

# COMMUNITY WILDFIRE PROTECTION PLAN

## CITY OF AGOURA HILLS

May 2026

*Prepared by the City of Agoura Hills & the Santa Monica Mountains Fire Safe Council with Jensen Hughes*



Funding for this project provided by the California Department of Forestry and Fire Protection's (CAL FIRE) Wildfire Prevention Grants Program as part of the California Climate Investments Program.



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## Acknowledgements

The following organizations and agencies provided invaluable time, resources, and feedback in the development of the Community Wildfire Protection Plan (CWPP) for the City of Agoura Hills, as well as support during site visits, public outreach and other engagement activities.

- + **City of Agoura Hills** – Ramiro Adeva, Louis Celaya, Law Enforcement and Emergency Response Subcommittee
- + **Santa Monica Mountains Fire Safe Council (SMMFSC)** – Pauline Allen, Danielle Picciano
- + **Agoura Hills Fire Safe Council (AHFSC)** – Peter Fehler
- + **Los Angeles County Fire Department (LACoFD)**– Chief Drew Smith, Megan Currier, Brad Weisshaupt, Daniel Sanchez, Haddee Hammoud
- + **Los Angeles County Sheriff’s Department** – Captain Dustin Car, Lieutenant Roman Foss
- + **Mountains Recreation and Conservation Authority (MRCA)** – Sarah Kevorkian
- + **Santa Monica Mountain Conservancy (SMMC)** – Rorie Skei
- + **California State Parks Service** – Richard Fink
- + **National Park Service (NPS)** – Tony Sandrini, Mark Wilson

This plan was prepared by the City of Agoura Hills, in partnership with LACoFD, SMMFSC, AHFSC, LA County Sheriff’s Department, MRCA, SMMC, California State Parks Service, NPS, and by an external consultant, Jensen Hughes.



Funding for this project provided by the California Department of Forestry and Fire Protection’s (CAL FIRE) Wildfire Prevention Grants Program as part of the California Climate Investments Program.



## *Disclaimers*

This CWPP is not a legal document and is not intended to be an all-encompassing fire planning, wildfire resiliency or disaster risk management plan for the City of Agoura Hills. The CWPP is a living document that serves as a road map for planning and prioritizing wildfire mitigation activities throughout the Planning Area, while also providing a resource to help increase public awareness and engagement in wildfire safety principles and preparedness at the individual, household, and neighborhood levels. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the authors and do not necessarily reflect the view(s) of any governmental agency, organization, corporation or individual with which the authors may be affiliated.

As a living document, the CWPP is a work in progress and is anticipated to be monitored, evaluated and updated over the next several years, as wildfire hazards and risks evolve, human development increases, community needs change, and the social, economic, and regulatory landscape change with time.

Recommended actions identified in this CWPP should not be interpreted as a project “activity” as defined under the “Community Guide to the California Environmental Quality Act, Chapter Three; Projects Subject to CEQA [California Environmental Quality Act].” Because the CWPP does not legally commit any public agency to undertake a specific course of action or conduct, the plan and associated recommendations are not a project subject to CEQA or NEPA (National Environmental Policy Act). Before any work described in this CWPP begins—whether supported by state or federal grant funding or requiring discretionary permits—the lead agency must determine if the activity is subject to CEQA or NEPA. If so, the agency is responsible for completing the appropriate environmental review prior to implementation.



## *Executive Summary*

The Community Wildfire Protection Plan (CWPP) for the City of Agoura Hills provides a clear, community-informed roadmap to reduce wildfire risk and strengthen the City's long-term resilience. The plan outlines practical strategies to help the City, partner agencies, homeowners' associations, and residents prepare for, mitigate against, respond to, and recover from wildfire events.

This CWPP builds upon the Community Wildfire Risk Assessment (CWRA) completed in October 2025, which established a science-based understanding of wildfire hazards, risks, and vulnerabilities across Agoura Hills. The CWPP represents the next step by translating those findings into prioritized actions and implementation strategies tailored to the City's local conditions.

The plan was developed through a collaborative process involving the City of Agoura Hills, Los Angeles County Fire Department (LACoFD), Los Angeles County Office of Emergency Services (LACo-OES), California State Parks, the National Park Service, other land management agencies, homeowners' associations, community groups, and members of the public. It meets the requirements of the 2003 Healthy Forests Restoration Act (HFRA), including identifying and prioritizing fuel reduction activities, addressing structural ignitability, and ensuring meaningful stakeholder collaboration.

The City of Agoura Hills is located within a fire-prone environment shaped by its Mediterranean climate, steep terrain, wildland–urban interface (WUI) setting, and fire-adapted vegetation. While wildfire is a natural part of the region's ecosystem, risks are heightened by the presence of residential neighborhoods, limited access and evacuation routes in some areas, accumulated vegetation, and the increasing impacts of climate change—such as prolonged drought and more frequent extreme fire weather conditions. CAL FIRE identifies the City as a Community-at-Risk (CAR), underscoring the importance of coordinated wildfire planning and mitigation.

Using high-resolution topography, fuels, weather data, and values-at-risk information, this CWPP identifies areas where wildfire hazards pose the greatest threat to people, homes, infrastructure, natural resources, and community assets. The plan prioritizes mitigation actions across a range of strategies, including:

- + Strengthening pre-fire planning and interagency coordination
- + Enhancing wildfire preparedness and evacuation readiness
- + Expanding public education and outreach efforts
- + Implementing strategic vegetation management and fuel reduction projects
- + Promoting and enforcing defensible space and home hardening measures

This CWPP provides a structured framework to guide implementation, monitor progress, and pursue funding opportunities that support wildfire resilience efforts throughout Agoura Hills. It aligns with the California Fire Plan, the City's General Plan Safety Element, and the Los Angeles County Strategic Fire Plan.



## What do residents need to know?

### 1. What is the risk to Agoura Hills from wildfire?

- Wildfire risk in Agoura Hills is real, but it is manageable with preparation and coordinated action. The greatest risks to the community come from a combination of dry vegetation, steep terrain, wind-driven fire behavior, and homes located near wildland areas. Embers can travel long distances during a wildfire, meaning that even homes not directly adjacent to open space may be at risk.

### 2. What can I do to protect my home and community from wildfires?

The most effective wildfire protection begins at the home and neighborhood level. Residents play a critical role in reducing wildfire risk by:

- Maintaining defensible space around their homes
- Removing flammable vegetation and debris, especially within the first 0–5 feet of structures (Zone 0)
- Hardening homes by addressing vents, roofs, windows, and other ignition-prone features
- Participating in Firewise or neighborhood-level wildfire preparedness efforts
- Staying informed about evacuation routes and emergency notifications

### 3. What is the City of Agoura Hills and fire and emergency partners doing to help make Agoura Hills wildfire resilient?

- The City of Agoura Hills and its partners are working to identify priority fuel treatment areas, improve coordination and emergency communications, and pursue funding to support wildfire mitigation projects.

### 4. What can I do to help my community become prepared for wildfires?

- Wildfire resilience is a shared responsibility. This CWPP provides the blueprint—but its success depends on continued collaboration between residents, community groups, local agencies, and regional partners. By taking action now, Agoura Hills can reduce wildfire risk and protect lives, homes, and the natural environment that defines the community

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### Revision Record Summary

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<i>Version</i>	<i>Date</i>	<i>Revision Summary</i>
0A	12/2025	Draft Chapters 1-4 issued to AWG for review
0B	02/2026	Draft Chapters 5-8 issued to AWG for review
0C	02/2026	Draft CWPP issued to City Ad Hoc Committee for review
0D	03/2026	Draft CWPP issued for public review
0	05/2026	Final CWPP issued

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## Signatures

The 2026 Community Wildfire Protection Plan (CWPP) for the City of Agoura Hills was developed in accordance with the Healthy Forests Restoration Act. The plan was developed collaboratively by stakeholders including the City of Agoura Hills, LACoFD, Agoura Hills Fire Safe Council, Santa Monica Mountains Fire Safe Council, county, state, federal agencies and the general public. The plan includes a prioritized list of hazardous fuel reduction strategies, measures that community members can take to reduce structural ignitability, as well as recommendations on additional studies, policy changes, educational programs and other initiatives that can be undertaken to provide a more holistic wildfire mitigation strategy in all stages of wildfire disaster risk management (i.e., prevention/mitigation, preparedness, response and recovery).

The undersigned have reviewed the CWPP and accept this document as the final version.

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City of Agoura Hills, City Manager, Nathan Hamburger	Date
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Los Angeles County Fire Department, Chief, Drew Smith	Date
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Los Angeles County Fire Department Forestry Division, Assistant Chief, Brad Weisshaupt	Date
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Los Angeles County Sheriff's Department, Malibu/Lost Hills Station Captain, Dustin Carr	Date
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Santa Monica Mountains Fire Safe Council, Executive Director, Pauline Allen	Date
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Agoura Hills Fire Safe Council, President, Peter Fehler	Date
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## List of Acronyms

AHFSC	Agoura Hills Fire Safe Council
AHJ	Authority Having Jurisdiction
CAL FIRE	California Department of Forestry and Fire Protection
CAR	Community at Risk
CEQA	California Environmental Quality Act
CCR	California Code of Regulations
CWPP	Community Wildfire Protection Plan
ESHA	Environmentally Sensitive Habitat Areas
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zone
FRA	Federal Responsibility Area
FRAP	Fire and Resource Assessment Program
GIS	Geographic Information System
HFRA	Healthy Forest Restoration Act
HIZ	Home Ignition Zone
HOA	Homeowners' Association
IBHS	Insurance Institute for Business and Home Safety
LACoFD	Los Angeles County Fire Department
LACo-OEM	Los Angeles County Office of Emergency Management
LANDFIRE	Landscape Fire and Resource Management Planning Project
LRA	Local Responsibility Area
MRCA	Mountains Recreation and Conservation Authority
MTT	Minimum Travel Time
NFP	National Fire Plan
NFPA	National Fire Protection Association
NIMS	National Incident Management System
NPS	National Park Service

PRC	Public Resources Code
RAWS	Remoted Automated Weather Station
SMMC	Santa Monica Mountains Conservancy
SMMFSC	Santa Monica Mountains Fire Safe Council
SRA	State Responsibility Area
WUI	Wildland Urban Interface

## 1.0 Introduction

Agoura Hills has a long history of wildfires that has caused substantial impact to human health and safety, the built environment, local economies, the natural environment, and cultural and historical resources. Wildfires have generated a wide range of short- and long-term social impacts, including effects on community well-being, vulnerable populations, and capacity for local recovery. While government agencies play an important role in developing and implementing a range of wildfire hazard and risk mitigation activities, wildfires cannot be fully prevented. Fire is a natural ecological process that supports soil health, nutrient cycling, habitat renewal, pest and disease control, and overall biodiversity. Recognizing both the risks and ecological benefits of fire, it is essential for the whole community to work together to build the capacity to prevent, prepare for, and respond to, and recover from major wildfire events. Because wildfires are an inevitable part of life in Agoura Hills and neighboring cities such as Calabasas and Westlake Village, the question is not *if* a wildfire will occur, but *when*—and how prepared and resilient the community will be to reduce potential impacts.

The 2026 Community Wildfire Protection Plan (CWPP) for the City of Agoura Hills considers all areas within city limits. The Planning Area is bounded by Oak Park to the north, Westlake Village to the west, the Santa Monica Mountains to the south and Calabasas to the east.

The CWPP is the result of a community-wide planning effort to quantify and evaluate wildfire threat to the Planning Area and to develop mitigation strategies that enhance protection of human life safety and a range of community values from wildfires. This plan meets the requirements of the 2003 Healthy Forests Restoration Act and better positions the City and other relevant agencies and organizations to apply for and have a higher likelihood of obtaining state and federal grants for additional studies and implementation activities identified in the action plan. This plan incorporates the latest wildfire science and engineering tools, as well as industry best practices, to holistically mitigate the risks of wildfires across the Planning Area.

### 1.1 PURPOSE OF PLAN

The primary purpose of the CWPP is to minimize the wildfire threat to human life and wellbeing and reduce the wildfire risk to community values/assets such as residential structures, critical infrastructure, businesses, the natural environment, recreation and historic/cultural resources across Agoura Hills.

The CWPP provides guidance for future actions of the City, local fire safe councils, LACoFD, county, state, and federal agencies, HOAs, residents, and other interested parties in their individual and collective efforts to reduce the potential wildfire threat to the communities in the Planning Area. Successful implementation and long-term sustainability are subject to available funding, the collective action and engagement of all community stakeholders, other City/County priorities, collaboration between Stakeholder groups on private and public lands, and environmental review under the California Environmental Quality Act (CEQA) or National Environmental Protection Act (NEPA).

Fundamental to any CWPP is the engagement and collective action of all community Stakeholders in protecting the things that are of value, addressing the specific challenges of the local context and developing comprehensive risk management strategies that work for the whole community.

### 1.2 GOALS & OBJECTIVES

The goals and objectives of the CWPP were developed in collaboration with the Agency Working Group and other stakeholders through a combination of meetings, open forum workshops and online feedback. The goals represent broad-based visions for the CWPP and provide general long-term guidelines to drive the desired end-

states for the city. The objectives define strategies or implementation steps to attain the identified goals. They are both specific and measurable and will have defined completion dates as determined by the respective, responsible stakeholder. Common themes identified for the 2026 CWPP goals and objectives include:

- + Protect people first
- + Protect homes, infrastructure and community assets
- + Prepare for a changing climate
- + Turn the plan into action

The goals and objectives of the CWPP development process are summarized in Table 1.

**Table 1. Goals & Objectives of the 2026 CWPP for the City of Agoura Hills**

Goals	Objectives
Minimize the wildfire threat to <b>life safety</b>	<ul style="list-style-type: none"> <li>• Reduce human caused ignitions.</li> <li>• Assess wildfire hazards, risks, and vulnerabilities within the Planning Area and utilize assessments to set priorities to reduce threats to life safety.</li> <li>• Review existing public alert programs and evacuation resources for wildfires and make recommendations as appropriate.</li> <li>• Improve collective action in reducing wildfire risk through enhancements to community engagement, participation, and education programs.</li> <li>• Assess community-level coping capacities to prevent, mitigate, respond to and recovery from wildland fire disaster events (e.g., communication systems, evacuation planning, people management, emergency power supplies, short-/long-term recovery resources).</li> </ul>
Reduce the wildfire <b>threat to values and assets at risk</b>	<ul style="list-style-type: none"> <li>• Identify values and assets at risk from wildfire in the Planning Area.</li> <li>• Utilize wildfire hazard, risk, and vulnerability assessments to develop prioritized mitigation strategies to reduce the threat to physical, social, environmental, and economic assets.</li> <li>• Evaluate the effectiveness of existing vegetation treatment codes, local ordinances, and guidance documents.</li> <li>• Summarize guidance and provide local/state references for fuel treatment methods and strategies for adequate defensible space of structures and critical infrastructure (e.g., transportation routes) in all types of locally relevant wildland fuels.</li> <li>• Map existing, planned, and proposed vegetation treatments.</li> <li>• Review existing mitigations for Agoura Hills and other relevant agency stakeholders</li> </ul>

Goals	Objectives
	<ul style="list-style-type: none"> <li>• Identify and promote citizen-based actions that enhance structure hardening and the development of effective defensible space within the City</li> <li>• Identify regional strategies to reduce structure ignitibility while protecting the environmental integrity of Environmentally Sensitive Habitat Areas (ESHAs) and consider land preservation (including but not limited to using nature-based solutions where possible, promoting the use of native/climate appropriate plants, and consideration of CEQA and NEPA requirements).</li> <li>• Identify recommendations for enhancing critical infrastructure (e.g., COMMS, water infrastructure, electrical infrastructure) protection from wildfires and reducing any ignitions sources caused by these facilities or equipment (e.g., electrical utilities).</li> </ul>
<p><b>Enhance the resiliency of Agoura Hills future climate change</b> impacts pertaining to wildfire.</p>	<ul style="list-style-type: none"> <li>• Determine potential impacts of climate change on the local fire environment and how these impacts may influence wildfire hazard and risk into the mid-21st century.</li> <li>• Assess potential future climate scenarios for the city.</li> <li>• Provide recommendations at the local scale to assist in mitigating potential increases in wildfire and post-wildfire hazard, risk, and vulnerabilities in the future.</li> </ul>
<p><b>Improve accountability, public trust, and efficiency in implementation</b> of action items identified in the CWPP</p>	<ul style="list-style-type: none"> <li>• Implementation Objectives:             <ul style="list-style-type: none"> <li>○ Identify responsible parties to carry out action items and establish accountability for actions through annual reporting.</li> <li>○ Support initiatives to identify funding sources available for smaller organizations/entities to carry out mitigation actions.</li> <li>○ Develop a standard approach for relevant stakeholders to collaborate on obtaining funding for wildfire mitigation initiatives.</li> </ul> </li> <li>• Tracking/Monitoring Objectives:             <ul style="list-style-type: none"> <li>○ Create a method to monitor, track, and document completed action items identified in the CWPP.</li> <li>○ Establish an approach and plan for measuring the success of implementing action items in achieving the goals identified in the CWPP (e.g., measurable reduction in risks).</li> </ul> </li> </ul>

### 1.3 DEVELOPMENT TEAM

This section identifies the agencies, parties and other organizations who were involved and/or provided input into the development of the CWPP. The roles and responsibilities are indicated Table 2 below:

**Table 2. CWPP Project Roles and Responsibilities.**

CWPP Development Entities	Roles/Responsibilities
<p>Lead Organizations:</p> <p>City of Agoura Hills</p> <p>Santa Monica Mountains Fire Safe Council</p>	<ul style="list-style-type: none"> <li>+ Manage day-to-day CWPP development and consultants</li> <li>+ Form and coordinate Stakeholder Working Group</li> <li>+ Coordinate Core Project Team and public outreach</li> <li>+ Provide guidance and support for CWPP development</li> <li>+ Distribute media releases about the CWPP</li> <li>+ Conduct direct outreach</li> <li>+ Coordinate with neighboring jurisdictions</li> <li>+ Identify and obtain grant funding for the CWPP</li> </ul>
<p>Stakeholder Working Group: 10 members See Section 2.2.2 for full list of members</p>	<ul style="list-style-type: none"> <li>+ Represent a wide range of agencies, organizations, and entities in Agoura Hills</li> <li>+ Approve CWPP goals and objectives and any planning unit boundaries</li> <li>+ Provide general feedback, expertise, and local context for CWPP development and associated products</li> <li>+ Identify gaps in CWPP development process</li> <li>+ Support public outreach activities</li> <li>+ Support site visits</li> <li>+ Develop, implement, and maintain long-term operations of CWPP strategy and actions</li> </ul>
<p>General Public and Other Interested Parties</p>	<ul style="list-style-type: none"> <li>+ Attend public workshops</li> <li>+ Provide responses to online survey</li> <li>+ Provide input on values to protect, areas of concerns, community projects and ongoing grass-roots initiatives</li> </ul>
<p>CWPP Consultant: Jensen Hughes</p>	<ul style="list-style-type: none"> <li>+ Support the development of the CWPP</li> <li>+ Provide fire science, engineering and subject matter expertise, data analysis, and guidance on current wildfire research</li> <li>+ Facilitate and support stakeholder outreach and engagement</li> <li>+ Provide supporting materials and content for public outreach activities (e.g., CWPP development page, Story Map, public survey)</li> <li>+ Develop CWPP implementation and monitoring plan</li> </ul>

## 1.4 POLICY AND REGULATORY FRAMEWORK

Federal	State
<ul style="list-style-type: none"> <li>+ Disaster Mitigation Act (2000–present)</li> <li>+ Healthy Forests Restoration Act (2003)</li> <li>+ National Cohesive Wildland Fire Management Strategy (Amended 2023)</li> <li>+ National Fire Plan (NFP) 2000</li> <li>+ NFPA Standards (NFPA 1, NFPA 1140)</li> <li>+ National Incident Management System (NIMS)</li> </ul>	<ul style="list-style-type: none"> <li>+ California State Hazard Mitigation Plan (2023)</li> <li>+ CAL FIRE California Strategic Fire Plan (2024)</li> <li>+ California Environmental Quality Act (CEQA) Guidelines (updated 2025)</li> <li>+ California Fire Code (2025)</li> <li>+ California Wildland-Urban Interface Code (2025)</li> <li>+ California Code of Regulations Title 24 (2025)</li> <li>+ California Residential Code Chapter 3 (2025)</li> <li>+ California’s Wildfire and Forest Resilience Action Plan (2021)</li> <li>+ Public Resource Code: 4123.7, 4124, 4125-4137, 4114.3, 4201-4204, 4290, 4291, 4292-93, 4296, 4296.5, 4421-4446, 4741</li> <li>+ California Code of Regulations - 1299.1, 1256</li> <li>+ Government Code 51175-51189, 65302.5, 8593.3.5</li> <li>+ California Health and Safety Code: DIVISION 12</li> <li>+ California Health and Safety Code Section 18931.7, 13159.5</li> <li>+ California Civil Code 1102.6f, 1102.19, 1103.C.3</li> <li>+ California Public Utilities Coded 8386</li> <li>+ California Emergency Services Act - Chapter 7, Section 8550-8551 (CESA)</li> <li>+ California Regional Water Quality Board</li> <li>+ California Air Resources Board</li> <li>+ Senate Bills: 160, 167, 190, 465, 560, 670, 901, 979, 1260</li> <li>+ Assembly Bills: 38, 836, 1054, 1877, 1956, 2911</li> <li>+ 2023 California Green Innovation Index, 15<sup>th</sup> Edition</li> </ul>
County & Regional	<ul style="list-style-type: none"> <li>+ County of Los Angeles Park Design Guidelines and Standards (2017)</li> <li>+ County of Los Angeles Department of Parks and Recreation Urban Forestry Program Manual</li> <li>+ South Coast Air Quality Management Plan</li> <li>+ Southern California Edison 2026-2028 Wildfire Mitigation Plan</li> </ul>
<ul style="list-style-type: none"> <li>+ Los Angeles County All-Hazard Mitigation Plan (2025)</li> <li>+ Los Angeles County Operational Emergency Response Plan (2023)</li> <li>+ Los Angeles County Fire Department, Overview Booklet (2020)</li> <li>+ Los Angeles County Fire Department “Act. Action. Accomplish.”: 2017-2021 Strategic Plan</li> </ul>	

- + Los Angeles County General Plan 2035
  - + Los Angeles County Regional Planning, SEA Ordinance Implementation Guide (2020)
  - + Los Angeles County, Planning and Zoning, Title 22
  - + Los Angeles County Fire Code, Title 32
  - + Los Angeles County Building Code, Title 26
- 

**Local**

- + City of Agoura Hills General Plan (Adopted 2010, updated 2022)
  - + City of Agoura Hills Municipal Code (AHMC)
  - + Los Angeles County Fire Code (2023) as adopted by AHMC Article III Section 3100
  - + Las Virgenes-Malibu Council of Governments Multi-Jurisdictional Hazard Mitigation Plan (2024)
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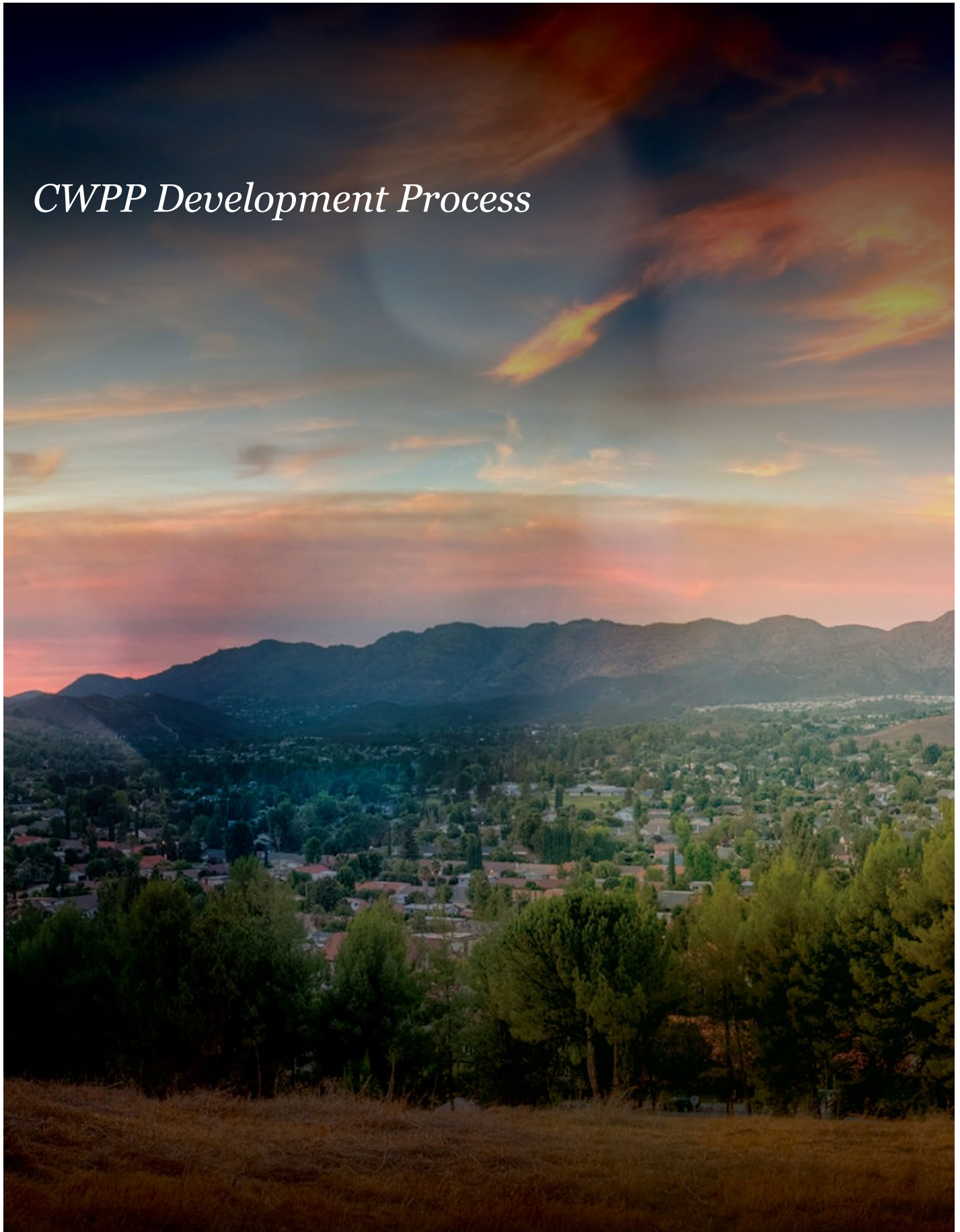
## 1.5 FUNDING FOR CWPP DEVELOPMENT

Funding for the preparation of this CWPP was provided by the California Department of Forestry and Fire Protection's (CAL FIRE) Wildfire Prevention Grants Program as part of the California Climate Investments Program.

## 1.6 GLOSSARY OF TERMS

A glossary of terms can be found in Appendix A.

# *CWPP Development Process*



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## 2.0 CWPP Development Process

### 2.1 OVERVIEW

The development of a CWPP is a collaborative process where community stakeholders assess the wildfire threat, identify community values at risk, and ultimately develop prioritized mitigation measures and actions to increase community resilience to wildfire threats. The language in the 2003 HFRA provides maximum flexibility for communities to determine the substance and detail of their CWPP action plan and the procedures they use to develop it. The CWPP planning process provides communities with the opportunity to develop a locally relevant plan that influences where and how federal agencies implement fuel treatment activities on federal land and the distribution of federal funds for projects on non-federal lands. In addition, development of a CWPP positions communities to access other funding sources from State and Local resources for wildfire mitigation projects.

The CWPP planning process brings together broad and diverse local interests to holistically identify common concerns and values related to public safety, sustainability of environmental and natural resources, and long-term resiliency and sustainability of the whole community. The process should provide a positive, solution-oriented environment in which to address the challenges of living in a community at risk to wildfire. Because not all community members will attend workshops or meetings, it is important to provide multiple opportunities for the whole community to provide input, voice issues and concerns, and participate in the process Figure 1.



**Note: Dates are subject to change over the course of the project.**

**Figure 1. CWPP Development Process and Timeline**

As part of the 2003 HFRA, there are three minimum requirements for a CWPP, including:

- + **Collaboration** – A CWPP must be collaboratively developed. Local and state officials must meaningfully involve federal agencies that manage land in the vicinity of the community and other interested parties (particularly non-governmental stakeholders) that can work collectively to implement and manage wildfire risk mitigation measures and can help build a “culture of resiliency” at an individual and community-level.
- + **Prioritized Fuel Reduction** – A CWPP must identify and prioritize areas for hazardous fuel reduction treatments on non-federal lands and recommend the types and methods of treatment that, if completed, would reduce risk to the community.

- + **Treatment of Structural Ignitability** – A CWPP must recommend measures that homeowners and communities can take to reduce the ignitability of structures throughout the area addressed by the plan.

In the development of a CWPP, the more inclusive the group and the greater the diversity of interests involved, the more likely the plan will represent the community as a whole. These three basic requirements, however, do not preclude the community from developing broader wildfire disaster risk management and capacity building efforts (e.g., evacuation/shelter-in-place planning, community emergency communications, early warning detection systems, post-fire recovery services, etc.).

## 2.2 THE COLLABORATIVE APPROACH

The Agoura Hills CWPP was developed collaboratively with the City of Agoura Hills, the Santa Monica Mountains Fire Safe Council, the Agency Stakeholder Working Group (i.e., Los Angeles County Fire Department, County Sheriff’s Department, the Agoura Hills Fire Safe Council, other county-, state-, and federal-agencies), community organizations and the general public. As the Agoura Hills CWPP is intended to be a “living” document, the various CWPP coordination and development groups, as well as public outreach was designed to reinforce existing relationships, establish ongoing networks to implement, maintain and monitor the CWPP actions, as well as integrate ongoing mechanisms to obtain community input, promote widespread community education and enable the ongoing monitoring and evaluation of the ever evolving wildfire risk landscape (e.g., impacts of changing climate, changes in development, impacts of mitigation activities etc.).

### 2.2.1 Core Project Team

The CWPP core project team was formed at the start of the CWRA project (July 2024), and was composed of a smaller group of key representatives from:

- + City of Agoura Hills
- + Santa Monica Mountains Fire Safe Council
- + County of Los Angeles Fire Department
- + Fire Consultant: Jensen Hughes



This group was responsible for the day-to-day development of the CWPP, organizing the engagement and participation of a broad range of stakeholders, agencies, organizations, and individuals, forming the Agency Stakeholder Working Group, monitoring project progress, facilitating public outreach, and reviewing key documents and project deliverables.

The group considered input from all relevant plans, community groups, agencies, and local organizations. The objective was to facilitate city, county, state, and federal participation to work cooperatively to help protect life, property, and natural resources from wildfires.

### 2.2.2 Agency Stakeholder Working Group

The Agency Stakeholder Working Group (AWG) was identified and formed at the start of the CWRA project in August/September 2024. This group continued to provide oversight and guidance to the CWPP development process and included representatives of relevant local-, state- and federal-government agencies, community groups, non-profit organizations and other entities (see below). The AWG served as an advisory group to the CWPP development process to provide local context and subject matter expertise. This included identifying

project gaps, assistance with public outreach activities (as needed), site visit coordination, and providing general feedback on the CWPP development process and products (as requested).

**Members:**

- + County of Los Angeles Fire Department (LACoFD) – Division 7
- + County of Los Angeles Fire Department (LACoFD) – Forestry Division
- + County of Los Angeles Sheriff’s Department
- + Mountains Recreation and Conservation Authority (MRCA)
- + Santa Monica Mountain Conservancy (SMMC)
- + State Parks Services (Angeles District of Parks)
- + National Park Service
- + Agoura Hills Fire Safe Council (AHFSC)
- + Santa Monica Mountains Fire Safe Council (SMMFSC)
- + Las Virgenes Unified School District
- + Southern California Edison

The AWG met six times over the course of the CWRA and CWPP development process. During the CWRA process, the AWG met four times which included key meetings such as the kickoff meeting (held November 14, 2024), a 1-day site visit (held March 7, 2025), prior to the draft CWRA (June 24, 2025) and when the final CWRA was produced (Sept 2025). During the CWPP development process, the AWG met two times which included key meetings on the development and review of the CWPP draft recommendations, (February 10, 2026) and the final CWPP product (April 21, 2026).



**2.2.3 Stakeholder and Public Engagement Approach**

Participation and engagement of a broad range of community stakeholder groups was a critical component in the development of a comprehensive CWPP for the City of Agoura Hills. The Core Project Team and Jensen Hughes identified a strategy for engaging the community and stakeholders regarding the CWPP development that considered multiple avenues for participation. This strategy considered engaging the public at public events or common places for gathering, providing project updates to the city elected-officials and opening dialogue for input, and promoting the CWPP development through various outreach channels such as the city’s website, FSCs newsletters, etc. This process also helped ensure that recommendations developed as part of the CWPP through stakeholder and public engagement will be implemented and sustained over time.

The primary goals and objectives of the outreach process were as follows:

- (1) Provide various opportunities for community stakeholders and the general public to participate, collaborate and engage throughout the CWPP development process.
- (2) Gather feedback on a broad range of concerns regarding wildfire hazards, risks, and vulnerabilities at various scales (e.g., city, neighborhood, parcel, individual).
- (3) Gather feedback from community members that will guide goal setting, action items and prioritization across the Planning Area.
- (4) Identify key project participants and key working group members as part of the process.
- (5) Identify appropriate levels and methods of stakeholder engagement.
- (6) Raise awareness of wildfire hazards and risks across the Planning Area, as well as the range of existing, planned, and proposed wildfire resiliency plans, programs, and projects.

Framing the stakeholder outreach efforts were a set of guiding principles, based upon discussions amongst the Core Project Team and literature.

- + **Accessible** – Stakeholders must be aware and be provided with a variety of engagement opportunities and formats to participate in the process.
- + **Participatory** – Creating an environment to facilitate the expression and the participation of different and diverse actors, such as oral communication, written communication, and schematic or visual representations. Promote a culture of participation with programs and activities that support ongoing engagement and ownership.
- + **Informative** – Help all involved to listen to each other, explore new ideas, learn, and apply information in ways that generate new solutions, methods, or opportunities.
- + **Collaborative** – Support and encourage participants, government and civil society groups, and other interested parties to work together to advance the common good.
- + **Representative** – Equitably incorporate diverse people, voices, ideas, and information to lay the groundwork for quality outcomes and democratic legitimacy.

To effectively engage various Stakeholder groups and the general public, several engagement tactics were identified to solicit the desired input or feedback specific to the targeted audience. See the following sections for an overview of engagement for different groups.

## 2.2.4 Broader Stakeholder Outreach

### 2.2.4.1 Stakeholder Survey

As part of the CWRA process, an online stakeholder survey was administered over a two-month period to gather information on major wildfire-related concerns, active and proposed activities/projects (including fuels reduction projects, emergency planning, and outreach), and any geospatial data and/or relevant plans/reports from a broad set of community stakeholders. This included stakeholders from infrastructure, governmental agencies, residential/commercial property-owners, and community groups. A total of 13 agencies and organizations provided responses to the stakeholder survey, either online or in paper form. These responses

were used to gather information on major wildfire concerns and proposed activities/projects that will be included in the CWPP development.

A summary of broader stakeholder comments can be requested from the City of Agoura Hills.

#### 2.2.4.2 *City Council Ad Hoc Committee Meetings*

During the CWRA development process, the CWRA Core Project Team engaged with the City of Agoura Hills' City Council and Law Enforcement and Emergency Response Subcommittee regarding the CWRA Project. The CWRA Core Project Team held meetings with the City Council and Subcommittee at City Hall. City Council and Subcommittee meetings about the CWRA public survey were held on December 16<sup>th</sup>, 2024 (Subcommittee), January 21<sup>st</sup>, 2025 (City Council), January 23<sup>rd</sup>, 2025 (Subcommittee), February 26<sup>th</sup>, 2025 (City Council).

At the conclusion of the CWRA development process, the CWRA Core Project Team brought the CWRA results to the City Council for their awareness of the findings. The meeting took place on October 22, 2025 at City Hall where City Council members received a presentation from the Core Project Team about the CWRA development process, outreach and engagement with stakeholders and community, and CWRA findings and recommendations. The City Council unanimously approved and filed the CWRA report.

The Core Project Team agreed that it was essential to continue engagement with the City of Agoura Hills elected leaders. This included engagement with the City's CWPP Ad Hoc Committee through two meeting presentations. The first meeting was held on March 4, 2026 where the Committee received a presentation from City staff and Jensen Hughes about the CWPP draft recommendations and results from the public survey that initially completed during the CWRA process. The second meeting took place on April 16, 2026 where the Subcommittee received a presentation from City staff and Jensen Hughes about the final CWPP draft and collected feedback and input from the Subcommittee.

### 2.2.5 **Public Outreach**

A priority for the City was to get broad community participation and engagement in the development of the CWPP. This was accomplished through public workshops and a public survey, both of which were started during the CWRA process and continued throughout the CWPP development process.

#### 2.2.5.1 *Public Survey*

A community survey was administered from February 20, 2025 to May 12, 2025 during the first step of the CWRA process. The survey was intended to gather feedback from the general public regarding broad and more nuanced information to better tailor community-based activities, educational programs, services, policies, and other action items that not only help mitigate wildland fire risks, but also are locally relevant, inclusive, and sustainable. Additional analysis of the survey results was completed during the CWPP development process that will be incorporated into the CWPP action plan. Refer to Appendix D for greater detail.

#### 2.2.5.2 *Public Workshops*

During the first phase of the CWRA and CWPP development process, two public workshops were held at Agoura Hills Recreation and Event Center.

- + **Workshop #1** – The first workshop was in-person and held on May 20, 2025 (See Figure 2). Members of the public were invited and attended the workshop via public announcements on the City's website, social media accounts, email blasts, and calendar, as well as direct communications with key stakeholders and

community groups. Attendees included local residents, homeowner association representatives, City officials, Fire Safe Council representatives, and other interested parties. In addition to learning about and providing feedback on the CWRA process, participants also had the opportunity to examine the results of initial wildfire hazard assessments and identify areas of specific concern. Throughout the presentation, stakeholders were given the opportunity to provide targeted comments and questions on specific topics of interest or concern via notecards that were collected at the end of the workshop.



**Figure 2. First public workshop held on May 20<sup>th</sup>, 2025 at the Agoura Hills Recreation and Event Center.**

- + **Workshop #2** – Upon completion of the CWRA development process, a final workshop was held on July 29<sup>th</sup>, 2025 to review the results of the overall risk assessment and recommendations. Participants learned about Agoura Hills’ values and risks, community vulnerabilities, and results from various outreach and engagement from stakeholders and the general public regarding Agoura Hills’ wildfire risks. In addition, participants were able to ask questions regarding the CWRA development process and provide input to the CWRA draft recommendations.
- + **Workshop #3** – In addition to the CWRA Workshops, a final in-person workshop was held on March 17, 2026 upon completion of the CWPP development process to review the overall work and recommended action plan for the City of Agoura Hills, LACoFD, and other key stakeholders for the next 5-10 years. Members of the public were invited to the workshop via public announcement on the CWPP website, social media accounts, email blasts, as well as direct communications with key stakeholders and community groups.
- + A summary of all workshops, meeting notes and stakeholder comments is available in Appendix E.

### 2.2.5.3 Community Tabling Events

In coordination with the City of Agoura Hills, SMMFSC, and AHFSC, tabling events were implemented at various events either hosted by the City, SMMFSC/AHFSC or both. This helped facilitate ongoing coordination and collaboration across the Core Project Team and various community organizations to enhance information sharing and engagement with community members. At these tabling events, community members were educated and informed about the CWPP development process, opportunities for engagement, and feedback process for CWPP drafts.

#### 2.2.5.4 CWPP Webpage

The Core Project Team developed a dedicated CWPP development webpage on the City of Agoura Hills website. The webpage served as a central hub for community members to gain access to pertinent information about the CWRA and CWPP development process. This included a high-level overview of the purpose of the CWPP, the overall development process, schedule of events, and opportunities to participate. The webpage also served as a means for local fire safe councils (i.e., the SMMFSC and AHFSC) to disseminate information to residents via their existing networks.

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*Community Overview*

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### 3.0 Community Overview

#### 3.1 OVERVIEW

The City of Agoura Hills, with an estimated population of 19,429, is in western Los Angeles County and north of the Santa Monica Mountains (Figure 3). The City is bordered by Westlake Village to the west, Hidden Hills and Calabasas to the east, Oak Park to the north, and unincorporated Los Angeles County land to the south. It is approximately 8 square miles in area and is considered a Community at Risk (CAR) by CAL FIRE.

Historically, wildfires have been a major part of the area’s natural ecosystem. The climate, surrounding topography, suburban-rural landscapes and fire-adapted vegetation creates an environment for periodic burns. Increasing effects of changing climate (e.g., increasing frequency and severity of droughts, extreme storms, flooding, increased number of fire danger days, etc.), as well as areas of overgrown vegetation have left Agoura Hills with an increased risk of wildfire.



**Figure 3. The Planning Area for the CWPP is the City of Agoura Hills boundary.**

Several communities across the City, particularly the longer established communities, have narrow roads with significantly overgrown, dense vegetation along the roadways. These conditions can expose both residents and

first responders to unsafe and/or dangerous conditions such as increasing the likelihood of fire encroachment, high temperatures, poor visibility, untenable conditions, congestion and blocked roadways. In addition, the city has a variety of other characteristics including intermixed, overgrown vegetation, structures constructed pre-WUI code, variable compliance with defensible space, communication dead-zones, need for large animal evacuation, and other characteristics that increase susceptibility to loss from wildfire threats.

### 3.2 FIRE HAZARD SEVERITY ZONES

Fire Hazard Severity Zone (FHSZ) maps identify geographic areas of significant fire hazard in both State and Local Responsibility Areas as defined by CAL FIRE. The zones are based on factors that influence wildfire behavior including vegetation, topography and weather. The fire hazard severity model for wildland fire has two key elements: probability of an area burning and expected fire behavior under extreme fuel and weather conditions. The zones reflect areas that have similar burn probabilities and fire behavior characteristics. The factors considered in determining fire hazard within wildland areas are fire history, flame length, terrain, local weather, and potential fuel over a 50-year period. Outside of wildlands, the model considers factors that might lead to buildings being threatened, including terrain, weather, urban vegetation cover, blowing embers, proximity to wildland, fire history, and fire hazard in nearby wildlands.

**Most of Agoura Hills is  
in a Very High Fire  
Hazard Severity Zone**

FHSZs are based on wildfire hazards over a 30- to 50-year period and therefore do not consider how recent wildfire activity or fuel modifications may influence potential fire severity.

All State Responsibility Areas (SRA) and Local Responsibility Areas (LRA) are classified into one of the three categories – moderate, high, and very high. As FHSZs are based on wildfire hazards over a 30- to 50-year period, they do not consider how recent wildfire activity or fuel modifications may influence potential fire severity. CAL FIRE is required to produce FHSZ maps under the California Public Resources Code 4201-4204, California Code of Regulations Title 14 Section 1280, and California Government Code 51175-89.

While FHSZs do not predict when or where a wildfire will occur, they do identify areas where wildfire hazards are likely more severe and of greater concern. As such, FHSZs identify areas where increased wildfire safety provisions for various building and site components (e.g., maintained defensible space, fire or ignition resistant materials, including vents, decks, and windows) are required for all new construction per California Building Code Chapter 7A. The FHSZ designation of a property is used by local governments to support wildfire risk analysis and hazard mitigation planning<sup>1</sup>.

Based on the most current FHSZ maps (LRA effective 3/24/25 and SRA effective 4/1/24), most of the City (77.7%) is in an LRA-designated Very High Fire Hazard Severity Zone (VH FHSZ). There are no SRA or Federal Responsibility Area (FRA) lands located within the City limits (Table 3, Figure 4). Most homes and structures in the City are in a VH FHSZ (57.4%) (Table 4).

<sup>1</sup> <https://osfm.fire.ca.gov/divisions/community-wildfire-preparedness-and-mitigation/wildfire-preparedness/fire-hazard-severity-zones/>

## Fire Hazard Severity Zones (FHSZ): What You Need to Know

### 1. What does it mean if my home is in a High or Very High Fire Hazard Severity Zone?

- It means your home is in an area where wildfire conditions such as vegetation, terrain, and wind could support more intense fire behavior if a wildfire occurs. It does not mean a wildfire is guaranteed to happen. It means that preparation and mitigation are especially important.

### 2. Am I required to maintain defensible space?

- Yes. California law requires homeowners in fire-prone areas to maintain defensible space around their homes (up to 100 feet, or to the property line where parcels are smaller). This includes:
  - Removing dead vegetation and combustible materials
  - Trimming trees and shrubs
  - Keeping roofs and gutters clear of debris
  - Reducing flammable materials within 0-5 feet of the home (Zone 0)
- Defensible space inspections are usually conducted by your local fire department, in this case the Los Angeles County Fire Department.

### 3. Will this affect my insurance?

- Fire Hazard Severity Zones may influence how insurance companies evaluate wildfire risk. Insurers consider multiple factors including defensible space, home construction, claims history, and regional wildfire exposure. Homes that are located in higher zones may experience:
  - Higher premiums
  - Defensible space documentation verification
  - Detailed inspections
- Improving defensible space and home hardening can help demonstrate reduced risk to insurers.

### 4. How can I find out what zone my home is in?

- You can look up your property's Fire Hazard Severity Zone designation through CAL FIRE's Fire Hazard Severity Zone maps or the City of Agoura Hills wildfire preparedness webpage.

### 5. What can I do now to reduce my risk?

Regardless of your hazard designation, you can:

- Maintain defensible space
- Focus particularly on the first 0–5 feet around your home
- Upgrade vents, roofing, and windows when possible
- Participate in Firewise or neighborhood wildfire preparedness efforts
- Stay informed about emergency alerts and evacuation routes.

Small improvements can significantly reduce the chance of home ignition during a wildfire.

