



Mariposa County Fire Advisory Committee **Special** MEETING AGENDA

April 27, 2022

DATE: Wednesday APRIL 27, 2022
TIME: 11:00 AM
LOCATION: Mariposa County Fire Department Head Quarters
4802 Highway 140 (Executive Meeting Room)
Mariposa, CA 95338

PLEASE NOTE- This meeting will be at the Mariposa County Fire Department However, it is a hybrid meeting –
Public and MCFAC members may either call-in or attend in person.

Teleconference option available (see below for call in participation information)

Dial in- United States: +1 (786) 535-3211

Access Code: 135-062-653

Members of the public who wish to participate in the meeting are invited to do so by submitting written comments (instructions follow) or by joining the teleconference by:

MCFAC Advisory Committee written commenting processes are as follows

WRITTEN COMMENTS: Written comments may be submitted via U.S. Postal Service, email or may be dropped off at the Planning Department. In your written communication please note in the subject line: Which Advisory Committee you are commenting to and indicate which “PUBLIC COMMENT ITEM #” (insert the item number relevant to your comment) or “PUBLIC COMMENT NON-AGENDA ITEM” that you are commenting on.

1) Mail • Send written communication to:

Mariposa County Fire Department
PO Box 2039
Mariposa CA 95338

2) Email • Send an email to the mcfac@mariposacounty.org

3) Drop Off: • Written communication can be dropped off at:

No matter which of these formats you choose to use for written communication (Mail, Email or Drop Off) please know that in order to ensure distribution to the committee prior to their consideration of the agenda, and in order for your written comments to be placed into the record it must be received no later than 8:00 a.m. on the day of the meeting.

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Fire Department at 209-966-4330.



Mariposa County Fire Advisory Committee

Special

MEETING AGENDA

April 27, 2022

1. Roll Call

2. **Resolution:** A resolution of the Mariposa County Fire Advisory Committee proclaiming a local emergency, ratifying the proclamation of a state of emergency by the Governor of the State of California on March 4, 2020 regarding an outbreak of respiratory illness due to a novel coronavirus (a disease now known as Covid-19), and authorizing remote teleconference meetings of the legislative bodies of the Mariposa County Fire Advisory Committee for the period April 27, 2022 to May 18, 2022 pursuant to Brown Act provisions.

County Counsel advised us that even with the hybrid style meetings, in person and teleconference, the Committee still needs to adopt the Resolution at the beginning of each meeting in order to be compliant with the Brown Act. The agenda includes the required Resolution.

3. Public comments

4. Discussion and Possible Action:

- a. County-wide Community Wildfire Protection Plan (CWPP)
 - i. Presentation and action on the draft CWPP Community level Wildfire Prevention Plans Template; to finalize edits and present to the Board of Supervisors for communities to use for future Community Wildfire Protection Plan development (Harrison, Engfer Ward)
 - ii. Presentation and action on the draft CWPP amended Communities boundary map for outlining and consolidating community areas; to finalize and present to the Board of Supervisors for initiation of CWPP Plan amendment. (Ward, Engfer, Ogren)

[Final CWPP is available here: http://www.mariposacounty.org/2448/Community-Wildfire-Protection-Plan](http://www.mariposacounty.org/2448/Community-Wildfire-Protection-Plan)

5. Updates, Activity Reports and Future Items

- a. Members
- b. Any future agenda items

6. Adjourn

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in meeting, please contact the Fire Department at 209-966-4330

RESOLUTION NO. 2021-01

Mariposa County Fire Advisory Committee

A RESOLUTION OF THE MARIPOSA COUNTY FIRE ADVISORY COMMITTEE PROCLAIMING A LOCAL EMERGENCY, RATIFYING THE PROCLAMATION OF A STATE OF EMERGENCY BY THE GOVERNOR OF THE STATE OF CALIFORNIA ON MARCH 4, 2020 REGARDING AN OUTBREAK OF RESPIRATORY ILLNESS DUE TO A NOVEL CORONAVIRUS (A DISEASE NOW KNOWN AS COVID-19), AND AUTHORIZING REMOTE TELECONFERENCE MEETINGS OF THE LEGISLATIVE BODIES OF THE MARIPOSA COUNTY FIRE ADVISORY COMMITTEE FOR THE PERIOD APRIL 27, 2022 TO MAY 18, 2022 PURSUANT TO BROWN ACT PROVISIONS.

WHEREAS, the Mariposa County Fire Advisory Committee is committed to preserving and nurturing public access and participation in meetings of the Planning Advisory Committee; and

WHEREAS, all meetings of the Mariposa County Fire Advisory Committee's legislative bodies are open and public, as required by the Ralph M. Brown Act (Cal. Gov. Code 54950 – 54963), so that any member of the public may attend, participate, and watch the District's legislative bodies conduct their business; and

WHEREAS, the Brown Act, Government Code section 54953(e), makes provisions for remote teleconferencing participation in meetings by members of a legislative body, without compliance with the requirements of Government Code section 54953(b)(3), subject to the existence of certain conditions; and

WHEREAS, a required condition is that a state of emergency is declared by the Governor pursuant to Government Code section 8625, proclaiming the existence of conditions of disaster or of extreme peril to the safety of persons and property within the state caused by conditions as described in Government Code section 8558; and

WHEREAS, a proclamation is made when there is an actual incident, threat of disaster, or extreme peril to the safety of persons and property within the jurisdictions that are within the District's boundaries, caused by natural, technological, or human-caused disasters; and

WHEREAS, it is further required that state or local officials have imposed or recommended measures to promote social distancing, or, the legislative body meeting in person would present imminent risks to the health and safety of attendees; and

WHEREAS, such conditions now exist, specifically, COVID-19 has spread and is continuing to spread at rates that threaten the capacity of the health care system and the health of the community, and

WHEREAS, in-person meetings that include members Mariposa County Fire Advisory Committee as well as members of the public would expose attendees to transmission of COVID-19 in ways that present imminent risks to health and safety; and

WHEREAS, the Mariposa County Fire Advisory Committee does hereby find that community transmission of COVID-19 has caused, and will continue to cause, conditions of peril to the safety of persons within the community that are likely to be beyond the control of services, personnel, equipment, and

facilities of the Fire Advisory Committee, and desires to proclaim a local emergency and ratify the proclamation of state of emergency by the Governor of the State of California; and

WHEREAS, as a consequence of the local emergency, the Mariposa County Fire Advisory Committee does hereby find that the Mariposa County Fire Advisory Committee shall conduct their meetings without compliance with paragraph (3) of subdivision (b) of Government Code section 54953, as authorized by subdivision (e) of section 54953, and that such legislative bodies shall comply with the requirements to provide the public with access to the meetings as prescribed in paragraph (2) of subdivision (e) of section 54953; and

WHEREAS, efforts are being made to ensure public access to the Mariposa County Fire Advisory Committee meetings, including providing public call-in numbers which are part of the meeting packet and public noticing materials.

NOW, THEREFORE, THE MARIPOSA COUNTY FIRE ADVISORY COMMITTEE DOES HEREBY RESOLVE AS FOLLOWS:

Section 1. Recitals. The Recitals set forth above are true and correct and are incorporated into this Resolution by this reference.

Section 2. Proclamation of Local Emergency. The Committee hereby proclaims that a local emergency now exists throughout the community, and that meeting in-person as a committee and with members of the public in attendance would present an imminent risk to the transmission of COVID-19.

Section 3. Ratification of Governor's Proclamation of a State of Emergency. The Committee hereby ratifies the Governor of the State of California's Proclamation of State of Emergency, effective as of its issuance date of March 4, 2020.

Section 4. Remote Teleconference Meetings. The County of Mariposa and legislative bodies of the Mariposa County Fire Advisory Committee are hereby authorized and directed to take all actions necessary to carry out the intent and purpose of this Resolution including, conducting open and public meetings in accordance with Government Code section 54953(e) and other applicable provisions of the Brown Act.

Section 5. Effective Date of Resolution. This Resolution shall take effect immediately upon its adoption and shall be effective until the earlier of (i) MAY 18, 2022, or such time the Mariposa County Fire Advisory Committee adopts a subsequent resolution in accordance with Government Code section 54953(e)(3) to extend the time during which the Mariposa County Fire Advisory Committee may continue to teleconference without compliance with paragraph (3) of subdivision (b) of section 54953.

