rank= <u>1.75= 2</u>

PUBLIC SCORE

Community members were also given the opportunity to rank the project identified at the public meetings. The scores assigned by the community members are presented in this report but not included in the overall ranking of a projects. This allows land managers to identify projects that may have high community support, but may not have been identified as a priority in the GIS ranking process.

Community members were asked to identify their top 5 projects. Projects will receive scores based on the following criteria, and then the total number accumulated for each project is reported as the public score. The projects with larger values for public score are a higher priority to the participants of the community meetings.

1: Fifth Priority

2: Fourth Priority

3: Third Priority

4: Second Priority

5: First Priority

Figure 10. Community members identify projects and essential infrastructure in Burnt Ranch (top) and Mad River (left) during *2020 CWPP Update* public meetings.

VI. RESULTS - SUMMARIES AND RECOMMENDATIONS

For the 2020 CWPP update, community meetings were held in Trinity Center for the North Lake Division; Weaverville, Lewiston, Junction City and Douglas City for the Middle-Trinity Division; Big Flat, Burnt Ranch, Hawkins Bar, and Salyer for the Down River Division; Hayfork and Hyampom for the South Fork Division; and Zenia/Kettenpom and Mad River for the South County Division.

The purpose of the community meetings was to:

- Provide educational information to 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 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. Furthermore, an online portal will include projects identified in the 2010, 2015, and 2020 CWPP processes as well as fire history, past projects, and future projects.

During the 2010 CWPP update process, a second set of workshops was held bringing community members back together to review the GIS maps generated from community input at the first workshop. Due to the stable WUI boundaries and the limited amount of new projects updated to the maps, a second set of community workshops was not held during the 2015 and 2020 CWPP update process. A survey was conducted in 2020 which provided the opportunity for individuals to review the proposed projects and add any additional items.

2020 prioritization factors defined in the previous section include WUI Score, Fire History, infrastructure proximity (IP), wildfire hazard potential (WHP), ingress/egress rank (IE), project continuity (PC) and public score. In the *2020 CWPP Update*, linear projects such as ridgetop and roadside fuelbreaks were evaluated separately from polygon (landscape treatment) projects.

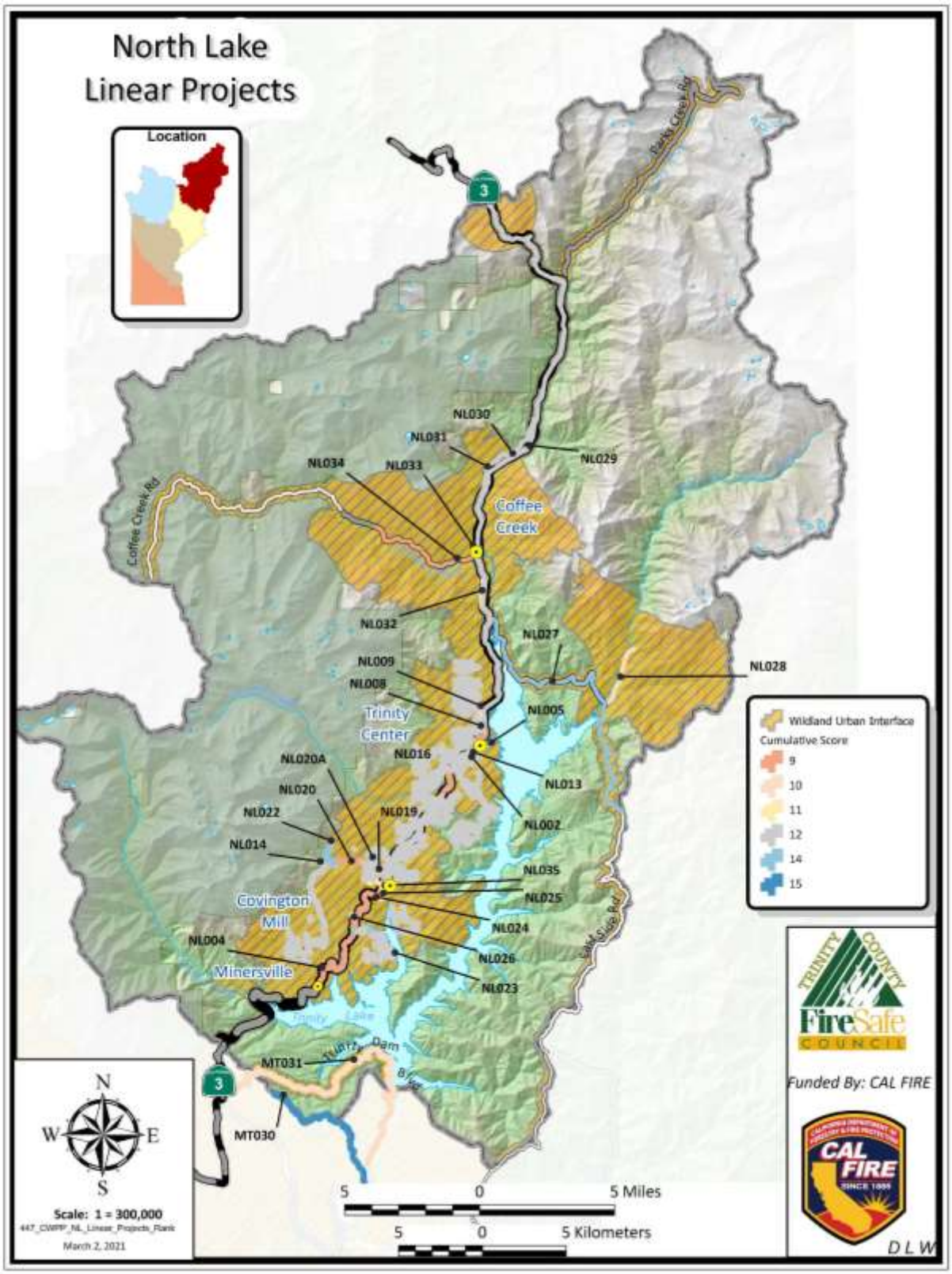
Roadside shaded fuelbreaks are defined for the use of everyday roads that can function as evacuation routes and may also need roadwork. Escape routes are community identified alternative routes to evacuate the community or

neighborhoods that will need roadside shaded fuelbreaks and roadwork with maintenance to be considered accessible evacuation routes.

If community is listed as All then it is determined that all communities in Trinity County can benefit from the proposed project. If community is listed as multiple it is determined that those projects will benefit multiple of the neighboring communities.

Projects for the South County area were developed in 2019 and have not reflected changes in community input since the 2020 August Complex Fire. The August Complex was factored in to the fire history ranking system.

NORTH LAKE

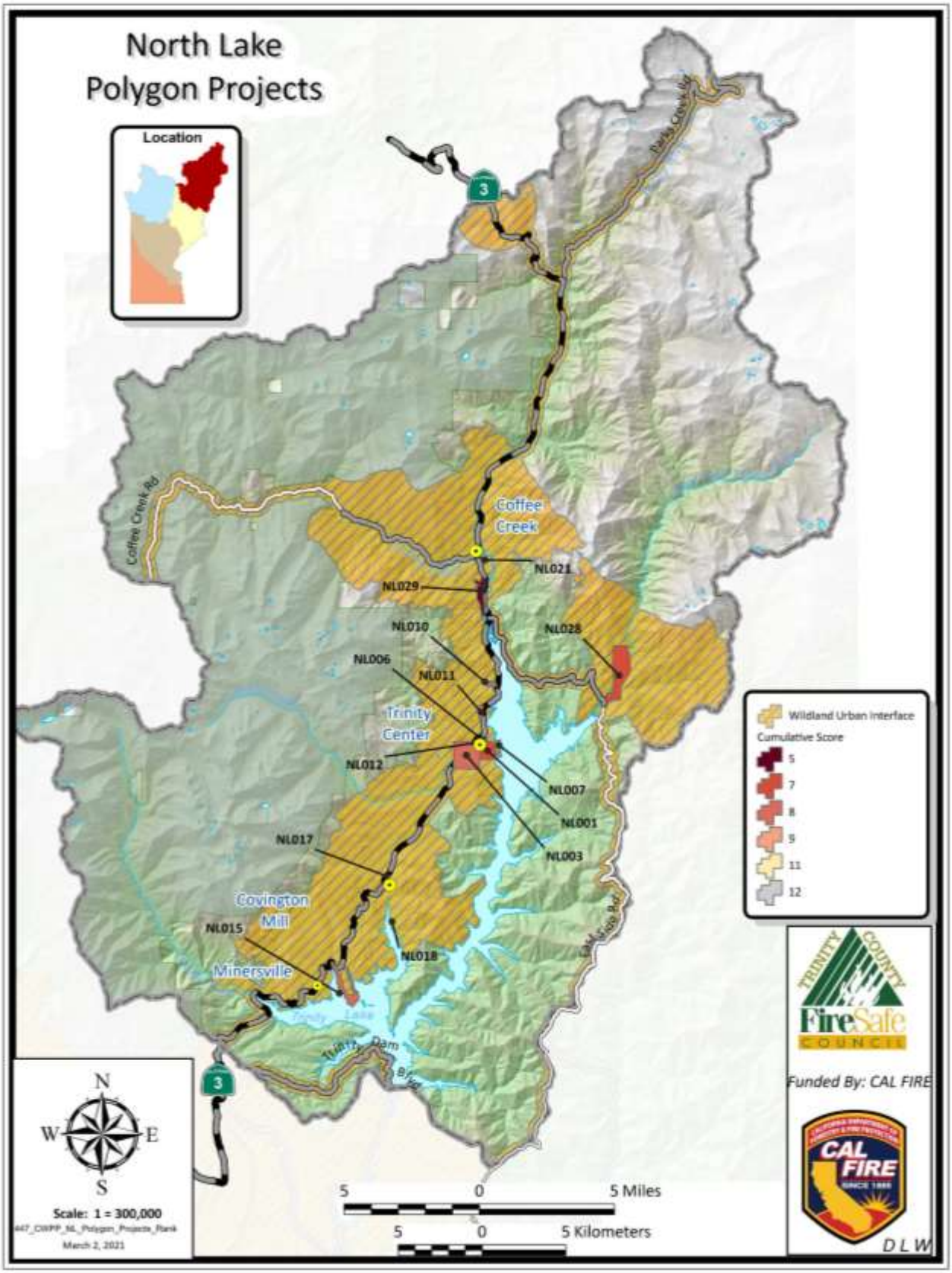

North Lake
Linear Projects
Location
3
Parks Creek Rd
NL030
NL031
NL029
NL034
NL033
Coffee Creek Rd
Coffee Creek
NL032
NL027
NL028
NL009
NL008
NL005
Trinity Center
NL016
NL020A
NL020
NL022
NL019
NL013
NL002
NL014
NL035
NL025
Covington Mill
NL024
NL004
NL026
Minersville
NL023
East Side Rd
Trinity Lake
Clair Engle Lake
Lewiston Dam
Trinity River
MT031
MT030
Wildland Urban Interface
Cumulative Score
9
10
11
12
14
15
N
W
E
S
Scale: 1 = 300,000
447_CWPP_NL_Linear_Projects_Rank
March 2, 2021
5 0 5 Miles
5 0 5 Kilometers
TRINITY COUNTY
FireSafe
COUNCIL
Funded By: CAL FIRE
CAL FIRE
SINCE 1885
D L W

North Lake Linear Projects

Rank	Project ID	ID Name	Project Type	Community	WUI Score	Fire History	IP	WHP	IE	PC	Cumulative Score	Public Score
1	NL033	S Derrick Flat Rd	Roadside Shaded Fuelbreak	Coffee Creek	1	1	1	1	3	1	**8**	0
2	NL004	SR 3	Roadside Fuelbreak	Multiple	1	1	1	2	3	1	**9**	4
2	NL020	Long Canyon Rd Private	Roadside Shaded Fuelbreak	Covington Mill	1	1	3	2	1	1	**9**	8
2	NL034	Coffee Creek Rd	Roadside Shaded Fuelbreak	Coffee Creek	1	1	1	2	3	1	**9**	0
5	NL019	Long Canyon Rd SPI Develop Shaded Fuelbreak	Maintenance/ Re-Open	Covington Mill	1	1	3	3	1	1	**10**	9
5	NL028	East Fork Rd	Roadside Shaded Fuelbreak	Trinity Center	1	1	1	3	3	1	**10**	0
5	NL032	Carville Loop	Roadside Shaded Fuelbreak	Coffee Creek	1	1	1	2	4	1	**10**	0
5	MT031	Trinity Dam Blvd	Roadside Shaded Fuelbreak	Lewiston	1	1	2	2	3	1	**10**	6
9	NL009	Trinity Center Knolls	Roadside Fuelbreak	Trinity Center	1	1	2	1	3	3	**11**	0
9	NL021	SPI Rd off of Long Canyon Rd	Roadside Shaded Fuelbreak	Covington Mill	1	1	4	2	1	2	**11**	3
9	NL025	Greenhorn Dr	Roadside Shaded Fuelbreak	Covington Mill	1	1	1	3	2	3	**11**	3
9	NL030	Eagle Creek Loop / SR 3	Roadside Shaded Fuelbreak	Coffee Creek	1	1	1	2	5	1	**11**	0
9	NL035	Lake Forest Dr	Roadside Shaded Fuelbreak	Covington Mill	1	1	1	3	4	1	**11**	0
14	NL008	Trinity Meadows	Roadside Fuelbreak	Trinity Center	1	1	2	2	3	3	**12**	10
14	NL014	Mule Creek Rd	Roadside Shaded Fuelbreak	Covington Mill	1	1	4	2	3	1	**12**	6

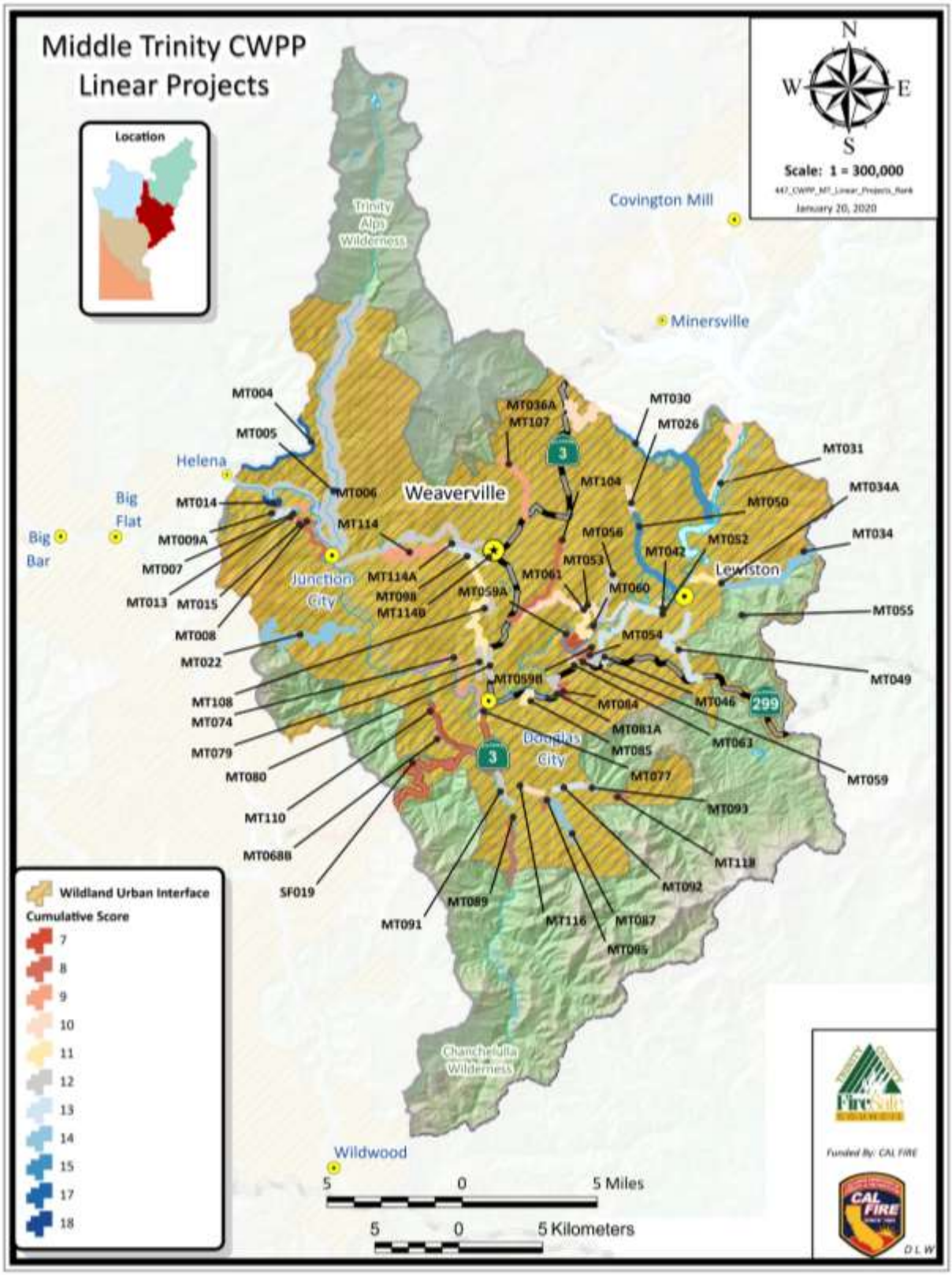
North Lake Linear Projects

Rank	Project ID	ID Name	Project Type	Community	WUI Score	Fire History	IP	WHP	IE	PC	Cumulative Score	Public Score
14	NL016	SPI Roads in Trinity Center Fire District	Roadside Shaded Fuelbreak	Trinity Center	1	1	1	3	5	1	**12**	0
14	NL024	Connect Greenhorn Dr to SR 3	Escape Route	Covington Mill	1	1	2	3	2	3	**12**	4
14	NL026	Strope Creek Rd	Roadside Shaded Fuelbreak	Covington Mill	1	1	2	4	3	1	**12**	0
14	NL029	SR 3	Roadside Shaded Fuelbreak	Multiple	1	1	1	3	5	1	**12**	0
14	NL031	Eagle Creek Loop	Roadside Shaded Fuelbreak	Trinity Center	1	1	1	3	5	1	**12**	0
21	NL002	Private Timber Land Rd	Escape Route	Trinity Center	1	1	2	3	3	4	**14**	16
21	NL013	Shaded Fuelbreak around School/Water Tanks	Maintenance/ Re-Open	Trinity Center	1	1	2	3	3	4	**14**	2
21	NL022	USFS Long Caynon Trailhead Rd 35N10	Roadside Shaded Fuelbreak	Covington Mill	1	1	4	2	3	3	**14**	0
21	NL023	Hayward Flat Rd	Defensible Space	Minersville	1	1	4	2	3	3	**14**	0
21	NL027	East Side Rd	Escape Route	Trinity Center	1	1	1	5	5	1	**14**	0
26	NL005	Airport Rd	Landscape Thinning	Trinity Center	1	1	4	3	3	3	**15**	20
26	MT030	Buckeye Ridge	Ridgetop Fuelbreak	Lewiston	2	1	4	2	3	3	**15**	0


North Lake
Polygon Projects
Location
Coffee Creek Rd
Coffee Creek
NL021
NL029
NL010
NL028
NL006
NL011
Trinity Center
NL012
NL007
NL001
NL003
NL017
Covington Mill
NL015
NL018
Minersville
Trinity Dam Blvd
Wildland Urban Interface
Cumulative Score
5
7
8
9
11
12
N
W
E
S
Scale: 1 = 300,000
5 0 5 Miles
5 0 5 Kilometers
Funded By: CAL FIRE
DLW

Rank	Project ID	ID Name	Project Type	Community	WUI Score	Fire History	IP	WHP	PC	Cumulative Score	Public Score
1	NL029	Carville Loop	Defensible space	Coffee Creek	1	1	1	1	1	**5**	0
2	NL021	Coffee Creek Village	Defensible Space	Coffee Creek	1	1	1	2	1	**6**	0
3	NL001	Trinity Center Village	Defensible Space	Trinity Center	1	1	1	3	1	**7**	26
3	NL018	Bowerman Boat Ramp	Safety Zone Access	Covington Mill	1	1	1	3	1	**7**	5
3	NL028	East Fork Rd	Defensible space	Trinity Center	1	1	1	3	1	**7**	0
6	NL003	Private Timber Land along Swift Creek	Landscape Thinning	Trinity Center	1	1	1	2	3	**8**	9
6	NL011	Trinity Center Knolls	Defensible Space	Trinity Center	1	1	2	1	3	**8**	13
6	NL015	Summer Camping Ridgeville Rd	Landscape Thinning	Minersville	1	1	3	2	1	**8**	8
9	NL010	Hatchet Creek	Shaded Fuelbreak	Trinity Center	1	1	2	2	3	**9**	0
9	NL012	River Bar Safety Zone	Safety Zone Access	Trinity Center	1	1	1	3	3	**9**	1
9	NL017	Hwy 3 and Guy Covington Dr.	Fuel Reduction	Covington Mill	1	1	2	4	1	**9**	9
12	NL006	KOA to Swift Creek	Landscape Thinning	Trinity Center	1	1	3	3	3	**11**	9
13	NL007	Between Airport and Trinity Lake	Fuelbreak	Trinity Center	1	1	3	4	3	**12**	15

MIDDLE TRINITY



Middle Trinity Linear Projects

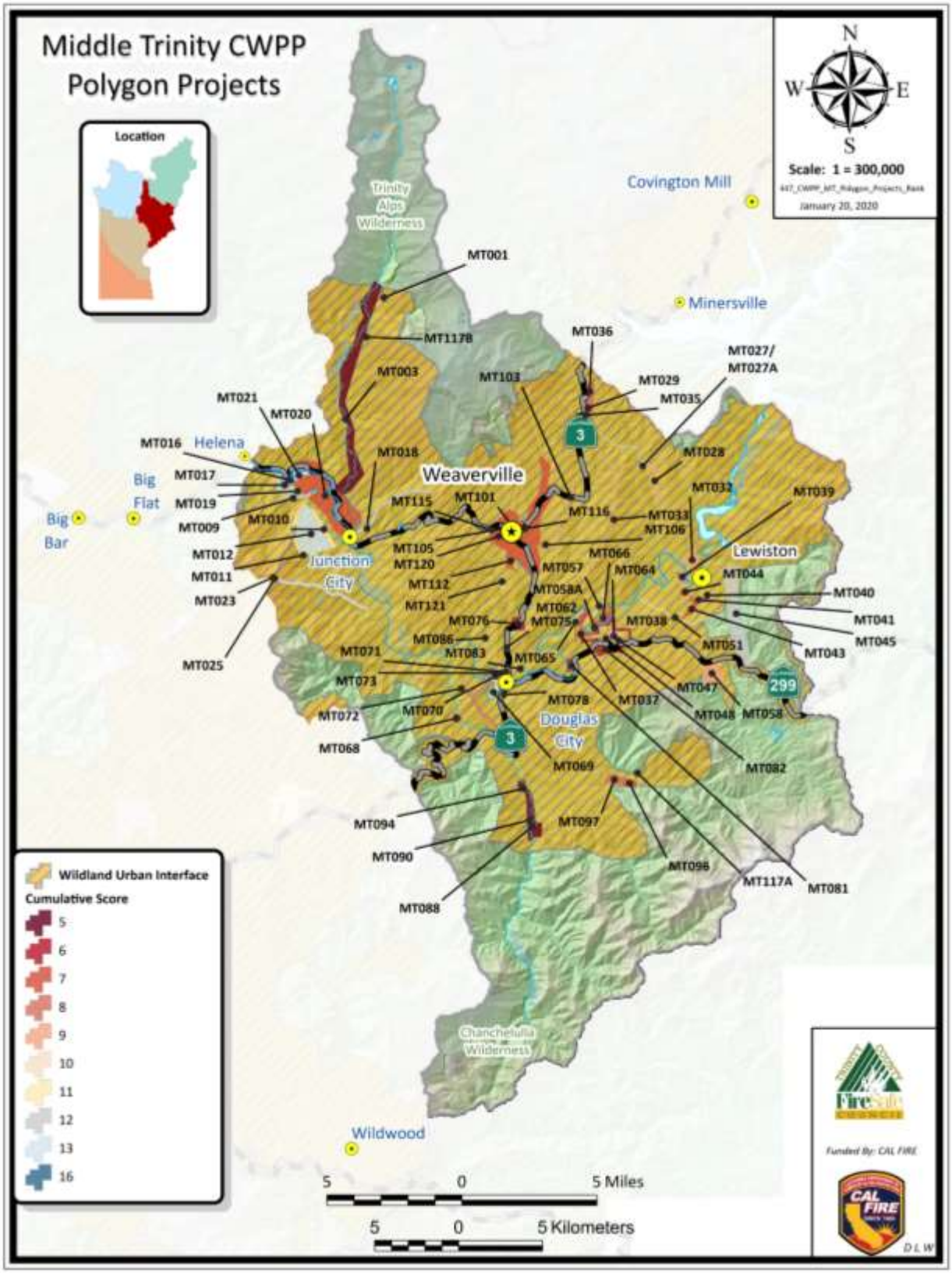
Rank	Project ID	ID Name	Project Type	Community	WUI Score	Fire History	IP	WHP	IE	PC	Cumulative Score	Public Score
1	MT060	Reo Ln/Bridge Rd	Roadside Shaded Fuelbreak	Douglas City	1	1	1	2	1	1	**7**	0
1	MT110	B Bar K Rd	Roadside Shaded Fuelbreak	Douglas City	1	1	1	2	1	1	**7**	2
3	MT008	Senger Rd	Roadside Shaded Fuelbreak	Junction City	1	1	2	2	1	1	**8**	3
3	MT015	Red Hill Rd	Roadside Shaded Fuelbreak	Junction City	1	1	1	1	3	1	**8**	9
3	MT059	Poker Bar Rd	Roadside Shaded Fuelbreak	Douglas City	1	1	2	2	1	1	**8**	45
3	MT059A	Poker Bar Rd Widening	Road Work	Weaverville	1	1	2	2	1	1	**8**	0
3	MT059B	Poker Bar Rd Annual Dead Tree Removal	Maintenance/ Re-Open	Douglas City	1	1	2	2	1	1	**8**	35
3	MT084	Vitzthum Gulch Rd	Roadside Shaded Fuelbreak	Douglas City	1	1	1	1	3	1	**8**	5
3	MT089	Deerlick Springs Rd	Roadside Shaded Fuelbreak	Douglas City	1	1	2	2	1	1	**8**	3
3	MT095	Blanchard Flad Rd	Roadside Shaded Fuelbreak	Douglas City	1	1	1	3	1	1	**8**	0
3	MT104	Little Browns Creek Rd	Roadside Shaded Fuelbreak	Weaverville	1	1	1	1	3	1	**8**	26
3	MT118	Indian Creek Rd E	Roadside Shaded Fuelbreak	Douglas City	1	1	1	1	3	1	**8**	0
3	SF019	SR3	Roadside Shaded Fuelbreak	Multiple	1	1	1	1	3	1	**8**	11
14	MT007	Lake Rd	Roadside Shaded Fuelbreak	Junction City	1	1	2	1	3	1	**9**	13
14	MT013	USFS on Red Hill Rd	Roadside Shaded Fuelbreak	Junction City	1	1	1	1	4	1	**9**	19
14	MT068B	Shady Creek Ln	Roadside Shaded Fuelbreak	Douglas City	1	1	2	1	3	1	**9**	0

