

Appendix E

Mariposa County
Hazard Profile

Community Wildfire Protection Plan
C.W.P.P

2010



Mariposa County Local Hazard Mitigation Plan

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Executive Summary

Wildland fire is a natural part of the ecosystems of California. However, the forests and wildlands of Mariposa County have been significantly altered by more than 100 years of fire suppression, resulting in increased fuels that tend to burn more intensely than in the past. In addition, recent population growth has led to more residential development interspersing within what is now known as called the Wildland Urban Interface (WUI). To address these issues, County, State, Federal Agencies, Mariposa County Fire Safe Council, and other local organizations as well as individuals have collaborated to develop the Mariposa Countywide Community Wildfire Protection Plan (CWPP).

The purpose of the Mariposa County CWPP is to protect human life and reduce property loss due to catastrophic wildland fire in the communities. Reducing the threat of wildland fire is the primary motivation behind this plan, managing the forests and rangelands for hazardous fuel reduction and fire resilience is only one part of the larger picture. It is unreasonable to expect others to risk their lives trying to protect our property if we have done nothing to make it safer for them to do so. Residents and visitors alike want healthy, fire-resilient forests that provide habitat for wildlife, recreation opportunities, and scenic beauty. Together we can make a difference!

Each year grant funds are available from U.S. Forest Service, Bureau of Land Management, National Park Service, FEMA, CAL FIRE, Sierra Nevada Conservancy, and other federal, state and private sources. These funds can be used to complete projects involving wildfire education, property risk assessment, community defensible space and chipping programs, and larger scale fuel treatment projects. In order to be competitive for future grant funds, Grantors are requiring that applicants have a completed and approved CWPP. This requirement was initially identified as part of the Healthy Forests Restoration Act (HFRA) of 2003, and has since become a requirement of the majority of funding sources. By having the Mariposa County CWPP we will have a framework to base our grant applications upon. Furthermore, the Mariposa County CWPP can be used as a source of information for other environmental plans such as Watershed Management plans or Wildlife Habitat improvement plans. This plan is also a living document which means as times change, projects get completed, or other changes in demographics the plan can be revised. Rather than trying to redo the entire plan, appendices can be sent to the Signatories for approval. As of this writing we suggest that either the Mariposa County Fire Safe Council or Mariposa County Fire be responsible for an annual updating of the Mariposa County CWPP. December or January would be the optimal months to accomplish this as the current Federal Grant application deadline is in February.

Planning Area Boundaries

For the purposes of this plan the planning area boundaries are geographic rather than political as wildland fires tend not to heed political boundaries and obey natural topographic features and fuel loading instead. As a result we are not so much concerned with who is the jurisdictional authority of the area that the fire is burning in as much as what the outcome is going to be.

Mariposa County is located in central California on the western slopes of the Sierra Nevada Mountains. The plan area contains three main vegetative ecosystems: the Mediterranean climate mixed chaparral, grass and oak lands, and a transition from open dry-site ponderosa pine to mixed conifer. The vegetation is adapted to the prevailing dry, continental climate and is highly susceptible to wildland fire.

Wildland Fire Risk Assessment

The Mariposa County Fire Safe Council in cooperation with Mariposa County Fire Department, USDA Forest Service, USDOJ National Park Service and CAL FIRE conducted risk assessments to gauge the relative risk and hazard due to wildland fire for the lands and communities within the planning area. It is a tool to direct implementation of wildfire mitigation activities to the highest priority areas and promotes cross-boundary coordination.

The assessment:

1. Identifies “at risk communities” within and adjacent to the Community Wildfire Protection Planning area.
2. Identifies the wildland urban interface (WUI) across the plan area.
3. Assesses risk, hazard, fire protection capability, structural vulnerability, and values to be protected.

The Authors

The Mariposa Countywide Community Protection Plan was written by the Mariposa County Fire Safe Council funded partially by the USDOJ Bureau of Land Management and through Title III funding from Mariposa County. Contributors to the plan are listed on Page 141.

The authors are:

Kimberly Bullock, Coordinator Mariposa County Fire Safe Council, Kimberly was responsible for gathering statistical data for the communities She has a background in Business Management and has been with Council for eight years.

Megan Redding, Administrative Assistant, Mariposa County Fire Safe Council, Megan wrote the Education and Outreach Portion of this plan, she has six years Wildland Fire Experience as an Engine Operator for the USDA Forest Service

Patrick Tierney, Mariposa County Fire Safe Council, Patrick assembled the statistical data and analysis of the fire risk to the communities and wrote the CWPP. Patrick is a retired 40 year

veteran of Wildland Fire Suppression and has a history of fuels management, fire behavior, and fire suppression.

Mariposa County Overview

Wildland fire is the number one natural disaster that threatens residents of Mariposa County. Fourteen of our twenty-two communities (approx. 70%) are listed in the Federal Register as at high or very high risk from wildfires (Listed: Bootjack, Coulterville, El Portal, Fish Camp, Foresta, Greeley Hill, Hunter Valley, Jerseydale, Lushmeadows Mountain Estates, Mariposa, Midpines, Mormon Bar/Ben Hur, Wawona, Yosemite Valley¹). As we mentioned earlier our planning areas are not political so if your community is not specifically mentioned this does not mean that the community is not part of this plan. We have tremendous hazardous fuel buildup in most areas of the County (averaging 75-100 tons per acre) and our population has been projected to more than double over the next 10-15 years due to the opening of U.C. Merced. Most new residents are relocating here from urban areas and have no concept of the extremely high wildfire danger throughout the County. If we do not educate residents about wildfire danger and assist those who are physically and financially unable to (i.e. seniors, low income, disabled and deployed) in creating and/or maintaining defensible space around their homes and along driveways and roadsides, we risk losing lives (residents and firefighters) and property as well as our precious natural and manmade resources. In addition, we must work with local, state and federal agencies to design and construct strategic fuel treatment areas to enhance protection from wildland fires for entire communities.

The purpose of the Mariposa Countywide Community Wildland Fire Protection Plan:

- Protect human life and property from wildland fires
- Restore fire-adapted ecosystems
- Increase public understanding of living in a fire-adapted ecosystem
- Instill a sense of personal responsibility for taking preventative actions regarding wildland fire
- Increase communities' ability to prepare for and respond to wildland fires
- Improve the landscape's fire resilience while protecting other social and ecological values.

The goals of the plan are to: (1) coordinate hazardous fuel reduction treatments across boundaries because wildland fires do not pay attention to political boundaries; and (2) promote a better understanding of living in a fire-adapted environment; and (3) promote personal responsibility for taking preventative action.

Mariposa Countywide CWPP mission:

The primary mission of the Mariposa County CWPP is to:

- Protect human life and property from wildland fires
- Increase public understanding of living in a fire-adapted ecosystem

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[Http://www.cafirealliance.org/communities_at_risk/communities_at_risk_list?filter_field=county_name&filter_text=Mariposa](http://www.cafirealliance.org/communities_at_risk/communities_at_risk_list?filter_field=county_name&filter_text=Mariposa)

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- Increase communities' ability to prepare for and respond to wildland fires
- Instill a sense of personal responsibility for taking preventative actions regarding wildland fire
- Improve the landscape's fire resilience while protecting other social and ecological values.
- Restore fire-adapted ecosystems

The Mission of the Mariposa County Fire Safe Council is to preserve Mariposa County's natural and manmade resources by mobilizing all Mariposans to make their homes, neighborhoods and communities fire safe.

Planning Area Boundaries

For the purposes of this plan the planning area boundaries are geographic rather than political as wildland fires tend not to heed political boundaries and obey natural topographic features and fuel loading instead. As a result we are not so much concerned with who is the jurisdictional authority of the area that the fire is burning in as much as what the outcome is going to be. Therefore, the Mariposa Countywide CWPP is a reflection of all the jurisdictions and addresses the wildfire risk and mitigations for those risks from a non-political view.

Fire Policies and Programs

As of this writing there are many state and federal programs and policies that address the environmental health as well as protection for private residences from catastrophic wildland fire. Some of these are:

Healthy Forest Restoration Act/ Healthy Forest Initiative², this act has two sections that are pertinent to Mariposa County, Title I which provides for treatment on acres of public land that are threatened by insects and disease. And Title III which encourages the development of CWPPs that identify areas that Healthy Forest Restoration Act projects may take place.

National Fire Plan (NFP) and 10 year Comprehensive Strategy³, this plan is intended to protect the lives of fire fighters and the public as well be a long term investment to help protect communities and natural resources. The NFP has led the federal wildland fire management agencies to develop a 10 Year Comprehensive Strategy that was completed in 2001. The NFP identifies the need for the development of CWPPs to aid in effectively implementing the target goals of the NFP.

The California Fire Plan⁴, this plan provides for the wildland fire protection in California. CAL FIRE Madera, Mariposa, Merced Ranger unit has specific targets and goals for pre-fire suppression and prevention that are specific for Mariposa County.

² http://www.forestsandrangelands.gov/Healthy_Forests/index.shtml

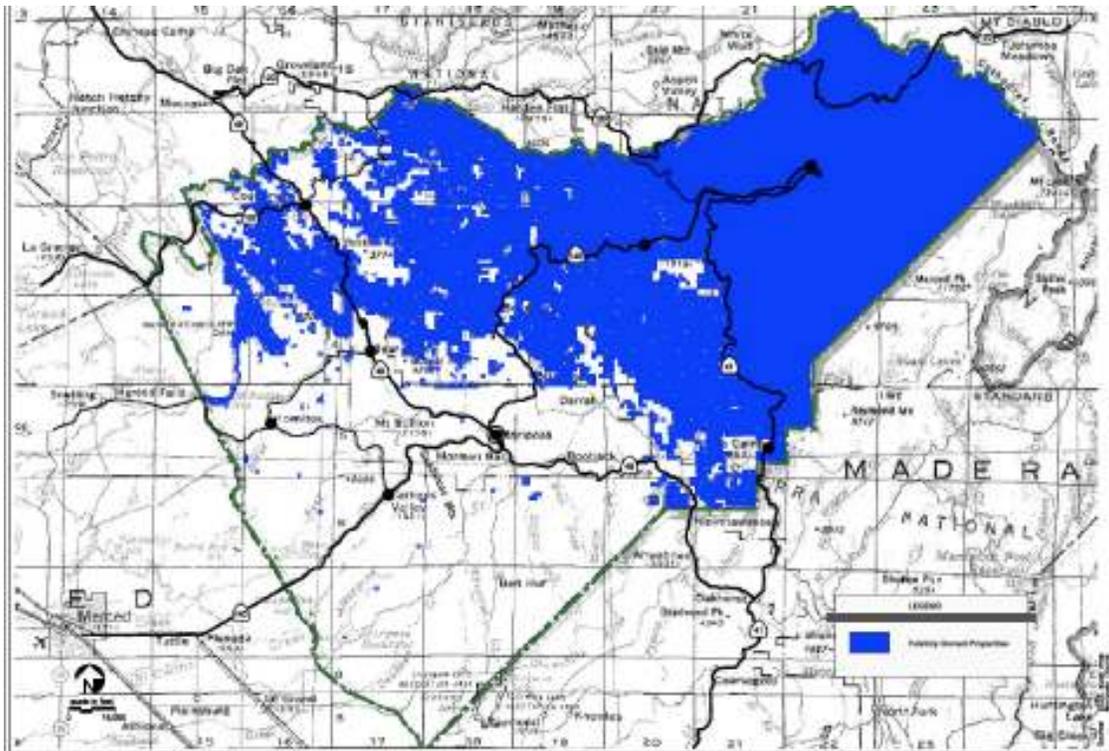
³ <http://www.forestsandrangelands.gov/>

⁴ http://www.calfire.ca.gov/communications/downloads/fact_sheets/FirePlan.pdf

Planning Area Profile

Land Ownership

Mariposa County has approximately 931,200 acres. The USDA Forest Service Sierra NF and Stanislaus NF⁵ comprise 179,684 acres or 19 %. USDOY Yosemite National Park comprises roughly 268,800 Acres. USDOY Bureau of Land Management comprises 72,580 acres⁶. This makes up approximately 56% of the county, which, is withdrawn from any kind of property tax. The rest is owned by privately and consists of rangelands, chaparral fuel types, Oak lands, open dry pine to forest. The uses are varied with cattle grazing to recreation, to logging, to wilderness areas.



Public lands within Mariposa County⁷

Natural and Cultural Resources

⁵ <http://www.carseyinstitute.unh.edu/uscounties/states/06/06043.html>

⁶ http://www.blm.gov/ca/news/2005/02/nr/CCNews39_planningmeeting.html

⁷ <http://ca-mariposacounty.civicplus.com/DocumentView.asp?DID=3063>

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Mariposa County has flat grasslands at the west side that progress into rolling hills to steep, rugged mountains bordered by narrow river canyons. With the San Joaquin Valley to the west and the Sierra Nevada Mountain range to the east elevations go from 450 feet in the valley to 14000 feet. This area is made up of two distinct eras of granite, the contact zone being the area where gold has been found, Mariposa being at the end of the Golden Chain.

Yosemite National Park is the dominant geographical feature of Mariposa County; the three tallest waterfalls in North America are found in the county: Yosemite Falls at 2,425 feet, Sentinel Fall at 2,000 feet, and Ribbon Fall at 1,612 feet. In addition to the named waterfalls there are nine other waterfalls in the county area. The park is also the headwaters for the Merced River which is the principal watershed. This watershed contributes greatly to the economic health of California by providing water for agricultural use in the San Joaquin Valley. The Merced River provides water to Lake McClure which is not only holding water the agricultural interest but is also a source for recreational users as well.

Forestland

Mariposa County is about half heavily forested. Portions of the Sierra and Stanislaus National Forests and Bureau of Land Management land fall within the county's borders. Timber at one time played a large roll in the economy providing many jobs and revenue for the local school district. Recent changes in the industry have seriously impacted logging on the National Forests and on private forests as well.

Climate

The climate in Mariposa County varies greatly with elevation, the higher you are the colder it will be in the winters and there will be more precipitation. For this plan we will be using county averages.⁸ The county enjoys a moderate climate with snow in some areas during the winter. Abundant rainfall is the norm which also brings beautiful wildflowers and green hills. Summers tend to be warm and dry. The annual average rainfall: 29.9 inches. In the Jerseydale area the rainfall averages 42 inches a year. At 12,000 feet it is not unusual to receive snow packs of more than 30 feet. The rainy season lasts from December through April during typical years. Summers are characterized by long drought periods, which are occasionally punctuated by electrical storms. Historically, the summer lightning, which occurs from May through October, has resulted in fires. These natural, along with traditionally ignited fires, have caused vegetation to evolve with high-intensity, stand replacing fires as result of fire suppression strategies over the last one hundred years.

Population

⁸ <http://www.usacitiesonline.com/camariposacounty.htm#search>

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The population of Mariposa County according to the US Census Bureau is 18,306.⁹ There are 15,704 households in Mariposa County that live in 2,430 single family owner occupied homes. Of these 18,306 people, 2,940 are over 65; 3,516 have a disability; there are currently 9,150 people in the workforce much of which is seasonal being employed in tourist related industry. The median income for Mariposa household is \$37,355.00 (2004). This ranks Mariposa as 54th to 58th of 58 (dependent upon what database is used) when compared to the rest of California which shows an average of \$49,854.00¹⁰.

Employment and Industry

From 2000 to end of 2006 the number of jobs in Mariposa increased by 3.4 %¹¹. Government jobs comprise the largest component of employment being 35.4% of all jobs in Mariposa County. This is followed closely by the leisure and hospitality industry. There is virtually no natural resource industry, either logging or mining, at this time.

Transportation

Mariposa County has State Highway 49, which runs predominately north south, State Highway 140, which serves as the middle entrance to Yosemite National Park, and State Highway 132, which runs east west and terminates in Coulterville. These roads serve as the primary access for any kind disaster that would occur in the county. The rest of the roads that are mentioned in the individual community plans are a combination of county, state, or federal jurisdiction. All roads are subject to closure due to wildland fires. Alternate routes are identified in the individual community plans. In the worst case scenario, mass evacuations can be accomplished by helicopters operating out of Mariposa Airport. During the 1997 floods, a contingency plan, which included the use of, California National Guard helicopters were staged in the advent of floodwaters cutting off escape for 4000+ park visitors that were in Yosemite Valley.

Facilities and Infrastructure

Communications

Mariposa County has one 911 center operated by Mariposa County Sheriff's office, CAL FIRE has a dispatch center for fire and medical dispatching, and Yosemite National Park has a Dispatch center for all hazards located in El Portal for Yosemite National Park. Cell Towers are located throughout Mariposa County which allows cell phone coverage for approximately 70% of the county. The Sierra and Stanislaus National Forests maintain repeaters which would allow for radio communications throughout the entire planning area. The majority of phone lines are underground and do well surviving wildland fires.

⁹ Estimate for 2007 provided by the US Census Bureau

¹⁰ <http://www.census.gov/hhes/www/income/income07/statemhi2.xls>

¹¹ <http://www.calmis.ca.gov/file/cosnaps/maripsnap.pdf>

Critical Facilities

The largest facility is the Mariposa County Fairgrounds. This facility is able to accommodate large scale Incident Bases as well as serve as an Evacuation Center for several thousand people at a time. Evacuation and staging facilities are listed for each community in their individual community plan. Evacuations are the responsibility of the Mariposa County Sheriff's office and for fires the jurisdictional entity will be responsible for staging areas as well support bases. Mariposa Airport is another key facility to use as a base of operations for light fixed wing aircraft and as a base for helicopters. During the 1997 flood in Yosemite National Park this facility was used in the advent of the need to the rescue of 4000+ people from Yosemite Valley by 12 Type 1 Helicopters operating from the airport. This airport comes into use on the average of twice a year to support helicopter operations for wildland fire. There are 12 schools located in Mariposa County, one hospital, three medical clinics, 2 sheriff's stations, and 22 fire stations.

Fire History

Every community in Mariposa County has been threatened by major wildland fires within the past twenty years. The Town of Mariposa has burnt down several times since 1854, the original county seat, Aqua Fria, was destroyed by fire in the 1800's and was not rebuilt. Structures that have survived for more than one hundred years, with exception of the Mariposa County Courthouse, have similar construction. That is steel roofs, steel shutters for doors and windows, and adobe, stone, or brick walls. Other structures that have survived are located in areas that were defensible from wildland fires and, had some sort of defensible space such as pastures, orchards, or just cleared areas around the structure. Mariposa County is not a stranger to wildland firefighter fatalities, in 1962 the US Forest Service, Jerseydale Engine was overrun by fire which resulted in four fire fighter fatalities. As the fuel loading increases in the county the potential for more firefighter and civilian fatalities also increase. The cost of wildland fire suppression is increasing every year, not only nationally but locally as well. There has been significant improvements in prevention that has dramatically reduced the number of human caused fires, Smokey Bear which started in the 1944, and more recently, the CAL FIRE and USDA Forest Service Team Teaching in the elementary schools which has reduced the number children caused fires to almost zero within the past 25 years. The cheapest fire to fight is the fire that hasn't started. This leaves lightning as the number one threat to Mariposa County and historically it is lightning caused fires that have been the most costly. Significant fires in the past 20 years have been listed in the individual community plan. The most notable fires of the past 20 years have been:

2008 Telegraph – Human Caused, thirty homes lost, 36,000 acres
1997 Stumpfield Fire- Human Caused-9 homes lost
1990 Arch Rock Fire-Lightning- 92 homes lost

Every year since 1983 there has been at least one or more Type 1 Incident Wildland Fires that have exceeded 5,000 acres. To control fire suppression costs more “upfront” money needs to be

spent to reduce the fuel loading, create “fire wise” communities that have a community defensible space, and return the environment in general to a pre-European state.

Fire Regimes

A fire regime refers to the relationship of disturbance attributes including type, frequency, duration, extent and severity. Natural fire regimes have been altered by management activities including fire exclusion, livestock grazing, and timber harvesting to mention a few. Historic climate variability and potential global climate change have and may further impact fire regimes.
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Five fire regime classes have been identified to aid fire management analysis efforts. They reflect fire return intervals and severity. (Note that there may be variation among the species listed under each Fire Regime);

Fire Regime I; Fire burns through once in less than 35 years non-lethal, low-severity (mostly forested areas). (Ponderosa pine, Incense Cedar, Black Oak, pine-oak woodlands, Douglas-Fir and dry site White Fir plant associations)

Fire Regime II; Fire burns through once in less than 35 years stand replacing (grassland and chaparral lands).

Fire Regime III; burns through once every 35-100+ years, mixed severity. (Moist/high elevation White Fir, Red Fir,)

Fire Regime IV; 35-100+ years stand replacing.

Fire Regime V; 200+ years stand replacement

The Sierra Nevada mountains and foothills show an average visitation of seven years up to 5,000 feet in elevation. This has a direct relationship to the type of fire behavior and post fire effects these sites will support today, compared to the past. Stand replacing fires were extremely rare till the mid 1940s. Today there are more stand replacing fires due to the heavy fuel loads caused by fire suppression strategies of the past 100 years. The ability to predict potential fire behavior characteristics is important for reducing the risk and loss to people and key resources.

Condition Class

Condition class attributes is an approach to defining and interpreting the importance of fire frequency in ecosystems. This concept is useful in helping wildland fire communicators convey to their audiences the science and management behind wildland fire.

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http://frames.nbii.gov/portal/server.pt?open=512&objID=309&&PageID=2727&mode=2&in_hi_userid=2&cached=true

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Current "condition class" is defined in terms of departure from the historic fire regime, as determined by the number of missed fire return intervals with respect to (1) the historic fire return interval, and (2) the current structure and composition of the system resulting from alterations to the disturbance regime. Five combinations of fire frequency are defined. Groups I and II include fire return intervals in the 0–35 year range. Group I includes Ponderosa Pine, other long-needle pine species, and dry-site Douglas Fir. Group II includes the drier grassland types, tall grass prairie, and some chaparral ecosystems. Groups III and IV include fire return intervals in the 35–100+ year range; and Group V is the long-interval (infrequent), stand replacement fire regime.

Three "Condition Classes" have been developed to categorize the current condition with respect to each of the five historic Fire Regime Groups. The relative risk of fire-caused losses of key components that define the system increases for each respective higher numbered condition class, with little or no risk at the Class 1 level. Features of each condition class are defined through a qualitative description of the current state of five key ecosystem attributes: (1) disturbance regime; (2) effects of disturbance agents; (3) potential production of smoke emissions; (4) hydrologic function; and (5) vegetative composition, structure, and resilience.

These first two fire regime groups occupy nearly all the lower elevation zones across the United States. They have been most affected by the presence of human intervention and analysis shows that these types demonstrate the most significant departure from historical levels. The departures are affected largely by housing development, agriculture, grazing, and logging. These areas are at greatest risk to loss of highly valued resources, commodity interests, and human health and safety. It is expected that these areas will receive primary focus of wildland management agencies in the future.¹³

The Five Historic Natural Fire Regime Groups		
Fire Regime Group	Frequency (Fire Return Interval)	Severity
I	0–35 years	low severity
II	0–35 years	stand replacement severity
III	35–100+ years	mixed severity
IV	35–100+ years	stand replacement severity
V	>200 years	stand replace

Condition Class 1 = Fire frequencies are within or near the historical range, and have departed from historical frequencies by no more than one return interval; vegetation attributes are intact

¹³ http://www.nifc.gov/preved/comm_guide/wildfire/fire_5.html

and functioning within the historic range. The risk of losing key ecosystem components is low.

Condition Class 2 = Fire frequencies and vegetation attributes have been moderately altered from the historical range, and fire frequencies have departed from historical frequencies by more than one return interval. The risk of losing key ecosystem components is moderate.

Condition Class 3 = Fire frequencies and vegetation attributes have been significantly altered from the historical range, and fire frequencies have departed from historical frequencies by multiple return intervals. The risk of losing key ecosystem components is high.

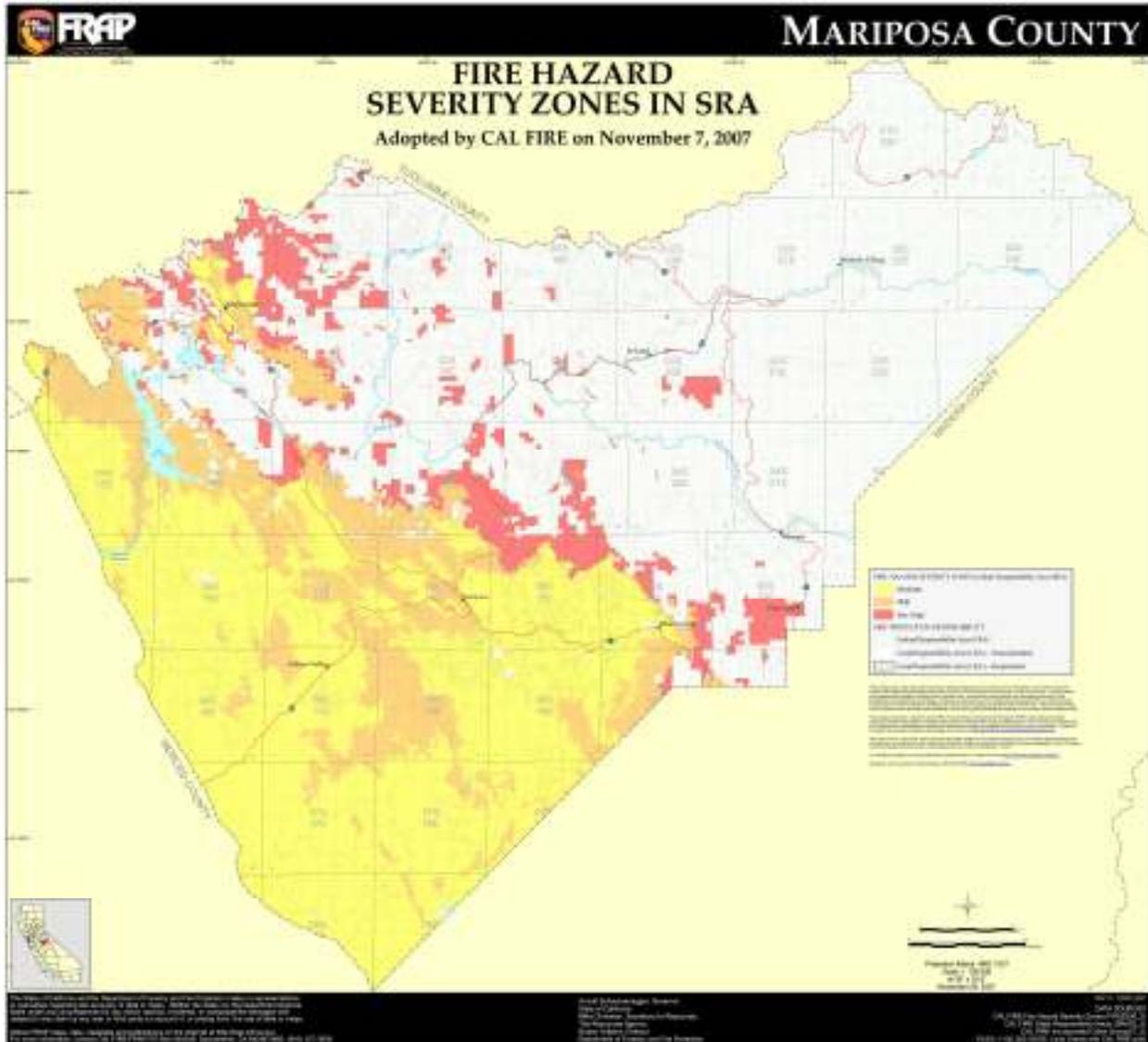
The condition class scale was developed to exhibit the departure in severity, intensity, and frequency of fires burning in the ecosystem in its current condition as compared to fire's historic or reference condition. The departure being described in these assessments results in changes to one or more of the following key ecological components: vegetation characteristics (species composition, structural stages, stand ages, canopy closure and mosaic pattern); fuel composition; fire frequency; severity and pattern; other associated disturbances; and the introduction of invasives, grazing and insect and disease mortality. Reference conditions are very useful as indicators of ecosystem function and sustainability, but do not necessarily represent desired future conditions, i.e., they may not reflect sustainable conditions under current climate, land use, or managerial constraints. So when we look at Midpines, this area is a Fire Regime I and has Condition Class III: the effects of the Telegraph Fire were as could be predicted. Unfortunately this holds true throughout most of the county.

Human Interaction with Wildfire

Humans have played an important role in the history of wildfire. The practice of burning the landscape by Native Americans to enhance production of subsistence resources is well documented for tribes in North America. While use of fire varied greatly, tribes used wildfire as a tool for hunting, crop management, improving growth and yields, insect collection, pest management, warfare, signaling, clearing areas for travel, felling trees, clearing riparian areas, and for fireproofing. As in many other Native American cultures, "fires were usually set by "Specialists" who owned formulas that were prescriptions for successful burning. Temperature, wind direction, and impacts to specific plants were all carefully considered before fires were set. Fire was viewed as a valuable tool, but it had the potential to damage precious resources that were essential for survival. During the settlement period in Mariposa County, approximately 1850 to 1910, pioneers also used fire as a tool. Settlers used fire for clearing away brush and forest litter to enhance the visibility of the ground for gold prospecting, or for easier travel or hunting, which stimulated new-growth brush for big game and for livestock, created dense smoke to attract deer escaping the affliction of flies or gnats, and maintained grassy areas for cattle and sheep grazing.¹⁴

¹⁴ Williams, Gerald W. Ph.D. References on the American Indian Use of Fire in Ecosystems. USDA Forest Service. Washington, D.C. May 18, 2001.

WILDLAND FIRE RISK ASSESSMENT



The Healthy Forests Restoration Act, the National Fire Plan, FEMA’s Disaster Mitigation Act of 2000 and the National Association of State Foresters all provide guidance on conducting a hazard and risk assessment for wildfire

CAL FIRE was responsible for the comprehensive review of risk assessment and conducted an inventory of existing data for risk, hazard, values, structural vulnerability and protection capability. CAL FIRE was also the agency responsible for developing and submitting a list of at risk communities to National Register.

Risk Assessment Objectives

Identify Communities-at-Risk

Identify and prioritize hazardous fuels treatment projects for all land in Mariposa County

What is a Wildland Fire Risk Assessment?

The Mariposa Countywide Community Wildfire Protection Plan wildfire risk assessment is a summary of the potential risks to life, property and natural resources. The assessment takes into consideration a combination of factors defined below:

Risk: the potential and frequency for wildfire ignitions

Hazard: the conditions that may contribute to wildfire (fuels, slope, aspect, elevation and weather)

Values: the people, property, natural resources and other resources that could suffer losses in a wildfire event.

Mitigations: measures that can be realistically taken to reduce or mitigate the risks

Structural Vulnerability: the elements that affect the level of exposure of the hazard to the structure (roof type and building materials, access to the structure, and whether or not there is defensible space or fuels reduction around the structure and the entire community.)

Communities at Risk

There are many ways to define community, particularly in Mariposa County. This fire plan draws people together in another way – the ability to provide fire protection services and protect people, property and natural resources in the event of a structural or wildland fire. For the intent of this fire plan, defines communities at risk to fire by looking at the common topographical boundaries for fire protection.

Specifically, our methods for identifying communities at risk are by Mariposa County Fire response areas or town planning areas boundaries. While a number of Mariposa County's communities are listed as "unprotected," it is important to note that these communities are NOT without fire service.

The following communities are listed on the Federal Register, August 17, 2001 as communities at high risk from wildland fire¹⁵: Bear Valley, Bootjack, Buck Meadows, Coulterville, Fish Camp, Foresta, Greeley Hill, Hunter Valley, Lake Don Pedro, Lushmeadows Mountain Estate, Mariposa, Mormon Bar, Wawona, and Yosemite Village.

In addition to this list the following communities show as at risk on the California Fire Alliance list¹⁶: El Portal, Midpines

The following communities lie within the Yosemite National Park Boundary or are a direct threat to the Park and consequently the USDO National Park Service has taken on responsibility for

¹⁵ <http://www.fs.fed.us/r6/frewin/projects/hfra/wui-2.pdf#xml=http://www.fs.fed.us/cgi-bin/texis/searchallsites/search.allsites/xml.txt?query=federal+register+of+communities+at+risk&db=allsites&id=47c400770>

¹⁶ http://www.cafirealliance.org/communities_at_risk/communities_at_risk_list?filter_field=county_name&filter_text=Mariposa

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them: El Portal, Foresta, Wawona, Yosemite West, and Yosemite Village. The Park Service has paid for a CWPP to be done for Foresta and Yosemite West.

In addition to this the communities of Coulterville, Buck Meadows and Greeley Hill lie within the SWIFT planning area and many of their possible projects are covered by that coalition of agencies.

Identification and Prioritization of Fuels Reduction Projects

The Healthy Forests Restoration Act provision for Community Wildfire Protection Plans (CWPP) requires that communities identify and prioritize hazardous fuels treatments as part of the CWPP. Currently, the Mariposa Countywide CWPP risk assessment methodology provides a foundation for assessing hazards and risk. There are three layers of information that should go into the identification and prioritization of fuels treatment projects: Community input on values and priority project areas which were gathered from meetings and from survey forms sent out by the Mariposa County Fire Safe Council. In addition to this, we received input from CAL FIRE, USDA Forest Service Sierra and Stanislaus NF, USDOY Yosemite NP and BLM land managers. This information was compiled and published by community which has been posted on the MCFSC website to provide an opportunity for the general public to review and provide further input to the input gathered from the public at community meetings. The last phase in this process is to present Countywide CWPP information on the priorities for fuels treatment to the communities and to then incorporate the information into the Countywide CWPP.

Other Fire Plan Priorities

As indicated previously some communities within the Mariposa Countywide CWPP's Planning area have already written Community Wildfire Protection Plans. The exercise of planning and prioritizing fuel reduction projects at the community level results in the incorporation of more local history and knowledge, better participation and a sense of responsibility, which in turn produces better projects and longer-term commitment toward continued maintenance of the area. While each Community Wildfire Protection Plan will address different issues, if a local CWPP doe's plan and prioritize fuel reduction projects these local priorities will take precedence over those within the broader Countywide CWPP.

Strategic Planning for Hazardous Fuels Treatment Projects

Create Defensible Space around individual homes

Strategic treatments around neighborhoods

Strategically superior defensible positions – Create fuel breaks that tie into ridges, natural opening such as meadows, lakes, large rocky areas or streams or to existing fuel treatment areas.

Education and Community Outreach

Education and Outreach has become one of the primary focuses of the Mariposa County Fire Safe Council (MCFSC) and is a priority outlined in the Mariposa Countywide Community Wildfire Protection Plan.

MCFSC Partners in Community Outreach and Education:

- Mariposa County Board of Supervisors
- California Department of Forestry and Fire Protection (CAL FIRE)
- United States Department of Agriculture – Forest Service (USFS)
- The Sierra National Forest
- The Stanislaus National Forest
- United States Department Of Interior- Bureau of Land Management (BLM)
- Folsom District BLM
- United States Department of Interior- National Park Service (NPS)
- Yosemite National Park
- The Grizzlies Fire Department
- Mariposa County Fire Department
- Sierra Nevada Conservancy
- FEMA

Objectives of Education and Outreach

- Reach out to all citizens in Mariposa County regardless of their age, gender, ethnicity, or income.
- Raise citizen awareness in regards to fire prevention and fire safety by developing strategies and tactics to reach all citizens of Mariposa County.
- Make community aware of the dangers of living with fire adapted ecosystems and in the Wildland-Urban Interface. We will advise residents on the mitigations that can take place to help prepare for a catastrophic wildland fire.

Current Programs and Activities

The MCFSC, along with their partners have focused on developing Education and Outreach programs that can and will be implemented in the years to come. Education and Outreach is included in all proposed grants in regard to fire prevention and fire safety, because if the public isn't informed on the dangers surrounding fire, then they will not be prepared for when disaster strikes. We plan on continuing our Education and Outreach programs by continuing our strategic planning and dedication to the community in helping them understand and prepare. We have the following programs and activities in place as of 2009:

- “*Safe At Home*” fair – Meet with over 100 kids and talk with them on the importance of fire prevention, and what they can do to become fire safe. Work with cooperating agencies.
- “*Team Teaching*” – Work with local agencies such as CAL FIRE, USFS, and Mariposa County Fire and travel to local elementary schools talking to kids on the importance of fire safety, how they can help in fire prevention, and what to do in the case of an emergency.

Mariposa County Local Hazard Mitigation Plan

- “*Defensible Space Educational Program*” – This program gives us an opportunity to discuss the importance of maintaining Defensible Space and how much it helps in saving their residence and/or property. We can go out to one’s residence at their request and advise the resident on what needs to be mitigated to meet the State Law of maintaining 100 foot minimum clearance around all structures.
- “*MCFSC Website*” – The website is used as a tool to get educational information across to the community with links to other useful websites as well. We have the ability to put video, schedules, useful tips, and our local CWPP drafts on the website for the public to view. They can also add their names to our contact list and we send out reminders on community meetings, useful tips, and any other valuable information that the community should be a part of.
- “*Mariposa County Fair*”- Every year, the MCFSC sponsors a booth at the local Mariposa County Fair during the months of August and September. We usually coordinate with the USFS and work together on getting the importance of fire safety out to the public. We advertise our organization, give out educational literature, work with community members and kids, letting them know of the different services and programs that we offer. We also show pictures and documentation of the past work that has been accomplished by the MCFSC and how they can become a part of it!