PASSED AND ADOPTED by the Mariposa County Fire Planning Advisory Committee this 27th day of APRIL 2022, by the following vote: —

AYES:

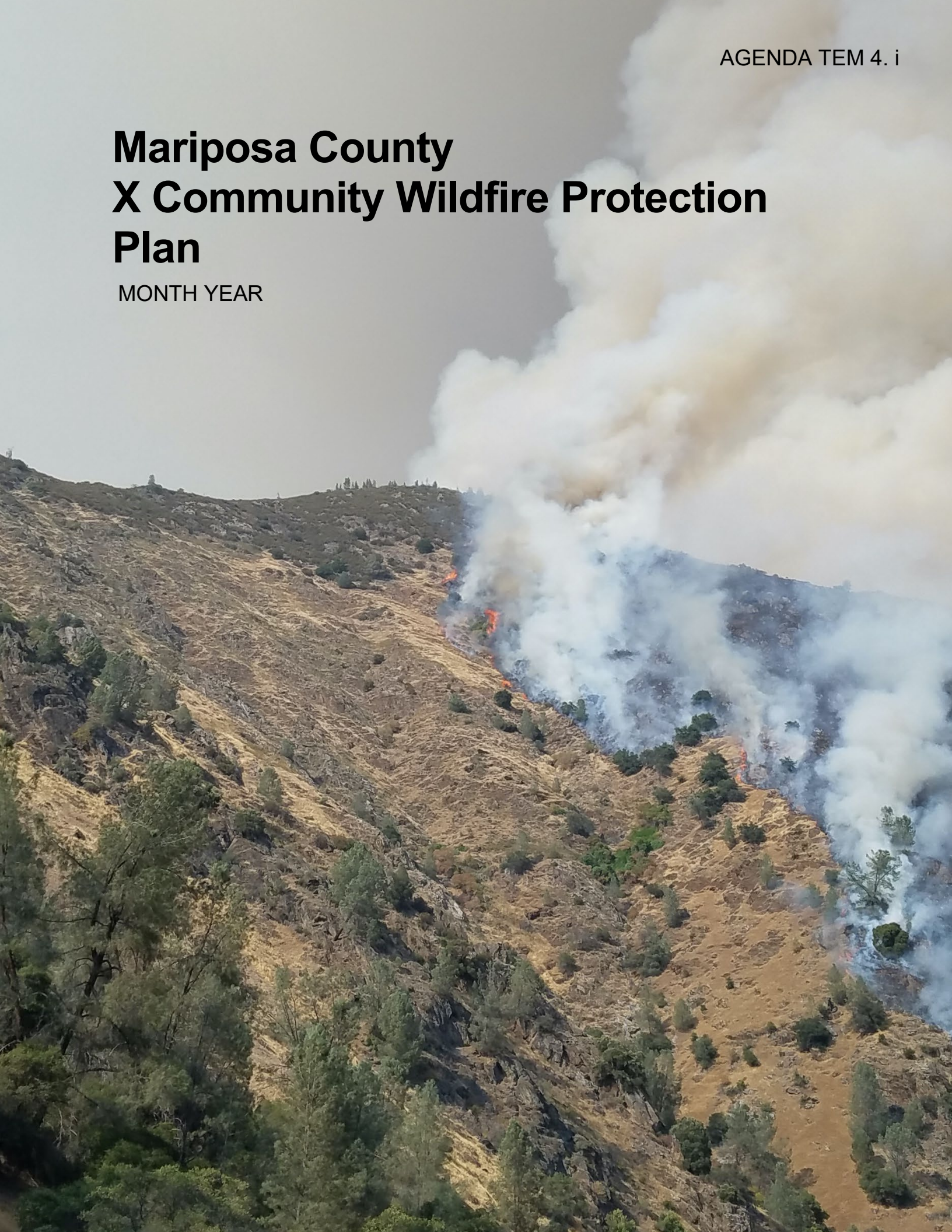
NOES:

ABSENT:

ABSTAIN:

Mariposa County X Community Wildfire Protection Plan

MONTH YEAR



Signature Page

Mike van Loben Sels

Unit Chief

CAL FIRE, Madera-Mariposa-Merced Unit

Date

[Name]

Rosemarie Smallcombe

Chairperson

Mariposa County Board of Supervisors

Date

[Name]

Steven Ward

Chairperson

Mariposa County Fire Advisory Committee

Mariposa County Fire Department

Date



Acknowledgments

The following **organizations and agencies provided invaluable time, input, and feedback** to ensure the contents of the Mariposa County Community Wildfire Protection Plan update, and its associated outreach activities, were accurate and met the needs of the planning process:

- Mariposa County Fire Safe Council – Barbara Cone, Executive Director
- Mariposa County Planning Department – Steve Engfer, Senior Planner
- Mariposa County Fire Department – Steve Ward, Battalion Chief
- Mariposa County Resource Conservation District – Melinda Barrett, Executive Director
- Mariposa County Fire Advisory Committee
- Mariposa County GIS – Ben Ogren
- CAL FIRE MMU GIS – Michael Keyser *or TBD*
- *Other organizations and agencies per each community*

Funding for this project was provided by the California Department of Forestry and Fire Protection as part of the California Climate Investments Program. Funding was also provided by Mariposa County, California. *TBD per each community*

This plan update was led by a consulting team, consisting of Wildfire Planning International LLC, Wildland Professional Solutions, Inc., and Anchor Point Group LLC. Internal review was provided by Atlas Planning Solutions. *TBD per each community*

Photo credits are listed below:

Cover, Executive Summary – Chief Bernie Quinn (CAL FIRE, retired)

Introduction, Local Environment, Cohesive Strategy Approach, Action Plan and Implementation, Appendices – Molly Mowery (Wildfire Planning International)

All other image credits are listed next to figures.

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Acronyms

CAL FIRE	California Department of Forestry and Fire Protection
CEQA	California Environmental Quality Act
CPAW	Community Planning Assistance for Wildfire
CWPP	Community Wildfire Protection Plan
CCR	California Code of Regulations
FEMA	Federal Emergency Management Agency
FMAG	Fire Management Assistance Grant
FRA	Federal Responsibility Area
FRAP	Fire and Resource Assessment Program
GNA	Good Neighbor Authority
HMGP	Hazard Mitigation Grant Program
HVRA	Highly Valued Resources and Assets
IBHS	Insurance Institute for Business and Home Safety
IRWM	Integrated Regional Water Management
LHMP	Local Hazard Mitigation Plan
LRA	Local Responsibility Area
MCFAC	Mariposa County Fire Advisory Committee
MMU	Madera-Mariposa-Merced Unit
NFPA	National Fire Protection Association
NPS	National Park Service
PDM	Pre-Disaster Mitigation
PRC	Public Resources Code
SIZ	Structure Ignition Zone
SRA	State Responsibility Area
USDA	United States Department of Agriculture
VHFHSZ	Very High Fire Hazard Severity Zone
WUI	Wildland-Urban Interface



EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

The X Community Wildfire Protection Plan (XCWPP) functions as this communities' principal document to prepare for wildfires, minimize negative impacts, and increase desired ecological outcomes. It is intended to serve as this communities' primary reference for strategic wildfire planning and will guide future wildfire prevention and mitigation activities.

Important takeaways that affect wildfire planning activities in X Community include:

- The historical fire regime has been significantly altered by human and forest health impacts, such as drought-induced insect outbreaks and drought-induced tree mortality. Climate change projections that include increasing temperatures, declining snowpack, and more frequent drought conditions will exacerbate imbalances in the natural fire environment. Without significant intervention and management, these factors will contribute to more aggressive and difficult to control wildfires that adversely affect forests, watersheds, communities, the local economy, and more.
- The Mariposa County Wildfire Risk Assessment identified and assessed the Wildland Urban Interface Community Groups in the County where concentrations of development are at risk of negative wildfire impacts. The Wildfire Risk Assessment further defines the specific factors that influence the risk rating for this community which will inform the selected wildfire planning activities that will occur.
- Demographic and economic factors, such as *list 2-3 major factors this community*, shape how the X community must consider outreach and mitigation activities in terms of messaging, timing, and resources.
- Critical infrastructure and facilities located in this community are vulnerable to wildfire and may also be affected by Pacific Gas & Electric (PG&E) Public Safety Power Shutoffs (PSPS). These factors will shape preparedness efforts for mass evacuation planning and mitigation priorities, such as vegetation management along critical evacuation corridors.
- *State how much of the community is state/federally managed* is managed by various state or federal land management agencies. This broadens the scope of partnerships and working agreements required to plan and implement wildfire response and mitigation measures and reinforces the need for collaborative planning.