**Table 3. Percentage Breakdown of Fire Hazard Severity Zones in the Planning Area**

Responsibility Area	Fire Hazard Severity Zone (% of total Planning Area)				Direct Protection Area in acres
	Very High	High	Moderate	Non-Burnable <sup>2</sup>	(% of total area)
FRA <sup>3</sup>	N/A	N/A	N/A	N/A	N/A
SRA	N/A	N/A	N/A	N/A	N/A
LRA	77.7%	8.3%	7.7%	53.7%	5,003 (100%)
<b>Total</b>	<b>77.7%</b>	<b>8.3%</b>	<b>7.7%</b>	<b>53.7%</b>	<b>5,003 (100%)</b>

**Table 4. Structure Breakdown of Fire Hazard Severity Zones in the Planning Area**

Responsibility Area	Fire Hazard Severity Zone (# of Structures)				Direct Protection Area
	Very High	High	Moderate	Non-Burnable <sup>2</sup>	(# of Structures)
FRA <sup>3</sup>	N/A	N/A	N/A	N/A	N/A
SRA	N/A	N/A	N/A	N/A	N/A
LRA	3,631	839	809	1,047	6,326
<b>Total</b>	<b>3,631</b>	<b>839</b>	<b>809</b>	<b>1,047</b>	<b>6,326</b>

<sup>2</sup> Five landscape features are classified as non-burnable; Urban/Suburban, Snow/Ice, Agricultural Fields, Open Water, Bare Ground. The current fire behavior models can only simulate fire spread in wildland fuel, therefore these areas are classified as non-burnable.

<sup>3</sup> The federal government has a different fire hazard scoring system to CAL FIRE’s FHSZ classification system and is not applicable to the Percentage Breakdown of Fire Hazard Severity Zones in the Planning Area table.

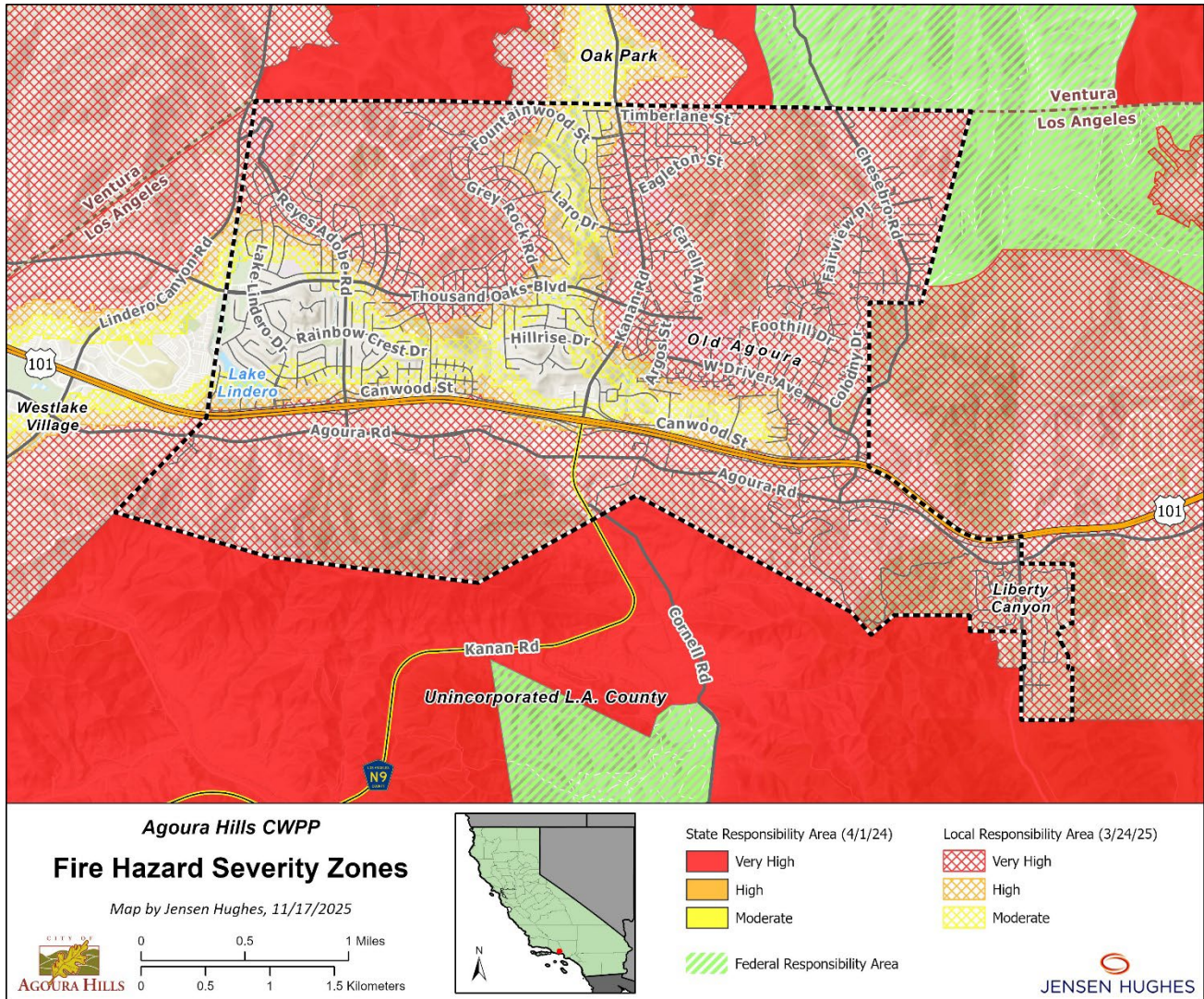


Figure 4: Fire Hazard Severity Zones

### 3.3 THE WILDLAND-URBAN-INTERFACE (WUI)

The wildland-urban interface, commonly called the WUI, is defined as the line, area, or zone where structures and other man-made development meet or intermingle with undeveloped wildland or vegetative fuels (NWCG, 2018). The WUI is often perceived as only rural areas where uninhabited wildlands (primarily timbered forests) meet individual structures or homes. This misconception has led many who live in more suburban and urban areas “near the WUI” to believe they are not at risk from wildfire, because they are not exactly at the interface of wildlands or they live adjacent to large open spaces of primarily grass and shrub-lands (instead of forests) [FEMA, 2022].

**Most of Agoura Hills is in wildland-urban interface (WUI) where embers—not flames—are the biggest threat to homes.**

To help protect people and property from potential catastrophic wildfire, the 2000 National Fire Plan (NFP) required the identification of communities in the WUI. WUI zones across Agoura Hills are shown in Figure 5.

The National Wildfire Coordinating Group (NWCG, 2009) defines the WUI as “the line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels.”

There are three WUI designations, all of which are considered at risk and susceptible to wildland fires. The WUI zones are:

1. **Wildland-Urban Interface:** dense housing development adjacent to vegetation that can burn in a wildland fire.
2. **Wildland-Urban Intermix:** housing development interspersed within an area dominated by wildland vegetation subject to wildfire.
3. **Wildland-Urban Influence Zone:** wildfire susceptible vegetation up to 1.5 miles from Wildland-Urban Interface and/or Intermix areas.

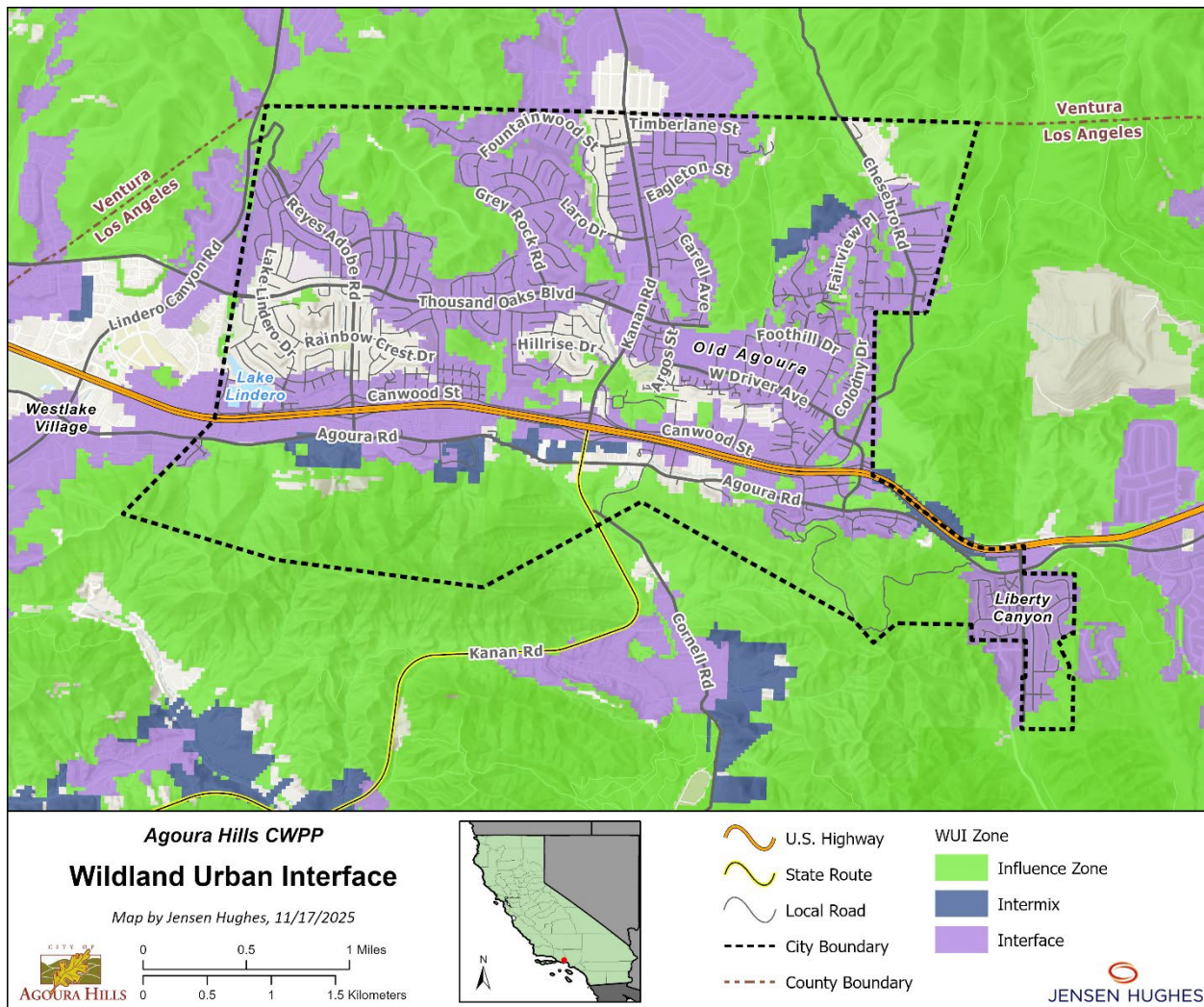


Figure 5. Wildland Urban Interface Zones for Agoura Hills

### 3.4 COMMUNITIES AT RISK

Communities at Risk (CAR) are a special designation originating from the Federal government to identify communities that are at high risk of damage and/or loss from wildfire, and which abut federal lands. These areas were identified as CARs in the Federal Register in 2001 (National Archives and Records Administration Federal Register, 2001), which was intended to facilitate fuel treatments on federal and adjacent lands to help protect local communities from wildfires. Over time, responsibility for maintaining this list was then turned over to the states.

In California, CAL FIRE is responsible for managing the CAR list and uses three main factors to determine communities to be added to the list as follows: 1) high fuel hazard, 2) probability of a fire, and 3) proximity of intermingled wildland fuels with urban environments. Additional communities may be added to the list of CARs by CAL FIRE based on changes in risk and understanding of risk. Existing and new communities on land designated as WUI or very high FHSZ may also be added as CARs. CAL FIRE has also expanded the definition to include communities which are not adjacent to federal lands. The City of Agoura Hills is designated a CAR.

### 3.5 VALUES AT RISK

The City of Agoura Hills is an important location for both locals and visitors with its trailheads, shopping and dining opportunities, agriculture and livestock operations, historic and cultural resources, government facilities and services, and educational facilities. Attempts to capture all the City’s measurable and intrinsic values are difficult. As such, the CWPP only considers those values that can be most readily impacted by wildfire.

Community values at risk to wildfires are often considered to be life safety, private property and critical infrastructure. However, impacted values can also include human health, natural resources, sensitive species and habitats, cultural and historical resources, views and other intangibles (e.g., social capital, community culture, livelihood). Although not all values can be protected directly through wildfire mitigation measures, actions can be taken to indirectly protect those values by developing strategies that reduce the wildfire threat overall. An ongoing challenge is to balance the level of hazard mitigation work needed to protect one set of values without compromising others.

The following values or assets have been identified by the Agency Stakeholder Working Group, Agoura Hills residents and other community stakeholders for the purposes of this CWPP:



**Human Life and Health**



**Critical Infrastructure**



**Private Property**



**Environment & Natural Resources**



**Cultural & Historical Resources**



**Recreation**



**Local Economy**

#### 3.5.1 Human Life and Health



The highest priority for agencies and organizations in Agoura Hills is life safety. Historically, large fires in the region have resulted in injuries and deaths of both firefighters and civilians, with the 2018 Woolsey Fire and 2025 Palisades Fire having serious impacts to human life and health, as well as to property, in and near Agoura Hills. The Palisades Fire resulted in the deaths of 12 people, with an additional 7 people missing, and other direct and indirect injuries.

The City of Agoura Hills presents numerous direct and indirect life safety challenges during wildfires including:

- + Large number of people and structures in very high fire prone areas
- + Various access and functional needs population(s) and other vulnerable groups (e.g., limited English proficiency, low income, elderly, medical baseline persons).
- + High percentage of existing building stock with deficient structural hardening and resistance to ember and smoke/ash infiltration
- + Limited and/or deficient defensible space in certain neighborhoods
- + Limited emergency public communication coverage, consistent messaging and physical resiliency
- + Limited number, capacity, and separation of travel routes during evacuations for certain neighborhoods
- + High number of neighborhoods with poor access/egress for residents, firefighters, and law enforcement

Life safety includes the protection of both life and physical well-being for all people in a community.

While all these factors contribute in varying degrees to the risk wildfires present to life-safety in the Planning Area, the factors that are considered foundational to life safety risks relate to human characteristics (e.g., how many people are at risk, where people are located relative to hazards, what vulnerabilities people may have to preparedness, response, and recovery).

Based on 2020 U.S. Census Bureau data, the City of Agoura Hills has a population of just over 20,000 people (not including transient populations and tourists) with the highest concentrations of individuals located near the major roadways of Thousand Oaks Blvd and Kanan Rd, in Liberty Canyon and in Old Agoura, see Figure 6. Due to the many large open spaces in and around Agoura Hills, nearly all neighborhoods are within the wildland-urban interface and/or CAL FIRE very high fire hazard severity zones.

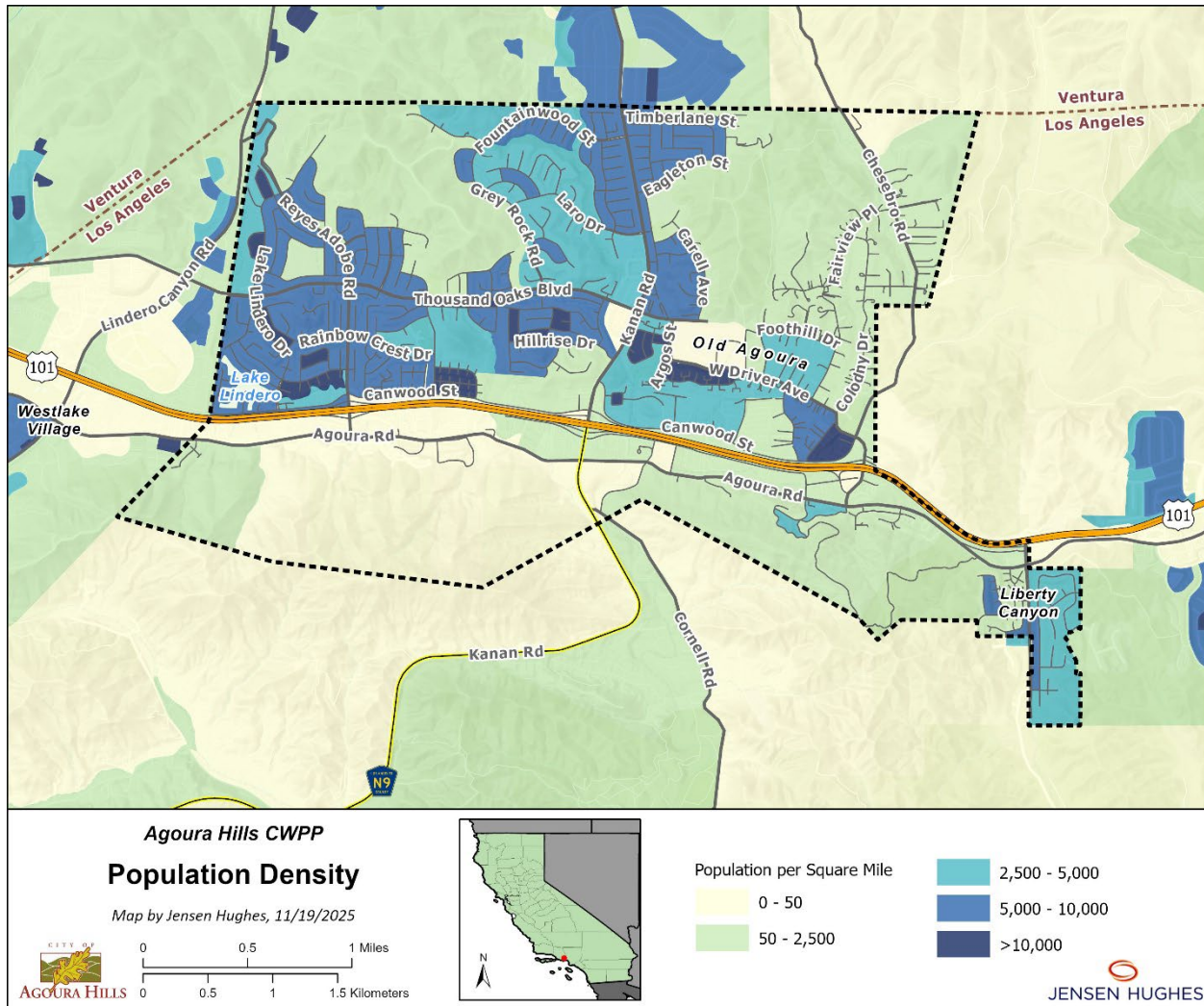
Though all people face challenges during an emergency event, vulnerable or functional needs populations have special needs and may have limited capacities to prepare for, respond to, and recover from a wildfire incident. These individuals are also less likely to undertake wildfire mitigation activities (Ojerio, 2008). As a proxy for individual-level vulnerability data, key population statistics for Agoura Hills from the 2020 U.S. Census (U.S. Census Bureau, <http://data.census.gov>) were assessed to identify potential vulnerable populations. These data were as follows:

- + **Population:** 20,299 and 7,621 housing units
- + **Ethnicity distribution:** 72.6% White, 11.4% Hispanic, 8.7% Asian, 1.2% Black or African American, 0.1% American Indian or Alaska Native, 0.03% Native Hawaiian/Pacific Islander, 6.0% Other/Two or More Races
- + **Spanish-speaking at home:** An estimated 7.6% of the population of Agoura Hills
- + **Disabilities:** 9.0% of the population
- + **Vulnerable age groups:** 19.8% 65 years and older
- + **Poverty:** 5.7% of the population live below poverty level

Vulnerable or functional needs populations include those who are physically and/or mentally disabled (e.g., blind, cognitive disorders, limited mobility), limited or non-English speaking, culturally isolated, medically or chemically dependent, homeless, Deaf and hard-of-hearing, frail or elderly, lack of digital services, and children

These population statistics suggest that segments of the population may have vulnerabilities which affect their ability to prepare, respond, and/or recover from a wildfire event. Physical and cognitive limitations can potentially reduce these individual's capacities to independently evacuate in a disaster. Limited access to financial resources may hinder the ability of lower-income populations to invest

in emergency preparedness and mitigation measures, as well as recover from losses. Language barriers can present major challenges to effectively receiving emergency notifications, evacuation instructions, and/or support services. In addition, visitors can be particularly vulnerable to wildfire incidents, as they are less likely to be familiar with the risks of wildfires, local response management practices, emergency resources, public communication channels and other support services. Planning for vulnerable or functional needs populations is critical to providing a holistic wildfire mitigation preparedness plan that works for the entirety of the community.



**Figure 6. Population Density of Agoura Hills**

Figure 6 illustrates population density across the City of Agoura Hills, with darker blue areas representing higher concentrations of residents. When viewed alongside FHSZs and WUI areas, many of the City’s more densely populated neighborhoods are also located in or adjacent to high and very-high fire hazard areas.

This overlap has direct implications for life safety and evacuation planning. Higher population density in fire-prone areas means:

- + A greater number of people may need to evacuate simultaneously.
- + Evacuation routes may experience congestion or bottlenecks.

- + Emergency responders may need to prioritize densely populated neighborhoods during fast-moving wildfire events.
- + Earlier evacuation notifications may be needed in certain areas to reduce traffic and improve safety.

In wildfire incidents across Southern California, delayed evacuation in densely populated areas has contributed to dangerous traffic congestion and increased risk to both civilians and first responders. Understanding where larger concentrations of residents intersect with wildfire hazard helps inform evacuation sequencing, traffic management strategies, and public communication planning.

Population density alone does not determine risk, however, when combined with hazard exposure, limited access/egress routes, and vulnerable population characteristics, it becomes a foundational life-safety planning.

### 3.5.2 Critical Facilities and Infrastructure



**General Description:** *Critical facilities and infrastructure are the structures, facilities, systems, and networks, whether physical or virtual, that are considered essential to maintaining the normalcy of daily life and overall functionality of a community or society. As such, they are essential for the efficient functioning, and delivery, of basic services provided in cities, towns, and rural areas.*

*According to the United Nations Office for Disaster Risk Reduction (UNISDR), the California Office of Emergency Services (CAL OES) and FEMA, destruction, disruptions, or interruptions in critical facilities and infrastructure, including health and education facilities, could lead to cascading effects across sectors and sometimes across borders.*

Per the CAL OES, critical facilities and infrastructure consist of nine sectors:

- |                                 |                          |
|---------------------------------|--------------------------|
| 1) Emergency Services           | 6) Communication Systems |
| 2) Government Facilities        | 7) Chemical              |
| 3) Healthcare and Public Health | 8) Transportation        |
| 4) Energy                       | 9) Food and Agriculture  |
| 5) Water and Wastewater Systems |                          |

As the facilities and infrastructure supporting these sectors can be in or near high-fire prone areas, the potential direct and indirect impacts of wildfires can cause significant damage, destruction and/or disruption to these essential public services. These major facilities and infrastructure are priority locations for hazard reduction and wildfire hardening projects. *Note: Wildfire mitigation actions to protect critical infrastructure are often the responsibility of the entity operating these facilities or services.*

The following is a brief description of critical infrastructure identified as part of the CWPP planning process. Figure 7 depicts critical infrastructure within and adjacent to the Planning Area.

#### 3.5.2.1 Emergency Services

**General Description:** *The emergency services sector is defined by dispatch centers, law enforcement facilities (e.g., police stations, sheriff offices), fire stations, emergency operations centers, and office of emergency services.*

- + **Law Enforcement Facilities:** Law enforcement in Agoura Hills is provided by the Los Angeles County Sheriff's Department – Lost Hills Station which is located just east of Agoura Hills in Calabasas.
- + **Fire Stations:** Fire protection in Agoura Hills is provided by the Los Angeles County Fire Department (LACoFD). LACoFD Station 89 (Battalion 5 Headquarters) is located in Agoura Hills. Refer to Section 3.7.1 for more details on firefighting resources.
- + **Emergency Operations Centers:** The County of Los Angeles' EOC is operated by the County Office of Emergency Management and is located outside of the Planning Area.
- + **Search and Rescue:** Search and Rescue is provided by the Los Angeles County Sheriff's department.

Refer to Figure 7 for the general locations of emergency services across the Planning Area.

### 3.5.2.2 Government Facilities

**General Description:** *The government facilities sector is defined by schools, military facilities, jails and prisons, homeless shelters, community centers, senior centers, independent living centers (as defined by the California Department of Rehabilitation), municipal and county owned facilities, voting centers, and vote tabulation facilities.*

- + **Schools:** The City of Agoura Hills is served by the Las Virgenes Unified School District. There are three public elementary schools, one public middle school, one public high school, and one public continuation high school. There are also three private schools. See Table 5 for more information. Note: Headquarters for home school and online learning programs are not included in this summary or in the list below.

**Table 5. Private and Public Schools in the City of Agoura Hills**

School	Type	Location
Agoura High School	9 – 12 (Public)	Agoura Hills
Lindero Canyon Middle	6 – 8 (Public)	Agoura Hills
Sumac Elementary School	K – 5 (Public)	Agoura Hills
Willow Elementary School	K – 5 (Public)	Agoura Hills
Yerba Buena Elementary School	K – 5 (Public)	Agoura Hills
Mariposa School of Global Education	K – 8 (Private)	Agoura Hills
Ilan Ramon Day School	Pre-K – 5 (Private)	Agoura Hills
Montessori School of Agoura	Pre-K – K (Private)	Agoura Hills

- + **Military Facilities:** There are no military facilities in the Planning Area.
- + **Federal Facilities:** Federal facilities consist of the United States Postal Service (USPS) facilities and lands and offices associated with the NPS's Santa Monica Mountains National Recreation Area. No major federal military or courthouse facilities are located within city limits.
- + **Jails and Prisons:** There are no jails, prisons, or other corrections facilities in the Planning Area.

- + **Homeless Shelters:** There are no homeless shelters in the Planning Area. The City of Agoura Hills works with several agencies throughout LA County and provides the public seeking resources by calling the LA County 2-1-1 line or visiting the [Los Angeles Homeless Services Authority \(LAHSA\) website](#).
- + **Community Centers:** The City of Agoura Hills has one community center known as the Event Center of Agoura Hills that provides a range of facilities and services for socializing, participating in recreation or education activities, and seeking city resources and information.
- + **Senior Centers, Independent Living Centers and Retirement Communities:** The Event Center of Agoura Hills is a city-owned community center that provides senior resources, programming, and events. There are three independent living centers in the City which include: (1) Oakmont of Agoura Hills, (2) Meadowbrook of Agoura Hills, and (3) Leisure Living, two of which (Oakmont and Meadowbrook) are located in southern Agoura Hills. This presents a risk, as this area is more prone to fires, and seniors may need more time to evacuate.
- + **Voting Facilities:** There are typically several voting centers located throughout the City of Agoura Hills during elections. However, the specific location of these facilities can change. Typically, this includes community centers and government offices. Ballots are processed in the Los Angeles County Election Center which is in the City of Industry.
- + **City, County and State-Owned Facilities:** Beyond the facilities listed above, there are many other city, county and state-owned facilities within the City of Agoura Hills. These include city hall, Agoura Hills Public Library, municipal government buildings, and park spaces for Agoura Hills.

Refer to Figure 7 for the general locations of government facilities across the Planning Area.

#### 3.5.2.3 Healthcare and Public Health

**General Description:** *The healthcare and public health sector is defined by public health departments, cooling (or warming) centers, temporary facilities established for public health emergencies, and medical facilities, including hospitals, skilled nursing facilities, nursing homes, blood banks, healthcare facilities, dialysis centers, and hospice facilities, but excluding doctor offices and other nonessential medical facilities.*

There are no full-service hospitals located in the Planning Area but there are nearby hospitals which include Los Robles Regional Medical Center in Thousand Oaks and West Hills Hospital and Medical Center in West Hills. Other medical facilities in the City of Agoura Hills include (1) Centurion Surgical Center, (2) Providence Medical Institute Primary Care, and (3) AFC Urgent Care. As mentioned in the previous section, there are several independent living centers and retirement communities that provide assisted living care for seniors in the Planning Area. The City has one designated cooling center at the Agoura Hills Public Library. The City Event Center serves as a Community Resource Center during PSPS events.

Refer to Figure 7 for the general locations of healthcare facilities across the Planning Area.

#### 3.5.2.4 Energy

**General Description:** *The energy sector is defined by public and private facilities vital to maintaining or restoring normal service, including but not limited to interconnected, publicly owned utilities and electric cooperatives. Additionally, electricity providers may undertake Public Safety Power Shutoffs (PSPS) during high hazard wildfire conditions, which has the potential to impact other critical infrastructure such as communications systems and transportation infrastructure.*

- + **Electric Utility:** Electricity is provided to the City of Agoura Hills by Clean Power Alliance (CPA), which purchases and generates power from renewable sources. Southern California Edison (SCE) is responsible for the physical delivery of power through its energy infrastructure. There are several aboveground and partially underground electrical transmission lines spanning about 24 miles that run through Agoura Hills. There are five nearby substations including the Crater Station, Thousand Oaks Substation, Newbury Substation, Royal Substation, and Potrero Substation. All substations are owned by SCE and are outside of Agoura Hills city limits.
- + **Pipelines:** The City of Agoura Hills receives natural gas services from the Southern California Gas Company (SoCalGas). A SoCalGas high pressure distribution line passes east to west through Agoura Hills and branches north towards Oak Park.

Refer to Figure 7 for the general locations of energy infrastructure across the Planning Area.

#### 3.5.2.5 Water and Wastewater Systems

**General Description:** *The water and wastewater sectors are defined by facilities associated with the provision of drinking water or processing of wastewater, including facilities used to pump, divert, transport store, treat, and deliver water or wastewater.*

- + **Water Delivery:** The City of Agoura Hills receives its water directly from the Las Virgenes Municipal Water District (LVMWD). The LVMWD is a member agency of the Metropolitan Water District of Southern California (MWD) and receives nearly all its drinking water from MWD. MWD imports water from Northern California via the State Water Project and from the Colorado River via the Colorado River Aqueduct. The LVMWD spans a 122 square-mile service area with mountainous and steep terrain, with potable water systems that includes 25 tanks, 24 pumping stations, 394 miles of main lines, the Las Virgenes reservoir of over 10,000 acre-feet, and the Westlake Filtration Plant that produces over 15 million gallons of water a day.
- + **Wastewater Treatment:** The LVMWD treats over 7 million gallons of wastewater daily through the Tapia Water Reclamation Facility, and processes biosolids removed during the wastewater treatment process at the Rancho Las Virgenes Composting Facility.

In addition, LVMWD formed the Las Virgenes Triunfo Pure Water Project, as part of a joint-powers authority (JPA) effort with the Triunfo Water & Sanitation Districts, to treat wastewater within the Malibu Creek Watershed. To increase water supply for the region, the Las Virgenes Triunfo Pure Water Project is in beginning stages of construction for the Advanced Purification Facility (AWPF) to purify recycled water to drinking water standards that would be supplied to customers of the district. It is currently in a review process by the general public.

#### 3.5.2.6 Communication Systems

**General Description:** *The communication sector is defined by carrier infrastructure, including selective routers, central offices, head ends, cellular switches, remote terminals, and cellular sites.*

- + **Cellular Service:** The City of Agoura Hills is generally well covered by cellular communication networks which include Verizon, AT&T and T-Mobile, all of which provide 4G/5G services. There are no standard cellular towers in the City of Agoura Hills. However, there are three standard nearby cellular towers in Oak Park, Calabasas and Thousand Oaks.

- + There are six microwave service towers in Agoura Hills, three owned by TowerStream Corp and three owned by the Los Angeles Regional Interoperable Communications System. In addition, there are nineteen private land mobile towers that are leased by the following entities who operate the towers on private land:
  - City of Agoura Hills (2)
  - City of Calabasas (1)
  - State of California (1)
  - Las Virgenes Unified School District (5)
  - County of Los Angeles (6)
  - Oakmont of Agoura Hills, LLC (1)
  - Teradyne, Inc. (2)
  - Tesla, Inc. (1)

While locating communications infrastructure on ridgelines is often ideal from a service coverage perspective, these areas can be at a higher risk of wildfire, which poses a vulnerability to communications systems. Alternative methods of communication will need to be evaluated for wildfire risk mitigation actions and public notification during wildfires.

#### 3.5.2.7 Chemical, Industrial and High Hazard Facilities

**General Description:** *The chemical sector is defined by facilities associated with the provision, manufacture, maintenance, or distribution of hazardous materials and chemicals.*

There are no chemical, industrial or other high hazard facilities in the Planning Area. However, any facilities storing or producing hazardous materials may present a major hazard during wildfire events, if not designed appropriately to limit release of hazardous or toxic chemicals into the natural or built environment. Depending on what is produced or stored at a given facility they can also pose a fire risk to nearby communities and accelerate the spread of wildfire. Any new hazardous materials facilities should be identified for preplanning consideration.

#### 3.5.2.8 Transportation

**General Description:** *The transportation sector is defined by facilities associated with automobile, rail, aviation, major public transportation, and maritime transportation for civilian, freight, and military purposes, as well as traffic management systems. Transportation and the movement of individuals to safety ahead of a wildfire is typically a major challenge for city, county and state governments.*

There is one major transportation corridor across the Planning Area. The key highway route is U.S. Route 101, which travels east-west through Agoura Hills. There are several primary and secondary roads in the Planning Area which include Agoura Road, Kanan Road, Lindero Canyon Road, Cornell Road and Thousand Oaks Boulevard. There is no rail system that travels into the City of Agoura Hills. Rail systems such as the Southern California Metrolink and the Los Angeles County Metropolitan Transportation Agency (Metro) can be accessed in other locations outside of the Planning Area (e.g., Simi Valley or North Hollywood). A variety of bus routes travel through the Planning Area operated by the City of Los Angeles Department of Transportation (LADOT) and Metro. There are no airports located in the Planning Area, with nearest airports located in Burbank or Van Nuys, California.

There are some neighborhoods with limited access to major transportation routes as well as some narrow and winding roads throughout the Planning Area (e.g., near Cheseboro Canyon). Depending on the day of week and time of day, evacuation operations could be significantly impacted by vehicles already using roadways throughout the Planning Area.

Protecting the viability of road systems in the Planning Area is critical to the safety of the public and emergency responders during a wildfire. The maintenance of roadside rights-of-way and prevention of neighborhood landscape vegetation from encroaching onto the road networks will be imperative for the resiliency of not only the physical transportation network but also the roadway capacity during a major wildfire event.

Refer to Figure 7 for the general locations of transportation infrastructure across the Planning Area.

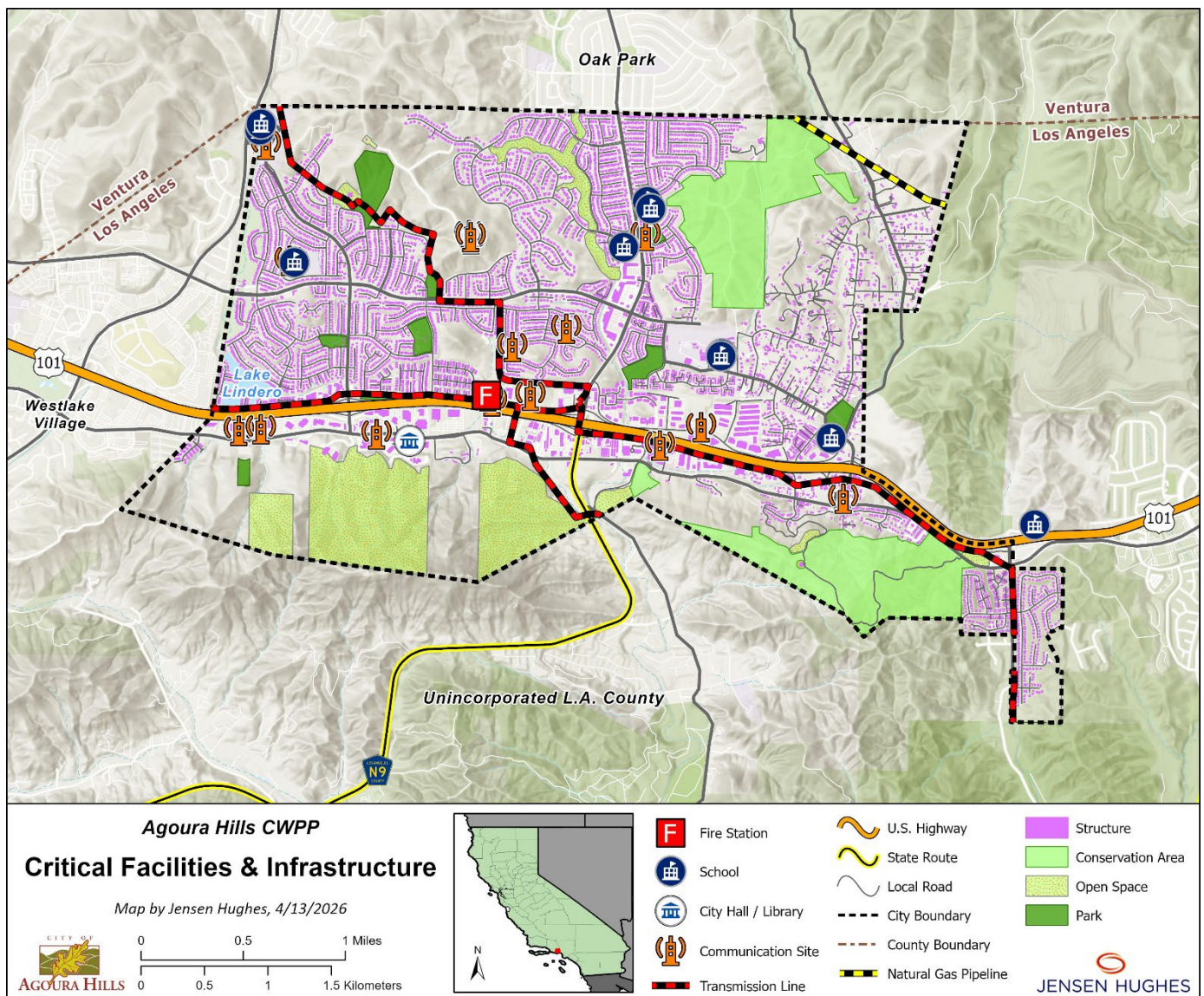


Figure 7: Critical Facilities & Infrastructure in Agoura Hills

### 3.5.3 Private Residential Property & Commercial Businesses



**General Description:** *The private property sector refers to homes and dwelling units such as single-family houses, apartments, condominiums, and mobile homes located on privately owned parcels. In addition, the commercial property sector refers to land and buildings used for business activities, including retail stores, offices, restaurants, hotels, and other service- or employment-based uses.*

In August 2022, the City of Agoura Hills updated its General Plan to include the 2021-2029 Housing Element. The City of Agoura Hills is primarily residential land use (approx. 42%). According to the City of Agoura Hills 2021–2029 Housing Element, the city had 7,639 housing units in 2020, including 5,349 single-family detached homes (70%), 1,249 multi-family units in structures of 2 or more units (16%), and 22 mobile homes/other units (less than 1%), with an overall vacancy rate of 3.4 percent. The Housing Element also identifies vacant single-family residential parcels with capacity for 102 additional units across approximately 134 acres, primarily in very low-, low-, and single-family residential and restricted open space designations.

Most housing in Agoura Hills is located in established single-family neighborhoods, including lower-density, large-lot areas such as Old Agoura. Higher-density and mixed-use housing is concentrated in specific “opportunity areas”—primarily along major corridors like Agoura Road and Kanan Road, including the Agoura Village and North Agoura Road planning areas—where the City of Agoura has planned for more compact residential and mixed-use development.

Housing in the Planning Area is aging. About 89% of the City’s housing stock was built prior to 1989, and is now over 30 years old, indicating that these homes are likely to have rehabilitation needs which may include plumbing, roof repairs, foundation work, etc. Most houses within the Planning Area were built before the adoption of the Chapter 7A requirements in the California Building Code, which increases the risk of ignition in a wildfire situation. The prevalence of older houses also increases the overall available fuel load and likelihood of structure-to-structure home ignition.

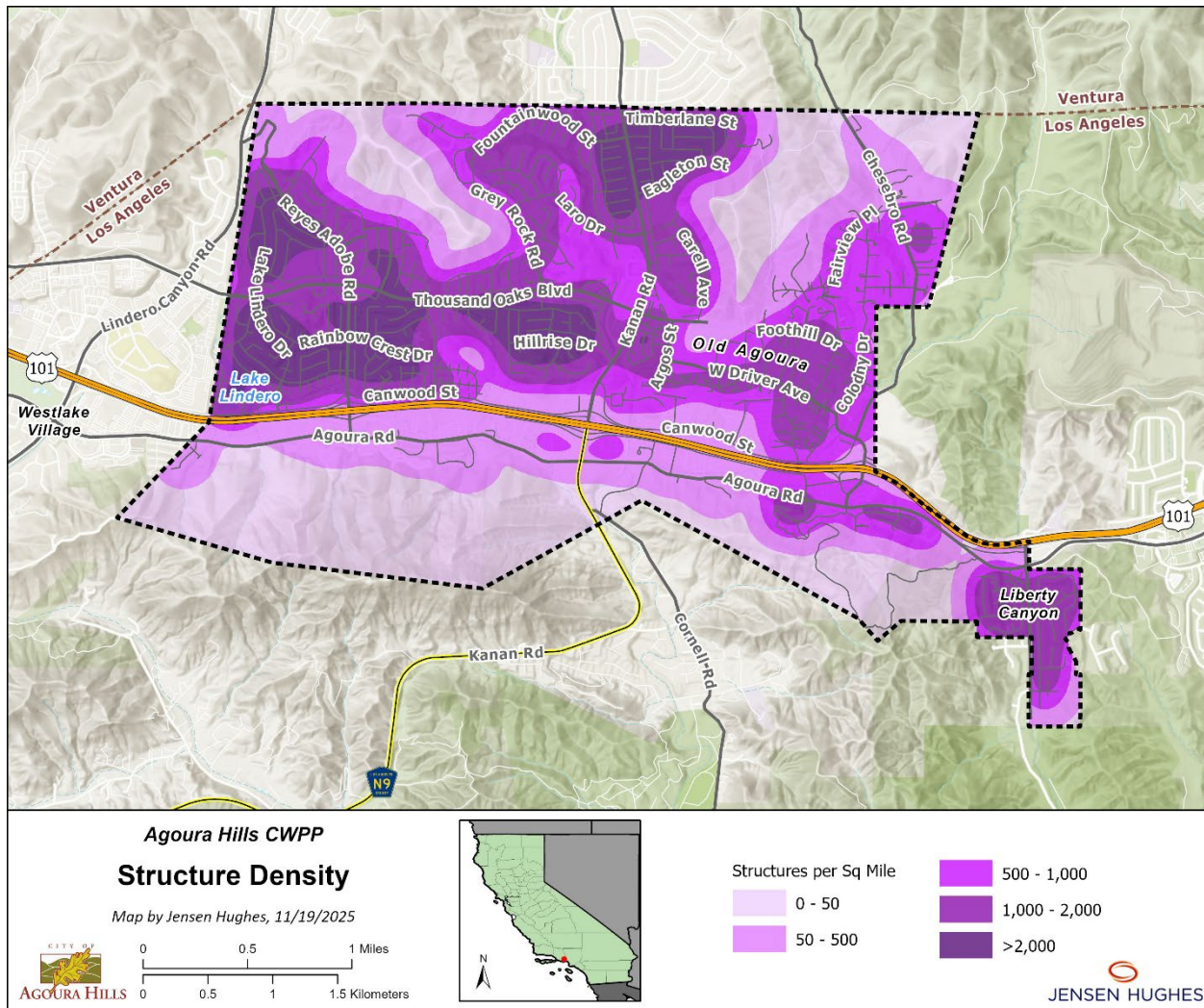
Most homes in the City of Agoura Hills were not constructed to modern wildfire building standards, making them more susceptible to ignition. This presents major challenges due to the high loss potential and a higher likelihood of structure-to-structure fire spread.

In 2022, the median home price in the City of Agoura Hills was around \$1.1 million per the City of Agoura Hills 2021-2029 Housing Element. According to CAL FIRE’s 2025 Fire Hazard Severity Zone (FHSZ) maps and the Agoura Hills CWRA, approximately three-quarters of the City of Agoura Hills (about 78%) lies within a CAL FIRE–designated Very High Fire Hazard Severity Zone (VH FHSZ), with most of the remaining land mapped as High or Moderate Fire Hazard Severity Zones (M-, H-, FHSZ). Because residential neighborhoods are distributed across the Planning Area, most existing homes in Agoura Hills are located within the Moderate, High, or Very High Fire Hazard Severity Zones, with most located in the VH FHSZ.

Residential land uses make up the largest share of the Planning Area at approximately 42%, while commercial and industrial/manufacturing uses comprise a smaller portion, at roughly 6% and 5%, respectively. Within the City of Agoura Hills, most commercial, office, and business park uses are concentrated along the US-101 corridor and adjacent major roadways. Based on CAL FIRE’s FHSZ maps and the City’s 2021–2029 Housing Element, a substantial share of these commercial areas lie within or immediately adjacent to mapped wildfire hazard zones, including portions of the VHFHSZ near the community’s hillsides and canyon areas.

While some freeway-adjacent commercial centers fall outside the designated VHFHSZ, they remain near to wildland fuels and residential neighborhoods that are at risk from embers, smoke, and evacuation-related disruption during major wildfires. As a result, nearly all of the city’s key commercial corridors and business

districts could potentially be exposed to wildfire impacts. Refer to Figure 8 for structure density across the region.



**Figure 8. Structure Density in Agoura Hills. Note: Higher structure density may increase the risk of home-to-home fire spread and increases the importance of communal defensible space.**

### 3.5.4 Environment and Natural Resources



**General description:** Environmental and natural resources consist of a variety of components including biological resources, historical and cultural resources, air quality, water, recreation, geological and archaeological resources.

As part of any actions associated with the mitigation of a potential wildland fire hazard, there is a need to balance the impacts of the mitigation actions against the level of protection they provide to a value at risk. Actions taken by private property owner on private lands are subject primarily to the protections found in local ordinance of codes. Regulatory direction can be found in the Agoura Hills General Plans.

Large scale fire hazard reduction projects undertaken by local, State and Federal agencies often fall under the auspices of the California Environmental Quality Act (CEQA) or the National Environmental Policy Act (NEPA).

The complexity of the proposed actions and the potential environmental impacts will determine the level of public engagement and analysis required by the laws. Both CEQA and NEPA have exemptions which allow for a less stringent level of environmental analysis. Under CEQA, a *Negative Declaration* as approved by the jurisdictional regulatory authority essentially is a determination that the project, as proposed, will not cause any significant environmental harm. For federal projects governed by NEPA regulations, a project may be excluded from analysis if the proposed action falls under one of several defined categories. These projects are considered *Categorically Excluded* from full environmental analysis.