Grant Opportunities

- Mariposa County Community Wildfire Protection Plan (CWPP) – This document will note all of the required elements of a CWPP, including the separate sections for each community, the assets at risk and the different mitigations that we can take to help stop or prevent a catastrophic wildfire!

National Fire Prevention Resources

- Firewise – The Firewise web site contains educational information for people who live or vacation in fire-prone areas of the United States. It was designed to acquaint residents with the challenges of living with wildland fire. The program includes a website with information for home owners and firefighters. Educational and informational resources include Wildfire News and Notes (a - publication for wildland firefighters) and for the public an interactive games and tutorials, an ask an experts section and message board, publicity for Firewise Communities Workshops, and information for participating in the Firewise Communities/USA recognition program. All information is supplied and approved by the National Wildfire Coordinating Group, a consortium of wildland fire agencies that includes the United States Department of Agriculture-Forest Service, The Department of Interior, and the National Association of State Foresters, the US Fire Administration and the National Fire Protection Association.¹⁷
- FEMA- the FEMA website has some of the most valuable information available to the public in regards to before and after emergency situations. How to prepare for any emergency situation is key to surviving it, and FEMA is a great resource for tips on how to

¹⁷ <http://firewise.org>

Mariposa County Local Hazard Mitigation Plan

do that. They provide not only tips for catastrophic wildfires, but for structure fires, tornados, floods, and rescuing animals. FEMA also offers free educational supplies such as coloring books, crossword puzzles, and quizzes.

Project statement:

The MCFSC, along with local wildland fire agencies will continue to conduct an Education/Outreach and Awareness program to better prepare Mariposa residents for living with wildfire. We have accepted the communities input on what they need from us, as far as educational literature, assistance clearing their defensible space, making clear what defensible space is and relaying it to them that maintaining 100 foot clearance is a State Law, what other resources are available to assist them, burn day information, how to protect and teach their children on the importance of fire prevention and protection, and what types of help we can offer. The MCFSC will continue to find new and better ways for the community to communicate their needs and ideas to them. Recently the MCFSC has a new website that is offered to the public. We would like to expand the website, making more information available to the community. With the above mentioned program, the MCFSC will continue to educate and assist residents in preparing for fire season and wildland fire. Not only will the MCFSC educate homeowners and residents but will also strive to reach the younger audience as well.

Program Title: *“Living with Wildfire.... Are you prepared? Because it’s not a matter of IF it is going to happen... It is a matter of WHEN it is going to happen”*

Introduction: With the majority of Mariposa residents living in the Wildland–Urban Interface, it is a priority to reach out to the residents and help them understand how much a wildland fire can negatively impact their lives. County residents can minimize and even prevent the damaging effects of a wildland fire, by taking on the initiative and responsibility of clearing and maintaining their defensible space around their homes and communities. The MCFSC and partners want to help people prepare for next fire season, and there is no time like the present. Planning will be a coordinated effort between all partners of the MCFSC including local fire agencies, county agencies, community groups, and individuals. This program will provide as much educational information as possible, incentives for wildfire preparedness, and will show residents the positive aspects of being prepared for a wildland fire. Because the reality of it is: The more prepared one is, the better chance one has of surviving.

Program Objectives:

- Use the Program theme “Living With Wildfire: Are You Prepared” to encourage and motivate Mariposa County residents to take proper action to reduce potential losses caused from wildland fire.
- Provide incentives to motivate Mariposa County residents to take on the responsibility of wildfire mitigation actions (clearing of defensible space around homes and other structures, reducing the fuel loading on or around property, and comply with The State Law in regards to the homeowner inspections.

Mariposa County Local Hazard Mitigation Plan

- Continue to stay strong with the partnerships that have been created, and continue to form new partnerships with agencies, counties, private businesses, non-profits, community members and groups. This will allow the MCFSC and cooperating partners to implement the plan and help promote the importance of resident actions.
- Communicate clearly what actions can be taken by the residents/community members and how they can be prepared in the event of a wildland fire.
- Recognize those residents and community members on their dedication to being fire safe and the community of Mariposa! This can be done by sending letters of recognition, holding an event where the names can be recognized by the community, or create a power point recognizing the residents and featuring their property.

Target Audience:

- The program will be targeted to all Mariposa residents, and be in cooperation with the local county, state and federal agencies.

Priority Activities for 2009-2010:

- A. Choose a program theme: ***“Living with Wildfire.... Are you prepared? Because it’s not a matter of IF it is going to happen... It is a matter of WHEN it is going to happen”***
 - Include this theme on all MCFSC Wildfire educational literature and related materials.
- B. Communicate to the community of the importance of fire safety and ways to mitigate total devastation from a wildfire.
 - Attend community meetings on a monthly basis
 - Attend SWIFT meetings on a monthly basis
 - Attend local county functions, promote the program and communicate with the public on ways they can become fire safe.
 - Put useful tools and safety tips up on the MCFSC Website.
- C. Work with children throughout the community/Recognition of fire safe kids
 - Contact the education/outreach member from the different local agencies (CAL FIRE, USFS, Mariposa County Fire, Grizzlies Fire Dept...etc)
 - Establish an ongoing list of events that involves Education/Outreach with kids
 - Schedule events based on the MCFSC availability
 - Work closely with cooperating agencies and MCFSC partners, ensuring accountability and cooperation between different agencies
 - Attend local events, talk and work with the kids on the importance of fire safety and different ways to become fire safe!
 - Design a checklist and questionnaire pertaining to fire safety
 - Design a “Certificate of Recognition” or “Certificate for a Fire Safe Kid” (this will allow the MCFSC to first see how many kids are aware of the dangers of wildfire, secondly see how many kids know what steps can be taken to mitigate the potential of wildfire and what to do in the event of a wildfire. Last but not least, by giving a

Mariposa County Local Hazard Mitigation Plan

child a certificate, it lets them know that they are an important asset to fire prevention, gives them some sort of recognition, and the confidence to carry out any steps that need to be taken in regards to fire safety and prevention.)

- D. Develop a 12 month “Wildland Fire Safety Calendar”
- Currently have a grant proposal to pay for the production of 500 calendars
 - Contact local printing companies and identify the best quality for the price calendar
 - Gather photos of local firefighting efforts, local wildland fires, and photos of our agency in progress.
 - Gather fire safety tips which will be added to the calendar along with the photos
 - Distribute calendars to community members on a personal basis. We will strive to reach more community members on a more personal level, giving the MCFSC the opportunity to talk with them about the different aspects of a wildland fire and different ways to prepare for one.
- E. Incorporation of Wildfire Safety Education when assisting residents with their Defensible Space
- When there is the chance to assist residents (or homeowners) with the clearing of their defensible space, we will incorporate the education on the importance of wildfire safety
 - Talking with the residents is perhaps the best way to get the message across. Therefore, we will strive to ensure that the residence is home when the work is to be completed
 - Establish or use an active checklist so that the can be used by the person receiving assistance to better prepare their homes in the event of a wildfire

ECONOMIC DEVELOPMENT

To date, grant funding through the National Fire Plan and County Title III funds have paid for most of the fuels reduction work that has occurred on private lands. The County will need to identify a strategy to pay for hazardous fuels treatment in the future when the Federal and State governments no longer fund hazardous fuel reduction.

Local investment and incentives may well be the best strategy there is. Whether it is local businesses or local citizens, paying to reduce fuels around personal property is a big step towards being accountable and responsible for personal safety. If there are markets that will ensure payment for raw materials (and a way to transfer the raw materials), a local landowner may be much more inclined to reduce hazardous fuels.

Mariposa County Department of Public works has been researching the feasibility of biomass utilization. Even Federal policies recognize the value of biomass marketing and utilization. Since its' inception, the National Fire Plan has funded small diameter marketing and utilization through the Forest Service Economic Action Programs. The Healthy Forests Restoration Act, which includes provisions for biomass marketing and utilization. However, meaningful funding and technical assistance must be provided to ensure that communities have the opportunity to identify feasible and economically beneficial ways to use raw materials from fuels reduction projects.

SUSTAINING EFFORTS

The Mariposa Countywide CWPP provides a foundation and resources for understanding wildfire risk and opportunities to reduce potential losses from wildfire; individual communities, fire districts and neighborhoods can take local action by participating in countywide activities for prevention and protection. Successful implementation of the Mariposa Countywide CWPP is dependent upon local community efforts. There are other Community Wildfire Protection Plans such as the Foresta and Yosemite West CWPPs and the Southwest Interface Team (SWIFT) Project. Successful implementation of the Mariposa Countywide CWPP is dependent upon local community efforts as well as County, State, and Federal agency support.

The Healthy Forests Restoration Act authorities for Community Wildfire Protection Plans require adoption of this plan, as does the FEMA Disaster Mitigation Act of 2000. With formal adoption of this plan, Mariposa County is more competitive for funding that may assist with plan implementation. Furthermore, adoption of this plan highlights the collaborative process between fire districts, local government, community-based organizations and public agencies.

Sustaining Fire Plan Efforts

Development of the Mariposa Countywide CWPP has been a four year undertaking. Implementation and sustaining these efforts will be much more complex. Building a collaborative and cooperative environment between community-based organizations, fire districts, local government and the federal land management agencies has been the first step in identifying and prioritizing measures to reduce wildfire risk. Maintaining this cooperation with the public is a long-term effort that requires commitment of all partners involved.

There has been limited public awareness about the investment required to maintain fire protection. Public investment up until this point has been reaction to crisis such as outdated fire truck replacement. Investment by the public for all aspects of wildland fire protection; from fuels reduction to education and prevention to evacuation, citizens must have the information and resources to be active participants in reducing their risk to wildfire. For many years, there has been a reliance on insurance, local government, fire service, federal agencies and many other types of organizations to aid the public when disaster strikes. The CWPP encourages citizens to take an active role in identifying needs, developing strategies and implementing solutions to address wildfire risk. Citizen action may be cleaning up brush around homes, installing new smoke detectors, voting to increase support to the local fire district through a bond measures, volunteering to be a part of an auxiliary, attending community meetings, or passing along information on fire prevention to neighbors and friends.

Mariposa County Fire Safe Council is also committed to supporting the communities in their fire protection efforts. The Council will continue to provide support in coordinating countywide grants when the opportunities become available and providing resource support for risk assessment. The Council will also support the communities in their endeavors to secure funding for long-term fire prevention efforts. The CWPP will focus on public meetings in the county, coordinate a spring education campaign, and explore opportunities for biomass marketing and utilization. Finally, the Council will provide support to coordinate fuels reduction projects and strengthen their protection capabilities. The Council's partners will also focus on refining long-term strategies to maintain fire protection activities in the County.

Monitoring and Evaluation

As part of the CWPP process the Mariposa County Fire Safe Council should hold an evaluation meeting with partnering agencies, stakeholders, and collaborators to assess the effectiveness of the CWPP and to revise mitigations and priorities. This evaluation should take place in November to allow time to develop mitigations and apply for grants in a meaningful time frame. Suggested questions are listed in Appendix E. The questions are not limited to those listed and may be altered to better reflect the conditions that exist at the time of the evaluation. The evaluation may be use as tool for reporting successes to the HFRA and to the agencies for their reporting requirements.

Ecological Monitoring

A critical outcome related to CWPPs is related to the change in fire behavior, as affected by the number and type of fuels treatments that occur as a result of priorities identified within the CWPP. The HFRA (Section 102(g)(5)) instructs the USFS and DOI to establish a collaborative multiparty monitoring, evaluation, and accountability process when significant interest is expressed in such an approach. This, however, will be subject to the participating agencies having the people and budget to do so.

Multiparty monitoring gives communities an opportunity to assess environmental, social, and economic outcomes related to fuels reduction projects. Multiparty monitoring also builds trust and provides an opportunity for residents to learn about fire-adapted ecology. The USFS Collaborative Forest Restoration Program in the Southwest offers a set of guidelines for monitoring community-based forest restoration. Communities engaged in ecological monitoring of hazardous fuels reduction projects can use these guidelines. They provide an overview of the multiparty monitoring process, ecological and socioeconomic goals and indicators, and examples of measures, data sources, and tools that can be used in conducting this kind of monitoring. The CFRP program also developed a series of handbooks to help communities conduct this monitoring. These resources can be downloaded directly at <http://www.fs.fed.us/r3/spf/cfrp/monitoring/index.shtml>.

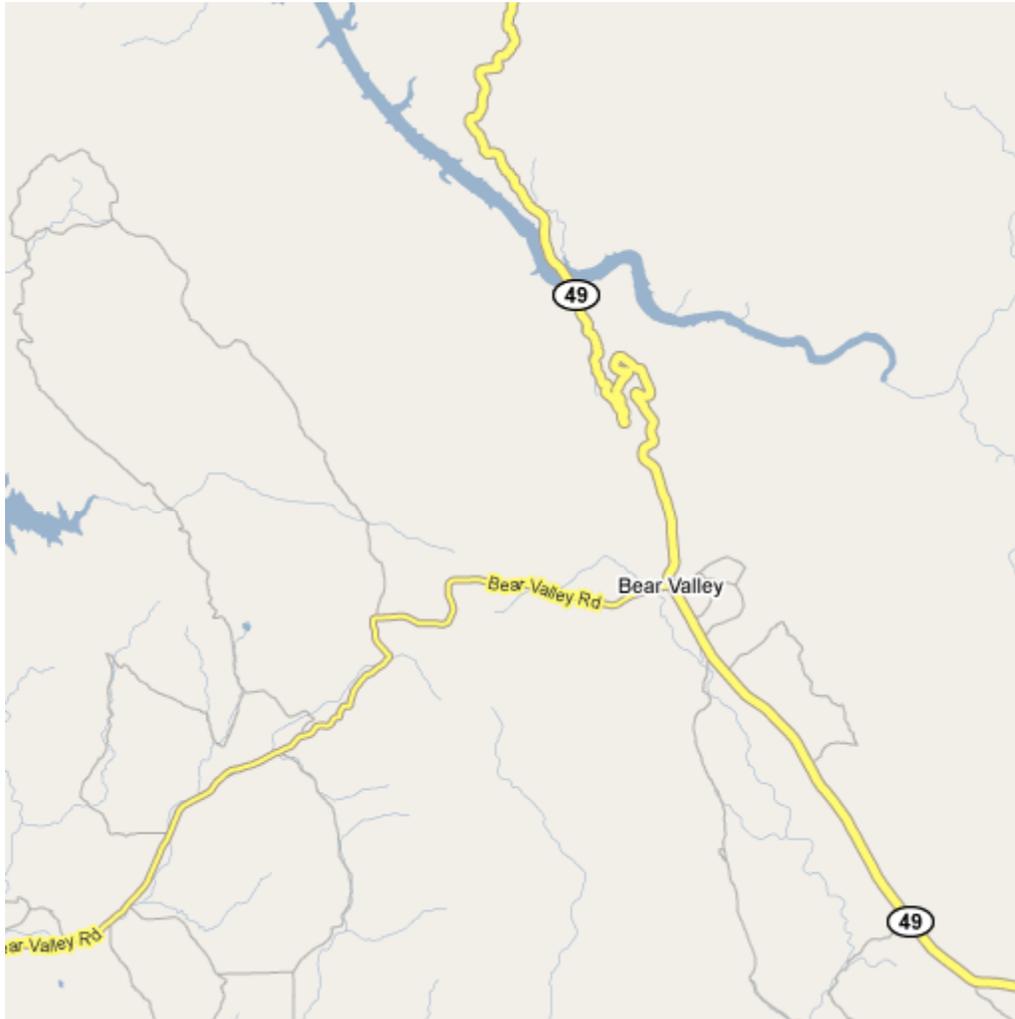
COMMUNITY WILDLAND FIRE PROTECTION PLAN



BEAR VALLEY

Mariposa County, California

Community Planning Area Map¹⁸



Community Overview

Bear Valley is a small rural community with rural historic and modern residential dwellings and a small commercial district in Mariposa County, California. The community ranges in elevation from 2,054 to 3,400 feet with moderate to steep terrain. Latitude is 37 34 9.1524, and longitude is 120 7 11.5572. Population is estimated at 157 residents with the majority of residents living in the community year-round. This community does not have any advisory groups or a Fire Safe Committee.

¹⁸ <http://maps.google.com>

Mariposa County Local Hazard Mitigation Plan

The community is listed in the Federal Register as at high risk from wildfires. CAL FIRE has not identified any strategic fuels treatment projects for this community.

County Supervisor

Lyle Turpin, District II 209-966-3222.

Community Contacts & Information

Primary Community Contact: Barbara Parker (Trabucco) 209-377-8349

Alternate Community Contact: Maggie Williams 209-377-8379

Scheduled Events/Meetings: No town or community meetings are held

Local Media: Mariposa Gazette 209-966-2500; Merced Sun Star 209-385-2431; Sierra Sun Times/goldrushcam.com

Assets at Risk

Estimated Number of Homes: 40

Estimated Value of Homes: \$8 million (median price \$200,000.)

Estimated Number of Businesses: The General Store – Bear Valley Grocery (closed beginning of 2008), The BON TON café (closed).

Estimated Value of Businesses: \$500,000

Facilities: Hall next to the store (Historic OSO Hall)
School house in Bear Valley owned by the Chases # 209-377-8285

Infrastructure: roads & bridges; PG&E poles, lines & equipment; Sierra Telephone lines & equipment, T.D.S. phone lines and equipment .

Estimated Value of Infrastructure & Facilities: \$2.1 million

Other Values

Watershed: Bear Creek

Cultural/tribal/historical: historic Trabucco building(s), OSO House, Bear Valley General Store, BON TON Café, Bear Valley School House. The town of Bear Valley has been distinguished as a Historical Landmark.

Public Lands: Within 40 miles of the Stanislaus National Forest, BLM, Folsom District

Other: Bear Valley Cemetery and the Trabucco Cemetery

Community Hazards

Average Fuel Load: 25-75 TPA (tons per acre)

Predominant Fuel Types: oak woodland, mixed chaparral, grass

Fire History: Human caused fires are the number one cause of fires in this area followed by lightning.

Fire Risk Potential: The biggest threat to this community is a fire coming out of the Merced River Canyon through Hell Hollow. A heavy continuous fuel bed of chemise and mixed chaparral provides an avenue for rapidly spreading, spotting, high intensity fire which will be difficult to contain and without an adequate defensible space would probably raze quite a few structures. Homes in this area especially need to have defensible space as most fires occurring in this area are human caused and would quickly destroy several structures prior to the arrival of the first engine. To the east lies Mt Bullion, which is a steep slope covered in mixed chaparral, without air support would run to the ridge top, threatening several ranches. To the west is a large bed of mixed chaparral in which a number of homes are to be found.

Community Ingress/Egress: The primary ingress/egress routes in the event of a wildland fire are Highway 49N and Bear Valley Road.

Fire Response/Resources

Nearest Fire Station: Mt. Bullion Volunteer Fire Station #25 (MCF), Hunters Valley Volunteer Fire Station #36 (MCF)

Response Resources: One Type 2 Engine (1,250 GPM pump), no Water Tender, One Type 4 Patrol (100 GPM pump, 300 gal)

Fire Agency Contacts: Mariposa County Fire Chief Jim Wilson and Mt. Bullion Volunteer Fire Station 209-966-4330.

Estimated Response Time: 25 minutes

Next Nearest Fire Station: Mariposa Fire Station (CAL FIRE) or Hunter's Valley Volunteer Fire Station #26 (MCF)

Response Resources: 5 Engines, 1 Water Tender, 1 Dozer, 2 Handcrews, 2 Airtankers, 1 Air Tactical, 1 Helicopter

Fire Agency Contacts: CAL FIRE 209-966-3622.

Estimated Response Time: First engine 20 minutes, water tender 35 minutes, Dozer, 35 minutes, 2 Airtankers 25 minutes, Air Tactical 20 minutes, Helicopter 30 minutes, CAL FIRE: within sixty minutes, 6 type 3 engines, 1 Type three helicopter, 2 dozers, 2 hand crews 25 minutes, 2 Overhead. From Mariposa County: 3 type three or larger engines 1 Overhead

Other Fire Response: M.P.U.D. Station # 209-966-2515.

Nearest Medical Facility: John C. Fremont Hospital 209-966-3631.

Nearest Water Sources: Bagby, There is no reliable water source for fire suppression located in Bear Valley.

Evacuation Information

Responsibility: The Mariposa County Sheriff’s Department is responsible for all evacuations in Mariposa County. The Department utilizes an automated reverse-911 system to notify residents of pre-evacuations and evacuations. During evacuations the Mariposa County Sheriff department also utilizes the Mariposa County Search and Rescue. The Mariposa County Sheriff’s Department Animal Control is used to assist in the evacuations of all animals. Contact: Mariposa County Sheriff’s Office 209-966-3615.

Primary roads for evacuation: Highway 49N and Bear Valley Road. Both of these roads are two lane paved roads and will support egress of evacuees and ingress of suppression units. The Bear Valley Road could shut down if the fire were to cross over, however the likelihood of both of these routes being closed at the same time is highly unlikely.

Structural Ignitability

The Public Resources Code 4290 (PRC4290) contains requirements pertaining to new construction on SRA in California. Driveway widths, slopes, turn-around areas, and water storage requirements for firefighting forces are regulated in PRC4290. CAL FIRE MMU personnel are tasked with inspecting the new construction within the unit, specifically in Mariposa County.

A portion of the Public Resource Code 4291 (PRC4291) requires a minimum of 100’ of clearance for fire safety (“Defensible Space”) surrounding all structures on State Responsibility (SRA) lands in California. As of 2008, CAL FIRE has been mandated to perform LE-100 inspections on 100% of improved properties within SRA.

Regarding existing structures, residents need to be educated on how to create and/or maintain proper Defensible Space, and also made aware of construction issues and materials that affect structural survivability in the event of wildland fires. Lists of resources (such as sources for fire-safe materials and local contractors who perform required work) need to be created and made available to residents.

Residents who need assistance in creating and/or maintaining Defensible Space need to be identified so that funding can be sought for them.

State & Federal Plans

CAL FIRE’s Madera-Mariposa-Merced Unit Fire Management Plan identifies Bear Valley as included in Target Area #4 for MMU and #2 for Mariposa County.

Bear Valley is not identified on any Federal Government Fire Management Plan.

Proposed Mitigations

Mitigation #1: Wildfire Risk Assessment Survey. In order to have a baseline to work from, a Wildfire Risk Assessment Survey should be performed and include every property in the community. This Survey can be performed using CAL FIRE's LE-100 form and/or Mariposa County Fire Department's Red Zone survey software. A provision should be made for identification of unimproved lots with hazardous fuels that pose a threat to neighboring properties and the community. Ideally, a group of Bear Valley residents will be trained by CAL FIRE, Mariposa County Fire and the Mariposa County Fire Safe Council to conduct an annual survey of the entire community, preferably in late spring and in conjunction with Wildfire Awareness Week (first full week in May.) Results of the Survey will be disclosed to residents as a tool to raise awareness and educate, and also used to identify in-need residents who cannot create and/or maintain Defensible Space around their structures.

Mitigation #2: Defensible Space Assistance & Education/Chipping Programs. Residents who are unable to physically and financially create and/or maintain Defensible Space need to be assisted. Funding needs to be applied for and obtained to perform brushing and chipping services for in-need residents. In addition, it is recommended that a pile chipping program be offered to residents who are able to cut and pile their own brush but have no way to dispose of it on site or transport it to a disposal site. Burning of piles when permitted requires careful planning and placement, poses a risk of escaped burns and is detrimental to air quality. Many residents will not go to the trouble or assume the risk involved in burning piles. Making pile chipping available to residents encourages them to clear brush and create/maintain Defensible Space, reducing the risk of structure loss in the event of a wildland fire.

Mitigation #3: Weed Abatement Ordinance. It is recommended that a weed abatement ordinance (for fire hazard nuisance) be explored for the Bear Valley area.

Mitigation #4 Mosaic the Fuel Beds. The region would benefit from either prescribed fire or mastication to create a mosaic pattern in the continuous fuel beds. A great deal of success was experienced in the former CAL FIRE VMP (Vegetation Management Program). Local residents may form a group to accomplish this project.

Mitigation #5 ID Strategic fire access roads: Identify existing roads which can be ranch access roads and develop these into fire lines by brushing the fuels back from the roadbed and doing minimal maintenance to allow access by type three engines.

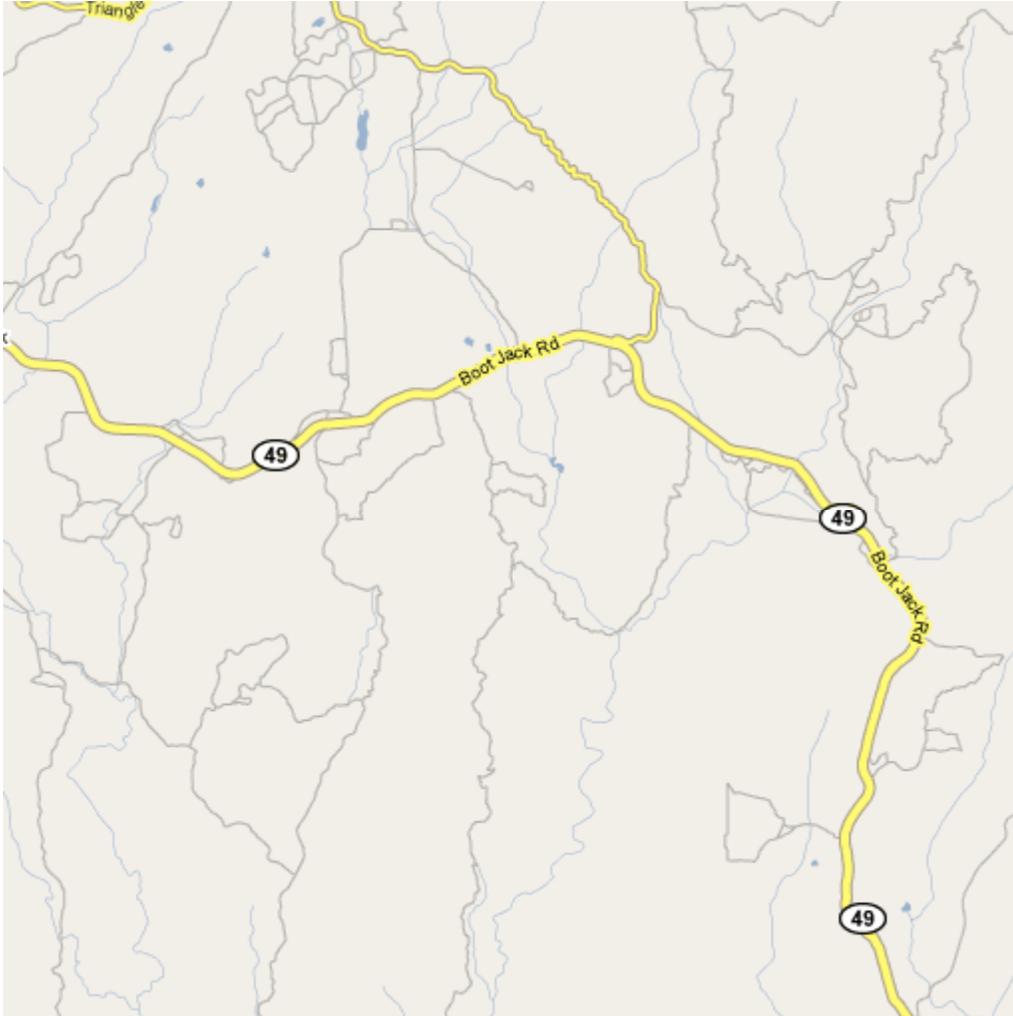
COMMUNITY WILDLAND FIRE PROTECTION PLAN



BOOTJACK

Mariposa County, California

Community Planning Area Map¹⁹



Community Overview

Bootjack consists of rural residential dwellings, some on large acreage and some within small subdivisions, and includes two concentrated commercial districts, Bootjack and Woodland, in Mariposa County, California. It ranges in elevation from 2,242 feet to 3,400 feet with moderate to steep terrain. In addition there are many drainages, chutes and small canyons. Latitude is 37 27 49.881, and longitude is -119 53 18.6714. Population is estimated at 3,325 residents with the

¹⁹ Google Maps

Mariposa County Local Hazard Mitigation Plan

majority of residents living in the community year-round. Most residents are permanent, with a moderate number of rental properties and some vacation homes distributed throughout the area. The community is listed in the Federal Register as at high risk from wildfires.

Planning Area: For this Protection Plan the boundaries we started at Hwy 49 and Allred Road traversing northerly to the intersection of Morning Star then due north to Triangle Road then northeasterly to Buckingham Mountain then east to the Sierra National Forest Boundary to the top of Buckingham Mtn., hence southerly to the intersection of Darrah and Triangle Road hence west to the intersection of Darrah and Deer Spring hence to end of Deer Springs Road hence easterly to the intersection of Poppy Lake Road and Tip Top Road, hence westerly along Tip Top Road to Highway 49 hence easterly to the Chowchilla River then southwest to the Mariposa County Line then northwesterly to Stumpfield Road hence northwesterly to Ashworth Road the northerly to the start point.

County Supervisors

Kevin Cann, District IV 209-966-3222.
Jim Allen, District V 209-966-3222.

Community Contacts & Information

Primary Community Contact: Patrick Tierney 209-966-3253.

Alternate Community Contact: Ruby Pierson (Bootjack Vol. Fire Captain) 209-742-7122

Scheduled Events/Meetings: Bootjack Volunteer Fire Station holds quarterly rummage sales and pancake breakfasts

Local Media: Mariposa Gazette 209-966-2500; Sierra Sun Times/goldrushcam.com

Assets at Risk

Estimated Number of Homes: 950.

Estimated Value of Homes: \$332 million (median price \$350,000.)

Estimated Number of Businesses: 45

Bootjack Market and Deli	Top Tech Automotive
Bootjack Mini Storage	Butch Bellardi Trucking
Bootjack Tire and Muffler	Shell Gas Station
Bootjack Equipment Rental	POPS Sportsman's Café
Bootjack Lumber	S&S Electric
Outlaw BBQ	Above All Towing
Grace Note Chimes	Ponderosa Towing
Jerry's Custom Truss	Dog Grooming by Tess
Alpine Builders	Tavis Corporation
McGuffy Plumbing	Mariposa Automatic Transmission
Haztech	Sierra Telephone
Lawson Construction	
Bed and Breakfast	
Diane's Day Care	

Estimated Number of Home Businesses: 85

Mariposa County Local Hazard Mitigation Plan

Estimated Value of Businesses: \$49.5 million

Facilities: Fish & Game Hall, Bootjack Stompers Hall, Grace Community Church, New Life Christian Fellowship Church,

Infrastructure: Bootjack Volunteer Fire Station; Usona Fire Station (CAL FIRE); Mariposa Middle School; Woodland Elementary School; Woodland Park; roads & bridges; PG&E poles, lines & equipment; Sierra Telephone lines & equipment; Northland Cable lines & equipment.
Other:

Estimated Value of Infrastructure & Facilities: \$61 million

Other Values

Watershed: Chowchilla River, Delong Creek, , Italian Creek, Jones Creek, Oliver Creek, Owl Creek, Pegleg Creek, Snow Creek

Wildlife habitat: This area supports a myriad of wildlife which includes but is not limited to: migratory birds and non migratory, deer, mountain lion, bobcat, reptiles and amphibians.

Cultural/tribal/historical: Because of the good supply of water and game as well as other natural resources the Bootjack area was populated by the Miwoks prior to the incursion of Europeans. The area was visited by the Spanish and Mexicans as early as the 1600's and finally settled into by Europeans and Americans during and after the gold rush of 1849. Bootjack became support community for the mines up in the Jerseydale Area and the Hite's Cove Mine.

Recreational: Woodland Park, Buckingham Mountain School

Public Lands: Within 20 miles of Sierra National Forest, and within 25 miles of Yosemite National Park, BLM has parcels of landlocked property throughout the area.

Community Hazards

Average Fuel Load: 15-100 TPA (tons per acre)

Predominant Fuel Types: mixed conifer, oak, mixed chaparral, Digger and Yellow pine

Fire History: 1996 Stumpfield Fire (15 structures lost.) 1961 Harlow Fire (2 fatalities, 105 structures lost.), Nelson Cove Fire 1959, Nelson Cove Fire of 1924 (@167,000) burned through this entire area.

Fire Risk Potential: The largest threats to the community are human caused fires that originate through carelessness, arson, burning debris and trash out of season, and mechanical (Power line and motor vehicle). Lightning does pose a problem as well especially during times that there are large demands on suppression resources. The fuel loading is at 90 tons per acre on the south side of Highway 49 and as much as 100+tons up in the Triangle Road area. Fires that start on the Highway 49 corridor pose a dire threat to all the homes located on the north side of Hwy 49. A fire getting established in lower regions of any of the creek drainages will be difficult to contain owing to inaccessibility, heavy fuel loading, and the need to protect structures. The structures in the area of the Middle School are going to be extremely difficult to protect from a fire traveling uphill from Highway 49 as they have the heaviest fuel loading with a continuous fuel bed with few roads that are marginally maintained which will make access/egress difficult at best.

Community Ingress/Egress: Primary roads for evacuation: Hwy 49S is a major paved two lane highway which would available in all but extreme cases. Ashworth Rd much of this road is

dirt and would not make a good route to evacuate on other than a small number of residents. Allred Rd same as Ashworth, Indian Peak Rd is paved most the way and although narrow could be used as a primary route to access and egress evacuees and fire suppression force Hirsch Rd, Triangle Rd, Silva Rd, Carlton Rd, and Darrah Rd are paved two lane roads and would make good escape routes for residents. Usona, Stumpfield, and Watt Roads are paved but narrow in places and could be prone to congestion and have historically had problems with access and egress.

Fire Response/Resources

Nearest Fire Station: Bootjack Volunteer Fire Station #37 (MCF)

Response Resources: One Type 2 Engine (1,250 GPM pump), One Type 1 Water Tender (3,500 gal), One Type 4 Patrol (100 GPM pump)

Fire Agency Contacts: Mariposa County Fire (209) 966-4330 and Bootjack Volunteer Fire Station #37 (209) 742-7122

Estimated Response Time: 15 minutes

Next nearest Fire Station: Usona Fire Station (CAL FIRE) (209) 742-7233

Response Resources: 1 Engine,

Fire Agency Contacts: Battalion Chief 4212- Kevin Smith 209-966-3622.

Estimated Response Time: 15 minutes. (Usona Fire Station is only staffed during fire season- May thru November)

Other Fire Response: Mormon Bar Volunteer Fire Station (MCF) (209) 966-4661.

Nearest Medical Facility: John C. Fremont Hospital 209-966-3631.

Nearest Water Sources: Bootjack, privately owned water tank (28,000 gallons), in addition there are cattle ponds and some running water in the larger creeks and rivers.

Additional Initial Attack resources: From CAL FIRE: 1 Air tactical aircraft (25 minutes), 2 Inmate hand crews (30 minutes), 4 additional type 3 engines (30+ minutes) 2 type 2 Airtankers (30 minutes), 1 Type 2 helicopter (35 minutes).

From the USFS: 2 Type 3 engines (20 minutes), 1 Type 1 hand crew (45 minutes)

From Yosemite National Park: 1 Type 3 engine, (30 minutes)

Limitations: Resources and response times are going to be dependent upon location of the fire, time of year, other fires going on locally, statewide, and nationally, time of day. Over all responsibility of the fire will be the Jurisdiction Agency and the on scene management will be the most qualified individual at the scene.

Evacuation Information

Responsibility: The Mariposa County Sheriff's Department is responsible for all evacuations in Mariposa County. The Department utilizes an automated reverse-911 system to notify residents of pre-evacuations and evacuations. During evacuations the Mariposa County Sheriff department also utilizes the Mariposa County Search and Rescue. The Mariposa County Sheriff's Department Animal Control is used to assist in the evacuations of all animals. Contact: Mariposa County Sheriff's Office 209-966-3615.

Structural Ignitability

The Public Resources Code 4290 (PRC4290) contains requirements pertaining to new construction on SRA in California. Driveway widths, slopes, turn-around areas, and water storage requirements for firefighting forces are regulated in PRC4290. CAL FIRE MMU personnel are tasked with inspecting the new construction within the unit, specifically in Mariposa County.

A portion of the Public Resource Code 4291 (PRC4291) requires a minimum of 100' of clearance for fire safety ("Defensible Space") surrounding all structures on State Responsibility (SRA) lands in California. As of 2008, CAL FIRE has been mandated to perform LE-100 inspections on 100% of improved properties within SRA.

Regarding existing structures, residents need to be educated on how to create and/or maintain proper Defensible Space, and also made aware of construction issues and materials that affect structural survivability in the event of wildland fires. Lists of resources (such as sources for fire-safe materials and local contractors who perform required work) need to be created and made available to residents.

Residents who need assistance in creating and/or maintaining Defensible Space need to be identified so that funding can be sought for them.

State & Federal Plans

CAL FIRE's Madera-Mariposa-Merced Unit Fire Management Plan identifies Bootjack as included in Target Area #2 for MMU and #1 for Mariposa County.