Parts 1-2 analyze these and other issues in more detail. a Parts 3-4 provide strategies to address resilient landscapes, fire-adapted communities, safe and effective wildfire response, and a prioritized set of actions to meet the goals of this Community CWPP.

High priority actions include:

- maintaining the community's new wildfire risk assessment to continue accurately informing strategic decision-making and risk reduction activities.
- initiating a streamlined development review process for fire mitigation to coordinate across the county's fire and planning departments.
- implementing a robust parcel-level assessment program to expand mitigation activities and reduce structural ignitability.
- promoting and educating the community on prescribed fire as a tool for landscape resilience and forest health.
- revisiting existing fuel treatments and updating as required to enhance the management of hazardous fuels and increase community protection.

- providing information for residents on PSPS and other timely safety notices.
- addressing unique risk considerations.

Key to this plan's success will be its implementation and future updates. An implementation strategy is provided to track progress and ensure updates occur on a regular schedule. Finally, stakeholder collaboration will occur at the forefront of planning efforts to ensure ongoing support and awareness across the community.



INTRODUCTION

INTRODUCTION

Insert Community introduction, including name and location

The X Community CWPP is organized into the following parts:

Part 1. Local Environment summarizes information about X Community's geography, demographics, economy, land use, and the environment as it relates to wildfire planning. These summaries help inform management strategies and actions in Parts 2, 3, and 4 by identifying trends, characteristics, or other factors for consideration.

Part 2. Risk Assessment identifies the Community's wildfire hazard and risk and defines the wildland-urban interface. This section details the comprehensive assessment approach of addressing all three components of the wildfire risk triangle (likelihood, intensity, and susceptibility) to provide a scientifically based tool for supporting wildfire mitigation planning and implementation decision making.

Part 3. Cohesive Strategy Approach focuses on appropriate management strategies to address the values at risk discussed in Parts 1 and 2. This section is organized into three main topics: resilient landscapes, fire-adapted communities, and safe and effective wildfire response. Each topic provides management strategies to help the community strategically prepare, respond, mitigate, or recover from wildfires.

Part 4. Action Plan and Implementation identifies a prioritized set of actions to meet the goals of the CWPP and includes an implementation strategy to track progress and ensure updates occur on a regular schedule.

Appendices provide additional content and information to support the strategic information presented in the CWPP, including definitions, risk assessment methodology, outreach activities, and community-specific analyses and recommendations.

Community X CWPP Goals



PART 1: LOCAL ENVIRONMENT

PART 1: UNDERSTANDING THE LOCAL ENVIRONMENT

Part 1 provides summary information about the Community's geography, demographics, economy, land use, and the environment as it relates to wildfire planning. These summaries help inform management strategies and actions in Parts 2, 3, and 4 by identifying trends, characteristics, or other factors for consideration. More detailed information about each topic below is also available in other plans, as identified in the Plan Linkages subsection, which provides a list of plans and their relationship to the CWPP.

Area Description

Mariposa County is located in central California, adjacent to the San Joaquin Valley and within the central Sierra Nevada. The County's jurisdictional boundaries encompass a total area of 1,463 square miles (931,200 acres), the majority of which is land (1,449 square miles) and 14 square miles is water.¹ Add description of community boundary, size, and location in the county, and a map.

Insert description of community area

Demographic Information

The 2019 population of Mariposa County is 17,203.² Mariposa County's population has experienced a decline of nearly 1,000 since 2010 and ranks as California's sixth least-populated county with residents dispersed throughout rural areas.³ Table 1 summarizes key demographic characteristics of this community. *Discuss community population and residential areas.*

TABLE 1: KEY DEMOGRAPHICS	
Category	X Community
Total Population	
Population Density (ppl/ sq. mile) – excluding public lands	
Median Age (years)	
Housing Units	
Poverty Rate	%
Unemployment Rate	%
<i>Data Sources: U.S. Census Bureau 2019 Quick Facts; Mariposa County Planning Department</i>	

¹ U.S. Census Bureau. 2010.

² United States Census Bureau. Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2018. U.S. Census Bureau, Population Division. Web. May 2019. <http://www.census.gov/>.

³ Ibid.

Land Management and Ownership

Discuss ownership and management of land, i.e. USFS, Park, BLM, private, , LCA, etc.

KEY POINTS: *Mariposa County has a higher than state average poverty rate and aging population, which may have implications for both the ability to pay for some wildfire mitigation measures, such as exterior home improvements, or the ability to implement property mitigation measures that require physical labor, such as tree removal.*

Land Use and Development

Discuss commercial and residential development characteristics such as density, zoned uses, and future projects.

KEY POINTS: *More than half of the total land area in Mariposa County is managed by various state or federal land management agencies. This broadens the scope of partnerships and working agreements required to plan and implement wildfire response and mitigation measures and reinforces the need for collaborative planning.*

KEY POINTS: *Mariposa County experiences an influx of tourists during the summer, typically coinciding with wildfires. This makes the local businesses more vulnerable to wildfire events and impacts (e.g., smoke, evacuations), and also increases the potential causes for wildfires. This may shape local messaging and education campaigns.*

KEY POINTS: *Development is limited by land agreements and geographic constraints. Future development will be directed toward existing service areas. State laws allowing additional accessory dwelling units on residential property may expand the number of structures at risk to wildfire in the County.*

Critical Infrastructure

Infrastructure

Identify community critical infrastructure including roads, airports, facilities, utilities, communication towers, hospitals, fire and sheriff stations and the critical facilities listed in the county LHMP

KEY POINTS: Numerous County-owned and private critical facilities across Mariposa County are vulnerable to wildfire. Planning for mass evacuations should take into account the County's network of single-access private roads, reliance on cell phone coverage, heavy tourist populations, and public safety power shutoffs. Some wildfire ignition prevention actions, such as public safety power shut offs can lead to secondary public safety hazards.

Historic and Cultural Resources

Community identified historic and cultural resources and areas

KEY POINTS: Unique considerations for historic buildings, structures, sites, and other resources of historic and cultural significance should factor into wildfire response planning and mitigation measures to support the preservation of Mariposa County's history.

Natural Environment and Ecosystem

X Community Watershed(s)

Community watershed information

Threatened and Endangered Species

Any relevant information to add here for the community; will likely be blank/omitted for most communities

KEY POINTS: It is important to assess and mitigate the potential impacts that mitigation strategies may have on threatened and endangered species, or non-native species

Fire Environment

History of fires in the community

Insert map of Community fire history

TABLE 2. NOTABLE RECENT WILDFIRES AND IMPACTS in Community X^{4,5,6}

Date	Fire Name	Size (acres)	Start Location	Community Impacts

⁷ Thompson, M.P., T. Zimmerman, D. Mindar, and M. Taber. 2016. Risk Terminology Primer: Basic Principles and a Glossary for the Wildland Fire Management Community. Fort Collins, CO: USDA Forest Service Rocky Mountain Research Station. Gen. Tech. Rep. RMRS-GTR-349. <https://www.fs.usda.gov/treesearch/pubs/50912>

⁷ Thompson, M.P., T. Zimmerman, D. Mindar, and M. Taber. 2016. Risk Terminology Primer: Basic Principles and a Glossary for the Wildland Fire Management Community. Fort Collins, CO: USDA Forest Service Rocky Mountain Research Station. Gen. Tech. Rep. RMRS-GTR-349. <https://www.fs.usda.gov/treesearch/pubs/50912>

⁷ Thompson, M.P., T. Zimmerman, D. Mindar, and M. Taber. 2016. Risk Terminology Primer: Basic Principles and a Glossary for the Wildland Fire Management Community. Fort Collins, CO: USDA Forest Service Rocky Mountain Research Station. Gen. Tech. Rep. RMRS-GTR-349. <https://www.fs.usda.gov/treesearch/pubs/50912>

Insert map of Community fire history

Figure 1. X Community Wildfire History Map 2008-2018

Assessing the factors that contribute to wildfires that can potentially threaten homes and communities is an important step in developing a CWPP. Those factors include the topography, vegetation (often referred to as fuels in a fire context), general climate, and specific fire weather patterns. Broadly, these physical characteristics combine to comprise the fire environment. The combination of this physical fire environment with ignition sources (both lightning and human) is responsible for a long history of wildfire activity in Mariposa County.