Rank	Project ID	ID Name	Project Type	Community	WUI Score	Fire History	IP	WHP	IE	PC	Cumulative Score	Public Score
14	MT074	Steiner Flat Road	Roadside Shaded Fuelbreak	Douglas City	1	1	3	2	1	1	**9**	10
14	MT107	East Weaver Creek Rd	Defensible Space	Weaverville	1	1	1	2	3	1	**9**	17
14	MT114	Oregon St: Back road	Escape Route	Weaverville	1	2	1	1	3	1	**9**	12
20	MT026	Rush Creek Rd	Roadside Shaded Fuelbreak	Lewiston	1	1	1	1	3	3	**10**	14
20	MT031	Trinity Dam Blvd	Roadside Shaded Fuelbreak	Lewiston	1	1	2	2	3	1	**10**	6
20	MT036A	First Left Rd	Roadside Fuelbreak	Junction City	1	1	2	2	3	1	**10**	0
20	MT053	Browns Mountain Rd	Escape Route	Multiple	1	1	2	2	3	1	**10**	2
20	MT063	Old Poker Bar Rd	Roadside Shaded Fuelbreak	Douglas City	1	1	2	1	4	1	**10**	0
20	MT114B	Oregon St: In Weaverville	Roadside Shaded Fuelbreak	Weaverville	1	1	1	3	3	1	**10**	0
20	MT116	Reading Creek Rd	Roadside Shaded Fuelbreak	Douglas City	1	1	1	3	3	1	**10**	0
27	MT034A	Deadwood Road	Roadside Shaded Fuelbreak	Lewiston	1	1	3	2	3	1	**11**	3
27	MT061	White Ball Rd	Escape Route	Lewiston	1	1	2	3	3	1	**11**	26
27	MT077	Marshall Ranch Rd	Roadside Shaded Fuelbreak	Douglas City	1	1	2	2	4	1	**11**	8
27	MT085	Indian Creek Ranch Rd and Wilson Mountain Rd	Roadside Shaded Fuelbreak	Douglas City	1	1	2	3	3	1	**11**	0
27	MT098	Tucker Hill Road	Escape Route	Weaverville	1	1	3	1	4	1	**11**	3
32	MT005	Canyon Creek Rd	Roadside Shaded Fuelbreak	Junction City	1	5	1	1	3	1	**12**	14
32	MT054	Old Highway to Poker Bar Rd	Roadside Shaded Fuelbreak	Douglas City	1	1	4	2	3	1	**12**	7

Rank	Project ID	ID Name	Project Type	Community	WUI Score	Fire History	IP	WHP	IE	PC	Cumulative Score	Public Score
32	MT056	Ridge east of Trinity House Gulch	Ridgetop Shaded Fuelbreak	Lewiston	1	1	4	2	3	1	**12**	0
32	MT079	Ridge on Tucker Hill Rd	Ridgetop Shaded Fuelbreak	Douglas City	1	1	4	1	3	2	**12**	6
32	MT080	SR299	Roadside Shaded Fuelbreak	Douglas City	1	1	3	3	3	1	**12**	0
32	MT081A	Steel Bridge Rd	Roadside Shaded Fuelbreak	Douglas City	1	1	1	3	5	1	**12**	0
32	MT091	Deerlick Springs Rd	Roadside Shaded Fuelbreak	Douglas City	1	1	3	5	1	1	**12**	0
32	MT093	Indian Creek Rd	Roadside Shaded Fuelbreak	Douglas City	1	1	3	5	1	1	**12**	0
32	MT108	Democrat Gulch 4	Ridgetop Fuelbreak	Weaverville	1	1	4	1	4	1	**12**	9
41	MT009A	Hocker Meadow Rd	Roadside Shaded Fuelbreak	Junction City	1	5	2	1	3	1	**13**	16
41	MT042	Old Fuelbreak off of Lewiston Rd	Maintenance/ Re-Open	Lewiston	1	1	3	1	3	4	**13**	5
41	MT046	BLM Lewiston Rd	Roadside Shaded Fuelbreak	Lewiston	1	1	4	3	3	1	**13**	7
41	MT049	Trinity Dam Blvd	Roadside Shaded Fuelbreak	Lewiston	1	3	1	2	5	1	**13**	0
41	MT052	Lewiston Rd	Roadside Shaded Fuelbreak	Lewiston	1	1	2	5	3	1	**13**	1
41	MT092	Indian Creek Rd	Roadside Shaded Fuelbreak	Douglas City	1	1	4	3	3	1	**13**	0
41	MT114A	Oregon St: Housing	Roadside Shaded Fuelbreak	Weaverville	1	2	2	4	3	1	**13**	12
48	MT022	Soldier Creek Rd	Escape Route	Junction City	1	2	4	1	3	3	**14**	0
48	MT034	Deadwood Road	Escape Route	Lewiston	1	5	2	2	3	1	**14**	3

Middle Trinity Linear Projects

Rank	Project ID	ID Name	Project Type	Community	WUI Score	Fire History	IP	WHP	IE	PC	Cumulative Score	Public Score
48	MT087	Reading Creek Rd	Roadside Shaded Fuelbreak	Douglas City	1	1	4	4	3	1	**14**	0
51	MT006	Power House Rd	Roadside Shaded Fuelbreak	Junction City	1	5	1	4	3	1	**15**	1
51	MT030	Buckeye Ridge	Ridgetop Fuelbreak	Lewiston	2	1	4	2	3	3	**15**	0
51	MT050	Rush Creek Rd	Roadside Shaded Fuelbreak	Lewiston	1	1	1	5	3	4	**15**	0
54	MT004	Rich Gulch to Valdor Gulch Spur	Ridgetop Shaded Fuelbreak	Junction City	1	5	4	3	3	1	**17**	0
55	MT014	Chimariko Rd	Roadside Shaded Fuelbreak	Junction City	1	5	4	1	4	3	**18**	0
56	MT055	Lewiston Turnpike	Escape Route	Lewiston	4	5	3	1	5	1	**19**	0


Middle Trinity CWPP
Polygon Projects
Location
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Scale: 1 = 300,000
January 20, 2020
Covington Mill
Minersville
Trinity Alps Wilderness
Helena
Big Flat
Big Bar
Weaverville
Junction City
Lewiston
Douglas City
Wildwood
Chanchelulla Wilderness
MT001
MT117B
MT003
MT021
MT020
MT016
MT017
MT019
MT009
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MT012
MT011
MT023
MT025
MT018
MT115
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MT051
MT047
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Wildland Urban Interface
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Funded By: CAL FIRE
CAL FIRE
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Rank	Project ID	ID Name	Project Type	Community	WUI Score	Fire History	IP	WHP	PC	Cumulative Score	Public Score
1	MT090	Deerlick Springs Rd	Defensible Space	Douglas City	1	1	1	1	1	**5**	0
1	MT094	Eagle Ln	Defensible Space	Douglas City	1	1	1	1	1	**5**	0
1	MT117B	Canyon Creek Hazard Tree Removal	Other	Junction City	1	1	1	1	1	**5**	0
4	MT037	BLM at Poker Bar Rd	Fuelbreak	Multiple	1	1	1	2	1	**6**	5
4	MT058A	Frendship Dr Old Airstrip	Safety Zone Access	Lewiston	1	1	1	2	1	**6**	0
4	MT076	Tucker Hill Community	Landscape Thinning	Douglas City	1	1	2	1	1	**6**	9
4	MT081	Steel Bridge Rd	Defensible Space	Douglas City	1	1	2	1	1	**6**	0
4	MT082	Top of the Grade	Defensible Space	Douglas City	1	1	2	1	1	**6**	0
9	MT020	Junction City	Noxious weeds	Junction City	1	3	1	1	1	**7**	3
9	MT029	Rush Creek Estates	Defensible Space	Weaverville	1	1	1	3	1	**7**	0
9	MT035	SR3 and Rush Creek	Landscape Thinning	Weaverville	1	1	3	1	1	**7**	0
9	MT038	Lewiston Rd Absentee Owner Parcels	Landscape Thinning	Lewiston	1	1	2	2	1	**7**	0
9	MT041	Bureau of Reclamation on Trinity Dam Blvd	Landscape Thinning	Lewiston	1	1	2	2	1	**7**	5
9	MT043	Mountain View Dr Ridge	Landscape Thinning	Lewiston	1	1	2	2	1	**7**	0
9	MT062	Poker Bar Rd	Defensible Space	Douglas City	1	1	2	2	1	**7**	2
9	MT065	Powerline Acces Rd Ridgeline above Poker Bar Rd	Ridgetop Shaded Fuelbreak	Douglas City	1	1	3	1	1	**7**	9
9	MT066	Reo Ln	Defensible Space	Douglas City	1	1	1	3	1	**7**	0
9	MT068	Shady Creek Ln	Defensible Space	Douglas City	1	1	2	2	1	**7**	1
9	MT078	SR3 Dead Tree Removal	Other	Douglas City	1	1	1	3	1	**7**	8
9	MT083	Campground above Poplar Ln	Landscape Thinning	Douglas City	1	1	3	1	1	**7**	0

Middle Trinity Polygon Projects

Rank	Project ID	ID Name	Project Type	Community	WUI Score	Fire History	IP	WHP	PC	Cumulative Score	Public Score
9	MT096	China Gulch Rd Stand	Landscape Thinning	Douglas City	1	1	3	1	1	**7**	0
9	MT105	Garden Gulch Riparian Cooridor to Sydney Gulch	Defensible Space	Weaverville	1	1	1	3	1	**7**	41
9	MT116	Weaverville Defensible Space	Defensible space	Weaverville	1	1	1	3	1	**7**	0
9	MT120	Fuelbreak around Rocky Rd and Quail Dr	Shaded Fuelbreak	Weaverville	1	1	2	2	1	**7**	24
25	MT001	Grasshopper Flat	Shaded Fuelbreak	Junction City	1	1	3	2	1	**8**	0
25	MT003	Junction City VFD on Canyon Creek Rd	Fuelbreak	Junction City	1	1	2	1	3	**8**	0
25	MT036	First Left Rd	Defensible Space	Weaverville	1	1	3	2	1	**8**	0
25	MT044	Lewiston Road Grasslands	Prescribed Burn	Lewiston	1	1	2	3	1	**8**	4
25	MT071	Douglas City School	Landscape Thinning	Douglas City	1	1	2	2	2	**8**	20
25	MT072	Reading Creek Ridgetop Fuelbreak	Ridgetop Fuelbreak	Douglas City	1	1	4	1	1	**8**	0
25	MT075	Between SR299 and Tucker Hill Rd	Landscape Thinning	Douglas City	1	1	2	3	1	**8**	9
25	MT097	Panwauket Gulch Stand	Wildlife Habitat	Douglas City	1	1	3	2	1	**8**	0
25	MT101	Weaverville Elementary	Landscape Thinning	Weaverville	1	1	1	4	1	**8**	5
25	MT106	North of Ransom Rd Remove Slash	Landscape Thinning	Weaverville	1	1	4	1	1	**8**	0
25	MT117A	Indian Creek Fuelbreak	Fuelbreak	Douglas City	2	1	2	1	2	**8**	0
36	MT028	Lost Bridge Rd Neighborhood	Fuelbreak	Lewiston	1	1	3	1	3	**9**	0
36	MT032	BLM on Rush Creek Rd	Prescribed Burn	Lewiston	1	1	2	1	4	**9**	10
36	MT033	Musser Hill Ridge	Ridgetop Fuelbreak	Multiple	1	1	4	2	1	**9**	23
36	MT039	Goose Ranch Rd Landscape Treatment	Landscape Thinning	Lewiston	1	1	2	2	3	**9**	5
36	MT048	Ridge at Poker Bar Rd	Ridgetop Fuelbreak	Douglas City	1	1	4	2	1	**9**	0

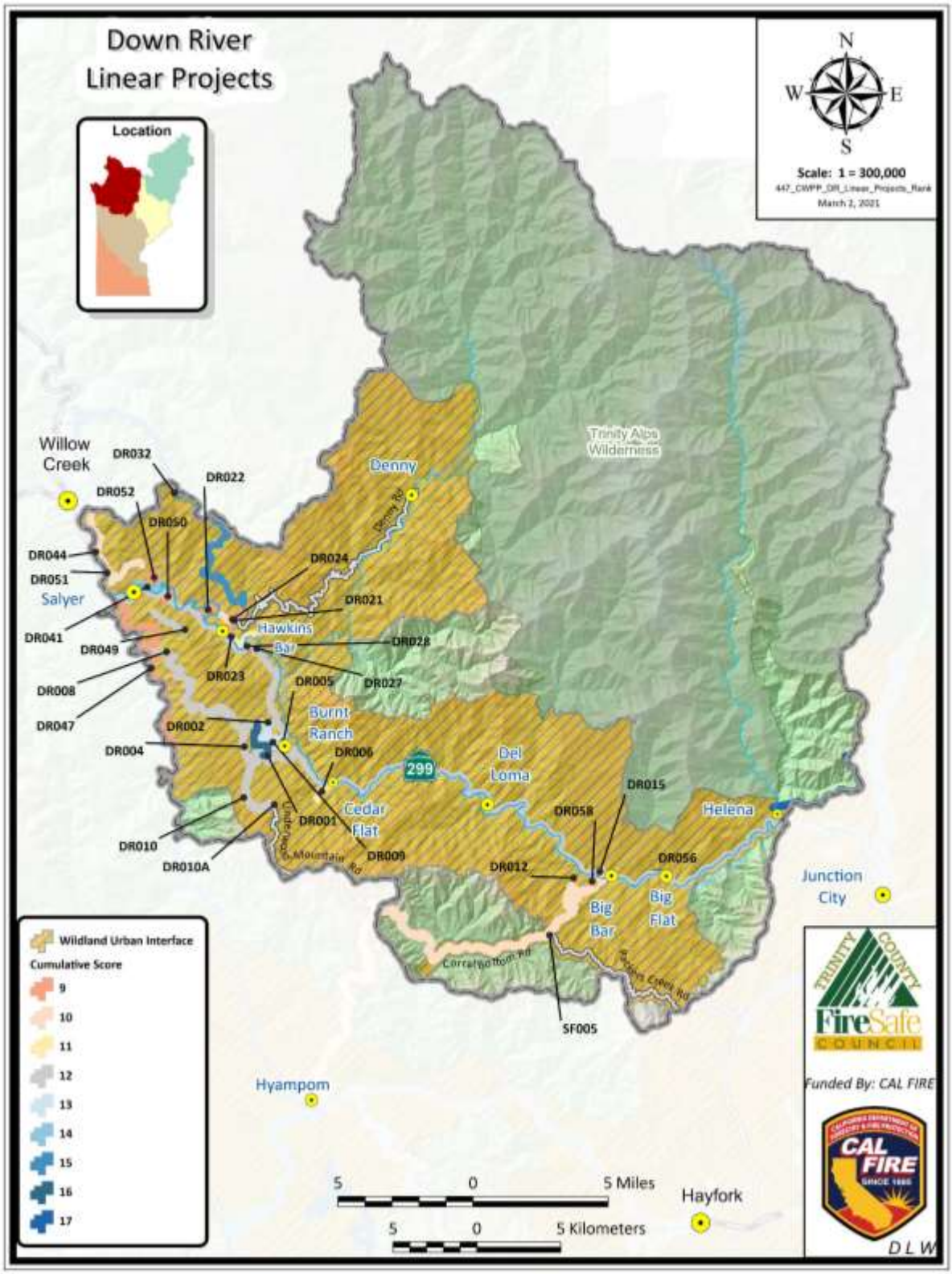
Middle Trinity Polygon Projects

Rank	Project ID	ID Name	Project Type	Community	WUI Score	Fire History	IP	WHP	PC	Cumulative Score	Public Score
36	MT058	Friendship Dr	Defensible Space	Lewiston	1	1	1	2	4	**9**	0
36	MT064	BLM along Old Highway	Landscape Thinning	Multiple	1	1	4	2	1	**9**	18
36	MT103	Ridge northeast of Weaverville	Ridgetop Shaded Fuelbreak	Weaverville	1	1	3	3	1	**9**	8
36	MT112	Ridge at Mill Street	Ridgetop Fuelbreak	Weaverville	1	1	4	2	1	**9**	15
45	MT047	Ridge at Lewiston Rd	Ridgetop Fuelbreak	Lewiston	1	1	4	3	1	**10**	2
45	MT057	Ridge east of China Gulch	Ridgetop Shaded Fuelbreak	Douglas City	1	1	3	3	2	**10**	6
45	MT069	Douglas City Campground	Landscape Thinning	Douglas City	1	1	4	3	1	**10**	17
45	MT070	Steiner Flat Campground	Landscape Thinning	Douglas City	1	1	4	3	1	**10**	21
45	MT073	Douglas City School Ridgetop Fuebreak	Ridgetop Fuelbreak	Douglas City	1	1	4	3	1	**10**	7
45	MT086	Tucker Hill/Lorenz Ranch Dead Tree Removal	Other	Douglas City	1	1	4	3	1	**10**	5
45	MT088	Ridge above Smith Ln	Ridgetop Fuelbreak	Douglas City	1	1	3	4	1	**10**	0
45	MT121	Democrat Ridge oak stand	Landscape Thinning	Weaverville	1	1	5	2	1	**10**	6
53	MT010	Helena Fire Dozer Line	Maintenance/ Re-Open	Junction City	1	3	4	2	1	**11**	23
53	MT011	Helena Fire Dozer Line (2)	Maintenance/ Re-Open	Junction City	1	3	4	2	1	**11**	10
53	MT016	Lime Point Rd	Safety Zone Access	Junction City	1	5	1	1	3	**11**	0
53	MT040	Trinity Dam Blvd and Bear Creek Trail	Landscape Thinning	Lewiston	1	1	3	5	1	**11**	3
53	MT051	Lewiston Ridgetop Fuelbreak	Ridgetop Fuelbreak	Lewiston	1	3	1	3	3	**11**	0
53	MT115	Thinning at Trinco Rd	Landscape Thinning	Weaverville	1	2	4	3	1	**11**	22
59	MT009	Hocker Meadow Rd and Ridge	Ridgetop Fuelbreak	Junction City	1	4	4	2	1	**12**	16

Middle Trinity Polygon Projects

Rank	Project ID	ID Name	Project Type	Community	WUI Score	Fire History	IP	WHP	PC	Cumulative Score	Public Score
59	MT017	Chimariko Rd north to Hocker Meadow Rd	Landscape Thinning	Junction City	1	5	4	1	1	**12**	8
59	MT018	Glenninson Gap Ridge	Ridgetop Fuelbreak	Junction City	1	3	4	3	1	**12**	0
59	MT027	Rush Creek Rd Dead Tree Removal	Other	Lewiston	1	3	1	4	3	**12**	1
59	MT045	Carr Fire Fuelbreak	Maintenance/ Re-Open	Lewiston	3	2	4	2	1	**12**	4
64	MT012	McKinney Gulch	Landscape Thinning	Junction City	1	3	4	2	3	**13**	31
64	MT021	Bear Springs Rd Neighborhood Fuelbreak	Maintenance/ Re-Open	Junction City	1	5	3	3	1	**13**	2
64	MT023	Soldier Creek Ridge	Ridgetop Fuelbreak	Junction City	1	2	4	3	3	**13**	6
64	MT027A	Rush Creek Rd	Roadside Shaded Fuelbreak	Lewiston	1	1	4	4	3	**13**	0
68	MT019	Jamie Ln Handline	Maintenance/ Re-Open	Junction City	1	5	4	3	3	**16**	0
68	MT025	Helena fire dozer line	Maintenance/ Re-Open	Junction City	1	3	5	4	3	**16**	0

DOWN RIVER


Down River
Linear Projects
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Helena
Cedar Flat
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Junction City
Big Bar
Big Flat
Denny
Denny Rd
Underwood Mountain Rd
Corral Bottom Rd
Eastern Creek Rd
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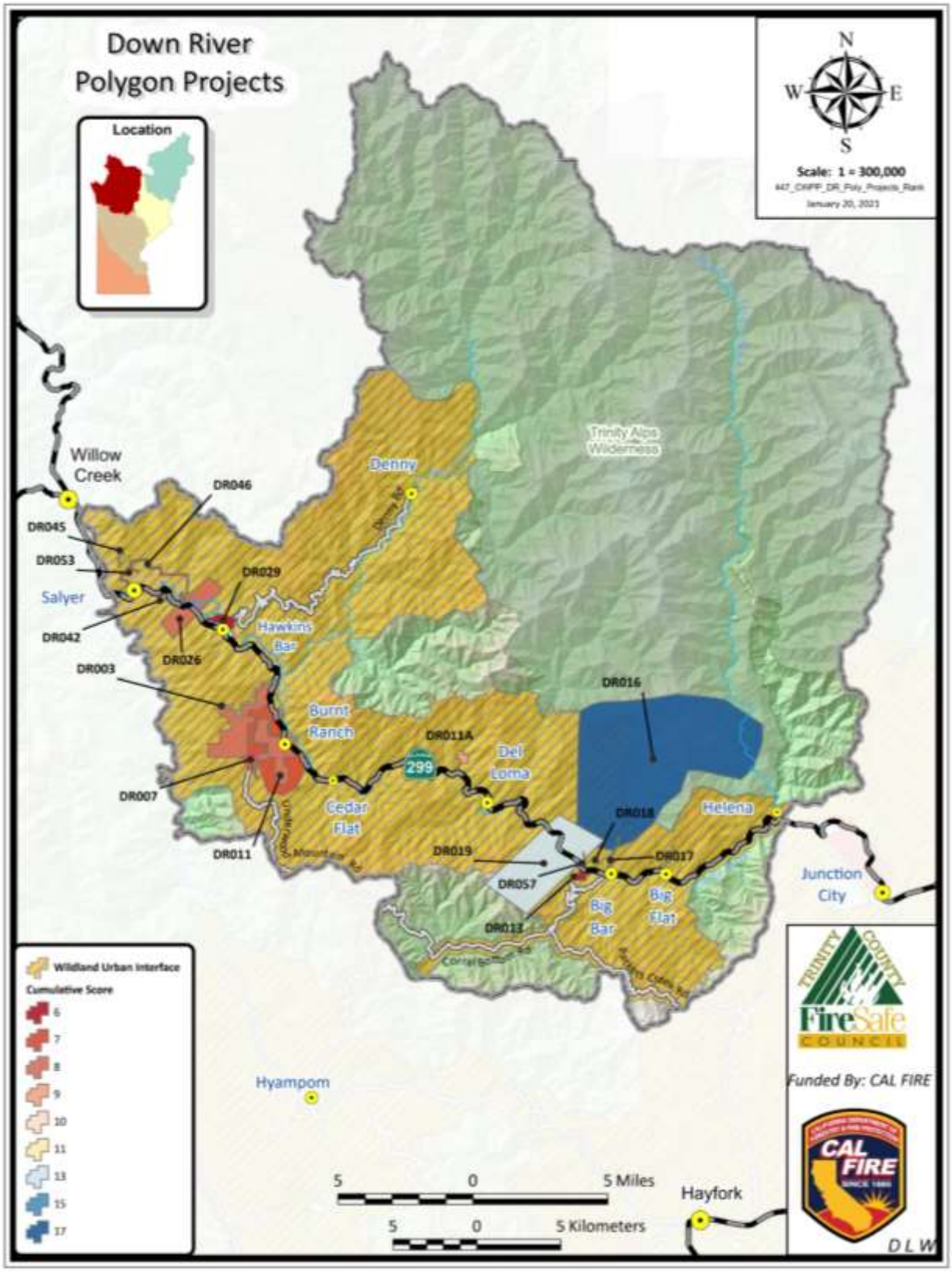
Down River Linear Projects