Bootjack is listed in the Five Party Mutual Aid Agreement that was signed in June 2008. Parts of this area adjoin National Forest and may be eligible for assistance under the National Healthy Forest Initiative.

Proposed Mitigations

Mitigation #1: Wildfire Risk Assessment Survey. In order to have a baseline to work from, a Wildfire Risk Assessment Survey should be performed and include every property in the community. This Survey can be performed using CAL FIRE's LE-100 form and/or Mariposa County Fire Department's Red Zone survey software. A provision should be made for identification of unimproved lots with hazardous fuels that pose a threat to neighboring properties and the community. Ideally, a group of Bootjack residents will be trained by CAL FIRE, Mariposa County Fire and the Mariposa County Fire Safe Council to conduct an annual survey of the entire community, preferably in late spring and in conjunction with Wildfire Awareness Week (first full week in May.) Results of the Survey will be disclosed to residents as a tool to raise awareness and educate, and also used to identify in-need residents who cannot create and/or maintain Defensible Space around their structures.

Mitigation #2: Defensible Space Assistance & Education/Chipping Programs. Residents who are unable to physically and financially create and/or maintain Defensible Space need to be assisted. Funding needs to be applied for and obtained to perform brushing and chipping services for in-need residents. In addition, it is recommended that a pile chipping program be offered to residents who are able to cut and pile their own brush but have no way to dispose of it on site or transport it to a disposal site. Burning of piles when permitted requires careful planning and placement, poses a risk of escaped burns and is detrimental to air quality. Many residents will not go to the trouble or assume the risk involved in burning piles. Making pile chipping available to residents encourages them to clear brush and create/maintain Defensible Space, reducing the risk of structure loss in the event of a wildland fire.

3. Mitigation: Buckingham Strategic Fuel Treatment. This project will result in a shaded fuel break approx. 1.5 miles long at 300 feet wide, for a total treatment area of approximately 75 acres. The treatment will be on private property near Buckingham Mountain in the communities of Jerseydale, Midpines, and Bootjack. Treatment types will include mechanical mastication and hand brushing and limbing. The Mariposa County Fire Safe Council may have opportunities to apply for funding (estimated cost \$148,000.00) to complete this project. Possible funding source is the USFS funding through the California Fire Safe Council Grants Clearinghouse.

Mitigation #4: Encourage Homeowner Special Interest Groups: Homeowners that live along non county maintained roads should be encouraged to form groups to maintain the brush clearance required to promote access and egress. This has been done on a small scale with great success in Mariposa County such as Whitmore Drive.

Mitigation #5 Encourage Landowners to assist in Identifying Potential Projects: There has been little to no participation of land or homeowners in identifying area that could be beneficial to create a fuel break or to contribute to a mosaic to break up the fuel bed that exists in this area. The local existing Fire safe Council could be a facilitating entity for these people to interact with land management and fire suppression agencies.

Mitigation # 6: Encourage landowners to participate in CEQA²⁰ and VMP²¹ as budgets allow.

²⁰ CEQA- Document URL: http://ceres.ca.gov/topic/env_law/ceqa/stat2/index.html
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COMMUNITY WILDLAND FIRE PROTECTION PLAN



CATHEYS VALLEY

Mariposa County, California

²¹ <http://www.fire.ca.gov/ResourceManagement/pdf/VMP2004.pdf>

*Community Planning Area Map*²²



Community Overview

Cathey's Valley consists of rural residential dwellings, large ranches and a concentrated commercial district in Mariposa County, California. It ranges in elevation from 250 feet to 1,325 feet with rolling to moderate terrain. Latitude is 37 25 31.89, and longitude is -120 6 22.7376. Population is estimated at 900 residents with the majority of residents living in the community year-round. Most residents are permanent, with a small number of rental properties and vacation

²² Google Maps

Mariposa County Local Hazard Mitigation Plan

homes distributed throughout the area. The community has a Town Planning Advisory Committee. The community is not listed in the Federal Register as at high risk from wildfires. However, in the 2005 Unit Fire Management Plan for CAL FIRE Madera Mariposa Merced Unit (MMU) lists Cathey's Valley as Target Area #4 for MMU.

Planning Area: For this Protection Plan, the boundary starts at Hwy 140 Elizabeth Lane hence east to the Range 17 East/Range18 East line then due south to the southeast corner of Section 36, Township 6 south, Range 17 East turn due west to the southwest corner of Section16, Township 6 south, Range 17 east, then due north to the northwest corner of section 6, township 6 south, range 17 east, the due east to the start point.

County Supervisor

Janet Bibby, District III 209-966-3222.

Community Contacts & Information

Primary Community Contact: Mary Hodson

Alternate Community Contact:

Scheduled Events/Meetings: Catheys Valley Town Planning Advisory Committee meetings,

Local Media: Mariposa Gazette 209-966-2500; Merced Sun-Star 209-385-2431

Assets at Risk

Estimated Number of Homes: 305

Estimated Value of Homes: \$92 million (median price \$300,000.)

Estimated Number of Businesses: 10+

Oasis Store

Catheys Valley Feed Store

Catheys Valley Real Estate

Light Racing Inc.

The Tap Room

Hibpshman Landscape and Irrigation

Coyote Springs Ranch

Ranch Fence

Yosemite Rocks and Gifts

Oaks Gas Station/ mini mart

Estimated Number of Home Businesses: 12

Estimated Value of Businesses: \$8.2 million

Facilities: McCay Hall at C.V. Co. Park; Catheys Valley Baptist Church, Cathey's Valley Methodist Church

Infrastructure: Catheys Valley Volunteer Fire Station #23 (MCF); Catheys Valley Fire Station (CAL FIRE); Catheys Valley Co. Park and McCay Hall; Catheys Valley Elementary School; US Post Office; roads & bridges; PG&E poles, lines & equipment; Sierra Telephone lines & equipment; cable television lines & equipment.

Other: Catheys Valley Cemetery

Estimated Value of Infrastructure & Facilities: \$7.8 million

Other Values

Watershed: Bear Creek, Owens Creek, Gann Creek

Cultural/tribal/historical: Old Catheys Valley School House, Cathey's Valley Methodist Church

Recreational: Catheys Valley Co. Park,

Community Hazards

Average Fuel Load: 45 TPA (tons per acre)

Predominant Fuel Types: grasslands, oaks, mixed chaparral

Fire History: There have been eight fires that have exceeded 300 acres since 1980 in the planning area.

Fire Risk Potential: This area is listed as high risk fire area. This is due to the amount of grasslands and the number of people passing through on Highway 140 to Yosemite. The western side of the unit has large areas of mixed chaparral and towards Guadalupe Mountain is Oaks and Digger Pine. Fires during the fire season are characterized by fast moving medium intensity fires. Spotting has historically been a problem in containing these fires.

Community Ingress/Egress: The primary ingress/egress routes in the event of a wildland fire are Hwy 140, Indian Gulch Rd, Schoolhouse Rd, Hornitos Rd, Upper and Lower Trower Rd. These roads are in good shape and make access and egress at the same time possible. The Old Highway has places that are narrow and would pose a problem with ingress large equipment and the egression of evacuees.

Fire Response/Resources

Nearest Fire Station: Catheys Valley Volunteer Fire Station #23 (MCF) (209)-966-5611

Response Resources: One Type 2 Engine (1,250 GPM pump), One Type 1 Water Tender (500 GPM pump, 3,500 gal), One Type 4 Patrol (100 GPM pump, 300 gal)

Fire Agency Contacts: Mariposa County Catheys Valley Volunteer Fire Station #23 (209)-966-5611

Estimated Response Time: 5-10 minutes

Next Nearest Fire Station: Catheys Valley Fire Station (CAL FIRE)

Response Resources: 2 type 3 engines

Fire Agency Contacts: CAL FIRE 209-966-3622.

Estimated Response Time: 0-5 minutes

Other Fire Response: CAL FIRE: within sixty minutes, 7 type 3 engines, 1 Air tactical aircraft, 2 air tankers, 2 Type three helicopters, 2 dozers, 2 hand crews, 2 Overhead. From Mariposa County: 3 type three or larger engines 1 Overhead

Nearest Medical Facility: John C. Fremont Hospital 209-966-3631. Mercy Medical Center at 301 East 13th Street, Merced Ca (209) 385-7201

Nearest Water Sources: Bear Creek Reservoir, Owens Reservoir, ponds,

Evacuation Information

Responsibility: The Mariposa County Sheriff's Department is responsible for all evacuations in Mariposa County. The Department utilizes an automated reverse-911 system to notify residents of pre-evacuations and evacuations. During evacuations the Mariposa County Sheriff department also utilizes the Mariposa County Search and Rescue. The Mariposa County Sheriff's Department Animal Control is used to assist in the evacuations of all animals. Contact: Mariposa County Sheriff's Office 209-966-3615.

Structural Ignitability

The Public Resources Code 4290 (PRC4290) contains requirements pertaining to new construction on SRA in California. Driveway widths, slopes, turn-around areas, and water storage requirements for firefighting forces are regulated in PRC4290. CAL FIRE MMU personnel are tasked with inspecting the new construction within the unit, specifically in Mariposa County.

A portion of the Public Resource Code 4291 (PRC4291) requires a minimum of 100' of clearance for fire safety ("Defensible Space") surrounding all structures on State Responsibility (SRA) lands in California. As of 2008, CAL FIRE has been mandated to perform LE-100 inspections on 100% of improved properties within State Responsibility Area.

Regarding existing structures, residents need to be educated on how to create and/or maintain proper Defensible Space, and also made aware of construction issues and materials that affect structural survivability in the event of wildland fires. Lists of resources (such as sources for fire-safe materials and local contractors who perform required work) need to be created and made available to residents.

Residents who need assistance in creating and/or maintaining Defensible Space need to be identified so that funding can be sought for them.

State & Federal Plans

CAL FIRE's Madera-Mariposa-Merced Unit Fire Management Plan identifies Cathey's Valley in target Area #4

Proposed Mitigations

Mitigation #1: Wildfire Risk Assessment Survey. In order to have a baseline to work from, a Wildfire Risk Assessment Survey should be performed and include every property in the community. This Survey can be performed using CAL FIRE's LE-100 form and/or Mariposa

Mariposa County Local Hazard Mitigation Plan

County Fire Department's Red Zone survey software. A provision should be made for identification of unimproved lots with hazardous fuels that pose a threat to neighboring properties and the community. Ideally, a group of Catheys Valley residents will be trained by CAL FIRE, Mariposa County Fire and the Mariposa County Fire Safe Council to conduct an annual survey of the entire community, preferably in late spring and in conjunction with Wildfire Awareness Week (first full week in May.) Results of the Survey will be disclosed to residents as a tool to raise awareness and educate, and also used to identify in-need residents who cannot create and/or maintain Defensible Space around their structures.

Mitigation #2: Defensible Space Assistance & Education/Chipping Programs. Residents who are unable to physically and financially create and/or maintain Defensible Space need to be assisted. Funding needs to be applied for and obtained to perform brushing and chipping services for in-need residents. In addition, it is recommended that a pile chipping program be offered to residents who are able to cut and pile their own brush but have no way to dispose of it on site or transport it to a disposal site. Burning of piles when permitted requires careful planning and placement, poses a risk of escaped burns and is detrimental to air quality. Many residents will not go to the trouble or assume the risk involved in burning piles. Making pile chipping available to residents encourages them to clear brush and create/maintain Defensible Space, reducing the risk of structure loss in the event of a wildland fire.

Mitigation #3: Weed Abatement Ordinance. It is recommended that a weed abatement ordinance (for fire hazard nuisance) be explored for the Catheys Valley area.

Mitigation #4 Mosaic the fuel beds. The region would benefit from either prescribed fire or mastication to create a mosaic pattern in the continuous fuel beds. A great deal of success was experienced in the former CDF VMP (Vegetation Management Program). Local residents may form a group to accomplish this project. The Adams VMP Was scheduled but not completed, this VMP would make a good project to start with. An outreach effort should be made in this area to rekindle interest with the land owners to use VMP projects.

Mitigation #5 ID Strategic fire access roads: Identify existing roads which can be ranch access roads and develop these into fire lines by brushing the fuels back from the roadbed and doing minimal maintenance to allow access by type three engines.

Mitigation #6 Develop prevention information boards: These could be in areas where passing through tourists tend to stop such as Cathey's Valley Park and the Oaks Gas Station.

COMMUNITY WILDLAND FIRE PROTECTION PLAN



COULTERVILLE

Mariposa County, California

Community Planning Area Map²³



Community Overview

Coulterville consists of rural residential dwellings and a concentrated commercial district in Mariposa County, California. It ranges in elevation from 800 feet to 3,000 feet with moderate to steep terrain. Latitude is 37 42 39.549, and longitude is -120 11 48.4116. Population is estimated at 400 residents with the majority of residents living in the community year-round. Most residents are permanent, with a small number of rental properties and vacation homes distributed throughout the area. The community is listed in the Federal Register as at high risk from wildfires.

²³ Google Maps

Mariposa County Local Hazard Mitigation Plan

Planning Area: For this planning area, starting at the Bagby Bridge on State Highway 49 North hence north by northwest to Dogtown hence northwest to the Mariposa County / Tuolumne County boundary hence southwest to the Penon Blanco Lookout Road hence due south to the north shoreline of Lake McClure hence east along the shoreline to the start point.

County Supervisor

Lyle Turpin, District II 209-966-3222.

Community Contacts & Information

Primary Community Contact: Scott Turpin, 209-878-3466, Captain Company 26

Alternate Community Contact: Gail Tyler 209-878-3792

Scheduled Events/Meetings: Coyote Howl, July 4th BBQ, events at Hotel Jeffrey, Winter Wonderland, Sultry Summer Shindig, and Children's Christmas Party at Coulterville Volunteer Fire Station #26

Local Media: Mariposa Gazette 209-966-2500; Sierra Sun Times/goldrushcam.com, Foothill Express 209-878-0300

Assets at Risk

Estimated Number of Homes: 300

Estimated Value of Homes: \$60 million (median price \$200,000.)

Estimated Number of Businesses: 25

Estimated Number of Home Businesses:

Estimated Value of Businesses: \$4.3 million

Facilities: Hotel Jeffrey, Odd Fellows Lodge #104, churches, Coulterville Community Club

Infrastructure: Coulterville Volunteer Fire Station #26; Coulterville Fire Station (CAL FIRE); U.S. Post Office; Coulterville Co. Park (w/pool); Coulterville CalTrans facility; County Roads Dept; Transfer Station; Coulterville High School; VFW; roads & bridges; PG&E poles, lines & equipment; AT&T substation, telephone lines & equipment; Coulterville Service Area- water, sewer, and fire hydrants

Estimated Value of Infrastructure & Facilities: \$3.2million

Other Values

Watershed: Merced River, Buckhorn Creek, Piney Creek, Blacks Creek, Boneyard Creek

Wildlife habitat: This area supports a myriad of wildlife which includes but is not limited to: migratory birds and non migratory, deer, mountain lion, bobcat, reptiles and amphibians

Mariposa County Local Hazard Mitigation Plan

Cultural/tribal/historical: Historic buildings the entire town is historic, Cemetery; Northern Mariposa County History Center. This area has an extensive history of pre-European Indian habitation and an extensive mining history going back to the Gold Rush era.

Recreational: Horseshoe Bend Recreation Area, Bagby Recreation Site, Mariposa County Park & pool,

Public Lands: Within 3 miles of Stanislaus National Forest, USDOJ BLM has holdings interspersed throughout this planning area.

Community Hazards

Average Fuel Load: 35-70 TPA (tons per acre)

Predominant Fuel Types: oak, mixed chaparral,

Fire History: There have been eleven fires that have exceeded three hundred acres within the last twenty years.

Fire Risk Potential: Large fires are due in part to the distance suppression units have to travel to get to some of these areas and due to flashy fuels that lead to dense mixed chaparral fuel beds and rough terrain. With the exception of Lake McClure there are few water sources in this area most being ponds that dry up in drought years. To further complicate the issue, there aren't any lookouts in this area and owing to the sparse population fires tend to be more than several acres before the first reports of fires are received.

Community Ingress/Egress: The primary ingress/egress routes in the event of a wildland fire are State Highway 49, J132, and the Priest-Coulterville Road. All of these roads are paved and would facilitate rapid access and egress.

Fire Response/Resources

Nearest Fire Station: Coulterville Volunteer Fire Station, (MCF)

Response Resources: One Type 2 Engine, One Type 3 Engine, One Rescue Unit

Fire Agency Contacts: Mariposa County Fire 209-966-4330.

Estimated Response Time: 5 minutes

Next Nearest Fire Station: Coulterville Fire Station (CAL FIRE)

Response Resources: Two type 3 Engine,

Fire Agency Contacts: CAL FIRE 209-966-3622.

Estimated Response Time: 5 minutes

Other Fire Response: CAL FIRE: within sixty minutes, 6 type 3 engines, 1 Air tactical aircraft, 2 air tankers, 2 Type three helicopters, 2 dozers, 2 hand crews, 2 Overhead. From MCF: 3 type three or larger engines 1 Overhead

Nearest Medical Facility: John C. Fremont Hospital 209-966-3631, John C Fremont Clinic in Greeley Hill 209-878-0155, Sonora Regional Hospital 209-536-5000

Nearest Water Sources: Lake McClure, ranch ponds

Evacuation Information

Responsibility: The Mariposa County Sheriff's Department is responsible for all evacuations in Mariposa County. The Department utilizes an automated reverse-911 system to notify residents of pre-evacuations and evacuations. During evacuations the Mariposa County Sheriff department

Mariposa County Local Hazard Mitigation Plan

also utilizes the Mariposa County Search and Rescue. The Mariposa County Sheriff's Department Animal Control is used to assist in the evacuations of all animals. Contact: Mariposa County Sheriff's Office 209-966-3615.

Primary roads for evacuation: Hwy 49, J132, Priest-Coulterville Road

Structural Ignitability

The Public Resources Code 4290 (PRC4290) contains requirements pertaining to new construction on SRA in California. Driveway widths, slopes, turn-around areas, and water storage requirements for firefighting forces are regulated in PRC4290. CAL FIRE MMU personnel are tasked with inspecting the new construction within the unit, specifically in Mariposa County.

A portion of the Public Resource Code 4291 (PRC4291) requires a minimum of 100' of clearance for fire safety ("Defensible Space") surrounding all structures on State Responsibility (SRA) lands in California. As of 2008, CAL FIRE has been mandated to perform LE-100 inspections on 100% of improved properties within SRA.

Regarding existing structures, residents need to be educated on how to create and/or maintain proper Defensible Space, and also made aware of construction issues and materials that affect structural survivability in the event of wildland fires. Lists of resources (such as sources for fire-safe materials and local contractors who perform required work) need to be created and made available to residents.

Residents who need assistance in creating and/or maintaining Defensible Space need to be identified so that funding can be sought for them.

State & Federal Plans

CAL FIRE's Madera-Mariposa-Merced Unit Fire Management Plan does not address the community of Coulterville.

The Stanislaus National Forest Fire Management Plan does not directly address the community of Coulterville.

Proposed Mitigations

1. Mitigation: Wildfire Risk Assessment Survey. In order to have a baseline from which to work, a Wildfire Risk Assessment Survey should be performed and include every property in the community. This Survey can be performed using CAL FIRE's LE-100 form and/or Mariposa County Fire Department's Red Zone survey software. A provision should be made for identification of unimproved lots with hazardous fuels that pose a threat to neighboring properties and the community. Ideally, a group of Coulterville residents will be trained by CAL FIRE, Mariposa County Fire and the Mariposa County Fire Safe Council to conduct an annual survey of the entire community, preferably in late spring and in conjunction with Wildfire Awareness Week (first full week in May.) Results of the Survey will be disclosed to residents as a tool to raise awareness and educate, and also used to identify in-need residents who cannot create and/or maintain Defensible Space around their structures.

2. Mitigation: Defensible Space Assistance & Education/Chipping Programs. Residents who are unable to physically and financially create and/or maintain Defensible Space need to be assisted. Funding needs to be applied for and obtained to perform brushing and chipping services for in-need residents. In addition, it is recommended that a pile chipping program be offered to residents who are able to cut and pile their own brush but have no way to dispose of it on site or transport it to a disposal site. Burning of piles when permitted requires careful planning and placement, poses a risk of escaped burns and is detrimental to air quality. Many residents will not go to the trouble or assume the risk involved in burning piles. Making pile chipping available to residents encourages them to clear brush and create/maintain Defensible Space, reducing the risk of structure loss in the event of a wildland fire.

3. Mitigation: Refurbish and Staff Williams Peak Lookout Tower: Owing to the fast moving nature of fires in this fuel type, the rapid detection becomes a critical element in successful suppression of any wild land fire. Williams Peak is in an ideal location to see and report fires while they are still small. Williams Peak would also cover Coulterville, Greeley Hill, Lake Don Pedro, Hunter's Valley as well as Hornitos. The MCFSC would like to recommend looking for grants to restore the tower and find Volunteers to staff this tower for the peak season; June through August.

4. Mitigation: Strategic Fire Defense Systems: Coulterville lies within the South West Inter-Face Team (SWIFT) which is coalition of City, County, State, and Federal Agencies which has undertaken the responsibility of coordinating the strategic fire and resource planning for area north of the Merced River that lies within Mariposa County.

For more information: <http://www.fs.fed.us/r5/stanislaus/groveland/swift/team.shtml>

5. Mitigation: Increase Water Capacity: Grants should be sought to develop another well in Coulterville and an additional water storage tank to supply water for wildland fire suppression use. Grants for this project maybe from but not limited to FEMA, Department of Homeland Security (DHS), USDI BLM, USDA, and USDA Forest Service. Grantees may include and are not limited to: Mariposa County Department of Public Works, Mariposa County Fire, or the Mariposa County Fire Safe Council.

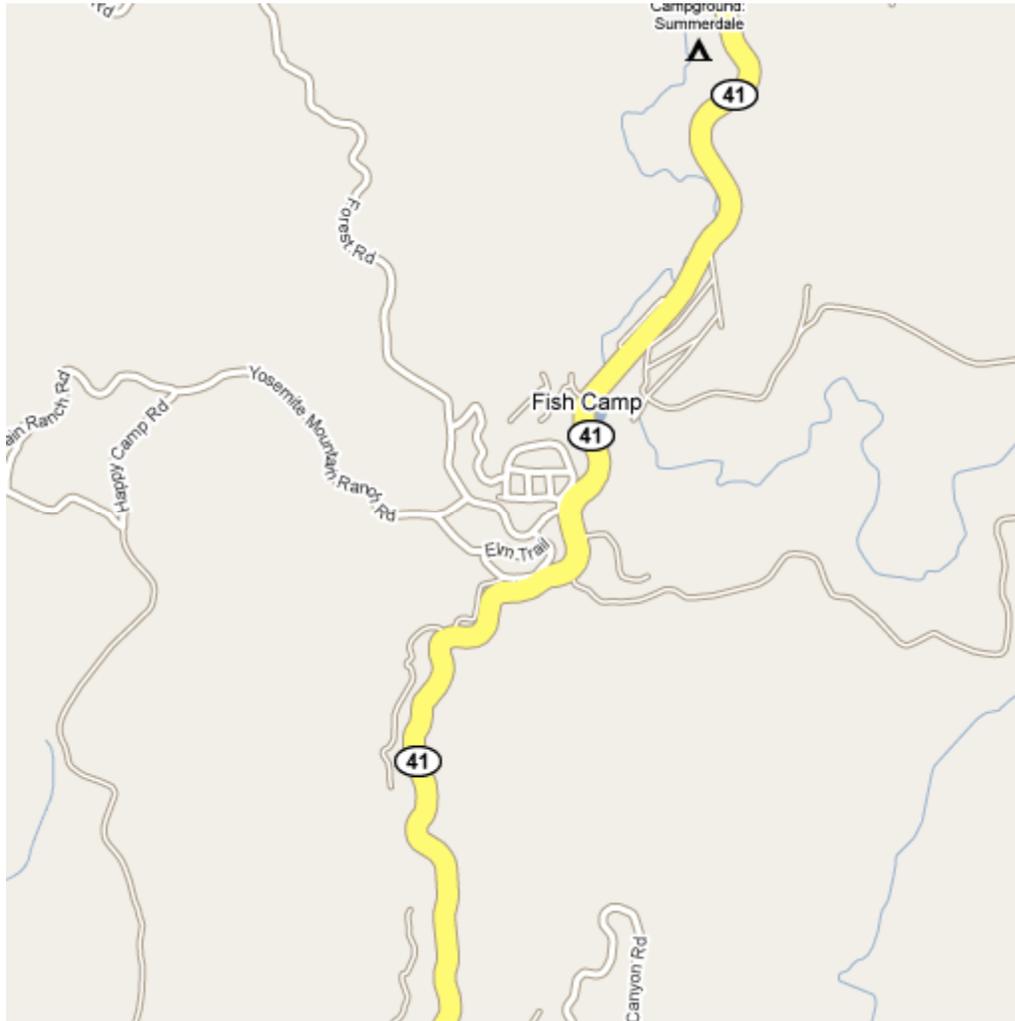
COMMUNITY WILDLAND FIRE PROTECTION PLAN



FISH CAMP

Mariposa County, California

Community Planning Area Map



Community Overview

Fish Camp consists of rural residential dwellings and a small, concentrated commercial and residential area in Mariposa County, California. It ranges in elevation from 5,000 to 6,200 feet with moderate to steep terrain. Latitude is 37 28 30.471 and longitude is -119 38 19.665. Population is estimated at 25 year-round residents. Most residents are seasonal, with a large number of rental properties and vacation homes distributed throughout the area. Residential population over summer and winter holidays can rise to over 600. During summer months the population can rise to over 2,000, comprised mainly of day-use walkers and hikers. The community is listed in the Federal Register as at high risk from wildfires.

Mariposa County Local Hazard Mitigation Plan

Planning Area: For this Protection Plan, the boundary starts at Hwy 41 at the Mariposa County and Madera County line hence west along the county line to the Section 27 & 26 corner then due north to the Yosemite National Park boundary then east along the boundary to the Section 13 & 14 corner then south to the Mariposa/ Madera County line hence west to the start point.

County Supervisor

Jim Allen, District V 209-966-3222.

Community Contacts & Information

Primary Community Contact: Donn Harter, Fish Camp Fire Association 559-683-2521.

Alternate Community Contact: Barry Green 559-864-9444, cell 559-994-5476.

Scheduled Events/Meetings: Annual Barbeque on the Sunday of Labor Day weekend.

Local Media: Mariposa Gazette 209-966-2500; Sierra Star 559-683-4464; Sierra Sun Times/goldrushcam.com. Donn Harter does community mailings and the bulletin boards at the Post Office and store.

Assets at Risk

Estimated Number of Homes: 160

Estimated Value of Homes: \$56 million (median price \$350,000.)

Estimated Number of Businesses: 20 (10 B&B's, Tenaya Lodge, Apple Tree Inn, White Chief Lodge, Fish Camp Store, Camp Green Meadows, Yosemite Mountain Ranch, transient rentals)

Estimated Value of Businesses: \$200 million

Facilities: Fish Camp Volunteer Fire Station (MCF)

Infrastructure: Fish Camp Volunteer Fire Station U.S. Post Office; Transfer Station; roads & bridges; PG&E poles, lines & equipment; Sierra Telephone lines & equipment; Northland Cable lines & equipment.

Estimated Value of Infrastructure & Facilities: \$1.2 million

Other Values

Watershed: South Fork Merced River, Big Creek, Lewis Creek, Cedar Creek. 1 acre pond: Kellerman's Pond.

Cultural/tribal/historical:

Recreational: Day use hikers; Summerdale Campground; private at Tenaya; snow play area in winter; Knapp's Pack Station.

Timber: Plantations on Sierra National Forest. Mariposa Grove (3,000 year old trees on Yosemite NP.); Yosemite Mountain Ranch (3,500 acres.)

Public Lands: Adjacent to Sierra National Forest and Yosemite National Park. :

Community Hazards

Average Fuel Load: over 100 TPA (tons per acre.)

Predominant Fuel Types: Mixed conifer forest (closed canopy.)

Fire History: 1929 Standard Mill Fire

Fire Risk Potential: The community is at risk from fires originating on the Sierra National Forest. The SNF is at risk from fires emanating from within the community. A fire coming out of the South Fork Merced River Canyon through Big Creek would threaten structures along Hwy 41 and the entire community. Heavy buildup of duff (mainly pine and fir needles) as well as dog hair thickets of cedar throughout the area adds to wildfire risk. Owing to the lack of fire in this area has resulted in unusually heavy fuel loads and stagnated stands of timber. Fires in this area are going to be difficult to contain and will require an extended mop up owing to the deep duff found in this area. The community is on the South Gate to Yosemite NP and there roughly 3 million visitors traveling this route; Human caused fires present the largest threat to this community the second cause would be lightning caused.

Community Ingress/Egress: The primary ingress/egress routes in the event of a wildland fire are Hwy 41. In summer only, Summit Rd to Chowchilla Mtn Rd to Ponderosa Basin or to Highway 41 in Wawona. This road will allow for one way traffic only, is not paved and is prone to dust six inches deep which will make the use of this road practically impossible for a rapid evacuation.

Fire Response/Resources

Nearest Fire Station: Fish Camp Volunteer Fire Station (MCF)

Response Resources: One Type 1 Engine (1,250 GPM pump), One Type 3 Engine (750 GPM pump), One Type 1 Water Tender (3,800 gal), One Type 4 Patrol

Fire Agency Contacts: Mariposa County Fire, 209-966-4330.

Estimated Response Time: 5 minutes

Next Closest Fire Station: Westfall R.S. (USFS)

Response Resources: 1 type 3 Engine, 1 type 4 Patrol

Fire Agency Contact: Sierra NF 559-291-1878 Dispatch Office

Estimated Response Time: 15 minutes during fire season

Other Fire Response: Additional Initial Attack resources: From CAL FIRE: 2 Inmate hand crews (60 minutes), 2 additional type 3 engines (30+ minutes), 1 type 2 Airtankers (30 minutes), and 1 Type 2 helicopter (55 minutes), 1 Dozer 45 Minutes. From the USFS; 1 Air tactical aircraft (25 minutes): 4 Type 3 engine (20-60 minutes), 2 Type 1 hand crew (15 & 45 minutes), From Yosemite National Park: 1 Type 3 engine, (30 minutes)

Limitations: Resources and response times are going to be dependent upon location of the fire, time of year, other fires going on locally, statewide, and nationally, time of day. Over all

Mariposa County Local Hazard Mitigation Plan

responsibility of the fire will be the Jurisdiction Agency and the on scene management will be the most qualified individual at the scene.

Nearest Medical Facility: Community Medical Center Oakhurst 559-683-2992.

Nearest Water Sources: Three community water systems and some hydrants (not rated.) Tenaya Lodge, Apple Tree Inn and White Chief have their own water systems. Big Creek and Kellerman's pond

Evacuation Information

Responsibility: The Mariposa County Sheriff's Department is responsible for all evacuations in Mariposa County. The Department utilizes an automated reverse-911 system to notify residents of pre-evacuations and evacuations. During evacuations the Mariposa County Sheriff department also utilizes the Mariposa County Search and Rescue. The Mariposa County Sheriff's Department Animal Control is used to assist in the evacuations of all animals.

Contact: Mariposa County Sheriff's Office 209-966-3615.

Primary roads for evacuation: Hwy 41 and, in summer only, Summit Rd to Chowchilla Mtn Rd to Ponderosa Basin or Yosemite National Park.

Structural Ignitability

The Public Resources Code 4290 (PRC4290) contains requirements pertaining to new construction on SRA in California. Driveway widths, slopes, turn-around areas, and water storage requirements for firefighting forces are regulated in PRC4290. CAL FIRE MMU personnel are tasked with inspecting the new construction within the unit, specifically in Mariposa County.

A portion of the Public Resource Code 4291 (PRC4291) requires a minimum of 100 feet of clearance for fire safety ("Defensible Space") surrounding all structures on State Responsibility (SRA) lands in California. As of 2008, CAL FIRE has been mandated to perform LE-100 inspections on 100% of improved properties within SRA.

Regarding existing structures, residents need to be educated on how to create and/or maintain proper Defensible Space, and also made aware of construction issues and materials that affect structural survivability in the event of wildland fires. Lists of resources (such as sources for fire-safe materials and local contractors who perform required work) need to be created and made available to residents.

Residents who need assistance in creating and/or maintaining Defensible Space need to be identified so that funding can be sought for them.

State & Federal Plans

CAL FIRE's Madera-Mariposa-Merced Unit Fire Management Plan does not address Fish Camp.

The Sierra National Forest Fire Management Plan does not directly address Fish Camp.

Proposed Mitigations

Mitigation #1: Wildfire Risk Assessment Survey. In order to have a baseline from which to work, a Wildfire Risk Assessment Survey should be performed and include every property in the community. This Survey can be performed using CAL FIRE's LE-100 form and/or Mariposa County Fire Department's Red Zone survey software. A provision should be made for identification of unimproved lots with hazardous fuels that pose a threat to neighboring properties and the community. Ideally, a group of Fish Camp residents will be trained by CAL FIRE, Mariposa County Fire and the Mariposa County Fire Safe Council to conduct an annual survey of the entire community, preferably in late spring and in conjunction with Wildfire Awareness Week (first full week in May.) Results of the Survey will be disclosed to residents as a tool to raise awareness and educate, and also used to identify in-need residents who cannot create and/or maintain Defensible Space around their structures.

Mitigation #2: Defensible Space Assistance & Education/Chipping Programs. Residents who are unable to physically and financially create and/or maintain Defensible Space need to be assisted. Funding needs to be applied for and obtained to perform brushing and chipping services for in-need residents. In addition, it is recommended that a pile chipping program be offered to residents who are able to cut and pile their own brush but have no way to dispose of it on site or transport it to a disposal site. Burning of piles when permitted requires careful planning and placement, poses a risk of escaped burns and is detrimental to air quality. Many residents will not go to the trouble or assume the risk involved in burning piles. Making pile chipping available to residents encourages them to clear brush and create/maintain Defensible Space, reducing the risk of structure loss in the event of a wildland fire.

Mitigation #3: Lewis Creek Strategic Fuel Treatment. This project will result in a shaded fuel break approx. 1 mile long at 300 feet wide, for a total treatment area of approx. 40 acres. The treatment will be on the Sierra National Forest in the Lewis Creek area adjacent to the community of Fish Camp. Treatment types will include mechanical mastication and hand brushing and limbing. This project has already been identified and planned by the Sierra National Forest.

COMMUNITY WILDLAND FIRE PROTECTION PLAN



GREELEY HILL /BUCK MEADOWS

Mariposa County, California

Community Pre-Attack Map



Community Overview

Greeley Hill/ Buck Meadows consists of rural residential dwellings and a small, concentrated commercial district in Mariposa County, California. It ranges in elevation from 1,500 feet to 5,500 feet with moderate to steep terrain. Latitude is 37 44 40.275, and longitude is -120 7 49.872. Population is estimated at 1,380 residents with the majority of residents living in the community year-round. Most residents are permanent, with a small number of rental properties and vacation homes distributed throughout the area. The community has an active Fire Safe Committee. The community is listed in the Federal Register as at high risk from wildfires.

Planning Area: For this planning area, the boundary starts at the Bagby Bridge on State Highway 49 North hence north by northwest to Dogtown hence northwest to the Mariposa

Mariposa County Local Hazard Mitigation Plan

County / Tuolumne County boundary hence east to Forest Service Road 02S97 hence due south to the Merced River hence west to the start point

County Supervisor

Lyle Turpin, District II 209-966-3222.

Community Contacts & Information

Primary Community Contact: Dawn Leitzell 209-878-0935. / Patricia North, Buck Meadows

Alternate Community Contact: Meg Hamre 209-878-0878.

Scheduled Events/Meetings: Greeley Hill Community Club holds monthly pancake breakfast fundraisers.

Local Media: Mariposa Gazette 209-966-2500; Sierra Sun Times/goldrushcam.com; Modesto Bee 209-578-2000 (800-776-4237.), Foothill Express, 209-878-0300. Yosemite Highway Herald 209-962-7425

Assets at Risk

Estimated Number of Homes: 620

Estimated Value of Homes: \$155 million (median price \$250,000.)

Estimated Number of Businesses: 14

Estimated Number of Home Businesses: 20

Estimated Value of Businesses: \$2.7 Million

Facilities: Greeley Hill Community Center,

Infrastructure: Rural Health Clinic, Greeley Hill Volunteer Fire Station #31; Greeley Hill Sheriff's Substation; roads & bridges; PG&E poles, lines & equipment; Sierra Telephone lines & equipment; Coulterville/ Greeley School, Red Cloud Library, Red Cloud Park. Buck Meadows School.

Estimated Value of Infrastructure & Facilities: \$3.9million

Other Values

Watershed: Merced River, Bean Creek, Bull Creek, Moss Creek, Smith Creek

Wildlife habitat: This area supports a myriad of wildlife which includes but is not limited to: migratory birds and non migratory, deer, mountain lion, bobcat, reptiles and amphibian

Cultural/tribal/historical: Tribal, historic buildings, and mining.

Recreational: On Stanislaus National Forest; camping, hunting, fishing, trail riding, both equestrian and OHV

Timber: Plantations on Stanislaus National Forest.