Appendix C offers Best Management Practices (BMPs) for use in fire hazard mitigation projects. Given the jurisdictional complexity of the Planning Area, implementation of resource protection measures will require coordination among multiple agencies and stakeholders. While specific actions on resource management agency lands are not prescribed in this plan, the CWPP supports continued collaboration to implement appropriate resource protection strategies that balance wildfire risk reduction with environmental considerations. Property owners are encouraged to coordinate with the City Planning Division and relevant resource agencies for site-specific guidance..

**Watercourses and Watershed Protections:** Within its corporate boundaries, the City of Agoura Hills has several blue-line streams, with the four primary creeks being Medea Creek, Lindero Creek, Chesebro Creek, and Palo Comado Creek. Medea Creek flows through the center of Agoura Hills, encompassing unimproved and improved channels and an open space corridor. Lindero Canyon Creek runs through the canyon in the northwest quadrant of the city and empties into Lake Lindero then surfaces again just south of Agoura Road west of Kanan Road. Palo Comado Creek crosses the northeast section of Agoura Hills, while Chesebro Creek in the City runs along the north side of Agoura Road between Lewis Road and Medea Creek. All of these drainages have been modified by urban development and maintain a mix of native riparian vegetation and non-native species.

The 2025 General Plan states that *“Preserving the watercourse in their natural state, where feasible, is a community priority”*. Supporting this priority are specific policies including:

- + NR-4.11 - Creeks and Natural Resources. Support the restoration of creeks and other natural resources with activities that include creek cleanup, erosion and urban runoff control, and weeding of non-native plants.
- + NR-6.1 - Riparian Habitat. Protect and enhance the natural qualities of riparian habitat.
- + NR-6.4 - Protect Open Space Areas and Water Resources. Conserve undeveloped open space areas and drainage courses and channels for the purpose of protecting water resources in the City’s watershed.
- + NR-6.6 - Cooperation with Other Agencies. Coordinate and collaborate with other jurisdictions and regional agencies in the watershed to address water quality issues of regional or local importance.

**Open Space and Recreation:** Known as the gateway to the Santa Monica Mountains, there are approximately 2,000 acres of land that are deed restricted or designated as open space within the city. Some of the larger open space parcels located in Agoura Hills and the adjoining Planning Area are designated restricted open space, where development potential is constrained because of natural habitat, visual and aesthetic value, or ownership by conservation groups. Ladyface Mountain Open Space is managed under a standalone specific plan which addresses potential development standards, oak tree protections, and fuel modification standards. Figure NR-1 of the 2025 General Plan (Figure 9) provides a map of the designated open space resources.

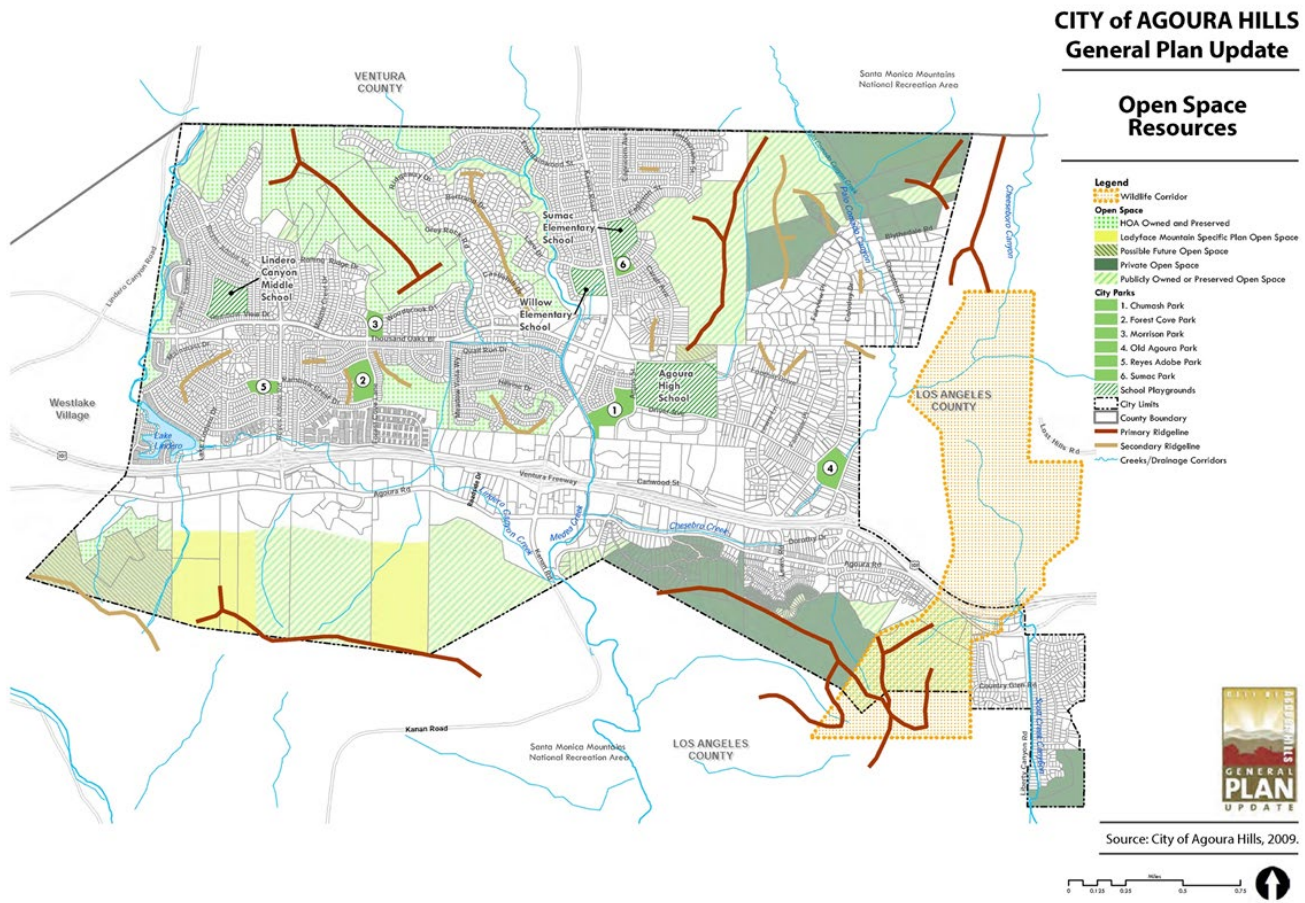


Figure NR-1

Figure 9: Open Space Resources (source: Agoura Hills General Plan)

A significant multi-user trail system exists within and directly adjacent to the city. Many of these trails are managed by the Mountains Recreation and Conservation Authority (MRCA) and the National Park Service. These trails often lead into the undeveloped wildland areas of Chesebro/Palo Comado Canyons, Liberty Canyon, and Ladyface Mountain. Other trails or trailheads that provide recreational opportunities include, the Medea Creek, Liberty Ridge, Liberty Canyon, and the Chesebro Canyon Equestrian.

The city maintains six designated parks, all of which include irrigated lawns and ornamental vegetation. Dense surface vegetation, such as that at Forest Cove Park, particularly along Forest Cove Lane, Rainbow Crest Drive, and Adelina Court, may act as receptive fuelbeds for embers during times of extreme fire weather. Vegetation conditions at other parks, particularly Old Agoura Park, could also pose a risk of ember ignition.

Open space areas in Agoura Hills contain continuous natural vegetation that can carry wildfire under dry and windy conditions. During Santa Ana wind events and other extreme fire weather, fires often originate in or move through undeveloped areas before impacting nearby neighborhoods. In many Southern California fires,

**Fires often move from open space into nearby neighborhoods during wind events.**

homes are ignited not by direct flames, but by wind-driven embers that travel ahead of the fire front and land in vulnerable areas around structures.

For neighborhoods adjacent to open space such as the WUI means that defensible space, vegetation management, and home hardening are especially important. Open space itself is not the problem but rather an interaction between natural vegetation, weather, and built environments that shapes wildfire risk. Protecting homes near open space requires coordinated efforts across public lands, private property, and community-wide planning.

**Sensitive Habitats and Species:** Several sensitive animals and plants live within the Planning Area of the CWPP. These sensitive species and habitats are in many cases protected by state, federal, and local ordinance.

The County of Los Angeles has identified two Significant Ecological Areas (SEAs) within portions in Agoura Hills; the Las Virgenes SEA #6 and Palo Comado Canyon SEA #12. The Las Virgenes SEA is located southeast of the Kanan and Agoura Road Intersection, while the Palo Comado SEA is in the northeast corner of the city.

The SEA program establishes the permitting, design standards, and review process for development within SEAs, balancing preservation of the County's natural biodiversity with private property rights. Through goals and policies, the SEA help guide development within SEAs. The County's General Plan goals and policies are intended to ensure that privately-held lands within the SEAs retain the right of reasonable use, while avoiding activities and developments that are incompatible with the ability of SEAs to thrive in the long term (Los Angeles County Planning website accessed November 2025).

### 3.5.5 Cultural and Historical Resources



**General description:** *Cultural and historical resources include archaeological sites, historical buildings and sites, and other areas of historical significance which are important community values.*

The area surrounding Agoura Hills is laden with points of cultural importance varying from artifacts associated with the first peoples of California and their use of the land, to influence of Spanish and Mexican land grants and the associated historic ranching and farming activities. These cultural features are scattered throughout the Planning Area and may not be easily recognized by those without professional backgrounds in cultural resources identification and preservation. The California State Office of Historic Preservation reviews and comments on thousands of federally sponsored projects annually pursuant to Section 106 of the National Historic Preservation Act and state programs and projects pursuant to Sections 5024 and 5024.5 of the Public Resources Code. Any proposed projects should be vetted with these cultural resource professionals and tribal entities to assure compliance with State and Federal requirements for the protection of cultural resources.

The following sections are a summary of some known cultural resource values.

**Indigenous Peoples:** For thousands of years before European contact, the Chumash people thrived in the Conejo Valley, a portion of their ancestral territory which stretches from Malibu north to San Luis Obispo. A sophisticated society, their lives were deeply intertwined with the land.

Few of the Chumash lived in the Agoura Hills area permanently, since year-round food sources were more prevalent near the coast. However, each autumn groups of Chumash traveled inland and camped in the area to harvest acorns and to hunt deer and small game.

In 1769, a Spanish land expedition led by Gaspar de Portola left Baja California and reached the Santa Barbara area where five Spanish missions were established in Chumash territory. The Chumash population was all but

decimated, due largely to the introduction of European diseases (<https://chumash.gov/chumash-history>, accessed December 12, 2025). By 1831, the number of mission-registered Chumash numbered only 2,788, down from pre-Spanish population estimates of 22,000.

The Chumash Indian Museum in Thousand Oaks, the Satwiwa Native American Indian Culture Center in Newbury Park, and the Santa Ynez Chumash Museum and Cultural Center provide excellent resources for better understanding the Chumash culture and history.

After mission secularization in 1834, Mexican authorities failed to live up to their promises of distributing the remaining land among the surviving Chumash, but rather large tracts of land were granted to individuals, leading to the establishment of large ranching and farming operations in the Conejo Valley.

### 3.5.6 Recreation



**General description:** *Recreational resources consist of a variety of components including parks, golf courses, gardens, hiking trails, scenic roads, and more. They are an important community value.*

The City of Agoura Hills has many parks and open spaces for the general public to gather in and recreate. There are 6 city-owned parks: Chumash, Forest Cove, Morrison, Old Agoura, Reyes Adobe, and Sumac. There are nearby hiking trails in and near the Planning Area which include the Cheeseboro Canyon Trailhead, which is managed by the NPS as part of the Santa Monica Mountains National Recreation Area. There is one golf course in the Planning Area, the Lake Lindero Golf Course, and near the golf course is Lake Lindero, a man-made lake surrounded by communities in the Planning Area. Outside of, but near, the Planning Area are Mullholland Highway which is considered a scenic road that runs about 50 miles through the Western Santa Monica Mountains from US 101 in Calabasas to SR 1 near Malibu that provides the general public with opportunity to drive from the inland mountains to the Pacific Ocean. Parts of Mullholland Highway, between Sierra Creek and Kanan, have recently been reopened to the public after being closed due to the Woolsey Fire in 2018.

### 3.5.7 Local Economy



**General description:** *Elements of the local economy, such as key established and emerging industries, and important community values that may be negatively impacted by wildfire.*

There are a variety of industries in the City of Agoura Hills that contribute to the local economy. The top 3 employment sectors for the City include professional and management (31.7%), education (15.6%), and leisure (11.7%) followed by retail trade (11.2%) and finance (10.2%). The top 5 employment sectors make up 60% of the jobs in the City of Agoura Hills. Top employers within the Planning Area include Las Virgenes Unified School District, Bank of America, Penny Mac, Cydcor LLC, and Teradyne Inc. A diverse local economy increases potential resilience to wildfire threats, because the local economy can rely on other industries if one is disproportionately affected by wildfire.

### 3.6 LAND USE / ZONING

The Community Conservation and Development chapter of the Agoura Hills General Plan 2035 is intended to guide development of Agoura Hills’ built environment to the year 2035. Agoura Hills’ land use policies have adapted over time, as the City is now almost fully developed. Therefore, policies now focus on how population and employment growth can be managed to preserve the qualities of the City’s neighborhoods, business districts, and open spaces.

The City of Agoura Hills is primarily residential land use (approx. 42%), as demonstrated in Figure 10. Parks and open space make up the second most common land use (approx. 28%), and planned development the third most common (approx. 16%). Business and manufacturing and commercial use make up the least amount of acreage, at roughly 6% and 5%, respectively.

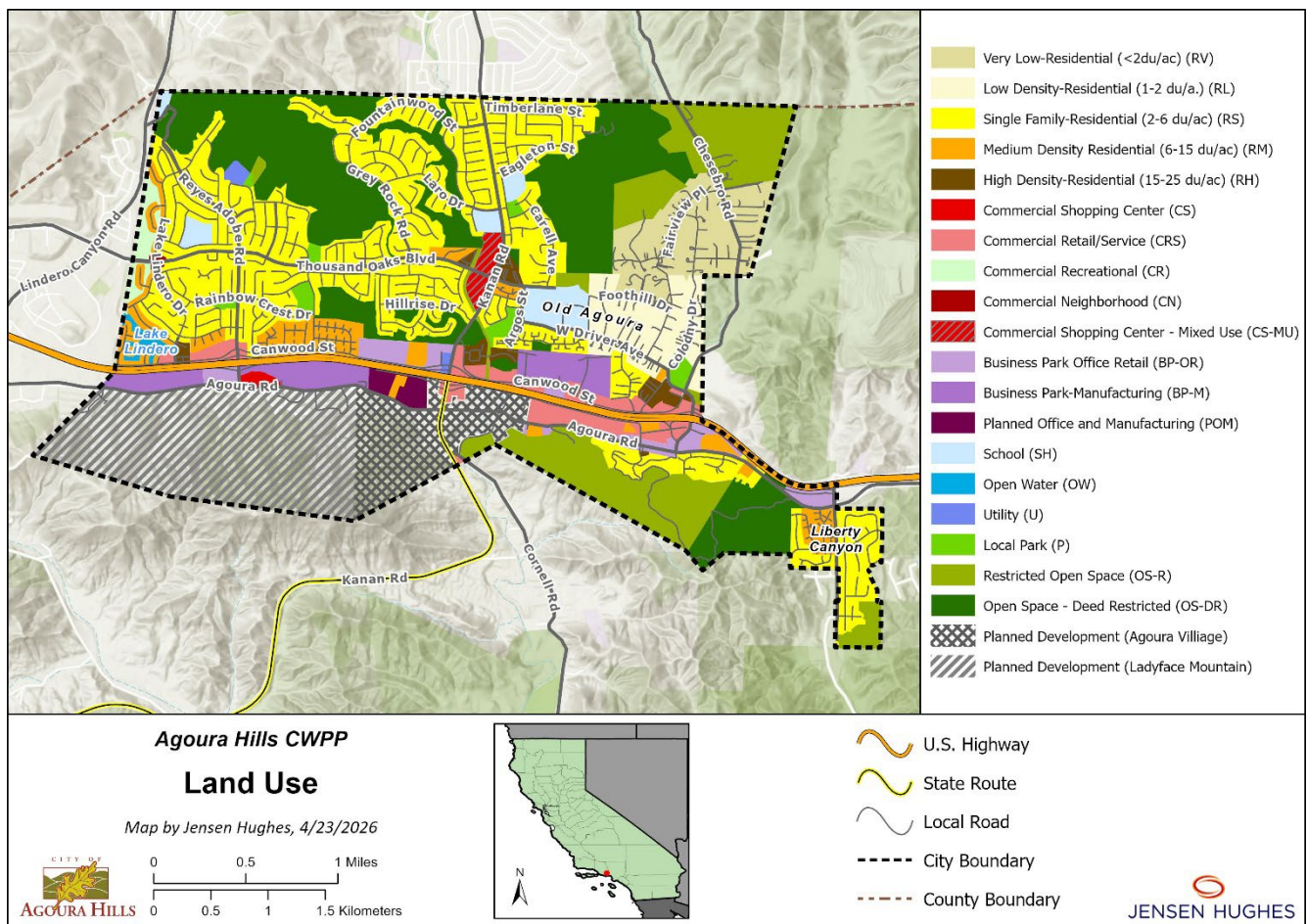


Figure 10. Land Use for Agoura Hills

### 3.7 FIRE PROTECTION RESPONSIBILITY

The ability to muster a timely and robust response to a wildland fire can influence the eventual impact of that fire on a community. The City of Agoura Hills has fire services provided by the Los Angeles County Fire Department (LACoFD). LACoFD has multiple jurisdictional responsibilities besides wildland fire suppression, including

emergency medical services, structure fire suppression, hazardous materials incidents, swift water and water rescue, inspection and permitting, and code enforcement. In 2024, LACoFD responded to a total of 11,539 fires county-wide out of a total of 455,722 calls for services. The fire workload, of which wildland fire is only a small proportion, represents approximately 2.5% of the department’s total workload (Los Angeles County Fire Department Statistical Summary, 2024).

**3.7.1 Fire Agencies in Agoura Hills**

The Agoura Hills Planning Area is in one of the most firefighting resource dense areas of the nation. LACoFD staffs 175 fire stations with a total of 228 front line engines. The County also staffs 35 trucks, 13 water tenders and 10 fire dozers and 17 hand crews, including nine crews managed by the California Department of Corrections.

A large array of aircraft is available for use on wildland fires, including 10 total helicopters, five Sikorsky S-70 Firehawks, five Bell 214 helicopters and the department also leases a Chinook CH-47 helitanker, considered the world’s larger firefighting helicopter, during fire season. In addition to the helicopters, the department also leases two CL-415 “Superscoopers” to augment their aerial fire suppression capabilities.

The firefighting resources maintained by the County are augmented through mutual aid agreements with Los Angeles City Fire, Ventura County Fire Protection District, and the federal fire agencies which assure that the closest available resources are dispatched to the report of a wildland fire. The sheer size of LACoFD and their fire cooperators enables reinforcements to be rapidly deployed to an emerging wildfire using not only departmental resources, but also those of the cooperating fire agencies.

The three cooperating fire protection agencies in and around Agoura Hills can muster an aggressive initial attack on any report of a wildfire. Using Agoura Hills High School as a center point for the community, these fire agencies can deploy 10 engines within 15 minutes of a dispatch to this location. Travel times and the closest resources will vary with the exact location of a reported fire, but Table 6 shows the speed at which ground based fire resources can be on the scene of a fire.

Fire crews for Los Angeles County Fire may be delivered by helicopter to a reported fire. The closest “fly crew” is stationed at Camp 8, located on the ridgeline above Malibu and has a response time to Agoura Hills of less than 10 minutes. The closest ground crews to Agoura Hills are based at Los Angeles County Camp 13 in Malibu and the CAL FIRE Ventura Camp in Camarillo.

Aviation resources are typically stationed at Whiteman Airport in Pacoima and Camarillo Airport.

**Table 6. Closest fire stations and response times to the center of Agoura Hills**

<b>Station</b>	<b>Agency</b>	<b>Distance (miles)</b>	<b>Travel Time (minutes)</b>
LAC 89	Los Angeles County	1.7	5
VNC 35	Ventura County	1.9	6
LAC 65	Los Angeles County	2.3	6
LAC 125	Los Angeles County	3.7	6

Station	Agency	Distance (miles)	Travel Time (minutes)
VNC 36	Ventura County	2.7	6
LAC 68	Los Angeles County	6.6	9
LAC 144	Los Angeles County	5.0	10
VNC 37	Ventura County	6.6	13
VNC 31	Ventura County	8.2	13
LAC 67	Los Angeles County	8.2	14

**3.7.2 Direct Protection Area (DPA)**

Direct Protection Areas define who has fire suppression responsibilities for specific locations within the Planning Area. DPA also defines who has the primary fiscal responsibility for paying for wildland fire suppression.

Three DPA exist within the Planning Area: Local Responsibility Areas, State Responsibility Areas and Federal Responsibility Areas (Figure 11). Within the City of Agoura Hills much of the wildland fire suppression responsibility rests with Los Angeles County Fire who is contracted by the City as their local fire department. Outside of the City on non-federal lands, Los Angeles County Fire is still the responsible fire agency for wildland fire suppression, but on these lands, they are acting as the contracted fire agency for the State of California. On federal lands, such as Santa Monica Mountains National Recreation Area, the federal government has wildland fire responsibility, with the National Park Service serving as the principal fire agency for the federal DPA.

**Regardless of jurisdiction, agencies coordinate during wildfire events.**

- + Local Government – Local Responsibility Areas.** Most of the lands within the City of Agoura Hills are Local Responsibility Areas (LRA) for wildland fire suppression responsibility. County Fire is the fire agency with suppression responsibility as they are contracted as the local fire department. County Fire can easily muster a first alarm wildfire response which generally includes five engines, two crews, dozer, water tender and two helicopters. The amount of initial attack equipment dispatched to a reported fire can easily double under the County’s augmented staffing plans or if the reported fire occurs within a mutual threat zone of a fire cooperator. Master Mutual Aid also allows the County to leverage additional fire personnel and equipment from nearby fire agencies in California Office of Emergency Services (OES) Mutual Aid Region 1.

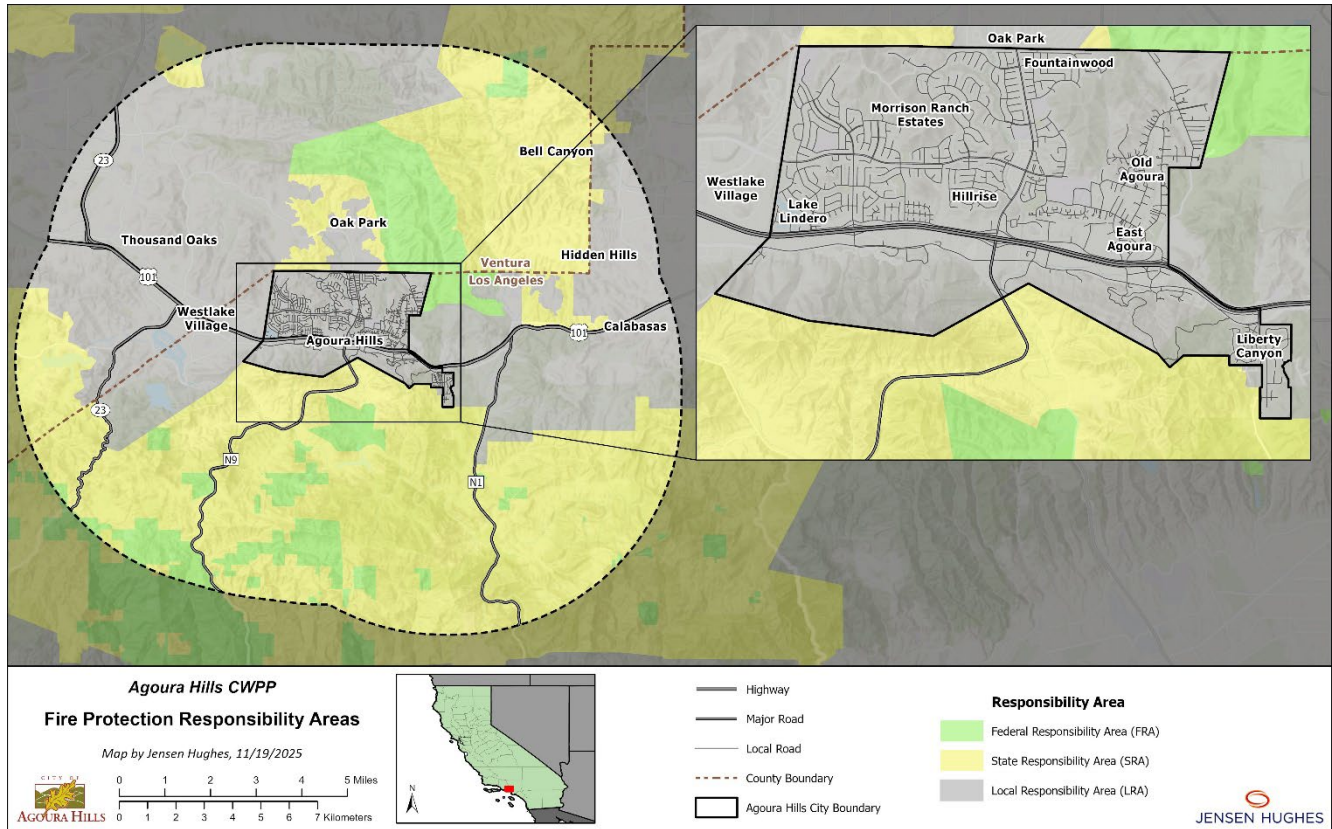


Figure 11: Fire Protection Responsibility Areas for Agoura Hills

- + **CAL FIRE – State Responsibility Areas** – State Responsibility Areas, SRA, is where CAL FIRE has the jurisdictional responsibility for the suppression of wildfires. SRA lands are primarily located adjacent to Agoura Hills within the greater Planning Area, but not on federal property. The Los Angeles County Fire Department is contracted by CAL FIRE to perform wildfire suppression services for SRA lands. County Fire, in conjunction with Ventura County Fire, can bring to bear substantial fire resources when a wildfire burns or threatens to burn SRA lands. These resources include engines, helicopters, crews, and dozers, which can augment existing County Fire equipment.
- + **National Park Service – Federal Responsibility Areas** – Wildlands located in Cheseboro and Palo Comado Canyons and south of the city on Ladyface Mountain are Federal Responsibility Areas. These locations are the protection responsibility of the National Park Service. Because a wildfire spreading from these federal lands can represent a threat to burn SRA or LRA lands, a Cooperative Fire Protection Agreement exist between Los Angeles County Fire and the National Park Service. This agreement provides for initial attack wildfire suppression support within a mutually agreed “threat zone.” While the federal firefighting resources are very limited in the local area, when a wildfire burns within or threatens to burn within these mutual aid area, County Fire can access fixed wing aircraft, helicopters, crews, and other federal fire resources located principally on nearby National Forests. A single Park Service engine is located at King Gillette Ranch approximately seven miles from Agoura Hills.

### 3.7.3 Fire Protection Agreements and Plans

The fire agencies in and around Agoura Hills have well established protocols for obtaining support from fire cooperators during an escalating wildfire through automatic and mutual aid agreements amongst themselves

and with adjoining jurisdictions including neighboring counties, other municipal fire departments, Federal Fire, and the Parks Service.

The following is a summary of existing agreements and mechanisms through which agencies can request assistance for fire suppression operations.

- + **Automatic Aid** - These agreements with nearby fire agencies assure that the closest available fire resource is dispatched to a reported wildland fire. Currently County Fire maintains a multitude of automatic aid agreements. Locally pertinent agreements exist with Ventura County Fire Department, and Los Angeles City Fire.
- + **Master Mutual Aid** - Managed by CAL OES, the California Disaster and Civil Defense Master Mutual Aid Agreement of 1950 allows local governments to request assistance from other signatories to the Agreement without having to reimburse the supporting departments. This agreement is “reciprocal,” in that County Fire, as a signatory, would not receive reimbursement from other local government departments who might receive their support during a time of need.
- + **Assistance by Hire** – Where agreements do not exist for firefighting resources, requests for additional suppression capabilities can be placed by field Incident Commanders through the unified ordering point of the incident. These requests will be relayed to the OES Operational Area to be filled or escalated to the OES Coordinator at the Southern California Geographic Area Coordination Center if the Operational Area cannot meet the needs of fire commanders. The equipment ordered under “assistance by hire” will be paid for by the requesting fire agency, or the cost of the equipment may be shared in a Cost Share Agreement with other jurisdictionally involved fire agencies.
- + **The Fire Management Assistance Grant (FMAG)** - Managed through the Federal Emergency Management Agency (FEMA) FMAG provides reimbursement to local government agencies for cost they may incur during a wildfire emergency. CAL OES will process FMAG requests for local government who must meet specific criteria to qualify for this cost reimbursement. As a rule of thumb, FMAG will cover 75% of local government cost incurred during a wildfire emergency.

# *Defining the Wildfire Problem*



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## 4.0 Defining the Wildfire Problem

The nature of the wildfire problem is a product of ignition sources, vegetative fuels, topography, and weather. Understanding the wildfire problem requires an understanding of how these factors interact. Agoura Hills has a complicated wildfire regime, with fire behavior determined by distance from the coast and topography. While only a small fraction of wildfires become large enough to result in significant damage each year, the ability to prevent and suppress these fires depends on a combination of conditions favorable to suppression and the availability of firefighting resources to provide an appropriate response to the fire, especially during the incipient stages of fire development. The wildlands surrounding Agoura Hills have the highest fire frequencies in California in the last century, almost entirely in the autumn months and including a mix of frequent small fires (<500 acre) and infrequent large, prolonged fires (>10,000 acres). This makes the Planning Area highly prone to disastrous wildfires. Wildfires have historically been a major part of Agoura Hills's ecosystem and will continue to be.

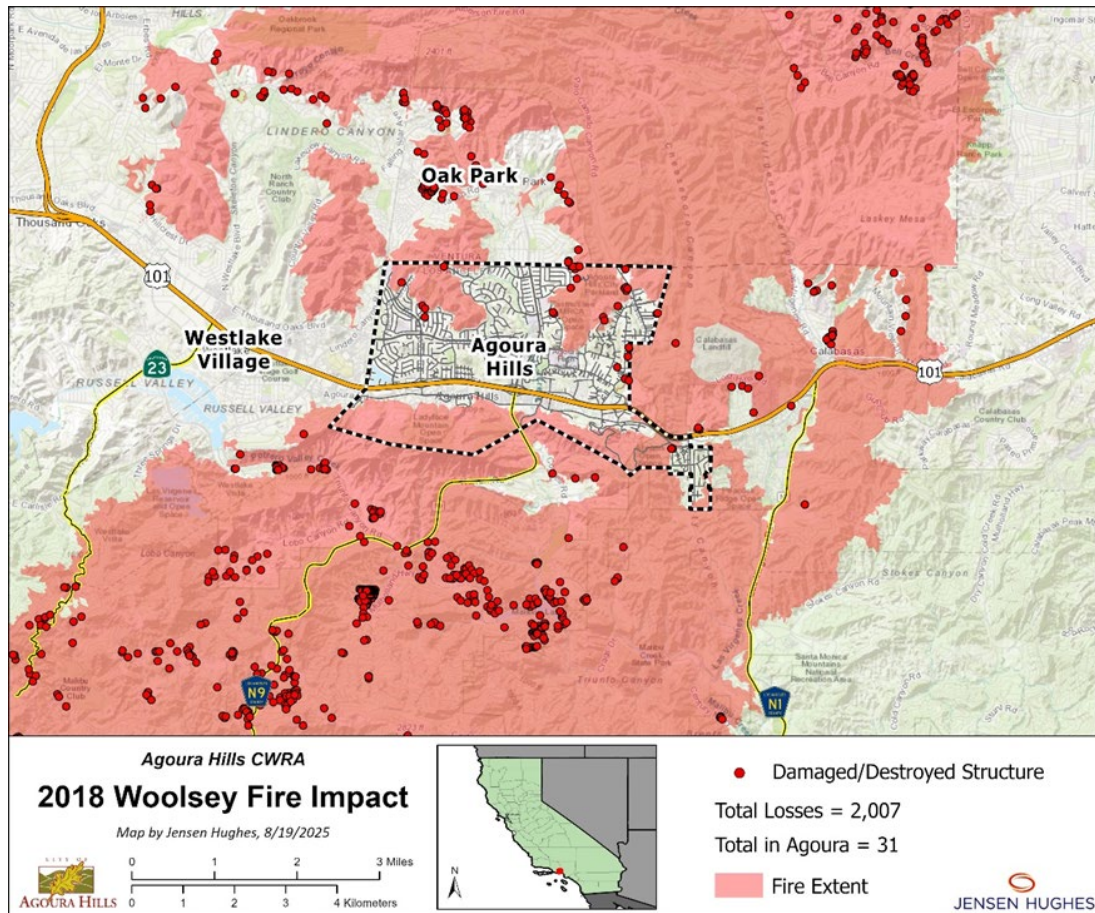
To effectively develop a mitigation strategy to address the potential negative effects of a wildfire within the Planning Area requires an understanding of fire history, fire ecology, climatology, and human interactions with these various elements.

### 4.1 FIRE HISTORY

Fire history provides a useful tool for fire prevention and preparedness as it provides an understanding of fire frequency, fire season, fire behavior and characteristics, major sources of ignition and portions of the landscape that are the most vulnerable.

There is a significant recent history of large wildfires burning in and around the city. The most impactful of these was the 2018 Woolsey Fire, which damaged or destroyed approximately 2,007 structures total, 31 of which were within Agoura Hills city limits (See Figure 12). While the Woolsey Fire directly impacted the city, multiple recent, larger fires have burned in the general vicinity of the community including:

- + **Kenneth Fire** – January 2025, burned 1,052 acres northeast of the City in Calabasas.
- + **Palisades Fire** – January 2025, burned 23,707 acres southeast of the City in Pacific Palisades and Malibu.
- + **Franklin Fire** – December 2024, burned 4,087 acres south of the City in Malibu.
- + **Hill Fire** – November 2018, burned 4,310 acres east of Camarillo (burned concurrently with the 96,949-acre Woolsey Fire).
- + **Mountain Fire** – November 2024, burned 19,904 acres to the north and east of Camarillo.
- + **Springs Fire** – May 2013, burned 23,676 acres east of Point Mugu in Ventura County.



**Figure 12. Damaged/Destroyed structures during the 2018 Woolsey Fire.**

Wildland fire ignitions do not generally start within Agoura Hills itself but spread towards the city from surrounding areas. Most of the recent, large wildfires have occurred around the city, encroaching from the northeast and northwest (See Figure 13 and Figure 14). All of the large wildfires cited above have burned under Santa Ana/offshore wind conditions, including the Springs Fire, which burned in May, a month not typically associated with Santa Ana weather events.

**The Woolsey Fire showed how quickly wildfire can reach Agoura Hills.**

The majority of ignitions occur to the southeast, near Malibu Creek State Park. This can be seen in the “hot spot” or fire cluster map in Figure 15.

These large fires in and adjacent to the city have modified the vegetative structure surrounding Agoura Hills by burning much of the older, denser chaparral. While these plant communities are in the process of recovery, the landscape now primarily supports less dense grass and grass-shrub fuel types. These fuels can burn rapidly under summer and fall fire weather conditions, though typically at lower intensities, which can improve the effectiveness of both aerial- and ground-based firefighting operations. However, during Santa Ana events, high wind speeds can limit or prevent the use of aerial resources, placing greater reliance on ground response.

Throughout Agoura Hills, there are many instances where non-native ornamental vegetation is used in landscaping. Often it is this ornamental vegetation that allows fire to impact a structure, either by providing a receptive fuel for embers or by providing a flammable connection from wildland fuels to a structure.

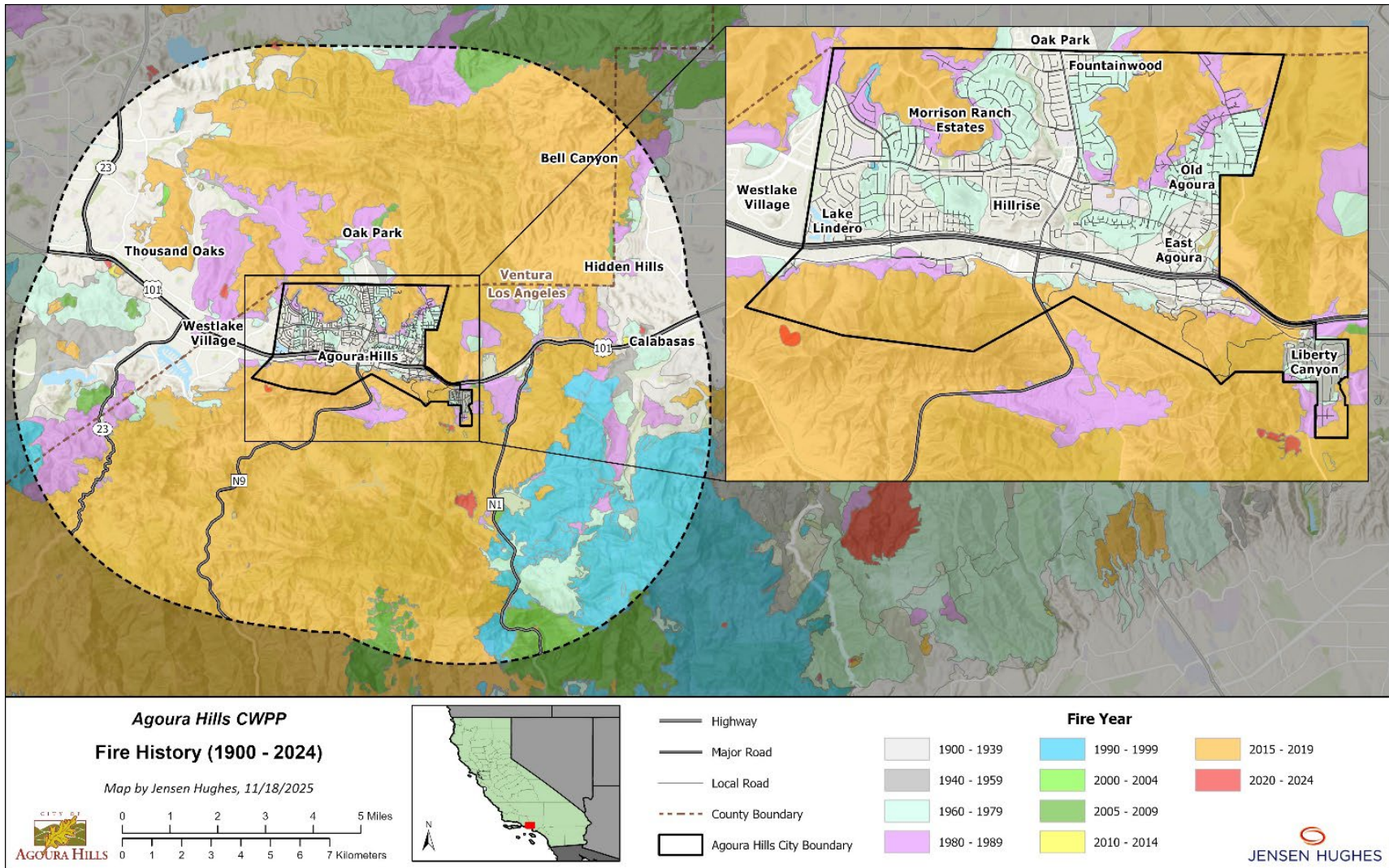


Figure 13. Historical Fire Perimeters in and around Agoura Hills

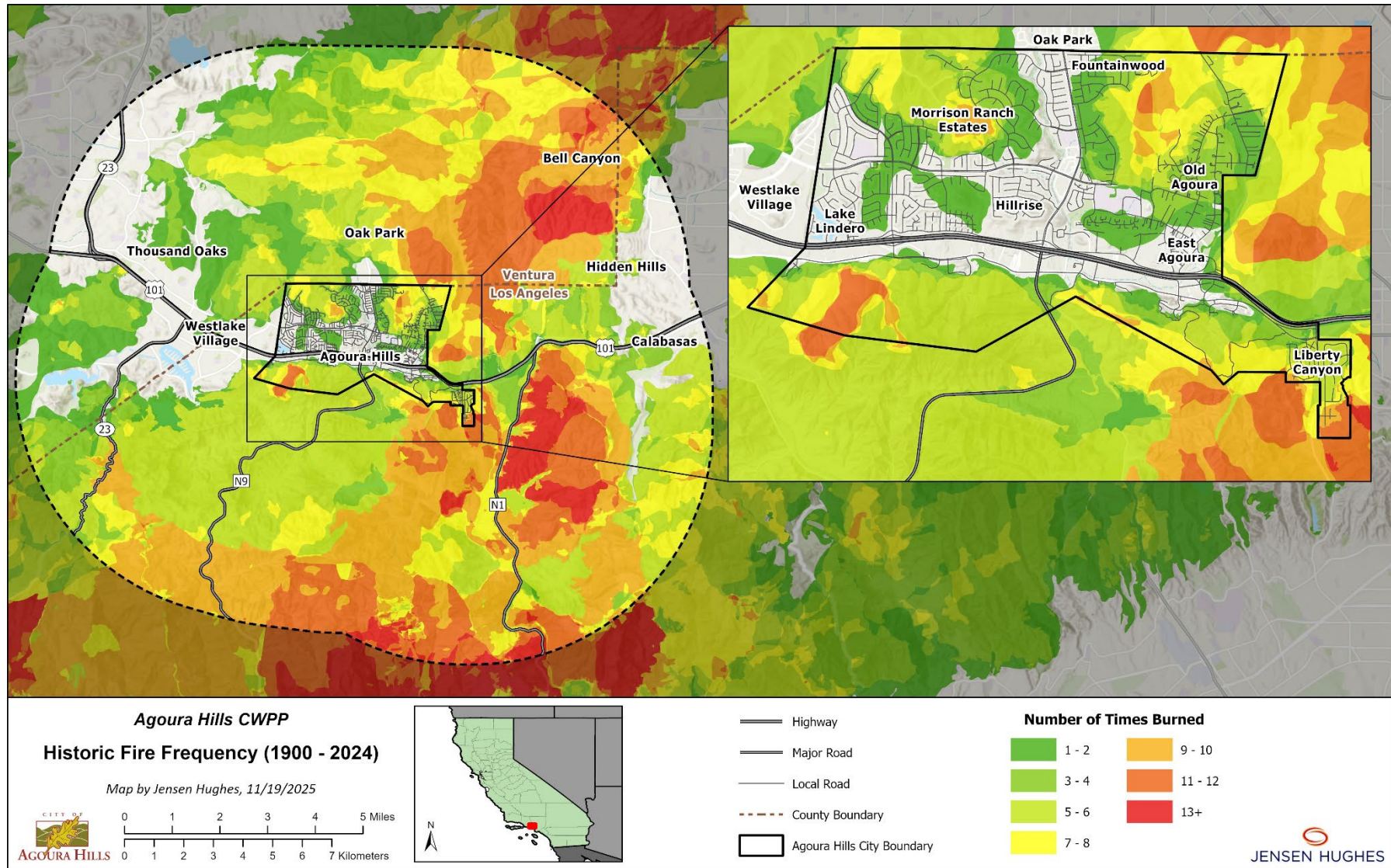
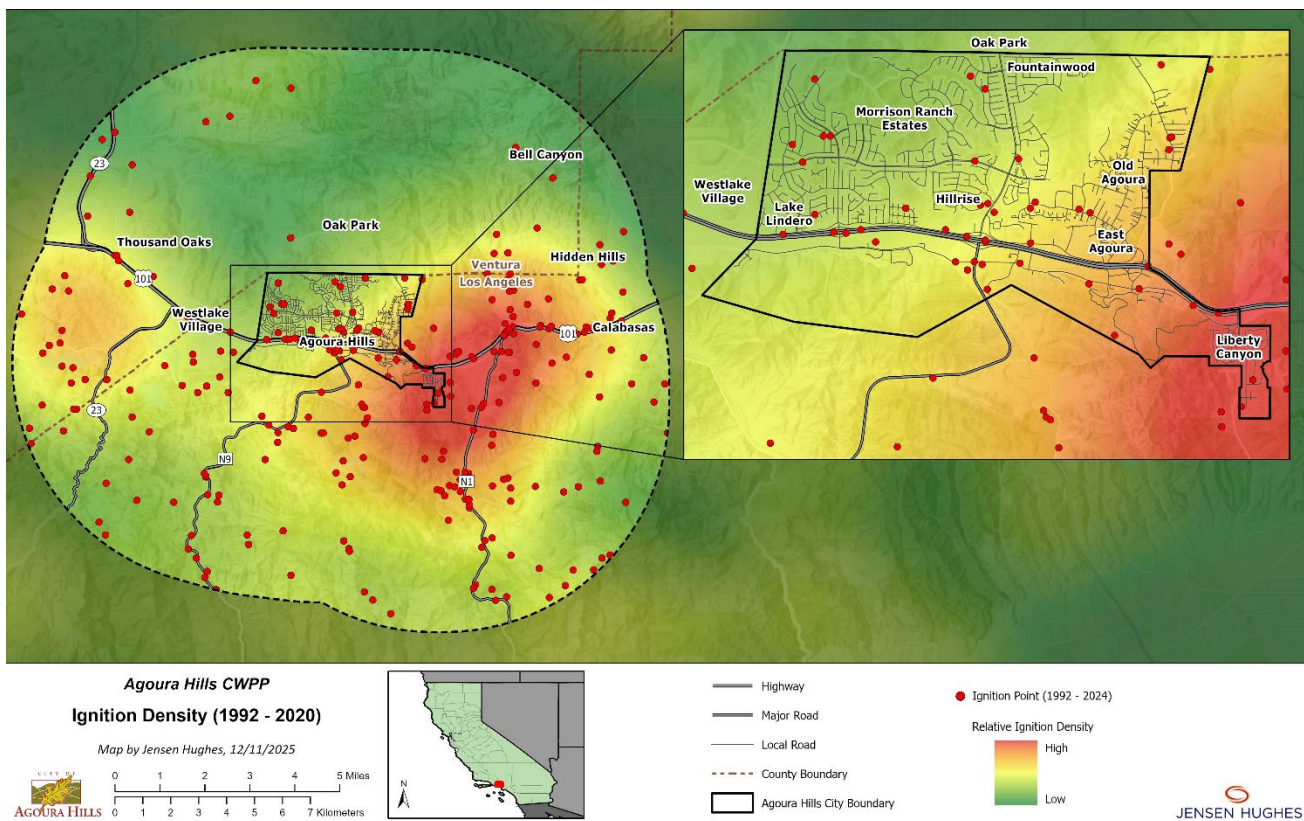


Figure 14. Historic Fire Frequency in and around Agoura Hills

As seen in Figure 15, the distribution of ignitions across the Planning Area shows that ignitions tend to cluster along travel routes, with US-101, Kanan Road and Las Virgenes Road having the greatest density of ignitions. The most potentially impactful ignition clusters to the city are those located along Chesebro Road, below the Calabasas landfill and along Las Virgenes Road. In these locations, if an ignition were to occur during a Santa Ana weather event, fire would be rapidly pushed into residential areas to the west and south.