Rank	Project ID	ID Name	Project Type	Community	WUI Score	Fire History	IP	WHP	IE	PC	Cumulative Score	Public Score
1	DR012	Pattison Ranch Rd	Roadside Shaded Fuelbreak	Big Bar	1	1	1	2	1	1	**7**	28
2	DR021	Denny Rd (Bridge to Wallen Ranch Rd)	Roadside Shaded Fuelbreak	Hawkins Bar	1	1	2	2	2	1	**9**	15
2	DR022	SuzyQ Rd	Roadside Fuelbreak	Hawkins Bar	1	1	1	2	3	1	**9**	8
2	DR027	Ammon Rd	Roadside Shaded Fuelbreak	Hawkins Bar	1	1	1	2	3	1	**9**	0
2	DR047	South Fork Rd	Roadside Shaded Fuelbreak	Salyer	1	1	1	1	1	4	**9**	14
2	DR050	Oden Flat	Roadside Shaded Fuelbreak	Salyer	1	1	1	2	3	1	**9**	4
2	DR052	Connect Peach Orchard Rd to Sharber Creek Rd	Road Work	Salyer	1	1	2	1	3	1	**9**	13
2	DR058	USFS Rd Between Pattison Ranch and Big Bar Dump	Fuel Reduction	Downriver	1	1	2	1	3	1	**9**	0
9	DR024	Madrone Ln	Roadside Shaded Fuelbreak	Hawkins Bar	1	1	2	2	3	1	**10**	6
9	DR044	Campbell Ridge Rd	Escape Route	Salyer	1	1	2	2	3	1	**10**	3
11	DR006	Friedrich Rd	Roadside Shaded Fuelbreak	Cedar Flat	1	1	2	1	3	3	**11**	1
11	DR023	Fisher Rd	Roadside Shaded Fuelbreak	Hawkins Bar	1	1	2	2	4	1	**11**	3
11	DR028	Jakes Mailbox Rd	Roadside Shaded Fuelbreak	Hawkins Bar	1	1	1	3	3	2	**11**	2
14	DR004	Moss Old Mill Rd to Underwood Mountain Rd	Roadside Shaded Fuelbreak	Burnt Ranch	1	1	4	2	3	1	**12**	1
14	DR005	SR299	Roadside Shaded Fuelbreak	All	1	3	1	1	5	1	**12**	18

Down River Linear Projects

Rank	Project ID	ID Name	Project Type	Community	WUI Score	Fire History	IP	WHP	IE	PC	Cumulative Score	Public Score
14	DR008	Hennessey Rd	Roadside Shaded Fuelbreak	Burnt Ranch	1	1	2	1	3	4	**12**	9
14	DR010	Underwood Mountain Rd	Roadside Shaded Fuelbreak	Burnt Ranch	1	1	2	2	3	3	**12**	0
14	DR015	Clement Rd	Prescribed Burn	Big Bar	1	3	1	1	5	1	**12**	8
14	DR049	USFS 06N31	Ridgetop Shaded Fuelbreak	Hawkins Bar	1	1	4	2	3	1	**12**	6
14	DR056	Wheel Gulch	Fuel Reduction	Big Flat	1	1	1	3	5	1	**12**	0
21	DR002	Hennessey to SR299	Roadside Shaded Fuelbreak	Burnt Ranch	1	1	2	1	5	3	**13**	14
21	DR009	Burnt Ranch School Rd and Pony Express Wy	Roadside Shaded Fuelbreak	Burnt Ranch	1	1	1	3	4	3	**13**	7
23	DR041	Fountain Ranch Rd	Roadside Shaded Fuelbreak	Salyer	1	1	2	5	4	1	**14**	38
23	DR051	Wood Ln	Roadside Shaded Fuelbreak	Salyer	1	1	3	3	3	3	**14**	0
25	DR032	Wallen Ranch Rd to USFS 07N04 - 07N02 Escape Route	Escape Route	Hawkins Bar	2	1	4	2	3	3	**15**	7
26	DR001	Hennessey to Underwood	Roadside Shaded Fuelbreak	Burnt Ranch	1	1	3	2	5	4	**16**	7
27	DR010A	Underwood Mountain Rd	Escape Route	Multiple	1	5	5	1	5	1	**18**	0


Down River
Polygon Projects
Location
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Scale: 1 = 300,000
447_CWPP_DR_Poly_Projects_Rank
January 20, 2021
Trinity Alps Wilderness
Willow Creek
Denny
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DR045
DR053
DR029
Salyer
DR042
DR026
Hawkins Bar
DR003
DR016
Burnt Ranch
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DR007
Cedar Flat
DR018
Helena
DR011
DR019
DR017
DR057
Junction City
Big Flat
Big Bar
DR012
Hyampom
Hayfork
Wildland Urban Interface
Cumulative Score
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FireSafe
COUNCIL
Funded By: CAL FIRE
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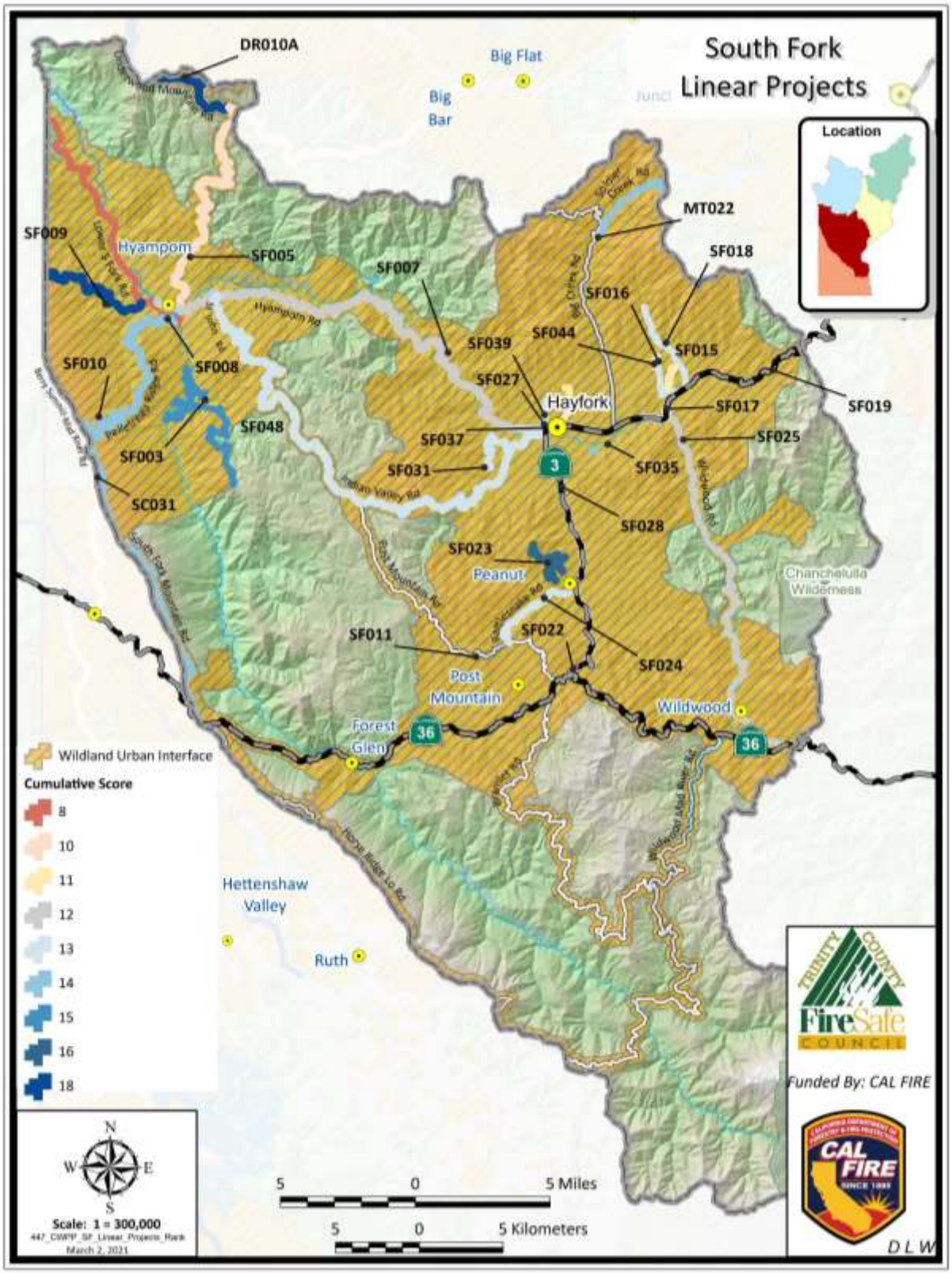
Down River Polygon Projects

Rank	Project ID	ID Name	Project Type	Community	WUI Score	Fire History	IP	WHP	PC	Cumulative Score	Public Score
1	DR013	Pattison Ranch Neighborhood	Defensible Space	Big Bar	1	1	1	2	1	**6**	16
1	DR029	Trinity Village Undeveloped Lots	Fuel Reduction	Hawkins Bar	1	1	1	2	1	**6**	3
1	DR042	Salyer Community Border	Fuelbreak	Salyer	1	1	1	2	1	**6**	39
4	DR007	USFS around Burnt Ranch	Landscape Thinning	Burnt Ranch	1	1	1	1	3	**7**	9
4	DR053	Salyer Loop Rd to Cherry Tree Ln	Prescribed Burn	Salyer	1	1	2	2	1	**7**	7
6	DR011	Private Land in core of Burnt Ranch	Defensible Space	Burnt Ranch	1	1	1	2	3	**8**	14
6	DR026	Ridgetop at Hawkins Bar	Ridgetop Fuelbreak	Hawkins Bar	1	1	3	2	1	**8**	4
8	DR003	SR299 to Hennessey Rd	Shaded Fuelbreak	Burnt Ranch	1	1	4	2	1	**9**	3
8	DR011A	Swede Creek Rd	Defensible Space	Del Loma	1	3	1	1	3	**9**	13
8	DR046	Salyer Old Fuel Break	Maintenance/ Re-Open	Salyer	1	1	2	4	1	**9**	8
11	DR045	07N15 Roadside Shaded Fuel Break	Maintenance/ Re-Open	Salyer	1	1	4	1	3	**10**	12
11	DR057	SR299 Historical	Fuelbreak	Big Bar	1	3	1	4	1	**10**	
13	DR018	Old USFS Fuel Break	Maintenance/ Re-Open	Big Bar	1	3	1	5	1	**11**	1
14	DR019	Ridgetop at Big Bar	Ridgetop Fuelbreak	Big Bar	1	3	4	2	3	**13**	2
15	DR017	Old USFS Fuel Break	Maintenance/ Re-Open	Big Bar	1	3	4	4	3	**15**	2
16	DR016	Trinity Alps Wilderness WUI Transition	Fuel Reduction	Big Bar	3	3	5	3		**17**	17

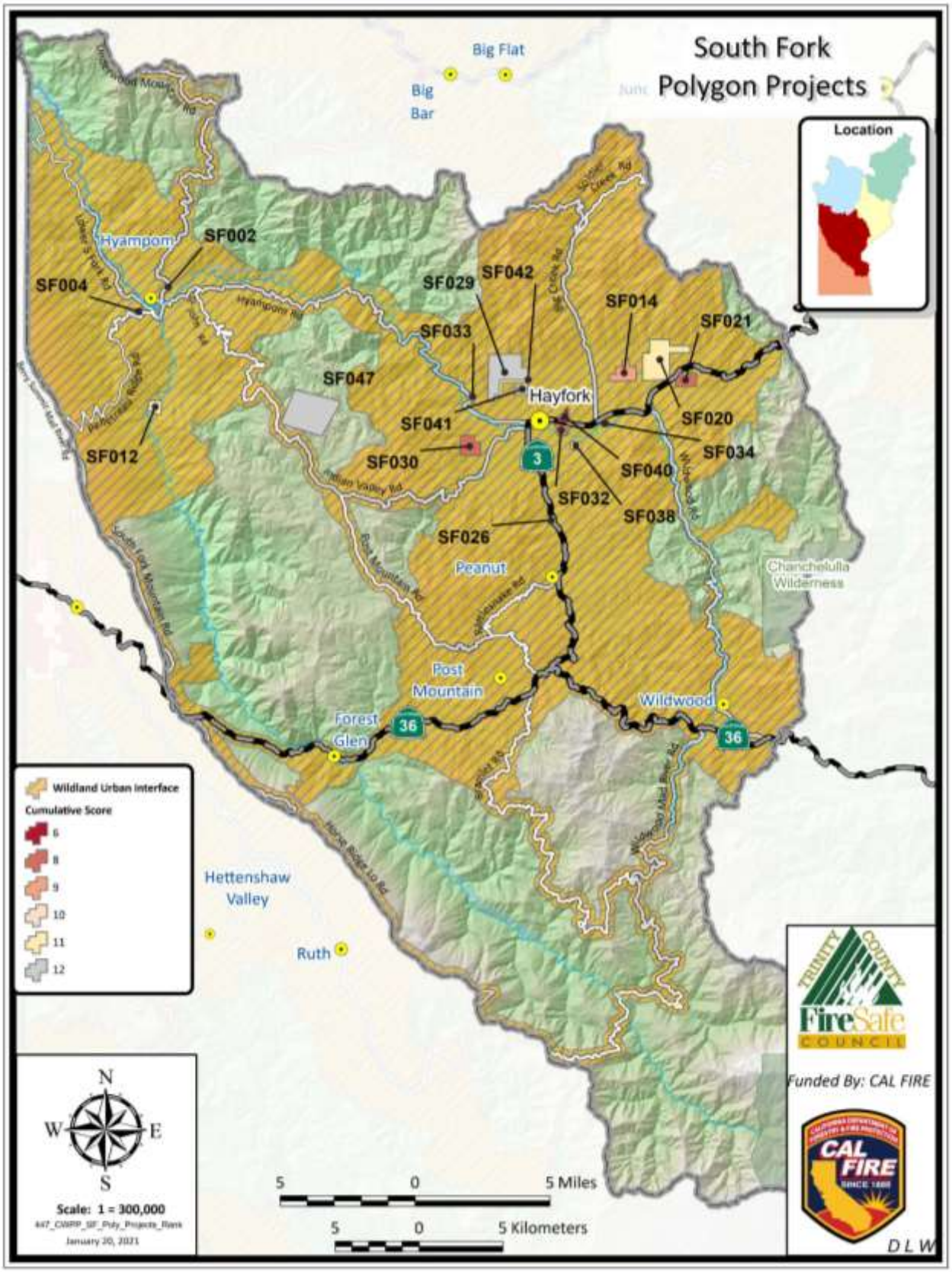
SOUTH FORK


South Fork
Linear Projects
Location
DR010A
Big Flat
Big
Bar
MT022
SF018
SF009
Hyampom
SF005
SF007
SF016
SF039
SF044
SF015
SF010
SF008
SF027
Hayfork
SF017
SF019
SF048
SF037
SF025
SF003
SF031
SF035
SC031
SF028
SF023
Peanut
Chanchelulla
Wilderness
SF011
SF022
SF024
Post
Mountain
Wildwood
Forest
Glen
36
Wildland Urban Interface
Cumulative Score
8
10
11
12
13
14
15
16
18
Hettenshaw
Valley
Ruth
Trinity County
Fire Safe
Council
Funded By: CAL FIRE
CAL FIRE
N
W
E
S
Scale: 1 = 300,000
5 0 5 Miles
5 0 5 Kilometers
DLW

Rank	Project ID	ID Name	Project Type	Community	WUI Score	Fire History	IP	WHP	IE	PC	Cumulative Score	Public Score
1	SF008	CO 311 / Lower S Fork Rd.	Roadside Shaded Fuelbreak	Hyampom	1	1	1	1	3	1	**8**	0
1	SF019	SR3	Roadside Shaded Fuelbreak	Multiple	1	1	1	1	3	1	**8**	11
1	SF015	300 ft ridgetop fuel break	Ridgetop Shaded Fuelbreak	Hayfork	1	1	4	1		1	**8**	0
4	SF005	Corral Bottom Rd	Escape Route	Multiple	1	3	1	1	3	1	**10**	0
4	SF022	SR3	Roadside Shaded Fuelbreak	Multiple	1	1	3	1	3	1	**10**	6
4	SF027	Highland Dr	Roadside Shaded Fuelbreak	Hayfork	1	1	1	5	1	1	**10**	0
4	SF044	N Meadow/ Sunshine Meadow	Road Work	Hayfork	1	1	1	3	3	1	**10**	0
8	SF037	Brady Rd	Roadside Shaded Fuelbreak	Hayfork	1	1	2	5	1	1	**11**	0
8	SC031	Hastings Tie Rd	Roadside Shaded Fuelbreak	Mad River	1	1	1	2	3	3	**11**	12
10	SF007	CO 301 / Hyampom Rd.	Roadside Shaded Fuelbreak	Multiple	1	1	1	2	4	3	**12**	0
10	SF025	Wildwood Rd	Roadside Shaded Fuelbreak	Mulitple	1	4	2	3	1	1	**12**	0
12	SF011	02N10 / Indian Valley Rd.	Roadside Shaded Fuelbreak	Post Mountain	1	1	4	2	2	3	**13**	0
12	SF016	Baker Valley Rd	Roadside Fuelbreak	Hayfork	1	1	3	3	2	3	**13**	13
12	SF017	SR 3	Roadside Shaded Fuelbreak	Mulitple	1	4	1	3	3	1	**13**	1
12	SF018	Baker Creek Rd	Roadside Shaded Fuelbreak	Hayfork	1	1	4	3	1	3	**13**	4
12	SF024	Rattlesnake Rd	Roadside Shaded Fuelbreak	Peanut	1	1	4	1	3	3	**13**	2
12	SF031	McAlexander Rd	Roadside Shaded Fuelbreak	Hayfork	1	1	4	3	3	1	**13**	12

South Fork Linear Projects

Rank	Project ID	ID Name	Project Type	Community	WUI Score	Fire History	IP	WHP	IE	PC	Cumulative Score	Public Score
12	SF039	North Vista Ln	Roadside Shaded Fuelbreak	Hayfork	1	1	4	3	3	1	**13**	0
19	SF010	Pelletreau Ridge Rd. / South Fork Mountain Rd.	Escape Route	Hyampom	1	5	3	1	3	1	**14**	0
19	SF028	SR3	Roadside Shaded Fuelbreak	Hayfork	1	5	1	3	3	1	**14**	2
19	SF035	Morgan Hill Rd	Fuel Reduction	Hayfork	1	4	3	2	3	1	**14**	0
19	MT022	Soldier Creek Rd	Escape Route	Junction City	1	2	4	1	3	3	**14**	0
23	SF003	St. John Rd	Roadside Fuelbreak	Hyampom	1	1	3	4	3	3	**15**	0
23	SF048	Limedyke Lo Rd.	Roadside Shaded Fuelbreak	Hyampom	1	1	4	3	5	1	**15**	0
25	SF023	USFS 30N61	Ridgetop Shaded Fuelbreak	Peanut	1	5	4	2	3	1	**16**	3
26	SF009	03N14 / Kerlin Creek Rd.	Escape Route	Hyampom	1	5	5	1	3	3	**18**	0
26	DR010A	Underwood Mountain Rd	Escape Route	Multiple	1	5	5	1	5	1	**18**	0

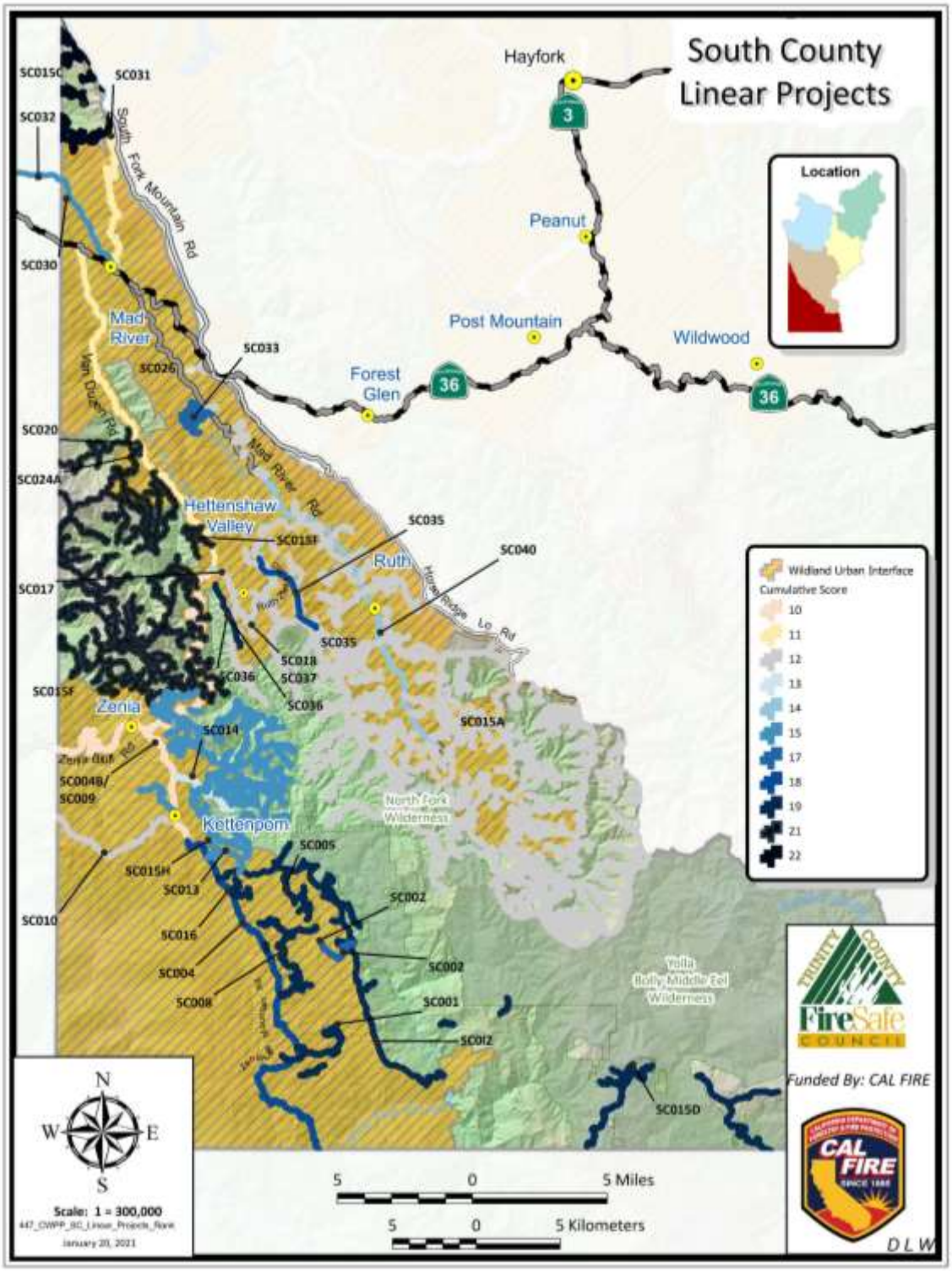

South Fork
Polygon Projects
Location
Big Flat
Big Bar
Hyampom
SF002
SF004
SF029
SF042
SF014
SF021
SF033
SF047
Hayfork
SF041
SF020
SF012
SF030
SF034
SF040
SF032
SF038
SF026
Peanut
Chanchelulla Wilderness
Post Mountain
Wildwood
Forest Glen
36
3
Wildland Urban Interface
Cumulative Score
6
8
9
10
11
12
Hettenshaw Valley
Ruth
N
W
E
S
Scale: 1 = 300,000
January 20, 2021
5 0 5 Miles
5 0 5 Kilometers
Trinity County FireSafe Council
Funded By: CAL FIRE
CAL FIRE
D L W

South Fork Polygon Projects

Rank	Project ID	ID Name	Project Type	Community	WUI Score	Fire History	IP	WHP	PC	Cumulative Score	Public Score
1	SF040	Reservoir Rd	Defensible Space	Hayfork	1	1	2	1	1	**7**	0
2	SF004	Pvt rd off USFS 03N10	Landscape Thinning	Hyampom	1	1	4	1	1	**8**	0
2	SF021	Summit Creek Rd	Defensible Space	Hayfork	1	1	2	3	1	**8**	0
2	SF030	McAlexander Rd / Shangri La Ln	Defensible Space	Hayfork	1	1	2	3	1	**8**	12
2	SF032	Hayfork High School	Landscape Thinning	Hayfork	1	1	1	4	1	**8**	0
6	SF014	BLM in Duncan Gulch	Landscape Thinning	Hayfork	1	1	3	3	1	**9**	3
7	SF002	Corral Bottom	Landscape Thinning	Hyampom	1	1	3	4	1	**10**	0
7	SF026	Duncan Ranch R	Prescribed Burn	Hayfork	1	3	1	2	3	**10**	5
9	SF012	St. Johns Rd	Landscape Thinning	Hyampom	1	4	4	1	1	**11**	0
9	SF020	Baker Creek Private Timber	Landscape Thinning	Hayfork	1	1	3	3	3	**11**	18
9	SF038	Mogran Hill Rd	Defensible Space	Hayfork	1	1	3	2	4	**11**	0
9	SF042	USFS near Cedar Gulch Rd	Shaded Fuelbreak	Hayfork	1	1	4	2	3	**11**	4
13	SF029	USFS Cedar Gulch	Landscape Thinning	Hayfork	1	2	4	2	3	**12**	0
13	SF041	Bean Gulch Rd	Defensible Space	Hayfork	1	1	4	3	3	**12**	9
13	SF047	Oak Ridge Rd	Landscape Thinning	Hayfork	5	3	1	2	1	**12**	0
16	SF033	Fox Ln And Cooperative Wy	Defensible Space	Hayfork	1	1	2	2	3	**13**	0
16	SF034	Connect Morgan Hill Rd to East Rd	Escape Route	Hayfork	1	1	4	3	1	**13**	3

SOUTH COUNTY

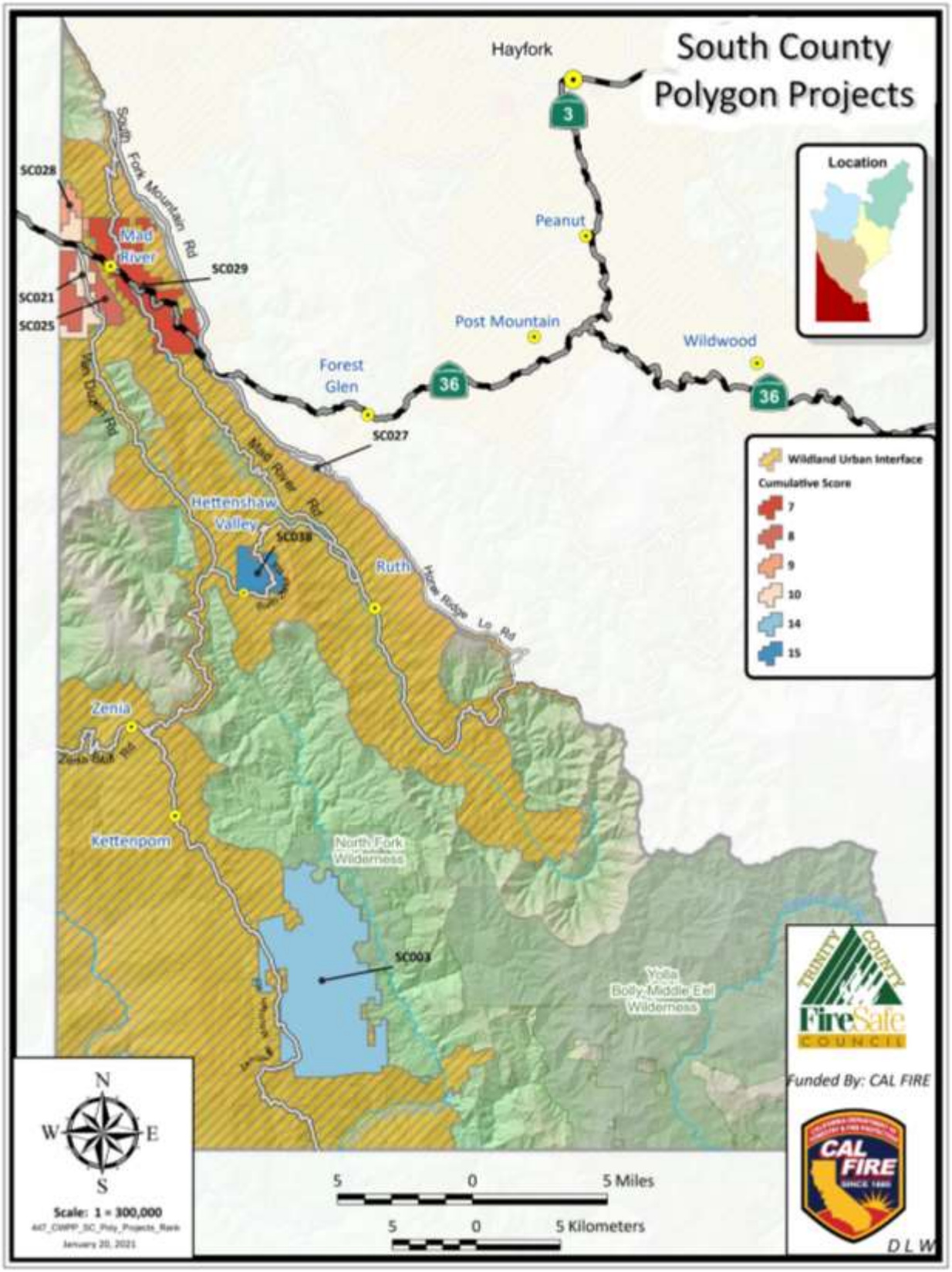
Projects for the South County area were developed in 2019 and have not reflected changes in community input since the 2020 August Complex Fire. The August Complex was factored in to the fire history ranking system.