Public Lands: Adjacent to the USDA Forest Service, Stanislaus National Forest and interspersed with USDOJ BLM lands.

Community Hazards

Average Fuel Load: 25-75 TPA (tons per acre)

Predominant Fuel Types: Mixed conifer, oak, manzanita, buckbrush, and chamise.

Fire History: This area is known for large fires; 1952 a firefighter fatality fire occurred near Buck Meadows, 1987 was the Stanislaus complex, a series of fires which resulted in a firefighter fatality and burned 170,000+ acres, Rogge and Ackerson fires in 1999 which burned into Yosemite National Park. Another Rogge fire in 2005 resulted in multiple firefighter fatalities. This area is prone to rapid spread, crown fires, and high intensity brush fires.

Fire Risk Potential: The community is at risk from fires originating on the Stanislaus National Forest (STF) and from BLM lands. The STF and BLM lands are at risk from fires emanating from within the community. The largest cause of catastrophic fire has historically been Lightning caused.

Community Ingress/Egress: The primary ingress/egress routes in the event of a wildland fire are J132/Greeley Hill Road, Hotel Road, Finke Road, and Dexter Road/Cuneo Road.

Fire Response/Resources

Nearest Fire Station: Greeley Hill Volunteer Fire Station, Mariposa County Fire (MCF)

Response Resources: One Type 2 Engine, One Type 1 Water Tender (3,500 gal), One Type 6 Engine.

Fire Agency Contacts: Mariposa County Fire 209-966-4330. Dispatched on MMU Local

Estimated Response Time: 5 minutes

Next nearest Fire Station: McDiarmid, US Forest Service, Stanislaus NF

Response Resources: 1 type 3 Engine, 1 Patrol

Fire Agency Contacts: US Forest Service (209) 532-3671. Dispatched on SNF.

Estimated Response Time: 5 minutes (seasonal)

Other Fire Response: CAL FIRE: within sixty minutes, Six type 3 engines, One Air tactical aircraft, Two air tankers, Two Type three helicopters, Two dozers, Two hand crews, Two Overhead. from Mariposa County: Three type 3 or larger engines One Overhead

Nearest Medical Facility: Rural Health Clinic, Greeley Hill

Nearest Water Sources: Stanislaus National Forest, Buck Meadows Station 60,000 gallons in water tanks, Merced River, scattered ponds

Evacuation Information

Responsibility: The Mariposa County Sheriff's Department is responsible for all evacuations in Mariposa County. The Department utilizes an automated reverse-911 system to notify residents of pre-evacuations and evacuations. During evacuations the Mariposa County Sheriff department also utilizes the Mariposa County Search and Rescue. The Mariposa County Sheriff's Department Animal Control is used to assist in the evacuations of all animals. Contact: Mariposa County Sheriff's Office 209-966-3615.

Primary roads for evacuation: J132/Greeley Hill Road, Holtzel Road, Fiske Road, Dexter Road/Cuneo Road, Smith station Road, State Highway 120, Dogtown Road.

Structural Ignitability

The Public Resources Code 4290 (PRC4290) contains requirements pertaining to new construction on SRA in California. Driveway widths, slopes, turn-around areas, and water storage requirements for firefighting forces are regulated in PRC4290. CAL FIRE MMU personnel are tasked with inspecting the new construction within the unit, specifically in Mariposa County.

A portion of the Public Resource Code 4291 (PRC4291) requires a minimum of 100' of clearance for fire safety ("Defensible Space") surrounding all structures on State Responsibility (SRA) lands in California. As of 2008, CAL FIRE has been mandated to perform LE-100 inspections on 100% of improved properties within SRA.

Regarding existing structures, residents need to be educated on how to create and/or maintain proper Defensible Space, and also made aware of construction issues and materials that affect structural survivability in the event of wildland fires. Lists of resources (such as sources for fire-safe materials and local contractors who perform required work) need to be created and made available to residents.

Residents who need assistance in creating and/or maintaining Defensible Space need to be identified so that funding can be sought for them.

State & Federal Plans

CAL FIRE's Madera-Mariposa-Merced Unit Fire Management Plan identifies Greeley Hill as included in Target Area #4 for MMU and #2 for Mariposa County.

The Stanislaus National Forest Fire Management Plan does not directly address Greeley Hill or Buck Meadows

Proposed Mitigations

1. Mitigation: Wildfire Risk Assessment Survey. In order to have a baseline from which to work, a Wildfire Risk Assessment Survey should be performed and include every property in the community. This Survey can be performed using CAL FIRE's LE-100 form and/or Mariposa County Fire Department's Red Zone survey software. A provision should be made for identification of unimproved lots with hazardous fuels that pose a threat to neighboring properties and the community. Ideally, a group of Greeley Hill residents will be trained by CAL FIRE, Mariposa County Fire and the Mariposa County Fire Safe Council to conduct an annual survey of the entire community, preferably in late spring and in conjunction with Wildfire Awareness Week (first full week in May.) Results of the Survey will be disclosed to residents as a tool to raise awareness and educate, and also used to identify in-need residents who cannot create and/or maintain Defensible Space around their structures.

2. Mitigation: Develop Community Water Supplies. This planning area has inadequate water supplies for firefighting purposes. The community should be outfitted with water storage tanks that can be easily maintained and accessed. Further exploration of possible underground storage tanks on County rights-of-way should be revived.

3. Mitigation: Defensible Space Assistance & Education/Chipping Programs. Residents who are unable to physically and financially create and/or maintain Defensible Space need to be assisted. Funding needs to be applied for and obtained to perform brushing and chipping services for in-need residents. In addition, it is recommended that a pile chipping program be offered to residents who are able to cut and pile their own brush but have no way to dispose of it on site or transport it to a disposal site. Burning of piles when permitted requires careful planning and placement, poses a risk of escaped burns and is detrimental to air quality. Many residents will not go to the trouble or assume the risk involved in burning piles. Making pile chipping available to residents encourages them to clear brush and create/maintain Defensible Space, reducing the risk of structure loss in the event of a wildland fire.

4. Mitigation: Buckhorn Flat Strategic Fuel Treatment. This project will result in a shaded fuel break approx. one mile long at 300 feet wide, for a total treatment area of approx. 40 acres. The treatment will be along a strategic ridge line adjacent to the community of Greeley Hill. (BLM is currently completing a shaded fuel break on BLM lands that will directly tie into this project.)

Treatment types will include mechanical mastication and hand brushing and limbing. The Mariposa County Fire Safe Council has been awarded 2008 Bureau of Land Management funding (\$57,955) through the California Fire Safe Council's Grants Clearinghouse to complete this project. Work is currently in progress.

5. Mitigation: Buckhorn Flat Strategic Fuel Treatment Phase 2. This project will result in a shaded fuel break approx. 10 miles long at 300 feet wide, for a total treatment area of approx. 400 acres, continuing the initial one mile project described above. The treatment will be along a strategic ridge line adjacent to the community of Greeley Hill. Treatment types will include mechanical mastication and hand brushing and limbing. During the 2008 Telegraph Fire, dozer line was cut along the ridge and will serve as the starting point for this project. The Mariposa County Fire Safe Council will apply for Bureau of Land Management funding (approx. \$400,000) through the California Fire Safe Council's Grants Clearinghouse to complete this project.

Per CAL FIRE, the number one priority VMP burn within Battalion 1 is the Greeley Hill VMP. This project is approximately 200 acres and sits on a southwest facing slope between the communities of Coulterville and Greeley Hill, located mostly on BLM ground.

6. Mitigation: Strategic Fire Defense Systems: Coulterville lies within the South West InterFace Team (SWIFT) which is coalition of City, County, State, and Federal Agencies which has undertaken the responsibility of coordinating the strategic fire and resource planning for area north of the Merced River that lies within Mariposa County.

For more information: <http://www.fs.fed.us/r5/stanislaus/groveland/swift/team.shtml>

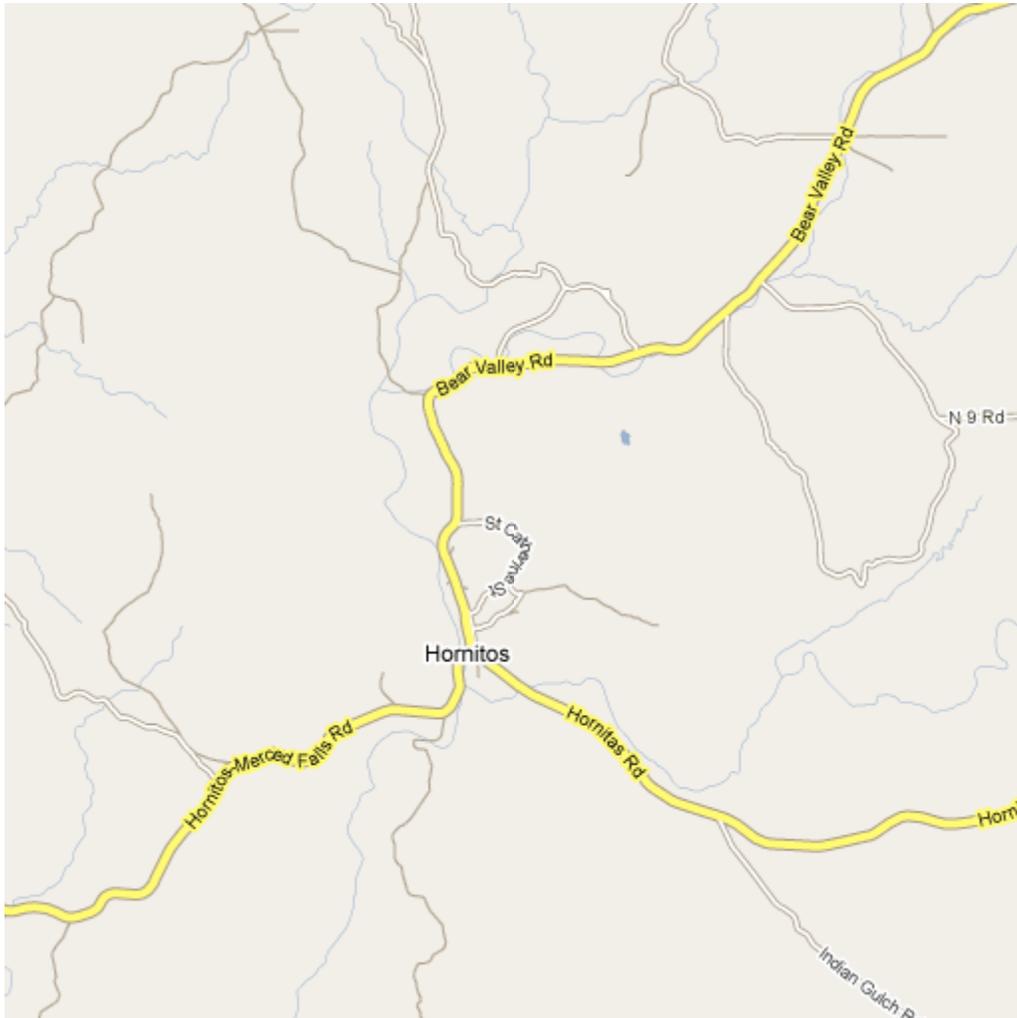
COMMUNITY WILDLAND FIRE PROTECTION PLAN

HORNITOS



Mariposa County, California

Community Planning Area Map²⁴



Community Overview

Hornitos consists of a small concentrated business district with residential structures and outlying isolated ranches in Mariposa County, California. It ranges in elevation from 700 feet to 1,200 feet, comprised mostly of rolling grass covered hills with some moderately steep terrain. Latitude is 37 30 10.1334, and longitude is -120 14 16.8822. Population is estimated at 105 residents with the majority of residents living in the community year-round. The community is not listed in the Federal Register as at high risk from wildfires.

²⁴ Google Maps

County Supervisor

Janet Bibby, District III 209-966-3222.

Community Contacts & Information

Primary Community Contact: Bernie Quinn 209-966-3622

Alternate Community Contact: Amy Gibson 209-376-2373

Scheduled Events/Meetings: Hornitos Enchilada Dinner (annual -- June)

Local Media: Mariposa Gazette 209-966-2500; Merced Sun-Star 209 722-1511

Assets at Risk

Estimated Number of Homes: 50

Estimated Value of Homes: \$10 million (median price \$200,000.)

Estimated Number of Businesses: 3

US Post office

Hornitos Bar

Hornitos Gift Shop

Estimated Number of Home Businesses: 6

Estimated Value of Businesses: \$2.4 million.

Facilities: Post Office, Catholic Church

Infrastructure: Hornitos Fire Station (CAL FIRE); Hornitos Park (& Hall); U.S. Post Office; Transfer Station; roads & bridges; PG&E poles, lines & equipment; Hornitos Telephone substation, lines & equipment; cable TV lines & equipment, Hornitos Cemetery

Estimated Value of Infrastructure & Facilities: \$1.6million

Other Values

Watershed: Burns Creek

Wildlife habitat: raptors, large wild pig population, and Wild Turkeys

Cultural/tribal/historical: Hornitos was founded in 1850 by Mexican miners who were expelled from nearby Quartzburg. At its peak, Hornitos ("little ovens") had a population of several thousand and the reputation of being the roughest town in Mariposa County. There are numerous historical buildings still present in the town as well as the walls of the Ghirardelli store, where Domingo Ghirardelli traded with the miners before moving to San Francisco in 1852 to found his chocolate company.

Recreational: Lake McSwain and Lake McClure are within twenty miles

Public Lands: USDOI BLM has lands interspersed throughout this area.

Community Hazards

Average Fuel Load: 20 TPA (tons per acre)

Predominant Fuel Types: Grass and widely spaced oaks with some mixed chaparral

Fire History: The last major fire has occurred within the last five years.

Fire Risk Potential: The number one cause of fires in this area is human cause and lightning being a very close second. During the summer months fires tend to spread very rapidly through the grass covered hills the month of June being the peak of fire season. Cattle grazing helps to reduce the fuels and fires tend to be suppressed quickly by ground units. Aircraft tend to be very successful as the terrain allows for very accurate delivery at lighter coverage levels which increases the area covered by a drop. Early detection is critical for any suppression in this environment.

Community Ingress/Egress: The primary ingress/egress routes in the event of a wildland fire are Hornitos Road and Bear Valley Road. Both of these roads are paved two lane roads which will allow for evacuation and arrival of suppression units simultaneously.

Fire Response/Resources

Nearest Fire Station: Hornitos Fire Station (CAL FIRE)

Response Resources: 5 Engines, 1 Water Tender, 1 Dozer, 2 Handcrews, 2 Airtankers, 1 Air Tactical, 1 Helicopter

Fire Agency Contacts: CAL FIRE 209-966-3622

Estimated Response Time: First engine 5 minutes, water tender 35 minutes, Dozer 45 minutes, Airtankers 15 minutes, Air Tactical 15 minutes, Helicopter 20 minutes, Handcrews 35 minutes

Next Nearest Fire Station: Catheys Valley Fire Station (CAL FIRE)

Response Resources: 2-type three engines

Fire Agency Contacts: CAL FIRE 209-966-3622.

Estimated Response Time: 20 minutes during fire season

Other Fire Response: CAL FIRE: within sixty minutes, 7 type 3 engines, 1 Air tactical aircraft, 2 air tankers, 2 Type three helicopters, 2 dozers, 2 hand crews, 2 Overhead. From Mariposa County: 3 type three or larger engines 1 Overhead

Nearest Medical Facility: John C. Fremont Hospital 209-966-3631. Mercy Medical Center at 301 East 13th Street, Merced Ca. (209) 385-7201.

Nearest Water Sources: Lake McSwain, Lake McClure

Evacuation Information

Responsibility: The Mariposa County Sheriff's Department is responsible for all evacuations in Mariposa County. The Department utilizes an automated reverse-911 system to notify residents of pre-evacuations and evacuations. During evacuations the Mariposa County Sheriff department also utilizes the Mariposa County Search and Rescue. The Mariposa County Sheriff's Department Animal Control is used to assist in the evacuations of all animals.

Contact: Mariposa County Sheriff's Office 209-966-3615.

Primary roads for evacuation: Hornitos Road and Bear Valley Road.

Structural Ignitability

The Public Resources Code 4290 (PRC4290) contains requirements pertaining to new construction on SRA in California. Driveway widths, slopes, turn-around areas, and water storage requirements for firefighting forces are regulated in PRC4290. CAL FIRE MMU personnel are tasked with inspecting the new construction within the unit, specifically in Mariposa County.

A portion of the Public Resource Code 4291 (PRC4291) requires a minimum of 100' of clearance for fire safety ("Defensible Space") surrounding all structures on State Responsibility (SRA) lands in California. As of 2008, CAL FIRE has been mandated to perform LE-100 inspections on 100% of improved properties within SRA.

Regarding existing structures, residents need to be educated on how to create and/or maintain proper Defensible Space, and also made aware of construction issues and materials that affect structural survivability in the event of wildland fires. Lists of resources (such as sources for fire-safe materials and local contractors who perform required work) need to be created and made available to residents.

Residents who need assistance in creating and/or maintaining Defensible Space need to be identified so that funding can be sought for them.

State & Federal Plans

CAL FIRE's Madera-Mariposa-Merced Unit Fire Management Plan does not address Hornitos.

Proposed Mitigations

Mitigation #1: Wildfire Risk Assessment Survey. In order to have a baseline from which to work, a Wildfire Risk Assessment Survey should be performed and include every property in the community. This Survey can be performed using CAL FIRE's LE-100 form and/or Mariposa County Fire Department's Red Zone survey software. A provision should be made for identification of unimproved lots with hazardous fuels that pose a threat to neighboring properties and the community. Ideally, a group of Hornitos residents will be trained by CAL FIRE, Mariposa County Fire and the Mariposa County Fire Safe Council to conduct an annual survey of the entire community, preferably in late spring and in conjunction with Wildfire Awareness Week (first full week in May.) Results of the Survey will be disclosed to residents as a tool to raise awareness and educate, and also used to identify in-need residents who cannot create and/or maintain Defensible Space around their structures.

Mitigation #2: Defensible Space Assistance & Education/Chipping Programs. Residents who are unable to physically and financially create and/or maintain Defensible Space need to be assisted. Funding needs to be sought for and obtained to perform brushing and chipping services for in-need residents. In addition, it is recommended that a pile chipping program be offered to residents who are able to cut and pile their own brush but have no way to dispose of it on site or transport it to a disposal site. Burning of piles when permitted requires careful planning and placement, poses a risk of escaped burns and is detrimental to air quality. Many residents will not go to the trouble or assume the risk involved in burning piles. Making pile chipping available to residents encourages them to clear brush and create/maintain Defensible Space, reducing the risk of structure loss in the event of a wildland fire.

Mitigation #3: Weed Abatement Ordinance. It is recommended that a weed abatement ordinance (for fire hazard nuisance) be explored for the Hornitos area.

Mitigation # 4: Refurbish and Staff Williams Peak Lookout Tower: Owing to the fast moving nature of fires in this fuel type the rapid detection becomes a critical element in successful suppression of any wildland fire. Williams Peak is in an ideal location to see and report fires while they are still small. Williams Peak would also cover Coulterville, Greeley Hill, Lake Don Pedro, Hunter's Valley as well as Hornitos. The MCFSC would like to recommend looking for grants to restore the tower and find Volunteers to staff this tower for the peak season; June through August.

Mitigation #5 Encourage Landowners to assist in Identifying Potential Projects: There has been little to no participation of land or homeowners in identifying area that could be beneficial to create a fuel break or to contribute to a mosaic to break up the fuel bed that exists in this area. The local existing Fire safe Council could be a facilitating entity for these people to interact with land management and fire suppression agencies.

Mitigation # 6: Encourage landowners to participate in CEQA²⁵ and VMP²⁶ as budgets allow.

²⁵ CEQA- Document URL: http://ceres.ca.gov/topic/env_law/ceqa/stat2/index.html
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²⁶ <http://www.fire.ca.gov/ResourceManagement/pdf/VMP2004.pdf>

COMMUNITY WILDLAND FIRE PROTECTION PLAN



HUNTERS VALLEY

Mariposa County, California

Community Pre-Attack Map



Community Overview

Hunters Valley consists of rural residential dwellings and ranches, with no commercial district, in Mariposa County, California. It ranges in elevation from 1,400 feet to 3,000 feet with moderate to steep terrain. Latitude is 37 37 9.8322, and longitude is -120 12 56.6994.

Population is estimated at 220 residents with the majority of residents living in the community year-round. The community is listed in the Federal Register as at high risk from wildfires.

Planning Area: For this Protection Plan, the boundary we starts at the intersection of the Bear Valley Road and the Hunter’s Valley Access Rd. then north along the Hunter’s Valley Access Road to its’ terminus hence northwestward to the Williams Peak. Hence northwest to Hunter’s Valley Mountain following the BLM road to Lake McClure hence following the shore line southerly to Cotton creek following Cotton Creek to the Cotton Creek Road then due south on Cotton Creek Road to the Bear Valley Road then easterly back to the start point.

County Supervisor

Lyle Turpin, District II 209-966-3222.

Community Contacts & Information

Primary Community Contact:

Alternate Community Contact:

Scheduled Events/Meetings: Hunters Valley Fire fundraisers

Local Media: Mariposa Gazette 209-966-2500; Merced Sun-Star? 209 722-1511

Assets at Risk

Estimated Number of Homes: 92

Estimated Value of Homes: \$ 23 million (median price \$250,000)

Estimated Number of Businesses: 4

Estimated Number of Home Businesses: 7

Estimated Value of Businesses: \$1.8 million

Infrastructure: Hunters Valley Volunteer Fire Station #36; roads & bridges; PG&E poles, lines & equipment; telephone lines & equipment;

Estimated Value of Infrastructure & Facilities: \$9.4 million

Other Values

Watershed: Temperance Creek and Cotton Creek

Wildlife habitat: raptors, large wild pig population, and Wild Turkeys

Cultural/tribal/historical:

Public Lands: adjacent to BLM

Community Hazards

Average Fuel Load: 50 TPA (tons per acre)

Predominant Fuel Types: oak, chaparral, grasslands

Fire History: 2000 Hunter Fire

Fire Risk Potential: The community is at risk from fires originating on BLM lands. BLM lands are at risk from fires emanating from within the community.

Community Ingress/Egress: The primary ingress/egress routes in the event of a wildland fire are Hunters Valley Rd, Bear Valley Road, Highway 49 North,

Fire Response/Resources

Nearest Fire Station: Hunters Valley Volunteer Fire Station, Mariposa County Fire (MCF)

Response Resources: 3 Type 2 Engine (1,250 GPM pump), 1 type 1 by 9/2009

Fire Agency Contacts: Mariposa County Fire and Hunters Valley Volunteer Fire Station 209-966-4330.

Estimated Response Time: 10 minutes

Next Nearest Fire Station: Hornitos Fire Station (CAL FIRE)

Response Resources: 1 type 3 Engine,

Fire Agency Contacts: CAL FIRE 209-966-3622.

Estimated Response Time: 20 minutes, seasonal

Other Fire Response: CAL FIRE: within sixty minutes, 7 type 3 engines, 1 Air tactical aircraft, 2 air tankers, 2 Type three helicopters, 2 dozers, 2 hand crews, 2 Overhead. From Mariposa County: 3 type three or larger engines 1 Overhead

Nearest Medical Facility: John C. Fremont Hospital 209-966-3631. Mercy Medical Center at 301 East 13th Street, Merced Ca. 209 385-7201.

Nearest Water Sources: Lake McClure, Merced River,

Evacuation Information

Responsibility: The Mariposa County Sheriff's Department is responsible for all evacuations in Mariposa County. The Department utilizes an automated reverse-911 system to notify residents of pre-evacuations and evacuations. During evacuations the Mariposa County Sheriff department also utilizes the Mariposa County Search and Rescue. The Mariposa County Sheriff's Department Animal Control is used to assist in the evacuations of all animals. Contact: Mariposa County Sheriff's Office 209-966-3615.

Primary roads for evacuation: Hunters Valley Rd, Bear Valley Rd, Hwy 49

Structural Ignitability

The Public Resources Code 4290 (PRC4290) contains requirements pertaining to new construction on SRA in California. Driveway widths, slopes, turn-around areas, and water storage requirements for firefighting forces are regulated in PRC4290. CAL FIRE MMU personnel are tasked with inspecting the new construction within the unit, specifically in Mariposa County.

A portion of the Public Resource Code 4291 (PRC4291) requires a minimum of 100' of clearance for fire safety ("Defensible Space") surrounding all structures on State Responsibility (SRA) lands in California. As of 2008, CAL FIRE has been mandated to perform LE-100 inspections on 100% of improved properties within SRA.

Mariposa County Local Hazard Mitigation Plan

Regarding existing structures, residents need to be educated on how to create and/or maintain proper Defensible Space, and also made aware of construction issues and materials that affect structural survivability in the event of wildland fires. Lists of resources (such as sources for fire-safe materials and local contractors who perform required work) need to be created and made available to residents.

Residents who need assistance in creating and/or maintaining Defensible Space need to be identified so that funding can be sought for them.

State & Federal Plans

CAL FIRE's Madera-Mariposa-Merced Unit Fire Management Plan identifies Hunters Valley as included in Target Area #4 for MMU and #2 for Mariposa County.

BLM identifies Hunters Valley as a Community at Risk/WUI Area within the Mariposa Fire Management Unit of the Folsom Fire Management Plan.

Proposed Mitigations

Mitigation #1: Wildfire Risk Assessment Survey. In order to have a baseline from which to work, a Wildfire Risk Assessment Survey should be performed and include every property in the community. This Survey can be performed using CAL FIRE's LE-100 form and/or Mariposa County Fire Department's Red Zone survey software. A provision should be made for identification of unimproved lots with hazardous fuels that pose a threat to neighboring properties and the community. Ideally, a group of Hunters Valley residents will be trained by CAL FIRE, Mariposa County Fire and the Mariposa County Fire Safe Council to conduct an annual survey of the entire community, preferably in late spring and in conjunction with Wildfire Awareness Week (first full week in May.) Results of the Survey will be disclosed to residents as a tool to raise awareness and educate, and also used to identify in-need residents who cannot create and/or maintain Defensible Space around their structures.

Mitigation #2: Defensible Space Assistance & Education/Chipping Programs. Residents who are unable to physically and financially create and/or maintain Defensible Space need to be assisted. Funding needs to be applied for and obtained to perform brushing and chipping services for in-need residents. In addition, it is recommended that a pile chipping program be offered to residents who are able to cut and pile their own brush but have no way to dispose of it on site or transport it to a disposal site. Burning of piles when permitted requires careful planning and placement, poses a risk of escaped burns and is detrimental to air quality. Many residents will not go to the trouble or assume the risk involved in burning piles. Making pile chipping available to residents encourages them to clear brush and create/maintain Defensible Space, reducing the risk of structure loss in the event of a wildland fire.

Mitigation #3 Hunter VMP: BLM and CAL FIRE have identified the Hunter VMP (prescribed fire) project as "still in planning stages".

Mitigation # 4: Refurbish and Staff Williams Peak Lookout Tower: Owing to the fast moving nature of fires in this fuel type the rapid detection becomes a critical element in successful suppression of any wildland fire. Williams Peak is in an ideal location to see and report fires while they are still small. Williams Peak would also cover Coulterville, Greeley Hill, Lake Don Pedro, Hunter's Valley as well as Hornitos. The MCFSC would like to recommend looking for grants to restore the tower and find Volunteers to staff this tower for the peak of fire season; June through August.

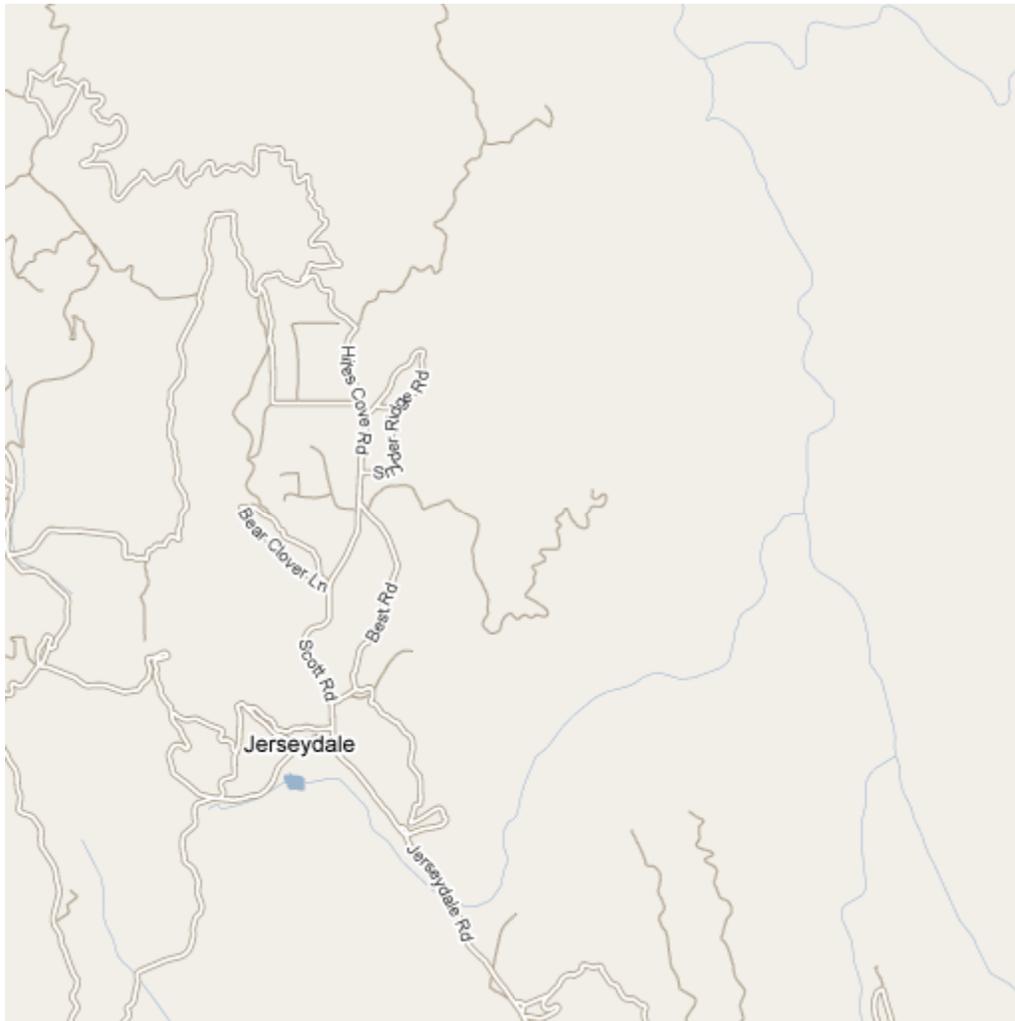
COMMUNITY WILDLAND FIRE PROTECTION PLAN



JERSEYDALE/MARIPOSA PINES

Mariposa County, California

Community Pre-Attack Map



Community Overview

Jerseydale/Mariposa Pines consists of rural residential dwellings as well as a subdivision with half acre to one acre lots in Mariposa County, California. It ranges in elevation from 2,800 to 4,000 feet with moderate to steep terrain. Latitude is 37 33 27.021 and longitude is -119 50 53.2926. Population is estimated at 565 residents with the majority of residents living in the community year-round. Most residents are permanent, with a small number of rental properties and vacation homes distributed throughout the area. The community has a very active Fire Safe Committee that is currently working on raising funds to build a County Volunteer Fire Station, and has already succeeded in placing an engine house and housing a County engine at Jerseydale Forest Station in cooperation with U.S.D.A. Forest Service, Sierra National Forest. The community is listed in the Federal Register as at high risk from wildfires.

Mariposa County Local Hazard Mitigation Plan

Planning Area: Starting at County Road 118 where it intersects the Sierra National Forest Congressional Boundary proceed due west along the boundary to the Township 4 south, Range 19 east, the southern corner of Sections 33 and Section 34, hence due north to the northern corner of Section 16 and Section 15 hence due east to the northern corner of Section 13 and Section 14 hence due south to the First Standard Parallel then due west back to the start point

County Supervisor

Jim Allen 209-966-3222.

Community Contacts & Information

Primary Community Contact: Jan Hamilton, Chairman, Mariposa County Fire Safe Council 209-966-2387.

Alternate Community Contacts: Rick Messier, Director, Mariposa County Fire Safe Council 209-742-6847, Dennis Lagitarus, Chairman, Mariposa Pines/Jerseydale Fire Safe Committee 209-742-6755 Daytime 209-966-2904

Scheduled Events/Meetings: Mariposa Pines/Jerseydale Fire Safe Committee monthly meetings (the last Wednesday 7 pm at Jerseydale Forest Station every month) and various fundraising events (rummage sales, dinners, El Mercado, etc.) Annual Picnic (Mariposa Pines Water Board) around July 4th.

Local Media: Mariposa Gazette 209-966-2500; Merced Sun-Star 209-722-1511; Tom Ohmer produces PR/newsletters for Mariposa Pines/Jerseydale Fire Safe Committee 209-742-6704.

Assets at Risk

Estimated Number of Homes: 226

Estimated Value of Homes: \$5.6 million (median price \$250,000.)

Estimated Number of Businesses: Businesses are in-home.

Estimated Number of Home Businesses: 14

Estimated Value of Businesses: \$5.8 million

Facilities: Jerseydale Forest Station (U.S.D.A. Forest Service.)

Infrastructure: Jerseydale Forest Station (U.S.D.A. Forest Service); Community water system (Mariposa Pines); roads & bridges; PG&E poles, lines & equipment; Sierra Telephone lines & equipment, water and sewer system.

Estimated Value of Infrastructure & Facilities: \$3.6million

Other Values

Watershed: South Fork Merced River.

Mariposa County Local Hazard Mitigation Plan

Wildlife habitat: Spotted owl habitat, large deer population, mountain lion, red legged frog, black bear

Cultural/tribal/historical: This area supported a large number of Miwoks prior to the advent of the opening of the Hites Cove Mine in 1852. This area has an extensive history of mining and the associated support industry of that era. Some of the more notable were the Hites Cove Mine, the Ferguson/Sweetwater Mine, the Savage Lundy Mine, and the Apperson Mine. At one time this area supported 6,000 to 10,000 people. In addition there were several thousand Chinese laborers which were never counted into any of census taken at that time. This area also had six different lumber mills and a number of ranches that supported the mining. Ranches that still exist today include Cunningham (Kahl) Ranch and the Clark Valley Ranch

Recreational: Trails on Sierra National Forest, Hites Cove Four Wheel Drive Road which provides access to the South Fork Merced River.

Timber: Plantations on the Sierra National Forest. Large private forest holdings exist in this area.

Public Lands: Surrounded by the Sierra National Forest

Other: Jerseydale Heli-Port (access from 5S25) - This is a paved improved heliport that can support type 1 helicopters and multiple type 2 or 3 helicopters. Not a working night heli-port.

Community Hazards

Average Fuel Load: 100 TPA

Predominant Fuel Types: Mixed conifer forest (closed canopy) scattered oaks and abundant bear clover, manzanita and mixed chaparral.

Fire History: 1952 McCready Fire; 1924 Nelson Cove Fire.

Fire Risk Potential: The community is at High risk from fires originating on the Sierra National Forest. The Sierra National Forest is at risk from fires emanating from within the community. Fires coming out of the South Fork Merced River Canyon will be fast moving as they progress up slope through heavy brush that has little or no access for suppression forces. The use of fixed wing aircraft will be limited by the steepness of terrain and the narrowness of the river canyon.

A fire coming out of the Savage-Lundy Mine site will travel up the Snyder Creek Drainage with no breaks in the fuel bed all the way up to the existing Mariposa Pines Subdivision. In the subdivision the Drainage is very narrow with 75-100 TPA fuel loading. The USFS had constructed a fuel break that was completed in the early 1980's but that has grown over and is no longer feasible as a holding line. The same will be true for a fire coming up the Skelton Creek Drainage. This area is also prone to wind events such as Mono Winds. The 1952 McCready fire was a result of a wind event where high velocity winds pushed the fire west due east into Devil's Gulch. The forest has stagnated and is characterized by stands of White Fir and dog hair thickets of Western Incense Cedar any open ground is covered in either Bear Clover or mixed Chaparral. Fires in this area are difficult to contain by hand line and are labor intensive for mopping up.

Community Ingress/Egress: The primary ingress/egress routes in the event of a wildland fire are the Mariposa County Road 119 and Road 118 also known as the Jerseydale Road. The U.S. Forest Service (USFS) Road 4S22, the Apperson Mine Rd, and the USFS Road 5S24, Sweetwater Mine Road will allow access to Midpines through Ponderosa Way or Carstens Drive. Forest Service Road 5S25 (Footman Ridge Road) from Jerseydale Road will allow access

Mariposa County Local Hazard Mitigation Plan

through to Ponderosa Basin. The USFS roads should only be considered as a last resort for evacuations as they are not suitable to standard passenger car use, prone to severe dust, narrow, with steep grades. They will not allow for two way traffic.

Fire Response/Resources

Nearest Fire Station: Jerseydale Forest Station USFS

Response Resources: MCF 1 type 3 engine; 1 Type 3-500 gallons & 1 Patrol USFS

Fire Agency Contacts: Sierra National Forest 209-966-2477.