Of less concern to the city are the ignition clusters south of the administrative boundary. Under normal southwest winds, burning conditions are typically within the ability of the local fire agencies to successfully suppress these ignitions. Fire history indicates that no large fire has spread into Agoura Hills from the south.

As seen in Figure 14, wildfire frequently flows through Las Virgenes/Chesebro/Palo Comado Canyons, Liberty Canyon, Kanan and Cornell Road south of Highway 101 and to a lesser degree Lindero Canyon. This corresponds with historic wildfire corridors observed by LA County Fire Department. These locations all feature north/south oriented canyons which funnel and accelerate winds during Santa Ana weather events.



**Figure 15. Ignition history in and around the Planning Area from 1992 - 2020. Source: USFS**

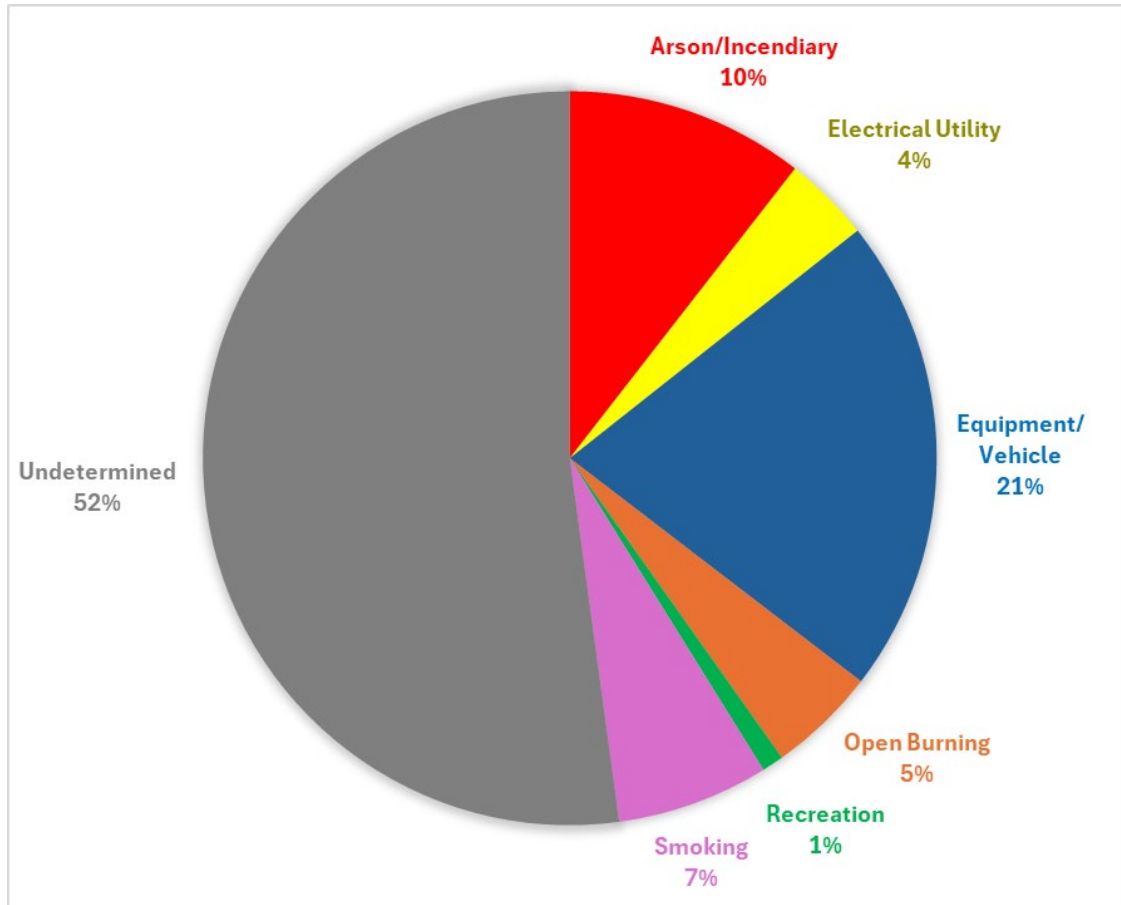


Figure 16. Ignition Causes in and around the Planning Area from 1992 - 2020. Source: USFS

#### 4.2 FIRE ECOLOGY

The Planning Area is characterized as a Mediterranean landscape due to its climate and the native vegetation that dominated prior to European settlement. Temperatures are generally quite warm in the late summer months and moderate in the winter months due to proximity to the ocean. Agoura Hills is far enough inland with sufficient blocking terrain to experience a slightly weaker marine layer than coastal Oxnard to the west or Malibu to the south, however, the marine layer cloud cover is still sufficiently strong to moderate high temperatures in early-to-mid-summer. Peak high temperatures exceeding 100F are common throughout the late summer (August and September), with the record temperature of 108F observed in early September.

Rainfall is highly variable from year-to-year across the Planning Area. The annual rainfall for Agoura Hills is 16.6" (based on a 1991-2020 climatological average), however, the area received 42" during the record 2005 year, while 20% of winters receive less than 10" of rain. This variability between wet and dry years, known as hydroclimatic "whiplash," greatly influences the fire ecology of the region (Swain et al. 2025).

The native vegetation of the Planning Area uplands is chaparral shrublands dominated by three primary species: manzanita (*Arctostaphylos* spp.), chamise (*Adenostoma fasciculatum*), and California lilac (*Ceanothus* spp.) (Figure 17). Chaparral is a highly fire-adapted species group that has high levels of volatile oils in its leaves and stems, making it very flammable, and it usually resprouts quickly after wildfire. In the higher-moisture riparian areas along canyons, these shrubs give way to oak, sycamore, and willow trees, which are more

resistant to the adverse impacts of wildfire and will either survive relatively undamaged or resprout following the fire. Chaparral species and oaks that characterize the Planning Area have evolutionary characteristics consistent with fire-adapted ecosystems. Some shrub species (e.g., scrub oaks) are obligate resprouters that utilize stored reserves to regenerate from existing stems shortly following the fire event. Thus, they must build up sufficient carbon reserves before the next fire in order for the regenerative machinery to function. Other shrub species are obligate seeders (e.g., some species of ceanothus and manzanita), regenerating only from stored seed bank in the soil or adjacent unburned areas.



**Figure 17: Sample images of late stage, dense California chaparral**

Prior to human expansion in the region, including Indigenous settlement, ignitions were infrequent due to very limited occurrence of lightning, which occurs occasionally in the Santa Monica Mountains. It is likely that there were relatively few small fires, with most area burned associated with infrequent large fires that occurred when a summer lightning ignition spent several months burning slowly across the Santa Monica mountains and eventually burned down a canyon or into the upland areas on the edges of Agoura Hills. Native burning throughout the region is well documented, although this likely decreased as Spanish settlement expanded beginning in the 16th century and then gave way to westward American expansion. The dramatic increase in population in the 20th century in the region further altered the natural fire regime of the region by substantially increasing human ignitions both in number and across the seasons. It also served to convert much of the open space found in parks and other inclusions throughout the city to primarily mixed grass and shrubs. The speed and intensity of fire behavior in these spaces is dependent on the ratio of this mix and the volume of vegetation: a higher grass component burns faster at lower intensity, while a higher shrub component tends to burn more slowly but with higher intensity and more embers cast. Thus, time since last fire and vegetation management are crucial to assessing potential for disastrous fire outcomes.

Today, the heavily urbanized Planning Area has the highest potential for human ignitions from an elevated level of recreational use of open spaces and trails, such as the Cheseboro use area, Mountains Recreation and Conservation Authority (MRCA) lands, Liberty Canyon, and the city-owned Medea Creek Park. The US 101 freeway also poses risks for new ignitions. Large private inholdings throughout the Planning Area provide potential opportunities for an ignition to spread rapidly into adjacent neighborhoods due to ingress/egress challenges. Historically, the open areas throughout the city have experienced a “local” (<500 acre) fire approximately once every 3-5 years, while large fires (>10,000 acres) have encroached on Agoura Hills from surrounding areas approximately once every 10-15 years. These include the 2018 Woolsey Fire, the 2005 Topanga Fire, the 1982 Dayton Canyon Fire, the 1978 Kanan Fire, and the 1970 Clappitt Fire.

### 4.3 VEGETATION AND FUELS



Vegetation is the primary fuel source for wildfires and, along with weather, is a key factor in determining the risk of wildfire hazards. In the case of Agoura Hills, both wildland vegetation and urban fuels present a hazard. Urban sources of fuel such as combustible structures (e.g., homes, businesses, industrial facilities, outbuildings), combustible non-structural features (e.g., decks, fences), vehicles, etc., can contribute to the fire environment and significantly influence fire behavior in the Planning Area. Locally, adjacency to chaparral and abundance of non-native trees, shrubs, and grasses as landscaping vegetation and screening has a negative effect on the overall wildland fire environment. Thus, the potential risk of a large-scale, destructive wildland fire can be linked to the adjacent chaparral as well as landscaping vegetation and other characteristics.

Table 7 provides a summary of the vegetation types and percentages that occur within Agoura Hills and Figure 18 shows their spatial distribution. The Planning Area consists of a large percentage of urban area, coastal scrub and chaparral, and a relatively small amount of grasslands and woodlands. Within Agoura Hills, most area is urban with coastal scrub and annual grassland around the perimeters of the urban area. Additionally, the vegetated areas to the south have mixed chaparral and those to the northeast have coastal oak woodland.

**Table 7. Percentage Breakdown of Vegetation Types in the Planning Area**

Vegetation Type	Acres	% of Planning Area
Annual Grassland	398	7.9
Barren	40	0.8
Coastal Oak Woodland	141	2.8
Coastal Scrub	752	15.0
Cropland	6.9	0.1
Lacustrine	14	0.3
Mixed Chaparral	522	10.4
Perennial Grassland	6.4	0.1
Urban	3,012	60.1
Valley Foothill Riparian	60	1.2
Valley Oak Woodland	60	1.2
<b>Total</b>	<b>5,013</b>	<b>100.0</b>

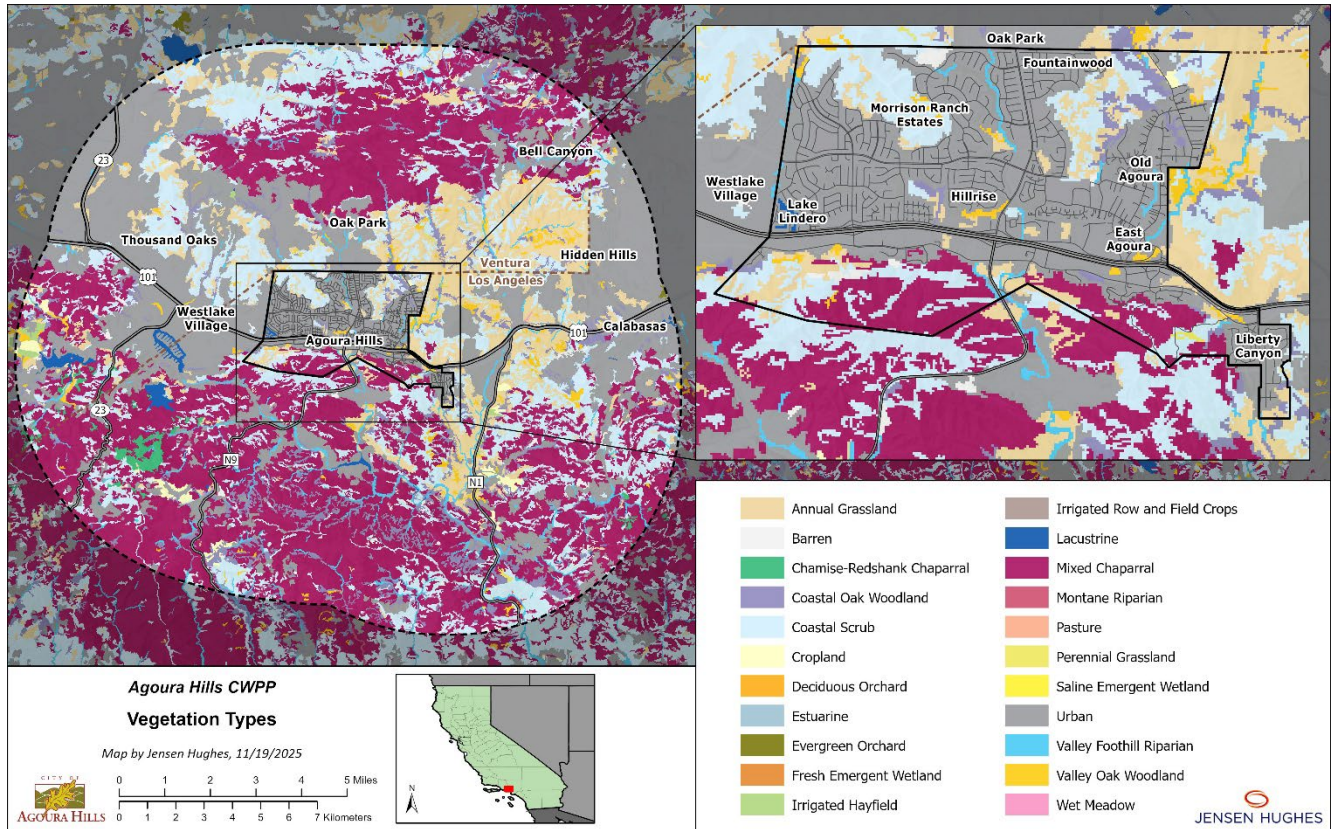
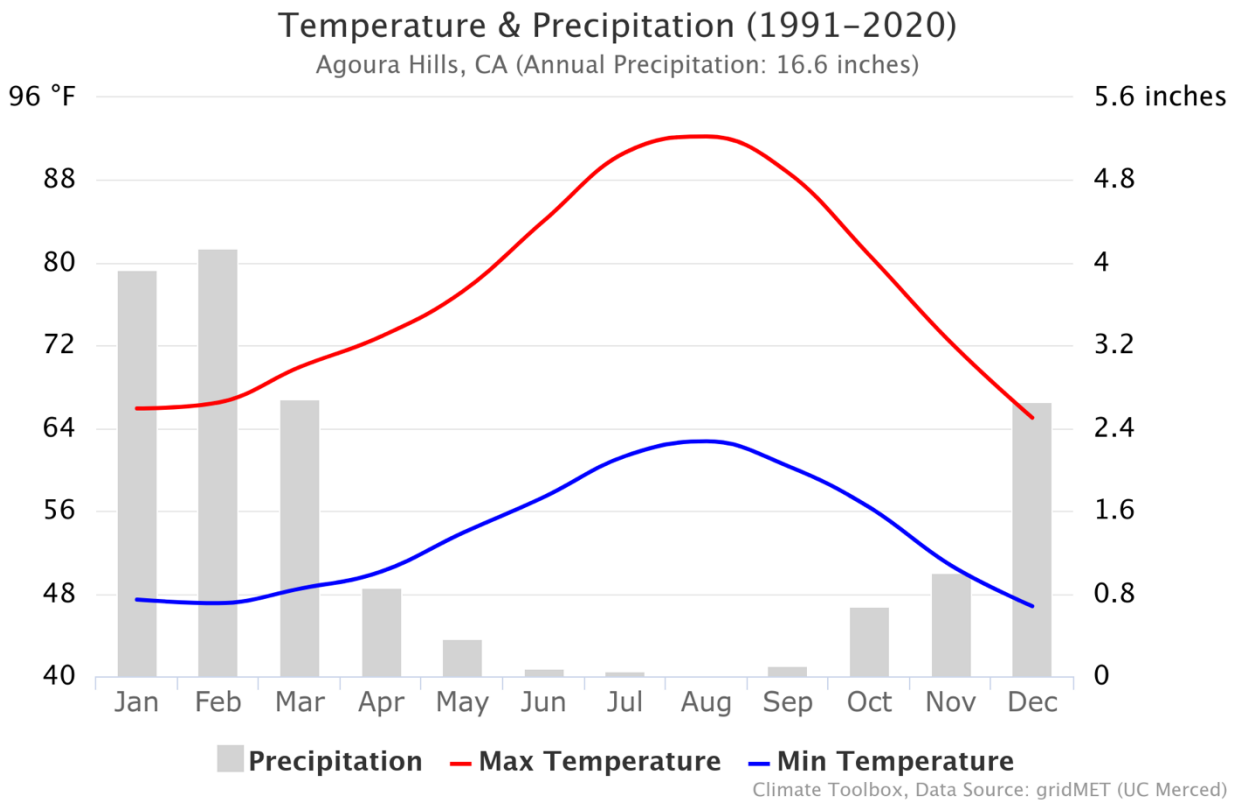


Figure 18: Vegetation Types for Agoura Hills

#### 4.4 CLIMATE AND CLIMATE CHANGE

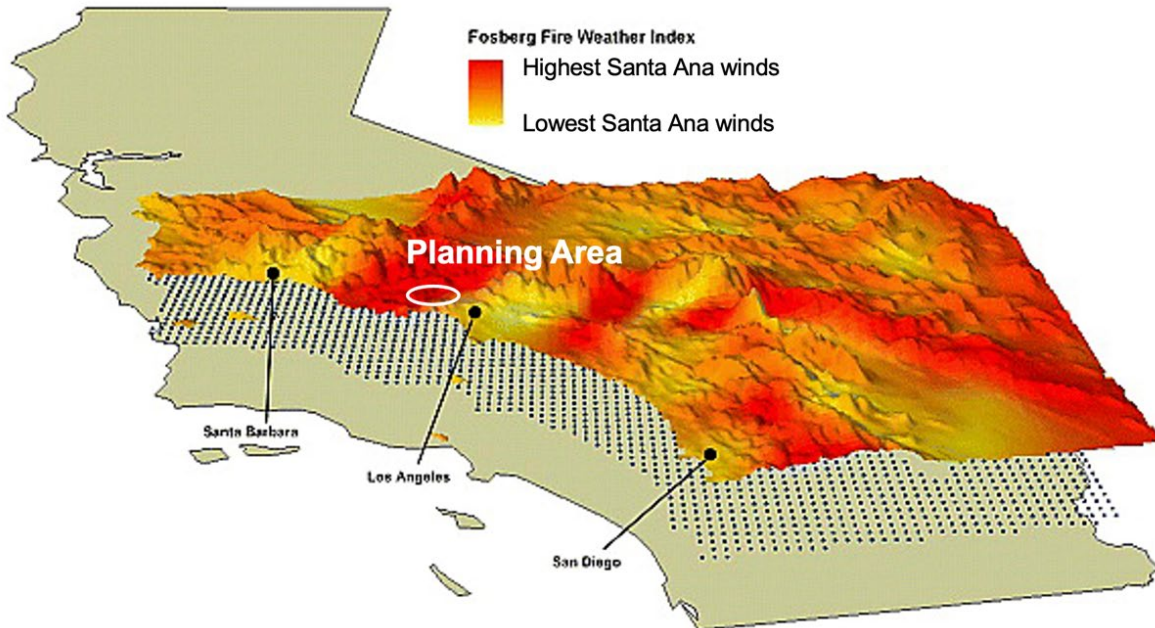
The City of Agoura Hills has a Mediterranean climate, with 16.6” annual precipitation falling primarily in the winter months. Agoura Hills is impacted by the marine layer, a mass of cooler air and cloud cover that moves inland from the ocean, with the greatest impacts during the spring and early summer. When the marine layer forms, temperatures are moderated and relative humidity increases, diminishing fire danger. The marine layer contributes to average temperatures peaking in later summer in the 100s F, with a relatively moderate range between the summer mean high (92 F) and the winter mean low (47 F) (Figure 19). This supports a moderate maritime climate that occasionally sees extreme temperature and extreme rainfall events. While the hottest month on average is August, the record hottest day (108 F) is in early September.



**Figure 19: Annual mean climatology over the 1991 – 2020 reporting period for the Planning Area.**

While global climate change is often reported as an average rise in temperature (i.e., warming) for the entire planet, the observed changes are highly variable across the globe and even within states, such as California. Changes in temperature, precipitation, and other meteorological phenomena are also variable both across the seasons of the year, and in terms of the intensity of extreme events. As wildfire tends to occur under extreme conditions in the Planning Area, it is critical to understand how climate change specifically impacts both the frequency and intensity of these extreme weather events, as well as how it affects the vegetation fueling the fire. Both fuels and extreme heat events are affected by climate change. Abnormally wet winter-spring periods yield higher than normal fine fuel loads, which are the primary carriers of fire.

In the Planning Area, conditions conducive to producing the most extreme fire behavior, including rapid rates of spread and uncontrollable flames, occur in the autumn and winter months when easterly Santa Ana winds coincide with drought conditions (Figure 20). Winter droughts are expected to increase in frequency and intensity under climate change.



**Figure 20: Map adapted from Moritz et al. (2010) showing where the highest Santa Ana winds concentrate and facilitate uncontrollable and extreme wildfires. The Planning Area (white oval) is in an area heavily impacted by strong Santa Ana winds.**

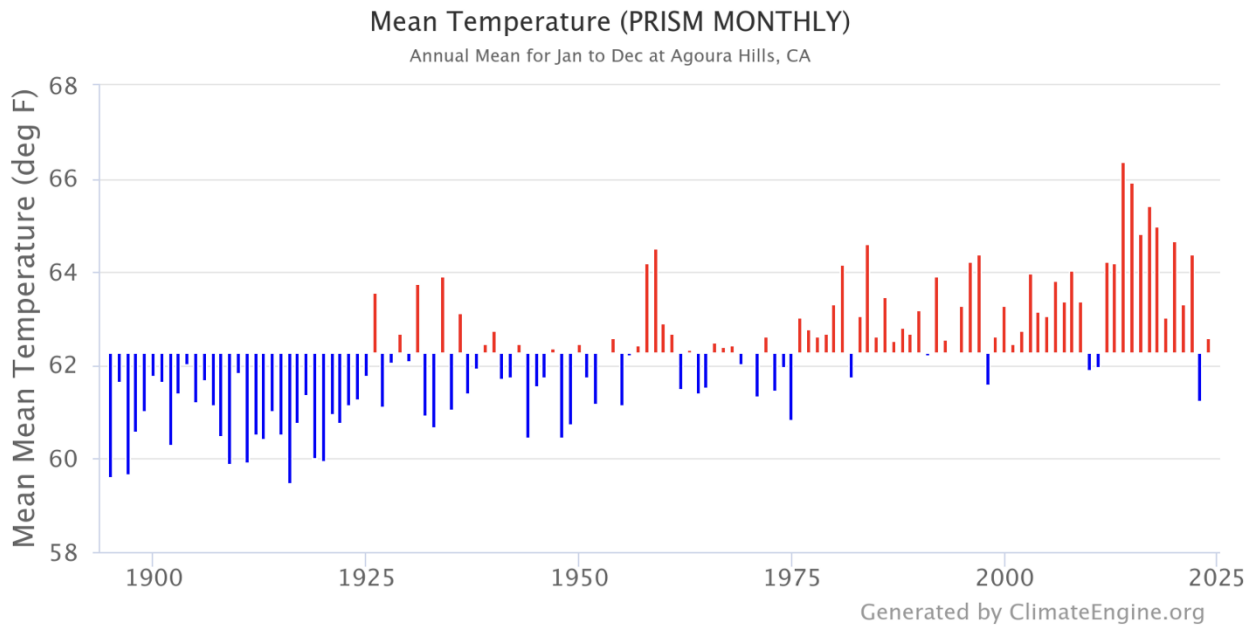
Agoura Hills has warmed 2.1° F overall in the last 100 years (Figure 21). However, temperatures are highly variable from year-to-year, with 2014 registering the hottest year for the Planning Area since 1895. Warming has occurred across all four seasons and for both daytime highs and nighttime lows, but the greatest warming trends are the nighttime lows, particularly in autumn.

These trends are consistent with reduced nighttime relative humidity recovery, where it remains dry at night rather than becoming more humid, and support anecdotal observations from fire suppression personnel that fires are more active at night now than they have been in the past. Reduced nighttime humidity recovery across spring, summer, and fall seasons is a contributing factor to an observed trend towards increased fire danger, specifically because fuel aridity is higher and fuels are less resistant to fire spread (Abatzoglou and Williams 2016, Goss et al. 2020)<sup>45</sup>. When a Santa Ana or Sundowner wind event develops in conjunction with low fuel moisture (i.e., high fuel aridity) there is a greater probability of rapid fire spread and the development of large, longer duration wildfires (Rolinski et al. 2016)<sup>6</sup>.

<sup>4</sup> Abatzoglou, J.T. and Williams, A.P., 2016. Impact of anthropogenic climate change on wildfire across western US forests. *Proceedings of the National Academy of Sciences*, 113(42), pp.11770-11775.

<sup>5</sup> Goss, M., Swain, D.L., Abatzoglou, J.T., Sarhadi, A., Kolden, C.A., Williams, A.P. and Diffenbaugh, N.S., 2020. Climate change is increasing the likelihood of extreme autumn wildfire conditions across California. *Environmental Research Letters*, 15(9), p.094016.

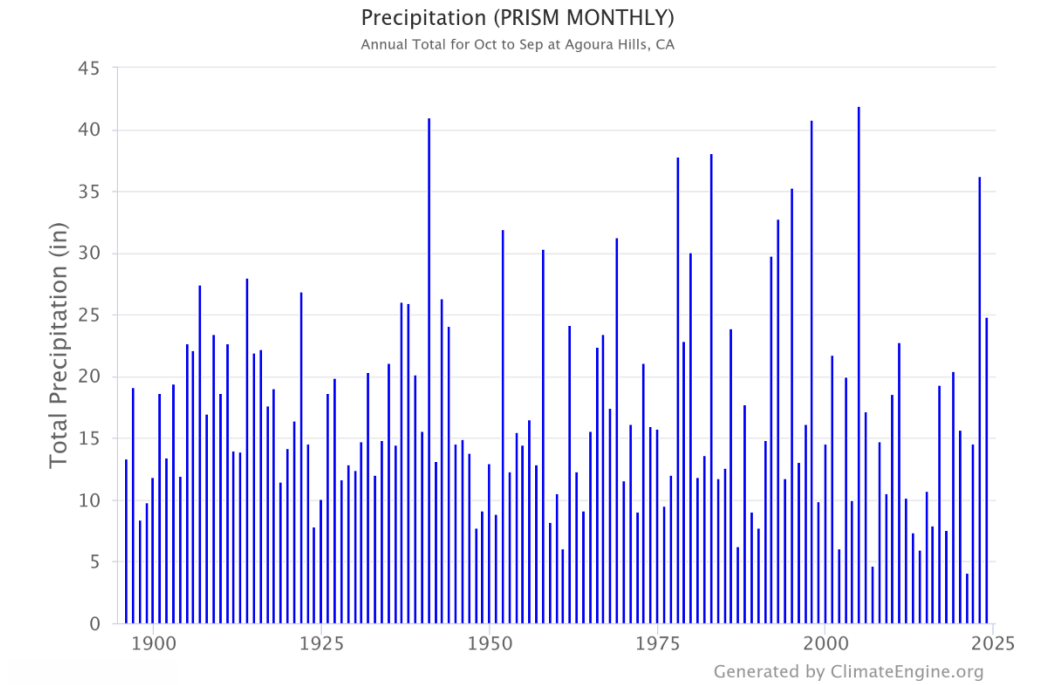
<sup>6</sup> Rolinski, T., Capps, S.B., Fovell, R.G., Cao, Y., D'Agostino, B.J. and Vanderburg, S., 2016. The Santa Ana wildfire threat index: Methodology and operational implementation. *Weather and Forecasting*, 31(6), pp.1881-1897.



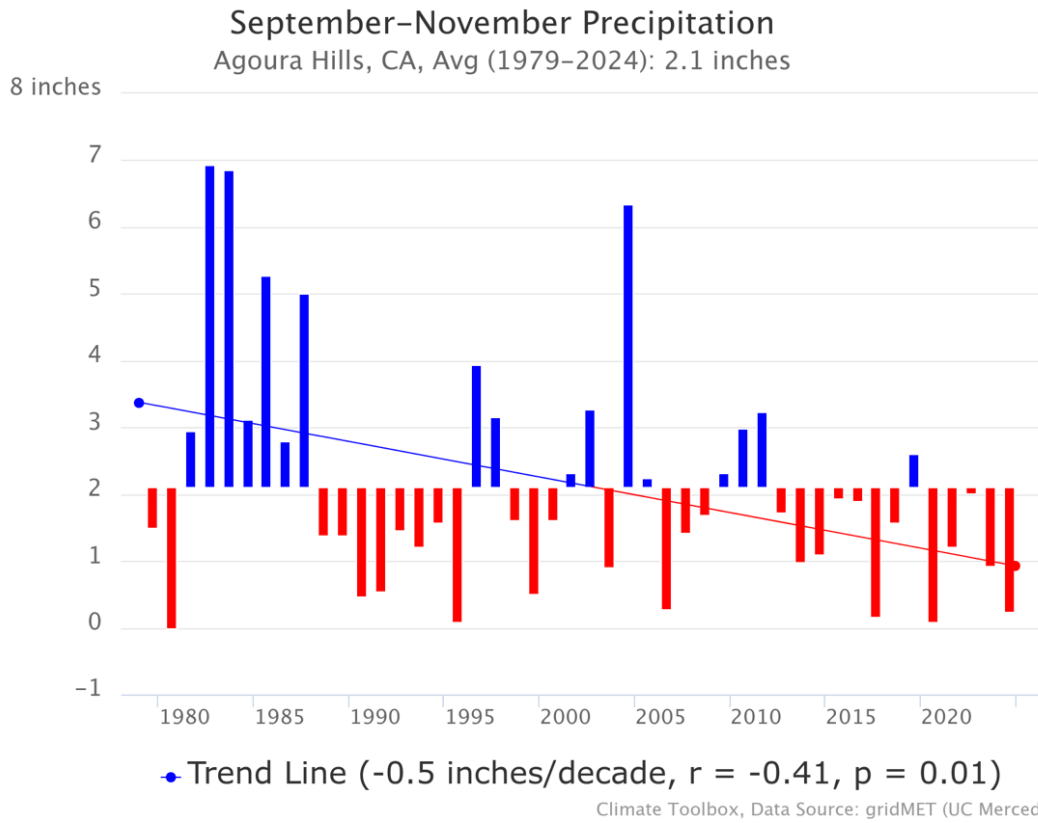
**Figure 21. Mean annual mean daily temperature for Agoura Hills from 1895-2024, showing departure from the long-term average of 62.3 F.**

In contrast to a clear warming trend, annual precipitation in the Planning Area has not changed significantly over the past century (Figure 22). Notably, however, precipitation has declined substantially in the last four decades in Autumn, the season when Santa Ana winds pick up and the fastest spreading wildfires occur (Figure 23). Moisture availability has also declined due to changes in the coastal influence. The marine layer is a type of coastal fog that develops during the spring and summer, and due to the strong temperature gradient between the cool ocean waters and the superheated land mass. This layer is difficult to measure, but observations from Burbank and Santa Monica airports over the last 50 years show that it appears to be getting weaker and providing less shade (Figure 24), which increases vegetation aridity on the ground (Williams et al. 2018)<sup>7</sup>. Continued ocean warming in the future may further decrease the marine layer, potential making the western portion of the Planning Area more susceptible to fire.

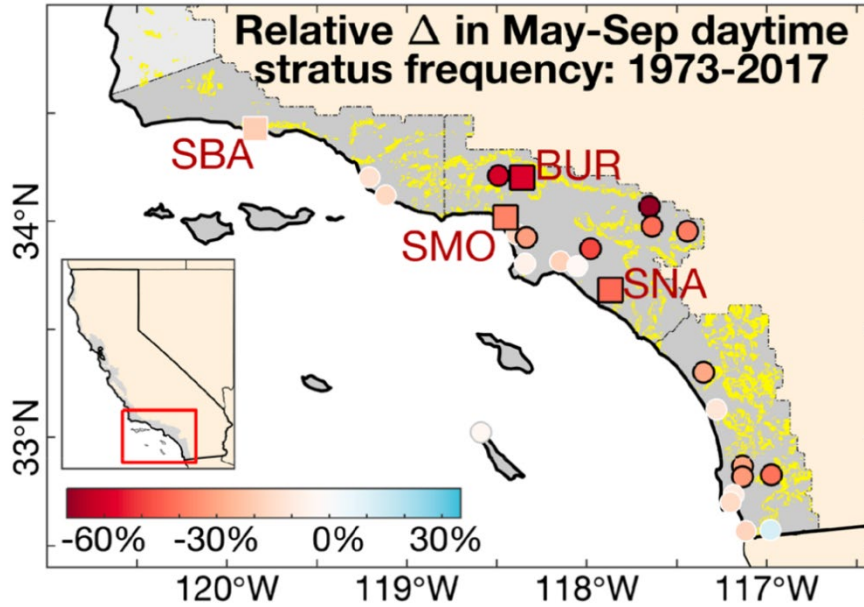
<sup>7</sup> Williams, A.P., Gentine, P., Moritz, M.A., Roberts, D.A. and Abatzoglou, J.T., 2018. Effect of reduced summer cloud shading on evaporative demand and wildfire in coastal southern California. *Geophysical Research Letters*, 45(11), pp.5653-5662.



**Figure 22: Mean annual water year (Oct. – Sept.) total precipitation for the Planning Area (1895-present).**

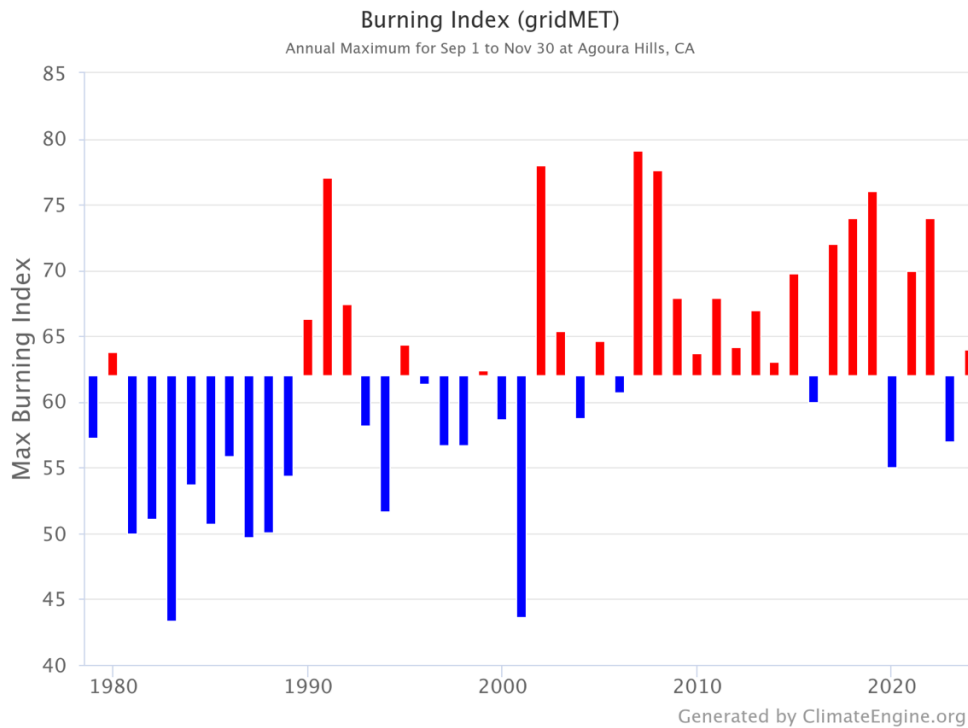


**Figure 23: Decline in Autumn precipitation from 1979-2025.**



**Figure 24: Summer decline in daytime cloud cover (frequency of stratus clouds observed at airfields including Burbank (BUR), Santa Monica (SMO), and Santa Barbara (SBA)) from 1973-2017 from Williams et al. (2018).**

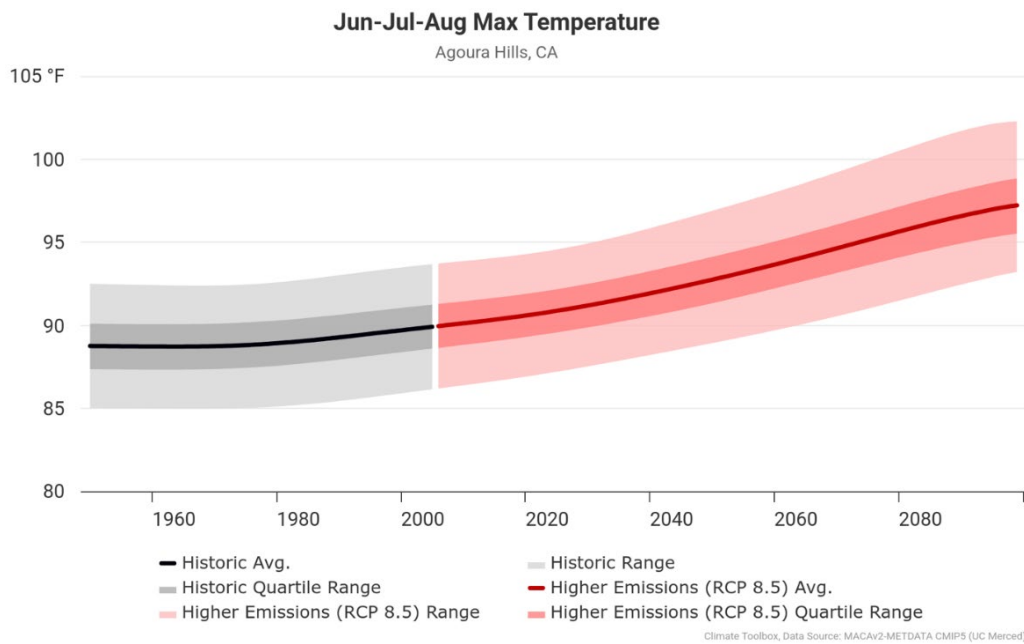
Overall, the rising temperatures and the declining autumn precipitation have increased fire potential in the City, as indicated in trends of Fire Danger indices, most notably the autumn Burning Index (BI; Figure 25).



**Figure 25: Autumn (October - December) maximum BI for the Planning Area shows the increase in dry, hot, windy events that are conducive to large fire growth.**

Projections of future climate change are modeled based on anthropogenic (i.e., human) emissions of greenhouse gases but also account for natural climate variability. Increases in fire activity across the western United States have been definitively partially attributed to anthropogenic climate change (Abatzoglou and Williams 2016)<sup>8</sup>, so there is high confidence that projections of future climate will have implications for fire. These trends aren't just part of Earth's natural climate variability.

In the Planning Area, **there is a projected temperature increase of an additional 5 to 8° F by 2100**, with increases seen across all seasons, and for both maximum and minimum daily temperatures (Figure 26, Figure 27). In contrast to high relative certainty that temperatures will continue to increase, precipitation trends are relatively difficult to predict into the future. What is certain about future precipitation is that extreme precipitation events with high rates of rainfall will become more frequent, even if precipitation ultimately declines. The projected temperature increases, especially the increasing nighttime lows, reduced relative humidity, and the increasing frequency of extreme events, such as heatwaves and dry periods coinciding with autumn and winter Santa Ana winds, drive a substantial increase in the number of days per year where there is Extreme Fire Danger (Figure 28, Figure 29, Figure 30). Although global climate models vary widely, they generally agree on an increase in the number of days of Extreme Fire Danger compared to the historic period, with the most extreme models projecting a doubling of Extreme Fire Danger days. It is worth noting that historically most climate model projections have been fairly conservative and underestimated what has actually happened.



**Figure 26: Increasing trends in average daily high summer (Jun-Jul-Aug) temperature for the Planning Area from 1979-present (in gray) and projected into the future to 2100 (pink). The projected increase in maximum temperature is approximately 8 degrees F hotter than today, but the highest temperatures, during heat waves will likely register temperatures substantially greater than 8 degrees difference from today's hottest temperatures because extremes always exceed averages.**

<sup>8</sup> Abatzoglou, J.T. and Williams, A.P., 2016. Impact of anthropogenic climate change on wildfire across western US forests. Proceedings of the National Academy of Sciences, 113(42), pp.11770-11775.



**For the future period (2040-2069), the highest projections are for up to 22 days per year of Extreme (97th percentile) fire danger, nearly double the 11 days per year observed in the historic period.**



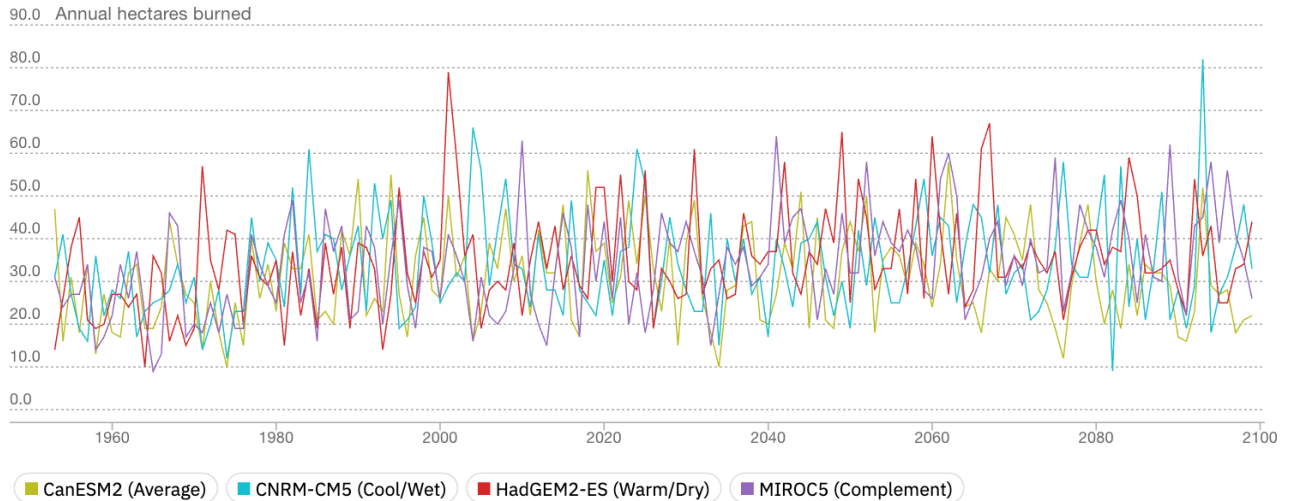
**Figure 29: Projected change in average fuel moisture and the average number of days of extreme fire danger for the winter and spring months for Agoura Hills from global climate model outputs.**



**Figure 30: Projected change in average fuel moisture and the average number of days of extreme fire danger for the summer and autumn months for Agoura Hills from global climate model outputs.**

These projections of future conditions indicate a substantial increase in the potential for more severe wildfire behavior on an increasing number of days. If no fuel management occurs, and no changes in how fires are managed as compared to the 20<sup>th</sup> century, fire models from the state CalAdapt project suggest a nearly 30% increase in annual area burned by the end of the 21<sup>st</sup> century for the Planning Area (Figure 31). Importantly, these models don't predict the actual area burned each year, rather, they project the change in a long-term average and show how variable the historic record is from year-to-year. From a planning and management perspective, this means that big fire years will be bigger with more area burned. As no fuel management is assumed in the models, however, these projections also demonstrate the critical need for fuels management to reduce fuel loads in order to mitigate undesirable negative outcomes.

MODELED HISTORICAL Baseline (1961-1990)		FUTURE PROJECTIONS Mid-Century (2035-2064)		FUTURE PROJECTIONS End-Century (2070-2099)	
30 YEAR AVG	30 YEAR RANGE	30 YEAR AVG	30 YEAR RANGE	30 YEAR AVG	30 YEAR RANGE
29.2 hectares	9.0–61.0 hectares	36.3 hectares	17.0–65.0 hectares	34.4 hectares	9.0–82.0 hectares



Source: Cal-Adapt. Data: Wildfire Simulations for California’s Fourth Climate Change Assessment (University of California Merced), Wildfire Simulations Derived Products (Geospatial Innovation Facility).