Topography

KEY POINTS: *Higher intensity wildfires can result in secondary negative influences on other natural hazards, such as drought, flooding and slope failures.*

Discuss community topography

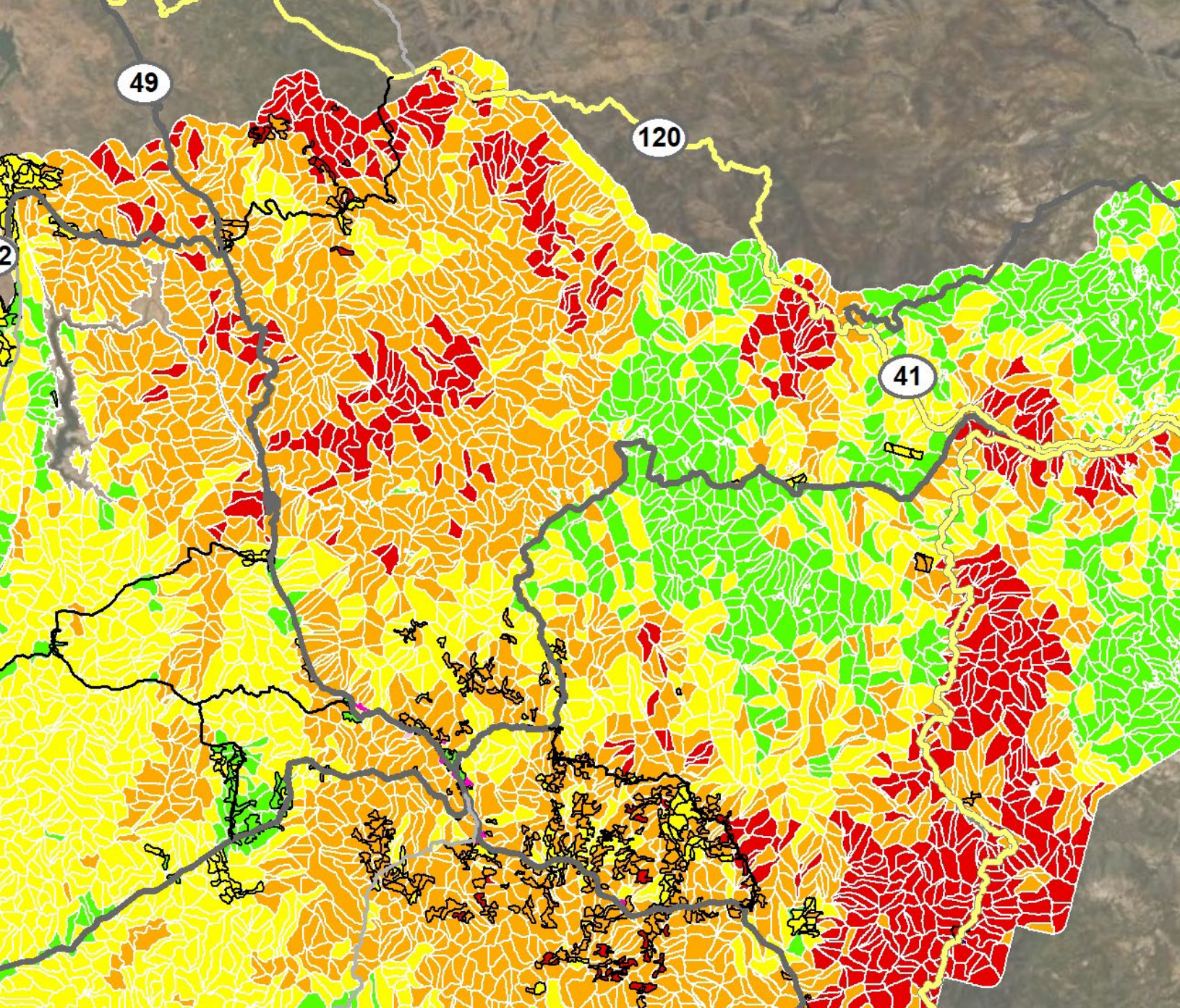
Insert LiDAR map of community

Vegetation (Fuels)

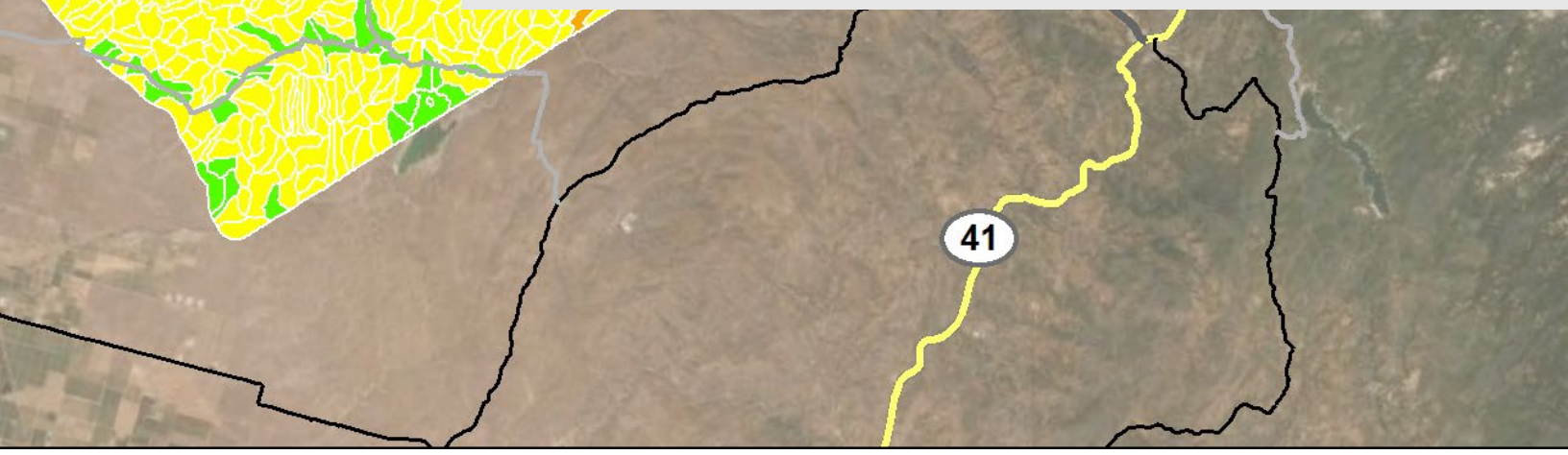
Forest health of the community

Insert community tree mortality map

KEY POINTS: *Extensive and rapidly worsening forest health conditions are resulting in increasing aggressive and larger wildfires. These fires, along with climate change, are increasing the vulnerability of forests to negative forest health impacts.*



PART 2: RISK ASSESSMENT



PART 2: RISK ASSESSMENT

Part 2 provides an assessment of the wildfire risk in the X Community using computer simulation modeling of hypothetical wildfires to display a robust and defensible means of mapping wildfire likelihood and potential intensity. This spatial context of wildfire risk provides a decision support tool that can be used to determine where different wildfire management and mitigation strategies will be most effective. The core of the wildfire risk assessment uses the primary inputs of fuel, weather, and topography to determine modeled potential fire behavior. Further inputs regarding the characteristics that affect the vulnerability of human development are evaluated to provide a spatial delineation of wildfire risk. Detailed information on the wildfire risk assessment methodology can be found in Appendix C. In addition, two key concepts incorporated into the risk assessment are the spatial definition of the Wildland-Urban Interface and the components of the Wildfire Risk Triangle.

Understanding the Wildfire Risk Triangle

Wildfire risk is a measure of both the probability and consequences of uncertain future wildfire events.⁷ Wildfire risk within the X Community depends on the chances of a fire occurring there, the likely intensity of the fire, and the vulnerability of something of value at that location. Scientists describe these three components of risk using a triangle where the sides are likelihood, intensity, and susceptibility. These three factors, and the resulting wildfire risk, vary across the X Community. The wildfire risk triangle is further discussed in the Mariposa County CWPP.

Parcel-Level (Structure Ignition Zone) Susceptibility Assessments

Individual parcel-level assessments complete the risk triangle by providing the susceptibility component. This focuses on assessing the susceptibility characteristics of each structure and the immediate surroundings (100 feet), otherwise defined as the Structure Ignition Zone (SIZ). In order to address the susceptibility component of the risk triangle, comprehensive parcel-level assessments that include the entire SIZ should be conducted for both existing and new development.

Updated Risk Assessment Approach

Mariposa County's current risk assessment approach does not address the susceptibility component to complete the risk triangle on its own and does not have a mechanism for updating by the County to reflect local conditions in a timely manner. The policies regarding defensible space and SIZ inspections on existing lots vary depending on if the land is designated a Local Responsibility Area (LRA), State Responsibility Area (SRA), or Federal Responsibility Area (FRA).