Estimated Response Time: 10 minutes for USFS Engine and Patrol during fire season (May thru November). Mariposa County Fire Co. 29 can respond year round in 15 minutes

Next Nearest Fire Station: Lushmeadows Volunteer Fire Station (MCF)

Response Resources: One Type 2 Engine (1,250 GPM pump) –One Water Tender (3,500 gal), One Type 4 Patrol (100 GPM pump, 300 gal)

Fire Agency Contacts: Mariposa County Fire 209-966-4330 and Lushmeadows Volunteer Fire Station #29

Estimated Response Time: 30 minutes

Other Fire Response: Additional Initial Attack resources: From CAL FIRE: 2 Inmate hand crews (60 minutes), 3 additional type 3 engines (30+ minutes) 1 type 2 Airtanker (30 minutes), 1 Type 2 helicopter (55 minutes). 1 Dozer 45 Minutes. From the USFS 1 Air tactical aircraft (25 minutes): 1 type Airtanker 25 minutes, 4 Type 3 engine (20-60 minutes), 2 Type 1 hand crew (15 & 45 minutes), 1 type 2 Helicopter 45 minutes, 1 type 1 helicopter 15 minutes; From Yosemite National Park: 1 Type 3 engine, (60 minutes), one type three Helicopter (20 Minutes)

Nearest Medical Facility: John C. Fremont Hospital 209-966-3631, Oakhurst Urgent Care 48677 Victoria Lane, Oakhurst Ca 559-683-2992

Nearest Water Sources: Community water system and hydrants in Mariposa Pines (186,000 gallons. This system can recharge at 100 gallons per minute as long as the power is not interrupted.). There are numerous ponds throughout the planning area.

Evacuation Information

Responsibility: The Mariposa County Sheriff's Department is responsible for all evacuations in Mariposa County. The Department utilizes an automated reverse-911 system to notify residents of pre-evacuations and evacuations. During evacuations the Mariposa County Sheriff department also utilizes the Mariposa County Search and Rescue. The Mariposa County Sheriff's Department Animal Control is used to assist in the evacuations of all animals. Contact: Mariposa County Sheriff's Office 209-966-3615.

Primary roads for evacuation: Jerseydale Rd, Apperson Mine Rd, Triangle Road, Darrah Road.

Structural Ignitability

The Public Resources Code 4290 (PRC4290) contains requirements pertaining to new construction on SRA in California. Driveway widths, slopes, turn-around areas, and water storage requirements for firefighting forces are regulated in PRC4290. CAL FIRE MMU personnel are tasked with inspecting the new construction within the unit, specifically in Mariposa County.

A portion of the Public Resource Code 4291 (PRC4291) requires a minimum of 100' of clearance for fire safety ("Defensible Space") surrounding all structures on State Responsibility Area (SRA) lands in California. As of 2008, CAL FIRE has been mandated to perform LE-100 inspections on 100% of improved properties within SRA.

Regarding existing structures, residents need to be educated on how to create and/or maintain proper Defensible Space, and also made aware of construction issues and materials that affect structural survivability in the event of wildland fires. Lists of resources (such as sources for fire-safe materials and local contractors who perform required work) need to be created and made available to residents.

Residents who need assistance in creating and/or maintaining Defensible Space need to be identified so that funding can be sought for them.

State & Federal Plans

CAL FIRE's Madera-Mariposa-Merced Unit Fire Management Plan does not address Jerseydale/Mariposa Pines

The Sierra National Forest Fire Management Plan does not directly address Jerseydale/Mariposa Pines.

Proposed Mitigations

1 Mitigation: Wildfire Risk Assessment Survey. In order to have a baseline from which to work, a Wildfire Risk Assessment Survey should be performed and include every property in the community. This Survey can be performed using CAL FIRE's LE-100 form and/or Mariposa County Fire Department's Red Zone survey software. A provision should be made for identification of unimproved lots with hazardous fuels that pose a threat to neighboring properties and the community. Ideally, a group of Jerseydale/Mariposa Pines residents will be trained by CAL FIRE, Mariposa County Fire and the Mariposa County Fire Safe Council to conduct an annual survey of the entire community, preferably in late spring and in conjunction

Mariposa County Local Hazard Mitigation Plan

with Wildfire Awareness Week (first full week in May.) Results of the Survey will be disclosed to residents as a tool to raise awareness and educate, and also used to identify in-need residents who cannot create and/or maintain Defensible Space around their structures.

2 Mitigation: Defensible Space Assistance & Education/Chipping Programs. Residents who are unable to physically and financially create and/or maintain Defensible Space need to be assisted. Funding needs to be sought for and obtained to perform brushing and chipping services for in-need residents. In addition, it is recommended that a pile chipping program be offered to residents who are able to cut and pile their own brush but have no way to dispose of it on site or transport it to a disposal site. Burning of piles when permitted requires careful planning and placement, poses a risk of escaped burns and is detrimental to air quality. Many residents will not go to the trouble or assume the risk involved in burning piles. Making pile chipping available to residents encourages them to clear brush and create/maintain Defensible Space, reducing the risk of structure loss in the event of a wildland fire.

3 Mitigation: Snyder Ridge Strategic Fuel Treatment. This project will result in a shaded fuel break approx. 1 1/2 miles long at 300 feet wide, for a total treatment area of approx. 70 acres. The treatment will be on private property along Snyder Ridge Road in the community of Mariposa Pines. Treatment types will include mechanical mastication and hand brushing and limbing. The Mariposa County Fire Safe Council may have opportunities to apply for funding (estimated cost \$157,000) to complete this project. Possible funding sources are Sierra Nevada Conservancy Proposition 84, and USFS funding through the California Fire Safe Council Grants Clearinghouse.

4 Mitigation: Snyder Creek Fuel Reduction: The biggest threat to the Mariposa Pines Subdivision is the build up of downed logs and brush in the Snyder Creek Drainage. Starting at the Sierra National Forest Boundary and continuing through to Double Eagle Road. Removal of fuels down to an acceptable level is critical to reduce the hazards to structures and will improve the habitat for amphibians and for people. This can be accomplished with steep slope yarding systems for larger fuels to reduce the impact on the soils in the Stream Management zones. Hand crews and chipping for the lighter fuels.

5. Mitigation: Snow Creek Strategic Fuel Treatment. This project will result in a shaded fuel break approx. 1 1/2 miles long at 300 feet wide, for a total treatment area of approx. 65 acres. The treatment will be on private property along Portuguese Ridge in the community of Jerseydale. Treatment types will include mechanical mastication and hand brushing and limbing. The Mariposa County Fire Safe Council may have opportunities to apply for funding (estimated cost \$157,000) to complete this project. Possible funding source is the USFS funding through the California Fire Safe Council Grants Clearinghouse.

6. Mitigation: Buckingham Strategic Fuel Treatment. This project will result in a shaded fuel break approximately 1.5 miles long at 300 feet wide, for a total treatment area of approximately 75 acres. The treatment will be on private property near Buckingham Mountain in the communities of Jerseydale, Midpines, and Bootjack. Treatment types will include mechanical mastication and hand brushing and limbing. The Mariposa County Fire Safe Council may have opportunities to apply for funding (estimated cost \$148,000.00) to complete this

Mariposa County Local Hazard Mitigation Plan

project. Possible funding source is the USFS funding through the California Fire Safe Council Grants Clearinghouse.

7. Mitigation: Encourage landowners to participate in CEQA²⁷ and VMP²⁸ as budgets allow.

²⁷ CEQA- Document URL: http://ceres.ca.gov/topic/env_law/ceqa/stat2/index.html

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²⁸ <http://www.fire.ca.gov/ResourceManagement/pdf/VMP2004.pdf>

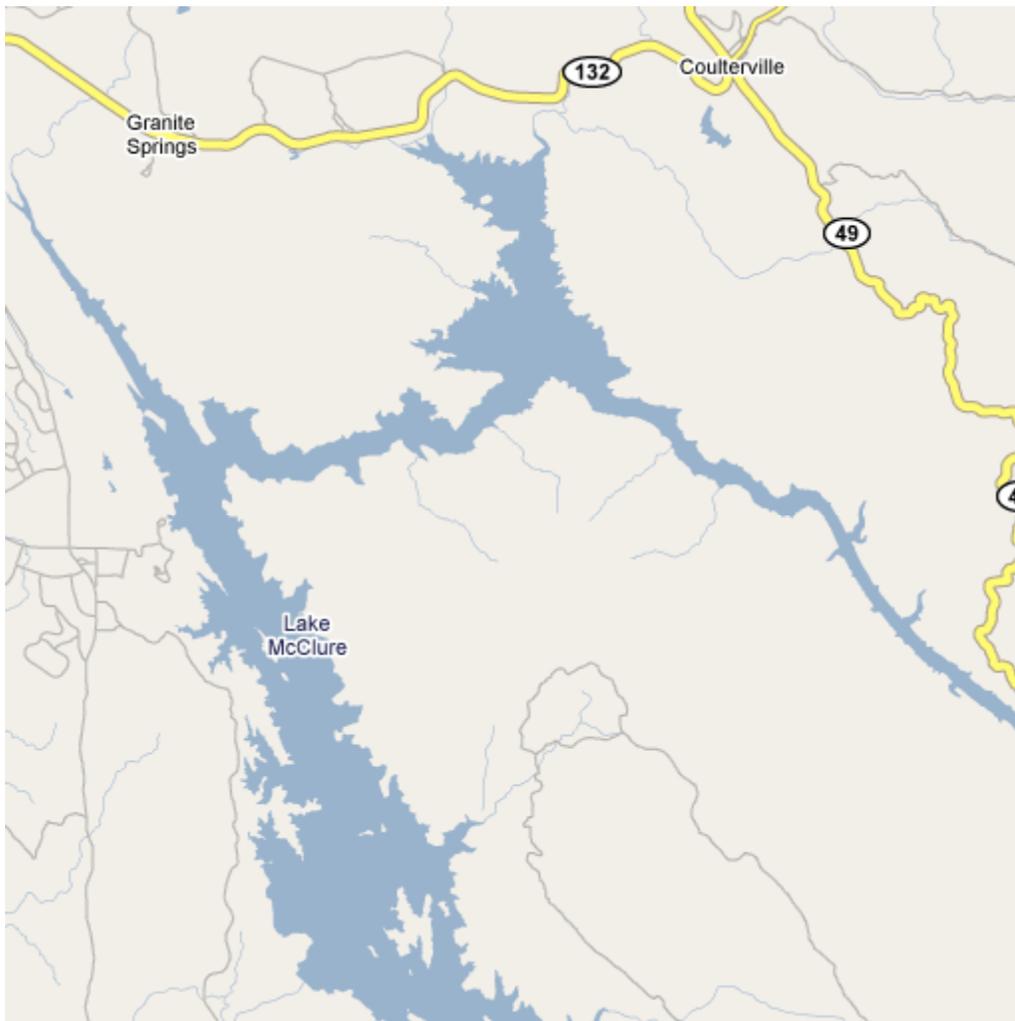
COMMUNITY WILDLAND FIRE PROTECTION PLAN



LAKE DON PEDRO

Mariposa County, California

Community Pre-Attack Map



Community Overview

Lake Don Pedro community is a rural subdivision of homes on large lots with several small commercial areas and a golf resort in Mariposa County, California. It ranges in elevation from 950 feet to 1,500 feet with moderate terrain. Latitude is 37 38 38.907, and longitude is -120 20 20.7168. Population is estimated at 1400 residents with the majority of residents living in the community year-round. Most residents are permanent, with a small number of rental properties and vacation homes distributed throughout the area. The community has a Homeowner's Association (LDPOA). The community is listed in the Federal Register as at high risk from wildfires.

Planning Area: Starting at the intersection of State Highway 132 and Jalapa Way proceed northerly on Jalapa Way including both sides of the street to the Mariposa County/ Tuolumne County Boundary, hence easterly along the boundary to the intersection of Azucena Court and

Mariposa County Local Hazard Mitigation Plan

Chicharraca Way hence northeast along Chicharra Way to Chauplin Way hence south to Granite Springs Road then west to Narciso Way hence south to State Highway 132 hence east along Hwy 132 to Piney Creek Road hence west to the shoreline of Lake McClure hence due west across the lake to the shoreline hence south along the shoreline to Piney Creek Road hence south to Ranchito Drive to the Merced Falls Road hence south to Coronado Drive hence northeast to Zarso Way hence west to Lazo Way

County Supervisor

Lyle Turpin, District II 209-966-3222.

Community Contacts & Information

Scheduled Events/Meetings: Lake Don Pedro Owner's Association (LDPOA) meetings,
Local Media: Mariposa Gazette 209-966-2500; Sierra Sun Times/goldrushcam.com

Assets at Risk

Estimated Number of Homes: 500
Estimated Value of Homes: \$175 million (median price \$350,000.)

Facilities: Hidden Hills Resort Golf Club
Infrastructure: Don Pedro Volunteer Fire Station; Transfer Station; Lake Don Pedro Elementary School; Don Pedro High School, roads & bridges; PG&E poles, lines & equipment; telephone lines & equipment; cable TV lines & equipment, water and sewer systems.
Estimated Value of Infrastructure & Facilities: 35 million

Other Values

Watershed: Lake Don Pedro, Lake McClure,
Recreational: Lake Don Pedro, Lake McClure, Hidden Hills Resort Golf Club,
Public Lands: Within 5 miles of BLM. Adjacent to Army Corp of Engineers

Community Hazards

Average Fuel Load: 30TPA (tons per acre)
Predominant Fuel Types: oaks, chaparral, grassland
Fire History: there have two fires in this area that exceeded 300 acres within the last twenty years. Human caused fires are the main cause of fires with a few lightning fires.

Mariposa County Local Hazard Mitigation Plan

Fire Risk Potential: Grass and Oaks on rolling hills result in fires in that are characterized by rapid rates of spread through flashy fuels. Early detection and quick responses are essential to contain fires with the initial attack. Aircraft are especially effective in this fuel type. Moderate intensity fires are easily influenced by wind speed and direction and due to ease of spotting suppression is difficult.

Community Ingress/Egress: The primary ingress/egress routes in the event of a wildland fire are J132, Merced Falls Rd, Banderilla Drive, Ranchito Drive,

Fire Response/Resources

Nearest Fire Station: Don Pedro Volunteer Fire Station, Mariposa County Fire (MCF)

Response Resources: One Type 2 Engine (1,250 GPM pump, 1,000 gals), Water Tender, One Type 4 Patrol (100 GPM pump, 300 gal)

Fire Agency Contacts: Mariposa County Fire and Don Pedro Volunteer Fire Station #24 209-966-4330.

Estimated Response Time: 0-5 minutes

Next Nearest Fire Station: Blanchard CAL FIRE Tuolumne Calaveras Unit (TCU)

Response Resources: 1 Type 3 Engine,

Fire Agency Contacts: CAL FIRE- TCU (209) 754-3831

Estimated Response Time: 10 minutes seasonal

Other Fire Response: CAL FIRE: within sixty minutes, 7 type 3 engines, 1 Air tactical aircraft, 2 air tankers, 2 Type three helicopters, 2 dozers, 2 hand crews, 2 Overhead. From MCF: 3 type three or larger engines 1 Overhead

Nearest Medical Facility: John C. Fremont Hospital 209-966-3631.

Nearest Water Sources: rated hydrants, Lake Don Pedro, Lake McClure,

Evacuation Information

Responsibility: The Mariposa County Sheriff's Department is responsible for all evacuations in Mariposa County. The Department utilizes an automated reverse-911 system to notify residents of pre-evacuations and evacuations. During evacuations the Mariposa County Sheriff department also utilizes the Mariposa County Search and Rescue. The Mariposa County Sheriff's Department Animal Control is used to assist in the evacuations of all animals.

Contact: Mariposa County Sheriff's Office 209-966-3615.

Primary roads for evacuation: J132, Merced Falls Rd, Banderilla Drive, Ranchito Drive, All of these are paved and will facilitate simultaneous access and egress.

Structural Ignitability

The Public Resources Code 4290 (PRC4290) contains requirements pertaining to new construction on SRA in California. Driveway widths, slopes, turn-around areas, and water

Mariposa County Local Hazard Mitigation Plan

storage requirements for firefighting forces are regulated in PRC4290. CAL FIRE MMU personnel are tasked with inspecting the new construction within the unit, specifically in Mariposa County.

A portion of the Public Resource Code 4291 (PRC4291) requires a minimum of 100 feet of clearance for fire safety (“Defensible Space”) surrounding all structures on State Responsibility (SRA) lands in California. As of 2008, CAL FIRE has been mandated to perform LE-100 inspections on 100% of improved properties within SRA.

Regarding existing structures, residents need to be educated on how to create and/or maintain proper Defensible Space, and also made aware of construction issues and materials that affect structural survivability in the event of wildland fires. Lists of resources (such as sources for fire-safe materials and local contractors who perform required work) need to be created and made available to residents.

Residents who need assistance in creating and/or maintaining Defensible Space need to be identified so that funding can be sought for them.

State & Federal Plans

CAL FIRE’s Madera-Mariposa-Merced Unit Fire Management Plan does not address Lake Don Pedro (TCU?)

BLM’s Folsom Fire Management Plan does not address Lake Don Pedro.

Proposed Mitigations

1. Mitigation: Wildfire Risk Assessment Survey. In order to have a baseline from which to work, a Wildfire Risk Assessment Survey should be performed and include every property in the community. This Survey can be performed using CAL FIRE’s LE-100 form and/or Mariposa County Fire Department’s Red Zone survey software. A provision should be made for identification of unimproved lots with hazardous fuels that pose a threat to neighboring properties and the community. Ideally, a group of Lake Don Pedro residents will be trained by CAL FIRE, Mariposa County Fire and the Mariposa County Fire Safe Council to conduct an annual survey of the entire community, preferably in late spring and in conjunction with Wildfire Awareness Week (first full week in May.) Results of the survey will be disclosed to residents as a tool to raise awareness and educate, and also used to identify in-need residents who cannot create and/or maintain Defensible Space around their structures.

2. Mitigation: Defensible Space Assistance & Education/Chipping Programs. Residents who are unable to physically and financially create and/or maintain Defensible Space need to be assisted. Funding needs to be applied for and obtained to perform brushing and chipping services for in-need residents. In addition, it is recommended that a pile chipping program be

Mariposa County Local Hazard Mitigation Plan

offered to residents who are able to cut and pile their own brush but have no way to dispose of it on site or transport it to a disposal site. Burning of piles when permitted requires careful planning and placement, poses a risk of escaped burns and is detrimental to air quality. Many residents will not go to the trouble or assume the risk involved in burning piles. Making pile chipping available to residents encourages them to clear brush and create/maintain Defensible Space, reducing the risk of structure loss in the event of a wildland fire.

3. Mitigation: Weed Abatement Ordinance. It is recommended that a weed abatement ordinance (for fire hazard nuisance) be explored for the Lake Don Pedro area.

4. Mitigation: Refurbish and Staff Williams Peak Lookout Tower: Owing to the fast moving nature of fires in this fuel type the rapid detection becomes a critical element in successful suppression of any wildland fire. Williams Peak is in an ideal location to see and report fires while they are still small. Williams Peak would also cover Coulterville, Greeley Hill, Lake Don Pedro, Hunter's Valley as well as Hornitos. The MCFSC would like to recommend looking for grants to restore the tower and find Volunteers to staff this tower for the peak season; June through August.

COMMUNITY WILDLAND FIRE PROTECTION PLAN



LUSHMEADOWS MOUNTAIN ESTATES

Mariposa County, California

Community Pre-Attack Map



Community Overview

Lushmeadows Mountain Estates is a rural subdivision in Mariposa County, California. It ranges in elevation from 3,200 to 3,500 feet with moderate to steep terrain. Latitude is 37 29 57.0192, and longitude is -119 49 48.0972. Population is estimated at 1,050 residents with the majority of residents living in the community year-round. Most residents are permanent, with a small number of rental properties and vacation homes distributed throughout the area. The community has an active Homeowner’s Association and Fire Safe Committee. The community is listed in the Federal Register as at high risk from wildfires.

Planning Area: For this Protection Plan, the boundary starts at Jerseydale Road and the Sierra National Forest Congressional Boundary hence east along the boundary to the intersection of State Highway 49 hence west along Highway 49 to Tip Top Road hence north along the Intersection of Poppy Lake Road hence west along Poppy Lake Road to Deer Springs Road

Mariposa County Local Hazard Mitigation Plan

hence west to the intersection of Darrah Road hence north to Jerseydale Road hence north to the start point.

County Supervisors

Kevin Cann, District IV 209-966-3222.

Jim Allen, District V 209-966-3222.

Community Contacts & Information

Primary Community Contact: Dick Hutchinson, Lushmeadows Fire Safe Committee Chairman 209-966-5163.

Alternate Community Contact: Larry Wesson at 209-966-4730, Lushmeadows Association President

Scheduled Events/Meetings: Lushmeadows Association (HOA) meets on the 2nd Wednesday of every month at 7pm at the Clubhouse (October and March are Association Meetings.) HOA Annual Meeting is held the 2nd Saturday in July at the Clubhouse. Many other events are held within the community, including special monthly dinners and holiday potlucks (St. Patrick’s Day, Memorial Day, Christmas, etc.)

Local Media: Mariposa Gazette 209-966-2500; Sierra Sun Times/goldrushcam.com; Quarterly & as needed HOA newsletter (also, HOA has upcoming website.)

Assets at Risk

Estimated Number of Homes: 300. (an additional approximate 100 homes in immediat

Estimated Value of Homes: \$105 million (median price \$350,000.)

Estimated Number of Businesses: 10+

- | | |
|---------------------------------|-------------------------|
| Lushmeadows Store & Gas Station | Yosemite Stitch in Time |
| Mini-Storage | Triangle Market |
| CKC | Triangle Road Café |
| Herb Farm | Triangle Mini Storage |
| Sparks Paving | Triangle Nail Salon |

Estimated Number of Home Businesses: 30.

Estimated Value of Businesses: \$11 million

Facilities: Lushmeadows Clubhouse; Campground at Dawn Lake; Darrah School House & Playground (Kiwanis Sound of Music Pre-school Academy), Dawn Lake Playground

Infrastructure: Lushmeadows Volunteer Fire Station #29; Kiwanis Sound of Music Pre-school Academy, roads & bridges; PG&E poles, lines & equipment; Sierra Telephone lines & equipment, water system.

Other: Dawn Lake & Mallard Lake.

Estimated Value of Infrastructure & Facilities: \$2.4 Million

Other Values

Watershed: CalWater Planning Watershed Numbers 65391101 and 65391102 (moderate.) Upper Chowchilla River, including; Fox Creek, Oliver Creek, Camp Meeting Creek, Italian Creek, Owl Creek, McGoon Creek, Snow Creek.

Wildlife habitat: Large population of deer, Mountain Lion, Black Bear, Spotted Owl, Golden Eagle, Great Gray Owl.

Cultural/tribal/historical: Grinding holes on at least 3 properties within community. Macready House (Moore owns original Ranch house that had a firehouse and barracks attached.)

Recreational: Dawn Lake & Campground, Mallard Lake, Lushmeadows Clubhouse, Dawn Lake Playground

Timber: Plantations on Sierra National Forest. Sierra Conservancy Forest on McCready property, 2,800 acres.

Public Lands: Adjacent to Sierra National Forest. Within 51 miles of Yosemite National Park, and within 18 miles of BLM

Community Hazards

Average Fuel Load: 50 – 125 TPA (tons per acre)

Predominant Fuel Types: Mixed conifer, oak, manzanita (pine: oak estimated at 1:1.)

Fire History: 1997 Stumpfield Fire (15 structures lost.) 1961 Harlow Fire (9 fatalities, 160? Structures lost.) Nelson Cove Fires (1924 175,000 acres, 1959, 1968.)

Fire Risk Potential: The community is at risk from fires originating on the Sierra National Forest. The SNF is at risk from fires emanating from within the community. The largest threats to the community are human caused fires that originate through carelessness, arson, burning debris and trash out of season, and mechanical (power line and motor vehicle). Lightning presents the biggest problem as well, especially during times that there are large demands on suppression resources. The fuel loading is at 120 tons per acre on the NF lands. Fires originating on the north side of Hwy 49 would pose a threat to the homes in Lushmeadows as there are few roads and the topography does lend itself well to fire line construction. Fires emanating from East Westfall Road will run into the Sierra National Forest because this location is in very steep, rugged country with extremely limited access. A fire originating here during the peak of Fire Season can be expected to reach 15,000 to 25,000 acres. Consequently the threat to the Sierra National Forest is very significant owing to the fact that the private holdings are downhill from the forest itself. The potential for vehicle fires is great due to the large number of Forest Visitors that use Off Highway Vehicle (OHV). Along with this is the increase of illegal drug operations such as marijuana growing and methamphetamine production, which already have had an impact on the number of fires over the past ten years.

Community Ingress/Egress: The primary ingress/egress routes in the event of a wildland fire are Darrah Road, Meadow Lane, Triangle Road, and State Highway 49 South. All of these routes are paved two lane and would facilitate rapid ingress and egress. There are however a multitude of small roads and private roads throughout the area which will not be suitable for large evacuations on short notice.

Fire Response/Resources

Nearest Fire Station: Lushmeadows Volunteer Fire Station, Mariposa County Fire (MCF) 209-966-4330

Response Resources: One Type 2 Engine (1,250 GPM pump), One Type 3 Engine (750 GPM pump), One Water Tender (3,500 gal), One Type 4 Patrol (100 GPM pump, 300 gal)

Fire Agency Contacts: Mariposa County Fire, 209-966-4330.

Estimated Response Time: 0-15 minutes

Next Nearest Fire Station: Jerseydale Forest Station (USFS)

Response Resources #: 2 type three engines : 1 patrol

Fire Agency Contacts: USDA Forest Service, Sierra National Forest, Jerseydale Forest Station, 209-966-2477, Fire Prevention Office at Jerseydale Forest Station: 209-742-7540

Estimated Response Time: for USFS Sierra Engine and Patrol (20 minutes) during fire season (estimated between the months May thru November). Mariposa County Fire Co. 29 can respond year round in 15 minutes

Other Fire Response: 1 type three engine, Usona Fire Station (CAL FIRE) 209-966-3622 (20 minutes, estimated between the months May thru November); 1 type two engine, 1 water tender, and 1 patrol, Bootjack Volunteer Fire Station (MCF) 209-966-4330 (25 minutes)

Additional Response: From CAL FIRE: 1 Air tactical aircraft (20 minutes), 2 Inmate hand crews (30 minutes), 4 additional type 3 engines (30+ minutes), 2 type 2 Airtankers (30 minutes), 1 Type 2 helicopter (35 minutes), 2 water tenders (30 minutes), 1 Dozer (35 minutes).

From the USFS: 2 Type 3 engines (30 minutes), 1 Type 1 hand crew (45 minutes), 1 type 1 helicopter (20 minutes), 1 type two helicopter w/crew (40 minutes)

From Yosemite National Park: 1 Type 3 engine, (30 minutes), 1 type three helicopter (15 minutes)

Limitations: Resources and response times are going to be dependent upon location of the fire, time of year, other fires going on locally, statewide, and nationally, time of day. Over all responsibility of the fire will be the Jurisdictional Agency and the on scene management will be the most qualified individual at the scene.

Nearest Medical Facility: John C. Fremont Hospital 209-966-3631 or Oakhurst Urgent Care, Oakhurst Ca 559-683-2992

Nearest Water Sources: Dawn Lake and Mallard Lake are both outfitted with dry hydrants.

Evacuation Information

Responsibility: The Mariposa County Sheriff's Department is responsible for all evacuations in Mariposa County. The Department utilizes an automated reverse-911 system to notify residents of pre-evacuations and evacuations. During evacuations the Mariposa County Sheriff department also utilizes the Mariposa County Search and Rescue. The Mariposa County Sheriff's Department Animal Control is used to assist in the evacuations of all animals. Contact: Mariposa County Sheriff's Office 209-966-3615.

Primary roads for evacuation: Triangle Road, Darrah, State Highway 49 South

Structural Ignitability

The Public Resources Code 4290 (PRC4290) contains requirements pertaining to new construction on SRA in California. Driveway widths, slopes, turn-around areas, and water storage requirements for firefighting forces are regulated in PRC4290. CAL FIRE MMU personnel are tasked with inspecting the new construction within the unit, specifically in Mariposa County.

A portion of the Public Resource Code 4291 (PRC4291) requires a minimum of 100' of clearance for fire safety ("Defensible Space") surrounding all structures on State Responsibility (SRA) lands in California. As of 2008, CAL FIRE has been mandated to perform LE-100 inspections on 100% of improved properties within SRA.

Regarding existing structures, residents need to be educated on how to create and/or maintain proper Defensible Space, and also made aware of construction issues and materials that affect structural survivability in the event of wildland fires. Lists of resources (such as sources for fire-safe materials and local contractors who perform required work) need to be created and made available to residents.

Residents who need assistance in creating and/or maintaining Defensible Space need to be identified so that funding can be sought for them.

State & Federal Plans

CAL FIRE's Madera-Mariposa-Merced Unit Fire Management Plan does not directly address the Lushmeadows Mountain Estates subdivision

The Sierra National Forest Fire Management Plan does not directly address the Lushmeadows Mountain Estates subdivision.

Proposed Mitigations

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1. Mitigation: Wildfire Risk Assessment Survey. In order to have a baseline from which to work, a Wildfire Risk Assessment Survey should be performed and include every property in the community. This Survey can be performed using CAL FIRE's LE-100 form and/or Mariposa County Fire Department's Red Zone survey software. A provision should be made for identification of unimproved lots with hazardous fuels that pose a threat to neighboring properties and the community. Ideally, a group of Lushmeadows residents will be trained by CAL FIRE, Mariposa County Fire and the Mariposa County Fire Safe Council to conduct an annual survey of the entire community, preferably in late spring and in conjunction with Wildfire Awareness Week (first full week in May.) Results of the survey will be disclosed to residents as a tool to raise awareness and educate, and also used to identify in-need residents who cannot create and/or maintain Defensible Space around their structures.

2. Mitigation: Defensible Space Assistance & Education/Chipping Programs. Residents who are unable to physically and financially create and/or maintain Defensible Space need to be assisted. Funding needs to be applied for and obtained to perform brushing and chipping services for in-need residents. In addition, it is recommended that a pile chipping program be offered to residents who are able to cut and pile their own brush but have no way to dispose of it on site or transport it to a disposal site. Burning of piles when permitted requires careful planning and placement, poses a risk of escaped burns and is detrimental to air quality. Many residents will not go to the trouble or assume the risk involved in burning piles. Making pile chipping available to residents encourages them to clear brush and create/maintain Defensible Space, reducing the risk of structure loss in the event of a wildland fire.

3. Mitigation: Lushmeadows Strategic Fuel Treatment Phase I (Cloud's Rest to Tip Top/Ridge Top.) This project will result in a shaded fuel break approximately 5 miles long at 300 feet wide, for a total treatment area of approx. 200 acres. The treatment will be along a strategic ridge line adjacent to the community of Lushmeadows. Treatment types will include mechanical mastication and hand brushing and limbing. The Mariposa County Fire Safe Council has been awarded 2008 Proposition 40 funding (\$188,278) through CAL FIRE to complete this project. (Countywide Fuel Treatment Priority #3.)

4. Mitigation: Lushmeadows Strategic Fuel Treatment Phase II (Sherrod & Homestead.) This project will result in a shaded fuel break approximately 6 miles long at 300 feet wide, for a total treatment area of approx. 240 acres. The treatment will be along strategic ridge lines adjacent to the community of Lushmeadows. Treatment types will include mechanical mastication and hand brushing and limbing. The Mariposa County Fire Safe Council will apply for 2009 Proposition 40 funding (estimated cost \$250,000) through CAL FIRE to complete this project. (Countywide Fuel Treatment Priority #4.)

5. Mitigation: Encourage landowners to participate in CEQA²⁹ and VMP³⁰ as budgets allow.

²⁹ CEQA- Document URL: http://ceres.ca.gov/topic/env_law/ceqa/stat2/index.html
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³⁰ <http://www.fire.ca.gov/ResourceManagement/pdf/VMP2004.pdf>

COMMUNITY WILDLAND FIRE PROTECTION PLAN



MARIPOSA (including MT. BULLION)

Mariposa County, California

Community Planning Area Map³¹



Community Overview

Mariposa (including Mt. Bullion) consists of concentrated residential and commercial districts, rural residential dwellings and a downtown historic district in Mariposa County, California. It ranges in elevation from 1,100 feet to 2,800 feet with moderate to steep terrain. Latitude is 37 29 13.8696, and longitude is -119 58 3.7158. Population is estimated at 3,030 residents with the majority of residents living in the community year-round. Most residents are permanent, with a moderate number of rental properties and vacation homes distributed throughout the area. The community is listed in the Federal Register as at high risk from wildfires.

³¹ Google Maps

County Supervisors

Kevin Cann, District IV 209-966-3222.
Janet Bibby, District III 209-966-3222.

Community Contacts & Information

Primary Community Contact: James Wilson 209-966-4330

Scheduled Events/Meetings: Mariposa County Fire Safe Council, The Mariposa Chamber of Commerce, Mariposa Arts Council, and other community clubs and organizations hold events almost every week throughout the year. Events are typically held in town at the County Park and the Arts Park, The Mariposa County Fairgrounds, on various school campuses, and at the Airport in Mt. Bullion.

Local Media: Mariposa Gazette 209-966-2500; Sierra Sun Times 209-742-4136, Merced Sun Star 209-722-1511

Assets at Risk

Estimated Number of Homes: 900

Estimated Value of Homes: \$225 million (median price \$250,000.)

Estimated Number of Businesses: 100-125

Estimated Number of Home Businesses: 45

Estimated Value of Businesses: \$91.4 million

Facilities: 6 Churches, Masonic Hall, VFW Hall, Oddfellows Hall; Government Center, High School auditorium, County Park Pavilion & picnic area,

Infrastructure: Mariposa Public Utility District Fire Station, Mariposa Fire Station (CAL FIRE); Mt. Bullion/Airport Volunteer Fire Station, Mariposa Co. Sheriff's Department Headquarters; Mariposa County Courthouse; Mariposa County Adult Detention Center; Mariposa-Yosemite Airport; Mariposa Co. Government Center; Mariposa Co. Hall of Records; Mariposa Co. Health Department; Mariposa Co. District Attorney; Mariposa Co. Human Services Dept.; Mariposa Co. Parks & Recreation Dept.; Mariposa Co. Public Works Landfill, Composting and Recycling Center; Mariposa Co. Behavioral Health & Recovery Services; Sewage Treatment Facility; Mariposa Elementary School; Mariposa County High School; Spring Hill Opportunity High School; Mariposa County Library; Mariposa County Park and Pool; Mariposa Arts Park; Mariposa Visitor's Center; John C. Fremont Hospital & Clinic; U.S. Post Office; Department of Motor Vehicles; California Highway Patrol; Mariposa Senior Center; Mariposa Cemetery; roads & bridges; PG&E poles, lines & equipment; Sierra Telephone lines & equipment; Northland Cable lines & equipment water and sewer systems.

Estimated Value of Infrastructure & Facilities: \$326 million

Other Values

Watershed: Stockton Creek Reservoir, Merced River,

Cultural/tribal/historical: downtown historic district, historic jailhouse, Museum & History Center (stamp mill), Mariposa Cemetery, Catholic Cemetery, numerous historic buildings throughout town and area, mining, tribal,

Recreational:

Public Lands: Adjacent to BLM land.

Community Hazards

Average Fuel Load: 35 TPA (tons per acre)

Predominant Fuel Types: Mixed chaparral

Fire History: The town of Mariposa has burnt down several times prior to 1900. Since 1900 there has been a threat to the town approximately once every 11 years, the most recent occurrences were in 2003 when three major fires threatened structures in town and the Telegraph Fire that threatened Mt. Bullion in 2008.

Fire Risk Potential: Human, both arson and accidental, is the leading cause of fire starts followed closely by mechanical failures (power lines, automotive, etc). Flashy fuels which lead to contiguous mixed chaparral fuel beds on steep slopes contribute to intense heat, resulting in rapid rates of spread, spotting, and fire behavior that prevents successful direct initial attacks if the fire gains more than a half acre during peak burning periods.

Community Ingress/Egress: The primary ingress/egress routes in the event of a wildland fire are Highway 140, Highway 49, both of which are paved two lane highways that allow for rapid evacuation and for the ingress of fire suppression vehicles simultaneously. Old Highway, Miller Road, Smith Road, Mt. Bullion Cutoff Road., Agua Fria Road, are paved but narrow. Congestion will be a problem as well as the encroachment of fuels to the roadway which cause congestion and close these roads when burning.