Rank	Project ID	ID Name	Project Type	Community	WUI Score	Fire History	IP	WHP	IE	PC	Cumulative Score	Public Score
1	SC004A	Ruth-Zenia to Zenia-Lake Mountain Rd	Roadside Fuelbreak	Kettenpom	1	1	1	1	5	1	**10**	8
2	SC020	Van Duzen Rd	Roadside Fuelbreak	Hettenshaw Valley	1	1	4	3	1	1	**11**	6
2	SC031	Hastings Tie Rd	Roadside Shaded Fuelbreak	Mad River	1	1	1	2	3	3	**11**	12
4	SC010	Peak Rd to Alder Point Bridge	Escape Route	Kettenpom	1	1	2	4	3	1	**12**	1
4	SC015A	SC01 USFS Fuels reduction	Roadside Fuelbreak	Ruth	2	3	1	2	3	1	**12**	0
4	SC016	Zenia Lake Mountain Rd to Covelo	Ridgetop Shaded Fuelbreak	Kettenpom	1	1	1	3	5	1	**12**	4
4	SC017	502 to Hettenshaw Valley	Roadside Shaded Fuelbreak	Hettenshaw Valley	1	1	1	3	5	1	**12**	0
4	SC018	515 East & West	Roadside Shaded Fuelbreak	Hettenshaw Valley	1	1	1	3	5	1	**12**	0
9	SC014	Bluff Creek Rd	Roadside Shaded Fuelbreak	Kettenpom	1	1	4	3	3	1	**13**	0
9	SC022	SR36 East	Roadside Shaded Fuelbreak	Mad River	1	1	1	4	3	3	**13**	0
9	SC026	Connect USFS 01S40 to 95th St	Escape Route	Mad River	1	1	4	3	3	1	**13**	5
12	SC040	Mad River Rd	Roadside Shaded Fuelbreak	Ruth	1	4	1	2	5	1	**14**	16
13	SC015H	SC01 USFS Fuels reduction	Roadside Fuelbreak	Kettenpom	3	5	1	2	3	1	**15**	0
13	SC023	SR36 West	Roadside Shaded Fuelbreak	Mad River	4	1	1	5	3	1	**15**	18
13	SC030	County Line Creek Rd	Landscape Thinning	Mad River	3	1	4	3	3	1	**15**	14
16	SC002	USFS 04S39	Road Work	Kettenpom	1	5	5	2	3	1	**17**	0
16	SC005	USFS 04S33	Ridgetop Shaded Fuelbreak	Kettenpom	1	5	4	3	3	1	**17**	0
16	SC013	USFS 04S15	Ridgetop Shaded Fuelbreak	Kettenpom	1	5	4	3	3	1	**17**	0

South County Linear Projects

Rank	Project ID	ID Name	Project Type	Community	WUI Score	Fire History	IP	WHP	IE	PC	Cumulative Score	Public Score
16	SC033	Hale Creek Road network	Roadside Shaded Fuelbreak	Mad River	1	5	4	3	3	1	**17**	0
20	SC001A	USFS 05S32	Roadside Shaded Fuelbreak	Kettenpom	1	5	5	3	3	1	**18**	0
20	SC004	Zenia - Lake Mountain Rd	Roadside Fuelbreak	Kettenpom	1	4	4	5	3	1	**18**	0
20	SC008	USFS 05S30	Roadside Shaded Fuelbreak	Kettenpom	1	5	5	3	3	1	**18**	4
20	SC035	Mad River Ridge	Roadside Fuelbreak	Hettenshaw Valley	1	5	5	2	3	2	**18**	13
24	SC001	USFS 05S32	Road Work	Kettenpom	1	5	5	4	3	1	**19**	15
24	SC012	Long Ridge Rd	Ridgetop Shaded Fuelbreak	Kettenpom	1	5	4	3	5	1	**19**	0
24	SC015D	SC01 USFS Fuels reduction	Roadside Fuelbreak	Kettenpom	2	5	5	3	3	1	**19**	0
24	SC032	Connect County Line Creek Rd to Humboldt 01N44	Escape Route	Mad River	5	1	4	5	3	1	**19**	9
24	SC036	USFS Ridge	Roadside Fuelbreak	Hettenshaw Valley	1	5	4	3	5	1	**19**	4
29	SC015F	SC01 USFS Fuels reduction	Roadside Fuelbreak	Hettenshaw Valley	4	5	4	4	3	1	**21**	0
30	SC015C	SC01 USFS Fuels reduction	Roadside Fuelbreak	Mad River	4	5	5	2	3	3	**22**	0


South County
Polygon Projects
Hayfork
Peanut
Post Mountain
Wildwood
Forest
Glen
Mad
River
Hettenshaw
Valley
Ruth
Zenia
Kettenpom
North Fork
Wilderness
Yolla
Bolly-Middle Eel
Wilderness
SC028
SC029
SC021
SC025
SC027
SC038
SC003
South Fork Mountain Rd
Mad River Rd
Horse Ridge Ln Rd
Zenia Bull Rd
3
36
36
Location
Wildland Urban Interface
Cumulative Score
7
8
9
10
14
15
N
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E
S
Scale: 1 = 300,000
5 0 5 Miles
5 0 5 Kilometers
TRINITY COUNTY
FireSafe
COUNCIL
Funded By: CAL FIRE
CAL FIRE
D L W

South County Polygon Projects

Rank	Project ID	ID Name	Project Type	Community	WUI Score	Fire History	IP	WHP	PC	Cumulative Score	Public Score
1	SC029	Lamb Crk to 94th and to Ruth Dam	Landscape Thinning	Mad River	1	1	1	3	1	**7**	25
2	SC025	USFS near Van Duzen	Landscape Thinning	Mad River	1	1	1	2	3	**8**	5
3	SC028	USFS land County Line Creek Rd	Landscape Thinning	Mad River	1	1	4	2	1	**9**	10
4	SC021	Van Duzen Rd	Defensible Space	Mad River	1	1	1	4	3	**10**	15
5	SC003	USFS land at Long Ridge Rd	Landscape Thinning	Kettenpom	1	5	4	3	1	**14**	15
6	SC027	Picket Peak	Landscape Thinning	Ruth	1	5	4	2	3	**15**	2
6	SC038	502 Logging Slash Fuels	Landscape Thinning	Hettenshaw Valley	1	5	4	4	1	**15**	3

VII. COUNTY-WIDE ISSUES AND RECOMMENDATIONS

The following recommendations made in the 2010 community meetings are relevant to the fire management process throughout the County in 2015 and beyond:

- 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.

- 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. Identifying and publicizing, for each community, safety zones in case of catastrophic fire; and
    c. Coordinating between fire prevention programs or personnel and land management organizations, and local VFDs to address wildfire issues.

- Coordinate with staff on the Mad River and Lower Trinity Ranger District, Six Rivers National Forest on fuels reduction treatments. Projects should take advantage of topographic features, including ridgeline shaded fuelbreaks, especially those with multiple access points.

- Considerable expense has gone into plantations, which have been 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.

- Continue to expand volunteer fire departments' capacities throughout the county.

- Work with volunteer fire departments to increase needed items such as fire protection equipment, community outreach tools, and firefighting water sources (and ensure access).

- 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.

Building upon the recommendations of the *CWPP Update 2010*, the following recommendations were added in 2015:

- Prescribed Fire- controlled burning has become an important tool in Trinity County over the last 5 years.

- General Plan- In November 2014, Trinity County adopted an update to the Safety Element. Wildfire and Structures were addressed in the plan and this CWPP reinforces the Safety Element including the following recommendations:
    - Fire Hazard Planning reviewed and conducted by the Trinity County Fire Safe Council and Trinity County Fire Chiefs' Association.

- Coordinating with CAL FIRE in the development of policies regarding wildfire and review of the CWPP.
- Use of Local Area Advisors as a resource during fire incidents.
- Protecting and maintaining transportation network is critical to public safety.
- Continue to use the national Firewise Program to educate and improve community awareness of what every community can do to make communities more fire adapted.

- Hazard Mitigation Plan- Table 4.2 Trinity County Mitigation Actions of the Hazard Mitigation Plan needs to be implemented. Wildfire specific actions include the following:
  - Centralized GIS mapping of water sources for firefighting, structure location, bridges, and all county infrastructure and services necessary for emergency response.
  - Improve watershed and forest health through actions to reduce illegal water diversions, fire hazards and unsustainable agricultural practices.
  - Identify, develop and secure funding to bring existing repeater sites up to current standards.

- Fire Borrowing- Trinity County should encourage Congress to take two actions. First, Congress must allow the firefighting spending to be scored as an adjustment to discretionary spending caps in bad fire seasons, in keeping with the treatment of other federal disaster response activities, instead of transferring resources from non-fire programs, including timber sale and fuels reduction projects, research and monitoring efforts, recreation and wildlife activities, and trail and visitor facility maintenance. Second, Congress must do this in a way that does not harm the agencies' ability to invest in fuels management and forest and rangeland restoration to make these lands less vulnerable and more resilient to catastrophic wildfire. Both of these actions are consistent with how the nation treats other natural disasters (June 7, 2016 Trinity County Board of Supervisors' letter to U.S. Senator Maria Cantwell).

- Build Local Capacity- There is a need to increase local capacity for integrated forest and wildfire management. Federal and state agencies need to work with local organizations to increase the capacity to reduce hazardous fuels. Examples include:
  - Long-term service contracts with federal and state agencies for fuels reduction that supports the development of a skilled workforce.
  - Contracting rules that allow for the local agencies to participate in wildfire suppression activities without penalizing project work.

- Trinity County Collaborative Group- Support the Trinity County Collaborative Group's (TCCG's) efforts to serve as an inclusive and successful natural resources, land management and economic development advisory group that supports safe and vibrant communities, thriving economies, and ecological resilience, through sustainable resource use and stewardship practices.

The following recommendations were made during the *CWPP 2020 Update*:

- Post Fire Resources – as the size and destruction of wildfires increase across California it is more pertinent than ever to prepare and educate the public about post fire clean-up actions and local government on available resources. Topics of special concern include, but are not limited to, hazard tree removal, water

quality, hazardous waste clean-up, restoration of essential infrastructure, and erosion control. Local entities should continue to develop capacity to support the County's actions on private lands and support agencies' actions on public lands.

- Strategically-placed Landscape Area Treatments – continue to utilize and develop more accurate data sets to predict where shaded fuelbreaks may provide the most effective impact on the landscape to prevent catastrophic wildfires and promote healthy prescribed burning.

- Shortening Burning Windows – continue to demonstrate the value of air curtain burners to extend the burning window and remove fuels from the landscape. Partner with CAL FIRE Shasta-Trinity Unit to bring an air curtain burner for projects in North Lake, Middle Trinity, Down River, and South Fork divisions of Trinity County. Continue partnership with CAL FIRE Humboldt – Del Norte Unit to utilize air curtain burner in the South County division. Explore the opportunities to use air curtain burners in post fire clean-up.

- Increase Pace and Scale – support increasing pace and scale of fuel treatments throughout the County through multiagency and multijurisdictional projects. Increase education efforts to promote the use of prescribed fire throughout Trinity County as an effective tool in managing the landscape. Land managers should educate landowners on the benefits of the smoke and risks associated with prescribed fire in contrast to wildfire.

- Maintenance – continue to educate landowners on the importance of maintaining fuel reduction projects to extend the lifetime of the benefits. Work to develop funding for FSC Coordinator to work one-on-one with neighborhoods to develop safety zones and fuel reduction plans. Continue to seek funding and opportunities to revisit project areas to maintain and expand the treated area.

- Forest Health Management – continue to utilize the most current scientific research to develop projects and drive land management decisions. Support the development of holistic projects addressing both watershed and forest health issues in a changing climate to encourage water storage and forest resilience.

ONGOING EXTERNAL EFFORTS

Hyampom Fire Safe Council has partnered with the Shasta-Trinity National Forest to develop the Hyampom Fire Resilience Project.

Trinity County Fire Safe Council supports the Hyampom Fire Safe Council in their efforts to develop fuel reduction projects with the Shasta-Trinity National Forest.

Trinity Public Utilities District is proposing to expand their power line right of ways to 130 feet.

Trinity County is going through a General Plan Update.

Trinity County Collaborative Group

Data for project treatments can be found within the CWPP online portal or www.tcrcd.net/fsc/.

VIII. 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 Fire Chiefs' Association, the Trinity County Board of Supervisors and CAL FIRE. This is a living document and will be updated to incorporate new strategies and policies addressing the development of fire safe landscapes.

Over the last 5 years California has continually been victim to increasing severity of wildfires in burn severity, rate of spread, acres burned, and property destroyed. The wildfire fire season is approximately one month longer than fire seasons in the 1990s due to changing climates producing drought and high wind conditions. The USFS, BLM, CAL FIRE, and local entities such as the TCRCD and WRTC have worked to increase pace and scale of the fuel reduction treatments in Trinity County. It is time for similar efforts on the neighborhood scale to increase pace and scale of individuals creating and maintaining fire adapted communities.

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 future updates to the County's General Plan. 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 and California Environmental Quality Act (CEQA) Environmental Compliance 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.

This CWPP update also will help inform and the Trinity County Collaborative Group as it continues its landscape-scale efforts to increase the pace and scale of work being done on forested lands. In support the mission of the TCCG, to create and recommend for implementation, natural resources, land management and economic development strategies driven by local values and goals that:

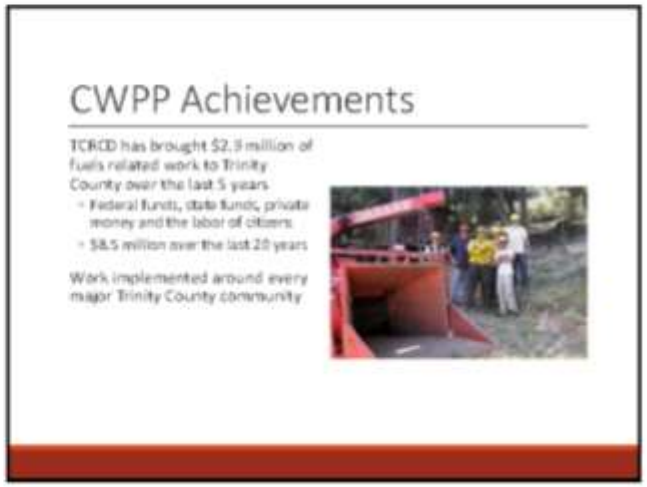
- acknowledge the interrelation between community, economy, and ecology,
- provide solutions for sustainable and resilient economic and ecological practices and projects,
- foster a culture of stewardship,
- improve our community, economy, and ecology, and
- create a better place for future generations.


Wildfire Protection
2019 Community Meetings
In Trinity County
Your help is needed to identify fuel reduction projects and critical community infrastructure!
Big Bar/Del Loma/Big Flat Oct. 12 6:00 pm Volunteer Fire Hall
Hawkins Bar Oct. 14 5:30pm Volunteer Fire Hall
Salyer Oct. 15 6:30pm Volunteer Fire Hall
Burnt Ranch Oct. 16 5:30pm Burnt Ranch School
Trinity Center Oct. 17 6:00pm IOOF Hall
Zenia/Kettenpom Oct. 22 4:00pm Volunteer Fire Hall
Mad River Oct. 24 6:00pm Community Hall
Douglas City Nov. 6 6:30pm Volunteer Fire Hall
Lewiston Nov. 7 3:30pm Volunteer Fire Hall
Junction City Dec. 3 6:00pm North Fork Grange
Hayfork Dec. 9 6:00pm TC Fairgrounds
Weaverville Dec. 10 6:00pm Volunteer Fire Hall
The Trinity County Resource Conservation District and Fire Safe Council are updating the Community Wildfire Protection Plan which identifies and prioritizes hazardous fuel reduction projects throughout Trinity County.
CAL FIRE
Fire Safe Council
FIREWISE
Trinity County Resource Conservation District
For more information contact Amelia
info@tcrcd.net or (530)623-6004 ext 4
This project is funded by CAL FIRE.


Trinity County
Community Wildfire Protection Plan
2020 Update
Lewiston
AMELIA FLEITZ & CHARLIE HOLTHAUS
530-623-6004
AFLEITZ@TCRCD.NET
CHOLTHAUS@TCRCD.NET
THIS PROJECT IS FUNDED BY CAL FIRE
CAL FIRE


Trinity County
Fire Protection Planning
• Trinity County Fire Safe Council
• History and Purpose - Trinity County has been a leader in community wildfire protection planning.
• Revision process a grant from CAL FIRE
Fire Safe Council
FIREWISE


Trinity County
Fire Safe Council
Seeks to improve cooperation and coordination in all aspects of wildfire management in Trinity County.
Meet every fourth Thursday at 1pm of each month at Trinity County RCD Conference Room
Next meeting – December 12 at 1pm
Trinity County
FIRE SAFE COUNCIL


CWPP Achievements
TCRCD has brought $2.3 million of fuels related work to Trinity County over the last 5 years
- Federal funds, state funds, private money and the labor of citizens
- $8.5 million over the last 20 years
Work implemented around every major Trinity County community

Community Wildfire Protection Plan Process

1. Community Meetings
2. Prioritization Process and Mapping
3. Write the CWPP
4. Review
5. Finalize

How prepared is your community for a wildfire?

1. DO YOU HAVE FUEL BREAKS AROUND THE COMMUNITY?
2. DO THE MAJORITY OF THE PROPERTIES MEET STATE CLEARANCE REGULATIONS?
3. DO YOU HAVE AN ALERT PLAN THAT DOES NOT NEED POWER?

Community Wildfire Protection Projects

Overview of meeting process

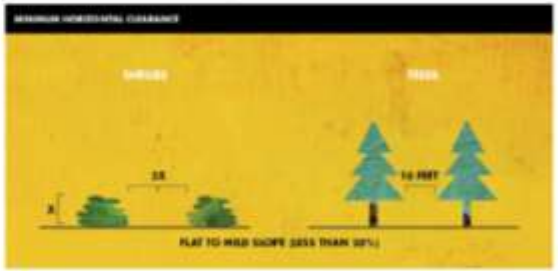
- Mapping project priorities
- Identifying new assets at risk

Types of projects that accomplish community protection objectives

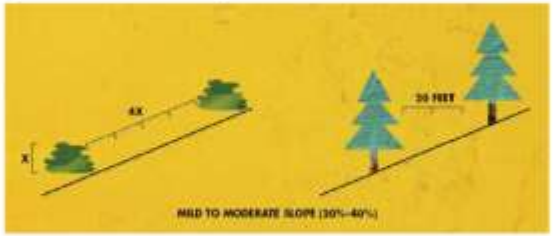
- Defensible space – home ignition zone
- Shaded fuelbreaks – roads and ridges
- Strategic landscape thinning
- Prescribed fire
- Maintenance of fuels reduction treatments

Photo: 2015 CWPP Update Mapping Exercise

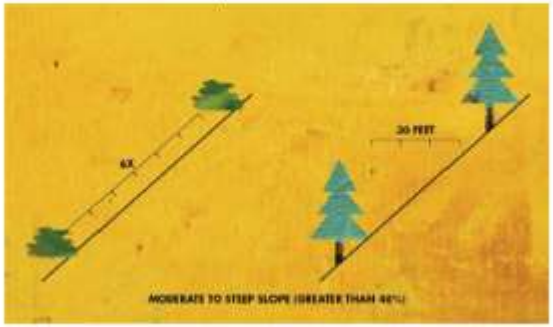
Defensible Space



Defensible Space



Defensible Space



Defensible space

Shaded Fuelbreaks

BEFORE

AFTER

Strategic Landscape Thinning

BEFORE

AFTER

Prescribed burning

Maintenance

Rate your community from 1-5 for wildfire preparedness.

1 LEAST PREPARED

5 MOST PREPARED

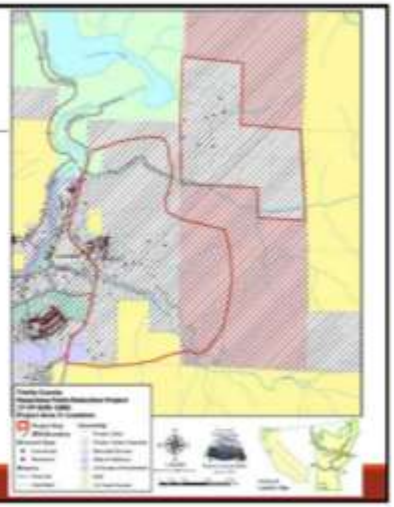
County Wide TCRCD Chipping

POOR STACKING

GOOD STACKING

Stacks may be no more than 4 feet high. Try to make them 4 feet wide and about 8 feet long. Ideally, stacks should be approximately 4x4x8.

Upcoming



Upcoming –

Fire Related Information

Resources available
- Maps
- Fire Preparedness Brochures

Online Resources
- Fire.ca.gov
- Readyforwildfire.org
- Tcrcd.net/fsc/
- www.nfpa.org

Evening Stations Activity

1. **Neighborhood Groups**
2. **You will travel around to the stations.**
   - Mapping future fuel reduction projects.
   - Mapping new water sources and values at risk.
   - Enrollment in CodeRED and emergency preparedness.
   - Local preparedness discussions with local VFD.
3. **At the end, each participant will vote on the top 5 fuel reduction projects in order of importance established at this meeting.**

Thank you! Questions?

Trinity County Community Wildfire Protection Plan 2020 Update Survey

16 responses

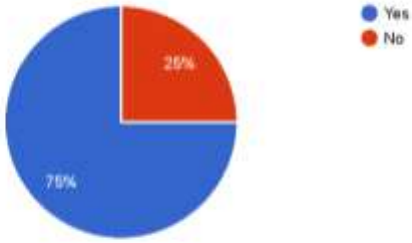
Publish analytics

Provide your email address if you would like to stay informed about the Trinity County Community Wildfire Protection Plan 2020 Update and/or the Trinity County Fire Safe Council.

The responses to the question above are not included to preserve the privacy of our participants.

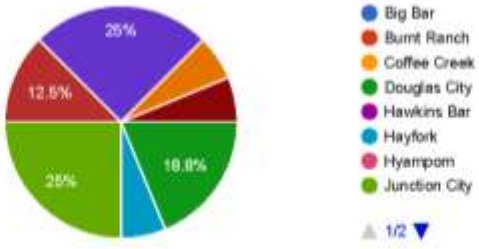
Did you attend a Trinity County Community Wildfire Protection Plan meeting in the fall of 2019?