**Figure 31: Projected change in area burned from four different global climate model scenarios (Average, Cool/Wet, Warm/Dry, and Complementary) based on 20<sup>th</sup> century fire history from CALFIRE and assumptions of no change in fire and fuels management shows a nearly 30% increase in average annual area burned from the baseline historic period (1970-2000) to the end of the 21<sup>st</sup> century (2070-2100). Active fuels management would substantially alter the projected outcomes.**

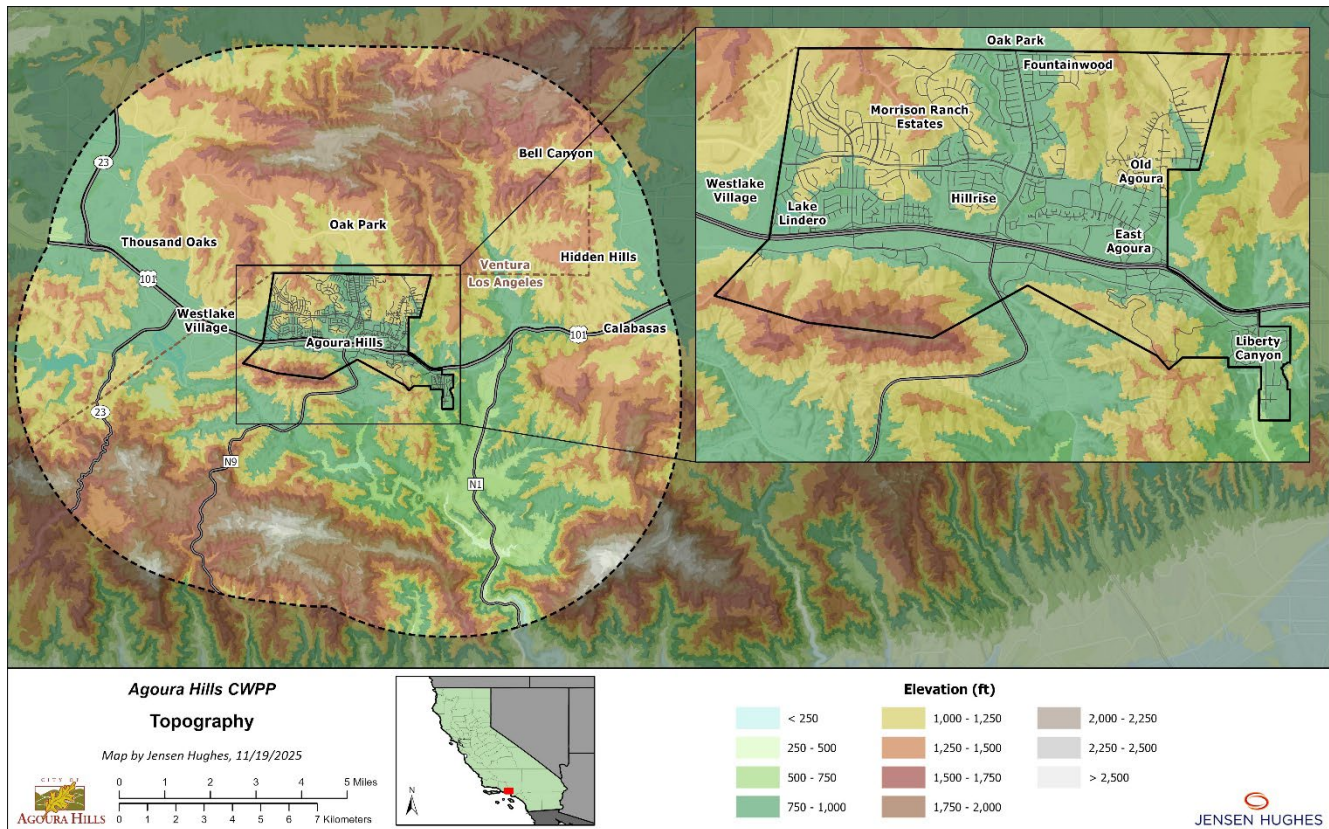
### What this means for Agoura Hills:

- + More days of extremely high fire danger, especially in autumn months
- + More high fire danger days in winter and spring, outside of the ‘traditional’ fire season
- + Longer periods of sustained high fire danger
- + Longer fire seasons
- + More days of hazardous air quality from smoke
- + More frequent Public Safety Power Shutoffs and outages when powerlines burn
- + Greater potential for sudden “no-notice” evacuations
- + Great potential for post-fire flooding and debris flows due to extreme rainfall on recently burned hillsides

### 4.5 TOPOGRAPHY

Topography is the configuration of Earth’s surface and is the most stable of the elements in the fire environment. Topography plays a significant role in wildland fire behavior by sheltering areas from the prevailing wind or by channeling wind through prominent canyons and drainages. Specific elements of topography that affect fire behavior include slope, aspect and elevation with the steepness of slope being the most influential. For wildfire behavior modeling for the CWPP, topographic data was obtained from the LANDFIRE program

As seen in Figure 32, three principal drainages bisect the city. These drainages flow from the Simi Hills north of the city and have a general north to south orientation. From east to west, these drainages are Chesebro/Palo Comado, Medea Creek Canyon and Lindero Canyon. It is this north/south orientation that serves to channel and intensify winds during Santa Ana weather events

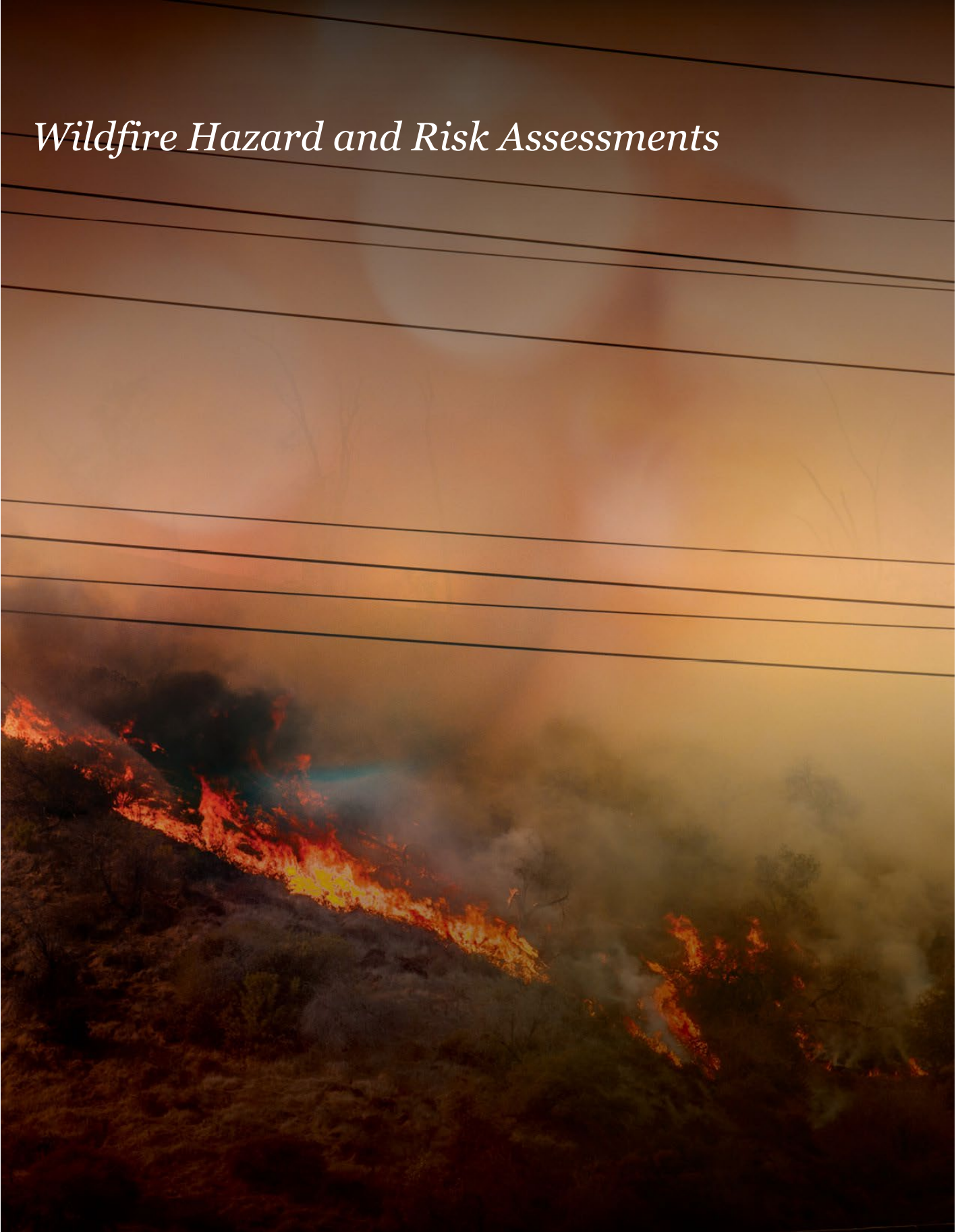


**Figure 32: Topography in and around Agoura Hills**

Other than the orientation of these drainages, topography has a limited impact on large fire development in the Planning Area as drainage bottom to ridgetop distances are relatively short, preventing slope driven fires from developing sustained uphill fire runs. Generally, slopes are mild enough to allow for the use of mechanized equipment during fire suppression operations. Most slopes are less than 30%, with the exception of locations south of Highway 101 where slopes can exceed 80%.

Aspects within the Planning Area are divided along Highway 101, with areas to the north of the 101 having a south aspect, and slopes south of the 101, a north aspect. These aspects influence vegetation type, with south aspects supporting grass, grass-shrub dominate fuel types and north facing slopes displaying more chaparral and oak-woodland dominated fuel types.

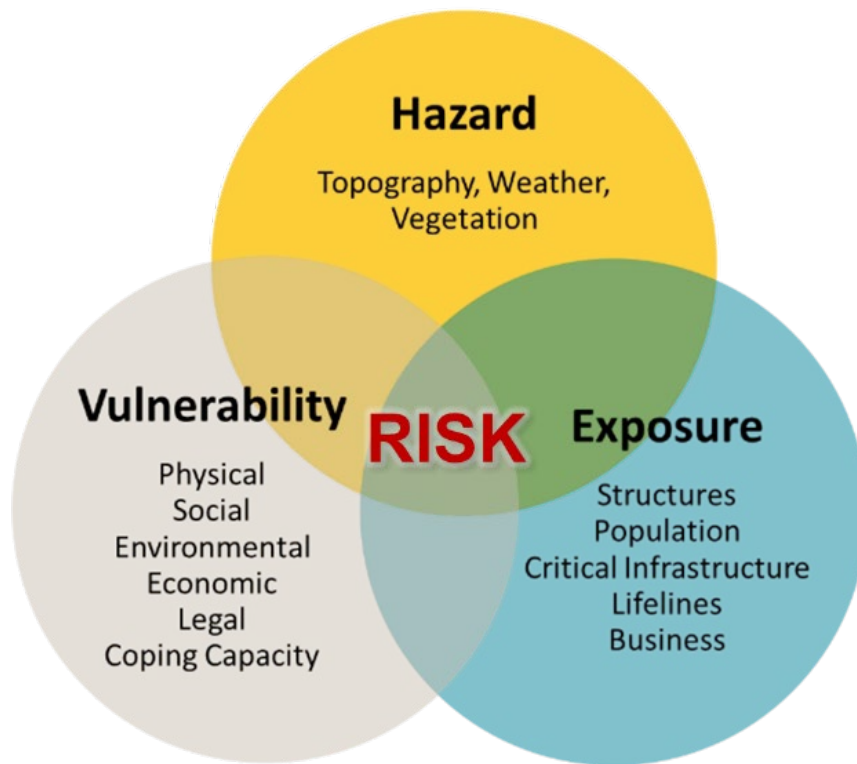
# *Wildfire Hazard and Risk Assessments*



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## 5.0 Wildfire Hazard and Risk Assessments

Given the high fire prone nature of Agoura Hills and surrounding areas, a fine-scale wildfire hazard and risk assessment including hazard, exposure and vulnerability analyses has been undertaken to help identify and prioritize the most at-risk communities and inform strategic planning and preparedness efforts (Figure 33). The assessment incorporates a combination of methods – field visits, wildfire behavior modeling, geospatial analytics, current research and best practices – in collaboration with the City of Agoura Hills, the Agency Working Group, local fire safe council members, LA County Fire, subject matter experts and other interested parties in the community. The assessment provides a foundation for prioritizing a range of wildfire mitigation strategies across the City.



**Figure 33. Key components of wildfire hazard and risk assessment for this CWPP.**

The sections that follow describe the various fine-scale hazard and risk assessments undertaken to identify areas of the City of Agoura Hills that are more likely to be impacted by wildfire. To understand the differences between these analyses, we differentiate between “hazard” and “risk.”

**Hazard** refers to the potential behavior of wildfire (e.g., rate of spread, flame length, intensity) given topography, fuels and weather.

**Risk** is the likelihood of a wildfire occurring, the associated fire behavior, and the potential impacts or consequences given the exposure and susceptibility (aka vulnerability) to loss, damage or disruption to a range of assets and values.

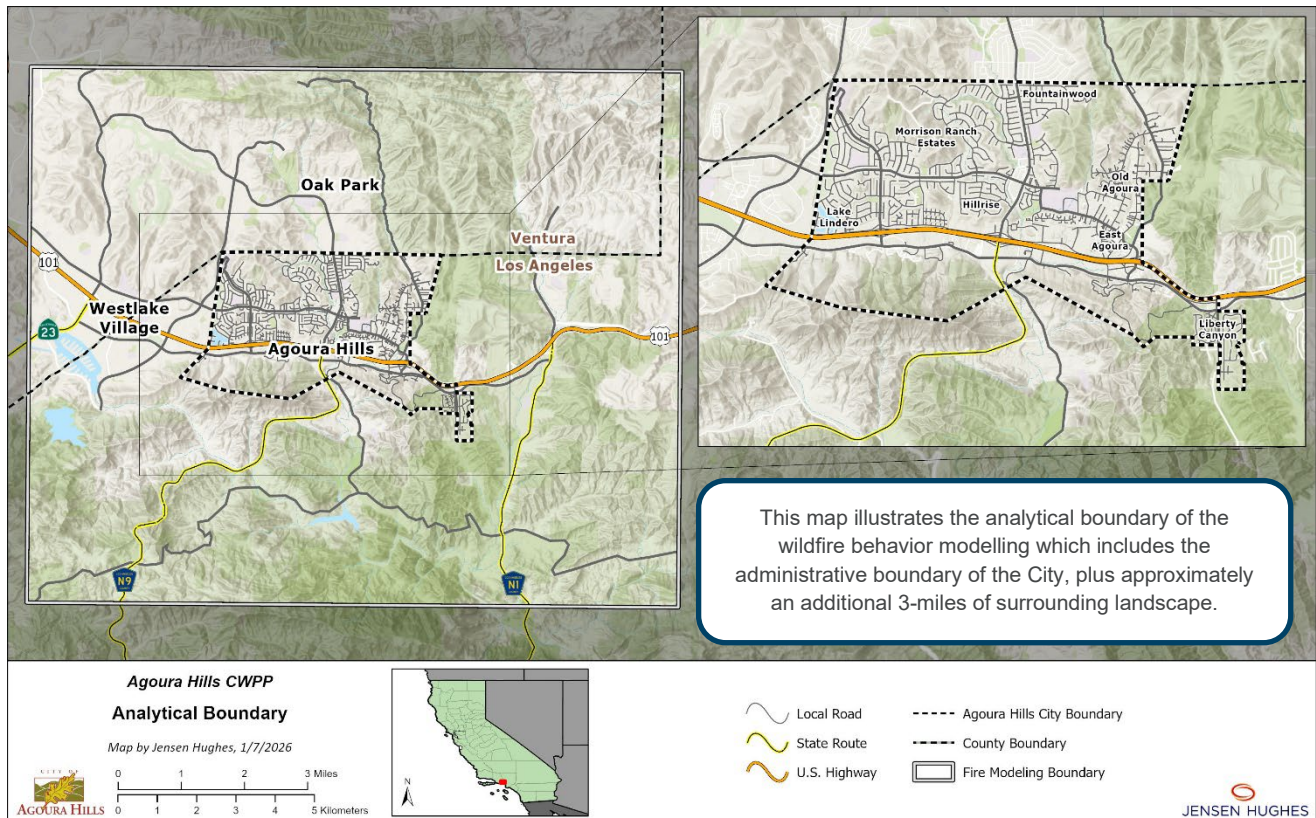
### 5.1 WILDFIRE BEHAVIOR MODELING

The objective of the wildfire behavior modeling is to identify areas within the Planning Area that are prone to severe fire conditions. Fire behavior characteristics such as rate of spread, flame length, fireline intensity, crowning and spotting are driven by the natural environment where topography, weather and fuels are primary forces. Fire behavior modeling is performed to estimate these characteristics and is based on key assumptions related to the primary driving forces – weather, fuels, and topography.

The following sections present the key assumptions and input data for the wildfire behavior modeling, which falls into four categories, as follows:

1. Software
2. Landscape Data
3. Weather Data & Analysis
4. Fuel Types & Fuel Models

The analytical boundary adopted for the wildfire behavior modelling includes the administrative boundary of the City and an approximately 3-mile buffer extending out from the City’s boundary. See Figure 34.



**Figure 34. Analytical boundary of wildfire hazard assessment for Agoura.**

The CWPP focuses on the impacts of a potential wildfire to the City, but by including additional landscape outside the city in the fire behavior modeling, the hazard analysis can identify influential topographic and fuel loads in the surrounding landscape that may impact the City. Since the primary threat of wildfire to Agoura Hills

comes from ignitions located outside of the administrative boundary, it is important that this buffer be included in the overall analysis so that ignition sources, primary fire flow paths and distribution of the flow paths that threaten the community can be identified. Understanding threats outside the City can provide a better understanding of where future fire mitigation actions could prove to be most effective in protecting vulnerable locations within the City.

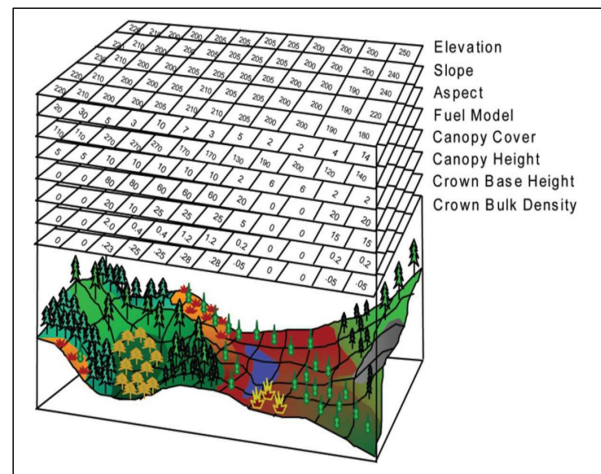
### 5.1.1 Software

Established wildland fire behavior modelling software provides the basis for evaluating the wildfire hazard, threat, and exposure analyses for the CWRA. The primary modelling software includes FLAMMAP (Version 6.0), FOFEM, and FireFamily Plus (Version 5.0). Wildfire Analyst Enterprise and NEXUS 2.0 were also used to capture some dynamic fire behavior features. The wildfire models used in the analysis are publicly available with the exception of Wildfire Analyst, which is a proprietary software application.

### 5.1.2 Landscape Data

Spatial fire modeling utilizes eight spatial files as required inputs into the fire behavior model(s) which are commonly referred to as a landscape file or LCP file in the fire modeling community. The LCP is made up of layers representing Fuel Models, Canopy Cover, Canopy Height, Crown Bulk Density, Canopy Base Height, Elevation, Aspect, and finally slope. Figure 35 is a graphic of a representative LCP file data.

LCP files are commonly obtained from the LANDFIRE<sup>9</sup> program and are representative of conditions as of 2023. The LCP files contain all the spatial data used in the fire behavior models except for weather. The weather data used in the models is described in Section 5.1.3.



**Figure 35. Landscape spatial files (LCP) used in wildfire hazard assessment. Data obtained primarily from LANDFIRE.**

### 5.1.3 Weather Data and Analysis

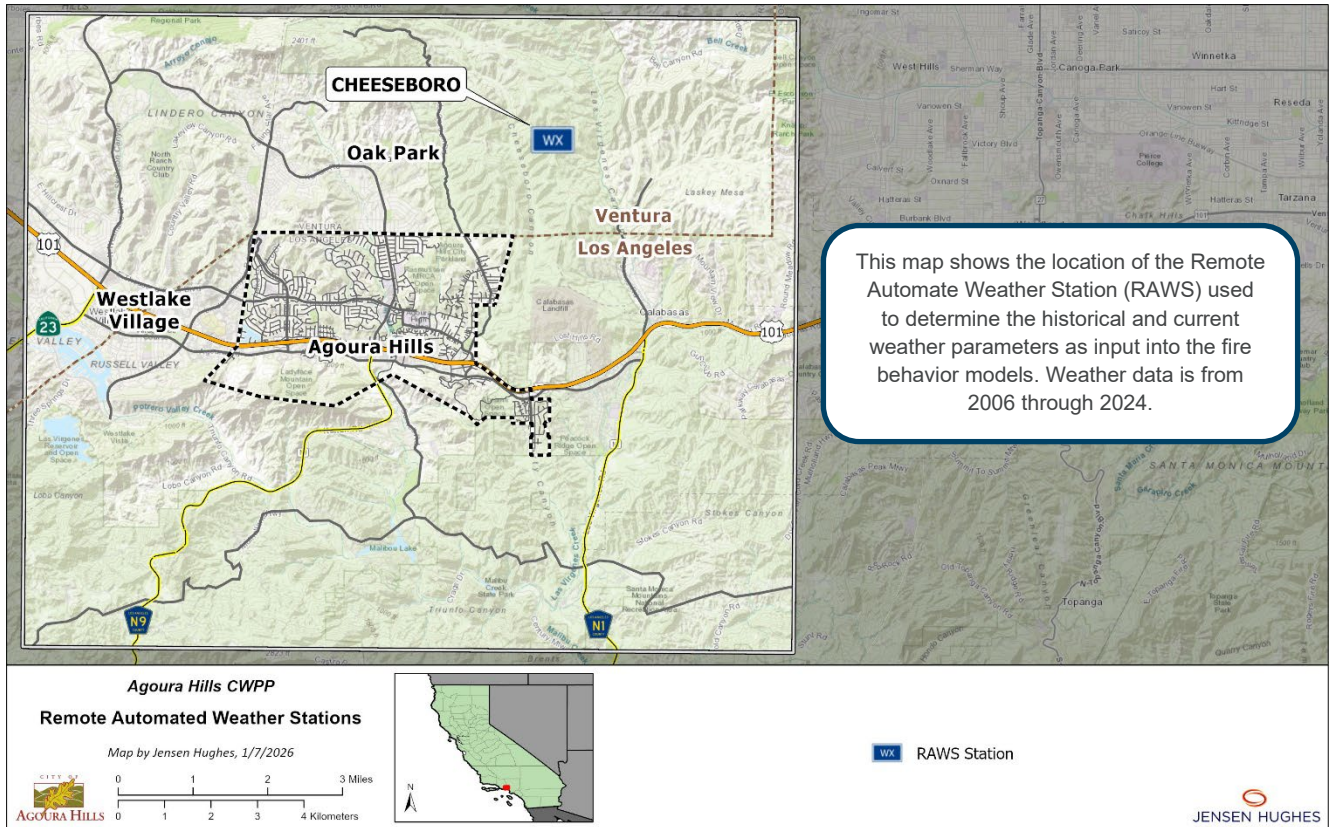
Weather is one of the most important and variable elements of the wildland fire environment. Important components of fire weather that influence fire behavior are temperature, relative humidity, precipitation, wind, and atmospheric stability. These elements have the potential to enhance or retard wildfire spread and intensity.

As input into the fire spread model, fuel moisture and weather values are analyzed and evaluated based on weather percentiles. For the wildfire behavior modelling, weather values at the 97<sup>th</sup> and 90<sup>th</sup> percentiles (hottest, driest 3% and 10% of the days) were utilized as inputs into the fire spread model to generate the results that were then used in the risk assessment. For the base analysis, a 17-mph wind has been used to represent Santa Ana conditions. Based on feedback from LACoFD, a 31-mph wind based on conditions during the 2025 Palisades Fire was also performed. A northeast wind event at 23 mph, similar to winds observed during the Woolsey Fire, was also explored as part of a sensitivity analysis. Refer to Figure 37 for sample output from these sensitivity studies. *Note: As both the 2018 Woolsey Fire and 2025 Palisades Fire scenarios were extreme*

<sup>9</sup> LANDFIRE (Landscape Fire and Resource Management Planning Tools) is a comprehensive program in the United States that provides data and tools for land management, particularly concerning wildfires, vegetation, and ecosystems. <https://landfire.gov/>

events, they did not provide significant variability in fire behavior conditions. That is, they would not be useful in identifying high priority areas in the landscape, as the entire landscape showed problematic fire conditions for both events.

Historical weather data was obtained from <https://famauth.wildfire.gov/index.html/> or the Cheeseboro Remote Automated Weather Station (RAWS) from 2006 through 2024 (Figure 36). Fire Family Plus Version 5.0 (USDA Forest Service, 2020) was used to compare historical and current fire weather parameters associated with temperature, wind, and precipitation, and to generate a suite of inputs to the fire behavior models. The Cheeseboro RAWS is located northeast of the City of Agoura Hills at an elevation of 1,707 feet.



**Figure 36. Remote Automated Weather Station (RAWS) used for the Wildfire Behavior Analysis.**

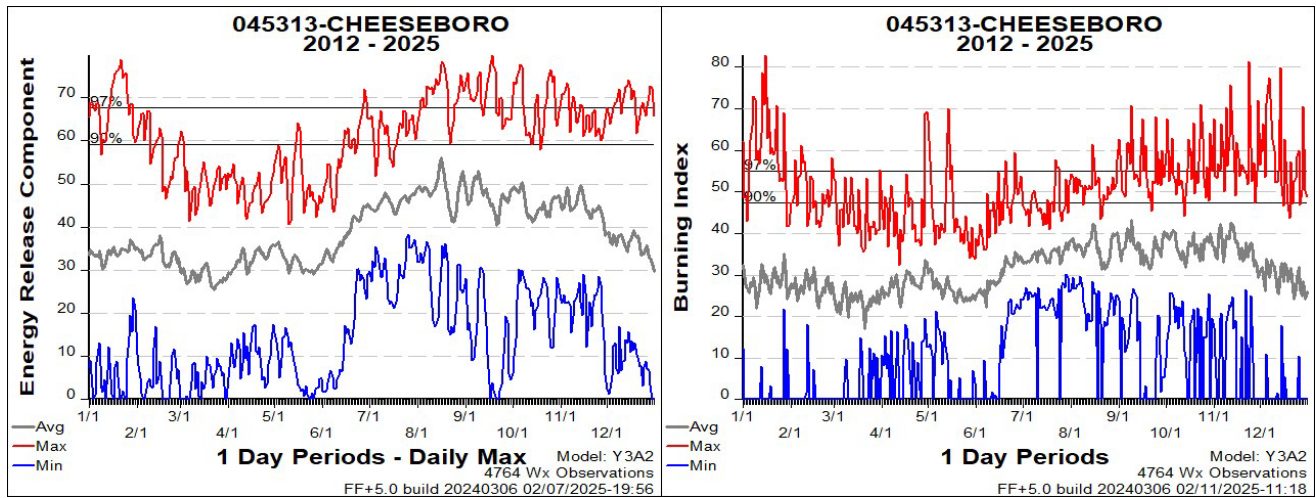
**Fire Danger – Energy Release Component (ERC) and Burning Index (BI)**

One key fire danger rating index related to weather and regional climate that is used to understand the potential for severe fire is the Energy Release Component (ERC) index. ERC is a number related to the available energy (BTU) per unit area (square foot) within the flaming front at the head of a fire. This index provides an approximation for fuel moisture conditions associated with climatological changes throughout a fire season. Thus, the larger the ERC value, the potentially more severe the fire. Values typically range from 0 to 100, though they can be higher depending on weather extremes and fuel model. Specifically, ERC is used to describe fire danger trends because it is less sensitive to daily weather variations than other fire danger indices. The ERC calculation is also affected by fuel loadings in different size classes. NFDRS Fuel model Y, the default analysis fuel model assigned the Cheeseboro RAWS includes both live and dead fuels and has a significant portion of the fuel load driven by large dead fuels.

Large fuels are not a primary component in and adjacent to the City of Agoura Hills and therefore another NFDRS index, Burning Index (BI), is tracked by Los Angeles County Fire Department to monitor fire danger. The BI is an index that rates fire danger related to potential flame length over a fire danger rating area. The BI is expressed as a numeric value related to potential flame length in feet multiplied by 10. The scale is open-ended, which allows the range of numbers to adequately define fire problems, even during low to moderate fire danger. Information on current BI indices is located at <https://fire.lacounty.gov/fire-weather-danger/>.

Figure 37 provides the variation in historical maximum, minimum and average values of the ERC and BI fire danger indices for the Cheeseboro RAWs from 2012 – 2025. The 90<sup>th</sup> and 97<sup>th</sup> percentile conditions are shown with grey lines and are indicative of when extreme fire behavior may occur.

Based on the results of weather, ERC and BI analyses, high fire conditions can occur almost any time throughout the year. As ERC values are tracked by Predictive Services (<https://gacc.nifc.gov/oscc/fuelsFireDanger.php>) and BI values are monitored by LACoFD (<https://fire.lacounty.gov/fire-weather-danger/>), both indices can be monitored to provide an indication of potential fire danger on a daily basis based on the thresholds identified in Figure 37. Finally, the weather conditions at the 97<sup>th</sup> percentile annually were used as inputs into the fire behavior models used to inform the hazard component of the CWPP.



**Figure 37. ERC (left) and BI (right) for Cheeseboro RAWs, National Weather Service station ID 045313.**

### 5.1.4 Fuel Characteristics & Fuel Models

The key characteristics of vegetative fuels that affect fire behavior include fuel moisture, fuel type, fuel loading, chemical properties, horizontal continuity, and vertical arrangement. These characteristics are combined to create fuel model datasets that, when combined with weather and topography, describe fire behavior. Understanding vegetative fuel models, their effects on fire behavior, and how the models change after the implementation of a fuel treatment can help fire managers design effective wildfire mitigation strategies.

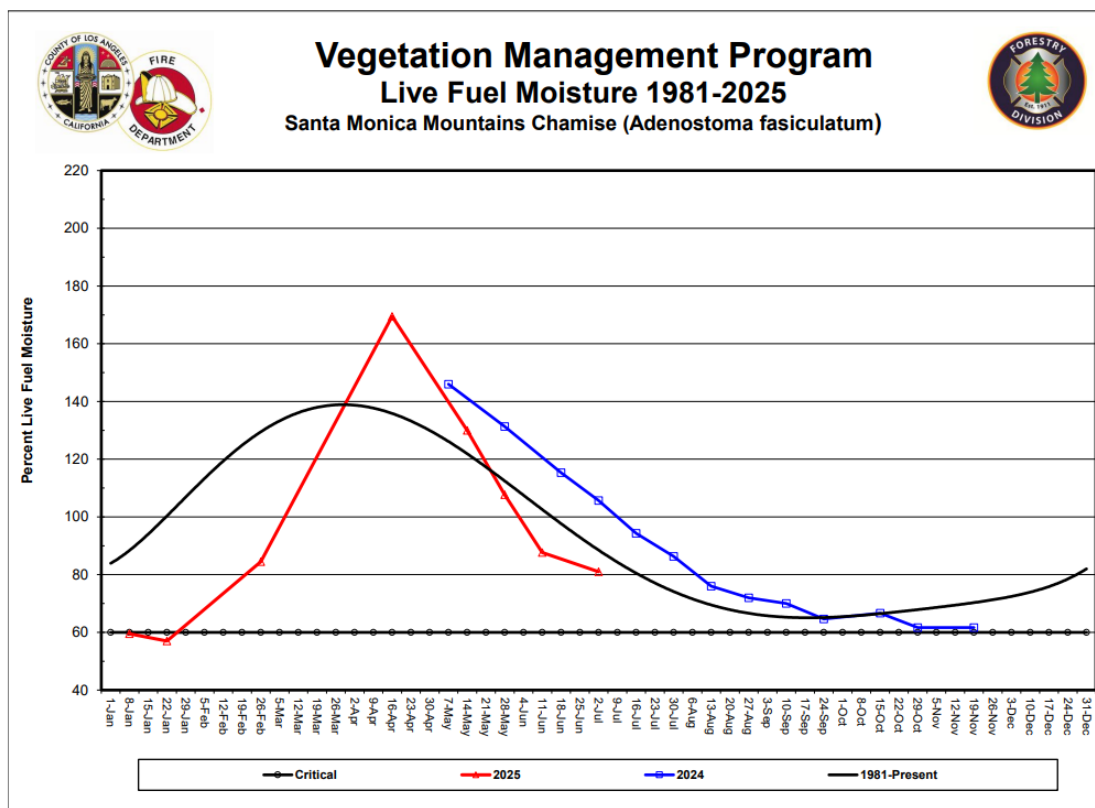
#### 5.1.4.1 Fuel Moisture

Fuel moisture is a dynamic variable controlled by seasonal and daily changes in the weather and is an important influence on wildland fire behavior. Simply stated, vegetation is most flammable when fuel moisture levels are low and less flammable when they are high. Fuel moisture levels will largely determine if a fire will ignite and spread. Fuel moisture is typically categorized as dead and live fuel moisture.

- + **Dead fuels.** Dead fuels act like a sponge absorbing or giving up moisture to the air and ground which surrounds them. The moisture exchange rate between dead fuels and their surrounding environment varies by the size of the dead fuel particle, with fuels less than ¼ in diameter reaching equilibrium with their surroundings within one-hour. Because of this rapid exchange rate, these smaller size class fuels exert significant control over wildfire burning characteristics, especially in the grass and shrub dominated fuels associated with the Planning Area.
- + **Live fuels.** Live fuel moisture is the moisture in living, growing vegetation and is controlled by the internal physiological mechanisms of the vegetation and external influences such as rainfall, drought, aspect, elevation, and seasonal drying patterns. Typically, live fuel moistures are highest in the spring through early summer and at their lowest in late summer through early winter when seasonal rains typically begin.

**Live fuel moisture of 60% or below is a “critical” threshold where live fuels display similar burning characteristics as dead fuels.**

Live fuel moisture status can be tracked at <https://fire.lacounty.gov/fire-weather-danger/>, with the Santa Monica Mountains data most applicable to the Agoura Hills Planning Area. Figure 38 shows both current and historical live fuel moisture data for the Santa Monica Mountains live fuel moisture sampling stations.



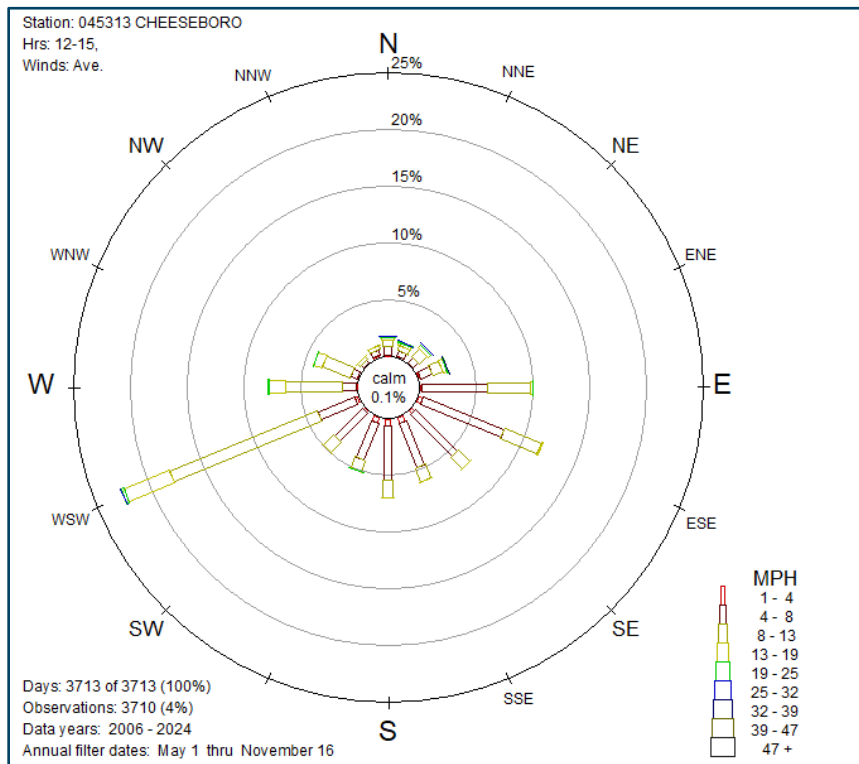
**Figure 38. Current and historical live fuel moisture data for the Santa Monica Mountains station**

Based on the 18-year historical weather data for the Remote Automated Weather Stations (RAWS), as described above, Fire Family Plus 5.0 was used to generate a suite of inputs to the fire behavior models for

each ERC level (Table 8). Additionally, wind roses (Figure 39) were evaluated to determine the dominate wind direction. The bars of the wind rose represent the direction and speed from which the wind is blowing.

**Table 8. Fuel Moisture and Weather Outputs – Base Fire Scenario**

<i>Weather Percentile</i>	<i>90%</i>	<i>97%</i>
Energy Release Component	59%	68%
Burning Index	48%	55%
20-ft Windspeed Direction	WSW	WSW
20-ft Windspeed	15 mph	17 mph
Herbaceous Fuel Moisture	30%	30%
Woody Fuel Moisture	60%	60%
1 HR Fuel Moisture	3%	2%
10 HR Fuel Moisture	4%	3%
100 HR Fuel Moisture	8%	7%
1000 HR Fuel Moisture	30%	30%



**Figure 39. Wind Rose for the City of Agoura Hills**

### 5.1.4.2 Fuel Types and Fuel Models

Fuels are categorized into specific fuel models (e.g., non-burnable, grass, grass-shrub, shrub, timber-understory, timber-litter, and slash- blowdown), which describe the physical properties of the vegetation that support fire. Fuel models are grouped by fire-carrying fuel type and the number of fuel models within each fuel type varies. Each fuel type has been assigned a mnemonic two-letter code.

- + **Non-burnable fuel models (NB).** Land areas that are considered non-burnable portions of the landscape are displayed on a fuel model map as NB. Urban development, barren land and water are all considered unburnable in fire behavior models.
- + **Grass (GR).** The primary carrier of fire in the GR fuel models is grass. Grass fuels can vary from heavily grazed grass stubble or sparse natural grass to dense grass more than 6 feet tall. Fire behavior varies from moderate spread rate and low flame length in the sparse grass to extreme spread rate and flame length in the tall grass models.
- + **Grass-Shrub (GS).** The primary carrier of fire in the GS fuel models is grass and shrubs combined; both components are important in determining fire behavior. The effect of live herbaceous moisture content on spread rate and intensity is strong and depends on the relative amount of grass and shrub load in the fuel model.
- + **Shrub (SH).** The primary carrier of fire in the SH fuel models is live and dead shrub twigs and foliage in combination with dead and down shrub litter. A small amount of herbaceous fuel may be present, especially in SH1.
- + **Timber-Understory (TU).** The primary carrier of fire in the TU fuel models is forest litter in combination with herbaceous or shrub fuels. The effect of live herbaceous moisture content on spread rate and intensity is strong and depends on the relative amount of grass and shrub load in the fuel model.
- + **Timber-Litter (TL).** The primary carrier of fire in the TL fuel models is dead and down woody fuel. Live fuel, if present, has little effect on fire behavior.
- + **Slash-Blowdown (SB).** The primary carrier of fire in the SB fuel models is activity fuel or blow down. Forested areas with heavy mortality may be modeled with SB fuel models.

**IMPORTANT NOTE:** *Traditional wildfire behavior models do not capture fire spread into urban fuels and thus will show as “unburnable”. However, we know that fire can readily burn into the built environment, particularly under conditions of high wind and low relative humidity.*

Table 9 describes the fuel models found in the Planning Area and the amount of area designated as each fuel type. Note: For this analysis, the 2023 40 Scott and Burgan Fire Behavior Fuel Model from LANDFIRE has been used. See Figure 40 for a spatial distribution of the fuel models across the landscape.

**Table 9. Breakdown of Generalized Fuel Types/Fuel Models within the Planning Area.**

<i>Fuel Model Type</i>	<i>Vegetation Group</i>	<i>Fuel Type Acres</i>	<i>% Coverage</i>
<b>Non-burnable</b> – Fuel models (NB1-NB9)	<i>Non-burnable</i>	14,182	25.3%
<b>Grass</b> - Nearly pure grass and/or forb types are represented by grass fuel models (GR1- GR9)	<i>Grassland/Forb</i>	5,213	9.3%
<b>Grass-Shrub</b> – Up to about 50 percent shrub coverage are represented by grass shrub fuel models (GS1-GS4)	<i>Grassland/Forb</i> <i>Broadleaf Forest and Woodland</i>	19,884	35.5%
<b>Shrubs</b> – Cover at least 50 percent of the site; grass sparse to non-existent are represented by shrub fuel models (SH1-SH9)	<i>Chaparral</i>	14,110	25.2%
<b>Timber-Understory</b> – Grass or shrubs mixed with litter from forest canopy are represented by timber understory fuel models (TU1-TU5)	<i>Conifer Forest and Woodland</i>	762	1.4%
<b>Timber-Litter</b> – Dead and down woody fuel (litter) beneath a forest canopy is represented by timber litter fuel models (TL1-TL9)	<i>Broadleaf Forest and Woodland</i> <i>Conifer Forest and Woodland</i>	1,807	3.2%
<b>Total</b>		55,958	100.0%

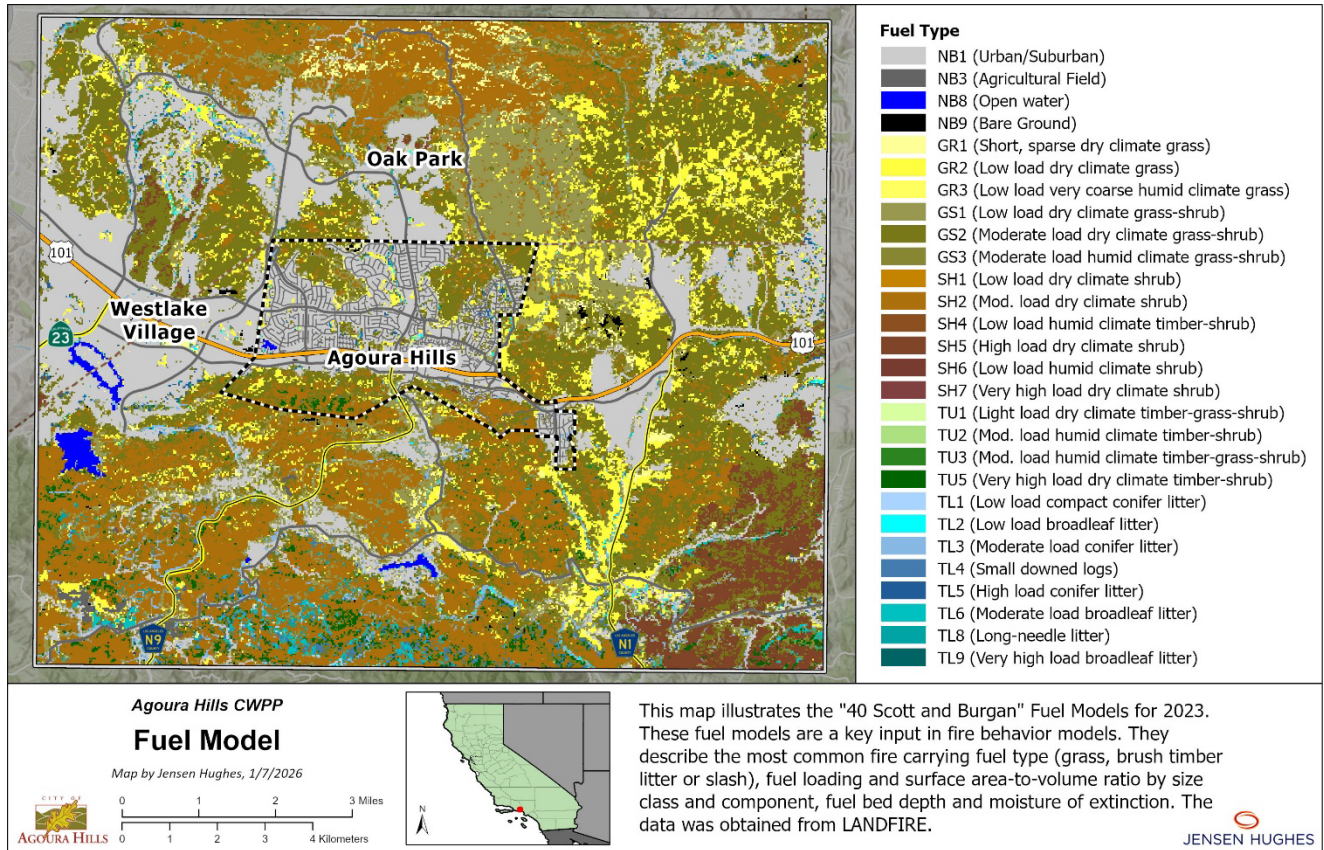


Figure 40. Fuel types/models within the Planning Area

## 5.2 WILDFIRE HAZARD ASSESSMENT

The objective of the wildfire hazard assessment is to identify areas within the Planning Area that are prone to severe fire conditions, and to use this as the basis for designing and prioritizing fuel treatments and other mitigation strategies as part of the CWPP process.

The wildfire hazard assessment performed to shape the development of the CWPP includes:

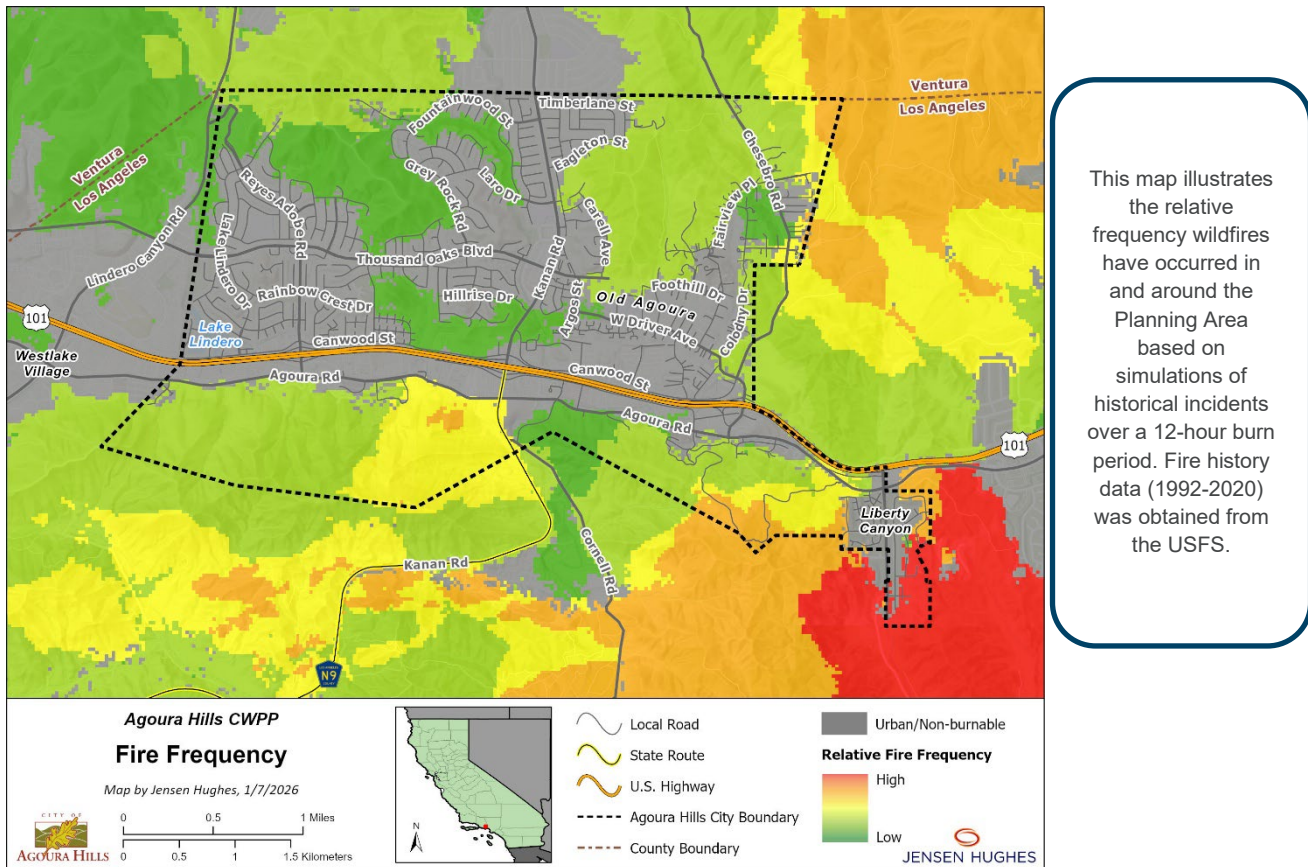
- (1) Simulated Fire Frequency
- (2) Fine-scale Fire Severity
- (3) Fire Flow Paths
- (4) Potential Crown Fire
- (5) Flame Length
- (6) Ember Exposure

### 5.2.1 Simulated Fire Frequency

Simulated Fire Frequency (SFF) or "Fire Frequency" outputs were created using the Minimum Travel Time (MTT) module in FlamMap to understand where on the landscape wildfire has the greatest probability of

spreading based on historic ignition locations within the Planning Area. SFF can also be used to identify where the pathways of fire spread are most rapid under a defined set of weather parameters, as well as help identify potential fuel reduction activities, that will assist in interrupting or altering the spread, direction, and/or intensity of fire entering the community.