Fire Response/Resources

Nearest Fire Station: Mariposa Public Utility District (MPUD) Fire Station / CAL FIRE

Response Resources: 2 Type 1 Engine, 3 type 2 engines, 6 type 3 engines, 2 Water Tender, 3 Patrols , 1 type 2 Dozer w/transportation, 1 type 2 rescue, 2 ALS ambulances,

Fire Agency Contacts: M.P.U.D. 209-966-2515, CAL FIRE 209-966-3622, Mariposa County Fire 209-966-4330

Estimated Response Time: 3 minutes

Next Nearest Fire Station: Mariposa County Fire, Mormon Bar

Response Resources: 2 type 3 Engine, 1 Water Tender, 1 Patrol

Fire Agency Contacts: MCFD 209-966-4330

Estimated Response Time: 20 minutes

Other Fire Response: Resources available within sixty minutes: MCFD; 6 type 3 or larger engines, 4 water tenders, 3 patrol. CAL FIRE: 6 type 3 engines, 2 type 1 handcrews, 1 dozer, 1

Mariposa County Local Hazard Mitigation Plan

Air tactical aircraft, 2 airtankers, 1 type 3 helicopter , USFS ; 3 type 3 engines, 2 patrols, 1 type 2 helicopter, 1 type 1 helicopter, 1 type 1 handcrew,

Nearest Medical Facility: John C. Fremont Hospital 209-966-3631.

Nearest Water Sources: hydrants, Stockton Creek Reservoir

Evacuation Information

Responsibility: The Mariposa County Sheriff's Department is responsible for all evacuations in Mariposa County. The Department utilizes an automated reverse-911 system to notify residents of pre-evacuations and evacuations. During evacuations the Mariposa County Sheriff department also utilizes the Mariposa County Search and Rescue. The Mariposa County Sheriff's Department Animal Control is used to assist in the evacuations of all animals.

Contact: Mariposa County Sheriff's Office 209-966-3615.

Primary roads for evacuation: Hwy 140, Hwy 49, Old Highway

Structural Ignitability

The Public Resources Code 4290 (PRC4290) contains requirements pertaining to new construction on SRA in California. Driveway widths, slopes, turn-around areas, and water storage requirements for firefighting forces are regulated in PRC4290. CAL FIRE MMU personnel are tasked with inspecting the new construction within the unit, specifically in Mariposa County.

A portion of the Public Resource Code 4291 (PRC4291) requires a minimum of 100' of clearance for fire safety ("Defensible Space") surrounding all structures on State Responsibility (SRA) lands in California. As of 2008, CAL FIRE has been mandated to perform LE-100 inspections on 100% of improved properties within SRA.

Regarding existing structures, residents need to be educated on how to create and/or maintain proper Defensible Space, and also made aware of construction issues and materials that affect structural survivability in the event of wildland fires. Lists of resources (such as sources for fire-safe materials and local contractors who perform required work) need to be created and made available to residents.

Residents who need assistance in creating and/or maintaining Defensible Space need to be identified so that funding can be sought for them.

State & Federal Plans

CAL FIRE's Madera-Mariposa-Merced Unit Fire Management Plan does not directly address the town of Mariposa, except that in Target Area #5 for Battalion 2 it states that the Von Der Ahe VMP project will directly protect the town of Mariposa when a wildfire occurs in the Stockton Creek drainage.

Proposed Mitigations

Mitigation #1: Wildfire Risk Assessment Survey. In order to have a baseline from which to work, a Wildfire Risk Assessment Survey should be performed and include every property in the community. This Survey can be performed using CAL FIRE's LE-100 form and/or Mariposa County Fire Department's Red Zone survey software. A provision should be made for identification of unimproved lots with hazardous fuels that pose a threat to neighboring properties and the community. Ideally, a group of Mariposa and Mt. Bullion residents will be trained by CAL FIRE, Mariposa County Fire and the Mariposa County Fire Safe Council to conduct an annual survey of the entire community, preferably in late spring and in conjunction with Wildfire Awareness Week (first full week in May.) Results of the Survey will be disclosed to residents as a tool to raise awareness and educate, and also used to identify in-need residents who cannot create and/or maintain Defensible Space around their structures.

Mitigation #2: Defensible Space Assistance & Education/Chipping Programs. Residents who are unable to physically and financially create and/or maintain Defensible Space need to be assisted. Funding needs to be applied for and obtained to perform brushing and chipping services for in-need residents. In addition, it is recommended that a pile chipping program be offered to residents who are able to cut and pile their own brush but have no way to dispose of it on site or transport it to a disposal site. Burning of piles when permitted requires careful planning and placement, poses a risk of escaped burns and is detrimental to air quality. Many residents will not go to the trouble or assume the risk involved in burning piles. Making pile chipping available to residents encourages them to clear brush and create/maintain Defensible Space, reducing the risk of structure loss in the event of a wildland fire.

Mitigation #3: Dubberke Fuel Break. This project will result in a shaded fuel break approximately 2 miles long at 300 feet wide, for a total treatment area of approx. 80 acres. The treatment will be along a strategic ridge line adjacent to the town of Mariposa. This project is included in CAL FIRE's Battalion 2 Pre-fire Projects map.

Mitigation #4: Encourage Homeowner Special Interest Groups: Homeowners that live along non county maintained roads should be encouraged to form groups to maintain the brush clearance required to promote access and egress. This has been done on a small scale with great success in Mariposa County such as Whitmore Drive.

Mitigation #5: Weed Abatement Ordinance. It is recommended that a weed abatement ordinance (for fire hazard nuisance) be explored for the Mariposa Town and Mt Bullion town areas.

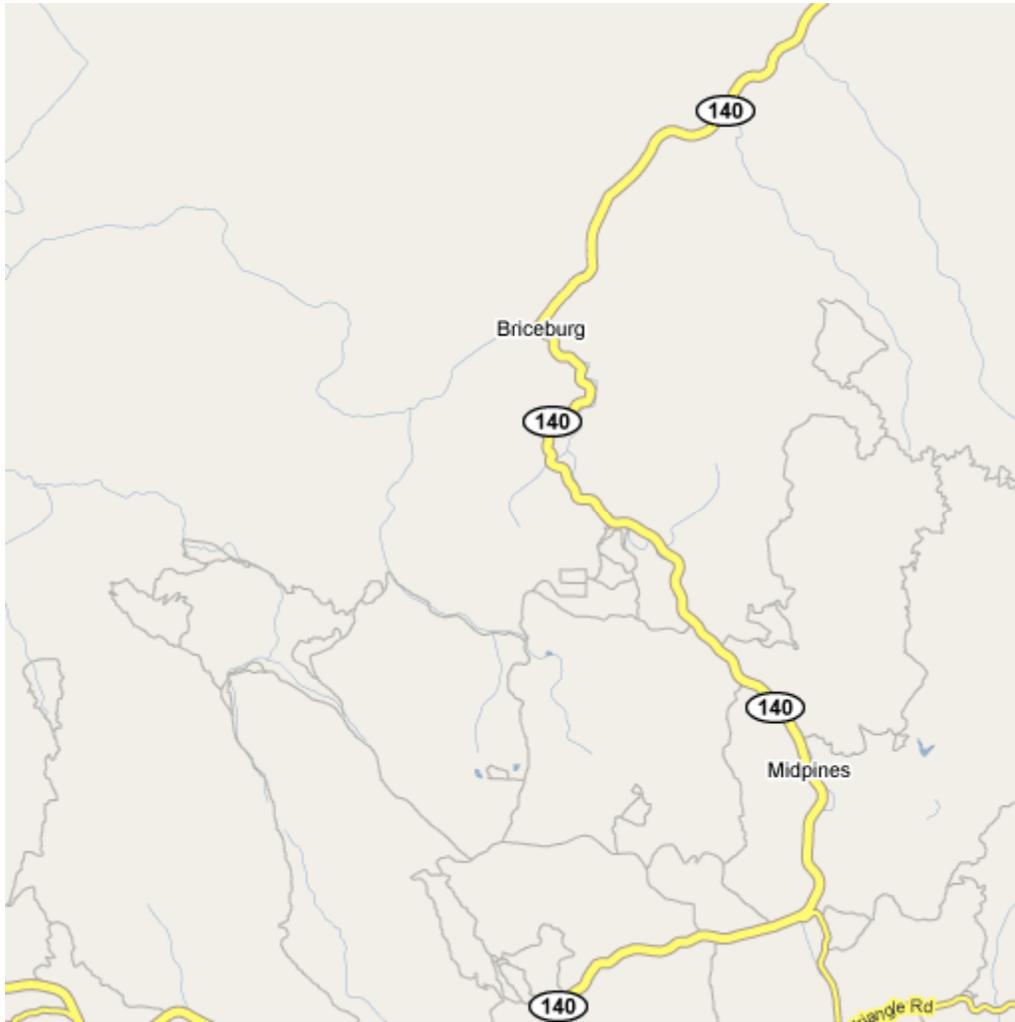
COMMUNITY WILDLAND FIRE PROTECTION PLAN



MIDPINES

Mariposa County, California

Community Planning Area Map³²



Community Overview

Midpines consists of rural residential dwellings and a dispersed commercial district in Mariposa County, California. It ranges in elevation from 1,800 to 4,000 feet with moderate to steep terrain. Latitude is 37 33 31.9206, and longitude is -119 55 59.1924. Population is estimated at approximately 1150. Most residents are permanent, with a moderate number of rental properties and vacation homes distributed throughout the area. The community has an Area Planning Advisory Committee appointed by the County Board of Supervisors. Local residents are interested in participating in the formulation and ongoing improvement of a CWPP. The community is listed in the Federal Register as at high risk from wildland fires. In the 2005 Unit Fire Management Plan for MMU, CAL FIRE lists Midpines as Target Area #5 for MMU and #3

³² Google Maps

Mariposa County Local Hazard Mitigation Plan

for Mariposa County. The geography covered by this CWPP and by the Midpines Town Area is coincident.

CWPP Planning Area: The boundary starts at the point where the dominant ridge of Whitlock Mountain crosses Highway 140. Proceed in a northwesterly direction along that dominant ridge to the intersection of West Whitlock Road and Mosher Road. Proceed down Mosher road to the mouth of Sherlock Creek. Proceed upstream along the Merced River to Hwy 140 at Briceburg, including the in holdings on the North side of the river. At the Bear Creek Bridge proceed easterly along the dominant ridge to the top of Feliciana Mountain, along Ponderosa Way to the Sweetwater Mine, then due south along Long. 119 deg 50' 30" to Triangle Road then westerly along Triangle to Hwy 140 then southwestly along 140 to the start point.

Stakeholders: Midpines Boosters, Midpines Planning Advisory Committee, Mariposa County Fire Department, CAL FIRE, USDA Forest Service, Sierra NF, USDOJ BLM, Folsom District

County Supervisor

Brad Aborn, District I 209-966-3222.

Community Contacts & Information

Primary Community Contact: Don Fox ,Midpines Town Planning Advisory Committee Chairperson 209-966-5511.

Alternate Community Contact: John Schroeder, Midpines Town Planning Advisory Committee Vice Chair/Secretary 209-966-3783.

Scheduled Events/Meetings: Midpines Town Planning Advisory Committee monthly meetings; Midpines Boosters meetings & events; Midpines Bible Church meets Sundays & Wednesdays.

Local Media: Mariposa Gazette 209-966-2500; Sierra Sun Times/goldrushcam.com.

Assets at Risk

Estimated Number of Structures: 800+

Estimated Value of Homes: \$210 million (median price \$300,000)

Estimated Number of Businesses: 26

Brand Auto	Raucina Cabinet shop
Muir Lodge	Outward Bound
High Sierra Manufacturing	Crystal Aire Skilled Nursing
Mountain View Store	Dayhoff Cabinet shop
Chappell Winery	Yosemite Bug Hostel & Spa
KOA	2 working gold mines

Mariposa County Local Hazard Mitigation Plan

Bear Creek Cabins approximately 10 B&B's,
Ranches and Farms

Estimated Number of Home Businesses: 35 – 50.

Estimated Value of Businesses: \$17.9 Million

Facilities: Midpines Community Hall, Briceburg Visitor's Center, CalTrans Facility; U.S. Post Office; Midpines County Park Community Hall, Midpines Fire Station (Mariposa County Fire);

Infrastructure: Saxon Creek MPUD pumping station; Cemeteries on Colorado Rd and Oak Rd; Midpines County Park; Midpines roads & bridges; PG&E poles, lines & equipment (high tension line to YNP); Sierra Telephone lines & equipment; Northland Cable lines & equipment, cell towers, MPUD potable water storage facility off Colorado Road

Estimated Value of Infrastructure & Facilities: \$4.7 million

Other Values

Watershed: Stockton Creek (water supply for town); Merced Wild and Scenic River; Bear Creek; Saxon Creek; Sherlock Creek.

Wildlife habitat: Limestone Salamander, hummingbirds

Cultural/tribal/historical: Triangle & 140 – historic structures (church – 2nd oldest in Midpines now abandoned); Tribal allotments, rancherias, cemeteries. Numerous historic mines and ranches.

Recreational: Merced Wild and Scenic River; campgrounds at Briceburg; Midpines County Park; Yosemite Bug Hostel & Spa.

Timber: Plantations on Sierra National Forest. Stands of first growth ponderosa pine along Sherlock Road.

Public Lands: Adjacent to Sierra National Forest and BLM lands; Within 15 miles of Yosemite National Park. Merced City College – 150 acres. State schools – 80 acres

Other: Highway 140 Scenic Overlay.

Community Hazards

Average Fuel Load: over 100 TPA (tons per acre) (Merced River canyon 25-50 TPA). Added into this is the fact that the topography is steep, with many drainages and gulches, and has the Merced River Canyon to the north. There are few roads and few places to quickly construct containment lines. There are opportunities to construct several strategic fuel treatment areas which would enhance rapid containment and consequential suppression of a wildland fire.

Predominant Fuel Types: Mixed conifer, oak, chamise, Ceanothus (buck brush), manzanita, (pine:oak ratio estimated at 1:1.)

Fire History: The area is prone to large wildland fires many of which were stand replacing fires. The more notable fires include: 1962 Timberlodge Fire, four fire fighters were killed when

Mariposa County Local Hazard Mitigation Plan

this fire over ran their engine. This fire was on the east side of Hwy 140 and during it one operational burning period ran down canyon from the start point which was south of Carstens Road. The fuel loading in this same area is now heavier than when the 1962 fire occurred. The 1985 Briceburg fire was the result of blasting and went for 2,500+ acres. This fire took for three operational periods before containment and had escaped containment once when the temperatures went above 120 degrees. The 2000 Briceburg was located in Sweetwater Creek burnt 860 acres and taking 7 operational periods to contain. There have been 4 major fires near McCabe Flat along the Merced River all of which were human caused and spread to the north. These fires move very quickly due the light flashy fuels located on the southwest aspect slopes. . Fires in the Midpines area during high fire danger periods tend to run uphill very quickly, an estimated average size fire stopped during initial attack is approximately twenty acres. The 2008 Telegraph Fire (30 homes & 100 outbuildings lost, 34,000+ acres burned.) started as result of target shooting on the north side of the Merced River. The point that the fire crossed the river was in a steep chute that led directly up to where the homes were lost on Whitlock Road. Moreover, the fire traveled all the way around Telegraph Mountain and went up the Saxon Creek canyon, threatening homes off Rancheria Creek Road and Colorado Road.

Fire Risk Potential: The largest threats to the community are human caused fires that originate through carelessness, arson, burning debris and trash out of season, and mechanical (Power line and motor vehicle). Lightning does pose a problem as well especially during times that there are large demands on suppression resources. Fires originating on the Sierra National Forest pose a serious risk to homes located on Carstens Drive and Ponderosa Way. National Forest extends along Carstens, crosses Hwy 140 and runs up the ridge along where the KOA Campground is located. The fuel loading is at 90 tons per acre on the NF lands. BLM lands located down in the river canyon from Bagby through to Briceburg. Fires that start on the south side of the river pose a dire threat to all the homes located on the west side of Hwy 140. Fires originating on the east side of Hwy 140 would pose a threat to the homes on the east side of the highway as well as have the potential to cross over the highway to the west especially at the Bear Creek Bridge. During the early summer months, fires caused by recreational users of the swimming holes located in Bear Creek below the former Octagon Restaurant will pose a threat to the highway, the Sierra National Forest as this location is in very steep, rugged country with extremely limited access. A fire originating here during the peak of Fire Season can be expected to reach 15,000 to 25,000 acres. Consequently the threat to the Sierra National Forest is very significant owing to the fact that the private holdings are downhill from the forest itself. The potential for vehicle fires is great due to the large number of Park Visitors that use Hwy 140 to visit Yosemite National Park. There is also growing number of Off Highway Vehicle (OHV) users that will start trips out of Midpines to access the Sierra National Forest. Along with this is the increase of illegal drug operations such as marijuana growing and methamphetamine production, which already have had an impact on the number of fires over the past ten years.

Fire Response/Resources

Mariposa County Local Hazard Mitigation Plan

Nearest Fire Station: The Midpines Volunteer Fire Station (MCF): One Type 2 Engine (1,250 GPM pump, 750 gal), One Type 1 Water Tender (750 GPM pump, 3,800 gal), One Type 4 Patrol (100 GPM pump, 300 gal)

USDA Forest Service, Sierra National Forest: 1 type 3 engine and one type 4 patrol:

Fire Agency Contacts: Mariposa County Fire 209-966-4330, Sierra NF,(USFS): Midpines Fire Station 209-966-4591,

Estimated Response Time: 5 minutes from Midpines,

Next Fire Station: CAL FIRE, MMU Headquarters

Response Resources: 2 Type 3 engines, 1 Dozer,

Fire Agency Contacts: CAL FIRE 209-966-3622

Estimated Response Time: 20 minutes

Additional Initial Attack resources: From CAL FIRE: 1 Air tactical aircraft (25 minutes), 2 Inmate hand crews (30 minutes), 2 additional type 3 engines (30+ minutes) 2 type 2 Airtankers (30 minutes), 1 Type 2 helicopter (35 minutes).

From the USFS: 1 Type 3 engine (20 minutes), 1 Type 1 hand crew (45 minutes)

From Yosemite National Park: 1 Type 3 engine, (30 minutes)

Limitations: Resources and response times are going to be dependent upon location of the fire, time of year, other fires going on locally, statewide, and nationally, time of day. Over all responsibility of the fire will be the Jurisdiction Agency and the on scene management will be the most qualified individual at the scene.

Nearest Medical Facility: John C. Fremont Hospital 209-966-3631.

Nearest Water Sources: Water sources are problematic in this community. The Merced River is the largest water source but can be quite a distance to shuttle water. There is a 1,000,000 gallon water tank on Colorado Road that is available to service a hydrant system

Evacuation Information

Responsibility: The Mariposa County Sheriff's Department is responsible for all evacuations in Mariposa County. The Department utilizes an automated reverse-911 system to notify residents of pre-evacuations and evacuations. During evacuations the Mariposa County Sheriff department also utilizes the Mariposa County Search and Rescue. The Mariposa County Sheriff's Department Animal Control is used to assist in the evacuations of all animals.

Mariposa County Sheriff 209-966-3615

Primary roads for evacuation: there is a problem with many of the escape routes from the Midpines area. Many of the roads have an inadequate clearance due to brush impingement. Several of these roads would close to any traffic at all during an established wild land fire. The time to a road closure is a critical element to any evacuation effort that the Sheriff's office would try to mount. Highway 140 is the major corridor through Midpines and is also a major route into Yosemite National Park. Highway 140 near the intersection of Triangle Road is prone to fires

crossing over the road which closes the highway to any safe transportation. Colorado Road is largely overgrown, the upper end of which is located on a ridge top which would make egress difficult with fire on either side. Some of the road is yet to be paved which will create a dust problem further making this road difficult for evacuating residents. East Whitlock Rd is two lane paved road that has had fuels reduction work done and would be a serviceable evacuation route from the intersection of Colorado Road out to Hwy 140. West Whitlock Road, including Sherlock and Mosher Roads are not satisfactory for rapid evacuation. All three of these roads are narrow with brush overgrowing in places, with tight radius turns which would hamper large transport vehicles. Evacuations will need to be determined very early on in order to avoid congestion and possible threats to the civilian population.

Structural Ignitability

The Public Resources Code Section 4290 (PRC4290) contains requirements pertaining to new construction on SRA (State Responsibility Area) in California. Driveway widths, slopes, turn-around areas, and water storage requirements for firefighting forces are regulated in PRC4290. CAL FIRE MMU personnel are tasked with inspecting the new construction within the unit, specifically in Mariposa County.

A portion of the Public Resource Code 4291 (PRC4291) requires a minimum of 100' of clearance for fire safety ("Defensible Space") surrounding all structures on SRA lands in California. As of 2008, CAL FIRE has been mandated to perform LE-100 inspections on 100% of improved properties within SRA.

Regarding existing structures, residents need to be educated on how to create and/or maintain proper Defensible Space, and also made aware of construction issues and materials that affect structural survivability in the event of wildland fires. Lists of resources (such as sources for fire-safe materials and local contractors who perform required work) need to be created and made available to residents.

Residents who need assistance in creating and/or maintaining Defensible Space need to be identified so that funding can be sought for them.

State & Federal Plans

CAL FIRE's Madera-Mariposa-Merced Unit Fire Management Plan identifies Midpines as Target Area #5 for MMU and #3 for Mariposa County. The Battalion 2 priority has been focused in Ponderosa Basin, and projects in the Midpines area have been delayed pending available resources.

Mariposa County Local Hazard Mitigation Plan

The Sierra National Forest Fire Management Plan does not directly address Midpines however they do provide for wild land fire suppression as part of the Mutual Aid Agreements³³ with the State of California.

BLM has contracted with CAL FIRE for the suppression and protection of public lands.

Proposed Mitigations

1. Mitigation: Wildfire Risk Assessment Survey. In order to have a baseline from which to work, a Wildfire Risk Assessment Survey should be performed and include every property in the community. This Survey can be performed using CAL FIRE's LE-100 form and/or Mariposa County Fire Department's Red Zone survey software. A provision should be made for identification of improved and unimproved lots with hazardous fuels that pose a threat to neighboring properties and the community. *Ideally, a group of Midpines' residents will be trained by CAL FIRE, Mariposa County Fire and the Mariposa County Fire Safe Council to conduct an annual survey of the entire community, preferably in late spring and in conjunction with Wildfire Awareness Week (first full week in May.)* Results of the Survey will be disclosed to residents as a tool to raise awareness and educate, and also used to identify in-need residents who cannot create and/or maintain Defensible Space around their structures.

2. Mitigation: Defensible Space Assistance & Education/Chipping Programs. Residents who are unable to physically and financially create and/or maintain Defensible Space need to be assisted. Funding needs to be applied for and obtained to perform brushing and chipping services for in-need residents. In addition, it is recommended that a pile chipping program be offered to residents who are able to cut and pile their own brush but have no way to dispose of it on site or transport it to a disposal site. Burning of piles when permitted requires careful planning and placement, poses a risk of escaped burns and is detrimental to air quality. Many residents will not go to the trouble or assume the risk involved in burning piles. Making pile chipping available to residents encourages them to clear brush and create/maintain Defensible Space, reducing the risk of structure loss in the event of a wildland fire.

3. Mitigation: Feliciano Strategic Fuel Treatment: This project will anchor into USDA Forest Service tree plantations and the existing fuel break located on Feliciano Mountain. The other end would meet Highway 140 at the Bear Creek Bridge. This would protect the east side Midpines from a fire that is would arise out of the Merced River Canyon and/or Bear Creek. Treatment would almost be entirely mastication. Much of this ridge is on BLM Lands but the Fire Safe Council could apply for a Sierra Nevada Conservancy grant. The estimated cost would be approximately \$200,000.

4. Mitigation: Colorado Road (West Side of 140) Strategic Fuel Treatment. This project will deal with the heavy fuel load on parcels west of Highway 140 between the Octagon and the junction of Colorado Road and Highway 140. On the lower end, there is chamise on steep slopes, and on the upper end, oak and pine forests with heavy ladder fuels underneath. This

³³ Five Party Mutual Aid Agreement, Yosemite National Park, Kings Canyon NP, CalFire, Sierra NF, and BLM. Signed June, 2008.

project would protect residents along Colorado Road, Rancheria Creek Road, Davis Road, and points to the west. Treatment would be a combination of shaded fuel breaks and mastication and prescriptive burns to achieve a Mosaic fuel bed. The specific design and cost of the project is to be determined and will be based on the outcome in Mitigation #1. The lower part is on BLM lands and the rest is privately owned. The Sarah Priest Allotment (USDOI Bureau of Indian Affairs) is included in the area to be treated and protected.

5. Mitigation: Midpines Interior Strategic Fuel Treatment. This area is bounded by Colorado Road, Rumley Mine Road, Telegraph Road, Sherlock Road, East Whitlock Road, and Highway 140. It encompasses the Upper Saxon Creek watershed and the Upper Sherlock Creek watershed. This is mostly privately owned, and is where a significant number of Midpines residents live. The Telegraph fire of 2008 burned the northern 1/3 of both Sherlock Mountain and Whitlock Mountain, but the remainder of this area is untouched and requires treatment. There was also a significant fire (an estimated 500 acres) early in the decade that began between Yosemite Oaks Road and the KOA campground on Highway 140 and traveled north toward Colorado Mountain. Aside from fires, the remainder of interior Midpines has had no significant fuel reduction for at least 75 years. Landowners seeking to reduce fuel loads will be encouraged to participate in CEQA³⁴ and VMP³⁵ as budgets allow. A more detailed project definition and breakdown will be written based on the survey results from Mitigation #1.

6. Mitigation: Buckingham Strategic Fuel Treatment. This project will result in a shaded fuel break approx. 1.5 miles long at 300 feet wide, for a total treatment area of approximately 75 acres. The treatment will be on private property near Buckingham Mountain in the communities of Jerseydale, Midpines, and Bootjack. Treatment types will include mechanical mastication and hand brushing and limbing. The Mariposa County Fire Safe Council may have opportunities to apply for funding (estimated cost \$148,000.00) to complete this project. Possible funding source is the USFS funding through the California Fire Safe Council Grants Clearinghouse.

7. Mitigation: Timberlodge Strategic Fuel Treatment: This project will anchor into USDA Forest Service tree plantations and the existing fuel break located on Feliciano Mountain. The other end would meet Forest Service tree plantations in the Plumbar Creek area. This would protect the east side Midpines from a fire that is coming up out of the Merced River Canyon and/or Bear Creek. Treatment would almost be entirely mastication. Possible funding source is the USFS funding through the California Fire Safe Council Grants Clearinghouse. The estimated cost would be approximately \$117,500.

Suggestions:

Where there are shared driveways and private roads; Homeowners could form groups to reduce brush along roads and facilitate maintenance on those roadways that are not dedicated Mariposa County Roads. These groups may be eligible to receive assistance from state and federal Agencies through the Mariposa County Fire Safe Council in the form of a chipper and for labor.

³⁴ CEQA- Document URL: http://ceres.ca.gov/topic/env_law/ceqa/stat2/index.html
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³⁵ <http://www.fire.ca.gov/ResourceManagement/pdf/VMP2004.pdf>

Mariposa County Local Hazard Mitigation Plan

Educational opportunities in the schools in the form of Fire Safety Education that is currently being conducted by Mariposa County Fire, and wild land fire awareness being done by CAL FIRE, USDA Forest Service, and Yosemite National Park. Defensible Space Educational Opportunities, which will be dependent upon funding, these can be done at homeowner association meetings, town hall meetings, the Mariposa County Fair, Butterfly Days, and Contractor Day to name a few. During the late spring and early summer there is a possibility of homeowner Defensible Space workshop that could be held at the Community Center or at the Yosemite Bug Hostel. This is going to take strong community support or it won't happen.

Develop water storage for along Colorado Road, which can be above ground or be in the form of cisterns which could be used for fire suppression. The tank(s) should have 250,000 to 1,000,000 gallon capacity. They should be incorporated into the existing hydrant system. These tanks could be filled in the spring when the water flow in the Merced River is high the water can then be returned to the system in the fall after the wild land fire danger has lowered. There is a possibility for FEMA Disaster mitigation grant funding.

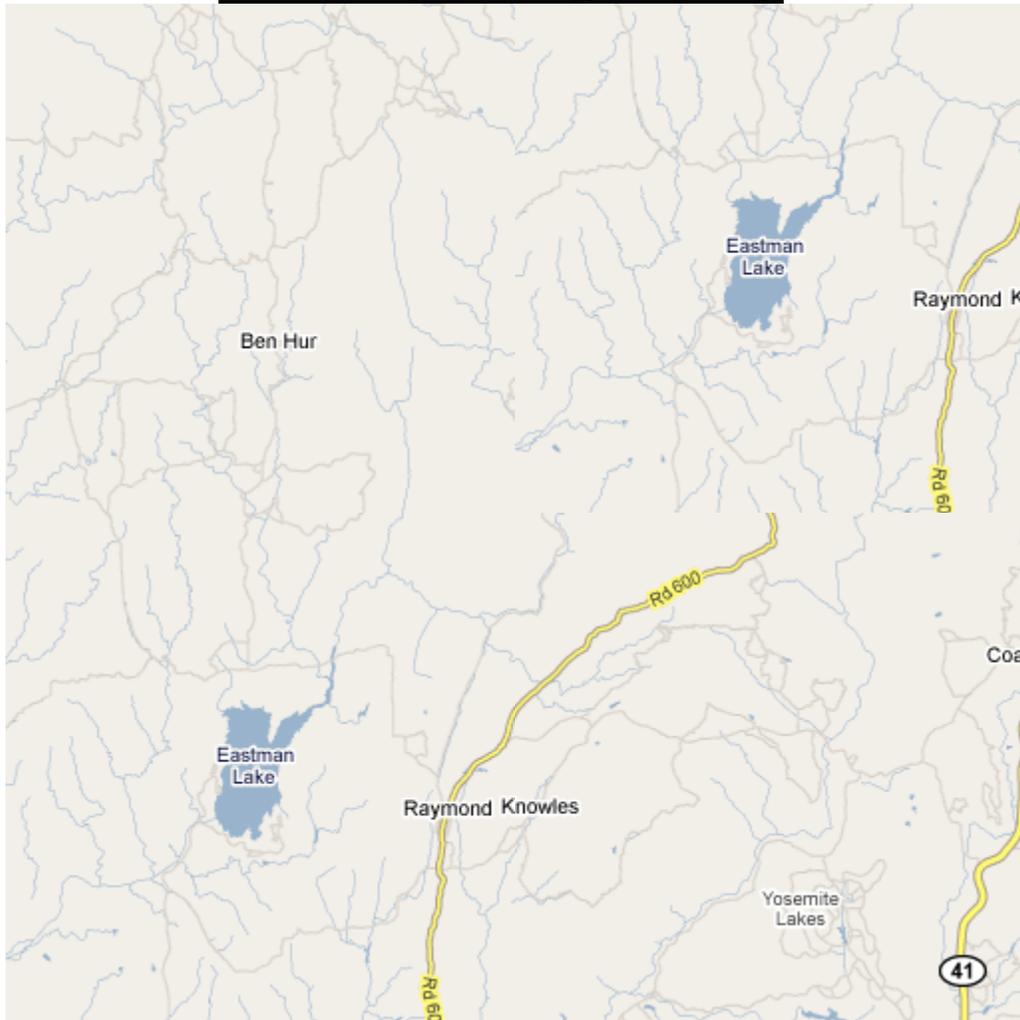
COMMUNITY WILDLAND FIRE PROTECTION PLAN



MORMON BAR/BEN HUR AREA

Mariposa County, California

Community Planning Area Map³⁶



Community Overview

Mormon Bar/Ben Hur area consists of rural residential dwellings and a number of concentrated commercial districts in Mariposa County, California. It ranges in elevation from 1,770 feet to 2,800 feet with moderate to steep terrain. Latitude is 37 27 44.6112, and longitude is -119 56 49.8696. Population is estimated at 2,125 residents with the majority of residents living in the community year-round. Most residents are permanent, with a small number of rental properties and vacation homes distributed throughout the area. The community is listed in the Federal Register as at high risk from wildfires.

Planning Area: For this planning area the start point is State Highway 140 and State Highway 49 South hence south along State Highway 140 to the intersection of the Guadalupe Fire Road hence southeast to the end of the Guadalupe Fire Road hence due south to the Mariposa

³⁶ Google Maps

Mariposa County Local Hazard Mitigation Plan

County/Madera County line hence northeast along the Boundary to Oak Grove Road hence north to Indian Peak Road hence north to State Highway 140 hence west to the start point.

County Supervisor

Janet Bibby, District III 209-966-3222.

Community Contacts & Information

Primary Community Contact: Marcella Good at 209-966-4661

Scheduled Events/Meetings: Mariposa County Fair, Mariposa Butterfly Days, Mariposa Contractor's day,

Local Media: Mariposa Gazette 209-966-2500; Sierra Sun Times/goldrushcam.com

Assets at Risk

Estimated Number of Homes: 850

Estimated Value of Homes: \$212 million (median price \$250,000.)

Estimated Number of Businesses: 40

Laura Lee Auto Sales

Top Tech Automotive

Chases Foothill and Petroleum

Mariposa County Sheriffs Dept Animal Control

Yosemite Falls Well Drilling

Asplundh Tree Service

Mariposa Glass

Bear Creek Sales

Total Waste Systems of MPSA County

A & L Speedy Lube

Jacksons Prospecting Supplies

Mariposa Hair Salon

Mariposa Pipe

Jim Allen Plumbing

Wesley's Auto Repair

Radanovich Winery

Mariposa Academy of Performing Arts

Stan's Auto Body

Mariposa County Road Dept.

Yosemite Builders

Bartlett Petroleum

Mining and Mineral Museum

Allison Sierra Inc.

Mariposa Mini Storage

Starchman-Bryant Law Office

Leatherworks Unlimited

Lou's Auto Repair

Ben Hur Mini Storage

Mariposa Auto Body

R & A Jenson Ranch

Sierra Custom Graphics

Daily and Company Real Estate

Barn and Garage King

Estimated Number of Home Businesses: 75

Estimated Value of Businesses: \$64.8 million

Mariposa County Local Hazard Mitigation Plan

Facilities: Mariposa Fairgrounds (Building A-Sequoia Hall, Building B-Manzanita Hall, Building C-Red Bud Room); Bootjack Stompers Hall, New Beginnings Church, Lutheran Church

Infrastructure: Mormon Bar Volunteer Fire Station; Mariposa Fairgrounds (Building A-Sequoia Hall, Building B-Manzanita Hall, Building C-Red Bud Room); Mariposa Agriculture Bldg; Mariposa County Dept of Public Works offices, Fleet & yard; Mariposa County Sheriff's Dept. Animal Control facility; California State Mining & Mineral Museum; Sierra Home School roads & bridges; PG&E poles, lines & equipment; Sierra Telephone lines & equipment; Northland Cable lines & equipment.

Estimated Value of Infrastructure & Facilities: \$46.5 million

Other Values

Watershed: Stockton Creek, Mariposa Creek

Wildlife habitat: This area supports a myriad of wildlife which includes but is not limited to: migratory birds and non migratory, deer, mountain lion, bobcat, reptiles and amphibians

Cultural/tribal/historical: tribal, historic buildings, mining, Mormon Bar is a designated Historical Landmark

Recreational: Mariposa Fairgrounds, Bootjack Stompers

Public Lands: USDOJ Bureau of Land Management lands are interspersed throughout this planning area, USDOJ Bureau of Indian Affairs land is also interspersed in this planning area.

Community Hazards

Average Fuel Load: 45 TPA (tons per acre)

Predominant Fuel Types: mixed conifer, oak, chaparral, grass

Fire History: Within the last twenty years there have been 18 fires that have exceeded 300 acres. This planning area has the highest occurrence of large fires in Mariposa County. Human caused and lightning caused share equal responsibility for fire starts in this area.

Fire Risk Potential: This due in part to the distance suppression units have to travel to get to some these areas and due to flashy fuels that lead to dense mixed chaparral fuel beds and rough terrain. There are few water sources in this area most being ponds that dry up in drought years. To further complicate the issues there are not any lookouts in this area; owing to the sparse population fires tend to be more than several acres before the first reports of fire are received.

Community Ingress/Egress: The primary ingress/egress routes in the event of a wildland fire are State Highway 49 South, State Highway 140 which are paved two lane highways that easily facilitate simultaneous access and egress. Old Highway, Ben Hur Road, Yaqui Gulch are paved but are narrow with tight radius turns that can create congestion and could be a hindrance to access of large equipment and egress of evacuees, Silver Bar Road and Ashworth Road both have stretches of dirt and steep pitches that would make these routes barely suitable for evacuation from this area.

Fire Response/Resources

Nearest Fire Station: Mormon Bar Volunteer Fire Station, Mariposa County Fire (MCF)

Response Resources: One Type 2 Engine (1,250 GPM 750 gal), One Type 1 Water Tender (500 GPM pump, 3,800 gal), One Type 4 Patrol (100 GPM pump, 300 gal)

Fire Agency Contacts: Mariposa County Fire Chief Jim Wilson at 209-966-4330 and Mormon Bar Volunteer Fire Station 209-966-4330 or 209-966-4661

Estimated Response Time: 0-25 minutes

Next Nearest Fire Station: Bootjack Volunteer Fire Station #37 (MCF)

Response Resources: One Type 2 Engine (1,250 GPM pump), One Type 1 Water Tender (3,500 gal), One Type 4 Patrol (100 GPM pump)

Estimated Response Time: 25 minutes

Fire Agency Contacts: Mariposa County Fire 209-966-4330

Other Fire Response: CAL FIRE 209-966-3622

Response Resources: CAL FIRE: within sixty minutes, 7 type 3 engines, 1 Air tactical aircraft, 2 air tankers, 2 Type three helicopters, 2 dozers, 2 hand crews, 2 Overhead. From Mariposa County: 3 type three or larger engines 1 Overhead

Agency Contact: CAL FIRE 209-966-3622

Nearest Medical Facility: John C. Fremont Hospital 209-966-3631.