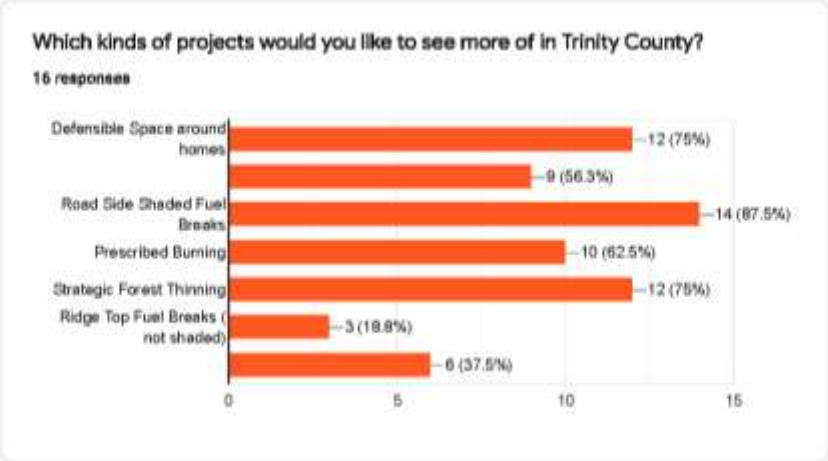
16 responses

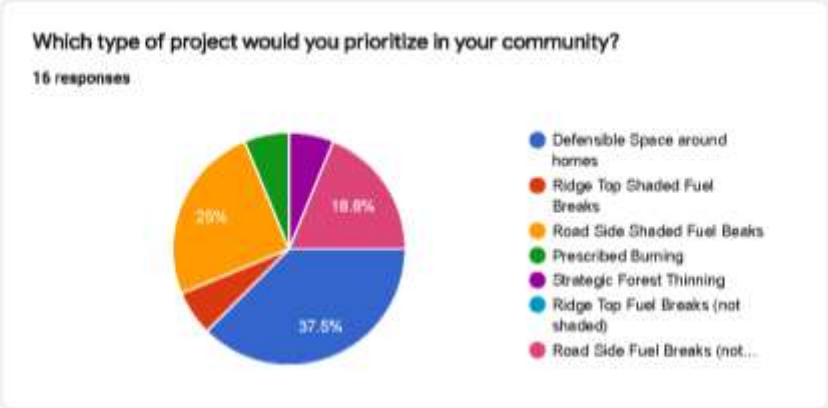


Which community do you live in?

16 responses




Which kinds of projects would you like to see more of in Trinity County?
16 responses
Defensible Space around homes
12 (75%)
9 (56.3%)
Road Side Shaded Fuel Breaks
14 (87.5%)
Prescribed Burning
10 (62.5%)
Strategic Forest Thinning
12 (75%)
Ridge Top Fuel Breaks (not shaded)
3 (18.8%)
6 (37.5%)
0
5
10
15


Which type of project would you prioritize in your community?
16 responses
18.8%
25%
37.5%
Defensible Space around homes
Ridge Top Shaded Fuel Breaks
Road Side Shaded Fuel Beaks
Prescribed Burning
Strategic Forest Thinning
Ridge Top Fuel Breaks (not shaded)
Road Side Fuel Breaks (not...

Are there any projects that should be included in the 2020 Community Wildfire Protection Plan that are not currently?

7 responses

Weaverville defensible space, around the community and homes.

Little Browns Creek Roadside thinning on both public and private portions. BLM has made a good start. Also, the ridge top between Wvl. and Little Browns Creek; SPI has made a good start of a fuel break there. The 160 acre State of Calif. parcel needs to be dealt with. That is the direction fire will come from to our neighborhood.

The Post Mountain area desperately needs fire hazard mitigation in and around the community.

Clear fuels both sides of Poker Bar Rd to create fire safe egress route and fire break

Rush Creek roadside brush & forest clearing

I thought Lewiston had a plan but I did not see it?

1 1/4 mi up Canyon Creek Rd (from Hwy 299) an area burned in 2017 -Helena fire dead tree removal. This is just before Powerhouse Road. Total of 3/4 mi of dead trees


Trinity County
Community Wildfire Protection Plan
2020 Update
Projects Mapped and Priority
Amelia Fleitz
530-623-6004 x 208
afleitz@tcrcd.net
This project is funded by CAL FIRE


Trinity County
Fire Protection Planning
• Trinity County Fire Safe Council
• History and Purpose - Trinity County has been a leader in community wildfire protection planning.
• Revision process a grant from CAL FIRE
FIREWISE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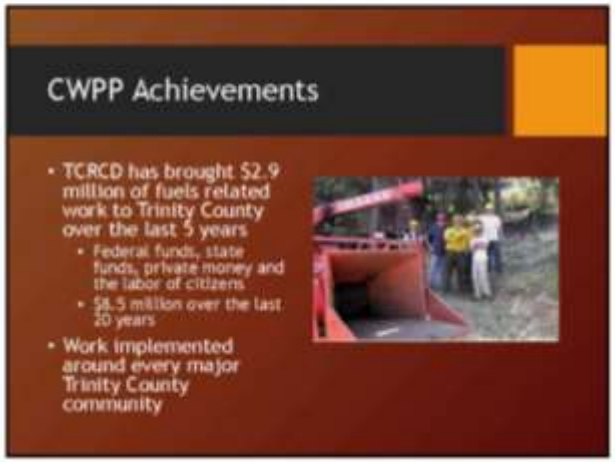
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- Overview of meeting process
  - Mapping project priorities
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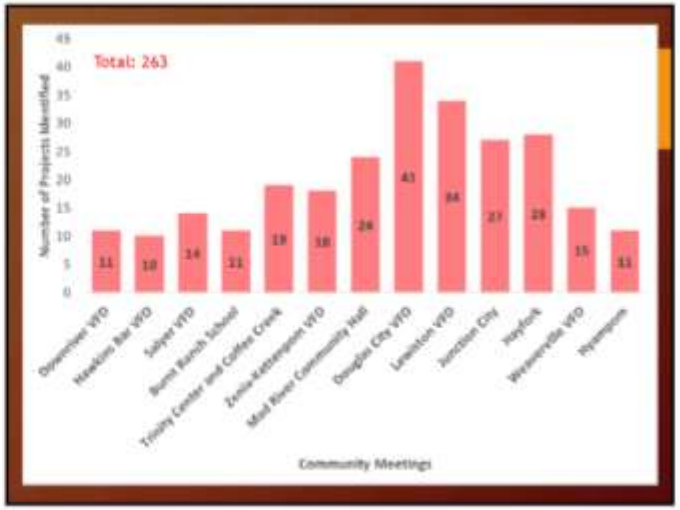
- Types of projects that accomplish community protection objectives
  - Defensible space – home ignition zone
  - Shaded fuelbreaks – roads and ridges
  - Strategic landscape thinning
  - Prescribed fire
  - Maintenance of fuels reduction treatments

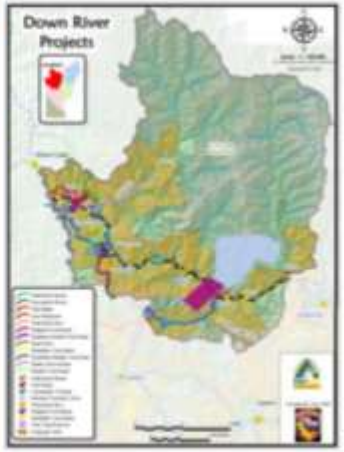
Photo: 2015 CWPP Update Mapping Exercise

In Person Mapping

Community Maps



Down River



Down River

Project ID	ID Name	Project Type	WUI Proximity	Infrastructure Proximity	Fire History	Wildfire Hazard Potential	Ingress / Egress	Score Totals	Priority Rank
DR047	South Fork Rd	Roadside Shaded Fuel Break	1	1	1	1	1	5	1
DR012	Pattison Ranch Rd	Ridgetop Shaded Fuel Break	1	1	1	2	1	6	2
DR006	Friedrich Rd	Ridgetop Shaded Fuel Break	1	2	1	1	3	8	3
DR008	Hennessey Rd Evac Rt	Ridgetop Shaded Fuel Break	1	2	1	1	3	8	3
DR021	Denny Rd Fuel break/bridge to Coon Creek Rd	Roadside Shaded Fuel Break	1	2	1	2	2	8	3
DR022	SuzyQ Rd	Roadside Fuel Break	1	1	1	2	3	8	3
DR027	Ammon Rd	Roadside Shaded Fuel Break	1	1	1	2	3	8	3
DR050	Oden Flat Area	Roadside Shaded Fuel Break	1	1	1	2	3	8	3
DR052	Peach Tree to Sharp Creek	Evacuation Route	1	2	1	1	3	8	3

Down River

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DR052	Peach Tree to Sharp Creek	Evacuation Route	1	2	1	1	3	8	3

WUI

Wildland Urban Interface

WUI Proximity

WUI Proximity:

Projects were analyzed and given points ranging from 1 to 5 depending on their relative position & proximity.

1: > 75% in WUI
2: 51- 75% in WUI
3: 26- 50% in WUI
4: 1- 24% in WUI
5: Out of WUI

Down River

Project ID	ID Name	Project Type	WUI Proximity	Infrastructure Proximity	Fire History	Wildfire Hazard Potential	Ingress / Egress	Score Totals	Priority Rank
0047	South Fork Rd	Roadside Shaded Fuel Break	1	1	1	1	1	5	1
0012	Pattison Ranch Rd	Ridgetop Shaded Fuel Break	1	1	1	2	1	6	2
0006	Friedrich Rd	Ridgetop Shaded Fuel Break	1	2	1	1	3	8	3
0008	Hennessey Rd Evac Rt	Ridgetop Shaded Fuel Break	1	2	1	1	3	8	3
0021	Denny Rd Fuel break/bridge to Coon Creek Rd	Roadside Shaded Fuel Break	1	2	1	2	2	8	3
0022	SuzyQ Rd	Roadside Fuel Break	1	1	1	2	3	8	3
0027	Ammon Rd	Roadside Shaded Fuel Break	1	1	1	2	3	8	3
0050	Oden Flat Area	Roadside Shaded Fuel Break	1	1	1	2	3	8	3
0052	Peach Tree to Sharp Creek	Evacuation Route	1	2	1	1	3	8	3

Infrastructure Proximity

Proximity to infrastructure was ranked as follows:
1. >75% within 100' of buffer
2. >75% within 100-500' of buffer
3. >75% within 1000' of buffer
4. >75% within 1 mile of buffer
5. >1 mile

Infrastructure include: airports, ambulances. bridges, cell towers. clean air facilities, community centers, electrical substations, gas pipeline, guard stations, fire station, health clinic, helicopter pads, hospital, law enforcement, police stations, post office, power lines, public buildings, safety zones, schools, senior centers

Additions: national and state historic infrastructure, water district infrastructure and gas stations and stores

Down River

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0050	Oden Flat Area	Roadside Shaded Fuel Break	1	1	1	2	3	8	3
0052	Peach Tree to Sharp Creek	Evacuation Route	1	2	1	1	3	8	3

Fire History

1. Prior to 2000 or no history
2. 2000-2004
3. 2005-2009
4. 2010-2014
5. 2015-2020

Down River

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DR052	Peach Tree to Sharp Creek	Evacuation Route	1	2	1	1	3	8	3

Wildfire Hazard Potential

Down River

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DR050	Oden Flat Area	Roadside Shaded Fuel Break	1	1	1	2	3	8	3
DR052	Peach Tree to Sharp Creek	Evacuation Route	1	2	1	1	3	8	3

Ingress/Egress

Factors that went into the Cal Fire ranking include:
Fuel Rating Flame Length
Slope Class
Road Position on Slope
Length of Road
Residences
Access
Road Rating
Road Speed

Converted to a five point scale for roads that need to addressed first with a score of 1 and roads to be delay 2-5.

Down River

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DR052	Peach Tree to Sharp Creek	Evacuation Route	1	2	1	1	3	8	3

Past Project History

Original Proposal:

1. No recent history of treatment
3. Treatment within the last 5 years
5. Treatment over 5 years ago

New Proposal:

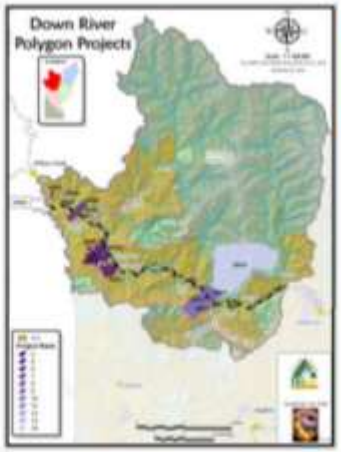
1. Within ¼ mile of a project completed within the last 5 years or is in a new project area (does not fitting in any other the other categories)
2. Within ½ mile of a project completed within the last 5 years
3. Within ¼ mile of a project completed over 5 years ago
4. Within ½ mile of a project completed over 5 years ago

Down River

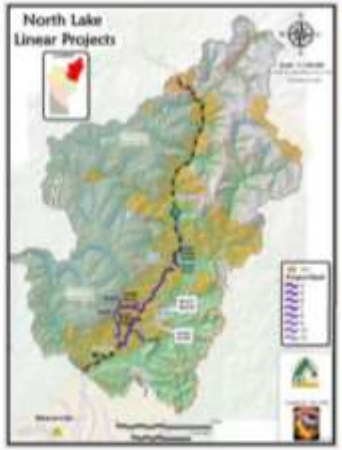
Down River

Project ID	ID Name	Type	Project Type	WUI Proximity	Infrastructure Proximity	Fire History	Wildfire Hazard Potential	Score Total	Priority Rank
DR007	USFS around Burnt Ranch		Prescribed Burn	1	1	1	1	4	1
DR002	Hennessey to 299	Fuel Break	Roadside Shaded Fuel Break	1	2	1	1	5	2
DR011	Private Land in core of Burnt Ranch		Defensible Space	1	1	1	2	5	2
DR013	Pattison Ranch Rd Community		Defensible Space	1	1	1	2	5	2
DR029	Trinity Village Undeveloped lots		Tree / Veg removal	1	1	1	2	5	2
DR042	Salyer Community border	Fuel Break	Fuel Break	1	1	1	2	5	2

Down River



North Lake



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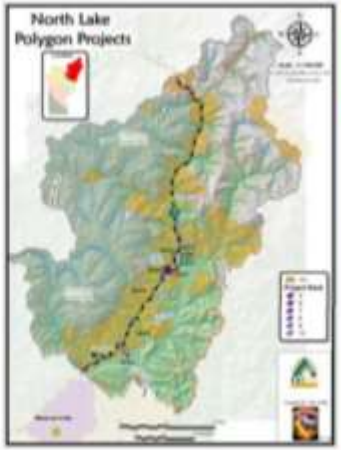
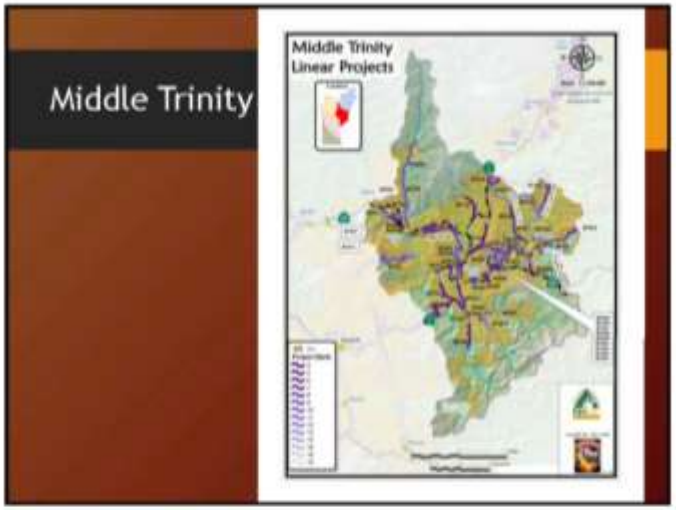
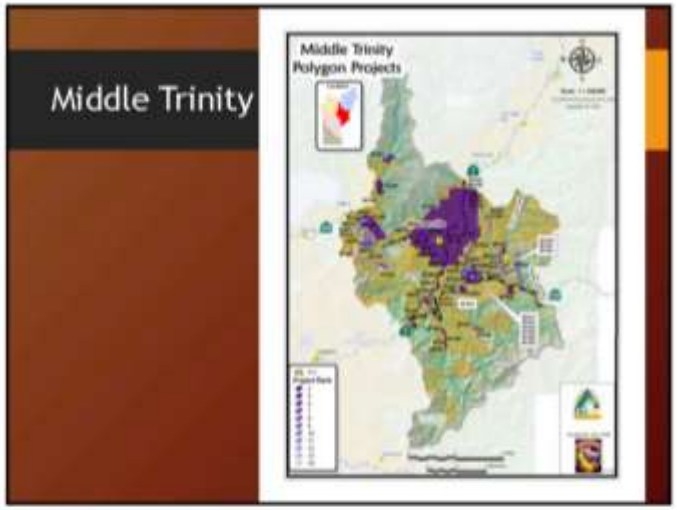
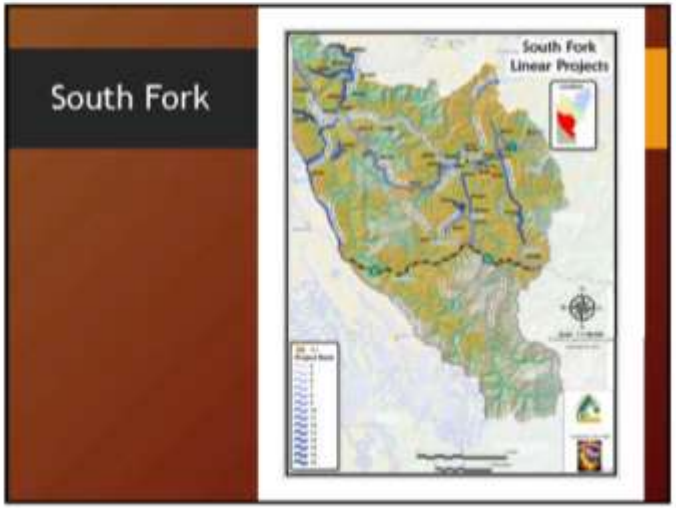
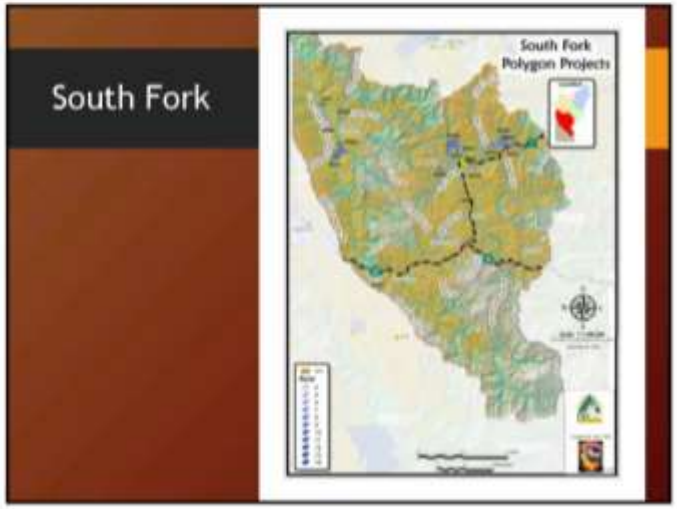



Middle Trinity
Middle Trinity
Linear Projects


Middle Trinity
Middle Trinity
Polygon Projects


South Fork
South Fork
Linear Projects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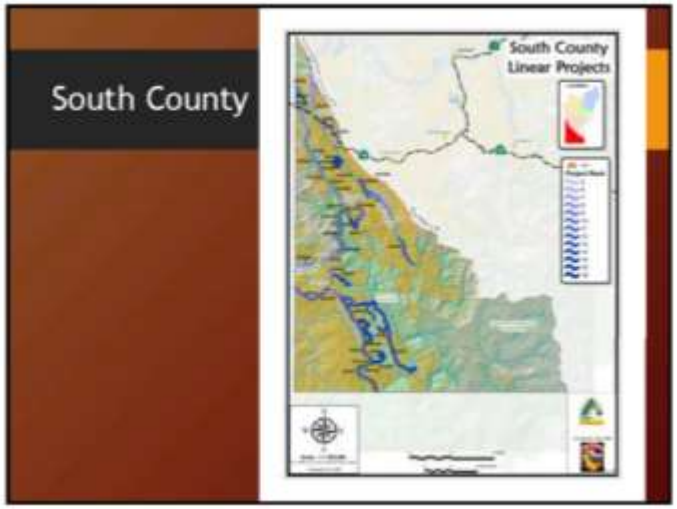
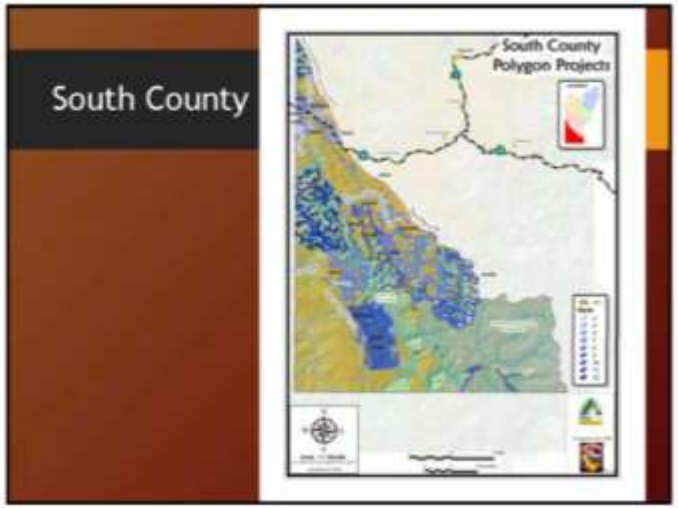




Additional Projects? Comments?

Complete a survey:
https://forms.gle/7CesTWqPazYTTHW37

Email or call Amelia:
afleitz@tcrcd.net
530-623-6004 x 208

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, decks, exterior walls, exterior windows.
- Enclose the underside of eaves, balconies and above ground decks with fire resistant materials
- Show your 100 foot 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 branches, 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 gallons 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

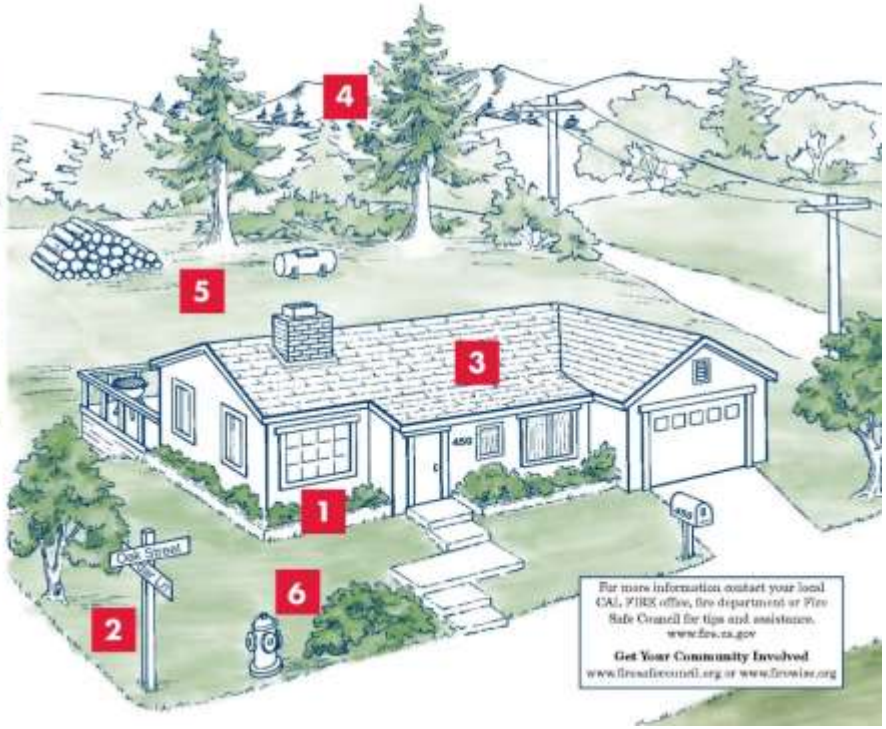
March 2009

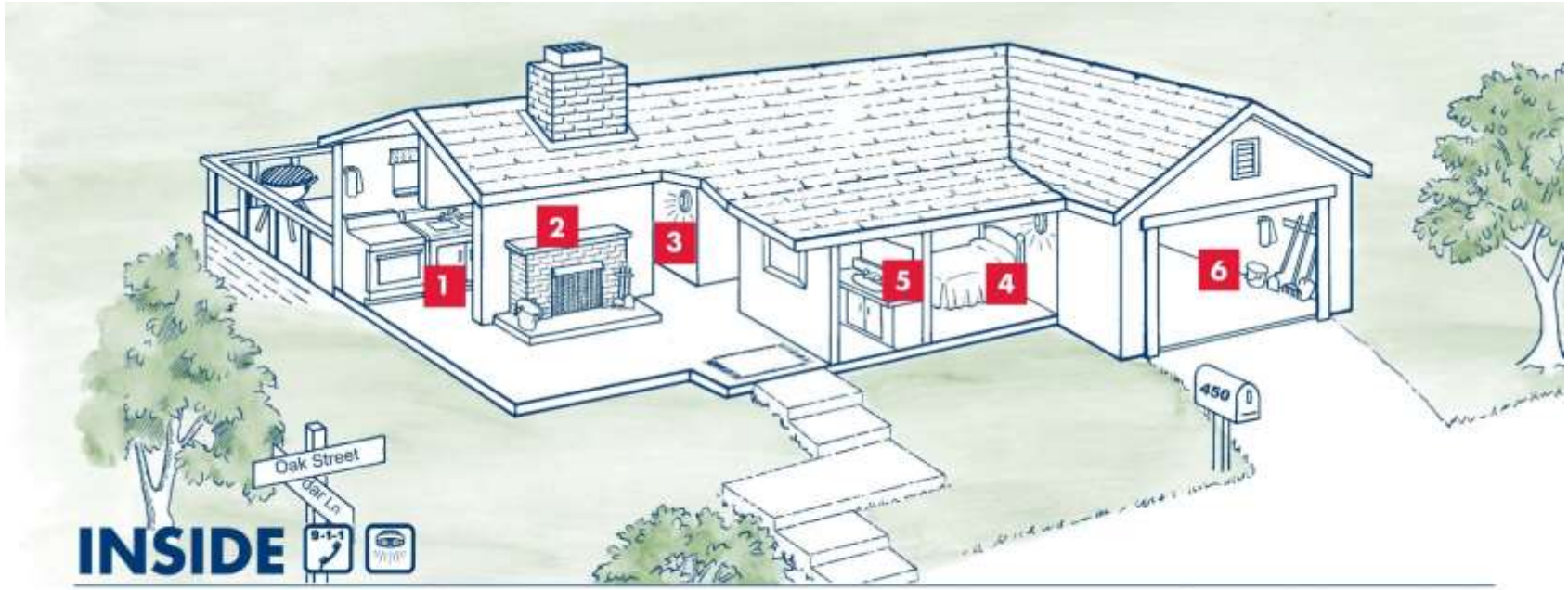
California Department of Forestry and Fire Protection

Homeowners Checklist

www.fire.ca.gov

How To Make Your Home Fire Safe





INSIDE

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 (UL) 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

WILDFIRE IS COMING. ARE YOU...