KEY POINTS: *A comprehensive risk assessment that addresses all three components of the wildfire risk triangle provides a scientifically defensible decision support tool for identifying and prioritizing wildfire mitigation strategies.*

⁷ Thompson, M.P., T. Zimmerman, D. Mindar, and M. Taber. 2016. Risk Terminology Primer: Basic Principles and a Glossary for the Wildland Fire Management Community. Fort Collins, CO: USDA Forest Service Rocky Mountain Research Station. Gen. Tech. Rep. RMRS-GTR-349. <https://www.fs.usda.gov/treearch/pubs/50912>

Insert No-HARM map of community

KEY POINTS: To provide an effective risk assessment decision support tool for Mariposa County, the updated wildfire risk assessment should include:

1. An updated assessment of the likelihood and intensity components of the wildfire risk triangle.
2. Spatial identification of the WUI and integration into the updated assessment.
3. Integration of a comprehensive SIZ assessment program for a comprehensive risk assessment.
4. The ability to access and update information in a timely manner.

Assessment Methodology

This section provides a summary of the assessment methodology that is explained in more detail in Appendix C and in the Mariposa County CWPP.

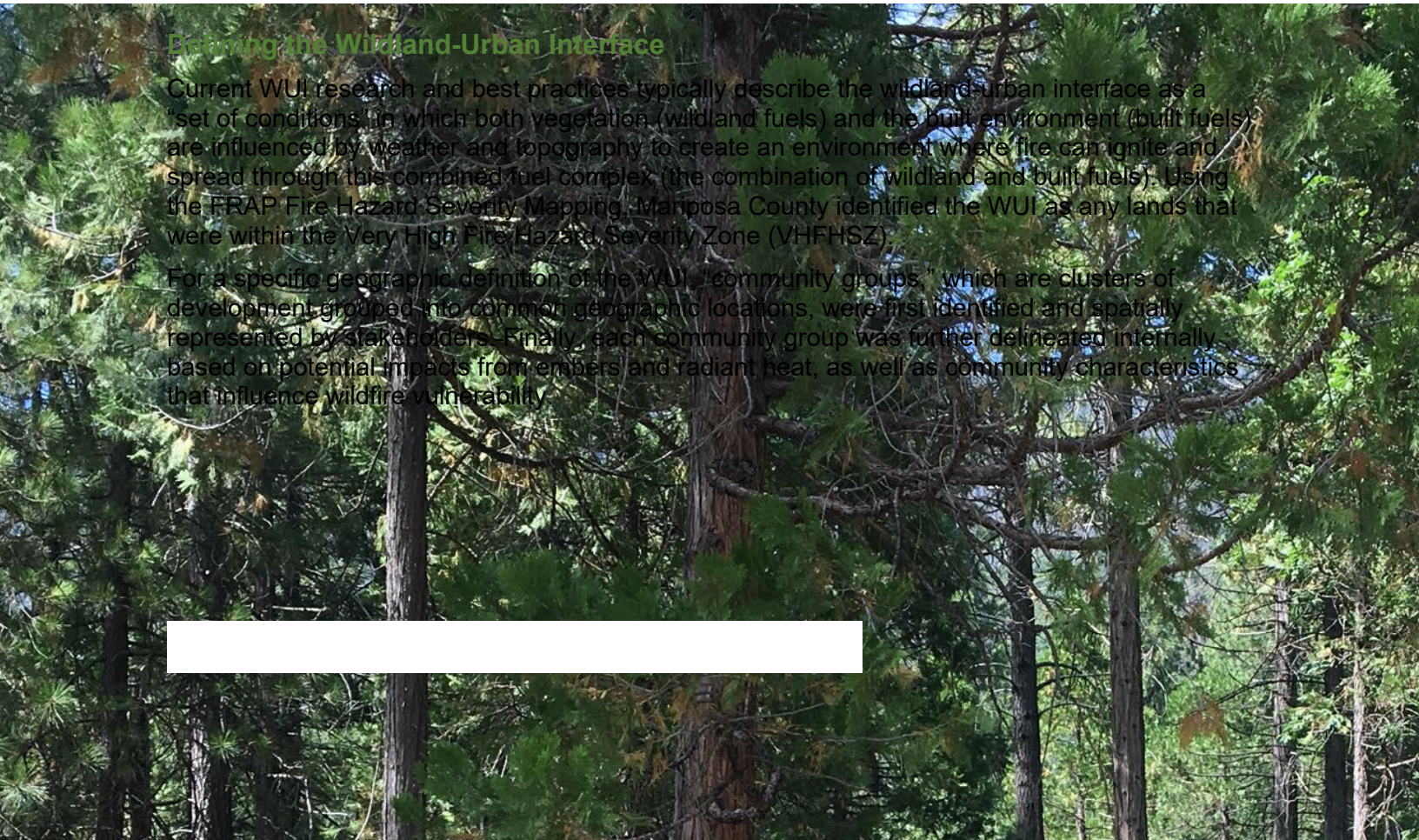
Frequency (Probability). No-HARM uses a combination of Burn Probability Modeling, fire behavior calculations that utilize pre-conditioning for fuel moisture, and anthropomorphic risk elements to provide an accurate definition of frequency.

Severity (Intensity). The No-HARM methodology utilizes calculations including 40 different fuel models, Digital Elevation Models for slope, aspect and topography, and local weather, including fuel moistures.

Defining the Wildland-Urban Interface

Current WUI research and best practices typically describe the wildland-urban interface as a “set of conditions” in which both vegetation (wildland fuels) and the built environment (built fuels) are influenced by weather and topography to create an environment where fire can ignite and spread through this combined fuel complex (the combination of wildland and built fuels). Using the FRAP Fire Hazard Severity Mapping, Mariposa County identified the WUI as any lands that were within the Very High Fire Hazard Severity Zone (VHFHSZ).

For a specific geographic definition of the WUI, “community groups,” which are clusters of development grouped into common geographic locations, were first identified and spatially represented by stakeholders. Finally, each community group was further delineated internally based on potential impacts from embers and radiant heat, as well as community characteristics that influence wildfire vulnerability.



PART 3: TAKING A COHESIVE STRATEGY APPROACH

Resilient Landscapes

Through fire suppression, human development, and the changing climate, the terrestrial ecosystem and the role of wildland fire have been significantly altered over time. Restoring landscapes to a resilient state and promoting fire's natural role in ecosystems where appropriate must be an integral part of increasing the County's resilience to wildfire and becoming fire-adapted. To achieve this, an ecosystem-based approach to fire management that incorporates prescribed fire in overall land management planning objectives is important in achieving the desired fire effects and mitigating undesirable fire effects on the ecosystem and the public. Finally, post-wildfire recovery is an important component in resiliency to ensure that any negative fire effects that impact the ecosystem and the community can be addressed to minimize their impact. With the diverse ownership of land, restorative land management will require a collaborative effort among multiple stakeholders.

TABLE 4. FUEL WUI COMMUNITY GROUP FUEL TREATMENT PRIORITIES

Treatment Priority	No-HARM Fire Behavior, Fuels and Burn Probability Outcomes
1	High Crown Fire Potential
2.	Moderate Crown Fire Potential
3.	Vegetation Cover > 50%
4.	Vegetation Cover < 50%