To develop the SFF data layer, historic ignitions from 1992-2020 were used to simulate fire spread over a 12-hour active burn period assuming all ignitions in a single year are burning simultaneously. The resulting fire perimeters and flow paths are then over-laid to determine where fires occurred more frequently. Note: These simulations assume no suppression activities. See Figure 41.



This map illustrates the relative frequency wildfires have occurred in and around the Planning Area based on simulations of historical incidents over a 12-hour burn period. Fire history data (1992-2020) was obtained from the USFS.

**Figure 41. Simulated Fire Frequency (SFF) across the City and surrounding areas.**

As seen in Figure 41, wildfire frequently flows through Las Virgenes/Chesebro/Palo Camado Canyons, Liberty Canyon, Kanan and Cornell Road south of Highway 101 and to a lesser degree Lindero Canyon. This corresponds with historic wildfire corridors observed by LA County Fire Department. These locations all feature north/south oriented canyons which funnel and accelerate winds during Santa Ana weather events.

**5.2.2 Fine-Scale Fire Severity**

Fire severity is used to classify how intensely a fire will burn under a variety of environmental conditions. Fire behavior is the product of the natural environment or the unique combination of topography, weather and fuels. Topography and weather are factors on which humans have little effect but, fuels can be altered through human intervention or natural processes such as fire (rapid) or decomposition (very slow). Therefore, when assessing fire severity (“hazard”), the focus can be on fuels and the associated fire behavior and how severe those

conditions may be. This can be determined by fire behavior characteristics such as rate of spread, flame length, fireline intensity, torching, crowning, spotting, fire persistence and resistance to control.

The fire hazard analysis conducted for the Planning Area represents a combination of four fire behavior and fire effects outputs merged into one representation to display the alignment of potential problematic areas on the landscape that would exhibit high severity fire. The four modeling outputs used to develop this analysis are:

- + Flame length
- + Spotting distance
- + PM<sub>2.5</sub> emissions
- + Fuel loading

Each of the above layers are stratified into five rating classes (Low to Very High) then merged into a single display to identify areas on the landscape where the highest potential for hazardous fire conditions exists. This analysis is designed to: (1) Allow land managers to identify locations in the landscape where the greatest fire hazard exists, and (2) Prioritize locations where management action may reduce these hazards.

The hazard analysis does not consider the nexus of hazard to values at risk but only evaluates the landscape features and fire behavior modeling outputs that influence fire hazard.

Figure 42 displays the outcome of the fire hazard analysis, while Table 10 summarizes the hazard ratings for the 97<sup>th</sup> percentile weather conditions for the City and for the surrounding landscapes. Locations shown in red have the highest potential for high severity/hazard and indicate areas where fuel treatments would provide beneficial effects to reduce the potential impacts to high value resources and assets, while improving firefighter and public safety and enhance fire suppression efficiencies.

## Key Wildfire FAQs

### 1. What is the difference between wildfire hazard and risk?

- **Fire hazard** = the **potential fire behavior** at a location (how intense or fast a fire could burn, based on fuels, weather, and topography)
- **Fire risk** = the **likelihood and consequences** of wildfire (how likely a fire is to occur *and*, if it does, how damaging it would be to life, property and critical services)
- **Fire vulnerability** = accounts for the potential increase in damage or loss due to social or physical susceptibilities to wildfire impacts

#### In short:

Hazard describes how bad a fire could be; risk describes how likely it is and what it would affect.

### 2. Why are the CAL FIRE FHSZ maps different from the fine-scale fire hazard and risk maps in the CWPP?

The difference comes down to purpose, scale and how the maps should be used. They are complementary tools, but they answer very different questions.

#### CAL FIRE FHSZ Maps

- **Primary purpose:** Regulatory classification of wildfire hazard for planning and building code enforcement.
- **Used to:**
  - Trigger California Wildland-Urban-Interface Code (CA-WUI) requirements (formerly California Building Code Chapter 7A and California Fire Code Chapter 49)
  - Support defensible space enforcement (PRC §4291)
  - Inform General Plans, Safety Elements, and disclosures
- Designed to be consistent statewide, not regionally or locally specific.

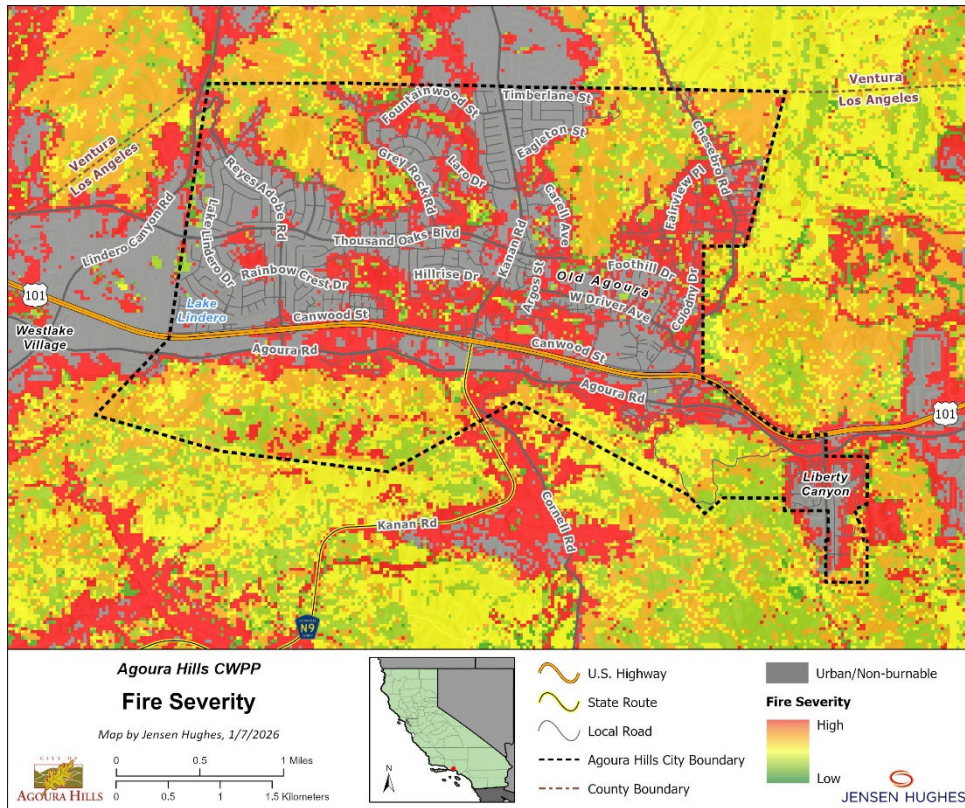
#### Fine-Scale Fire Behavior Maps (Chapter 5 of the CWPP)

- **Primary purpose:** Localized wildfire hazard and risk mitigation planning
- **Used to:**
  - Evaluate fire spread pathways, intensity, and fire frequency
  - Support CWPPs, evacuation studies, fuel treatment design, and suppression planning
  - Develop local projects, identify priorities and monitor progress
  - Compare relative risk within and between communities

#### Bottom line:

FHSZ maps answer “Where does the State say wildfire hazard is high enough to regulate?”

Fine-scale models answer, “How might fire actually behave here, under specific conditions?”



This map illustrates the anticipated severity or intensity of a fire, in the event fire were to occur in and around the Planning Area. For the CWRA, fire severity consists of a combination of fire behavior characteristics – flame length, max spotting distance, fuel loading, and PM 2.5 emissions. This data layer has been based on fire behavior modelling given current fuel loads, topography and 97th percentile weather conditions, and is independent of any specific ignition source.

**Figure 42. Fire severity across the Planning Area. Fire severity includes flame length, spotting distance, PM2.5 emissions, fuel loading**

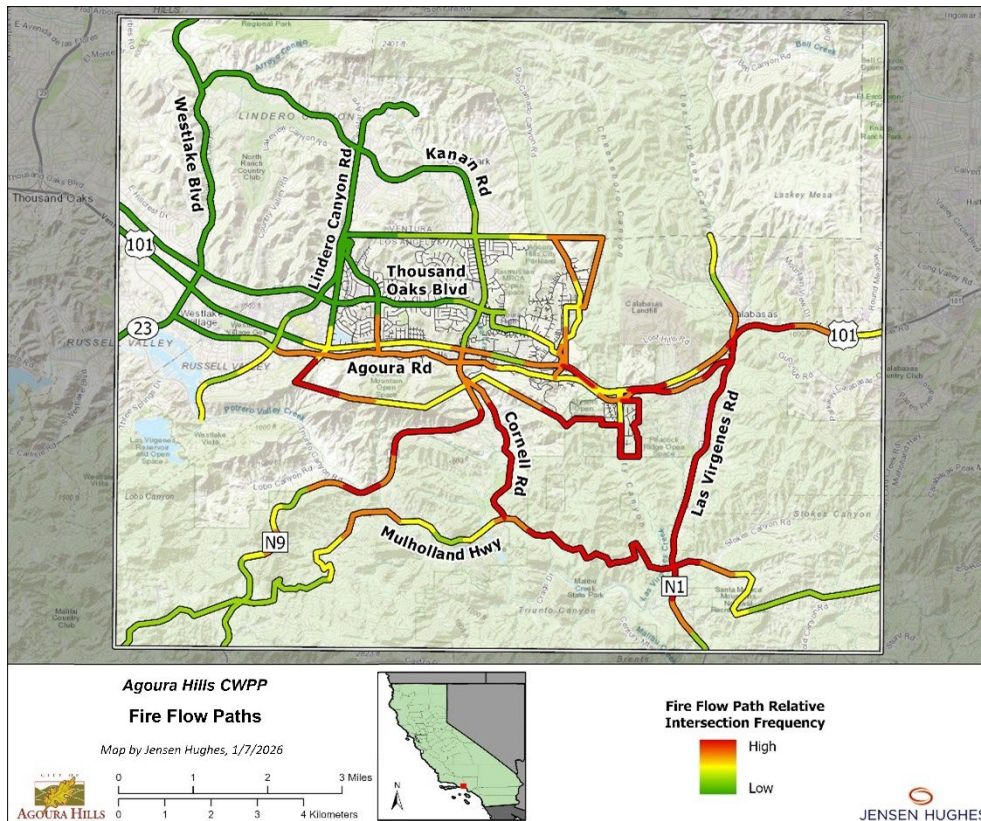
**Table 10. Fire hazard severity by % acres in the City and surrounding area for 97<sup>th</sup>% weather conditions**

Planning area	Non-burnable	Very Low	Low	Moderate	High	Very High
Entire Analytical Area	25%	2%	20%	20%	18%	14%
City of Agoura Hills	54%	1.6%	10%	9%	16%	10%

**5.2.3 Fire Flow Paths**

Fire Flow Paths are an output derived from the Simulated Fire Frequency analysis. These fire behavior outputs examine the intersection and concentration of where fires originating from different parts of the landscape would converge or intersect on the landscape. As part of the overarching risk assessment, documented fire locations for the time 1992 through 2020 were simulated and allowed to burn unsuppressed for a 24-hour period under 97<sup>th</sup> percentile fuel moisture conditions and a 17mph wind from the northeast. Flow paths from these simulations were compiled in GIS to determine locations along the corporate boundary of Agoura Hills where fires are most likely to impact the community.

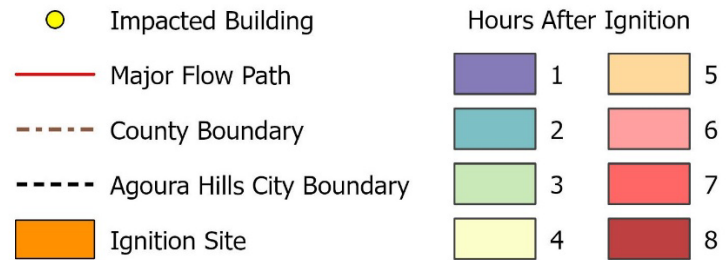
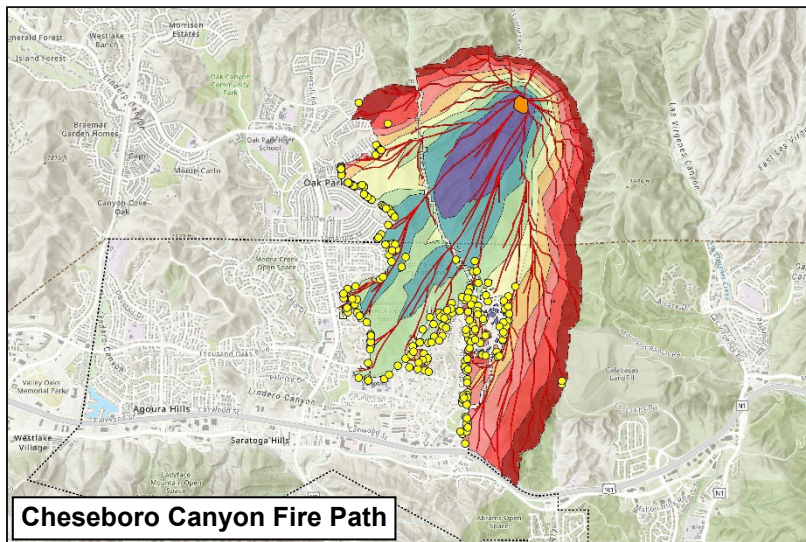
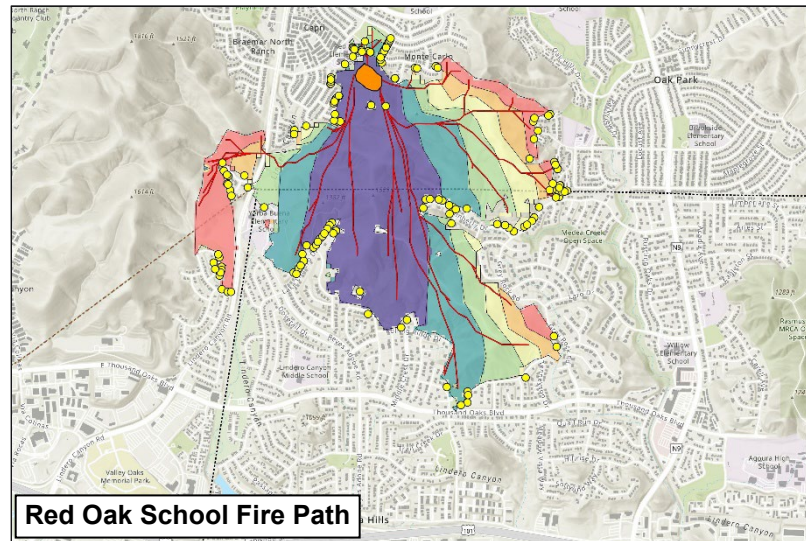
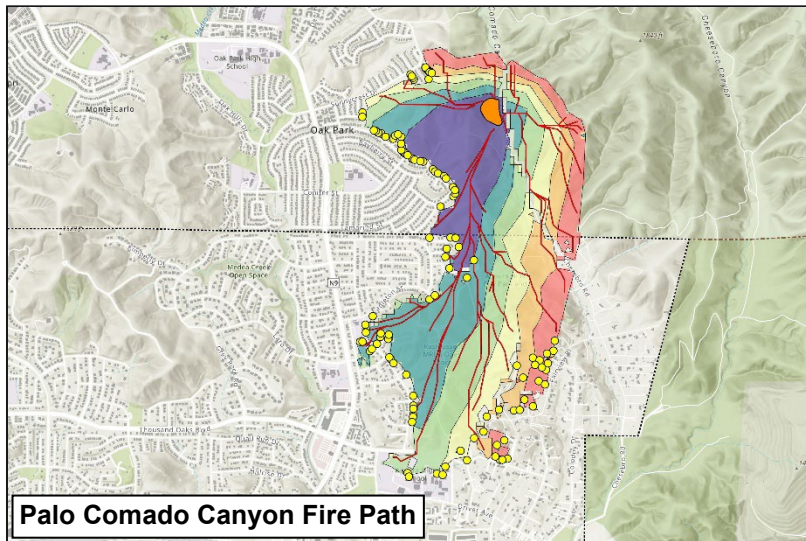
The analysis indicates that the east side of the community, particularly in Chesebro and Liberty Canyons are highly prone to wildfire, while the locations west of Kanan Road and the west side of the city show fewer intersects with the modeled fires. This same analysis was used to show the potential impacts on major travel routes in the city, with results indicating that locations along Chesebro Road, Agoura Road and Liberty Canyon Road showing the greatest number of fire intersections. These major travel routes will be the principal evacuation routes for members of the community in the event of a significant wildfire. Figure 43 shows the flow path intersection with the road systems and the administrative boundary of the city.



This map illustrates major wildfire flow paths for simulated ignitions in Chesebro Canyon. A wildfire flow path is a major route in which a fire spreads due to wind, terrain, or other factors. Outputs were captured for each ignition location based on a Minimum Travel Time (MTT) analysis. This map demonstrates where wildfire flow paths are most likely to cross Major Roads.

**Figure 43. Fire Flow Paths intersections of major roadways and Agoura Hills city boundary.**

The fire flow path analysis focused on historic ignition locations and how fire spread impacts linear features like roads and boundary lines but additionally flow paths can also be used to see how a fire might spread into a community. To look at how a fire may impact certain locations within the City, three ignition points were selected north of Agoura Hills and allowed to burn unsuppressed for six hours under weather conditions like those that occurred in the 2025 Palisades Fire. The locations selected for these ignitions were Chesebro Canyon, Palo Comado Canyon and Red Oak Elementary School near Linder Canyon (Figure 44).



**Figure 44. Simulated fire flow paths with ignition points in Palo Comado Canyon (top left), near Red Oak School (top right), and Chesebro Canyon (bottom).**

Each simulation demonstrates how a fire burning during a Santa Ana weather event can spread into the core of the city and impact the built environment.

**Note: These simulations likely underestimate fire spread within the community as flammable landscape vegetation and structure-to-structure fire spread is beyond the capabilities of current fire models.** The flow paths indicate where community impacts are most anticipated under these burning conditions given these defined ignition points and weather conditions.

#### 5.2.4 Potential Crown Fire

In addition to flame length (see below), the type of predicted fire can provide a strong correlation to the potential for extreme fire behavior characteristics such as how fires spread (surface or crown). The type of predicted fire also governs the potential strategic and tactical operations alternatives by fire agencies during a wildfire. Examples could include the use of aircraft or the potential for indirect attack methods based on crown fire potential or fast-moving brush fires.

The following are fire types and how they can influence potential fire behavior:

- + **Surface Fire** – A surface fire burns in the surface fuel layer, which lies immediately above the ground fuels, but below the canopy. Surface fuels consist of needles, leaves, grass, dead and down branch wood, logs, shrubs, low brush, and short trees (<3 feet). Surface fire behavior varies widely depending on the nature of the surface fuel complex (vertical and horizontal arrangement). Surface fires are generally easier to contain than any type of crown fire.
- + **Crown Fire** – A crown fire burns in the elevated canopy fuels. Canopy fuels normally consumed in crown fires consist of the live and dead foliage, lichen, and very fine live and dead branch wood found in the forest canopy. Reducing the potential for crown fire is very important in reducing the risk of lofted fire brands that may threaten structures and the WUI. In addition, crown fires are defined as either “passive” or “active.”
  - **A passive crown fire (“torching”)** is defined as the ignition of a single or small group of trees, but does not spread continuously through the canopy of the trees.
  - **An active crown fire** is where the entire fuel complex is involved in flame, but the initiation and spread of the crown fire is dependent on the heat released from surface fuel.
  - **An independent crown fire** is a rare, intense wildfire that spreads through tree canopies without needing heat from a surface fire below, relying on strong winds, fuel density, and steep terrain for its own momentum, creating a fast-moving, self-sustaining blaze in the treetops. Note: Because this type is extremely rare, only passive and active crown fires are simulated.

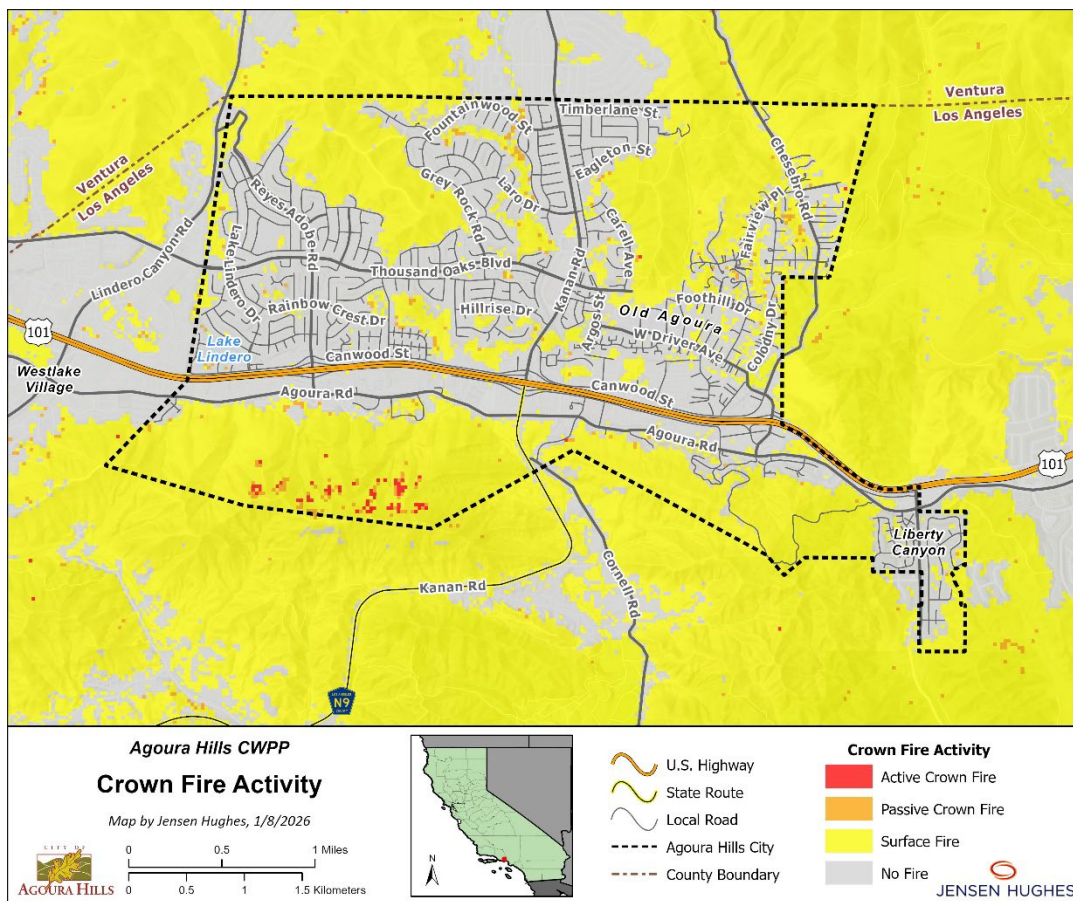
Figure 45 illustrates the spatial distribution of potential crown fire (active and passive) and surface fire across the planning area.

For the City of Agoura Hills, crown fire initiation and propagation are not considered an issue of great concern. Crown fires under the limits of the current fire models are associated with timber understory and timber litter fuel types only, with these fuel types representing only 4.6 percent of the overall Planning Area. Where timber dominated fuel models exist on the landscape, the fuels are comprised of an oak dominated overstory, which is more resistant to crown fire initiation than conifer species.

The fuel structure in and around Agoura Hills will not allow for the development of an active crown fire.

Fire behavior modeling does indicate that passive crown fires have the potential to occur on 0.9% of the Planning Area and are mostly confined to extreme southeast portion of the analysis area within the Santa Monica Mountains.

While crown fire is not a landscape level issue for Agoura Hills, there are locations within the City where torching of individual trees used as landscaping near structures and along road systems can occur. This is particularly true where groups of pines, eucalyptus, cypress, or pepper trees occur.



**Figure 45. Modeled crown fire behavior across Agoura Hills.**

A simple tool that property owners may use to evaluate if trees within their home ignitions zones have the potential to be ignited from a surface fire is the “Crown Fire Initiation” model, that uses the surface fire intensity, foliar moisture of the tree canopy, and the separation distance between the surface fuels and the lowest level of canopy of a tree to determine if torching is probable.

Fire behavior outputs from fire hazard assessment indicate that in urban environments adjacent to wildland fuels, flame lengths are generally 4-foot or less. By using a standard foliar moisture of 90-percent the simple crown fire initiation model indicates that there needs to be a canopy separation distance of 11 feet (red lines) to mitigate potential ignition of the tree canopy (Figure 46).

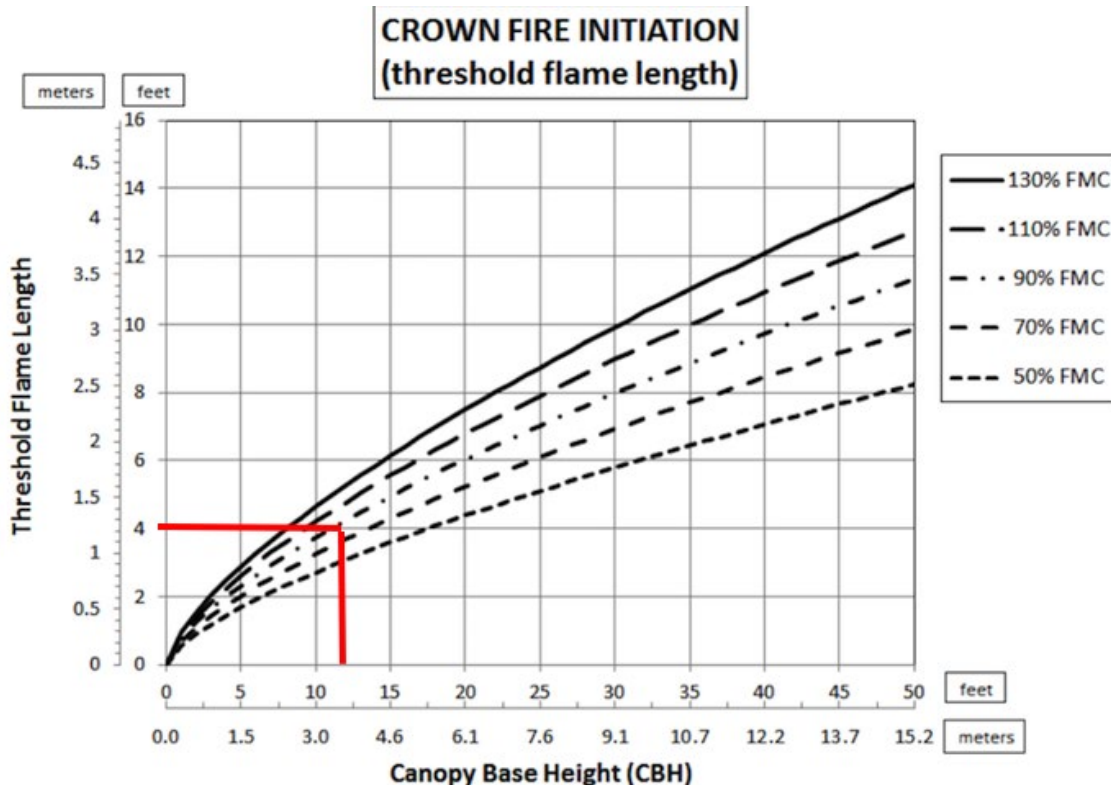


Figure 46. Crown Fire Initiation.

5.2.5 Flame Length

Flame length is the observable feature of wildland fire that is directly related to a fire’s intensity. Flame length can also be used as a proxy for fire hazard and is an easily relatable fire behavior characteristic to communicate fire hazard to the public. Flame length has also been correlated by fire scientists to the potential success of fire suppression operations. Generally, flame lengths less than 8 feet can be successfully attacked by ground-based firefighting resources (Table 11). The correlation between flame length and suppression success is also useful when designing fuel treatments to mitigate fire hazard, with fuel treatment prescriptions often targeting post-treatment conditions that produce flame lengths of 4-feet or less.

Table 11. Fire Behavior Characteristics and Suppression Capability

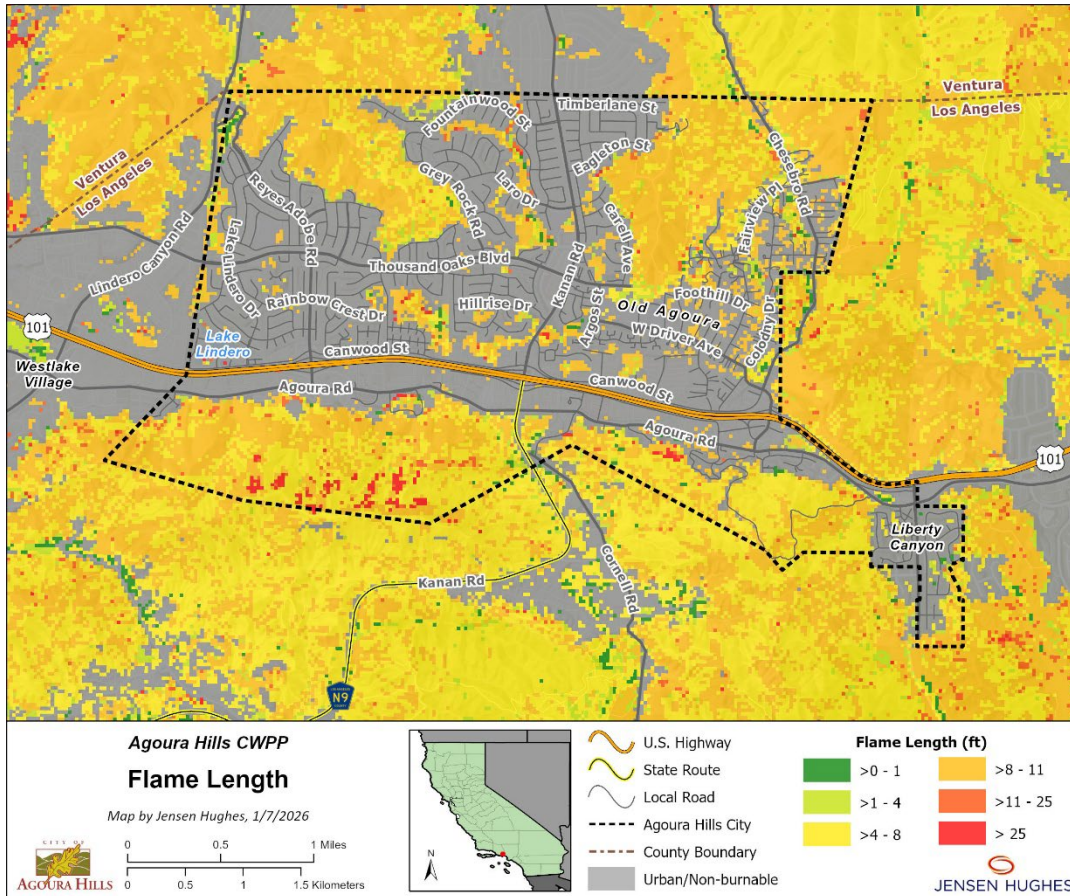
Flame Lengths (feet)	Fireline Intensity (BTU/foot/Second)	Interpretation
0-4	0-100	Fires can be generally attacked at the head or flanks by persons using hand tools. Handlines should hold the fire
4-8	100-500	Fires are too intense for direct attack at the head of the fire by persons with hand tools. Handlines cannot be relied upon to hold the fire. Equipment such as dozers, engines and retardant aircraft can be effective.

<i>Flame Lengths (feet)</i>	<i>Fireline Intensity (BTU/foot/Second)</i>	<i>Interpretation</i>
8-11	500-1,000	Fires may present serious control problems – torching out, crowning and spotting. Control efforts at the head of the fire will probably be ineffective.
11+	1,000+	Crowning, spotting and major fire runs are common. Control efforts at the head of the fire are ineffective.

Highly influenced by windspeed, flame length can vary greatly within the same fuel types under different wind conditions. For this risk assessment, winds associated with 97<sup>th</sup> percentile weather conditions (17 mph) were evaluated. A tabular summary of the distribution of flame lengths across the Planning Area is shown in Table 12, while Figure 47 displays the spatial distribution of the modeled flame lengths across the landscape.

**Table 12. Modelled flame lengths in the City and surrounding landscape.**

<i>Flame Length</i>	<i>97th percentile weather</i>	
	<i>Agoura Hills</i>	<i>Surrounding Landscape</i>
Non-burnable	54%	25%
0 – 4 feet	3%	5%
4 – 8 feet	16%	35%
8 – 11 feet	26%	29%
11+ feet	1.6%	5%

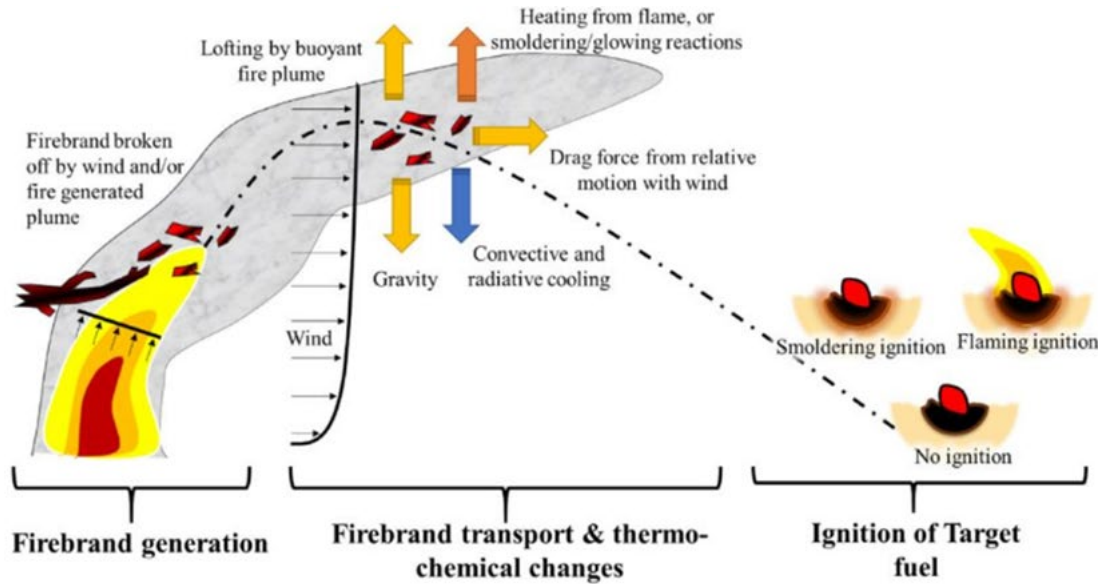


Flame Length is an estimate of the mean flame length (in feet) for all potential fires that may occur given vegetative conditions, fuel moistures, and peak winds. This metric is often used as a proxy for fire intensity. Model inputs are based on 97th and 90th percentile conditions obtained from 20 years of weather records from remote automated weather stations (RAWS) during the core fire season.

Figure 47. Modeled flame lengths across Agoura Hills.

### 5.2.6 Ember Exposure

Embers constitute one of the greatest threats to homes and other structures as they may be carried for long distances ahead of the main fire front or from burning urban fuels (e.g., structures), igniting receptive fuel beds in and around structures. See Figure 48 for general transport mechanism for embers or firebrands during a wildfire incident. For this plan, fire modeling was used to evaluate the potential ember exposure expected under the 97th percentile conditions scenario from the previous section.



**Figure 48. General generation, transport, and ignition mechanisms for ember cast in a wildfire.**

To develop the Ember Exposure map (Figure 49), the maximum spotting distance of each pixel on the digital landscape was determined from FlamMap using the worst-case scenario fire weather; in this case, the fire weather observed during the Palisades Fire was used, including a 31-mph sustained Santa Ana wind. Using the outputs from FlamMap, each pixel on the landscape was buffered in ArcGIS to represent the maximum spotting distance. For example, a pixel with a 300-foot maximum spotting distance was buffered 300 feet in all directions from the center of the pixel. This creates a circle on the digital landscape with a 300-foot radius. When all pixels on the landscape are buffered, the outcome is a series of overlapping circles that represent how many surrounding pixels might contribute embers to the pixel in the middle. The number of potentially contributing pixels is then divided by the total number of pixels that could contribute within a radius equivalent to the maximum spotting distance observed for the Planning Area. This yields a percentage that represents the proportion of surrounding pixels (i.e., the surrounding landscape) that would potentially provide embers to a given pixel: the Ember Exposure.

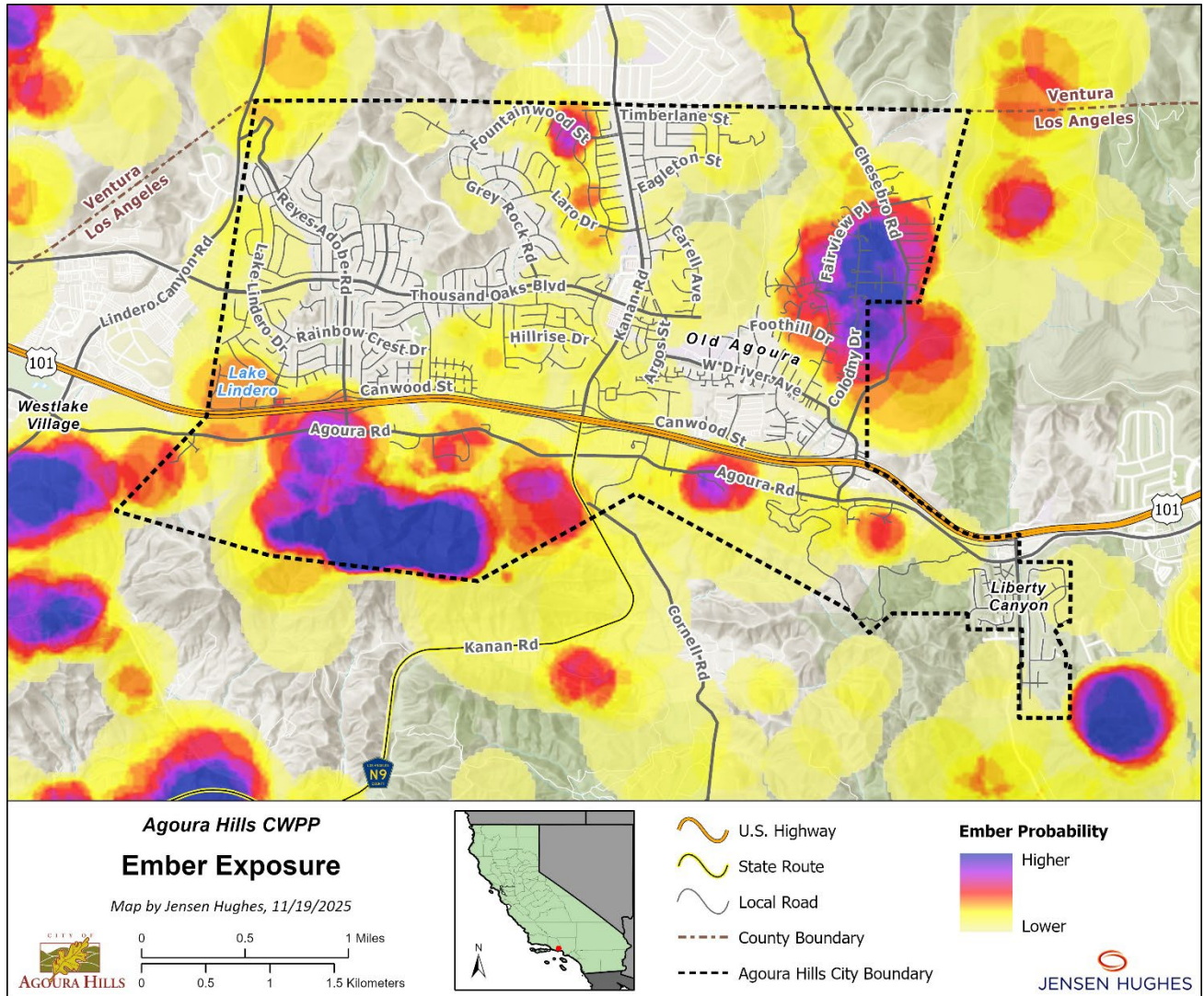
Spotting from embers is highly erratic and very difficult to model accurately with the current best available science and modeling, so it is best to assess these percentages relative to each other, rather than as a direct probability. For example, the maximum probability of Ember Exposure for the Planning Area is 4%. **Rather than interpreting this as a 4% probability that a location will be exposed to embers, interpret it as 4% of the surrounding landscape will contribute embers in a wildfire.** A location that received embers from 4% of the surrounding landscape will have nearly twice the Ember Exposure level of a location that only receives embers from 2% of the surrounding landscape.

The maximum spot distance modeled in this analysis was 2,992 feet (just over half of a mile), but this should be considered a conservative estimate. The fire behavior analysis conducted here demonstrates very conservative fire behavior because the recent 2018 Woolsey Fire removed vegetation around nearly the entirety of the Planning Area, so it is in early stages of regrowth. There are a very limited number of trees in the fuel layer used to model fire behavior, and while trees are the primary driver of embers in the model, mature shrubs become a significant source of embers as they age. **Further, this model does not capture any flammable landscaping around homes and highly granular pockets of wildland vegetation on unmanaged open spaces within the city.**

Given the model emphasis on trees as sources of embers, the highest modeled risk of embers is primarily in neighborhoods along the eastern border of the Planning Area, along Cheeseboro Canyon, and along the southern border of the Planning Area at the base of Ladyface Mountain and adjacent to City Hall. An additional pocket of elevated ember exposure is along Medea Creek Park because of the high concentration of trees there. Notably, because the trees along this riparian area are primarily native oaks and various deciduous species, the riparian zone will normally have reduced flammability, but in extreme fire events and during drought, riparian zones burn readily and can be substantial sources of embers if dried leaves have accumulated along the banks. In several recent southern California wildfires, heavily vegetated riparian zones have served as conduits pulling fire along and into neighborhoods.

Currently Oak Park Fire Safe Council is administering a grant to treat riparian vegetation along Lindero and Medea Creeks to reduce the potential of a wildfire spreading through these drainages under extreme fire weather conditions (<https://opfsc.org/2024/09/2023-2024-wildfire-prevention-grant/>). Action item KW-9 of this plan proposes a similar project along Shady Creek Drive.

It is extremely important to recognize that it only takes a single ember to create a spot fire or burn down a home; therefore, areas characterized by Low Ember Exposure are still at risk during a wildfire, and mitigation measures can reduce the probability of ignition and spread. Equally, the Ember Exposure analysis models embers sourced from wildland vegetation, but wildfire disasters with widespread structure loss primarily stem from house-to-house ignitions when a wildfire transitions into an urban conflagration. In these events, structures themselves become the primary sources of embers, as was seen during the 2025 Palisades and Eaton Fires. Given the older age of housing across the planning area (nearly all homes pre-date the 2008 Chapter 7a WUI building codes), any non-hardened structure within an ember exposure zone has potential to be ignited by embers in even a small, local wildfire.



**Figure 49. Ember exposure probability across Project Area. The percentage represents the proportion of the surrounding area that would contribute embers to a given location, rather than the probability of the location being exposed to embers. The highest ember probability on this map is 4.2%.**

### 5.3 COMMUNITY RISK ASSESSMENT

In its simplest form, community wildfire risk is the likelihood of a fire and its potential consequences on the community. It includes:

- (1) The identification of potential fire hazards and associated characteristics such as location, intensity, frequency and probability of fire.
- (2) The analysis of exposure and vulnerability of physical, social, health, environmental and economic assets or values in the community; and
- (3) The evaluation of the effectiveness of coping capacities in response to and recovery from potential wildfire impacts.

This provides a basic framework to not only identify potential risks but, more importantly, determine various strategic actions for individuals, communities, agencies and other stakeholders to better prepare for, mitigate, respond to and recover from future wildfire threats.

The community risk assessment is based on a combination of approaches – both quantitative and qualitative – to determine the nature and extent of wildfire risks across the Planning Area. In addition to the quantified risk assessment in Section 5.3.1, various physical and social vulnerability analyses (neighborhood- and parcel-level vulnerabilities, community-level vulnerabilities, vulnerable populations) were conducted to help further inform overall risk and targeted mitigation actions.