Nearest Water Sources: Greenamyers Pond, Hensley Lake, ranch ponds scattered throughout the area.

Evacuation Information

Responsibility: The Mariposa County Sheriff's Department is responsible for all evacuations in Mariposa County. The Department utilizes an automated reverse-911 system to notify residents of pre-evacuations and evacuations. During evacuations the Mariposa County Sheriff department also utilizes the Mariposa County Search and Rescue. The Mariposa County Sheriff's Department Animal Control is used to assist in the evacuations of all animals. Mariposa County Sheriff 209-966-3615.

Primary roads for evacuation: Hwy 49, Ben Hur Rd, Silver Bar Rd, Ashworth Rd, Old Highway

Structural Ignitability

The Public Resources Code 4290 (PRC4290) contains requirements pertaining to new construction on SRA in California. Driveway widths, slopes, turn-around areas, and water storage requirements for firefighting forces are regulated in PRC4290. CAL FIRE MMU

personnel are tasked with inspecting the new construction within the unit, specifically in Mariposa County.

A portion of the Public Resource Code Section 4291 (PRC4291) requires a minimum of 100' of clearance for fire safety ("Defensible Space") surrounding all structures on State Responsibility (SRA) lands in California. As of 2008, CAL FIRE has been mandated to perform LE-100 inspections on 100% of improved properties within SRA.

Regarding existing structures, residents need to be educated on how to create and/or maintain proper Defensible Space, and also made aware of construction issues and materials that affect structural survivability in the event of wildland fires. Lists of resources (such as sources for fire-safe materials and local contractors who perform required work) need to be created and made available to residents.

Residents who need assistance in creating and/or maintaining Defensible Space need to be identified so that funding can be sought for them.

State & Federal Plans

CAL FIRE's Madera-Mariposa-Merced Unit Fire Management Plan does not address the Mormon Bar/Ben Hur area.

Proposed Mitigations

1. Mitigation: Wildfire Risk Assessment Survey. In order to have a baseline from which to work, a Wildfire Risk Assessment Survey should be performed and include every property in the community. This Survey can be performed using CAL FIRE's LE-100 form and/or Mariposa County Fire Department's Red Zone survey software. A provision should be made for identification of unimproved lots with hazardous fuels that pose a threat to neighboring properties and the community. Ideally, a group of Mormon Bar/Ben Hur area residents will be trained by CAL FIRE, Mariposa County Fire and the Mariposa County Fire Safe Council to conduct an annual survey of the entire community, preferably in late spring and in conjunction with Wildfire Awareness Week (first full week in May.) Results of the Survey will be disclosed to residents as a tool to raise awareness and educate, and also used to identify in-need residents who cannot create and/or maintain Defensible Space around their structures.

2. Mitigation: Defensible Space Assistance & Education/Chipping Programs. Residents who are unable to physically and financially create and/or maintain Defensible Space need to be assisted. Funding needs to be applied for and obtained to perform brushing and chipping services for in-need residents. In addition, it is recommended that a pile chipping program be offered to residents who are able to cut and pile their own brush but have no way to dispose of it on site or transport it to a disposal site. Burning of piles when permitted requires careful planning and placement, poses a risk of escaped burns and is detrimental to air quality. Many residents will not go to the trouble or assume the risk involved in burning piles. Making pile

chipping available to residents encourages them to clear brush and create/maintain Defensible Space, reducing the risk of structure loss in the event of a wildland fire.

3. Mitigation: Mormon Bar Strategic Fuel Mitigation. This project will result in a shaded fuel break approx. 4 miles long at 300 feet wide, for a total treatment area of approx. 160 acres. The treatment will be along (an existing road? a strategic ridge line?) within the Mormon Bar/Ben Hur area. This project is included in CAL FIRE's Battalion 2 Pre-fire Projects map.

4. Mitigation: General Fuel Treatment for areas that have not had a fire in the past twenty years. Encourage landowners to participate in CEQA³⁷ and VMP³⁸ as budgets allow.

Suggestions:

Where there are shared driveways and private roads; Home owners could form groups to reduce brush along roads and facilitate maintenance on those roadways that are not dedicated Mariposa County Roads. These groups may be eligible to receive assistance from State and Federal Agencies through the Mariposa County Fire Safe Council in the form of a chipper and for labor.

³⁷ CEQA- Document URL: http://ceres.ca.gov/topic/env_law/ceqa/stat2/index.html
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³⁸ <http://www.fire.ca.gov/ResourceManagement/pdf/VMP2004.pdf>

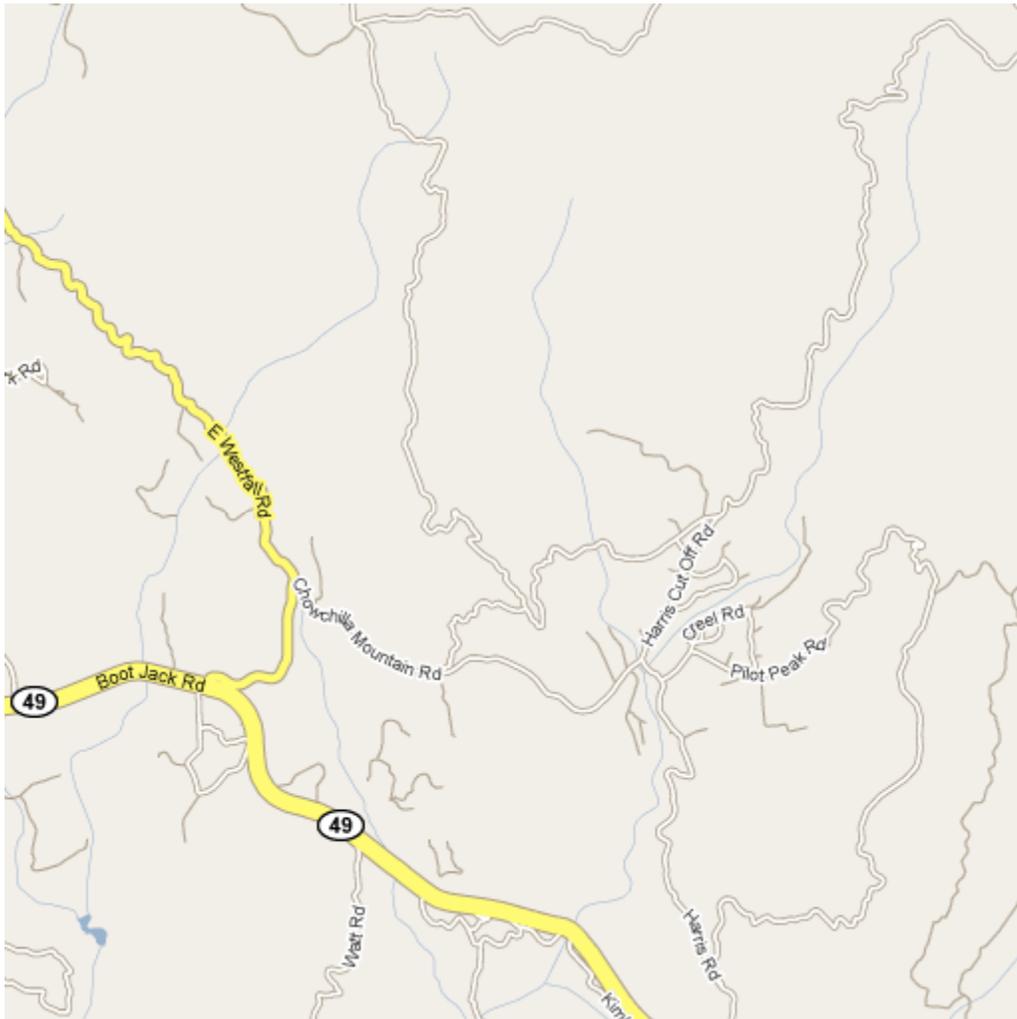
COMMUNITY WILDLAND FIRE PROTECTION PLAN



PONDEROSA BASIN

Mariposa County, California

Community Planning Area Map



Community Overview

Ponderosa Basin is a rural subdivision in Mariposa County, California. It ranges in elevation from 3200 feet to 4,500 feet with moderate to steep terrain. Latitude is 37 27 53.1936, and longitude is -119 44 23.6538. Population is estimated at 980 residents with the majority of residents living in the community year-round. Most residents are permanent, with a small number of rental properties and vacation homes distributed throughout the area. The community has an active organization, Chowchilla Mountain Women’s Club, which raised funds to build and continues to support and improve the volunteer fire station. The Club is also very interested in Fire Safe issues. The community is listed in the Federal Register as at high risk from wildfires (included in Lushmeadows Mountain Estates.)

Planning Area: For this Protection Plan; the planning area is Township 5 South, Range 20 East, Township 6 South, Range 20 East, Mount Diablo Meridian.

Community Hazards

Average Fuel Load: 75 TPA (tons per acre)

Predominant Fuel Types: Ponderosa Pine, Cedar, Live Oak, Buckbrush & Manzanita.

Fire History: 2008 Oliver Fire that burned through the Cold Springs Fire of 1977. 1996 Stumpfield Fire (15 structures lost.)

Fire Risk Potential: The community is at HIGH risk from fires originating on the USDA Forest Service Sierra National Forest (SNF). The SNF is at risk from fires emanating from within the community. This community lies below the Sierra National Forest there is steep and inaccessible terrain leading into the National Forest where there are few roads to facilitate access. Fires that occur during peak fire season quite often rapidly spread into the crowns of the timber as result of overstocked, stagnant timber stands on steep terrain. Fire scars in this area regenerate into large chaparral fuel beds often providing the ladder fuels needed to sustain crown fires. Suppression is difficult, the tall timber tends to devaluate the effectiveness of fixed wing retardant drops, hinder the placement of engines, and discourage the use of dozers, and slow hand line construction greatly.

Community Ingress/Egress: The primary ingress/egress routes in the event of a wildland fire are East Westfall, Harris Road (this a dirt road and will does not lend itself well to two way traffic plus the dust will be a significant problem), Chowchilla Mountain Rd and Harris Cut Off Road.

Fire Response/Resources

Nearest Fire Station: Ponderosa Basin Volunteer Fire Station Mariposa County Fire (MCF)

Response Resources: One Type 1 Engine (1,250 GPM pump), one Type 4 Patrol.

Fire Agency Contacts: Mariposa County Fire and Ponderosa Basin Volunteer Fire Station #32 at 209-966-4330

Estimated Response Time: 15 minutes

Next nearest Fire Station: Usona Fire Station (CAL FIRE)

Response Resources: 1 type three engines

Fire Agency Contacts: CAL FIRE 209-966-3622.

Estimated Response Time: 15 minutes (Usona Station is only staffed during fire season - May through November)

Other Fire Response: From Sierra National Forest, two type 3 engines, one patrol, 1 type handcrew, 1 type two helicopter, one overhead. From CAL FIRE: within sixty minutes, 7 type 3 engines, 1 Air tactical aircraft, 2 air tankers, 2 Type three helicopters, 2 dozers, 2 hand crews, 2 Overhead. From Mariposa County: 3 type three or larger engines 1 Overhead

Fire Agency Contacts: USDA Forest Service, Sierra National Forest, Jerseydale Forest Station, 209-966-2477, CAL FIRE 209-966-3622, Mariposa County Fire 209-966-4330

Nearest Medical Facility: John C. Fremont Hospital 209-966-3631.

Nearest Water Sources: Hydrants. Ranch ponds can be throughout this area. Some swimming pools, Chowchilla River (Seasonal)

Evacuation Information

Responsibility: The Mariposa County Sheriff’s Department is responsible for all evacuations in Mariposa County. The Department utilizes an automated reverse-911 system to notify residents of pre-evacuations and evacuations. During evacuations the Mariposa County Sheriff department also utilizes the Mariposa County Search and Rescue. The Mariposa County Sheriff’s Department Animal Control is used to assist in the evacuations of all animals.

Contact: Mariposa County Sheriff’s Office 209-966-3615.

Primary roads for evacuation: Chowchilla Mountain Road, Triangle Road, and Highway 49 these are paved two lane roads which facilitate rapid access and egress simultaneously. East Westfall Road and Harris Road have stretches of dirt roadbeds which hamper travel due to roughness, narrowness and dust and should only be used if the main routes become unusable.

Structural Ignitability

The Public Resources Code 4290 (PRC4290) contains requirements pertaining to new construction on SRA in California. Driveway widths, slopes, turn-around areas, and water storage requirements for firefighting forces are regulated in PRC4290. CAL FIRE MMU personnel are tasked with inspecting the new construction within the unit, specifically in Mariposa County.

A portion of the Public Resource Code 4291 (PRC4291) requires a minimum of 100’ of clearance for fire safety (“Defensible Space”) surrounding all structures on State Responsibility (SRA) lands in California. As of 2008, CAL FIRE has been mandated to perform LE-100 inspections on 100% of improved properties within SRA.

Regarding existing structures, residents need to be educated on how to create and/or maintain proper Defensible Space, and also made aware of construction issues and materials that affect structural survivability in the event of wildland fires. Lists of resources (such as sources for fire-safe materials and local contractors who perform required work) need to be created and made available to residents.

Residents who need assistance in creating and/or maintaining Defensible Space need to be identified so that funding can be sought for them.

State & Federal Plans

CAL FIRE’s Madera-Mariposa-Merced Unit Fire Management Plan identifies Ponderosa Basin as included in Target Area #2 for MMU and #1 for Mariposa County.

The Sierra National Forest Fire Management Plan does not directly address the Ponderosa Basin subdivision.

Proposed Mitigations

1. Mitigation: Wildfire Risk Assessment Survey. In order to have a baseline from which to work, a Wildfire Risk Assessment Survey should be performed and include every property in the community. This Survey can be performed using CAL FIRE's LE-100 form and/or Mariposa County Fire Department's Red Zone survey software. A provision should be made for identification of unimproved lots with hazardous fuels that pose a threat to neighboring properties and the community. Ideally, a group of Ponderosa Basin residents will be trained by CAL FIRE, Mariposa County Fire and the Mariposa County Fire Safe Council to conduct an annual survey of the entire community, preferably in late spring and in conjunction with Wildfire Awareness Week (first full week in May.) Results of the Survey will be disclosed to residents as a tool to raise awareness and educate, and also used to identify in-need residents who cannot create and/or maintain Defensible Space around their structures.

2. Mitigation: Defensible Space Assistance & Education/Chipping Programs. Residents who are unable to physically and financially create and/or maintain Defensible Space need to be assisted. Funding needs to be applied for and obtained to perform brushing and chipping services for in-need residents. In addition, it is recommended that a pile chipping program be offered to residents who are able to cut and pile their own brush but have no way to dispose of it on site or transport it to a disposal site. Burning of piles when permitted requires careful planning and placement, poses a risk of escaped burns and is detrimental to air quality. Many residents will not go to the trouble or assume the risk involved in burning piles. Making pile chipping available to residents encourages them to clear brush and create/maintain Defensible Space, reducing the risk of structure loss in the event of a wildland fire.

3. Mitigation: Roundtree Saddle Strategic Fuel Treatment. This project will result in a shaded fuel break approx. 3/4 mile long at 300 feet wide, for a total treatment area of approximately 35 acres. The treatment will be on private property near Round Tree Saddle in the community of Jerseydale. Treatment types will include mechanical mastication and hand brushing and limbing. The Mariposa County Fire Safe Council may have opportunities to apply for funding (estimated cost \$81,000.00) to complete this project. Possible funding source is the USFS funding through the California Fire Safe Council Grants Clearinghouse.

4. Mitigation: CAL FIRE has completed 75% of its Ponderosa Basin Fuel Break Project, the creation of a shaded fuel break along the northwestern boundary of the community. Additional work is required to complete the fuel break and burn residual brush piles.

5. Mitigation: CAL FIRE is working to complete the Von der Ahe Hazard Mitigation, removal of dead fuel in the Stockton Creek drainage, piles to be burned in the winter (as of 2005 MMU Fire Mgmt Plan.)

6. Mitigation: CAL FIRE has applied for a 2008 Wildland Urban Interface grant for Ponderosa Basin

7: Mitigation: General Fuel Treatment for unburned portions of Sherlock Mountain, the east slope of Whitlock Mountain, and Colorado Mountain. Encourage landowners to participate in CEQA³⁹ and VMP⁴⁰ as budgets allow.

Suggestions:

Where there are shared driveways and private roads; Home owners could form groups to reduce brush along roads and facilitate maintenance on those roadways that are not dedicated Mariposa County Roads. These groups may be eligible to receive assistance from State and Federal Agencies through the Mariposa County Fire Safe Council in the form of a chipper and for labor.

Educational opportunities in the schools in the form of Fire Safety Education that is currently being conducted by Mariposa County Fire, and Wildland fire awareness being done by CAL FIRE, USDA Forest Service, and Yosemite National Park. Defensible Space Educational Opportunities, which will be dependant upon funding, these can be done at homeowner association meetings, town hall meetings, the Mariposa County Fair, Butterfly Days, and Contractor Day to name a few. During the late spring and early summer there is a possibility of homeowner Defensible Space workshop that could be held at the Ponderosa Basin Chapel, or at the Ponderosa Basin Fire Station. This is going to take strong community support or it won't happen.

³⁹ CEQA- Document URL: http://ceres.ca.gov/topic/env_law/ceqa/stat2/index.html
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⁴⁰ <http://www.fire.ca.gov/ResourceManagement/pdf/VMP2004.pdf>

Appendix A

Education and Prevention

Priority #1: Wildfire Risk Assessment Survey. In order to have a baseline from which to work, a Wildfire Risk Assessment Survey should be performed and include every property in the community. This Survey can be performed using CAL FIRE's LE-100 form and/or Mariposa County Fire Department's Red Zone survey software. A provision should be made for identification of unimproved lots with hazardous fuels that pose a threat to neighboring properties and the community. Ideally, a group of residents will be trained by CAL FIRE, Mariposa County Fire and the Mariposa County Fire Safe Council to conduct an annual survey of the entire community, preferably in late spring and in conjunction with Wildfire Awareness Week (first full week in May.) Results of the Survey will be disclosed to residents as a tool to raise awareness and educate, and also used to identify in-need residents who cannot create and/or maintain Defensible Space around their structures.

Priority #2: Defensible Space Assistance & Education/Chipping Programs. Residents who are unable to physically and financially create and/or maintain Defensible Space need to be assisted. Funding needs to be applied for and obtained to perform brushing and chipping services for in-need residents. In addition, it is recommended that a pile chipping program be offered to residents who are able to cut and pile their own brush but have no way to dispose of it on site or transport it to a disposal site. Burning of piles when permitted requires careful planning and placement, poses a risk of escaped burns and is detrimental to air quality. Many residents will not go to the trouble or assume the risk involved in burning piles. Making pile chipping available to residents encourages them to clear brush and create/maintain Defensible Space, reducing the risk of structure loss in the event of a wildland fire.

Priority #3: Encourage Homeowner Special Interest Groups: Homeowners that live along non county maintained roads should be encouraged to form groups to reduce brush along roads and facilitate maintenance on those roadways that are not dedicated Mariposa County Roads. These groups may be eligible to receive assistance from state and federal agencies through the Mariposa County Fire Safe Council in the form of a chipper and for labor. This has been done on a small scale with great success in Mariposa County such as Whitmore Drive.

Priority#4: Fuel Break Maintenance: Develop a systematic approach to fuel break maintenance. Encourage the development of homeowner groups to adopt local fuel breaks and help to develop a hand crew or animal crew to mitigate fresh brush growth on existing fuel breaks.

Priority #5 Fire Awareness: Educational opportunities in the schools in the form of Fire Safety Education that is currently being conducted by Mariposa County Fire, and wildland fire awareness being done by CAL FIRE, USDA Forest Service, and Yosemite National Park. Defensible Space Educational Opportunities, which will be dependent upon funding, these can be done at homeowner association meetings, town hall meetings, the Mariposa County Fair, Butterfly Days, and Contractor Day to name a few.

Mariposa County Local Hazard Mitigation Plan

Priority #6 Encourage Landowners to assist in Identifying Potential Projects: There has been little to no participation of land or homeowners in identifying area that could be beneficial to create a fuel break or to contribute to a mosaic to break up the fuel bed that exists in this area. The local existing Fire safe Council could be a facilitating entity for these people to interact with land management and fire suppression agencies.

Priority #7: Develop prevention information boards: These could be in areas where passing through tourists tend to stop such as Cathey's Valley Park. And the Oaks Gas Station

Priority # 8: Increase Water Capacity: Grants should sought to develop another well in Coulterville and an additional water storage tank to supply water for wildland fire suppression use. Grants for this project maybe from but not limited to FEMA, Department of Homeland Security (DHS), USDI BLM, USDA, and USDA Forest Service. Grantees may include and are not limited to: Mariposa County Department of Public Works, Mariposa County Fire, or the Mariposa County Fire Safe Council.

Priority # 9: Refurbish and Staff Williams Peak Lookout Tower: Because of typically rapid spread of fires in this fuel type rapid detection becomes a critical element in successful suppression of any wildland fire. Williams Peak is in an ideal location to see and report fires while they are still small. Williams Peak would also cover Coulterville, Greeley Hill, Lake Don Pedro, Hunter's Valley as well as Hornitos. We would like to recommend looking for grants to restore the tower and find Volunteers to staff this tower for the peak season; June through August.

Priority #9: Weed Abatement Ordinance. Base upon the number of comments from all the communities listed in this document a recommendation for a weed abatement ordinance (for fire hazard nuisance) be explored for the subdivisions and town areas that will address vacant lots and absentee homeowners.

Strategic Fuel Treatment

Priority #1Mosaic the Fuel Beds. The region would benefit from either prescribed fire or mastication to create a mosaic pattern in the continuous fuel beds. A great deal of success was experienced in the former CAL FIRE VMP (Vegetation Management Program). Local residents may form a group to accomplish this project.

Priority #2: Buckingham Strategic Fuel Treatment. This project will result in a shaded fuel break approx. 1.5 miles long at 300 feet wide, for a total treatment area of approximately 75 acres. The treatment will be on private property near Buckingham Mountain in the communities of Jerseydale, Midpines, and Bootjack. Treatment types will include mechanical mastication and hand brushing and limbing. The Mariposa County Fire Safe Council may have opportunities to apply for funding (estimated cost \$148,000.00) to complete this project. Possible funding source is the USFS funding through the California Fire Safe Council Grants Clearinghouse.

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Priority #3: Feliciana Strategic Fuel Treatment: This project will anchor into USDA Forest Service tree plantations and the existing fuel break located on Feliciana Mountain. The other end would meet Highway 140 at the Bear Creek Bridge. This would protect the east side Midpines from a fire that is coming up out of the Merced River Canyon and/or Bear Creek. Treatment would almost be entirely mastication. Much of this ridge is on BLM Lands but the Fire Safe Council could apply for a Sierra Nevada Conservancy grant. The estimated cost would be approximately \$200,000.00

Priority #4: Timberlodge Strategic Fuel Treatment: This project will anchor into USDA Forest Service tree plantations and the existing fuel break located on Feliciana Mountain. The other end would meet Forest Service tree plantations in the Plumber Creek area. This would protect the east side Midpines from a fire that is coming up out of the Merced River Canyon and/or Bear Creek. Treatment would almost be entirely mastication. Possible funding source is the USFS funding through the California Fire Safe Council Grants Clearinghouse. The estimated cost would be approximately \$117,500.

Priority #5: Snow Creek Strategic Fuel Treatment. This project will result in a shaded fuel break approx. 1 1/2 miles long at 300 feet wide, for a total treatment area of approx. 65 acres. The treatment will be on private property along Portuguese Ridge in the community of Jerseydale. Treatment types will include mechanical mastication and hand brushing and limbing. The Mariposa County Fire Safe Council may have opportunities to apply for funding (estimated cost \$157,000) to complete this project. Possible funding source is the USFS funding through the California Fire Safe Council Grants Clearinghouse.

Priority #6: Roundtree Saddle Strategic Fuel Treatment. This project will result in a shaded fuel break approx. 3/4 mile long at 300 feet wide, for a total treatment area of approximately 35 acres. The treatment will be on private property near Round Tree Saddle in the community of Jerseydale. Treatment types will include mechanical mastication and hand brushing and limbing. The Mariposa County Fire Safe Council may have opportunities to apply for funding (estimated cost \$81,000.00) to complete this project. Possible funding source is the USFS funding through the California Fire Safe Council Grants Clearinghouse.

Priority #5: Snyder Ridge Strategic Fuel Treatment. This project will result in a shaded fuel break approx. 1 1/2 miles long at 300 feet wide, for a total treatment area of approx. 70 acres. The treatment will be on private property along Snyder Ridge Road in the community of Mariposa Pines. Treatment types will include mechanical mastication and hand brushing and limbing. The Mariposa County Fire Safe Council may have opportunities to apply for funding (estimated cost \$87,840) to complete this project. Possible funding sources are Sierra Nevada Conservancy Proposition 84, and USFS funding through the California Fire Safe Council Grants Clearinghouse.

Priority #6:Lushmeadows Strategic Fuel Treatment Phase I (Cloud's Rest to Tip Top/Ridge Top.) This project will result in a shaded fuel break approx. 5 miles long at 300 feet wide, for a total treatment area of approx. 200 acres. The treatment will be along a strategic ridge line adjacent to the community of Lushmeadows. Treatment types will include mechanical mastication and hand brushing and limbing. The Mariposa County Fire Safe Council has been

awarded 2008 Proposition 40 funding (\$188,278) through CAL FIRE to complete this project. (Countywide Fuel Treatment Priority #3.)

Priority #7: Lushmeadows Strategic Fuel Treatment Phase II (Sherrod & Homestead.)

This project will result in a shaded fuel break approx. 6 miles long at 300 feet wide, for a total treatment area of approx. 240 acres. The treatment will be along strategic ridge lines adjacent to the community of Lushmeadows. Treatment types will include mechanical mastication and hand brushing and limbing. The Mariposa County Fire Safe Council will apply for 2009 Proposition 40 funding (estimated cost \$250,000) through CAL FIRE to complete this project. (Countywide Fuel Treatment Priority #4.)

Priority #8: Mormon Bar Strategic Fuel Mitigation. This project will result in a shaded fuel break approx. 4 miles long at 300 feet wide, for a total treatment area of approx. 160 acres map. The treatment will be along a strategic ridge line within the Mormon Bar/Ben Hur area. This project is included in CAL FIRE's Battalion 2 Pre-fire Projects

Priority #9: Adams VMP. The region would benefit from either prescribed fire or mastication to create a mosaic pattern in the continuous fuel beds. A great deal of success was experienced in the former CDF VMP (Vegetation Management Program). Local residents may form a group to accomplish this project. The Adams VMP Was scheduled but not completed, this VMP would make a good project to start with. An outreach effort should be made in this area to rekindle interest with the land owners to use VMP projects.

Priority #10: Hunter VMP: BLM and CAL FIRE have identified the Hunter VMP (prescribed fire) project as still in planning stages.

Priority #11: Midpines Interior Strategic Fuel Treatment. This area is bounded by Colorado Road, Rumley Mine Road, Telegraph Road, Sherlock Road, East Whitlock Road, and Highway 140. It encompasses the Upper Saxon Creek watershed and the Upper Sherlock Creek watershed. This is mostly privately owned, and is where a significant number of Midpines residents live. The Telegraph fire of 2008 burned the northern third of both Sherlock Mountain and Whitlock Mountain, but the remainder of this area is untouched and requires treatment. There was also a significant fire (an estimated 500 acres) early in the decade that began between Yosemite Oaks Road and the KOA campground on Highway 140 and traveled north toward Colorado Mountain. Aside from fires, the remainder of Interior Midpines has had no significant fuel reduction for at least 75 years. Landowners seeking to reduce fuel loads will be encouraged to participate in CEQA⁴¹ and VMP⁴² as budgets allow. A more detailed project definition and breakdown will be written based on the survey results from Mitigation

Priority #13: Colorado Road (West Side of 140) Strategic Fuel Treatment. This project will deal with the heavy fuel load on parcels west of Highway 140 between the Octagon and the junction of Colorado Road and Highway 140. On the lower end, we have chamise on steep slopes, and on the upper end, oak and pine forests with heavy ladder fuels underneath. This

⁴¹ CEQA- Document URL: http://ceres.ca.gov/topic/env_law/ceqa/stat2/index.html
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⁴² <http://www.fire.ca.gov/ResourceManagement/pdf/VMP2004.pdf>

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project would protect residents along Colorado Road, Rancheria Creek Road, Davis Road, and points to the west. Treatment would be a combination of shaded fuel breaks and mastication and prescriptive burns to achieve a Mosaic fuel bed. The specific design and cost of the project is to be determined and will be based on the outcome in Mitigation #1. The lower part is on BLM lands and the rest is privately owned. The Sarah Priest Allotment (USDOI Bureau of Indian Affairs) is included in the area to be treated and protected.

Priority #14: VonDer Ahe Fuel Treatment: CAL FIRE is working to complete the Von der Ahe Hazard Mitigation, removal of dead fuel in the Stockton Creek drainage, piles to be burned in the winter (as of 2005 MMU Fire Mgmt Plan.)

Priority #15: Dubberke Fuel Break. This project will result in a shaded fuel break approx. 2 miles long at 300 feet wide, for a total treatment area of approx. 80 acres. The treatment will be along a strategic ridge line adjacent to the town of Mariposa. This project is included in CAL FIRE's Battalion 2 Pre-fire Projects map.

Priority #16: Lewis Creek Strategic Fuel Treatment. This project will result in a shaded fuel break approx. 1 mile long at 300 feet wide, for a total treatment area of approx. 40 acres. The treatment will be on the Sierra National Forest in the Lewis Creek area adjacent to the community of Fish Camp. Treatment types will include mechanical mastication and hand brushing and limbing. This project has already been identified and planned by the Sierra National Forest.

Priority #17: Mt. Bullion to Midpines Strategic Fuel Treatment. This project will result in a shaded fuel break approx. 20 miles long at 300 feet wide, for a total treatment area of approx. 800 acres. The treatment will be along strategic ridge lines above the Merced River adjacent to the community of Midpines. Treatment types will include mechanical mastication and hand brushing and limbing. The Mariposa County Fire Safe Council may have opportunities to apply for funding (estimated cost \$800,000 - \$1,000,000) to complete this project. Possible funding sources are CAL FIRE, Sierra Nevada Conservancy Proposition 84, and USFS and BLM funding through the California Fire Safe Council Grants Clearinghouse. (Countywide Fuel Treatment Priority #4.) This project may have to be redesigned due to the Telegraph Fire of 2008.

Priority #18: Snyder Creek Fuel Reduction: The biggest threat to the Mariposa Pines Subdivision is the build up of downed logs and brush in the Snyder Creek Drainage. Starting at the Sierra National Forest Boundary and continuing through to Double Eagle Road. Removal of fuels down to an acceptable level is critical to reduce the hazards to structures and will improve the habitat for amphibians and for people. This can be accomplished with steep slope yarding systems for larger fuels to reduce the impact on the soils in the Stream Management zones. Hand crews and chipping for the lighter fuels.

Priority #19: ID Strategic fire access roads: Identify existing roads which can be ranch access roads and develop these into fire lines by brushing the fuels back from the roadbed and doing minimal maintenance to allow access by type three engines.

Priority #21: WUI Grant CAL FIRE has applied for a 2008 WUI grant for Ponderosa Basin

Priority #20: Strategic Fire Defense Systems: Coulterville lies within the Southwest Inter Face Team (SWIFT)⁴³ which is coalition of City, County, State, and Federal Agencies which has undertaken the responsibility of coordinating the strategic fire and resource planning for area north of the Merced River that lies within Mariposa County.

⁴³ <http://www.fs.fed.us/r5/stanislaus/groveland/swift/team.shtml>

Appendix B

*Glossary*⁴⁴

Aerial Fuels: All live and dead vegetation in the forest canopy or above surface fuels, including tree branches, twigs and cones, snags, moss, and high brush.

Airtanker: A fixed-wing aircraft equipped to drop fire retardants or suppressants.

Agency: Any federal, state, or county government organization participating with jurisdictional responsibilities.

Anchor Point: An advantageous location, usually a barrier to fire spread, from which to start building a fireline. An anchor point is used to reduce the chance of firefighters being flanked by fire.

Aspect: Direction toward which a slope faces.

Backfire: A fire set along the inner edge of a fireline to consume the fuel in the path of a wildfire and/or change the direction of force of the fire's convection column.

Backpack Pump: A portable sprayer with a hand pump, fed from a liquid-filled container fitted with straps, used mainly in fire and pest control. (See also Bladder Bag.)

Bambi Bucket: A collapsible bucket slung below a helicopter. Used to dip water from a lake, stream, portable tank, etc. for fire suppression.

Bladder Bag: A collapsible backpack portable sprayer made of neoprene or high-strength nylon fabric fitted with a pump. (See also Backpack Pump.)

Blow-up: A sudden increase in fire intensity or rate of spread strong enough to prevent direct control or to upset control plans. Blow-ups are often accompanied by violent convection and may have other characteristics of a firestorm. (See Flare-up.)

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.

Bucket Drops: The dropping of water or retardant or suppressants from specially designed buckets slung below a helicopter.

Buffer Zones: An area of reduced vegetation that separates wildlands from vulnerable residential or business developments. This barrier is similar to a greenbelt in that it is usually used for another purpose such as agriculture, recreation areas, parks, or golf courses.

Burn Out: To set fire inside a control line to widen the line or to consume fuel between the edge of the fire and the control line.

Burning Conditions: The state of the combined factors of the environment – such as winds, temperature, fuel moistures, and humidity – that affect fire behavior in a specified fuel type.

Burning Index: An estimate of the potential difficulty of fire containment as it relates to the flame length at the most rapidly spreading portion of a fire's perimeter.

Burning Period: That part of each 24-hour period when fires spread most rapidly, typically from 10:00 a.m. to sundown.

Campfire: As used to classify the cause of a wildland fire, a fire that was started for cooking or warming that spreads sufficiently from its source to require action by a fire control agency.

Candle or Candlering: A single tree or a very small clump of trees burning from the bottom up.

Chain: A unit of linear measurement equal to 66 feet.

⁴⁴ <http://www.fs.fed.us/r1/nfp/glossary.shtml>

Closure: Legal restriction – but not necessarily elimination – of specified activities such as smoking, camping, or entry that might cause fires in a given area.

Cold Front: The leading edge of a relatively cold air mass that displaces warmer air. The heavier cold air may cause some of the warm air to be lifted. If the lifted air contains enough moisture, the result may be cloudiness, precipitation, and thunderstorms. If both air masses are dry, no clouds may form. Following the passage of a cold front in the Northern Hemisphere, westerly or northwesterly winds of 15 to 30 mph often continue for 12 to 24 hours.

Command Staff: The command staff on an incident management team includes the information officer, safety officer and liaison officer. They report directly to the incident commander (IC) and may have assistants.

Complex: Two or more individual incidents located in the same general area and assigned to a single incident commander or unified command.

Contain a fire: A fuel break around the fire has been completed. This break may include natural barriers and/or manually built fireline and/or mechanically constructed line.

Control a fire: To complete a control line around a fire, any spot fires therefrom, and any interior islands to be saved; burn out any unburned area adjacent to the fire side of the control lines; and cool down all hotspots that are immediate threats to the control line, until the lines can reasonably be expected to hold.

Control Line: All built or natural fire barriers and treated fire edge used to control a fire.

Cooperating Agency: An agency supplying assistance other than direct suppression, rescue, support, or service functions to the incident control effort; e.g., Red Cross, law enforcement agency, telephone company.

Coyote Tactics: A progressive line construction duty involving self-sufficient crews that build fireline until the end of the operational period, remain at or near that point while off duty, and begin building fireline where they left off at the beginning of the next operational period.

Creeping Fire: Fire spreading slowly with a low flame.

Crew Boss: A person in supervisory charge of usually 16 to 21 firefighters and responsible for their performance, safety, and welfare.

Crown Fire (Crowning): The movement of fire through the crowns of trees or shrubs more or less independently of the surface fire.

Curing: Drying and browning of herbaceous vegetation or slash.

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 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 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 house 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.

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

Dispatcher: A person employed who receives reports of discovery and status of fires, confirms their locations, takes action promptly to provide people and equipment likely to be needed for control in first attack, and sends them to the proper place.

Dispatch Center: A facility from which resources are directly assigned to an incident.

Division: Divisions are used to divide an incident into geographical areas of operation. Divisions are established when the number of resources exceeds the span-of-control of the operations chief. A division is located with the Incident Command System organization between the branch and the task force/strike team.

Dozer: Any tracked vehicle with a front-mounted blade used for exposing mineral soil.

Dozer Line: Fireline constructed by the front blade of a dozer.

Driptorch: Hand-held device for igniting fires by dripping flaming liquid fuel on the materials to be burned; consists of a fuel fount, burner arm, and igniter. Fuel used is generally a mixture of diesel and gasoline.