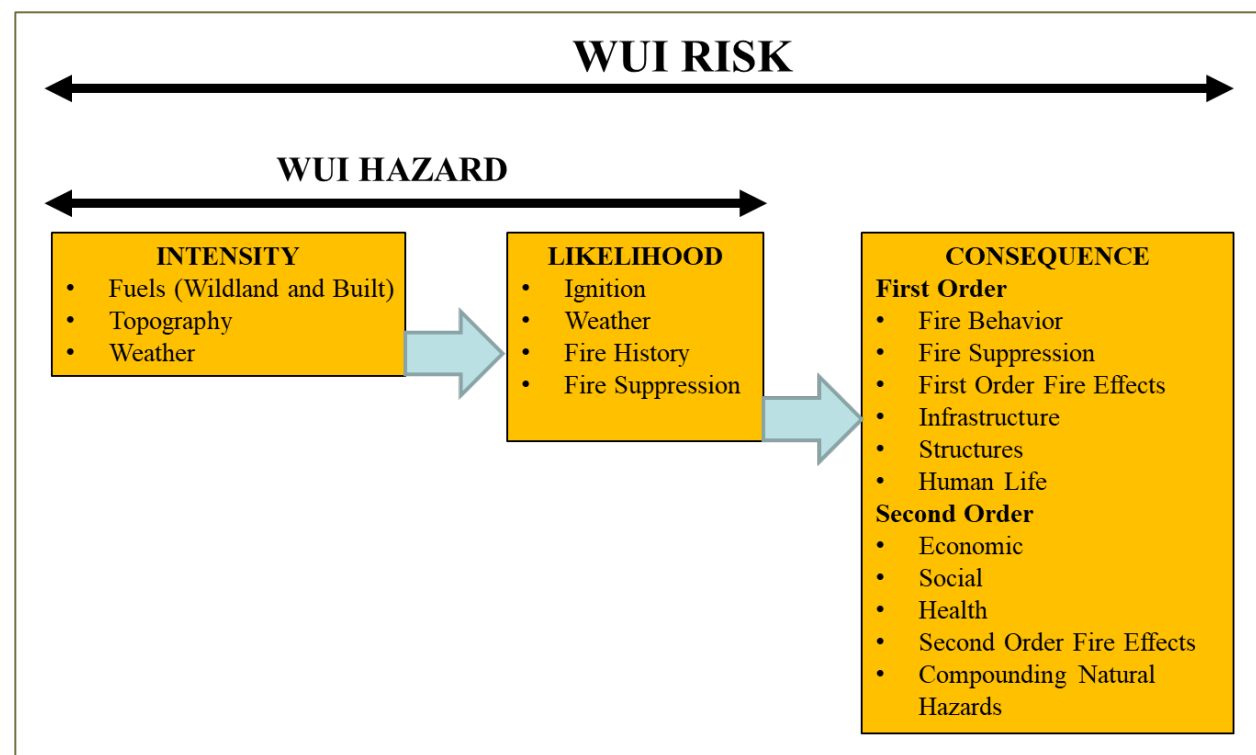


TABLE 5: RESILIENT LANDSCAPES STRATEGY

Strategy	Purpose	Implementation Considerations
Review and identify priority landscapes and potential treatment options	The priorities that are identified in each of the community CWPP's should be reviewed for relevance, and new potential priorities considered based on the updated risk assessment information. Appropriate treatments (e.g., commercial thinning, hand thinning, mastication, prescribed fire) should also be determined and undertaken.	• Buy-in from the public and community groups is important • Environmental and ecological impacts must be considered • Should involve pre- and post-treatment monitoring • Will require expert resources • Dependent upon funding
Advance prescribed fire activities	Prescribed fire use should be advanced in areas where it is determined to be the appropriate treatment for achieving ecological restoration or hazard reduction goals and objectives.	• Buy-in from the public and community groups is important • Air quality regulations and smoke sensitivities • Environmental and ecological impacts must be considered • Should involve pre- and post-treatment monitoring • Will require expert resources • Timing is dependent upon available burn window • Dependent upon funding
Implement post-fire recovery activities	The impacts of wildfire on ecosystems will vary from positive effects to negative effects. Objectives in a post-fire recovery plan should be developed to address the anticipated negative effects of wildfire on ecosystem values	• Dependent upon post-fire disaster funding • Plans and resources should be in place ahead of time • Environmental and ecological impacts must be considered • Plans must remain flexible • Should involve short-term and long-term monitoring

Fire-Adapted Communities

Fire-adapted communities take actions to prepare for, adapt to, and recover from wildfire in ways that minimize social, economic, and environmental disruptions. Actions can occur at the different scales, typically categorized at the property/lot scale, the neighborhood/subdivision scale, and community-wide (e.g., across the entire County). The more actions a community takes, the more fire-adapted it becomes.

Property Scale

Fire-adaptation at the property scale focuses on the Structure Ignition Zone (SIZ)—an area around a specific structure and associated accessory structures, including all vegetation that contains potential ignition sources and fuels. Science and research, including from the U.S. Forest Service, CAL FIRE, Insurance Institute for Business and Home Safety (IBHS), and National Institute of Standards and Technology, has shown that reducing structural ignitability is greatly influenced by factors within the SIZ.

Structures

Building materials and construction standards, including roofing materials, vents, siding, gutters, and windows, should require ignition-resistant materials and construction techniques to reduce exposure to radiant heat, embers, and direct flame contact. Building standards may also apply to accessory dwelling units, sheds, or other structures that pose a vulnerability to primary structures. Decks and attachments, such as fences, should also be required to use ignition-resistant or noncombustible materials to reduce the likelihood of ignition. Structural requirements are tied to the issuance of building permits.

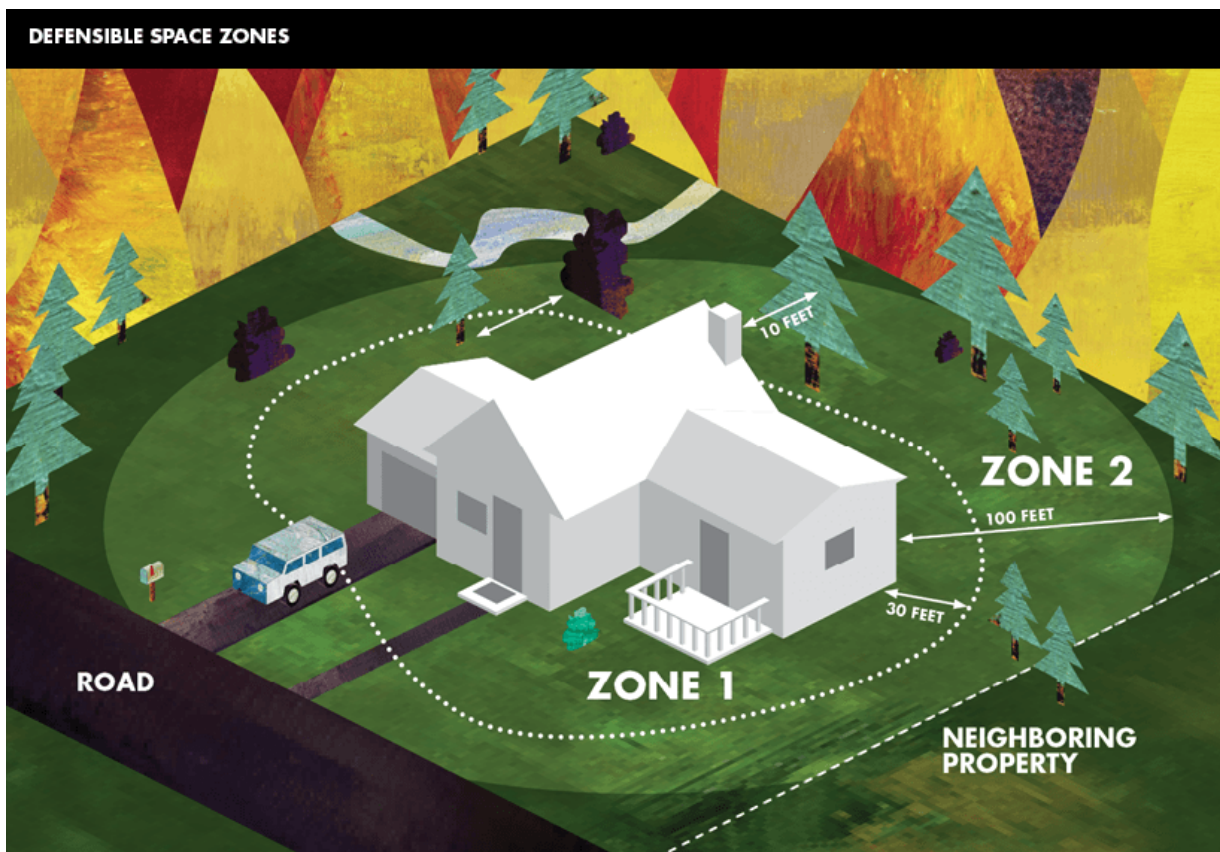


Figure 2. CAL FIRE delineates two defensible space zones – Zone 1 (extends 30 feet from all buildings, decks, structures) and Zone 2 (extends 100 feet from all buildings, decks, and structures). Note that these zones are extended when on slopes. Image credit: CAL FIRE (www.readyforwildfire.org/prepare-for-wildfire/get-ready/defensible-space/)

Surroundings

Mitigating the immediate surroundings around a home or other structure, also known as defensible space, is also essential to improving a structure's chance of survival during a wildfire. CAL FIRE delineates this area into two zones: Zone 1 extends 30 feet from buildings, structures, decks; Zone 2, which extends 100 feet from buildings, structures, decks (Figure 9). Note that zone distances need to be extended further when structures are located on slopes. When mitigated properly, this area creates an environment that does not sustain ignition or spread wildfire to the home, either from direct flame contact or radiant heat. This area is also important for the protection of the firefighters defending a home.