### 5.3.1 Quantitative Risk Assessment

To understand the potential wildfire risks across the Planning Area, a quantified risk assessment was performed. More detail about the methodology can be found in Agoura Hills' CWRA but a summary of approach and results is presented below. The governing risk equation is as follows:

$$(0.6 \text{ Fire Severity}) + (0.4 \text{ Fire Frequency}) \times (\text{Exposure} + \text{Vulnerability})$$

Where,

**Fire Severity** – is a combination of various fire characteristics, as described above. [Scale: 0-5]

**Fire Frequency** – is the simulated fire frequency, as described above. [Scale: 0-5]

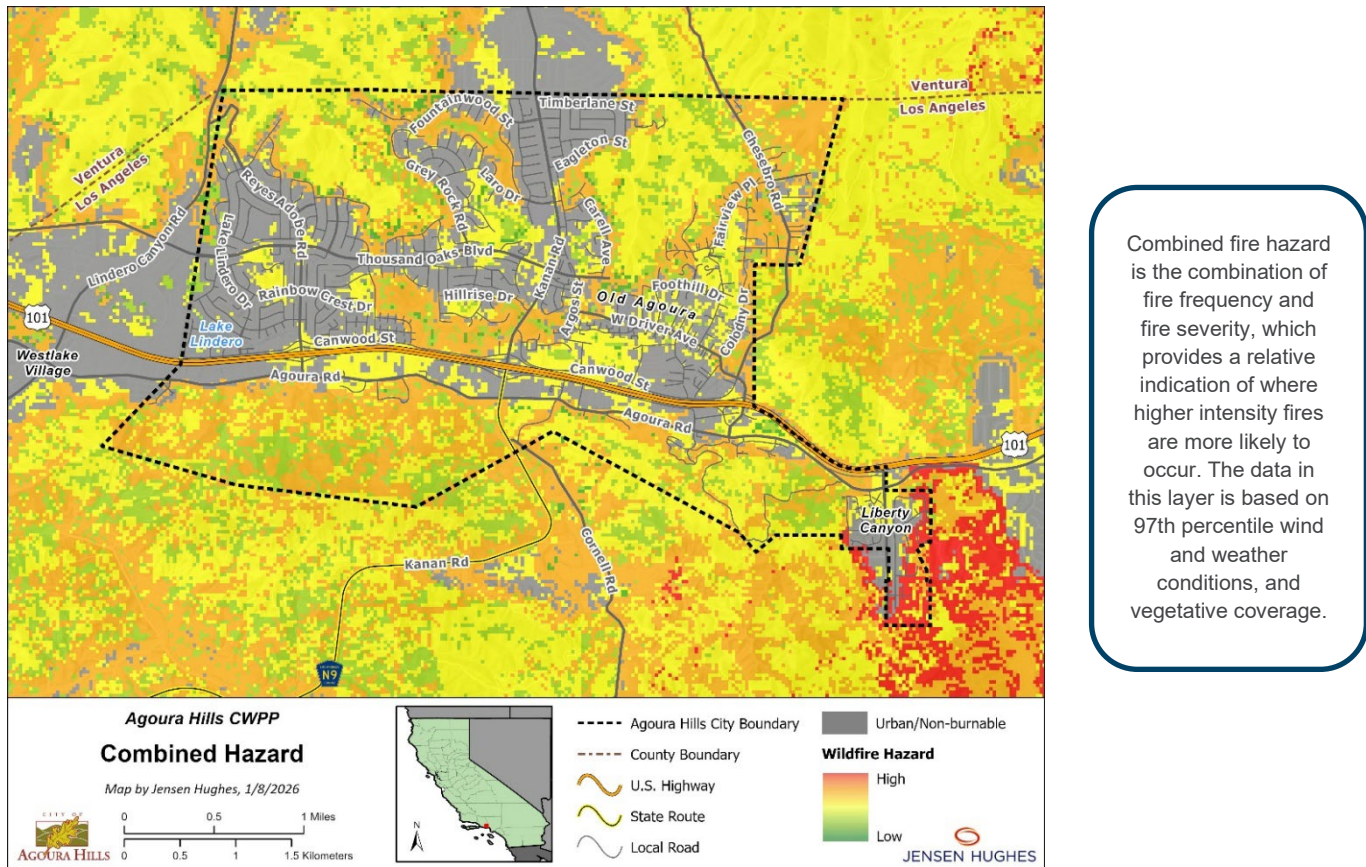
**Exposure** – is the density of values or assets at risk from fire exposure. [# of assets]

**Vulnerability** – is an additional term(s) to account for the potential increase in damage or loss due to inherent social or physical susceptibilities to wildfire impacts. [1 – 2.5]

As seen in the generalized risk equation, there are two components describing the fire: (1) fire severity and (2) fire frequency. See Sections 5.2.2 and 5.2.3 for detailed discussions regarding these two individual components. The reason for combining these two components is to acknowledge that wildfire risk is not only a function of how severe a fire is, but also how frequently it occurs. In other words, some of the most concerning fires are those that occur less often but are severe (low frequency high intensity), particularly if they occur near high value assets or in vulnerable areas. High frequency-low intensity fires (such as those that occur in grasslands), may occur more often but they tend to be low intensity and therefore more manageable from a firefighting perspective.

Some of the most concerning fires are those that occur less often but are extremely severe (low frequency high intensity), particularly if they occur near high value assets or in vulnerable areas. High frequency-low intensity fires (such as those that occur in grasslands), may occur more often but they tend to be low intensity and therefore more manageable from a firefighting perspective.

Figure 50 shows the combined Fire Severity and Fire Frequency components of the risk equation and provides an indication of where higher intensity-higher frequency fires are more likely across the Planning Area. As seen in the figure, Liberty Canyon has the highest relative likelihood of problematic fires.



**Figure 50. Combined hazard (0.6 fire severity + 0.4 frequency) across the City.**

Wildfire risk is not just a function of the fire itself but also what values/assets may be impacted, so the general risk equation includes a component for “assets” and “vulnerability.” Completed during the CWRA development process, three (3) different measures of risk were evaluated to understand different aspects of risk. These are:

- (1) Risk to All Assets (“Comprehensive Risk”)
- (2) Risk to Natural Resources
- (3) Risk to Economic Resources

As each of the three (3) measures evaluates risk from a different perspective, the types of assets or values, and the vulnerabilities included in each analysis are specific to that perspective. For example, risk to economic resources includes buildings and structures, as equally weighted assets, that provide the City with economic value. Note: The economic risk map assumes that all structures have equivalent financial value. Therefore, higher economic risk areas will skew the results to where there is a higher density of structures in combination with higher fire intensity. Comprehensive risk captures all assets, but is generally more weighted to reflect risk to people, property and infrastructure, particularly as these assets are also where populations are likely to reside.

Refer to Figure 51 for the Planning Area risk maps. Risk is displayed from green to red, with dark red indicating areas of higher risk. “Non-burnable” regions (i.e., urban areas and water) are also indicated on the risk maps.

**Note: Current wildfire models do not have an urban fuel model. This does not mean urban areas cannot burn; it just means that fire science has yet to credibly define urban fuel burn characteristics.**

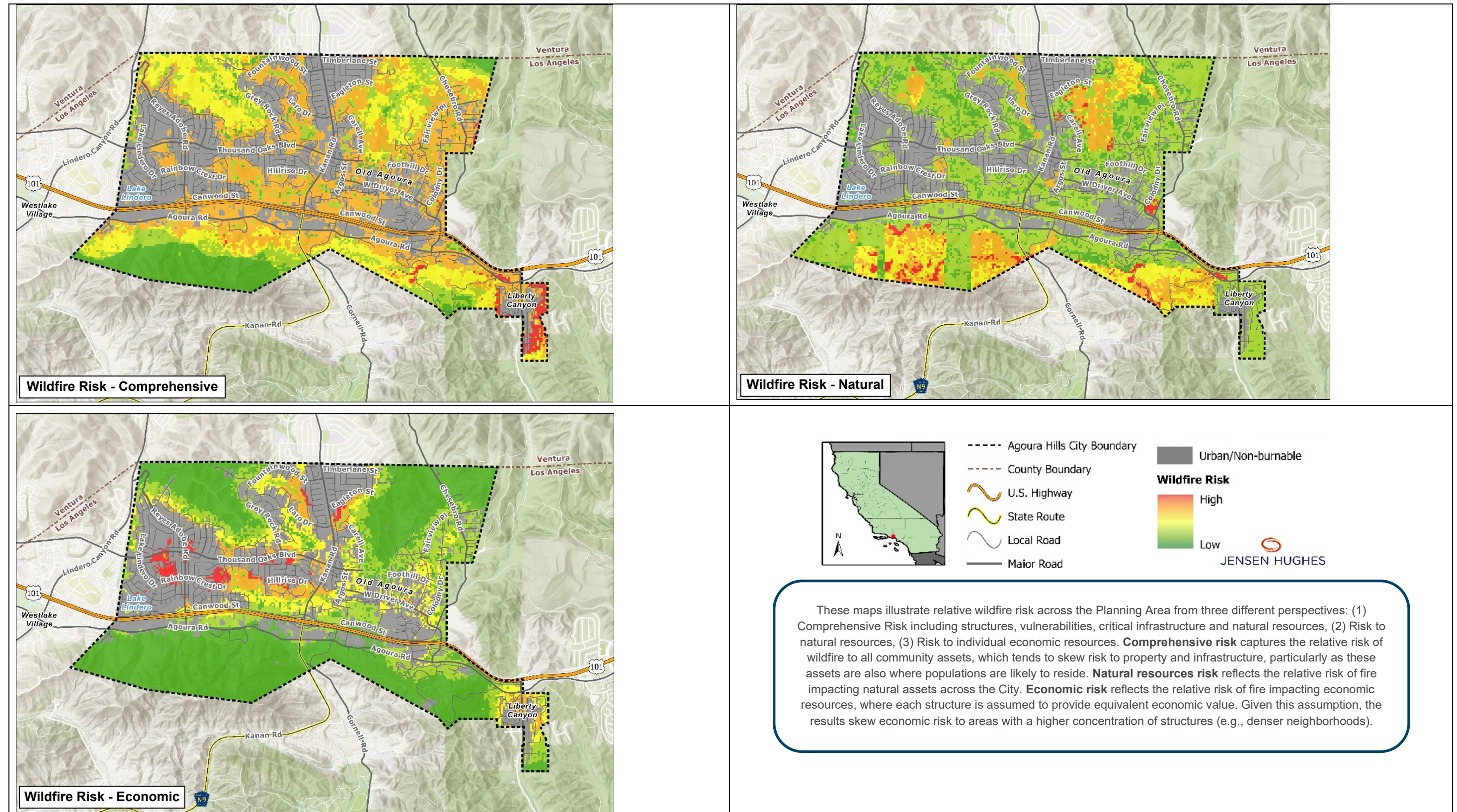


Figure 51. Community Risk from three different perspectives across the City.

As seen in the comprehensive risk map in Figure 51, very high risk zones are concentrated in the region of Liberty Canyon. Additionally, much of the City is also considered to be at a moderate to high risk due to the density of assets and high potential fire severity across the city. Peacock Ridge ranges around moderate to high fire risk, as does Morrison Ranch and Fountainwood. Morrison Ranch, however, has more area under the high hazard classification and Fountainwood has more area under the urban or non-burnable classification. Chateau Creek, Hillrise, Annandale and Old Agoura all contain larger areas of both high fire hazard and urban or non-burnable zones. Lake Lindero is primarily of the non-burnable and urban classification.

**IMPORTANT NOTE:** “Non-burnable” regions (i.e., urban areas, agriculture, water and barren lands) in the following risk maps are not truly “non-burnable” with exception of the water features. The “non-burnable” areas are only a limitation of the wildfire behavior models, which currently do not have fuel models for these land-type uses. This does not mean they cannot burn. It just means that fire science has yet to develop credible burn models to describe the fire characteristics (e.g., flame length, rate of spread) through these spaces. That said, these areas can be considered to have a lower likelihood of burning as a wildland fire. In some cases, for the urban areas, these are no longer wildland fuels, but urban fuels.

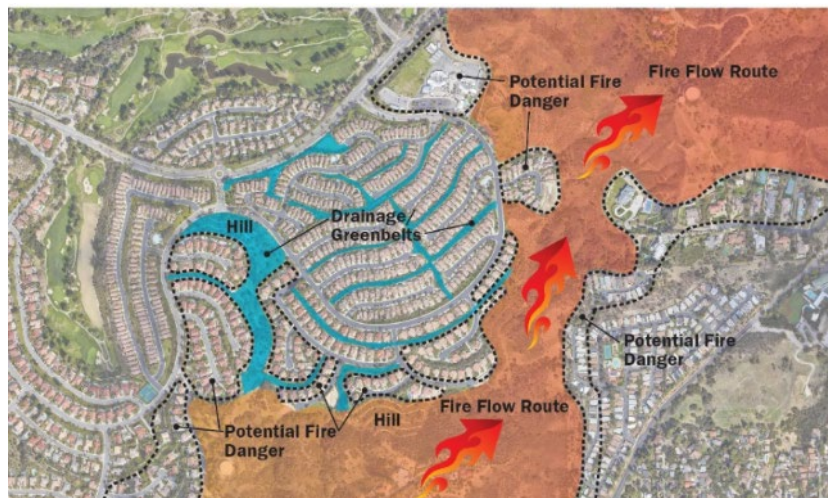
### 5.3.2 Community Vulnerabilities

#### 5.3.2.1 Technical Background

In 2025, wildfires destroyed 18,385 structures across the United States, of which 12,773 were residences. In Southern California, the January 2025 Los Angeles County fires, including the Eaton and Palisades Fires, destroyed over 16,000 structures, and resulted in 30 civilian fatalities.<sup>10</sup>

While earlier research focused on the home ignition zone as providing the primary sources of structure vulnerability (e.g., construction materials, home hardening and defensible space features immediately around the home), current research and technical guidance also highlight the significance of landscape level features and neighborhood designs on influencing structure vulnerability to wildfires. That is, a structure’s vulnerability is determined by a complex interaction of vulnerabilities at different scales – building, parcel, neighborhood, and community. Ways in which these scales influence vulnerability include:

- + **Potential neighborhood and community design vulnerabilities** – Key influences on vulnerability include housing density or separation distances with other structures, zoning and land-use planning, access/egress routes, setbacks to hazardous topographic features both natural and man-made (e.g., steep slopes, ridges, gullies, drainage ditches, open spaces/parks), integration of greenbelts and recreational uses within the built environment, and road placement. These characteristics impact the likelihood of (1) wildfire spreading into a community, (2) frequency and/or intensity of fire exposure, (3) structure-to-structure ignitions and associated fuel loads and intensities. Figure 52 shows an



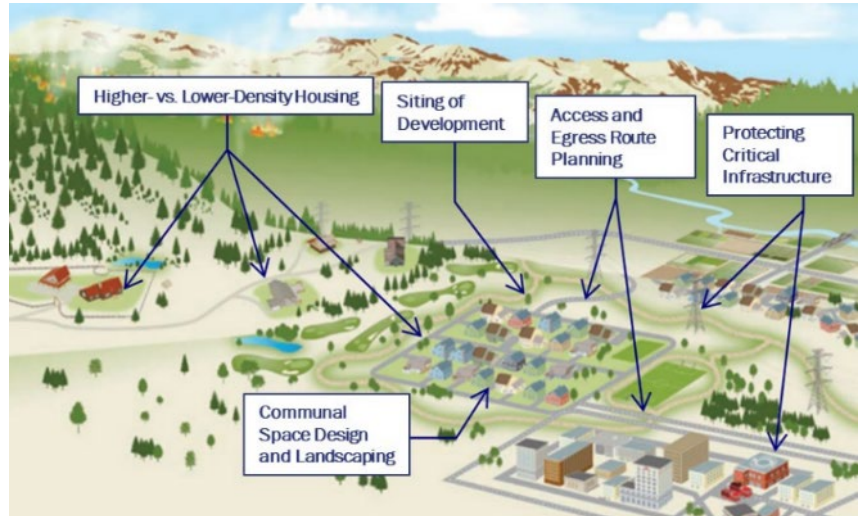
**Figure 52. Example of a fire flow path via a greenbelt/drainage into a community. (Source: FEMA)**

<sup>10</sup> <https://www.nifc.gov/nicc/predictive-services/intelligence>, 2025

example of how neighborhood or community design can lead to fire flowing into a neighborhood and influence structure vulnerability.

- + **Potential vulnerabilities from adjacent vegetated open space** – Large, uninterrupted, mostly unmanaged open space (e.g., parks, greenbelts, recreational use spaces) can provide a potential source of wildland fire or fuel bed for ember ignitions proximate to homes.

- + **Potential vulnerabilities from adjacent non-WUI designed structures or neighborhoods** – Neighborhoods with older construction located within the WUI or proximate to the WUI are generally not designed to meet modern building and fire code standards for wildfire resistance. This makes these neighborhoods and structures more easily ignitable, and they can ultimately become a fire source and ember generator that may present a threat to adjacent homes and neighborhoods – whether those neighboring structures are designed to WUI standards or not.



**Figure 53. Various community and neighborhood level features that can influence wildfire exposure at a local level (Source: FEMA).**

- + **Building component and parcel details** – Non WUI-compliant building construction, lack of vent protection, combustible siding, combustible decking and fencing, non-fire-resistant roofing, the location of structure on site (e.g., mid-slope, hilltop), maintenance practices of structure and landscaping, and proximate fuels (e.g., flammable materials, sheds, other structures) within 30-100 feet all impact ignitability

The heat transfer mechanisms which ignite structures occur due to fire from wildlands, open spaces, greenbelts, and communal spaces to structures, but also from fire spreading from structure-to-structure and from other items in the built environment. This phenomenon is known as an urban conflagration.

**Figure 54** provides a high-level overview of the various heat transfer mechanisms that cause structure ignition regardless of the characteristics of the community, neighborhood, parcel, or building.

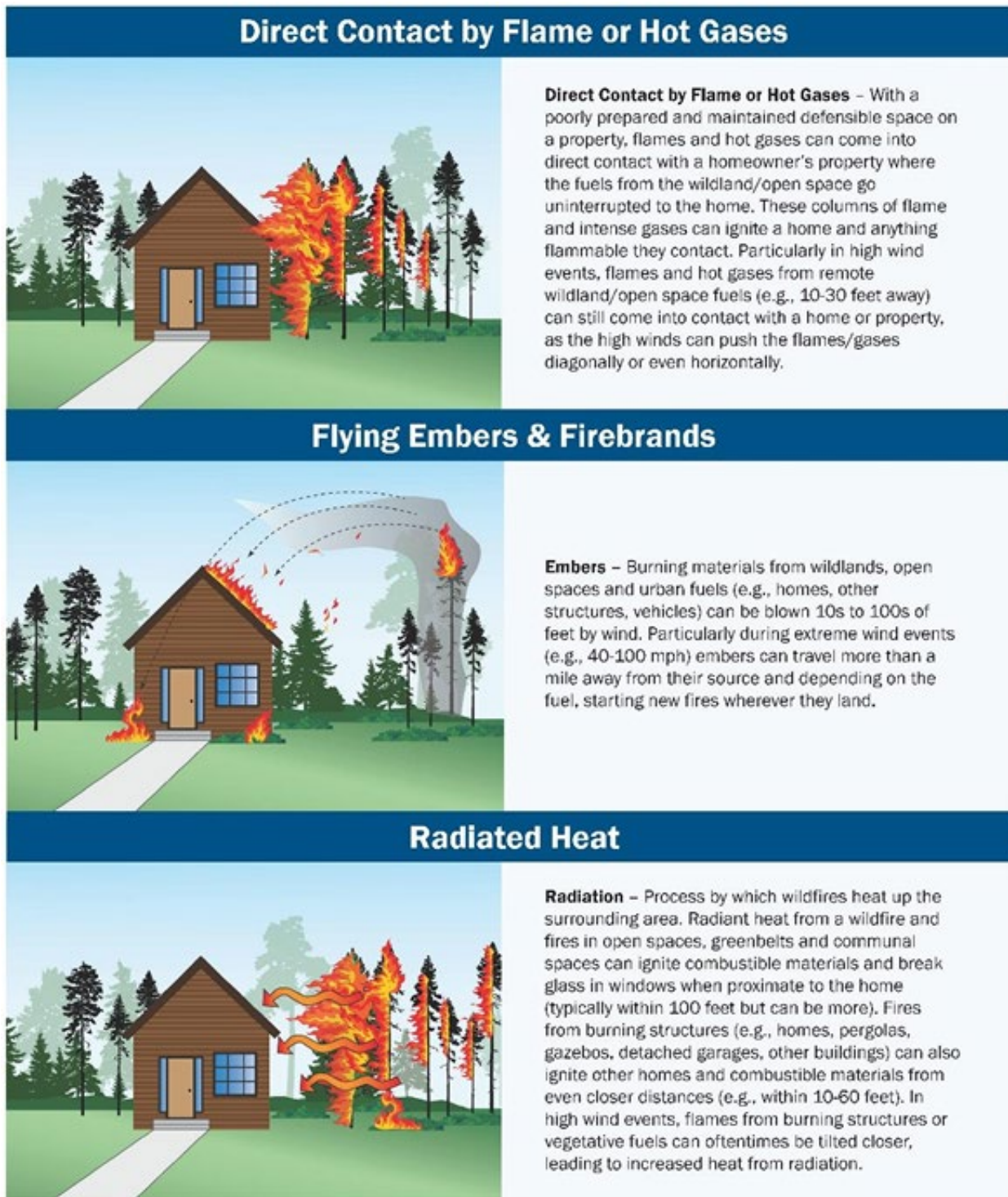


Figure 54. A structure can ignite during a wildfire due to direct contact, flying embers, and radiated heat. (Source: FEMA)

### 5.3.2.2 Observations of Neighborhood-Level Vulnerabilities

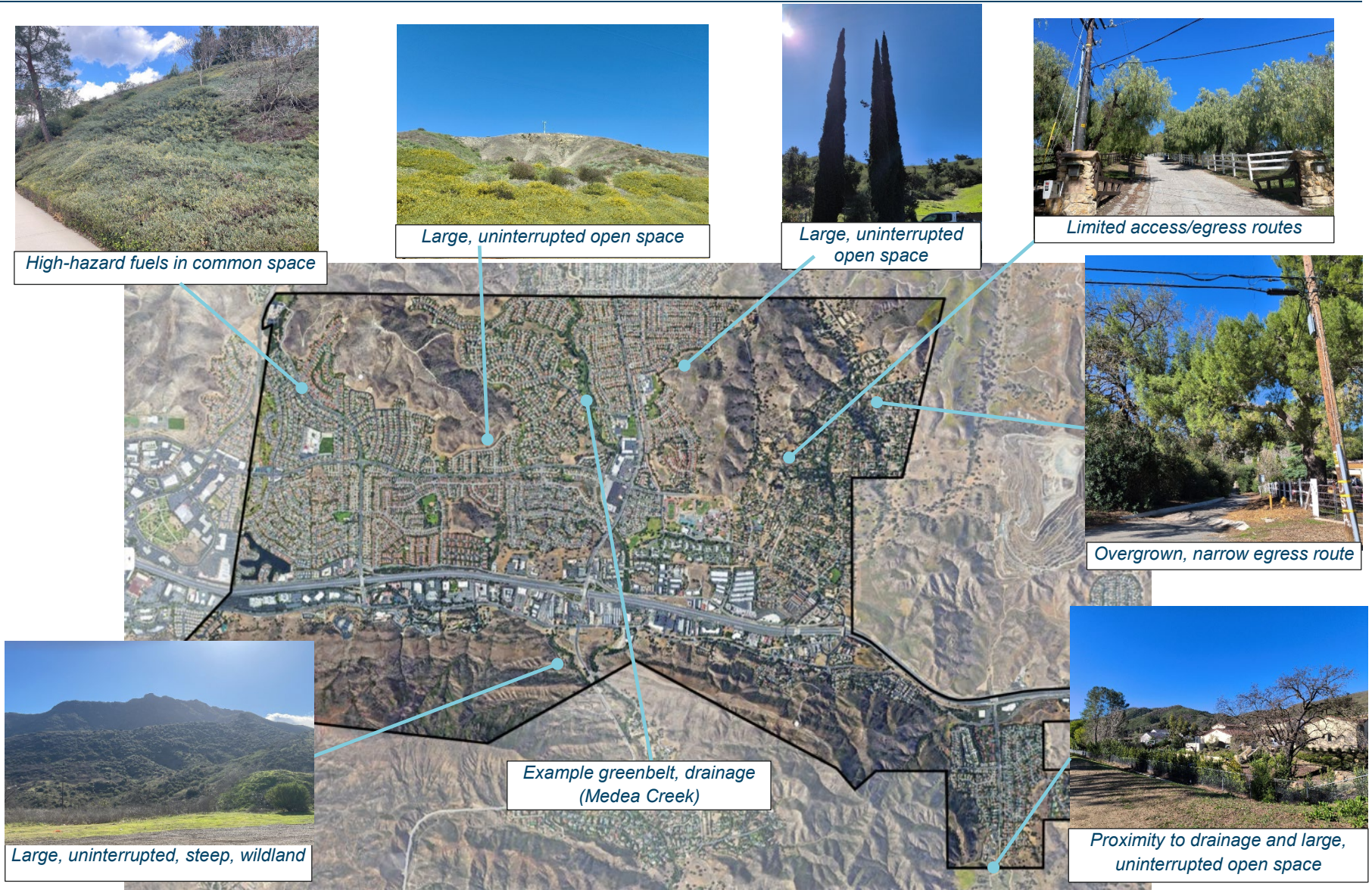
While earlier research focused on the home ignition zone as providing the primary sources of structure vulnerability (e.g., construction materials, home hardening and defensible space features immediately around the home), current research and technical guidance also highlights the significance of landscape level features and neighborhood designs on influencing structure vulnerability to wildfires. That is, a structure's vulnerability is determined by a complex interaction of vulnerabilities at different scales – building, parcel, neighborhood, and community.

During the site and based on some of the wildfire modelling, many neighborhoods across the City are vulnerable to one or combination of neighborhood- or community-level vulnerabilities, including:

- (1) Limited access/egress routes
- (2) Proximity to large, uninterrupted wildland vegetation or poorly maintained open spaces
- (3) Proximity to north-south trending drainage pathways (e.g., Chesebro, Palo Comado, Lindero Canyons)
- (4) Proximity to integrated greenbelts into the built environment (e.g., Medea Creek)
- (5) Proximity to older, non-WUI code compliant neighborhoods

See Figure 55 for examples of neighborhood- and community-level vulnerabilities observed across the City.

In addition to some of these high hazard neighborhoods, even communities that are more remote from large areas of continuous vegetation are still vulnerable to wildfires due to embers that can be carried large distances from the fire front, landing and igniting receptive fuel beds on and immediately surrounding a structure, as seen during the 2018 Woosley. Fire receptive fuel beds can include ornamental landscaping, dead vegetation, litter, debris built up in rain gutters, and mulch beds. Enclaves, islands, and riparian corridors of wildland vegetation and ornamental vegetation are also found within neighborhoods and interspersed with structures throughout communities. These create significant opportunities for wildfires to ignite and destroy structures.



**Figure 55. Observed neighborhood- and community-level vulnerabilities**

### 5.3.2.3 Observations of Parcel-Level Vulnerabilities

In addition to community-scale vulnerabilities, several neighborhoods were observed to have parcel-level vulnerabilities throughout Agoura Hills. Homes and other structure types had varying degrees of vulnerability to wildfire, including:

+ **Defensible space** is the space around a structure that, under normal conditions, creates a sufficient buffer to modify or arrest the spread of a wildfire to a structure. Flammable landscaping and other combustible items, such as firewood or debris piled near a structure, pose an ignition threat. Structures are more susceptible to ignition when exposed to significant radiant and convective heat from burning material. Several neighborhoods, particularly older communities (e.g. Old Agoura), across the City have significant overgrown vegetation, high hazard plants/trees or combustible man-made fuels (e.g., trash bins, storage sheds) proximate to the home. See Figure 56.



**Figure 56: Overgrown vegetation in Zone 0 and 1 proximate to the exterior of the home. This introduces several paths for fire to spread and encroach the home.**

+ **Vents** – Vents in eaves, attics or crawl spaces are an easy entry point for embers to penetrate the interior of a structure, particularly vents located in the underside of soffits. Where embers enter attic spaces, fires in can go easily undetected from the outside, as attics typically do not have smoke detection or sprinkler protection. In past fires, structures have been lost when fire personnel have left the scene unaware that a fire has ignited in the attic. The majority of homes across the City have limited vent protection (e.g., 1/8” or 1/16” non-corrosive metal mesh or a listed ember resistant vent system) against embers during a wildfire.

+ **Wood Fences** – Wood fences act as a fuel source and also as a fire pathway carrying fire to a structure. Wooden fences connecting adjacent homes present a major threat. If ignited, these fences can act as “wicks” that contribute to fire spread from home to home (Figure 57). Wood and other combustible fencing materials such as vinyl, that may ignite, melt, or transmit heat, were observed in multiple neighborhoods across the City.



**Figure 57: Wooden fences and vegetation near and between homes can act as a “wick” that contributes to fire spread.**

+ **Siding** – Combustible siding can provide a pathway for flames to reach vulnerable portions of a structure, such as eaves or windows. Siding is especially vulnerable when combustible materials (e.g., vegetation, wooden decks and fences, stacked firewood) are near a structure’s siding and can provide a heat source to

ignite siding. Most homes in Agoura Hills appeared to have stucco siding or other ignition-resistant material. However, in some older neighborhoods (e.g., Lake Lindero area) combustible siding is still present.

+ **Roofing** – Roof construction and maintenance is a key factor influencing structure loss in wildfire. Vulnerability is not just related to roofing material, but also design, construction details, condition, and whether the roof is clear of combustible material (e.g., pine needles and other debris). The majority of the homes in Agoura have Class A roof systems. However, some homes have complex roof designs (e.g. Figure 58) that create multiple ledges, valleys and other features where vegetative debris and embers have a higher likelihood of collecting, leading to ignition along gaps at the various roof joints.



**Figure 58: Example of a complex roof, which introduces several locations where flammable debris and embers can gather.**

+ **Garages** – Gaps at the top, bottom and edges of garage doors allow embers to enter a home. Garages often contain combustible materials or flammable liquids that are highly susceptible to ignition and challenging fires. Garages typically also have vents along the façade to provide venting for a variety of purposes (e.g., gas furnace or hot water heaters, natural ventilation, clothing dryer). These vents can provide easy entry points for embers, as most garage vents are unscreened or have large openings (e.g., greater than 1/8" openings). Similar to other vents, protection of garage vents is likely deficient across the City.

+ **Nooks and Crannies** – Grooves, inside corners, and roof valleys are areas where flammable debris (e.g., leaf litter, bird nests) collect over time. Embers can land on this debris, leading to ignition. These areas can also accumulate a large number of embers, which increases the likelihood of ignition of combustible concealed spaces just behind the exterior façade, roof covering or similar outer building material. Many homes in Agoura Hills have tiled roofs. Tiled roofs tend to have gaps at the roof edge underneath the tiles, which if left unprotected, can allow flammable debris to collect.

+ **Windows** – Single pane windows can be a major vulnerability during a major fire. Single pane windows can oftentimes break due to impact by airborne materials or crack and fallout due to thermal exposure to intense heat. This can create large entry points into the structure allowing flames, hot gases and embers to penetrate the home, igniting interior combustible materials. The majority of homes in Agoura have double-paned windows.

Wildfire will continue to threaten Agoura Hills. However, residents and homeowners can and should take proactive measures to mitigate this threat. Current land use planning, zoning regulations, and codes adopted by the State of California and local fire departments provide the regulatory basis for preparedness, but these alone will not protect life safety and other community values.

#### 5.3.2.4 Social Vulnerabilities

While many people might be exposed to the same wildfire, differences in demographic and socioeconomic characteristics can result in very different short and long-term impacts. Vulnerable or functional needs populations may have limited capacities to prepare for, respond to, and recover from a wildfire incident. These

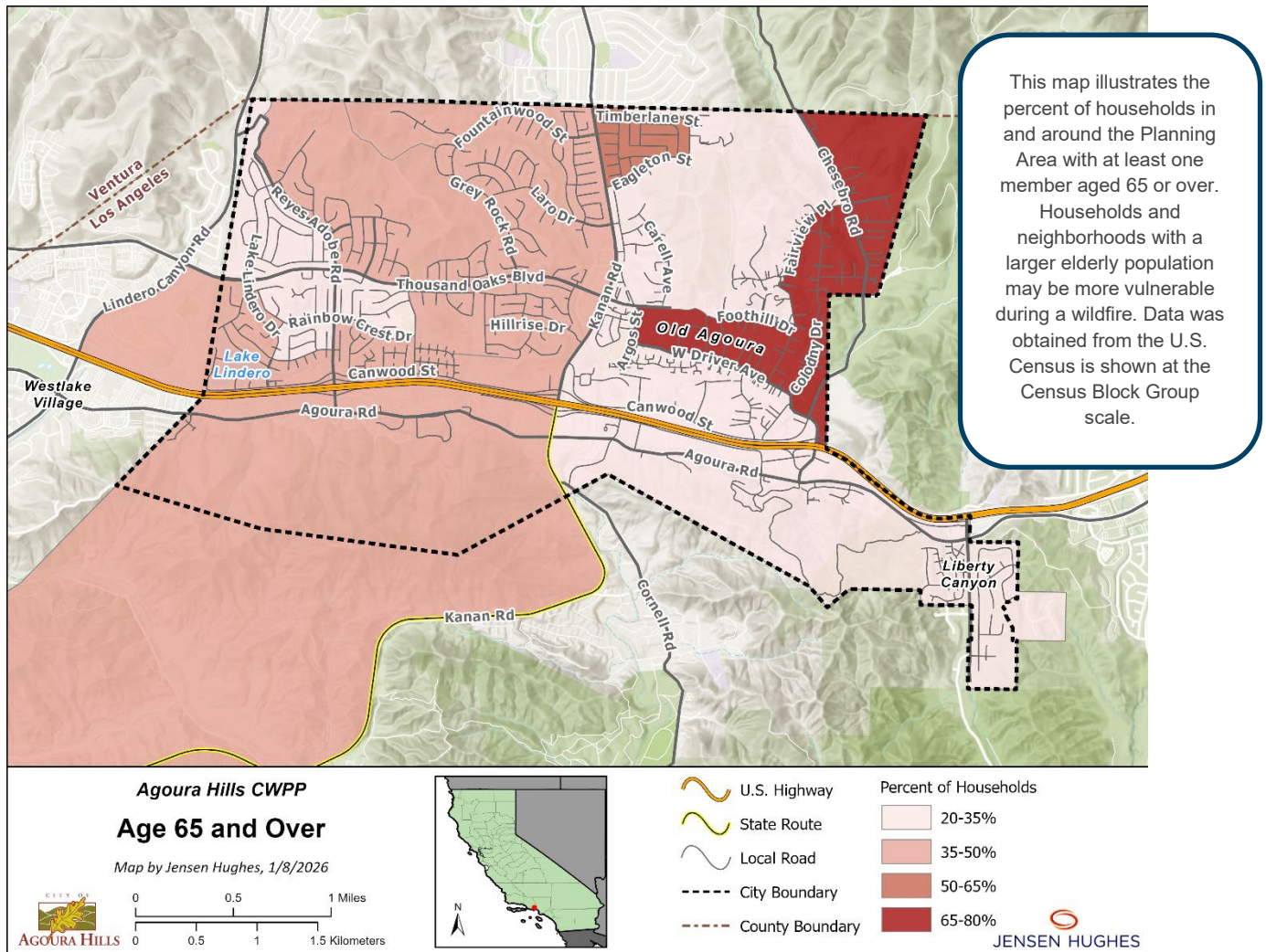
individuals are also less likely to be involved in wildfire mitigation activities (Ojerio, 2008). As a proxy for individual-level vulnerability data, key demographic and population statistics for Agoura Hills from the 2020 U.S. Census and 2023 American Community Survey (U.S. Census Bureau, <http://data.census.gov>) were assessed to identify potential vulnerable populations:

- + **Population:** 19,429
- + **Housing Units:** 7,585
- + **Average population density:** ~2,500 people/square mile
- + **Racial makeup:** 68.7% White (non-Hispanic), 15.3% Hispanic or Latino, 0.8% Black or African American, 7.9% Asian, 0.1% American Indian or Alaska Native, 0.1% Native Hawaiian/Pacific Islander, 10.2% Other/Two or More Races
- + **Language other than English spoken at home:** 20.1% of the population
- + **Disabilities:** 4.9% of the population
- + **Vulnerable age groups:** 3.4% of the population under 5 years, 16.0% 65 years and older
- + **Poverty:** 5.7% of the population live below the federal poverty level

Vulnerable or functional needs populations include those who are physically and/or mentally disabled (e.g., blind, cognitive disorders, limited mobility), limited or non-English speaking, culturally isolated, medically or chemically dependent, homeless, Deaf or hard-of-hearing, of vulnerable ages (e.g., elderly or young), or lack digital services.

These characteristics may influence people's ability to plan and prepare in advance of a wildfire, respond quickly and independently during a wildfire, and recover following a wildfire. For example, older individuals are likely to have difficulty undertaking defensible space maintenance around their properties and may also need assistance evacuating. Those with limited English proficiency may need emergency communications, as well as information about wildfire preparedness, shared in a language other than English. Limited access to financial resources may hinder the ability of lower-income populations to invest in emergency preparedness and mitigation measures, as well as to recover from losses. Other characteristics, and combinations of different characteristics, impact social vulnerability in different ways. Planning for vulnerable or functional needs populations is critical to providing a holistic wildfire mitigation preparedness plan that works for the entire community.

Understanding where vulnerable populations are geographically is important for targeting outreach and interventions to reduce impacts. A small sample of the many attributes that contribute to social vulnerability was explored as part of the CWPP development process. The number of households with at least one member aged 65 or over was found to have the greatest spatial variation (Figure 59). These individuals are more likely to have greater challenges with all aspects of wildfire preparedness and areas with a greater proportion of these vulnerable populations may need additional resources. This is simply a starting point for understanding how social vulnerability varies across Agoura Hills and should be combined with other, more locally specific, information.



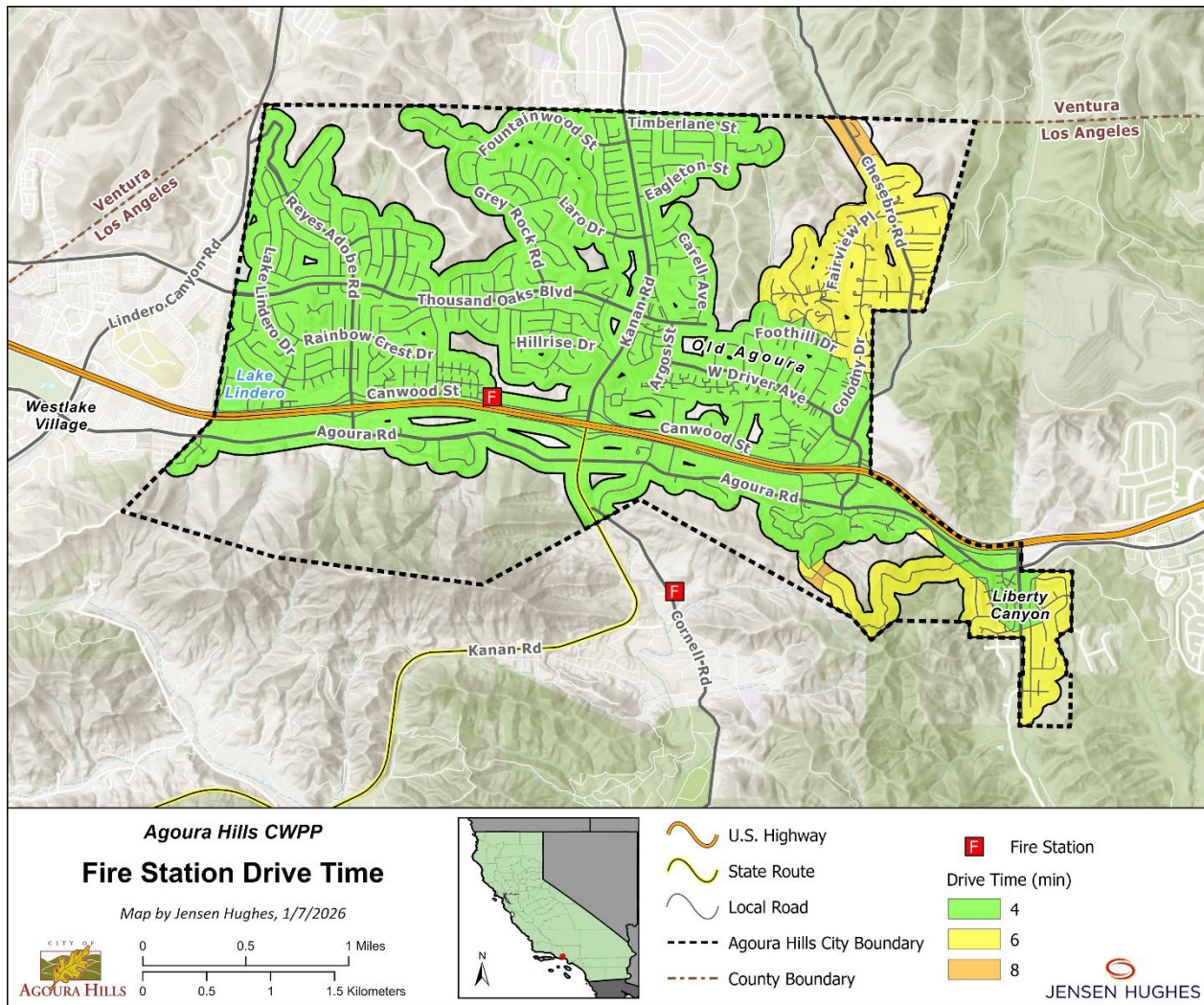
**Figure 59: Percent of households in each census block group with at least one member aged 65 or over**

As shown in Figure 59, Old Agoura and the northeastern parts of Agoura Hills have the highest proportion of older residents, with up to 80% of households having at least one member aged 65 or over. Households in the area east of Kanan Rd. between Eagleton St. and Timberlane St. also have, on average, over 50% of households with at least one older member.

**5.3.2.5 Fire Department Response Capacities**

Community-level vulnerability refers to the resilience of various built environment characteristics to wildfire threats over both the short and long-term. While there are numerous values in the natural, built and human environments that may be exposed to the same wildfire, how much loss or damage is experienced by those values can vary dramatically depending on the inherent physical resiliency of those assets to wildfire – individually or as a collective. Some examples of physical vulnerability include age of construction, code compliant structural hardening and defensible space, limited access/egress routes, and structure separation distances. Community-level vulnerabilities may also include coping capacities of the community (e.g., the availability of resources to effectively respond to or recover from a wildfire threat). Some coping capacity proxies may include fire service response times, firefighting water supplies, emergency power supplies, communication dead zones, etc. Note: As vulnerability assessments are often limited by the availability, quality and scale of the datasets, the corresponding analyses have been governed by these limitations.

Fire service response time coverage has been evaluated as a proxy for wildfire coping capacities across the City. See Figure 60.



**Figure 60: Fire Department response time coverage across the City.**

As seen in Figure 60, the majority of the city has a very good fire department response time with expected arrival times of less than 4 min to the nearest fire station. The northern portion of Old Agoura and the southern portion of Liberty canyon have slightly higher response times, primarily between 4 and 6 min, reaching between 6 and 8 minutes in few places.

## 5.4 COMMUNITY INPUT ON HAZARDS AND RISKS

### 5.4.1 CWRA Development: Community Input on Hazards and Risks

During the CWRA development process, three forms of community outreach were used to understand the experiences, perceptions and concerns of local residents, agencies, organizations, and other interested parties to past and future wildland fire threats in and around Agoura Hills. The forms of community outreach included:

- + Public survey
- + Public workshops

#### + Digital polling

A summary of the feedback is provided in the following sections. See Appendix B and Appendix E for additional details.

### 5.4.2 Feedback from Individuals & Households

As described in Section 2.2.5.1, a public survey was administered as part of the CWRA process to gather feedback on wildfire-related concerns, past experiences and recommendations for mitigations to future wildfire threats. Approximately 371 households responded to the survey. Additional in-depth analysis of the survey responses was undertaken as part of the CWPP development process. For more detailed information on survey responses, please see Appendix E.

The following are common themes that arose from the survey:

#### + Major wildfire concerns:

- Insurance availability and cost
- Home hardening – cost and enforcement
- Vegetation management, including HOAs – cost and enforcement
- Evacuation, including power outages and signal traffic outages

#### + Suggested opportunities and strategies to increase public education and awareness:

- Community workshops with greater advertising and webinar formats
- Providing information on proper materials and contractors for home hardening
- Door-to-door campaigns and tabling at public events

As described in Section 2.2.5.2, two (2) public workshops were held during the CWRA development process (May and July 2025). Attendees represented various agencies, organizations, interested parties and general public across the City. Additionally, one (1) public workshop was held during the CWPP development process (March 2026). The March 2026 workshop had over 50 attendees from Agoura Hills. The workshops included a breakout session where facilitated groups discussed concerns, recommendations, and improvements.

The following are common themes that arose from workshops:

#### + Major wildfire concerns:

- Vegetation management, including cost and enforcement (e.g. HOAs provided as an example)
- Home Hardening, including cost and enforcement
- Evacuation routes, including power and signal traffic outages
- Emergency communication
- Community education on mitigation efforts & egress routes
- Costs of home hardening
- Insurance availability and cost

**+ Most important assets within the City:**

- Human life & community cooperation
- Property
- City parks & natural environment and animals

**+ Suggested ways to increase public education and awareness:**

- Community workshops with greater advertising and webinar formats
- Providing information on proper materials and contractors for home hardening
- Door-to-door campaigns and tabling at public events

**5.4.3 Feedback from Community Groups**

As described Section 2.2.4, a broader stakeholder digital poll was administered from March 3 – 31, 2025 as part of the CWRA process. Thirteen representatives of fire agencies, fire safe councils, land managers, utilities and other community groups responded to the digital poll.

Additionally, two (2) meetings were held with members of the City's CWPP Ad Hoc Committee on March 4, 2026 and April 16, 2026 to collect feedback and input from select City elected officials and members of the public.