READY?

DEFENSIBLE SPACE AND HARDENING YOUR HOME.

THOUSANDS OF WILDFIRES STRIKE CALIFORNIA EVERY YEAR. IT'S NOT A MATTER OF IF YOUR HOME IS AT RISK, BUT WHEN.

ReadyForWildfire.org

PLANT AND TREE SPACING

The spacing between grass, shrubs, and trees is crucial to reduce the spread of wildfire. The spacing needed is determined by the type and size of the shrubs and trees, as well as the slope of the land. For example, a property on a steep slope with larger plant life will require greater spacing between trees and shrubs than a level property that has small, sparse vegetation.

VERTICAL SPACING

Remove all tree branches at least 6 feet from the ground.

If shrubs are under trees, additional vertical space is needed. Lack of vertical space can allow a fire to move from the ground to the shrubs to the treetops like a ladder.

FIRE-SAFE LANDSCAPING

Fire-safe landscaping isn't necessarily the same thing as a well-maintained yard. Fire-safe landscaping uses fire-resistant plants that are strategically planted to resist the spread of fire to your home.

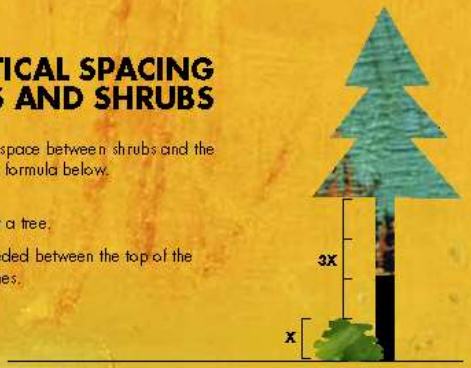
The good news is that you don't need to spend a lot of money to make your landscape fire-safe. And fire-safe landscaping can increase your property value and conserve water while beautifying your home. For more information on fire-safe landscaping, visit: **ReadyForWildfire.org/landscaping**.

MINIMUM VERTICAL SPACING BETWEEN TREES AND SHRUBS

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

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.

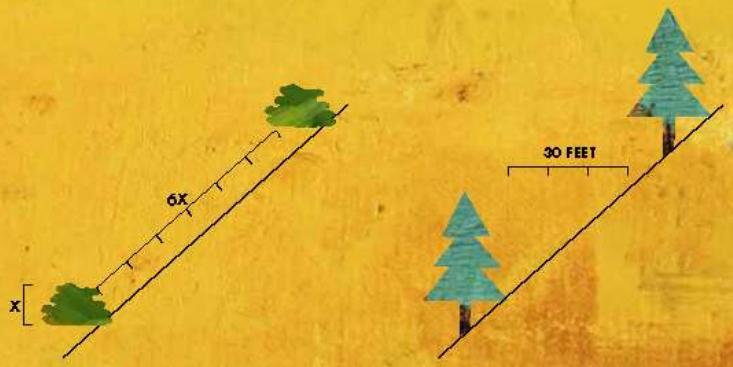


MINIMUM HORIZONTAL SPACING FOR TREES AND SHRUBS

Horizontal spacing depends on the slope of the land and the height of the shrubs or trees. Check the diagrams below to determine spacing distance.

FLAT TO MILD SLOPE (LESS THAN 20%)

MILD TO MODERATE SLOPE (20%–40%)



MODERATE TO STEEP SLOPE (GREATER THAN 40%)

DEFENSIBLE SPACE

Creating and maintaining defensible space is essential for increasing your home's chance of surviving a wildfire. It's the buffer that homeowners are required to create on their property between a structure and the plants, brush and trees or other items surrounding the structure that could catch fire. This space is needed to slow the spread of wildfire and improves the safety of firefighters defending your home.

Two zones make up the required 100 feet of defensible space:

ZONE 1—Extends 30 feet out from buildings, decks, and other structures

1. Remove all dead plants, grass and weeds.
2. Remove dead or dry leaves and pine needles from your yard, roof and rain gutters.
3. Trim trees regularly to keep branches a minimum of 10 feet from other trees.
4. Remove dead branches that hang over your roof. And keep branches 10 feet away from your chimney.
5. Relocate exposed woodpiles outside of Zone 1 unless they are completely covered in a fire resistant material.
6. Remove or prune flammable plants and shrubs near windows.
7. Remove vegetation and items that could catch fire from around and under decks.
8. Create a separation between trees, shrubs and items that could catch fire, such as patio furniture, swing sets, etc.

ZONE 2—Extends 30 to 100 feet from buildings and other structures

9. Cut or mow annual grass down to a maximum height of 4 inches.
10. Create horizontal spacing between shrubs and trees. (See diagram)
11. Create vertical spacing between grass, shrubs and trees. (See diagram)
12. Remove fallen leaves, needles, twigs, bark, cones, and small branches. However, they may be permitted to a depth of 4 inches if erosion control is an issue.

BOTH ZONES—0 to 100 feet from buildings and other structures

13. Mow before 10 a.m., but never when it's windy or excessively dry.
14. Protect water quality. Do not clear vegetation near waterways to bare soil. Vegetation removal can cause soil erosion—especially on steep slopes.

ARE YOU DOING THE RIGHT THING—THE WRONG WAY?

Each year, CAL FIRE responds to hundreds of fires started by Californians using equipment the wrong way. If you live in a wildland area, all equipment must be used with extreme caution.

Lawn mowers, metal-bladed trimmers, chain saws, grinders, welders, and tractors can all start a wildland fire if not used properly. Do your part to keep your community fire-safe.

HERE'S HOW TO DO IT THE RIGHT WAY:

Mowing

Metal blades striking rocks can create sparks and start fires in dry grass. Use caution.

Spark Arresters

In wildland areas, spark arresters are required on all portable, gasoline-powered equipment. This includes tractors, harvesters, chainsaws, weed-trimmers and mowers.

- Keep the exhaust system, spark arresters and mower in proper working order and free of carbon buildup.
- Use the recommended grade of fuel, and don't top it off.


KNOW THE LAW
BE FIRE SMART
100 FEET OF DEFENSIBLE SPACE IS REQUIRED UNDER THE PUBLIC RESOURCES CODE (PRC) 4291. CALIFORNIA BUILDING CODE CHAPTER 7A REQUIRES CERTAIN CONSTRUCTION MATERIALS AND METHODS FOR HOMES IN WILDLAND AREAS. BE SURE TO CONTACT YOUR LOCAL FIRE DEPARTMENT FOR ADDITIONAL REQUIREMENTS TO ENSURE YOUR HOME IS COMPLIANT WITH THE LAW. READYFORWILDFIRE.ORG/THELAW
10 FEET
ZONE 2
100 FEET
30 FEET
ZONE 1
ROAD
NEIGHBORING PROPERTY
1
2
3
4
5
6
7
8
9
10
11
12
13
14

HARDENING YOUR HOME

FLYING EMBERS CAN DESTROY HOMES UP TO A MILE AHEAD OF A WILDFIRE. PREPARE (HARDEN) YOUR HOME NOW BEFORE FIRE STARTS.

SOME THINGS YOU CAN DO TO HARDEN YOUR HOME:

Roof: Your roof is the most vulnerable part of your home. Homes with wood or shingle roofs are at high risk of being destroyed during a wildfire.

Build your roof or reroof with materials such as composition, metal or tile. Block any spaces to prevent embers from entering and starting a fire.

Vents: Vents on homes create openings for flying embers.

- Cover all vent openings with 1/8-inch to 1/4-inch metal mesh. Do not use fiberglass or plastic mesh because they can melt and burn.
- Protect vents in eaves or cornices with baffles to block embers. (Mesh is not enough.)

Eaves and Soffits: Eaves and soffits should be protected with ignition-resistant or non-combustible materials.

Windows: Heat from a wildfire can cause windows to break even before the home ignites. This allows burning embers to enter and start fires inside. Single-paned and large windows are particularly at risk.

- Install dual-paned windows with one pane of tempered glass.
- Consider limiting the size and number of windows that face large areas of vegetation.

Decks: Surfaces within 10 feet of the building should be built with ignition-resistant, non-combustible, or other approved materials.

- Remove all combustible items from underneath your deck.

Exterior Walls: Wood products such as boards, panels or shingles are common siding materials. However, they are combustible and not good choices for fire-prone areas.

- Build or remodel your walls with ignition-resistant building materials, such as stucco, fiber or cement siding, fire-retardant-treated wood, or other approved materials.
- Be sure to extend materials from the foundation to the roof.

Rain Gutters: Screen or enclose rain gutters to prevent accumulation of plant debris.

Patio Cover: Use the same ignition-resistant materials for patio covers as a roof.

Fences: Consider using ignition-resistant or non-combustible fence materials to protect your home during a wildfire.

Additional Home Fire Safety Steps:

Go to ReadyForWildfire.org/hardening for more important information on the following:

- Driveways and Access Road Information
- Garage Safety
- Address Visibility
- Water Supply Access
- Equipment Use Safety
- Ignition-Resistant Materials

READY, SET, GO! PREPARATION GUIDES

Preparing for a wildfire starts with three simple steps: Ready, Set, Go! Keep all three wildfire preparation guides on hand as a quick reference for helping your family and property be safe in the event of a wildfire.

WILDFIRE IS COMING PREPARATION GUIDES:

Step 1:
Is Your Home Ready?

Creating defensible space and hardening your home against wildfire.

Step 2:
Are You Set?

Developing a Wildfire Action Plan.

Step 3:
Are You Ready to Go?

A quick-reference evacuation guide.

Go to ReadyForWildfire.org for more detailed information on all three guides to prepare for and survive a wildfire.

HOME SAFETY CHECKLIST

SIMPLE STEPS FROM ROOF TO FOUNDATION TO MAKE A HOME SAFER FROM EMBERS AND RADIANT HEAT

HOME SAFETY CHECKLIST

- [ ] Clean roofs and gutters of dead leaves, debris and pine needles that could catch embers
- [ ] Replace or repair any loose or missing shingles or roof tiles to prevent ember penetration
- [ ] Reduce embers that could pass through vents in the eaves by installing 1/8 inch metal mesh screening
- [ ] Clean debris from exterior attic vents and install 1/8 inch metal mesh screening to reduce embers
- [ ] Repair or replace damaged or loose window screens and any broken windows
- [ ] Screen or box-in areas below patios and decks with wire mesh to prevent debris and combustible materials from accumulating
- [ ] Move any flammable material away from wall exteriors – mulch, flammable plants, leaves and needles, firewood piles – anything that can burn
- [ ] Remove anything stored underneath decks or porches

VISIT FIREWISE.ORG FOR MORE DETAILS

- Store firewood away from the home
- Mow the lawn regularly
- Prune low-hanging tree branches
- Landscape with fire-resistant plants
- Create fuel breaks

FOR MORE INFORMATION about how to protect your home and property visit **firewise.org.**

Talk to your local forestry agency or fire department to learn more about the specific wildfire risk where you live.

NFPA

FIREWISE USA™

Residents reducing wildfire risks

Firewise® is a program of the National Fire Protection Association.

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HOW TO PREPARE YOUR HOME FOR WILDFIRES

WILDFIRE RISK REDUCTION STEPS THAT CAN MAKE YOUR HOME SAFER DURING A WILDFIRE

NFPA **FIREWISE USA™** RESIDENTS REDUCING WILDFIRE RISKS

FIREWISE.ORG

WILDFIRE PREPAREDNESS

ORDER A REDUCING WILDFIRE RISKS IN THE HOME IGNITION ZONE CHECKLIST/POSTER AT **FIREWISE.ORG**

VEGETATION MANAGEMENT

1. HOME IGNITION ZONES

Limiting the amount of flammable vegetation, choosing fire-resistant building materials and construction techniques, along with periodic exterior maintenance in the three home ignition zones - increases the chances your home will survive a wildfire when exposed to embers and/or a surface fire. The zones include the **Immediate Zone**: 0 to 5' around the home; **Intermediate Zone**: 5 to 30' and the **Extended Zone** 30 - 100'. Visit **www.nfpa.org** for more details on the Home Ignition Zones.

2. LANDSCAPING AND MAINTENANCE

To reduce ember ignitions and fire spread, trim branches that overhang the home, porch and deck and prune branches of large trees up to (depending on their height) 6 to 10 feet from the ground. Remove plants containing resins, oils and waxes and replace mulch in the Immediate Zone of 0 to 5 feet with non-combustible mulch products like crushed stone and gravel. Maintain vegetation annually.

FIRE RESISTIVE CONSTRUCTION

3. ROOFING AND VENTS

Class A fire-rated roofing products offer the best protection. Examples include: Composite shingles, metal, concrete and clay tiles. Inspect shingles or roof tiles and replace or repair those that are loose or missing to prevent ember penetration. Box-in eaves, but provide ventilation to prevent condensation and mildew. Roof and attic vents should be screened to prevent ember entry.

4. DECKS AND PORCHES

Never store flammable materials underneath decks or porches. Remove dead vegetation and debris from under decks/porches and between deck board joints.

5. SIDING AND WINDOWS

Embers can collect in small nooks and crannies and ignite combustible materials; radiant heat from flames can crack windows. Use fire-resistant siding such as brick, fiber-cement, plaster or stucco and dual-pane tempered glass windows.

BE PREPARED

6. EMERGENCY RESPONDER ACCESS

Ensure your home and neighborhood has legible and clearly marked street names and numbers. Driveways should be at least 12' wide with a vertical clearance of 15' for emergency vehicle access.

7. DISASTER PLAN

Develop, discuss and practice an emergency action plan with everyone in your home. Include details for pets, large animals and livestock. Know two ways out of your neighborhood and have a pre-designated meeting place. Always evacuate if you feel it's unsafe to stay - don't wait to receive an emergency notification if you feel threatened from the fire.

8. ANNUAL INSURANCE CHECK-UP

Conduct an annual insurance policy check-up to adjust for local building costs, codes and new renovations. Create/update a home inventory to help settle claims faster.

Creating Defensible Space to Help Survive a Wildfire Ember Storm

DURING AN EMBER STORM, flying embers can ignite anything combustible in their path, including your home and anything near it, such as plants or patio furniture.

Defensible homes should have nothing ignitable within the first 5 feet, and reduced fuels out to 100 feet or the property line (whichever is closer).

Creating and maintaining defensible space around a house—while hardening the home against wind- or heat-driven embers, flames, and heat—will increase the likelihood that it survives a wildfire. Defensible space also helps firefighters be safer while protecting property.

If a home is difficult to find, is surrounded by dense vegetation, or doesn't provide enough safe space for firefighters to work, it may be too dangerous to attempt to save.

This brochure is a guide to help you create your defensible space and find additional information and resources.

How Homes Catch Fire

THREE WAYS YOUR HOME CAN BE EXPOSED TO FIRE

EMBER STORM

Embers are small pieces of burning material that can travel more than a mile ahead of a wildfire. They can create spot fires when they land on combustible materials, such as leaves in your gutter or plants under your windows.

RADIANT HEAT

Radiant heat generated from burning structures or plants can be hot enough to ignite a house without direct flame contact. This is particularly challenging in densely populated areas, where the heat from one burning home can ignite the next.

DIRECT FLAME

Depending on time and exposure, direct flame contact can ignite your home. The flaming front of a wildfire is often not hot enough to ignite a house, but plants under windows ignited by embers or direct flame can break glass, allowing fire to enter the house.

Embers are responsible for most damage during wildfires. They can accumulate on your home, deck, or porch and ignite plants, mulch, leaves, fencing, or furniture. They can also be forced into gaps in the home (e.g. attic vents or an open or broken window) and burn the home from the inside out. When this happens, there can be little damage to the surrounding vegetation, leaving people puzzled as to what caused the home to burn.

Embers cause the majority of wildfire home ignitions.

Home and Property

WE'VE LEARNED FROM RECENT FIRES. Hardening your home and keeping the 5 feet closest to your house clear of flammable materials greatly improves the chance of surviving a fire.

Maintaining defensible space is the law within 100 feet of a home in wildfire-prone areas, and highly recommended elsewhere. If a garage, shed, your neighbor's house, or the property line is closer than 100 feet, it is especially important to "harden" the home itself to reduce vulnerability to radiant heat, and to work together with your neighbors to reduce risk—a great way to build community while protecting assets.

See the *California Fire Safe Council, Home Hardening* brochure for more information on structure protection.

Ladder Fuels and Fuel Continuity

Fire needs fuel to burn. A fuel ladder occurs when grass or other surface fuel carries flames into shrubs or small trees and then the fire climbs into larger trees—a continuous vertical line of fuel. Surface and ladder fuel is almost always necessary to sustain fire in upper tree branches. Defensible space breaks up the continuity of fuel both horizontally and vertically, to interrupt the spread of fire to your home.

Continuous vegetation reaches into upper tree branches, providing a "ladder" for the fire to climb.

Helpful Resources

The CALIFORNIA FIRE SAFE COUNCIL (CFSC) helps coordinate a strong network of partnerships with local, regional, state, and national organizations in order to help California residents acquire the education, resources, and tools they need to be better prepared for wildfire.

Defensible Space is the law in wildfire-prone areas. Contact CAL FIRE or your local fire department for specific defensible space information and local ordinances.

ReadyForWildfire.org/Defensible-Space

Contact your local Fire Safe Council to get involved.

FireSafeCouncil.org

Sign up for CAL FIRE Alerts:

ReadyForWildfire.org/Ready-for-Wildfire-App

Look for an emergency alert system in your county.

ALWAYS CALL 911 FOR EMERGENCIES

Recommendations for Creating Defensible Space

HOMES SURVIVE WILDFIRE THROUGH A COMBINATION OF THE FOLLOWING FACTORS:

1) Awareness and management of combustible materials on the property, especially within the first 5 feet of the home.
2) Incorporation of fire- and ember-resistant construction materials, installation details, and maintenance.
3) Careful landscape selection, placement, and maintenance.

For best practices to protect your home and other structures, see the *California Fire Safe Council, Hardened Homes* brochure.

Defensible Space is the law in wildfire-prone areas. These condensed recommendations address legal requirements and best practices for preparing and protecting your property. For more information contact CAL FIRE or your local fire department.

ZONE 0

0 feet – 5 feet from buildings, decks, and other structures

The goal is to avoid home ignition from blowing embers.

- ❑ Use noncombustible materials such as rock, stone pavers, cement, bare earth, gravel, or sand.
- ❑ Remove all plants and shrubs near windows.
- ❑ Remove leaves and needles from your roof and rain gutters.
- ❑ Clear vegetation and items that could catch fire from around and under decks.
- ❑ Remove dead branches that overhang or touch your roof. Keep branches 10 feet away from your chimney.
- ❑ Remove all leaves, needles, or other debris that fall in this zone.

ZONE 1

5 feet – 30 feet from buildings, decks, and other structures

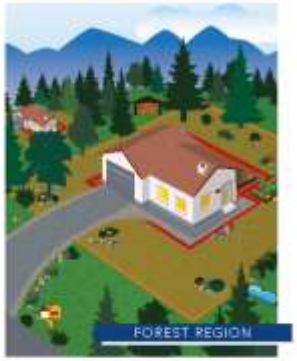
The goal is to reduce heat and movement of flame.

- ❑ Remove all dead plants, grass, and weeds.
- ❑ Actively prune live shrubs.
- ❑ Relocate woodpiles outside of this zone.
- ❑ Avoid extensive use of mulch, which can convey fire to the house.
- ❑ Limit fallen leaves, needles, twigs, bark, cones, and small branches to a depth of 2 inches.
- ❑ Move all gas and propane tanks outside of this zone.

ENTIRE PROPERTY

5 feet – 100 feet from buildings, decks, and other structures, or to the property line

- ❑ Create islands of vegetation with horizontal spacing between shrubs and trees.
- ❑ Create vertical spacing between grass, shrubs, and trees.
- ❑ Choose low-growing, irrigated, non-woody plants such as vegetables, succulents, erosion-control grasses, flowers, or lawn to create landscaping in this zone.
- ❑ Mow or remove dead or dried vegetation.
- ❑ Trim trees regularly to maintain a minimum of 10 feet of clearance between branches of adjoining trees or shrubs.
- ❑ Mow any grass to a maximum height of 4 inches.
- ❑ To protect water quality, maintain vegetation near waterways; do not clear to bare soil. Vegetation removal can cause soil erosion that damages streams, especially on steep slopes. Remove dead trees and shrubs, leaving the roots in place, if practical.
- ❑ Break up dense shrub cover on slopes by creating small islands of pruned shrubs staggered horizontally.
- ❑ Prior to evacuation, pull patio furniture, play sets, and gas BBQ tanks as far as possible from any structure, and bring cushions inside.



LANDSCAPING TIPS

Proper Placement Makes A Difference

Remember, any plant can burn under the right conditions. For all plants, maintenance is key.

When choosing species to plant in your 5- to 30-foot defensible space zone, look for plants with these characteristics:

- Able to store water in leaves and stems.
- Produce limited dead and flammable material.
- Maintain high moisture content with limited watering.
- Low-growing or open form.
- Open loose branches with a low volume of total vegetation.
- Low levels of volatile oils or resins.
- Slow growing with little maintenance needed.
- Not considered invasive.

Is Your Home Hardened to Survive a Wildfire Ember Storm?

FIRE HARDENED means your home is prepared for wildfire and an ember storm. It does not mean fireproof. Home hardening addresses the most vulnerable components of your house with building materials and installation techniques that increase resistance to heat, flames, and embers that accompany most wildfires.

Learning to live with wildfire includes taking steps to reduce the risk to homes. Homes built to modern (2008 or later) building codes, with an adjacent and well-maintained defensible space, have a much better chance of surviving wildfire. Maintenance and upgrades to older homes can significantly improve the chance of your home surviving a fire.

Part of learning to live with wildfire is understanding that we have some control in how we prepare for and address this hazard, and how we manage fire in our individual communities.

This brochure can help you better understand options for hardening your home and where to find more information.

How Homes Catch Fire

THREE WAYS YOUR HOME CAN BE EXPOSED TO FIRE

EMBER STORM

Embers are small pieces of burning material that can travel more than a mile ahead of a wildfire. They can cause spot fires when they land on combustible materials, such as leaves in your gutter or gaps under your windows.

RADIANT HEAT

Radiant heat generated from burning structures or plants can be hot enough to ignite a house without direct flame contact. This is particularly challenging in densely populated areas, where the heat from one burning home can ignite the next.

DIRECT FLAME

Depending on size and exposure, direct flame contact can ignite your home. The leading edge of a wildfire is often not hot enough to ignite a house, but plants and/or structures ignited by embers or other flame can. Small glass, allowing fire to enter the house.

Embers are responsible for most damage during wildfires. They can accumulate on your home, deck, or porch and ignite plants, mulch, leaves, fencing, or furniture. They can also be forced into gaps in the home (e.g. attic vents or an open or broken window) and burn the home from the inside out. When this happens, there can be little damage to the surrounding vegetation, leaving people puzzled as to what caused the home to burn.

Embers cause the majority of wildfire home ignitions.

Home and Property

WE'VE LEARNED FROM RECENT FIRES. HARDENING YOUR HOME and keeping the 5 feet closest to your house clear of flammable materials (including patio furniture and decor) greatly improves its chance of surviving a fire.

Maintaining defensible space is the law within 100 feet of a home in wildfire-prone areas, and highly recommended elsewhere. If a garage, shed, your neighbor's house, or the property line is closer than 100 feet, it is especially important to harden your home to reduce vulnerability to radiant heat and to work together with your neighbors to reduce risk—a great way to build community while protecting assets.

See the *California Fire Safe Council, Defensible Space* brochure for more information.

KEY ELEMENTS OF DEFENSIBLE SPACE

- Keep your gutters and roofs clear of leaves and debris.
- Maintain a 5-foot noncombustible zone around your home and deck.
- Break up fuel by creating space between plants, and between the ground and the branches of trees.
- Mow grass to a height of 4 inches.
- Keep mulch away from the house. Bark mulch helps plants retain water but ignites and becomes flying embers during a wind-driven fire.
- During a wildfire move anything burnable—such as patio furniture or gas BBQ tanks—30 feet away from structures.

Helpful Resources

The **CALIFORNIA FIRE SAFE COUNCIL** (CFSC) helps coordinate a strong network of partnerships with local, regional, state, and national organizations in order to help California residents acquire the education, resources, and tools they need to be better prepared for wildfire.

For more information:
FireSafeCouncil.org • ReadyForWildfire.org

Contact your local Fire Safe Council to get involved.

For building codes in California, visit Office of the State Fire Marshal:
OSFM.Fire.ca.gov/CodeDevelopment/WildFireProtectionBuildingConstruction

Additional Hardened Home Information:
ReadyForWildfire.org/Hardening-Your-Home
DisasterSafety.org/Ishi/Ishi-Wildfire-Publications
UCANR.edu/Sites/Fire/Prepare/Building

Sign up for CAL FIRE Alerts:
ReadyForWildfire.org/Ready-for-Wildfire-App

Look for an emergency alert system in your county.

ALWAYS CALL 911 FOR EMERGENCIES

This publication is made possible through a grant from the USDA Forest Service, Pacific Southwest Region Cooperative Fire Program. The California Fire Safe Council is an equal opportunity provider.

Recommendations for Hardening Your Home to Better Survive Wildfire

EMBER-RESISTANT CONSTRUCTION RELIES ON BOTH MAINTAINING DEFENSIBLE SPACE AND HARDENING YOUR HOME. HERE ARE SOME THINGS YOU CAN DO TO HARDEN YOUR HOME TO MAKE IT MORE FIRE-RESISTANT.