Activities at the property scale are typically implemented through a combination of mandatory and voluntary efforts, including adopting and enforcing local building, zoning, and/or WUI codes to address structure and landscaping requirements, compliance with CAL FIRE home inspections and other local SIZ assessment programs, development of plans and policies that support fire-adapted communities, and participation in home retrofit programs and community recognition programs.

Neighborhood / Subdivision Scale

Fire-adaptation at this scale focuses on clusters of homes and associated infrastructure, including transportation routes, parks, waterways, and other features. These can be formally established through Homeowner associations (HOA) or Property owner associations (POA). At this scale, communities can improve resident and first responder safety and take strategies to reduce property loss or damage. Interventions at the subdivision scale can include:

- requiring buffering or screening measures that reduce installation or plantings of hazardous fuels
- ensuring specific criteria are met for developing and maintaining water supply, emergency routes, roads, and bridges to ensure safe public evacuation and first responder access
- creating development setbacks from features such as forested areas, steep slopes, or other elements that may exhibit extreme fire behavior
- implementing vegetation management plans in neighborhoods to reduce hazards and recommending tree and plant species

Activities at this scale are typically implemented through a combination of voluntary efforts, including adopting access, water supply, landscaping, and other safety recommendations in the subdivision, development of plans and policies that support neighborhood risk reduction (e.g., creation of neighborhood CWPPs), and participation in community recognition programs and community evacuation planning efforts.

Response and Suppression Capabilities

Discuss the presence of fire-related infrastructure and suppression resources

Add a map of the community with the identified fire infrastructure and suppression resources

TABLE 7. MADERA-MARIPOSA-MERCED UNIT OPERATIONAL FACILITIES AND EQUIPMENT in the X Community

Facilities

TABLE 7. MADERA-MARIPOSA-MERCED UNIT OPERATIONAL FACILITIES AND EQUIPMENT in the X Community	
Unit Operational Equipment	

Community Limitations

identify the specific community limitations present for each plan



PART 4: ACTION PLAN & IMPLEMENTATION

PART 4: ACTION PLAN AND IMPLEMENTATION

Part 4 provides the action plan and an implementation strategy to track progress and ensure the X Community CWPP updates occur regularly. This section of the plan is intended to be referenced and updated frequently.

Action Plan

Table 9 provides a list of actions that address wildfire concerns in X Community related to resilient landscapes, fire-adapted communities, and safe and effective response. Each action has corresponding information to identify those agencies and partners responsible for implementation, a suggested timeframe for the action to occur, resources required to successfully accomplish the action, the priority (high, medium, low), and the status for implementation (not started, in progress, or complete).

TABLE 9. X Community CWPP ACTION PLAN								
Action	Proposed Leads	Timeframe	Resources and Notes	Priority	Status	Landscapes	Communities	Response

Tracking and Monitoring

Insert plan on how the county will track the implementation tasks and community progress such as the specific entities monitoring the progress, e.g. the fire departments and CalFire



APPENDICES

APPENDICES

TABLE 10. LIST OF APPENDICES	
Name	Description
A. Key Terms Defined	Provides a glossary of key terms used in the CWPP
B. Public Engagement and Collaboration	Summarizes public engagement that occurred during the development of this community plan, including virtual public workshops
C. Risk Assessment Methodology	References the methodology used to develop the wildfire risk assessment
D. Local WUI Communities	Creates a placeholder for future projects specific to each community (e.g., fuel reduction projects)

APPENDIX A. KEY TERMS DEFINED

Defensible Space: The selection, location, grouping, and maintenance of vegetation on the property in such a manner that the opportunity for fire to burn directly to a structure is minimized.

Desirable Ecological Conditions: the condition of an ecosystem that land managers have determined to be the most appropriate based on science, best practices, and land management objectives

Ecosystem: a biological community of interacting organisms and their physical environment

Exposure: The contact of an entity, asset, resource, system, or geographic area with a potential hazard. Note: In incident response, fire responder exposure can be characterized by the type of activity

Fire adapted community: A human community consisting of informed and prepared citizens collaboratively planning and taking action to safely coexist with wildland fire.

Mitigation: The act of modifying the environment or human behavior to reduce potential adverse impacts from a natural hazard. Mitigation actions are implemented to reduce or eliminate risks to persons, property, or natural resources, and can include mechanical and physical tasks, specific fire applications, and limited suppression actions.

Prevention: Activities directed at reducing the incidence of fires, including public education, law enforcement, personal contact, and reduction of fuel hazards (fuels management); actions to avoid an incident, to intervene for the purpose of stopping an incident from occurring, or to mitigate an incident's effect to protect life and property.

Fire Regime: Description of the patterns of fire occurrences, frequency, size, severity, and sometimes vegetation and fire effects as well, in a given area or ecosystem. A fire regime is a generalization based on fire histories at individual sites. Fire regimes can often be described as cycles because some parts of the histories usually get repeated, and the repetitions can be counted and measured, such as fire return interval.

Risk assessment: Product or process that collects information and assigns values to risks for the purpose of informing priorities, developing or comparing courses of action, and informing decision making.

Structure ignition zone: The area around a specific structure and associated accessory structures, including all vegetation that contains potential ignition sources and fuels.

Suppression: A wildfire response strategy to “put the fire out” as efficiently and effectively as possible while providing for firefighter and public safety.

Values: Items identified by a community as having measurable or intrinsic worth that could be negatively impacted by a wildfire. Values include property, structures, physical improvements, natural and cultural resources, community infrastructure, and economic, environmental, and social values.

Wildland fuels: All vegetation (natural and cultivated).

Wildfire: An unplanned wildland fire, including unauthorized human-caused fires and escaped prescribed fire projects. Wildfire management objectives may vary based on site-specific circumstances and conditions

Wildfire risk: The wildfire hazard plus the addition of the factors that contribute to susceptibility, or the impact of a wildfire on highly valued resources and assets.

Wildfire hazard: The combination of the likelihood of a fire occurring and the intensity of the fire. Also refers to the wildland or built fuels present in a given area, or the combustibility of a given fuel type or fuel complex in general.

Wildland-urban interface: Any developed area where conditions affecting the combustibility of natural and cultivated vegetation (wildland fuels) and structures or infrastructure (built fuels) allow for the ignition and spread of fire through these combined fuels.

Source Planning the Wildland-Urban Interface (American Planning Association 2019)

*Additional terms are available in the National Wildfire Coordinating Group. 2018. "Glossary A-Z."
Available at www.nwcg.gov/glossary/a-z*

APPENDIX B. PUBLIC ENGAGEMENT AND COLLABORATION in X Community

Overview

As part of the creating of the X Community CWPP, the following public engagement and collaborative activities occurred:

Public Workshop Outcomes

Discuss any public workshops conducted in and with the community

Public Comments

Discuss any efforts to receive public comments from this community

APPENDIX C. RISK ASSESSMENT METHODOLOGY

The National Hazard and Risk Model (No-HARM) is a decision support tool for wildfire hazard and risk assessment developed by Anchor Point. Incorporating the predicted severity (hazard) and the predicted frequency (risk) of wildfire in a location, No-HARM gives a comprehensive view of the threat context a structure is exposed to. Anchor Point used No-HARM to undertake a wildfire risk assessment as part of the Mariposa County CWPP, and for a complete description of that process please refer to the Mariposa County CWPP. The No-HARM tool collected data that was used to assess the X Communities' wildfire risks.