Drop Zone: Target area for airtankers, helitankers, and cargo dropping.

Dry Lightning Storm: Thunderstorm in which negligible precipitation reaches the ground. Also called a dry storm.

Duff: The layer of decomposing organic materials lying below the litter layer of freshly fallen twigs, needles, and leaves and immediately above the mineral soil.

Engine: A truck that provides pumping, water, and hose capacity.

Engine Crew: Firefighters assigned to an engine. The Fireline Handbook defines the minimum crew makeup by engine type.

Entrapment: A situation where personnel are unexpectedly caught in a fire-behavior-related, life-threatening position where planned escape routes or safety zones are absent, inadequate, or compromised. An entrapment may or may not include deployment of a fire shelter, and such situations may or may not result in injury. They include "near misses."

Environmental Assessment (EA): EAs were authorized by the National Environmental Policy Act (NEPA) of 1969. They are concise, analytical documents prepared with public participation that determine whether an Environmental Impact Statement (EIS) is needed for a particular project or action. If an EA determines an EIS is not needed, the EA becomes the document allowing agency compliance with NEPA requirements.

Environmental Impact Statement (EIS): EISs were authorized by the National Environmental Policy Act (NEPA) of 1969. Prepared with public participation, they assist decision makers by providing information, analysis, and an array of action alternatives, allowing managers to see the probable effects of decisions on the environment. Generally, EISs are written for large-scale actions or geographical areas.

Escape Route: A preplanned and understood route firefighters take to move to a safety zone or other low-risk area, such as an already burned area, previously constructed safety area, a meadow that won't burn, or a natural rocky area large enough to take refuge in without being burned. When escape routes deviate from a defined physical path, they should be clearly marked (flagged).

Escaped Fire: A fire which has exceeded or is expected to exceed initial attack capabilities or prescription.

Extended Attack Incident: A wildland fire that has not been contained or controlled by initial attack forces and for which more firefighting resources are arriving, en route, or being ordered by the initial attack incident commander.

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.

Faller: A person who fells trees. Also called a sawyer or cutter.

Field Observer: Person responsible to the Situation Unit Leader for collecting and reporting information about an incident obtained from personal observations and interviews.

Fine (Light) Fuels: Fast-drying fuels, generally with a comparatively high surface area-to-volume ratio, which are less than 1/4-inch in diameter and have a timelag of one hour or less. These fuels readily ignite and are rapidly consumed by fire when dry.

Fingers of a Fire: The long narrow extensions of a fire projecting from the main body.

Fire Behavior: The manner in which a fire reacts to the influences of fuel, weather, and topography.

Fire Behavior Forecast: Prediction of probable fire behavior, usually prepared by a Fire Behavior Analyst (FBA), in support of fire suppression or prescribed burning operations.

Fire Behavior Specialist: A person responsible to the Planning Section Chief for establishing a weather data collection system and for developing fire behavior predictions based on fire history, fuel, weather, and topography.

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

Fire Cache: A supply of fire tools and equipment assembled in planned quantities or standard units at a strategic point for exclusive use in fire suppression.

Fire Crew: An organized group of firefighters under the leadership of a crew leader or other designated official. Includes Type 1 crews or hotshots, Type 2 crews, etc.

Fire Front: The part of a fire within which continuous flaming combustion is taking place. Unless otherwise specified, the fire front is assumed to be the leading edge of the fire perimeter. In ground fires, the fire front may be mainly smoldering combustion.

Fire Intensity: A general term relating to the heat energy released by a fire.

Fireline: A linear fire barrier that is cleared of fuels and scraped or dug to mineral soil. Also called control line or containment line or line.

Fire Load: The number and size of fires historically experienced on a specified unit over a specified period (usually one day) at a specified index of fire danger.

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

Fire Perimeter: The entire outer edge or boundary of a fire. Note that acreage of a fire is determined or estimated by the fire's perimeter, but some substantially smaller acreage may have actually been burned within that perimeter.

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 Shelter: An aluminized tent offering protection by means of reflecting radiant heat and providing a volume of breathable air in a fire entrapment situation. Fire shelters should only be used in life-threatening situations, as a last resort.

Fire Shelter Deployment: Removing a fire shelter from its case and using it as protection against fire.

Firestorm: Violent convection caused by a large continuous area of intense fire. Often characterized by destructively violent surface indrafts, near and beyond the perimeter, and sometimes by tornado-like whirls.

Fire Triangle: Instructional aid in which the sides of a triangle are used to represent the three factors (oxygen, heat, fuel) necessary for combustion and flame production; removal of any of the three factors causes flame production to cease.

Fire Use Module (Prescribed Fire Module): A team of skilled and mobile personnel dedicated primarily to prescribed fire management. These are national and interagency resources, available throughout the prescribed fire season, that can ignite, hold, and monitor prescribed fires.

Fire Weather: Weather conditions that influence fire ignition, behavior, and suppression.

Fire Weather Watch: A term used by fire weather forecasters to notify using agencies, usually 24 to 72 hours ahead of the event, that current and developing meteorological conditions may evolve into dangerous fire weather.

Fire Whirl: Spinning vortex column of ascending hot air and gases rising from a fire and carrying aloft smoke, debris, and flame. Fire whirls range in size from less than one foot to more than 500 feet in diameter. Large fire whirls have the intensity of a small tornado.

Firefighting Resources: All people and major items of equipment that are or could be assigned to fires.

Flame Height: The average maximum vertical extension of flames at the leading edge of the fire front. Occasional flashes that rise above the general level of flames are not considered. This distance is less than the flame length if flames are tilted due to wind or slope.

Flame Length: The distance between the flame tip and the midpoint of the flame depth at the base of the flame (generally the ground surface); an indicator of fire intensity.

Flaming Front: The zone of a moving fire where the combustion is primarily flaming. Behind this flaming zone combustion is primarily glowing. Light fuels typically have a shallow flaming front, whereas heavy fuels have a deeper front. Also called fire front.

Flanks of a Fire: The parts of a fire's perimeter that are roughly parallel to the main direction of spread.

Flare-up: Any sudden acceleration of fire spread or intensification of a fire. Unlike a blow-up, a flare-up lasts a relatively short time and does not radically change control plans.

Flash Fuels: Fuels such as grass, leaves, dropped pine needles, ferns, tree moss, and some kinds of slash that ignite readily and are consumed rapidly when dry. Also called fine fuels.

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.



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

Fuel Model: Simulated fuel complex (or combination of vegetation types) for which all fuel descriptors required for the solution of a mathematical rate of spread model have been specified.

Fuel Moisture (Fuel Moisture Content): The quantity of moisture in fuel expressed as a percentage of the weight when 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.

Fusee: A colored flare designed as a railway warning device and widely used to ignite suppression and prescription fires.

General Staff: The group of incident management personnel reporting to the incident commander. They may each have a deputy. Staff members include operations section chief, planning section chief, logistics section chief, and finance/administration section chief.

Geographic Area: A political boundary designated by the wildland fire protection agencies, where these agencies work together in the coordination and effective utilization of resources. See www.fs.fed.us/fire/reports.shtml for a listing of and links to Geographic Area Coordination Centers.

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.

Haines Index: An atmospheric index used to indicate the potential for wildfire growth by measuring the stability and dryness of the air over a fire.

Hand Line: A fireline built with hand tools.

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

Head of a Fire: The side of the fire having the fastest rate of spread.

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

Helibase: The main location within the general incident area for parking, fueling, maintaining, and loading helicopters. The helibase is usually at or near the incident base.

Helispot: A temporary landing spot for helicopters.

Helitack: The use of helicopters to transport crews, equipment, and fire retardants or suppressants to the fireline.

Helitack Crew: A group of firefighters trained in the technical and logistical use of helicopters for fire suppression.

Holding Actions: Planned actions required to achieve wildland prescribed fire management objectives. These actions have specific timeframes for fire use actions but can have less sensitive implementation demands for suppression actions.

Holding Resources: Firefighting personnel and equipment assigned to do all required fire suppression work following fireline construction but generally not including extensive mop-up.

Hose Lay: Arrangement of connected lengths of fire hose and accessories on the ground, beginning at the first pumping unit and ending at the point of water delivery.

Hotshot Crew: A highly trained fire crew used mainly to build fireline by hand. Hotshots are usually the crews called upon to fight fire in the most rugged and inaccessible areas on a fire, when highly specialized training and experience are necessary.

Hotspot: A particular active part of a fire.

Hotspotting: Reducing or stopping the spread of fire at points of particularly rapid rate of spread or special threat, generally the first step in prompt control, with emphasis on first priorities.

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.

Incident Action Plan (IAP): Contains objectives reflecting the overall incident strategy and specific tactical actions and supporting information for the next operational period. The plan may be oral or written. When written, the plan may have a number of attachments, including objectives, assignment list, division assignment, incident radio communication plan, medical plan, traffic plan, safety plan, and incident map.

Incident Command Post (ICP): Location at which primary command is executed. The ICP may be co-located with the incident base or other incident facilities.

Incident Command System (ICS): The combination of facilities, equipment, personnel, procedure, and communications operating within a common organizational structure, with responsibility for the management of assigned resources to effectively accomplish objectives on an incident.

Incident Commander: The individual responsible for the management of all incident operations at the incident site.

Incident Management Team: The incident commander and appropriate general or command staff assigned to manage an incident.

Incident Objectives: Statements of guidance and direction necessary for selection of appropriate strategy and the tactical direction of resources. Incident objectives are based on realistic expectations of what can be accomplished when all allocated resources have been effectively deployed.

Infrared Detection: The use of heat sensing equipment – Infrared Scanners – for detection of heat sources that are not visible by the normal surveillance methods of either ground or air patrols.

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

Jump Spot: Selected landing area for smokejumpers.

Jump Suit: Protection suit worn by smokejumpers.

Knock Down: To reduce the flame or heat on the more vigorously burning parts of a fire edge.

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. For statistical purposes, a fire burning more than 100 acres. 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.

Lead Plane: Aircraft with pilot used to make dry runs over the target area to check wind and smoke conditions and topography and to lead airtankers to targets and supervise their drops.

Light (Fine) 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 timelag of one hour or less. These fuels ignite readily and are rapidly consumed by fire when dry.

Lightning Activity Level (LAL): A number, on a scale of 1 to 6, that reflects frequency and character of cloud-to-ground lightning. The scale is exponential, based on powers of 2 (i.e., LAL 3 indicates twice the lightning of LAL 2).

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.

Mineral Soil: Soil layers below the predominantly organic horizons; soil with little combustible material.

Mobilization: The process and procedures used by all organizations federal, state and local) for activating, assembling, and transporting all resources that have been requested to respond to or support an incident.

Modular Airborne Firefighting System ([MAFFS](#)): A manufactured unit consisting of five interconnecting tanks, a control pallet, and a nozzle pallet, with a capacity of 3,000 gallons, designed to be rapidly mounted inside an unmodified [C-130](#) (Hercules) cargo aircraft for use in dropping retardant on wildland fires.

Mop-up: To make a fire safe or reduce residual smoke after the fire has been controlled by extinguishing or removing burning material along or near the control line, felling snags, or moving logs so they won't roll downhill.

Multi-Agency Coordination (MAC): A generalized term which describes the functions and activities of representatives of involved agencies and/or jurisdictions who come together to make decisions regarding the prioritizing of incidents, and the sharing and use of critical resources. The MAC organization is not a part of the on-scene ICS and is not involved in developing incident strategy or tactics.

Mutual Aid Agreement: Written agreement between agencies and/or jurisdictions in which they agree to assist one another upon request, by furnishing personnel and equipment.

National Environmental Policy Act (NEPA): NEPA is the basic national law for protection of the environment, passed by Congress in 1969. It sets policy and procedures for environmental protection, and authorizes Environmental Impact Statements and Environmental Assessments to be used as analytical tools to help federal managers make decisions on management of federal lands.

National Fire Danger Rating System (NFDRS): A uniform fire danger rating system that focuses on the environmental factors that control the moisture content of fuels.

National Wildfire Coordinating Group: The [NWCG](#) was formed under the direction of the Secretaries of Agriculture and the Interior and includes representatives of the U.S. Forest Service, Bureau of Land Management, Bureau of Indian Affairs, National Park Service, U.S. Fish and Wildlife Service and National Association of State Foresters. The group's purpose is to facilitate coordination and effectiveness of wildland fire activities and provide a forum to discuss, recommend action, or resolve issues and problems of substantive nature. NWCG is the certifying body for all courses in the National Fire Curriculum.

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Nomex ®: Trade name for a fire-resistant synthetic material used in the manufacturing of flight suits and pants and shirts used by firefighters.

Normal Fire Season: 1) A season when weather, fire danger, and number and distribution of fires are about average. 2) Period of the year that normally comprises the fire season.

Operations Branch Director: Person under the direction of the operations section chief who is responsible for implementing that portion of the incident action plan appropriate to the branch.

Operational Period: The period of time scheduled for execution of a set of tactical actions as specified in the Incident Action Plan. Operational periods can be of various lengths, although usually not more than 24 hours.

Overhead: People assigned to supervisory positions, including incident commanders, command staff, general staff, directors, supervisors, and unit leaders.

Paracargo: Cargo that's dropped, or intended for dropping, from an aircraft by parachute, by other retarding devices, or by free-fall.

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 damages at an unacceptable level.

Personnel Protective Equipment (PPE): All firefighting personnel must be equipped with proper equipment and clothing in order to mitigate the risk of injury from, or exposure to, hazardous conditions encountered while working. 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.

Preparedness: Condition or degree of being ready to cope with a potential fire situation.

Prescribed Fire: Any fire ignited by management actions under certain predetermined conditions to meet specific objectives related to hazardous fuels or habitat improvement. A written prescribed fire plan must exist, and NEPA requirements must be met prior to ignition.

Prescribed Fire Plan (Burn Plan): This document provides the prescribed fire burn boss information needed to implement an individual prescribed fire project.

Prescription: Measurable criteria that define conditions under which a prescribed fire may be ignited, guide selection of appropriate management responses, and indicate other required actions. Prescription criteria may include a combination of safety, economic, public health, environmental, geographic, administrative, social, or legal considerations.

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

Project Fire: A fire of such size or complexity that a large organization and prolonged activity is required to suppress it.

Pulaski: A combination chopping and trenching tool that combines a single-bitted ax blade with a narrow adze-like trenching blade fitted to a straight handle. Useful for grubbing or trenching in duff and matted roots. Well-balanced for chopping.

Radiant Burn: A burn received from a radiant heat source.

Radiant Heat Flux: The heat flowing through a given area in a given time, usually expressed as calories/square centimeter/second.

Rappelling: Technique of landing specifically trained firefighters from hovering helicopters; involves sliding down ropes with the aid of friction-producing devices.

Rate of Spread: The relative activity of a fire in extending its horizontal dimensions. It is expressed as a rate of increase of the total perimeter of the fire, as rate of forward spread of the

fire front, or as rate of increase in area, depending on the intended use of the information. Usually it is expressed in chains or acres per hour for a specific period in the fire's history.

Reburn: The burning of an area that has been previously burned but that contains flammable fuel that ignites when burning conditions are more favorable; an area that has reburned.

Red Card: Fire qualification card issued to fire-rated persons showing their training needs and their qualifications to fill specified fire suppression and support positions in a large fire suppression or incident organization.

Red Flag Warning: Term used by fire weather forecasters to alert forecast users to an ongoing or imminent critical fire weather pattern.

Rehabilitation: The activities necessary to repair damage or disturbance caused by wildland fires or the fire suppression activity.

Relative Humidity (RH): The ratio of the amount of moisture in the air to the maximum amount of moisture that air would contain if it were saturated. The ratio of the actual vapor pressure to the saturated vapor pressure.

Resources: 1) Personnel, equipment, services, and supplies available or potentially available for assignment to incidents. 2) The natural resources of an area, such as timber, grass, watershed values, recreation values, and wildlife habitat.

Resource Management Plan (RMP): A document prepared by field office staff with public participation and approved by field office managers that provides general guidance and direction for land management activities at a field office. The RMP identifies the need for fire in a particular area and for a specific benefit.

Retardant: A substance or chemical agent which reduces the flammability of combustibles.

Run (of a fire): The rapid advance of the head of a fire with a marked change in intensity and rate of spread from that noted before and after the advance.

Running fire: A rapidly spreading surface fire with a well-defined head.

Safety Zone: An area cleared of flammable materials used for escape in the event the line is outflanked or in case a spot fire causes fuels outside the line to render the line unsafe. In firing operations, crews progress so as to maintain a safety zone close at hand, allowing the fuels inside the control line to be consumed before going ahead. Safety zones may also be constructed as integral parts of fuel breaks; they are greatly enlarged areas which can be used with relative safety by firefighters and their equipment in the event of a blowup in the vicinity.

Scratch Line: An unfinished preliminary fireline hastily established or built as an emergency measure to check the spread of fire.

Severity Funding: Funds provided to increase suppression response capability necessitated by abnormal weather patterns, extended drought, or other events causing abnormal increase in the fire potential and/or danger.

Single Resource: An individual, a piece of equipment and its personnel complement, or a crew or team of individuals with an identified work supervisor that can be used on an incident.

Size up: To evaluate a fire to determine a course of action for fire suppression.

Slash: Debris left after logging, pruning, thinning, or brush cutting; includes logs, chips, bark, branches, stumps, and broken understory trees or brush.

Sling Load: Cargo carried beneath a helicopter and attached by a lead line and swivel.

Slop-over: A fire edge that crosses a control line or natural barrier intended to contain the fire.

Smokejumper: A firefighter who travels to fires by aircraft and parachute.

Smoke Management: Application of fire intensities and meteorological processes to minimize degradation of air quality during prescribed fires.

Smoldering Fire: A fire burning without flame and barely spreading.

Snag: A standing dead tree or part of a dead tree from which at least the smaller branches have fallen.

Spark Arrester: A device installed in a chimney, flue, or exhaust pipe to stop the emission of sparks and burning fragments.

Spot Fire: A fire ignited outside the perimeter of the main fire by flying sparks or embers.

Spot Weather Forecast: A special forecast issued to fit the time, topography, and weather of each specific fire. These forecasts are issued upon request of the user agency and are more detailed, timely, and specific than zone forecasts.

Spotting: Behavior of a fire producing sparks or embers that are carried by the wind and start new fires beyond the zone of direct ignition by the main fire.

Staging Area: Location set up at an incident where resources are placed while awaiting a tactical assignment on a 3-minute available basis. Staging areas are managed by the operations section.

Strategy: The science and art of command as applied to the overall planning and conduct of an incident.

Strike Team: Specified combinations of the same kind and type of resources, with common communications and a leader.

Strike Team Leader: Person responsible to a division/group supervisor for performing tactical assignments given to the strike team.

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

Suppressant: An agent such as water or foam used to extinguish the flaming and glowing phases of combustion when directly applied to burning fuels.

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.

Swamper: (1) A firefighter who assists fallers and/or sawyers by clearing away brush, limbs, roots, small trees, etc. from the fireline. Carries fuel, oil, and tools and watches for dangerous situations. (2) A worker on a dozer crew who pulls winch line, helps maintain equipment, etc., to speed suppression work on a fire.

Tactics: Deploying and directing resources on an incident to accomplish the objectives designated by strategy.

Temporary Flight Restriction (TFR): A restriction requested by an agency and put into effect by the Federal Aviation Administration in the vicinity of an incident. The TFR restricts the operation of nonessential aircraft in the airspace around that incident.

Terra Torch ®: Device for throwing a stream of flaming liquid, used to facilitate rapid ignition during burnout operations on a wildland fire or during a prescribed fire operation.

Test Fire: A small fire ignited within the planned burn unit to determine characteristics (such as fire behavior, detection performance, and control measures) on a prescribed fire.

Timelag: Time needed under specified conditions for a fuel particle to lose about 63 percent of the difference between its initial moisture content and its equilibrium moisture content. If conditions remain unchanged, a fuel will reach 95 percent of its equilibrium moisture content after four timelag periods.

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Torching: The ignition and flare-up of a tree or small group of trees, usually from bottom to top.

Two-way Radio: Radio equipment with transmitters in mobile units on the same frequency as the base station, permitting conversation in two directions using the same frequency in turn.

Type: The capability of a firefighting resource in comparison to another type – such as Type 1 team, Type 2 crew, Type 1 helicopter, etc. Type 1 usually means greater capability because of power, size, or capacity.

Uncontrolled Fire: Any fire which threatens to destroy life, property, or natural resources, and has not yet been declared controlled.

Underburn: A fire that consumes surface fuels but not trees or shrubs. (See Surface Fuels.)

Volunteer Fire Department (VFD): A fire department of which some or all members are unpaid.

Water Tender: A ground vehicle capable of transporting specified quantities of water.

Weather Information and Management System (WIMS): An interactive computer system designed to accommodate the weather information needs of all federal and state natural resource management agencies. Provides timely access to weather forecasts, current and historical weather data, the National Fire Danger Rating System (NFDRS), and the National Interagency Fire Management Integrated Database (NIFMID).

Wet Line: A line of water, or water and chemical retardant, sprayed along the ground, that serves as a temporary control line from which to ignite or stop a low-intensity fire.

Wildland Fire: Any nonstructure fire, other than prescribed fire, that occurs in the wildland.

Wildland Fire Implementation Plan (WFIP): A progressively developed assessment and operational management plan that documents the analysis and selection of strategies and describes the appropriate management response for a wildland fire that's being managed for resource benefits.

Wildland Fire Situation Analysis (WFSA): A decision-making process that evaluates alternative suppression strategies against selected environmental, social, political, and economic criteria. Provides a record of decisions.

Wildland Fire Use: The management of naturally ignited wildland fires to accomplish specific pre-stated resource management objectives in pre-defined geographic areas outlined in Fire Management Plans.

Wildland/urban Interface: The line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels.

Wind Vectors: Wind directions used to calculate fire behavior.

Appendix C
Collaboration

Agency/Groups

USDOI Bureau of Land Management, Folsom Field Office
CAL FIRE Madera-Mariposa-Merced Unit
Chowchilla Mountain Women's Club
Fish Camp Fire Rescue
Greeley Hill Fire Safe Committee
Lushmeadows Association
Mariposa County Fire Department
Mariposa County Fire Safe Council
Mariposa Pines/Jerseydale Fire Safe Committee
Midpines Town Planning Advisory Committee
USDOI National Park Service, Yosemite National Park
SouthWest InterFace Team (SWIFT)
U.S.D.A. Forest Service, Sierra and Stanislaus National Forests

Individuals

Dan Smith, Hunters Valley
Dawn Leitzell, Greeley Hill
Rick Messier, Jerseydale
Dennis Lagitaurus, Mariposa Pines (Jerseydale)
Tracey Lyman, Mariposa Pines (Jerseydale)
Robert Miller, Mariposa Pines (Jerseydale)
Jack Paddock, Lake Don Pedro
Tammy Paddock, Lake Don Pedro
Captain Mike, Lushmeadows
Dick Hutchinson, Lushmeadows
Kathy Mills, Lushmeadows
Larry Wesson, President, Lushmeadows Homeowners Association
John Schroeder, Midpines
Candy O'Donel-Browne, Midpines
Gary Francisco, Midpines
Don Fox, Midpines
Ken Gosting, Midpines

Numerous meetings were held starting in May 2003, the first of which was to familiarize the various participants with the CWPP. After the first meeting Mariposa County Fire led most of the meetings and we do not have the dates or the participants. The Mariposa County Fire Safe Council attended three meetings in Midpines, July 13, 2004, September 2007 and January 21, 2009. Greeley Hill/Buck Meadows in September 2004. There are no records to indicate one way or another which communities had meetings and which ones didn't. The individual community plans were posted for review in January 2009 on the Mariposa County Fire Safe Council website.⁴⁵

⁴⁵ <http://www.mariposafiresafe.org/>

Appendix D

January 21, 2009, Midpines Community Center

Midpines Town Planning Advisory Committee

USDA Forest Service, Sierra National Forest

Dave Martin

Mark Lemon

USDOI Bureau of Land Management, Folsom

Brian Mulhullen

CAL FIRE MMU

Ryan Williams

Mariposa County Board of Supervisors

Brad Aborn

Mariposa County Fire

Jim Wilson

Mariposa County Fire Safe Council

Jan Hamilton

Patrick Tierney

Megan Redding

February 27, 2009 USFS Jerseydale Forest Station

Mariposa Pines/ Jerseydale Fire Safe Committee

Dennis Lagitauris

Thomas Atkins

Roy Leach

Steve Smallcombe

Rosemarie Smallcombe

Tom Ohmer

Marianne Atkins

Bob Miller

Jane Sheldon

Lyman Tracy

Marilyn Tracy

Lorie Setterberg

Ron Setterberg

USDA Forest Service, Sierra National Forest

William Loucks

Mariposa County Fire

Jim Wilson

Mariposa County Fire Safe Council

Jan Hamilton

Patrick Tierney

Megan Redding

Sweet Pea

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April 18, 2009 Lake Don Pedro Hacienda

Lake Don Pedro Homeowner's Association

Ken Kennedy	Victor Afanasieu	William A. Kinsella
Sally Perez	Lew Richardson	Charles Day
Lesley Butler	Jim Knosp	Adrienne Knosp
Jim Dean	Dale Smith	Ruth Smith
Bob Riess	Alice Riess	Nancy Dubuque
Phyllis Cotta		

Mariposa County Fire Safe Council

Patrick Tierney

April 18, 2009 Greeley Hill Community Center

Greeley Hill Fire Safe Committee

Dawn Lietzel	Jim Lietzel	Darralynne Love
Sylvia Mobley	Craig Byer	Charles French
Karen Wilson	Art Laursen	Brian Conley
Meg Hamre	Tom James	Jerry Howard
Lorri Wickenhauser	Dave Wickenhauser	Sarah Wickenhauser
Sheila Frankehansen	Paul Franke	

Mariposa County Fire Safe Council

Patrick Tierney

July 14, 2009 Mariposa County Board of Supervisors Chambers

Mariposa County Board Of Supervisors

Brad Aborn
Janet Bibby
Lyle Turpin
Kevin Cann
James Allen

Mariposa County Fire

James Wilson

Mariposa County Fire Safe Council

Jan Hamilton
Candy O'Donnel-Brown
Megan Redding
Patrick Tierney

Appendix E

Evaluating a CWPP⁴⁶

1. Partnerships and Collaboration

1.1 Who has been involved with CWPP development and implementation? How have relationships grown or changed through implementation? What resources did they bring to the table?

1.2 How did the fire planning process influence CWPP implementation?

1.3 How has the collaborative process assisted in implementing the CWPP and building capacity for the community to reduce wildfire risk?

1.4 Have social service agencies (or groups that might assist low-income and vulnerable populations) partnered on CWPP efforts? If so, how?

1.5 Have partners involved in the planning process remained engaged in implementation? Have new partners become involved? How have the relationships established through the CWPP enhanced opportunities to address CWPP goals?

1.6 Has CWPP collaboration made a difference or had a positive impact on local organizations, neighborhoods and/or actions?

2. Risk Assessment

2.1 How has population growth/change and development in your community affected wildfire risk?

2.2 If this is a multi-jurisdictional plan, what is the number and percent of communities at risk with a CWPP in the area? Are all communities at risk identified in the CWPP, and are there priority fuels projects identified in the area?

2.3 Are there new or updated data sources that may change the risk assessment and influence fuels priorities?

⁴⁶ http://www.forestsandrangelands.gov/communities/documents/CWPP_Report_Aug2008.pdf

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2.4 How is the risk assessment being used to make decisions about fuels priorities or the designation of the WUI boundary?

2.5 Has the community enacted a wildfire-related ordinance? If so, county, state, or local?

2.6 What percent of communities at risk are also low-income or have special needs? Have these communities been engaged in reducing wildfire risk?

3. Reducing Hazardous Fuels

3.1 How many acres have been treated for hazardous fuels reduction on public and private land that were identified as high-priority projects in the CWPP? What percentage of total acres treated does this constitute?

3.2 How many fuels reduction projects have spanned ownership boundaries to include public and private land?

3.3 What is the number and percent of residents that have participated in projects and completed defensible space on their land?

3.4 Economic development resulting from fuels reduction

3.5 How many local jobs have resulted because of fuels reduction or restoration activities?

3.6 How many hazardous fuels reduction projects have been implemented in connection with a forest restoration project?

4. Reducing Structural Ignitability

4.1 What kind of resource losses (homes, property, infra-structure, etc.) have occurred from wildfires in the year being evaluated?

4.2 Are the current codes and regulations for wildfire hazard adequate? If not, are there efforts to change or update them? Are there action items in the CWPP to develop codes and recommendations?

4.3 Has the public knowledge and understanding about structural ignitability been increased by strategies adopted in the CWPP? Have homeowners been educated on how to reduce home ignitability, and are they replacing flammable building components with non-flammable materials?

4.4 How many Firewise Communities have been recognized? How many citizens, neighborhoods, or communities have taken action to increase the resilience of their structure to fire?

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4.5 How has the availability and capacity of local fire agencies to respond to wildland and structural fires improved or changed since the CWPP was developed?

5. Education and Outreach

5.1 What kind of public involvement has the CWPP fostered? Examples include public education, household visits, demonstration projects, etc.

5.2 Has a change in public awareness about wildfire resulted from the plan?

5.3 What kinds of activities have citizens taken to reduce wildfire risk?

6. Emergency Management

6.1 Is the CWPP integrated within the county or municipal Emergency Operations Plan?

6.2 Does the CWPP include an evacuation plan? If yes, has it been tested or implemented since the CWPP adoption?

6.3 Is the CWPP aligned with other hazard mitigation plans or efforts?

CWPP self evaluation January 25, 2010

1. Partnerships and Collaboration

1.1 Who has been involved with CWPP development and implementation? How have relationships grown or changed through implementation? What resources did they bring to the table?

The Mariposa Countywide Community Wildland Fire Protection Plan (MCCWPP) was developed with the collaboration of the following: USDOJ Bureau of Land Management and Nevada Conservancy have provided partial funding for the MCCWPP; USDA Forest Service, USDA Natural Conservation Services, USDOJ National Park Service, Federal Emergency Management Agency, Cal Fire, Mariposa County Fire Department, these agencies provided technical assistance; Mariposa County Sheriff's Office, Mariposa County Board of Supervisors, Mariposa County Department of Public Works, California Fire Safe Council, Mariposa County Fire Safe Council, Jerseydale Fire Safe Committee, Midpines Area Planning Advisory Committee as well as numerous individuals that are listed in the MCCWPP provided valuable input for the development of the plan. As a result of this collaboration the plan is based on what the local community needs and what services can be provided by the local, state and federal agencies.

1.2 How did the fire planning process influence CWPP implementation?

The MCCWPP incorporates parts of Cal Fire's Madera-Mariposa Unit Fire Management Plan, USDA Forest Service's National Fire Plan, Healthy Restoration Act/ Healthy Forest Initiative, Sierra National Forest Fire Management Plan, BLM, Folsom District, Mariposa Fire Management Unit Plan CA-180-12 and reflects an integration of projects to assist the agencies and the community objectives for a coherent use of available funds.

1.3 How has the collaborative process assisted in implementing the CWPP and building capacity for the community to reduce wildfire risk?

There has been an increase of agency input regarding the overall strategic direction for on the ground projects. This is resulting in a more coherent plan for the community on a large scale basis.

1.4 Have social service agencies (or groups that might assist low-income and vulnerable populations) partnered on CWPP efforts? If so, how?

Mariposa County Human Services, Mariposa County Sheriff's Office, and the Mariposa Senior Center have referred people to our office for assistance in creating a defensible space around their residences.

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1.5 Have partners involved in the planning process remained engaged in implementation? Have new partners become involved? How have the relationships established through the CWPP enhanced opportunities to address CWPP goals?

Of the partners originally involved with this planning effort; Sierra Nevada Conservancy (SNC), SWIFT, Cal Fire, and the BLM have input in regarding implementation. Working with Cal Fire, SWIFT, and BLM has resulted in the facilitation of fuel breaks protecting subdivisions. SNC and the USFS have been a major contributor to help us meeting the defensible space objectives.

1.6 Has CWPP collaboration made a difference or had a positive impact on local organizations, neighborhoods and/or actions?

The MCCWPP has enriched the participation of several communities, especially those that were threatened by large wild land fires in 2007.

2. Risk Assessment

2.1 How has population growth/change and development in your community affected wildfire risk?

N/A

2.2 If this is a multi-jurisdictional plan, what is the number and percent of communities at risk with a CWPP in the area? Are all communities at risk identified in the CWPP, and are there priority fuels projects identified in the area?

All eighteen at risk communities in Mariposa County are covered by either the MCCWPP or individual community CWPP's. This is 95 % of the communities in the County. The remaining 5% lies entirely within the administrative boundaries of Yosemite National Park.

2.3 Are there new or updated data sources that may change the risk assessment and influence fuels priorities?

Currently the data sources are being updated by the Sierra National Forest and we have met with the Forest Service to accommodate those changes and the impacts on local communities.

2.4 How is the risk assessment being used to make decisions about fuels priorities or the designation of the WUI boundary?

To date the assessment is driving the direction of strategic fuel treatments for communities as grant funding becomes available. Priorities are being dictated by the need for fire pre-suppression.

2.5 Has the community enacted a wildfire-related ordinance? If so, county, state, or local?

There has not been any new ordinances enacted.

2.6 What percent of communities at risk are also low-income or have special needs? Have these communities been engaged in reducing wildfire risk?

Approximately 80% of the communities fit into low income or special needs. Of these communities, about 50% are actively involved with projects to reduce the risk.

3. Reducing Hazardous Fuels

3.1 How many acres have been treated for hazardous fuels reduction on public and private land that were identified as high-priority projects in the CWPP? What percentage of total acres treated does this constitute?

467 Acres have been treated for projects that were listed for 2009. This 30% of the total acres that were identified.

3.2 How many fuels reduction projects have spanned ownership boundaries to include public and private land?

None

3.3 What is the number and percent of residents that have participated in projects and completed defensible space on their land?

Fuel breaks-28 land owners

Defensible Space-461 homes

3.4 Economic development resulting from fuels reduction.

Creation of a four person crew to do defensible space work. Provided employment for fifteen person crew for a month as well as employment for a mastication contractor for six weeks.

3.5 How many local jobs have resulted because of fuels reduction or restoration activities?

28 jobs, two permanent full time and 26 temporary.

3.6 How many hazardous fuels reduction projects have been implemented in connection with a forest restoration project?

None

4. Reducing Structural Ignitability

4.1 What kind of resource losses (homes, property, infra-structure, etc.) have occurred from wildfires in the year being evaluated?

No homes have been lost,

4.2 Are the current codes and regulations for wildfire hazard adequate? If not, are there efforts to change or update them? Are there action items in the CWPP to develop codes and recommendations?

California PRC's.

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4.3 Has the public knowledge and understanding about structural ignitability been increased by strategies adopted in the CWPP? Have homeowners been educated on how to reduce home ignitability, and are they replacing flammable building components with non-flammable materials?

Yes, homeowners are being educated on the importance of reducing structural ignitability during education/outreach events. Such events as The Mariposa County Fair, Safe At Home event, and a checklist of mitigations are outlined in the Mariposa County Fire Safe Council brochure and website.

4.4 How many Firewise Communities have been recognized? How many citizens, neighborhoods, or communities have taken action to increase the resilience of their structure to fire?

No communities have been recognized as a Firewise Community. Seven communities are taking steps to improve their survivability as a community.

4.5 How has the availability and capacity of local fire agencies to respond to wildland and structural fires improved or changed since the CWPP was developed?

There has not been a change.

5. Education and Outreach

5.1 What kind of public involvement has the CWPP fostered? Examples include public education, household visits, demonstration projects, etc.

There has been an interest generated in five communities in the MCCWPP and a grass roots effort is starting in the form of groups of homeowners that share private roads, taking steps to reduce the fuel loading along those routes. Along these routes during our Defensible Space projects Homeowners are contacted on an individual basis for a discussion of the importance of maintaining a defensible space.

5.2 Has a change in public awareness about wildfire resulted from the plan?

There has been an increase of participation by the public in events such as the Mariposa County Fair, Safe at Home, and team teaching in the elementary schools. In addition to this we have developed a website, press releases and a monthly article in the local newspaper focusing on wild land fire survivability.

5.3 What kinds of activities have citizens taken to reduce wildfire risk?

As mentioned in # 51 awareness in evacuation routes, mitigations for road easement encroachment of fuels. There are two groups of homeowners that have formed to address the larger issues of fire protection. Groups of homeowners have begun to reduce the fuel loadings on a community basis for mutual protection.

6. Emergency Management

6.1 Is the CWPP integrated within the county or municipal Emergency Operations Plan?

No

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6.2 Does the CWPP include an evacuation plan? If yes, has it been tested or implemented since the CWPP adoption?

Calfire and the Sheriff's office have developed an evacuation plan. The CWPP does not address evacuation other than identifying key routes and developing a strategy to maintain those routes.

6.3 Is the CWPP aligned with other hazard mitigation plans or efforts?

This CWPP is based on Calfire's MMU Pre-suppression Fire plan, BLM's Mariposa Fire suppression Plan, and The Sierra National Forest's Fuels Plan. A meeting with Calfire and the Sierra National Forest was held to consolidate strategic fuel reduction projects for the upcoming year.