YOUR TOP 3 PRIORITIES SHOULD BE YOUR ROOF, VENTS, AND NEAR-HOME VEGETATION.

1) Avoid combustible materials on the property, especially within the first five feet of the home.
2) Incorporate fire- and ember-resistant construction materials, installation details, and maintenance.
3) Be thoughtful about landscaping choices and maintenance.

THE ROOF has the greatest exposure to fire embers.

- ❑ Inspect and repair or replace your roof with tile, metal, asphalt, or shingles (materials with a Class A fire rating).
- ❑ Plug gaps between your roof covering and sheathing to prevent ember entry.
- ❑ Install a metal drip edge (i.e., more angle flashing) at the roof edge.
- ❑ Override codes to ensure best practices.

VENTS can allow embers to enter a crawl space, the attic, soffit, or foundation.

- ❑ Upgrade vents with 1/8 inch metal mesh, or install vents approved to resist embers and flames (see www.vesta.org).

EAVES AND SOFFITS with open-eave construction should be inspected.

- ❑ Wherever possible enclose open eaves.
- ❑ Caulk and plug gaps around exposed rafters and blocking.

WINDOWS can break from the heat, even before a home ignites, allowing burning embers or flames into the home.

- ❑ Install or upgrade to multi-pane tempered glass.
- ❑ Ensure there is no vegetation or other combustible materials within 5 feet of windows and glass doors.

SIDING is vulnerable if exposed to flames or radiant heat for periods of time.

- ❑ Inspect all siding. Plug or caulk gaps and joints.
- ❑ Maintain a 4-inches of vertical noncombustible material between the ground and the start of the siding.
- ❑ Replace shingle or shake siding with ignition-resistant materials.
- ❑ If a neighboring home or outbuilding is closer than 30 feet, be sure it uses noncombustible or ignition-resistant materials.
- ❑ Use a noncombustible fascia and/or self-closing dryer vent cover.

DECKS are vulnerable to fires from embers igniting vegetation or materials near or below them.

- ❑ Ensure that all combustible items are removed from underneath, on or next to your deck.
- ❑ Put a noncombustible layer between wood decks and siding.

CHIMNEY

- ❑ Cover your chimney and stovepipe outlets with a noncombustible mesh screen.

RAIN GUTTERS should be cleared of leaves and needles that embers can easily ignite.

- ❑ Inspect and clean gutters regularly.
- ❑ Install a noncombustible gutter guard to reduce accumulated debris.

GARAGES are especially vulnerable to embers and ash. Embers can enter a garage as easily as dust, potentially igniting a house from the inside.

- ❑ Install weather stripping or gaskets around and under the garage door to limit ember entry.
- ❑ Store all combustible and burnable liquids away from ignition sources.
- ❑ Know how to operate your garage door when there is no power.

FENCES

- ❑ Fences or gates that connect to structures should use noncombustible materials within 5 feet of the building, to prevent the fence from burning up to the structure.

DRIVEWAYS AND ACCESS ROADS should be built and maintained according to state and local codes so that emergency vehicles can safely reach your home.

- ❑ Maintain access roads with a minimum of 10 feet of clearance on either side.
- ❑ Ensure that all gates can open without power to accommodate emergency equipment.
- ❑ Trim overhanging trees up to 15 feet from the ground in order to allow emergency vehicles to pass.

ADDRESS

- ❑ Make sure your address is clearly visible from the road.

WATER SUPPLY can be enhanced by having multiple garden hoses long enough to reach all areas of the structures on your property.

- ❑ If you have a pool or well, consider getting a non-powered pump.
- ❑ Best practice is to provide a 2½ inch water line from a water tank to a stand-pipe installed with 50 inches free flowing, coordinated with your local fire department.

For best practices to protect your home and property, see the *California Fire Safe Council, Defensible Space* brochure.

Fire is a Fact of Life

California is home to some of the most scenic vistas in the world. The natural beauty and mild, Mediterranean climate have attracted millions to settle in the foothills, deserts and coastal valleys.

But living in California means learning to live with fire. That's because our scenic vistas are fire-dependent. Fire cracks seed casings, allowing our native plants to thrive. And it clears out dead brush that can choke living plants and cut off food for wildlife.

So why are today's fires so devastating, destroying our neighborhoods, taking our homes, possessions and even lives?

The answer lies in our own backyards.

Your Best Defense Against Fire

Firefighters agree: It's not if, but when, fire will burn through an area. And there aren't enough fire engines to protect every house. Firefighters need your help to give your home a fighting chance.

The single most important feature that will help your home stand alone against fire and give firefighters a base to battle the flames is A FIRE SAFE LANDSCAPE.

What is a Fire Safe Landscape?

A fire safe landscape uses fire resistant plants that are strategically planted to resist the spread of fire to your home.

The good news is, you don't need a lot of money to make your landscape fire safe. And you will find that a fire safe landscape can increase your property value and conserve water while beautifying your home.

The California Fire Safe Council is a broad-based partnership mobilizing Californians through education and action programs because we believe fire prevention and loss reduction are everyone's business.

Contact your local Fire Safe Council for more information about fire safe landscaping and other steps you can take to increase your home's chance of surviving a wildfire.

California Fire Safe Council
P.O. Box 2106
Glendora, CA 91740
626/335-7426
www.firesafecouncil.org

Made possible by a National Fire Plan Grant through the USDI Bureau of Land Management (www.blm.gov) and in collaboration with the California Department of Forestry and Fire Protection (www.fire.ca.gov).

FireSafe COUNCIL

FIRE SAFE LANDSCAPING

How to Protect Your Home Against Wildfire Destruction

Defensible Space

Defensible space is the base around your home that will give firefighters a fighting chance against fire. It means clearing all dry grass, brush and dead leaves at least 30 to 100 feet from your home.

The key here is "at least." Your local fire department may ask for greater clearance. Contact them for requirements in your area.

Defensible space and a fire safe landscape don't mean a ring of bare dirt around your home. When establishing your landscape, keep trees furthest from your house, shrubs can be closer, and bedding plants and lawns are nearest the house.

Your home may be the biggest investment you ever make. Protect that investment by following the steps in this brochure to create a fire safe landscape.

Planning

- Assess your fire risk. Is your home on a hill? Are you near highly flammable native vegetation or drought-damaged ornamental plants? If your answer is yes, your fire risk is greater than average.
- Contact your local fire department for fire hazard ratings in your neighborhood.
- Plan your landscape to reduce the amount of flammable vegetation nearest your home. Establish defensible space.
- Consider consulting your local nursery or a landscape contractor to help plan your landscape.

Spacing

- Eliminate the "fire ladder." Fire needs fuel to burn. You can sap its strength by robbing it of the continuous sequence of vegetation that can carry flames from your landscape to your house.
- Group plants of similar height and water requirements to create a "landscape mosaic" that can slow the spread of fire and use water most efficiently.
- Space trees at least 10 feet apart, and keep branches trimmed at least 10 feet from your roof. For trees taller than 18 feet, prune lower branches within six feet of the ground.

- Install fire resistant, drought-tolerant plants that have a high moisture content. Use plants that do not accumulate dead leaves or twigs.
- Use masonry or stone walls to separate plant groups and add variety to your landscape.

Watering

- Choose the right irrigation system. While all plants will eventually burn, healthy plants burn less quickly. Your plant selection and water availability will determine the right system for you.
- Consider drip irrigation for watering most of your landscape. It's effective and conserves water because it targets where the water goes and how much gets there.
- Use sprinklers for lawns or turf landscaping. Drip irrigation does not work well on lawns. Sprinklers on timers ensure your lawn is getting the right amount of water to keep it healthy and fire resistant.

Maintenance

- Keep your landscape healthy and clean. On a regular basis, remove dead branches, leaves and pine needles from your yard. These can serve as added fuel to a fire.
- Prune and thin shrubs, trees and other plants to minimize the fuel load.
- Be diligent about cleaning up, especially during fire season. Remove dead leaves from under the plants as well.
- Involve your gardener. If a gardener cares for your property, ask him or her to include these regular maintenance steps as part of the routine service.
- Recycle/compost plant materials. Participate in your community's green waste recycling program. You can also compost plant litter and create a money-saving alternative to store-bought soil and mulch. Grasscycling is another time- and money-saving way to make your green waste work for you.

California Fire Safe Council

The California Fire Safe Council's mission is to preserve and enhance California's manmade and natural resources by providing leadership and support that mobilizes all Californians to protect their homes, communities and environment from wildfires.

The California Fire Safe Council has more than 10 years of leadership in bringing together private individuals, local organizations, industry groups, government agencies and others for effective preventive action against wildfire.

Fire Safe Council Members

- Allstate Insurance Company
- American Society of Landscape Architects
- Association of California Insurance Companies
- Association of Contract Counties
- Bureau of Land Management
- California Air Resources Board
- California Association of Nurserymen
- California Association of REALTORS®
- California Association of Resource Conservation Districts
- California Board of Forestry and Fire Protection
- California Building Industry Association
- California Cattlemen's Association
- California Department of Conservation
- California Department of Forestry and Fire Protection
- California Department of Insurance
- California Department of Parks and Recreation
- California FAIR Plan Association
- California Farm Bureau Federation
- California Fire Chiefs Association
- California Integrated Waste Management Board
- California Landscape Contractors Association
- California State Association of Counties
- California State Automobile Association
- California State Fire Marshal's Office
- California State Firefighters' Association
- California Urban Forest Council
- Chemco
- Chubb Insurance
- Council for a Green Environment
- Farmers Insurance Group of Companies
- Federal Emergency Management Agency
- Fire Districts Association of California
- Fireman's Fund Insurance Company
- Governor's Office of Emergency Services
- Insurance Information Network of California
- Insurance Services Office, Inc.
- League of California Cities Fire Chiefs
- National Audubon Society
- National Fire Protection Association
- Pacific Gas and Electric Company
- Personal Insurance Federation of California
- Planning and Conservation League
- Safeco Insurance
- Society of American Foresters
- Southern California Edison Company
- State Farm Insurance Companies
- Thermo-Gel
- USAA Property and Casualty Insurance
- USDA Forest Service
- 21st Century Insurance

Fire Safe Information Resources

Fire Service

Calif. Dept. of Forestry & Fire Protection
1416 Ninth Street
Sacramento, CA 94244
916/653-5123
www.fire.ca.gov

Calif. Fire Chiefs Assn.
15 Mission Oliva Ct.
Oroville, CA 94966
530/589-469
www.calchiefs.org

Calif. State Firefighters' Assn.
2701 K Street, Suite 201
Sacramento, CA 95816-5113
800/451-2732
www.csfa.firedept.net

Calif. State Fire Marshal's Off.
1131 S Street
Sacramento, CA 94244
916/445-8200
www.fire.ca.gov

Fire District's Assn. of Calif.
1215 K Street, Suite 930
Sacramento, CA 95814
916/329-9307
www.fdac.org

U.S.D.A. Forest Service
3735 Neely Way
Mather, CA 95655
916/364-2800
www.fs.fed.us

Building/Real Estate

Calif. Building Industry Assn.
1215 K Street, Suite 1200
Sacramento, CA 95814
916/443-7933
www.cbia.org

Calif. Assn. of REALTORS®
980 Ninth Street, Suite 1430
Sacramento, CA 95814
916/444-2045
www.car.org

Insurance Industry

Insurance Information Network of California
3530 Wilshire Blvd., Suite 1610
Los Angeles, CA 90010
800/397-1679
www.iinc.org

Public Utilities

Pacific Gas & Electric Co.
P.O. Box 770000, H12A
San Francisco, CA 94177
800/743-5000
www.pge.com

Southern California Edison
8631 Rush Street
Rosemead, CA 91770
626/302-7413
www.sce.com

Landscape/Nursery Industry

Am. Soc. of Landscape Architects
3550 Watt Ave., Suite B
Sacramento, CA 95821
916/484-3848
www.asla.org

Calif. Assn. of Nurserymen
3947 Lennane Drive, Suite 150
Sacramento, CA 95834-1957
800/748-6214
www.cangc.org

California Landscape Contractors Assn.
1491 River Park Drive, Suite 100
Sacramento, CA 95815
916/830-2780
www.clca.org

Council for a Green Environment
926 J Street, Suite 815
Sacramento, CA 95814
916/442-7195

Environmental Groups

National Audubon Society
555 Audubon Place
Sacramento, CA 95825
916/481-5332
www.audubon.org

The Wilderness Society
P.O. Box 29241
San Francisco, CA 94129-0241
415/561-6641
www.wilderness.org

Agriculture

Calif. Farm Bureau Federation
2300 River Plaza Drive
Sacramento, CA 95833
916/561-5500
www.cfbf.com

FireSafe COUNCIL

Public and Private Partners Working Together

To Create A "Fire Safe California"

Who is the Fire Safe Council?

The California Fire Safe Council is a broad-based partnership mobilizing Californians through education and action programs because we believe fire prevention and loss reduction are everyone's business.

Mission

The California Fire Safe Council's mission is to preserve and enhance California's manmade and natural resources by providing leadership and support that mobilizes all Californians to protect their homes, communities and environment from wildfires.

Objectives

- Unite Council members to speak with one voice on fire safety.
- Empower grass roots organizations and individuals to create fire safe communities.
- Unite Council members to increase distribution of fire safe education materials.
- Evaluate fire safe-related legislation.

A Council In Your Community

There are more than 100 Councils in California and other states.

To find the Council nearest you, or learn how to start your own, visit www.firesafecouncil.org.

Why does California need the Fire Safe Council?

Development has created wildland-urban interface communities amid fire-dependent landscapes.

Living in these communities means learning to live with fire by creating communities that can stand against wildfire.

The California Fire Safe Council has more than 10 years of leadership in bringing together private individuals, local organizations, industry groups, government agencies and others for effective preventive action against wildfire. Prevention creates savings for everybody because for every ten cents spent preventing fire, one dollar is saved in costs of suppression and damage to homes, businesses, communities and our natural resources.

www.firesafecouncil.org

The Fire Safe Council hosts one of the best online resources for fire safety in California:

Local Council Sites
Set up your Council site and visit other Councils'.

Links
Link to members and other sites with fire safe information.

Fire Safe Council Handbook
The definitive guide on how to form a Council.

Fire Safe Inside and Out
Fire safety tips and strategies for inside and outside the home.

Fire Safe Landscaping
Highlights four keys to a fire safe landscape: planning, spacing, watering and maintenance.

Fire Safe Council Brochure
Online version of this brochure.

Fire Safe California Community Action Kit
Complete community fire safety guide.

FireSafe COUNCIL

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Wildfire Safety

California's beautiful scenery and warm climate create some of the most severe wildfire conditions in the world. This Wildfire Survival Checklist will help you protect your home and family when a wildfire is threatening.

If you see a fire approaching, dial 9-1-1. Remember to stay on the phone to answer the emergency dispatcher's questions.

Dress to prevent burns and life long scars. Wear cotton or wool long pants, long-sleeve shirts or jackets. Gloves and a damp cloth provide added protection. Do not wear short sleeve shirts or synthetic fabrics.

If there is time before the fire arrives, take the steps included in this brochure.

You can make your home safe before fire season begins.

For more information on how to prepare early for fire season, please call your local fire department.

For current wildfire information, please visit:

www.fire.ca.gov

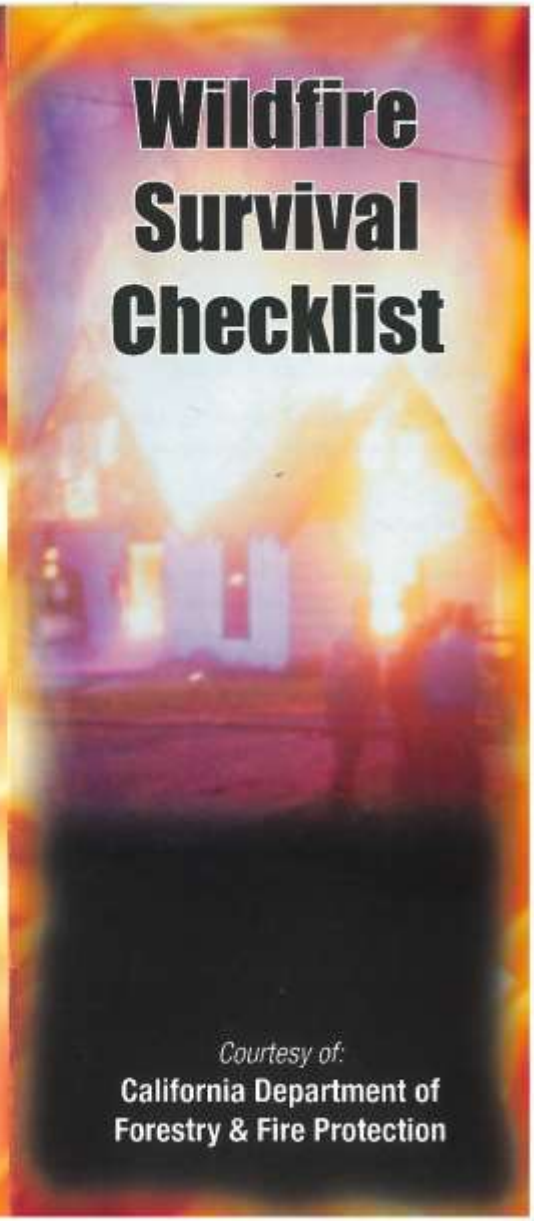
CALIFORNIA DEPARTMENT of FORESTRY and FIRE PROTECTION

C D F

FORESTRY

FIRE

Wildfire Survival Checklist



Courtesy of:

California Department of Forestry & Fire Protection

Wildfire Survival Checklist

Preparing to Evacuate

- ❑ Park your car in the garage, facing out, with windows closed and keys in the ignition.
- ❑ Close the garage door but leave it unlocked; disconnect the automatic garage door opener in case of power failure.
- ❑ If you do evacuate, use your pre-planned route, away from the approaching fire front.
- ❑ Keep a flashlight and portable radio with you at all times.
- ❑ If you are trapped by fire while evacuating in your car, park in an area clear of vegetation, close all vehicle windows and vents, cover yourself with a blanket or jacket and lie on the floor.
- ❑ If you are trapped by fire while evacuating on foot, select an area clear of vegetation along a road, or lie in the road ditch. Cover any exposed skin with a jacket or blanket. Avoid canyons that can concentrate and channel fire.

Outside Your Home

- ❑ Move combustible yard furniture away from the house or store it in the garage; if it catches fire while outside, the added heat could ignite your house.
- ❑ Cover windows, attic openings, eave vents and sub-floor vents with fire-resistance material such as 1/2-inch or thicker plywood. This will eliminate the possibility of sparks blowing into hidden areas within the house. Close window shutters if they are fire-resistant.
- ❑ Attach garden hoses to spigots and place them so they can reach any area of your house.
- ❑ Fill trash cans and buckets with water and put them where firefighters can find them.
- ❑ If you have an emergency generator or a portable gasoline-powered pump that will supply water from a swimming pool, pond, well or tank, clearly mark its location and make sure it is ready to operate.
- ❑ Place a ladder against the house on the side opposite the approaching fire to help firefighters swiftly onto your roof.

Inside Your Home

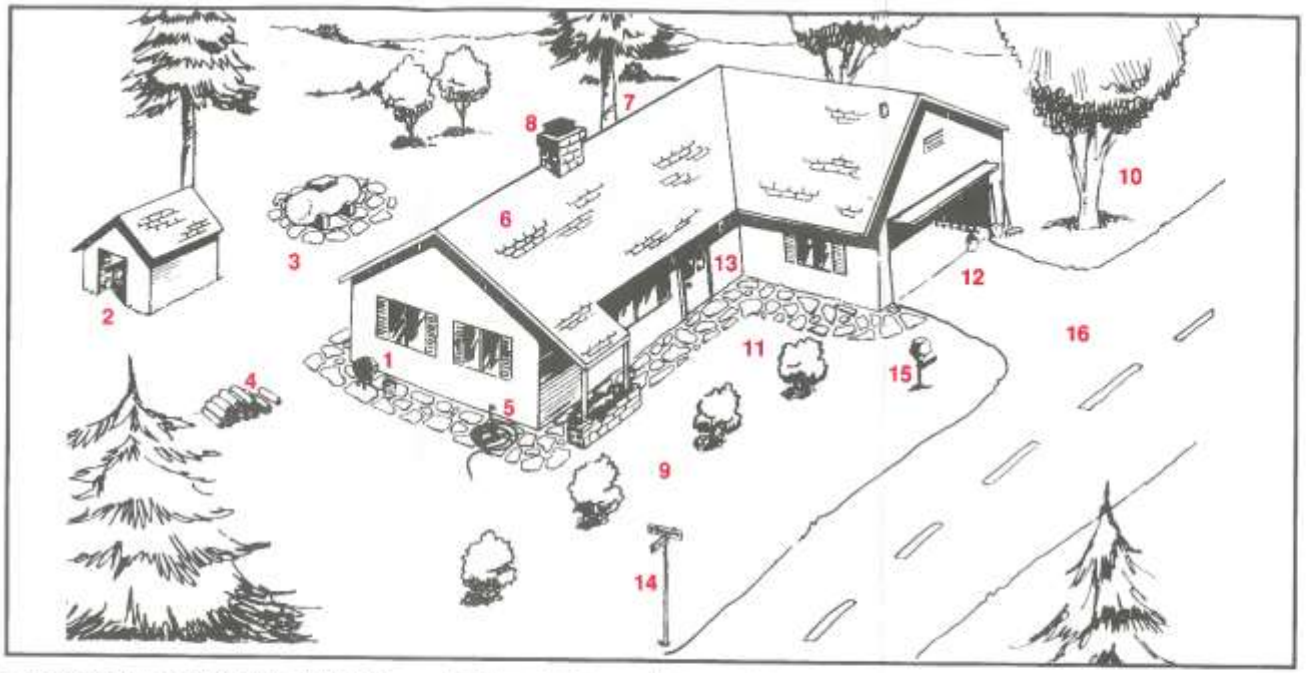
- ❑ Close all windows and doors to prevent sparks from blowing inside.
- ❑ Close all doors inside the house to slow the spread of fire from room to room.
- ❑ Turn on a light in each room of your house, on the porch and in the yard. This will make the house more visible in heavy smoke or darkness.
- ❑ Fill sinks, bathtubs and buckets with water. These can be important extra water reservoirs.
- ❑ Shut off liquefied petroleum gas (LPG) or natural gas valves.

Staying at Home During a Fire

- ❑ Move furniture away from windows and sliding glass doors to keep it from igniting from the heat of fire radiating through windows.
- ❑ Remove your curtains and drapes. If you have metal blinds or special fire-resistant window coverings, close them to block heat radiation.
- ❑ Stay inside your house, away from outside walls.
- ❑ Close all doors, but leave them unlocked.
- ❑ Keep entire family together and remain calm. Remember: if it gets hot in the house, it is many times hotter and more dangerous outside.

After the Fire Passes

- ❑ Check the roof immediately, extinguishing all sparks and embers. If you must climb onto the roof, use caution, especially if it is wet.
- ❑ Check inside the attic for hidden burning embers.
- ❑ Check your yard for burning woodpiles, trees, fence posts or other materials.
- ❑ Keep the doors and windows closed.
- ❑ Continue rechecking your home and yard for burning embers for at least 12 hours.



1. Dispose of stove or fireplace ashes and charcoal briquets only after soaking them in a metal pail of water for 24 hours.

2. Store gasoline in an approved safety can away from occupied buildings.

3. LPG tanks should be far enough away from buildings for valves to be shut off in case of fire. Keep area clear of flammable vegetation.

4. All combustibles such as firewood, picnic tables, boats, etc. should be kept away from structures.

5. Garden hose should be connected to outlet.

6. Clean roof surfaces and gutters regularly to avoid accumulation of flammable materials.

7. Remove portions of any tree extending within 10 feet of the flue opening of any stove or chimney.

8. Maintain a screen constructed of non-flammable material over the flue opening of every chimney or stovepipe. Mesh openings of the screen should not exceed 1/2 inch.

9. Shrubs should be spaced at least 15 feet apart.

10. Remove branches from trees to a height of 15 feet.

11. A fuel break should be maintained around all structures.

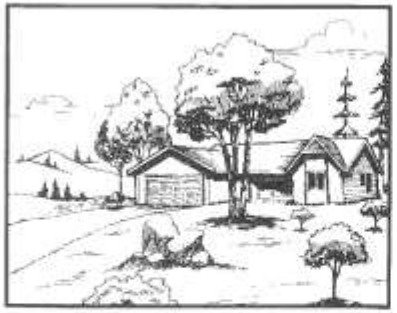
12. Have fire tools handy such as: ladder long enough to reach the roof, shovel, rake, and bucket for water.

13. Each home should have at least 2 different entrance and exit routes.

14. Names of roads should be indicated at all intersections.

15. Names and addresses of occupants should be posted at driveway entrance.

16. All roads and driveways should be at least 16 feet in width.



Every year many families lose their homes and possessions to the ravages of wildfire. These losses can be minimized if homeowners take the time and trouble to become aware of safety measures to help protect their homes. By observing the precautions and procedures described in this folder, you can reduce the risk of losing your home to wildfire. Only you can decide if it's worth the effort.

USE FIRE RESISTANT BUILDING MATERIAL
The roof and exterior structure of your dwelling should be constructed of non-combustible or fire resistant materials such as asphalt roofing shingles, tile, slate, sheet iron, aluminum, brick, or stone. Wood siding, cedar shakes, exterior wood paneling, and other highly combustible materials should be treated with fire retardant chemicals.

BURN SAFELY
Check local laws on burning debris. Some communities allow burning only during specified hours; others forbid it entirely. Make sure you have a valid permit. A burning permit shall not be valid for any day in which agriculture burning is prohibited by the Air Pollution Control District. If debris burning is allowed in your locale, take the following precautions:

- Clear the ground of all flammable materials for at least 10 feet.
- Have adequate water and fire tools available in case the fire escapes.
- Burn only during those hours specified on your permit.
- Don't burn on dry, windy days.
- Have an adult attend the fire until it is completely out.