APPENDIX D. WUI COMMUNITY GROUPS WITHIN THE X COMMUNITY

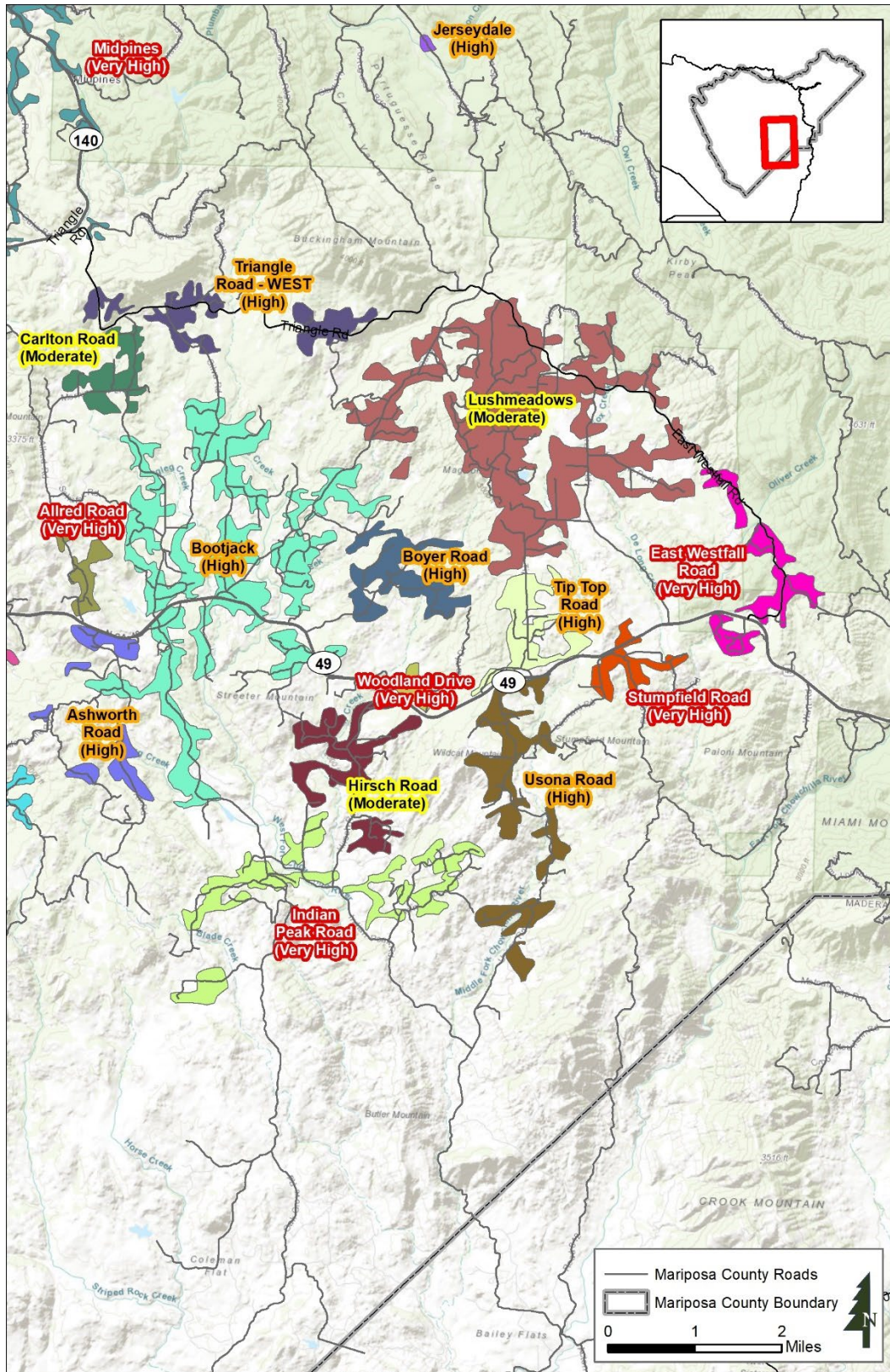
The Mariposa County CWPP recognizes that there are many local CWPPs, fuel risk reduction activities, and other efforts underway within local communities across the County. In an effort to further support local planning and coordination efforts and help inform future planning activities, this CWPP identifies # residential areas as WUI community groups within X Community.

These communities are alphabetically listed along with their associated wildfire risk rating and referenced Map Tile number in Table D1. Figure D1 provides a graph of the communities within X Community ranked by risk rating from Very High to Moderate. The WUI Community Map Tiles, numbered one to #, illustrate the geographic location and overall risk rating of each WUI Community Group. Finally, specific risk rating details and CWPP action tables for each community group are provided by the community in alphabetical order. Ratings were obtained through the No-HARM risk assessment process, which included “boots on the ground” field validation and steering group reviews.

Ratings are designed to increase awareness of local wildfire risk and direct mitigation priorities between and within the community. Mariposa County will support local implementation by working with communities, relevant agencies, and organizations on wildfire risk mitigation to update each community section, which includes incorporating references to local plans, identifying risk reduction activities, and assisting in the coordination of future opportunities.

TABLE D1. LIST OF WUI COMMUNITIES & WILDFIRE RISK RATINGS		
Name (in alphabetical order)	Map Tile Ref	Risk Rating

Mariposa County WUI Community Map Tile



WUI Community: XXX

Map Tile XX

Community-Specific CWPP: XX

CWPP Action Plan (Insert below)

Community Risk Rating: XX

COMMUNITY-SPECIFIC CWPP ACTION PLAN TEMPLATE								
Action	Coordinators	Timeframe	Resources and Notes	Priority	Status	Landscapes	Communities	Response
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
1.								
2.								

Allred Road			
NOTE: Yellow rows are already calculated by No-HARM but values and points are provided in data table for reference			
NOTE: No-HARM rating comprises 40% of the overall points (20 points), BOG* is 60% (30 points plus add'l factors)			
NOTE Green elements to be filled in by field surveys			
Community Topographic Position (Average Inside Comm. Boundary)		Value	Desc. (Points)
Slope (%)	Lowest = -1 (Flat), Highest = 6 (>42%)		Low (1)
Aspect	Lowest = -2 (NW to NE), Highest = 4 (SW to SE) (Others medium)		Moderate (1)
Fire Behavior, Fuels, and Burn Probability (Average Within Nearest FireSheds)		Value	Desc. (Points)
Flame Length (ft)	Lowest = 1, Highest = >50ft	14 feet	
Crown Fire Activity	Lowest = 0 points, Highest = 4 points		Moderate (2)
Vegetation Cover (%)	Lowest = -3 (0%), Highest = 3 (>85%)		Low (-1)
Nonburnable (%)	Lowest = -5 (70%), Highest = 5 (>0%)		High (4)
Frequency	Lowest = 1, Highest = 29	High (20)	
Construction and Infrastructure (Inside Community Boundary)		Description	Points
Roof Type	Mostly Class A (-2) Mixed/Class B (2) Class C (4)	Mixed	2
Siding/Deck Type	Non-combustible (-1) Mix (2) Combustible (4)	Mixed	2
Defensible Space	Full (-2) Partial (2) None (4)	Partial	2
Utilities	Underground (0) Mix (1) All Above (2)	All above	2
Suppression Factors (Inside Community Boundary)		Description	Points
Ingress/Egress	Multiple Ways In/Out (-2) One Way In/Out (4)	Multiple	4
Road Slopes	<15% (0) >=15% (1)	>+15%	1
Road Widths	>24ft, with 2 or more lanes (0) <=24ft (3)	<+24'	3
Adequate Turnarounds	Yes (0) Mixed (0.5) No (1)	No	1
Street Signs	4" Reflective (-2) Mixed (0.5) Not Present (1)	Mixed	0.5
Hydrants	Municipal hydrants available (-4) No water available (2)	None	2
Dip/Draft Water	Lowest -3 (0mi), Highest = 0 (>5mi)		Low (-2)
Dist. to Imp. Road	Lowest -2 (0mi), Highest = 2 (>5mi)		Low (-1)
Dist. to Fire Station	Lowest 0 (0mi), Highest = 50 (> 5mi)		Moderate (31)
Non-Fuel Elements	Lowest = -10 points, Highest > 0 points		High (0)
Additional Rating Factors (Put Value in Points if Present)		Poss. Pts.	Points
Frequent Lightning		1	1
Close Railroads		1	0
Mid-slope Homes		0.5	0.5
Homes on Ridge Tops		0.5	0.5
Homes in Saddles		0.5	0.5
Ravines		0.5	0.5
Chimneys		0.5	0.5
Many Campfires		2	0
Frequent Burning (Ag, Debris, Wood Stove etc.)		1	1
Wood Fencing		2	0
Non-year-round Population		1	0
Other (Maxium of 2 Points(Bad Stuff))		2	0
Other (Maxium of -2 Points (Good Stuff)) Specify: ___ Feul break along ridgetop with many f		-2	
Final Points		Value	Points
Overall Rating (RISK50)	Lowest = 1, Highest = 20, from Nearest FireSheds		11
Overall BOG Rating	Lowest = -15, Highest = 30+ Add'l Rating Factors		24
TOTAL POINTS			35
Rating			
Final Rating	Moderate <24, High 24-29, Very High >29		
*Boots on Ground (BOG)			

Community Wildfire Protection Plan

AGENDA ITEM 4 ii

DRAFT PROPOSED COMMUNITIES

25 Proposed Community Polygons vs. 37 Existing Polygons