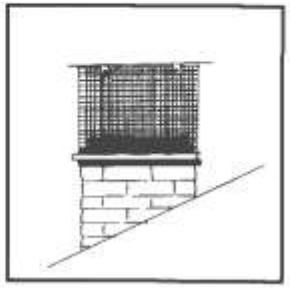
CLEAN YOUR ROOF
Clean roof surfaces and gutters regularly to avoid accumulation of leaves, twigs, pine needles, and other flammable materials.

KEEP YOUR CHIMNEY CLEAN
At least twice a year, inspect your chimney or have it inspected for an accumulation of soot or creosote. Clean your chimney at least once a year, or more often if necessary. Keep the dampers in good working order.

STORE FIREWOOD AWAY FROM YOUR HOME
All combustibles such as firewood, picnic tables, boats, etc., should be stored away from structures.

USE ONLY APPROVED WOODBURNING DEVICES
Install only approved woodburning devices and be sure they are installed according to manufacturer's recommendations and local regulations. When you dispose of your stove or fireplace ashes, take the following precautions: place ashes in a safe container, let sit for two days until all hot embers are completely extinguished, then dispose of cold ashes in a cleared area free of all flammable material.

INSTALL A SPARK ARRESTER
Every home and cabin built in a wooded area should have a spark arrester on its chimney. It should be constructed of non-flammable, corrosive-resistant material similar to stainless steel. The openings in the mesh should be no larger than 1/2 inch in diameter. Inspect your spark arrester annually for broken mesh and secure installation.



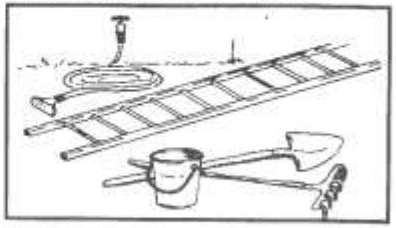
CONTROL VEGETATION
A fuel break at least 30 feet wide should be established and maintained around all structures. Wider fuelbreaks are needed around buildings located on steep slopes or in areas of dense, highly flammable fuels.

The fuel break area may contain single shade trees and ornamental shrubs that do not provide means of rapidly transmitting fire from native vegetation to buildings. Shrubs and trees should be at least 15 feet apart. Remove branches from trees to a height of 15 feet to prevent ground fire from spreading to tops of trees. Trees and vegetation should be kept at least 10 feet away from a chimney or stove pipe. Foundation planting should be of the non-resinous, fire resistant variety and be free of dead and dying vegetation.

DEVELOP A WATER SUPPLY
An adequate and reliable water supply is essential to protect structures and natural areas from fires. Water can be supplied in rural areas by wells with high volume pumps. A plan should be developed to locate and note nearby creeks, rivers, lakes and ponds so that firefighters can obtain additional water if needed. Swimming pools may also be considered a source of additional water supply. A garden hose outlet should be installed on the exterior of each dwelling. One hundred feet of hose should be racked and connected to the outlet to be available to protect all sides of the house and roof. It is recommended that additional outlets be installed at least 50 feet from the house for firefighter use.

PLAN ADEQUATE ACCESS AND ESCAPE
Each home should have at least two different entrance and exit routes. All roads leading to your property should be at least 16 feet wide to allow for easy entrance of fire trucks and the passage of vehicles evacuating the area. Roads should not be located in areas with grades in excess of 12%. Dead-end roads terminating in a cul-de-sac should have a minimum turn-around radius of 50 feet. Names of roads should be clearly indicated at all intersections, and the name and address of the occupants should be prominently posted at the driveway entrance. Bridges should be constructed to support a minimum gross vehicle weight of 30,000 pounds to accommodate firefighting equipment. Plan a safe retreat route for you and your family before forest fire occurs, and make sure everyone knows the plan. Emergency phone numbers should be posted.

HAVE FIRE TOOLS HANDY
Your home should have a cache of fire tools including the following: a ladder long enough to reach the roof in case of a roof fire; 100 feet of preconnected garden hose; a shovel, a rake, and a bucket. These tools should be kept in an easily accessible place, and all occupants of the house should know where they are.



IF A FIRE OCCURS

- Back car into garage and close garage door. Leave keys in ignition.
- Close windows and doors to the house and close all inside doors. Take down drapes and curtains.
- Place water in containers to fight fire.
- Place ladder against front of house.
- If you have a combustible roof, wet it down or turn on roof sprinklers.
- Turn off gas at the meter and butane tank.
- Evacuate family and pets to a safe location.

After you've done everything on your checklist and the fire is close - it is time to evacuate.

or

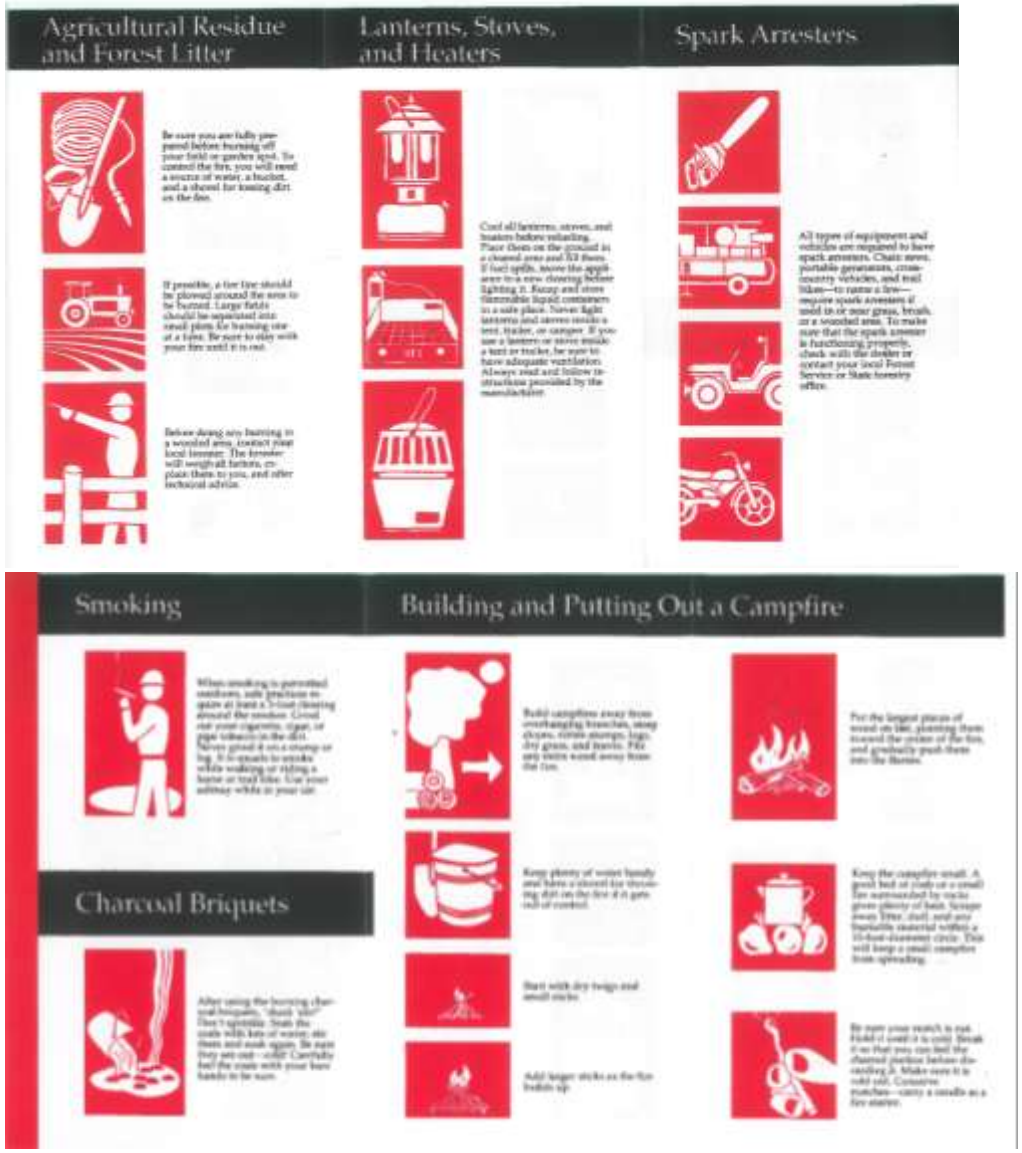
If law enforcement and fire authorities permit, and it is safe to do so, an able bodied member of the household may remain to protect the house.

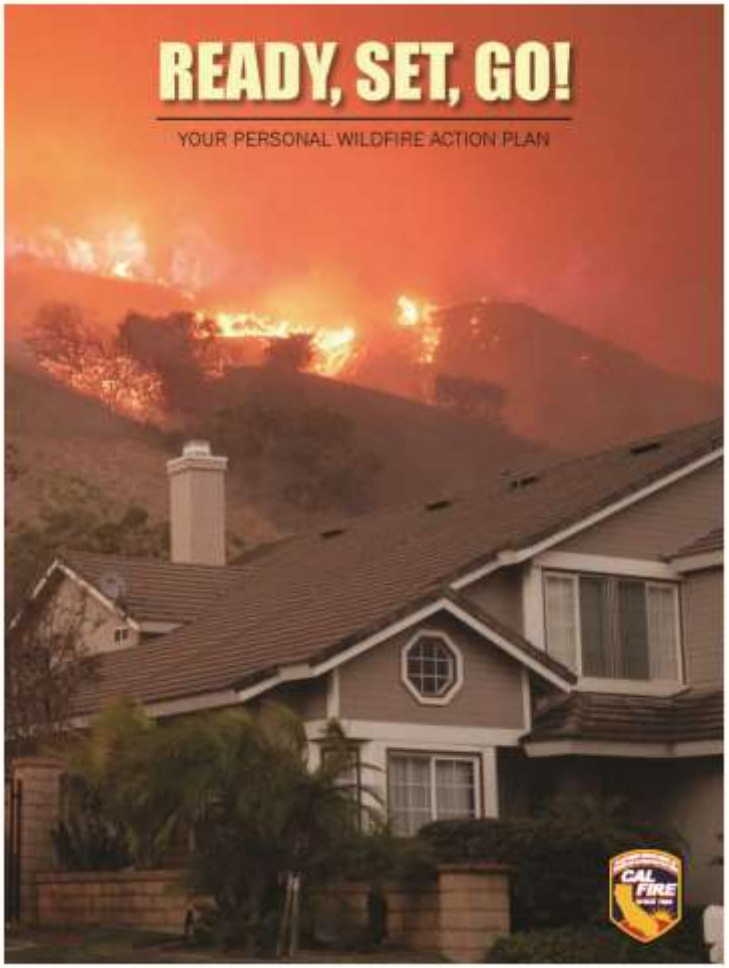
If the fire cannot be stopped and passes over your home, the safest place for protection is inside the house with all the doors and windows closed.

Immediately after the fire passes, check for hot spots for at least six to ten hours.

In a major conflagration, fire protection agencies may not have enough equipment and manpower to be at every home. Taking all proper precautions before a wildland fire will be your best defense against it.


Out a Campfire
Outdoor Fire
SAFETY
MAKE CAMPFIRES SAFE
SAFE DEBRIS BURNING
FIRE SAFETY OUTDOORS
Outdoor Fire Safety
Debris
Household Trash
Agricultural Residue and Forest Litter
NO OPEN BURNING
SMOKEY
Remember, Only YOU Can Prevent Forest Fires


Agricultural Residue and Forest Litter
Lanterns, Stoves, and Heaters
Spark Arresters
Smoking
Building and Putting Out a Campfire
Charcoal Briquets



READY, SET, GO!

Wildfire Action Plan

Saving Lives and Property through Advance Planning

Wildfire is a serious threat to lives, property and natural resources in California. The men and women of CAL FIRE make countless preparations and train frequently in order to be ready for all types of emergencies, including wildfires. Residents need to do the same.

You can dramatically increase your safety and the survivability of your property by preparing well in advance of a wildfire. This brochure provides comprehensive information on how to improve your home's resistance to wildfires and prepare your family to be ready to leave early in a safe manner. We call this process, "Ready, Set, Go!"

The guide illustrates the importance of having defensible space around your home and it will help educate you about the preparations you need to make so you can leave early and evacuate well ahead of a wildfire. This brochure also provides information on how to retrofit your home with ignition resistant materials to address the threat of flying embers that can travel as far as a mile ahead of a flame front.

Fire is, and always has been, a natural part of the beautiful state we've chosen to live in. Wildfires, fueled by a build-up of dry vegetation and driven by hot, dry winds, are extremely dangerous and are challenging for firefighters to control. This publication will help you prepare your home so you can leave early; confident in the fact that you've done everything you reasonably can to protect your home from devastating wildfire.

I hope you'll find the information on the next pages helpful. As always, if you need more information about preparing for wildfire or any other disaster, contact your nearest fire station or visit us on the web at www.fire.ca.gov.

Chief Del Walters
Director, CAL FIRE

All suggestions and requirements are based on State Codes and Regulations, specifically the California Building Code Chapter 7A, California Fire Code, and Title 14 Fire Safe Regulations. Contact your local fire and building department for specific requirements or recommendations for your community.

INSIDE

This publication was prepared by the Ventura County Fire Department. Special thanks to CAL FIRE, Orange County Fire Authority, FireSafe Council, Firewise Communities, and the Institute for Business and Home Safety as well as many other organizations for their contributions to content.

Ready, Set, Go! is supported by:

Living in the Wildland Urban Interface

Ready. Set. Go! begins with a house that firefighters can defend.

Defensible space works!

If you live next to a natural area, the Wildland Urban Interface, you must provide firefighters with the defensible space they need to protect your home. The buffer you create by removing weeds, brush and other vegetation helps to keep the fire away from your home and reduces the risks from flying embers.

A home within one mile of a natural area is at risk of flying embers. Wind-driven embers can attack your home. You and your home must be prepared well before a fire occurs. Ember fires can destroy homes or neighborhoods far from the actual flame front of the wildfire.

What is Defensible Space?

Defensible space is the required space between a structure and the wildland area that, under normal conditions, creates a sufficient buffer to slow or halt the spread of wildfire to a structure. It protects the home from igniting due to direct flame or radiant heat. Defensible space is essential for structure survivability during wildfire conditions and for the protection to firefighters defending your home.

ZONE ONE

Zone One extends 30 feet out from buildings, structures, decks, etc.

- Remove all dead or dying vegetation.
- Trim tree canopies regularly to keep their branches a minimum of 10 feet from structures and other trees.
- Remove leaf litter (dry leaves/pine needles) from yard, roof and rain gutters.
- Relocate woodpiles or other combustible materials into Zone Two.
- Remove combustible material and vegetation from around and under decks.
- Remove or prune vegetation near windows.
- Remove "ladder fuels" (low-level vegetation that allows the fire to spread from the ground to the tree canopy). Create a separation between low-level vegetation and non-vegetative materials such as patio furniture, wood piles, swing set, etc., from tree branches. This can be done by reducing the height of low-level vegetation and/or trimming low tree branches.

ZONE TWO

Zone Two extends 30 to 100 feet out from buildings, structures and decks. You can minimize the chance of fire jumping from plant to plant or other non-vegetative combustible, by removing dead material and removing, separating, and/or thinning vegetation. The minimum spacing between vegetation is three times the dimension of the plant or other non-vegetative combustible.

- Remove "ladder fuels."
- Cut or mow annual grass down to a maximum height of 4 inches.
- Trim tree canopies regularly to keep their branches a minimum of 10 feet from other trees.
- Loose surface litter, normally consisting of fallen leaves or needles, twigs, bark, cones, and small branches, shall be permitted to a depth of 3 inches if erosion control is an issue.

What is a Hardened Home?

Construction materials and the quality of the defensible space surrounding it are what gives a home the best chance to survive a wildfire. Embers from a wildfire will find the weak link in your home's fire protection scheme and gain the upper hand because of a small, overlooked or seemingly inconsequential factor. However, there are measures you can take to safeguard your home from wildfire. While you may not be able to accomplish all the measures listed below, each will increase your home's, and possibly your family's, safety and survival during a wildfire.

ROOFS

Roofs are the most vulnerable surface where embers land because they can lodge and start a fire. Roof valleys, open ends of barrel tiles and rain gutters are all points of entry.

EAVES

Embers can gather under open eaves and ignite exposed wood or other combustible material.

VENTS

Embers can enter the attic or other concealed spaces and ignite combustible materials. Vents in eaves and cornices are particularly vulnerable, as are any unscreened vents. New vents have been developed that prevent flame and embers from getting through to the attic.

WALLS

Combustible siding or other combustible or overlapping materials provide surfaces or crevices for embers to nestle and ignite.

WINDOWS and DOORS

Embers can enter gaps in doors, including garage doors. Plants or combustible storage near windows can be ignited from embers and generate heat that can break windows and/or melt combustible frames.

BALCONIES and DECKS

Embers can collect in or on combustible surfaces or the undersides of decks and balconies, ignite the material and enter the home through walls or windows.

To harden your home even further, consider protecting your homes with a residential fire sprinkler system. In addition to extinguishing a fire started by an ember that enters your home, it also protects you and your family year-round from any fire that may start in your home.

All suggestions and requirements are based on State Codes and Regulations; specifically the California Building Code Chapter 7A, California Fire Code, and Title 14 Fire Safe Regulations. Contact your local fire and building department for specific requirements or recommendations for your community.

Tour a Wildfire Ready Home

Home Site and Yard: Ensure you have at least a 100-foot radius of defensible space (cleared vegetation) around your home. Note that even more clearance may be needed for homes in severe hazard areas. This means looking past what you own to determine the impact a common slope or neighbors yard will have on your property during a wildfire.

Cut dry weeds and grass before 10 a.m. when temperatures are cooler to reduce the chance of sparking a fire.

Landscape with fire-resistant plants that have a high moisture content and are low-growing.

Keep woodpiles, propane tanks and other non-vegetative combustible materials away from your home and other structures such as garages, barns and sheds.

Ensure that trees are far away from power lines.

Roof: Your roof is the most vulnerable part of your home because it can easily catch fire from wind-blown embers. Homes with wood-shake or shingle roofs are at high risk of being destroyed during a wildfire.

Build your roof or re-roof with ignition resistant materials such as composition, metal or tile. Block any spaces between roof decking and covering to prevent ember intrusion.

Clear pine needles, leaves and other debris from your roof and gutters.

Cut any tree branches within ten feet of your roof.

Vents: Vents on homes are particularly vulnerable to flying embers.

All vent openings should be covered with 1/8-inch to 1/4 inch metal mesh. Do not use fiberglass or plastic mesh because they can melt and burn.

Attic vents in eaves or cornices should be baffled or otherwise protected to prevent ember intrusion (mesh is not enough).

Windows: Heat from a wildfire can cause windows to break even before the home ignites. This allows burning embers to enter and start internal fires. Single-paned and large windows are particularly vulnerable.

Install dual-paned windows with one pane of tempered glass to reduce the chance of breakage in a fire.

Consider limiting the size and number of windows in your home that face large areas of vegetation.

Inside: Keep working fire extinguishers on hand.

Install smoke alarms on each level of your home and in bedrooms. Test them monthly and change the batteries twice a year.

Address: Make sure your address is clearly visible from the road.

Decks: Surfaces within 10 feet of the building should be built with ignition resistant, non-combustible, or other approved materials.

Ensure that all combustible items are removed from underneath your deck.

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READY, SET, GO!

Create Your Own Wildfire Action Plan

Now that you've done everything you can to protect your house, it's time to prepare your family. Your **Wildfire Action Plan** must be prepared with all members of your household well in advance of a fire.

Use these checklists to help you prepare your Wildfire Action Plan. Each family's plan will be different, depending on their situation.

Once you finish your plan, practice it regularly with your family and keep it in a safe and accessible place for quick implementation.

GET READY | Prepare Your Family

- ☐ Create a **Family Disaster Plan** that includes meeting locations and communication plans and practice it regularly. Include in your plan the evacuation of large animals such as horses.
- ☐ Have fire extinguishers on hand and train your family how to use them.
- ☐ Ensure that your family knows where your gas, electric and water main shut-off controls are and how to use them.
- ☐ Plan several different evacuation routes.
- ☐ Designate an emergency meeting location outside the fire hazard area.
- ☐ Assemble an emergency supply kit as recommended by the American Red Cross.
- ☐ Appoint an out-of-area friend or relative as a point of contact so you can communicate with family members who have relocated.
- ☐ Maintain a list of emergency contact numbers posted near your phone and in your emergency supply kit.
- ☐ Keep an extra emergency supply kit in your car in case you can't get to your home because of fire.
- ☐ Have a portable radio or scanner so you can stay updated on the fire.

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GET SET | As the Fire Approaches

- ☐ Evacuate as soon as you are set!
- ☐ Alert family and neighbors.
- ☐ Dress in appropriate clothing (i.e., clothing made from natural fibers, such as cotton, and work boots). Have goggles and a dry bandana or particle mask handy.
- ☐ Ensure that you have your emergency supply kit on hand that includes all necessary items, such as a battery powered radio, spare batteries, emergency contact numbers, and ample drinking water.
- ☐ Stay tuned to your TV or local radio stations for updates, or check the fire department Web site.
- ☐ Remain close to your house, drink plenty of water and keep an eye on your family and pets until you are ready to leave.

INSIDE CHECKLIST

- ☐ Shut all windows and doors, leaving them unlocked.
- ☐ Remove flammable window shades and curtains and close metal shutters.
- ☐ Remove lightweight curtains.
- ☐ Move flammable furniture to the center of the room, away from windows and doors.
- ☐ Shut off gas at the meter. Turn off pilot lights.
- ☐ Leave your lights on so firefighters can see your house under smoky conditions.
- ☐ Shut off the air conditioning.

OUTSIDE CHECKLIST

- ☐ Gather up flammable items from the exterior of the house and bring them inside (e.g., patio furniture, children's toys, door mats, etc.) or place them in your pool.
- ☐ Turn off propane tanks.
- ☐ Don't leave sprinklers on or water running - they can waste critical water pressure.
- ☐ Leave exterior lights on.
- ☐ Back your car into the driveway. Shut doors and roll up windows.
- ☐ Have a ladder available.
- ☐ Patrol your property and extinguish all small fires until you leave.
- ☐ Seal attic and ground vents with pre-cut plywood or commercial seals if time permits.

IF YOU ARE TRAPPED: SURVIVAL TIPS

- ☐ Shelter away from outside walls.
- ☐ Bring garden hoses inside house so embers don't destroy them.
- ☐ Patrol inside your home for spot fires and extinguish them.
- ☐ Wear long sleeves and long pants made of natural fibers such as cotton.
- ☐ Stay hydrated.
- ☐ Ensure you can exit the home if it catches fire (remember if it's hot inside the house, it is four to five times hotter outside).
- ☐ Fill sinks and tubs for an emergency water supply.
- ☐ Place wet towels under doors to keep smoke and embers out.
- ☐ After the fire has passed, check your roof and extinguish any fires, sparks or embers.
- ☐ Check inside the attic for hidden embers.
- ☐ Patrol your property and extinguish small fires.
- ☐ If there are fires that you can not extinguish with a small amount of water or in a short period of time, call 9-1-1.

Go! | *Early!*

By leaving early, you give your family the best chance of surviving a wildfire. You also help firefighters by keeping roads clear of congestion, enabling them to move more freely and do their job.

WHEN TO LEAVE

Leave early enough to avoid being caught in fire, smoke or road congestion. Don't wait to be told by authorities to leave. In an intense wildfire, they may not have time to knock on every door. If you are advised to leave, don't hesitate!

WHERE TO GO

Leave to a predetermined location (it should be a low-risk area, such as a well-prepared neighbor or relative's house, a Red Cross shelter or evacuation center, motel, etc.)

HOW TO GET THERE

Have several travel routes in case one route is blocked by the fire or by emergency vehicles and equipment. Choose an escape route away from the fire.

WHAT TO TAKE

Take your emergency supply kit containing your family and pet's necessary items.

EMERGENCY SUPPLIES

The American Red Cross recommends every family have an emergency supply kit assembled long before a wildfire or other emergency occurs. Use the checklist below to help assemble yours. For more information on emergency supplies, visit the American Red Cross Web site at www.redcross.org.

- ☐ Three-day supply of water (one gallon per person per day).
- ☐ Non-perishable food for all family members and pets (three-day supply).
- ☐ First aid kit.
- ☐ Flashlight, battery-powered radio, and extra batteries.
- ☐ An extra set of car keys, credit cards, cash or traveler's checks.
- ☐ Sanitation supplies.
- ☐ Extra eyeglasses or contact lenses.
- ☐ Important family documents and contact numbers.
- ☐ Map marked with evacuation routes.
- ☐ Prescriptions or special medications.
- ☐ Family photos and other irreplaceable items.
- ☐ Easily carried valuables.
- ☐ Personal computers (information on hard drives and disks).
- ☐ Chargers for cell phones, laptops, etc.

Note: Keep a pair of old shoes and a flashlight handy in case of a sudden evacuation at night.

Write up your Wildfire Action Plan and post it in a location where every member of your family can see it. Rehearse it with your family.

My Personal Wildfire Action Plan

During High Fire Danger days in your area, monitor your local media for information on brush fires and be ready to implement your plan. Hot, dry and windy conditions create the perfect environment for a wildfire.

Important Phone Numbers:

Out-of-State Contact: _____ Phone: _____

Work: _____ _____ _____

School: _____ _____ _____

Other: _____ _____ _____

Evacuation Routes: _____

_____

_____

Where to go: _____

_____

Location of Emergency Supply Kit: _____

_____

Notes: _____

_____

_____

California Department of Forestry and Fire Protection
If you have an emergency, call 911.
CAL FIRE: 916-653-5123
Web site: http://www.fire.ca.gov

This booklet has been adapted from the original, created by the Ventura County Fire Department.

APPENDIX C – 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	Office of Emergency Services
OG	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 D – 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.

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