The following are common themes that arose from the digital polling:

**+ Major wildfire concerns:**

- Availability of funding to pursue WUI-related projects
- Inter-agency coordination during a wildfire
- Feasibility and enforcement of defensible space measures
- Egress and evacuation challenges (e.g., notifications, evacuation planning, vulnerable populations)

**+ Suggested opportunities and strategies to increase wildfire resiliency:**

- Provide more guidance information for evacuations
- Increase community education initiatives

The following are common themes that arose from the two Ad Hoc committee meetings (to be included after the meetings take place).

# Community Wildfire Resiliency Strategy



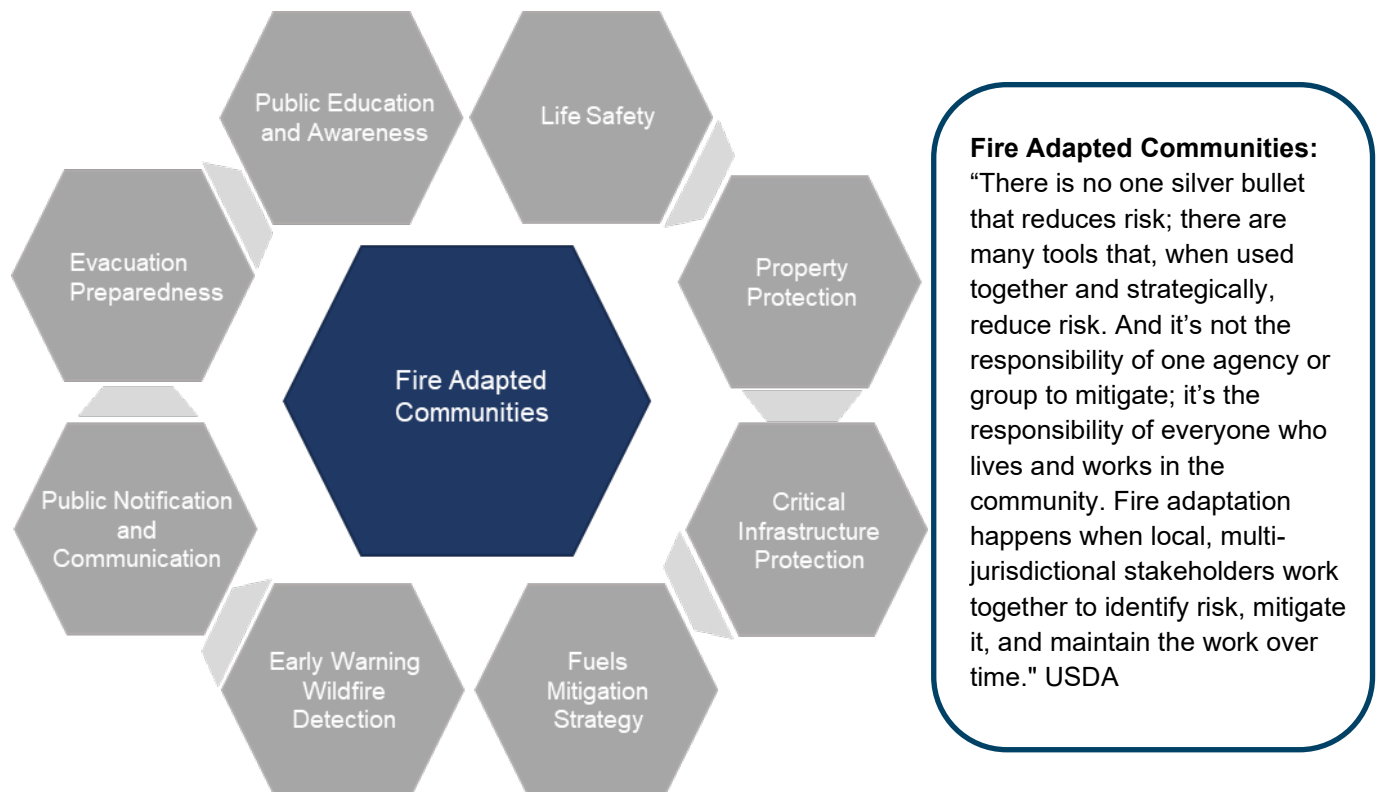
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## 6.0 Community Wildfire Resiliency Strategy

While wildfires are part of the natural landscape and cannot be eliminated, their devastating impacts to community assets, the environment, social infrastructure, and local economies can be reduced through the collective action of all involved groups, both government and non-government. As wildfires have been increasing in frequency, scale, and severity over the past several decades, traditional approaches to mitigating wildfire risk – such as government policies, programs, planning codes, zoning regulations, firefighting operations, and vegetation management – are no longer sufficient. The complexity and breadth of impacts highlight the need to take a more comprehensive and proactive approach to managing those risks. Resiliency to wildfires means engaging and collaborating across the whole community, across all scales and sectors, to more holistically build individual and community-level capacities to prevent, prepare, respond to, and recover from wildfire incidents.

Based on this goal of a comprehensive and proactive approach, a Community Wildfire Resiliency Strategy and Recommended Actions have been developed to help mitigate the hazards and risks of wildfires in the City of Agoura Hills for the next 5-10 years. These are based on the results of the fire hazard, risk, and vulnerability analyses in Chapters 3-5 and the conceptual framework for fire adapted communities (FAC). FAC provides a general framework to address a broad range of individual and societal capacities to build community wildfire resilience, which is a major goal of this CWPP.

Figure 61 shows the key components of the Community Wildfire Resiliency Strategy for the City of Agoura Hills on the FAC framework. Additional information for the FAC framework can be found at <https://www.fs.usda.gov/managing-land/fire/fac> and <https://fireadaptednetwork.org/>.



**Figure 61. Key Components of Community Wildfire Resiliency Strategy for the City of Agoura Hills**

For this CWPP, the key components of the strategy include protecting life safety, property, and critical infrastructure as well as having a robust fuels mitigation strategy, early warning detection systems, public notification and communications, evacuation preparedness, and public education. These strategic components are described in the following sections and include existing, planned, and proposed activities that are essential for increasing wildfire resiliency across Agoura Hills. Where there are areas of improvement, they are indicated in the sections below and summarized in more detail in the Recommended Actions (Chapter 7).

## 6.1 PROTECTING LIFE SAFETY

The first priority of the City of Agoura Hills, Los Angeles County Fire Department, Los Angeles County Sheriff's Department, and other key federal, state, and local stakeholders is the life safety of residents and first responders.

### 6.1.1 Public Safety

As with any natural hazard, minimizing the risk wildfire poses to public safety necessitates a comprehensive approach from prevention and mitigation to preparedness, response, and recovery. Collectively, the wildfire resiliency strategy and proposed action items described in this plan aim to reduce the potential risk to human life for both the general public and first responders. At an individual level, community members can become aware and actively engaged in understanding the various wildfire hazards and risks that may impact where they live and work, and take the necessary steps to prepare themselves, their homes, and their family members to minimize risk. The educational information and resources provided by the City's Emergency Preparedness webpage, local Fire Safe Councils, LACoFD and other relevant agencies in the City are available to aid individuals and community groups. Initiatives such as "Ready-Set-Go" help individuals understand steps to take to increase wildfire resilience. See Section 6.9 for more about public education and awareness programs.

These informational materials cover the key concepts of fire life safety for residents including:

- (1) **Prevent ignition** – Reducing ignition sources and fire hazards in and around your property
- (2) **Control ignition** – In the event fire occurs, minimize the potential for fire spread and growth (e.g., structural hardening provisions, vegetation management, defensible space)
- (3) **Notification and communication** – Knowing and being familiar with public notifications systems and their limitations and signing up for county emergency alert systems
- (4) **Evacuation** – Be familiar with evacuation routes from your home, place of work, and other frequented locations; be familiar with any publicly available evacuation centers/shelter-in-place facilities (if provided); be prepared using Ready-Set-Go program

During wildfire events, it is often unsafe or impossible for firefighters, let alone members of the public, to defend structures, particularly during large, wind-driven incidents. During wildfire events, logistical limitations such as water availability, personnel, equipment, and access can overwhelm response efforts and prevent firefighters from defending every structure. As a result, structures and other valued assets must be prepared in advance to withstand wildfire exposure through passive measures such as defensible space and fire-resistant construction. Fighting wildfires and protecting structures is complex, dangerous, and resource-intensive. Evacuation orders are lawful directives, and it is highly recommended that the public evacuate when directed to do so.

### 6.1.2 Firefighter Safety

There are many factors that affect the ability of firefighters to protect structures and other community assets. Firefighters arriving on scene quickly perform an assessment or "triage" to determine whether a structure or asset can be safely defended. Prior to engaging in structure defense activities, firefighters look for access and

egress issues, whether a structure or improvement has vulnerabilities, hazardous material issues, adequate water sources, adequate defensible space, and whether the defensible space provides safe operational space. The state law for defensible space outlined in the Public Resources Code (PRC) 4291 and Government Code Sections 51175-51189, require that any property within a designated Fire Hazard Severity Zone in a State Responsibility Area, within a Local Responsibility Area's Very High Fire Hazard Severity Zone (updated in 2025), within Wildland Urban Interface areas (WUIs), or any other property at the discretion of the Fire Department, be provided with 100 feet of maintained defensible space from all sides of any structure. Research suggests that even the 100 feet of defensible space may not be sufficient for firefighters to safely engage in structure defense (See Section 6.1.2 for more details). This is reflected by the Los Angeles County Code of Ordinances Section 325.2.1, which allows the required defensible space distance to be increased in extra hazard situations to up to 200 feet, at the discretion of the fire code official or commissioner.

Guidelines established for wildfire safety zones can enhance safe operational space for firefighters and the public. However, the additional element of burning structures and other "non-native" fuels can significantly increase fire intensities that can threaten the life safety of firefighters and the public. Safe separation distance (SSD) calculations can provide a better estimate for whether a structure can be defended with lower risk of thermal injury. This distance is often greater than 100 feet. Onsite consultation with the fire code official, local Fire Safe Councils, or LACoFD is recommended to determine whether the clearance around a structure or other improvement is sufficient to provide a safer structure defense environment.

## 6.2 PROPERTY PROTECTION

Most actions to increase the resiliency of a structure or property to wildfires can be categorized into one of two groups:

1. **Structural hardening** – Mitigation actions associated with the structure itself, from the top of the building down to the foundation.
2. **Defensible space** – Mitigation actions associated with natural and manmade features from 0 feet to 100+ feet around a structure.

In general, the primary responsibility for preventative actions to protect a structure from wildfire is with the property owner.

### 6.2.1 Structural Hardening

Structural hardening is the term used to broadly describe any actions that are done to the structure to protect vulnerable areas from ignition. These vulnerable areas most commonly include exterior elements such as the roofing, siding, and vents, among others. Structural hardening adds another layer of passive fire protection in addition to the protection afforded by the vegetation management and defensible space measures described in subsequent sections. In general, buildings constructed before the adoption of Chapter 7A into the California Building Code in 2008 (which is now incorporated into the California Wildland Urban Interface Code) are less likely to have modern, wildfire-resistant construction features. Thus, older structures are likely to be less hardened and more vulnerable to wildfire impacts.

In the event of a fast-moving, large-scale wildfire, firefighting resources may be quickly overwhelmed. This means that active structure defense by firefighters may not be available for most structures or may be considered unsafe for a variety of factors (e.g., intensity of the fire, weather conditions, local topography, access issues, lack of water supplies). Thus, the survivability of a structure in a major wildfire event can depend on where the property or structure is situated relative to local topography, the presence and condition of structural hardening provisions, condition of defensible space and proximity to other combustible fuels/structures in the built environment.

Several guidance documents and technical resources are available to provide property owners with best practices to further increase the resiliency of new properties or developments to wildfires. See below.

#### City of Agoura Hills Emergency Preparedness Guidance

- Wildfire Preparedness Webpage  
[https://www.agourahillscity.gov/business\\_detail\\_T4\\_R40.php](https://www.agourahillscity.gov/business_detail_T4_R40.php)

#### Los Angeles County Guidance (Accessed at <https://fire.lacounty.gov/rsq/>)

- Home Hardening /Defensible Space Webpage

#### Full-Scale Research on Wildfire Resiliency of Joints and Building Detailing

- Insurance Institute for Business & Home Safety (IBHS) Full-Scale Fire Testing  
<https://ibhs.org/risk-research/wildfire/>
- Fire Safety Research Institute (FSRI) <https://fsri.org/about>
- National Institute of Standards and Testing (NIST) <https://www.nist.gov/fire>

#### Design Guidance for New and Existing Construction

- FEMA Marshall Fire MAT Products <https://www.fema.gov/emergency-managers/risk-management/building-science/mitigation-assessment-team>
- SFPE Foundation Virtual Handbook on WUI Risk Assessments  
<https://www.sfpe.org/wuihandbook/home>
- University of Nevada, Reno Wildfire Home Retrofit Guide  
<https://extension.unr.edu/publication.aspx?PubID=3810>
- Maranghides, A., et al, WUI Structure/Parcel/Community Fire Hazard Mitigation Methodology  
<https://www.nist.gov/el/fire-research-division-73300/wildland-urban-interface-fire-73305/hazard-mitigation-methodology-1>
- FM Global, Data Sheet 9-19: Wildland Fire <https://www.fm.com/resources/fm-data-sheets>
- Hedayati, F. et al, Wildland Embers and Flames: Home Mitigations that Matter  
<https://ibhs.org/risk-research/wildfire/>
- NFPA Handout on Wildfire Preparedness <https://www.nfpa.org/downloadable-resources/safety-tip-sheets/how-to-prepare-your-home-for-wildfires>

- US Green Building Council CA Wildfire Rebuilding Guide  
[https://www.smmfsc.org/files/uqd/caaf3b\\_8bea39a6d9a84db1a8499527c8b5cab8.pdf?index=true](https://www.smmfsc.org/files/uqd/caaf3b_8bea39a6d9a84db1a8499527c8b5cab8.pdf?index=true)

#### Databases for Fire-Listed Products and Assemblies

- FM Approvals, Approval Guide <https://www.approvalguide.com/>

- Intertek Directory of Building Products [https://bpdirectory.intertek.com/pages/DLP\\_Search.aspx](https://bpdirectory.intertek.com/pages/DLP_Search.aspx)
- UL Product iQ <https://productiq.ulprospector.com/en>
- CAL FIRE Building Materials Listings <https://osfm.fire.ca.gov/divisions/fire-engineering-and-investigations/building-materials-listing/bml-search-building-materials-listing/>

**6.2.2 Retrofit Resources & Other Local Resources**

In addition to new construction, the guidance documents and technical resources listed in Section 6.2.1 can also provide helpful recommendations to retrofit existing properties to increase resiliency to wildfires.

**Table 13** provides further guidance on mitigation actions that can enhance protection of life safety and improve the survivability of existing structures in the community.

**Table 13. Structural Hardening Measures for Existing Properties**

<i>Structural Component</i>	<i>Mitigation Measures</i>
Roof	Replace wood-shake or shingle roofs with a Class-A material or ember-resistant materials suitable for extreme fire exposure. Plug openings in roofing materials, such as the open ends of barrel tiles, to prevent ember entry and debris accumulation. Regardless of the type of roof, keep it free of bird’s nests, fallen leaves, needles and branches.
Chimneys	Screen chimney and stovepipe openings with an approved spark arrestor cap with a 5/8-inch screen.
Eaves	Cover the underside of the eaves with a soffit, or box in the eaves, which will reduce the ember threat. Enclose eaves with fiber cement board or 5/8-inch thick, high-grade plywood. If enclosing the eaves is not possible, fill gaps under open eaves with caulk.
Exterior Siding	Noncombustible siding materials (e.g., stucco, brick, cement board, and steel) are better choices. If using noncombustible siding materials is not feasible, keep siding in good condition and replace materials in poor condition. Caulk or plug gaps greater than 1/8-inch in siding.
Windows and Skylights (including solar tube)	Single-pane windows and large windows are particularly vulnerable in older homes built prior to current fire codes. It is recommended to install windows that are at least double-glazed and utilize tempered glass for the exterior pane. The type of window frame (e.g., wood, aluminum, or vinyl) is not as critical; however, vinyl frames can melt in extreme heat and should include metal reinforcements. Skylights should be kept free of leaves and other debris, and overhanging branches should be removed to reduce ember accumulation. In the WUI, skylights should be flat and constructed of double-pane, tempered glass to improve fire resistance. Solar tube skylights may also be used if they are constructed with noncombustible or tempered materials, incorporate ember-resistant seals, and are properly installed to prevent ember intrusion. As with all roof openings, regular maintenance and proper installation are critical to reducing wildfire risk.
Vents	All vent openings should be covered with 1/8-inch or smaller wire mesh. Another option is to install ember-resistant vents. Baffles can also be used to protect vents in eaves or cornices. Do not permanently cover vents, as they play a critical role in preventing wood rot. Fire-resistant materials should be used to protect eaves & soffits.

<i>Structural Component</i>	<i>Mitigation Measures</i>
Rain Gutters	Always keep rain gutters free of bird’s nests, leaves, needles, and other debris. Roof gutters shall be provided with a means to prevent accumulation of leaves, needles, and debris, such as a noncombustible gutter cover. Check and clean them several times during the year.
Decks	Keep all deck materials in good condition. Consider using fire-resistant rated materials or heavy timber construction. Routinely remove combustible debris (e.g., pine needles, leaves, twigs, and weeds) from the gaps between deck boards and under the deck. Enclosing the sides of the deck may reduce this type of maintenance. Do not store combustible material under the deck.
Combustible Items	Keep the porch, deck, and other areas of the home free of flammable materials (e.g., baskets, newspapers, pine needles, and debris). Keep firewood, bales of hay or straw, and other combustible/flammable materials at least 30-feet away from a structure.
Residential Fire Sprinkler Systems	Automatic residential fire sprinkler systems are required in all new residential structures. An automatic residential fire sprinkler system is not required for additions or alterations to existing building that are not already provided with an automatic residential sprinkler system. Annual maintenance service or inspection of these systems is strongly recommended to ensure operability.
Detached accessory structures	All detached accessory structures should ideally follow the same provisions as the main structure. Detached accessory structures should be constructed of non-combustible materials or of ignition-resistant materials.

**More detailed information on reducing structural ignitability can be found in the California Wildland Urban Interphase Code, Los Angeles County Fire Code, and Public Resources Code 4291, as amended by the City of Agoura Hills.**

The Agoura Hills Fire Safe Council has a variety of resources to help the residents of Agoura retrofit their homes to be more resilient. The interactive home hardening guide (available: <https://agourahillsfsc.org/wildfire-home-hardening-guide/>) explains in detail the common areas where structural hardening measures provide the most benefit, and common weak-points in a typical single-family home.

The City of Agoura Hills and the Agoura Hills Fire Safe Council are working together on a home hardening program to provide free ember-resistant vent mesh to the residents of Agoura Hills. Installing wildfire-appropriate mesh over vents (with max 1/8” openings) is a cost effective, and relatively simple home hardening effort that can provide substantial benefit to a home’s wildfire preparedness. The program provides free mesh to residents (see: <https://agourahillsfsc.org/home-hardening-program/>), and has reasonable prices for custom sizes or extra pieces of mesh, if needed.

Additional local resources can also be found at the Los Angeles Regional Fire Safe Council (available: <https://www.wildfirela.org/ready/>).

### 6.2.3 Defensible Space

Defensible space is an area within the perimeter of a parcel where basic wildfire prevention practices and measures are implemented and maintained. These measures include but are not limited to removing brush, flammable vegetation, or combustible growth within at least 100 feet of a building or structure as measured from the eaves, porches, decks and balconies to the property line. Defensible space, coupled with structural hardening (Section 6.2.1 above), is essential to increasing a structure’s likelihood of surviving a wildfire.

Defensible space is generally subdivided into three zones, whereby the highest priorities and most restrictive measures are required for the area closest to the structure. The County of Los Angeles Fire Department defines the three zones as follows, with an optional fourth zone (See Figure 62):

- **Ember-Resistant Zone** or “Immediate Zone,” or “Zone 0” (0–5 feet). The Ember-Resistant Zone is considered the most important and includes areas immediately surrounding a structure, as well as areas under any attached decks or overhangs.

- **Zone A** or “Intermediate Zone,” “Lean, Clean, and Green Zone,” or “Zone 1” (0–30 feet). Zone A adds a defensible zone that extends through the Ember Resistant Zone and to Zone B. The goal of this area is to reduce the connectivity between garden beds, shrubs, and trees; removing lower branches of trees and shrubs; and creating areas of irrigated and mowed grass or hardscape between isolated vegetation islands,

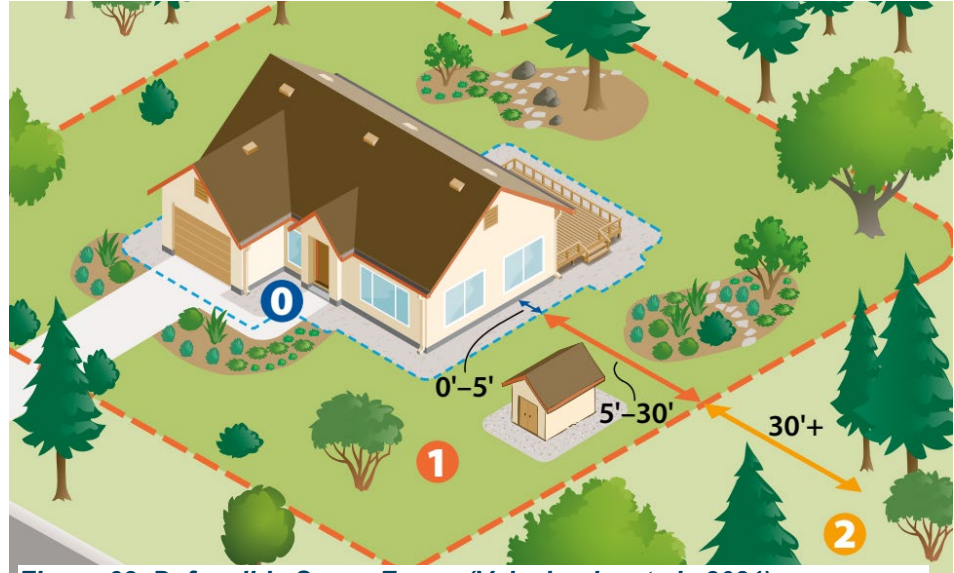


Figure 62. Defensible Space Zones (Valachovic, et al., 2021)

which are free of dead or drying plant material, so that wildfire does not burn to the house or into the crown of trees. Plants should be properly irrigated and maintained to remove dead/dry material (Valachovic, et al., 2021). This designation also applies to the area within 10 feet of driveways, access roads, or public roads adjacent to the property.

- **Zone B** or “Extended Zone,” “Reduce Fuel Zone,” or “Zone 2” (30–100 feet). The goal of Zone B is to create a fuel break that interrupts the continuous vegetative fuel path of a wildfire, minimizes flame length, and keep fires on the ground by reducing ladder fuels and crown clustering.
- **Zone C** (100-200 feet). Zone C is required only when deemed necessary by the fire code official.

The Agoura Hills Fire Safe Council provides Home Wildfire Assessments upon request to residents of Agoura Hills. The page, and the link to the request form can be accessed at <https://agourahillsfsc.org/wildfire-assessments/>

Table 14 details basic recommendations for each defensible space zone. This table contains some City and County-specific requirements but is not intended to be a complete list. Consult with LACoFD or authority having jurisdiction (AHJ) for more detailed guidance.

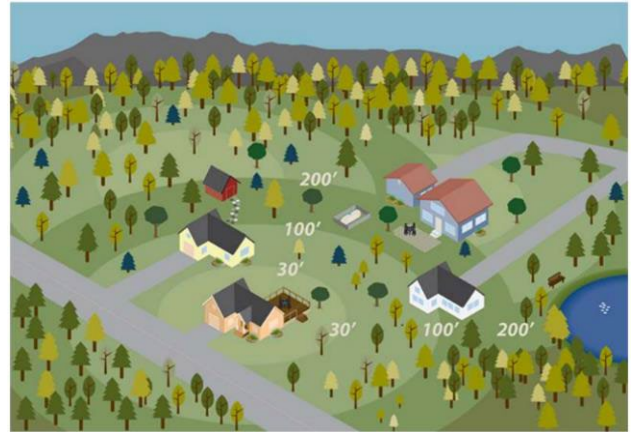
**Table 14. Defensible Space Mitigation Measures.**

<i>Hazard Mitigation Zone</i>	<i>Mitigation Measures</i>
Ember Resistant Zone (0 – 5 ft)	<ul style="list-style-type: none"> <li>+ Use hard surfaces, such as concrete or noncombustible rock mulch around the home. Consider removing artificial turf near structures and replacing it with noncombustible materials such as gravel, pavers, or low-water, fire-resistant plants.</li> <li>+ Clean roof and gutters of dead leaves, debris, and pine needles.</li> <li>+ Avoid anything combustible in this area, including woody plants, mulch, woodpiles, combustible trellises, wood fences, and stored items. This is an excellent location for walkways, or hardscaping with pavers, rock mulch, decomposed granite, or pea gravel. This should include a six-inch noncombustible zone between the ground and the start of the building’s exterior siding.</li> <li>+ Relocate boats, RVs, vehicles and other combustible items outside this zone.</li> </ul>
Zone A (0 – 30 ft)	<ul style="list-style-type: none"> <li>+ Store firewood and other combustible materials away from the home, garage, or attached deck. Cover wood piles with a noncombustible cover.</li> <li>+ Trim touching or overhanging branches from the roof to a distance of at least 10 feet.</li> <li>+ Herbaceous non-woody ground cover should not exceed 3-inches high.</li> <li>+ In general, plants should have clearance 2 times their height from other plants and exterior openings.</li> <li>+ Use non-combustible pots and planting boxes at the ground level.</li> <li>+ Remove artificial or synthetic grass.</li> <li>+ Trees are generally not recommended except for dwarf varieties or mature trees less than 25’ tall and wide at maturity. Trees shall be positioned so their canopies do not extend over the roof of any structure.</li> <li>+ Move trailers/recreational vehicles, storage sheds and other combustible structures out of the zone and over 30 feet from the home. If unable to move, create defensible space around them.</li> <li>+ Hedges should be well-maintained, lean clean and green, and no more than 8 ft tall.</li> </ul>
Zone B (30 – 100 ft)	<ul style="list-style-type: none"> <li>+ Ensure sheds and other structures have defensible space in the zone and over 100 feet from the home. Maintain clearance from vegetation and keeping surrounding areas free of combustible materials.</li> <li>+ Use non-woody, low-growing herbaceous vegetation. Succulent plants and ground covers are good choices.</li> <li>+ Create vegetation groups, or “islands” to break up continuous fuels around the home.</li> <li>+ Remove “ladder fuels” to create a separation between low-level vegetation and tree branches to keep fire from climbing trees.</li> <li>+ Remove leaf and needle debris from the yard.</li> <li>+ Keep grass and wildflowers under 4 inches in height.</li> </ul>
Zone C (100-200 ft)	<ul style="list-style-type: none"> <li>+ Create and maintain a minimum of 10 feet between the tops of trees.</li> <li>+ Remove “ladder fuels” to create a separation between low-level vegetation and tree branches to keep fire from climbing trees.</li> <li>+ Remove dead trees and shrubs.</li> </ul>

**More detailed information on defensible space can be found in Public Resources Code 4291, and the California Wildland Urban Interphase Code as amended by the City of Agoura Hills.**

### 6.2.4 Communal Defensible Space

Mitigating risks within the Home Ignition Zone (HIZ) is important but requires a joint effort if a neighbor's structure or residence is closer than the 100-foot distance for which defensible space should be maintained (as determined by the inspecting agency). Figure 63 depicts a representative example of neighboring homes with overlapping defensible space zones. Whether these property owners properly maintain their defensible space can influence the survivability of a neighbor's property. Closely spaced homes and smaller parcels (i.e., smaller than 100 feet in all dimensions) can cause a defensible space overlap issue. Risk reduction efforts by all neighbors are beneficial to multiple properties. This concept is referred to as communal defensible space and is one of the main drivers for the establishment of Firewise Communities. For more information on Firewise Communities, refer to Section 6.9.



**Figure 63. Communal Defensible Space or Home Ignition Zone Overlap (courtesy: [www.firewise.org](http://www.firewise.org)).**

**Communal Defensible Space:** Where adjacent landowners coordinate to maintain fuel treatments to protect several homes or structures. Treatments are designed to consider how vegetation and topography affect fire behavior regardless of property boundaries. When combined with structural hardening, the development of communal defensible space is the best practice to reduce damage and loss from wildfire in the WUI.

**Top priority:** Numerous properties across Agoura Hills have overlapping defensible space zones, with owners that either do not know they should maintain communal defensible space or do not have the resources to address communal defensible space practices. This necessitates public education, guidance, and resources for residents to undertake communal defensible space actions.

In most urban and suburban residential neighborhoods, many property owners will have difficulty establishing the required 100' of defensible space within their individual property lines. Establishing defensible space regardless of the parcel size or ownership should be a priority for all residents of the Planning Area.

Achieving appropriate defensible space may require a combination of strategies including:

- Work with neighbors and other adjacent property owners to ensure that common defensible space considerations are implemented between and adjacent to structures on all properties.

- Prioritize home hardening measures on the sides of the structure with insufficient separation to adjacent properties (e.g., vent covers, replace combustible siding, remove combustible non-vegetative features).

- Provide structural hardening measures for the entire home (e.g., upgrading to a Class A roof). Refer to "Structural Hardening" section above.



**Figure 64. Examples of additional structural hardening and defensible space features where 30 feet of setback to the property line is not feasible (FEMA).**

Prioritize the reduction of receptive fuel beds around the entire home from ember attack.

In some circumstances, structures may not be able to achieve 30 feet of separation from other structures (Figure 64). In these instances, property owners are encouraged to consider the following strategies:

1. Install solid, noncombustible property line walls or fences to minimize ember transmission and heat transfer.
2. Install 5-10 feet of hardscaping and/or noncombustible landscaping around the home. Note: Where hardscaping is introduced, ensure proper drainage is provided.
3. Prioritize localized structural hardening measures on the side of the structure with less than 30 feet of separation.
4. Provide additional structural hardening such as installing or upgrading exterior walls, windows, vents, and under-eaves areas of the home to be fire-resistance rated.
5. Refer to FEMA's fact sheets on defensible space and home hardening for more detail:

[https://www.fema.gov/sites/default/files/documents/fema\\_rsl\\_marshall-mat-homeowners-guide-to-reducing-wildfire-risk-through-defensible-space\\_042025.pdf](https://www.fema.gov/sites/default/files/documents/fema_rsl_marshall-mat-homeowners-guide-to-reducing-wildfire-risk-through-defensible-space_042025.pdf)

## 6.3 CRITICAL INFRASTRUCTURE PROTECTION

The protection of critical infrastructure (e.g., communication systems, water supplies/infrastructure, electrical power infrastructure) from wildfire hazards, as well as limiting the number of wildfire ignitions caused due to this infrastructure, is an important planning consideration while developing a community wildfire resiliency strategy.

The following guidance and best practices should be considered in the community wildfire resiliency strategy. Critical infrastructure may span multiple jurisdictions and may have multiple responsible entities (e.g., public utilities, city, county) so coordination with all responsible parties is key.

### 6.3.1 Water Infrastructure

The Las Virgenes Municipal Water District (LVMWD) is the main district responsible for delivering water to residents and businesses in the City of Agoura Hills. LVMWD purchases imported water from the Metropolitan Water District of Southern California (MWD). Critical facilities include the Tapia Water Reclamation Facility which treats 7 million gallons of wastewater daily and processes biosolids removed during the wastewater treatment process at the Rancho Las Virgenes Composting Facility. The treatment and purification of recycled water through the Las Virgenes Triunfo Pure Water Project are also critical to the water infrastructure in the City of Agoura Hills (refer to Section 3.5.2.5).

Wildfire can affect water infrastructure in a number of ways. These impacts to infrastructure may influence operations during a wildfire, water quality, and recovery of communities following a wildfire. It is imperative that

the authorities with the responsibility of maintaining water infrastructure take actions to maintain operations during a wildfire wherever possible, and work towards restoration of services in a timely manner to facilitate overall community recovery efforts. There are several proactive actions that can be taken as part of a community wildfire resiliency strategy to aid these efforts.

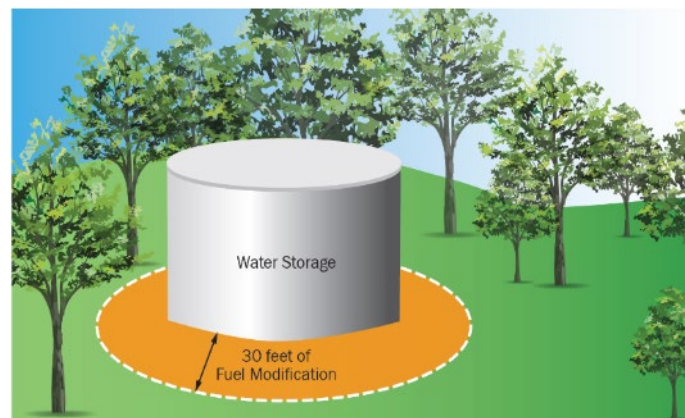
The University of California Agriculture and Natural Resources (UC ANR), California Institute for Water Resources and the Luskin Center for Innovation (LCI) at the University of California, Los Angeles (UCLA) produced a detailed [report](https://innovation.luskin.ucla.edu/wp-content/uploads/2021/12/Wildfire-and-Water-Supply-in-California.pdf) (<https://innovation.luskin.ucla.edu/wp-content/uploads/2021/12/Wildfire-and-Water-Supply-in-California.pdf>) on wildfire & water supply in California. Some key recommendations contained in this report are:

#### Top Priorities for Water Infrastructure:

- + Invest in debris management basins.
- + Plan for treatment technologies and techniques to protect water systems under different wildfire impact and contamination scenarios.
- + Proactively invest (e.g., in forest restoration projects) to help avoid accumulation of reservoir cleanup costs.
- + Invest in backup power supply to maintain operation of treatment facilities and pump stations during an emergency.
- + Invest in offsite operations of water systems to reduce risk to water system employees and maintain water operations for emergency use.
- + Develop specific wildfire mitigation plans that include local or regional partnerships with surrounding water systems or water wholesalers with inter-tying supply connections.

Additional guidance related specifically to water infrastructure for fire protection is provided by FEMA:

- + As a minimum, 30 feet of brush clearance should be maintained around water infrastructure components that are critical fire protection equipment, such as water storage. This distance may vary based on review and discussion with the local fire department. Refer to NFPA 1 and local ordinances for detail.
- + Minimum water storage requirements should be considered to provide protection for dwellings and other structures where adequate public/private water supply is not available. Property owners are encouraged to consult with the local fire department for further guidance.



**Figure 65. Providing appropriate vegetation clearance around critical water infrastructure and associated equipment is key for increasing wildfire resiliency.**

### 6.3.2 Communications Infrastructure

The preservation of communication systems during a wildfire emergency is vital to the safety of residents and first responders and actions should be taken to protect this important infrastructure in the event of a wildfire. There are some protective measures that can be taken to protect communication systems such as communication towers and associated equipment:

- + Provide 30 feet of hardscaping or brush clearance around communication towers and associated equipment (See Figure 66 for an example of a lack of sufficient hardscaping and clearance around communication towers).
- + Provide a minimum of 100 feet of clearance around accessory buildings that support the operations of communications systems.
- + Increase defensible space beyond minimum standards for communications infrastructure located on ridgelines or slopes, where site conditions may warrant expanded clearance to address increased fire intensity and ember exposure.
- + Implement enhanced vegetation management and hardening measures, including removal of ladder fuels, use of noncombustible ground cover, and coordination with service providers to evaluate site-specific clearance needs (potentially exceeding 100 feet) in high-risk locations.



**Figure 66. Water and communications infrastructure in a wildfire prone area.**

### 6.3.3 Electrical Infrastructure

Electrical utilities are not only important to maintain in a wildfire as critical infrastructure and lifeline facilities, but they can also pose a wildfire hazard or be a source of ignition themselves. While wildfire mitigation and protection of investor-owned electrical utility infrastructure is the responsibility of the electrical corporation that owns and/or operates it (e.g., Southern California Edison), it is subject to the requirements of the California Public Utilities Commissions (CPUC) and Office of Energy Infrastructure Safety (OEIS). Additionally, other electrical systems and infrastructure also require protection and wildfire safety measures. The following are general actions that can be taken to protect electrical infrastructure:

- + Where possible, place all electrical distribution equipment in conduit underground.
- + Regular vegetation maintenance should be planned and implemented to maintain appropriate clearances and should take into consideration species' growth rates, trim cycle, and line sway (NFPA 1, Chapter 17, Office of Energy Infrastructure WMP Guidelines, CPUC General Orders)
- + Maintain a combustible free zone around poles and towers of not less than 10 feet in each direction. For distribution lines, vegetation clearances are defined as a function of line voltage and time of trimming (e.g., a 4160V line requires a minimum of 4 feet clearance, so trimming requirements are triggered when vegetation is 4 feet from the line and must be trimmed to 6 feet clearance, to allow for growth in between trimming cycles).

Southern California Edison, the main investor-owned utility providing electricity to the area, is required to maintain a Wildfire Mitigation Plan (WMP). Refer to Southern California Edison website for details (<https://www.sce.com/safety/wild-fire-mitigation>).

See Chapter 7 for recommended actions to increase the resiliency of electrical infrastructure to wildfires.

### 6.3.4 Transportation Infrastructure

The physical resiliency of road infrastructure to wildfire exposure and post-fire debris flows is critical to protecting the transportation network throughout the City of Agoura Hills not only for access/egress during a wildfire, but also as a lifeline facility for maintaining local economies and livelihoods. A wildfire exposure and post-fire debris flow assessment of the road infrastructure across the City should be undertaken to better understand and mitigate against any physical threats to the transportation infrastructure from wildfires.

**Top Priority:** A wildfire exposure and post-fire debris flow assessment should be undertaken across the County to better understand and mitigate any physical threats to the road network.

Roadside fuel treatments are a key mitigation strategy to help reduce structural damage to the road network, particularly for bridges and overpasses that are of combustible construction or have limited inherent fire resistance (e.g., steel structures), and to maintain the roadways such that they are useable and free of extreme fire conditions during a wildfire. Roadside fuel treatments also reduce the likelihood of ignition along highways.

## 6.4 NATURAL RESOURCES PROTECTION

As part of any actions associated with the mitigation of potential wildland fire hazard, there is a need to balance the impacts of the mitigation actions against the level of protection they provide a value at risk. Actions taken by private property owner on private lands are subject primarily to the protections found in local ordinance of codes. Regulatory direction can be found in the Agoura Hills General Plan.

Large scale fire hazard reduction projects undertaken by local, State and Federal agencies often fall under the auspices of the California Environmental Quality Act (CEQA) or the National Environmental Policy Act (NEPA). The complexity of the proposed actions and the potential environmental impacts will determine the level of public engagement and analysis required by the laws. Both CEQA and NEPA have exemptions which allow for a less stringent level of environmental analysis. Under CEQA, a *Negative Declaration* as approved by the jurisdictional regulatory authority essentially is a determination that the project, as proposed, will not cause any significant environmental harm. For federal projects governed by NEPA regulations, a project may be excluded from analysis if the proposed action falls under one of several defined categories. These projects are considered *Categorical Excluded* from full environmental analysis.

Appendix D offers several Best Management Practices (BMPs) for use on fire hazard mitigation projects. Property owners are strongly encouraged to contact the city Planning Division for any site-specific resource protection direction.

## 6.5 FUELS MITIGATION STRATEGY

Wildfires have been a significant component of the southern California landscape for thousands of years, and no level of vegetation management will eliminate the potential negative impacts of a wildfire on local communities. Focusing fire mitigation efforts on individual structures and communities where social costs are highest shows the greatest promise to decrease overall fire suppression costs, prevent community losses through increased efficiency of firefighting resources, and reduce impacts on native plant communities which serve as a source of plant and animal diversity (Lombardo, 2012).

Fuel treatment, also referred to as vegetation management, is the act of removing or manipulating vegetation to reduce fire intensity, therefore increasing the probability that values at risk will be unaffected in a wildland fire. Fuel removal generally occurs by prescribed fire, grazing or the physical cutting and hauling away of vegetative

matter. Modifying fuels by chipping, mastication or weed whipping can also reduce fire behavior by creating a less flammable fuel arrangement.

Multiple agencies have a role in developing a comprehensive fuel treatment strategy for the Planning Area, including Los Angeles County Fire, National Park Service, Mountains Recreation Conservation Authority, multiple Homeowner Associations, and individual property owners. These entities all have different goals and policies that guide their actions on the ground.

A fuels treatment strategy for the Planning Area will require coordination between all the jurisdictional agencies and private landowners to increase the landscape level effectiveness of the various actions. Through coordinated actions, funding and personnel can be directed to the highest priority locations. These priority treatment's locations are based on the risk assessment performed as part of the approved City of Agoura Hills Community Wildfire Risk Assessment and are categorized at the Planning Unit level in section 6.5.2.

### 6.5.1 Proposed Fuel Treatments

Manipulating vegetation to modify fire behavior can be an area of contention in portions of southern California where the wildfire return interval has been shown to be well above historic norms. The value and effectiveness of fuel treatments, especially during times of high Santa Ana winds, is debated by some fire scientists and land managers, however the federal, state, and local jurisdictional fire agencies see a benefit from incorporation fuel treatments along with structure hardening and defensible space as part of a fully integrated fire protection strategy.

According to the National Wildfire Coordinating Group a fuel break is “*a strategically located strip or block of land where vegetation, debris, and litter are reduced or modified to alter fire behavior, slowing or controlling fire spread by making it easier for firefighters to build control lines or anchor suppression efforts, often using thinning, mowing, or clearing.*” Vegetation management may include the development and maintenance of fuel breaks, but the term covers a broad range of activities and can include any actions that modify the existing vegetation structure to support a defined land management goal. These vegetation management actions can vary from the removal of non-native invasive species to timber harvest.

For this plan, fuels breaks are proposed for maintenance and enhancement where they currently exist on the ground. These are located immediately adjacent to structures and are intended to reduce fire intensity and ember cast near these structures.

Most proposed actions in the CWPP meet the definition of vegetation management treatments and range from removal of non-native trees and shrubs on private property to grazing or the potential use of prescribed fire on larger tracks of land. See Figure 67 and Section 6.5.2 for specifics about prioritization of fuel treatments.

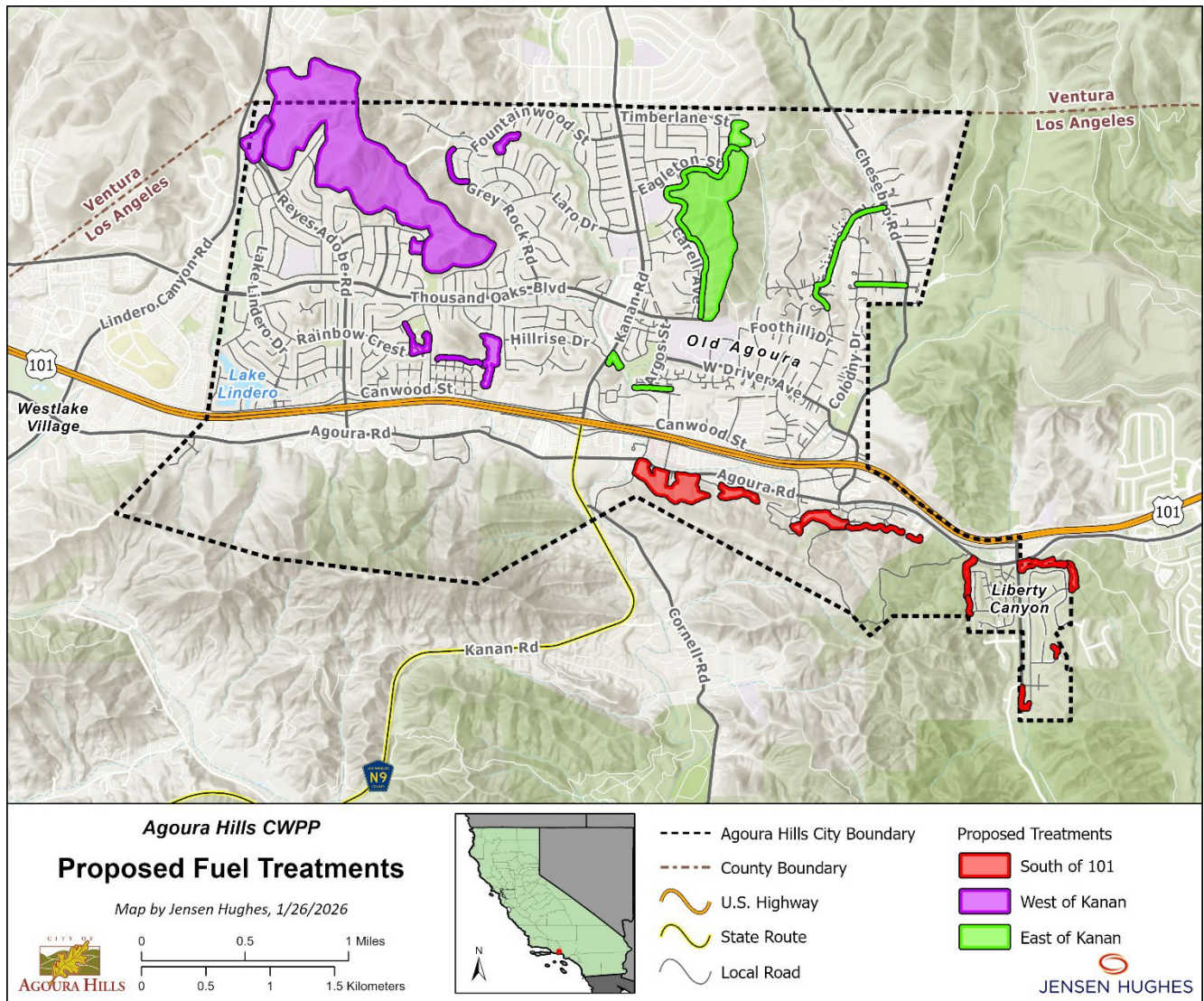


Figure 67: Proposed Fuel Treatment Areas

### 6.5.2 Fuel Treatment Prioritization

Often prioritizing fuel treatments can be as simple as identifying projects with the fewest obstacles to implementation. Single jurisdiction projects where one or a small number of willing landowners come together with a single goal usually have the fewest barriers to implementation. State, federal and local agencies can be constrained by environmental compliance regulations or agency policies that do not always align with fuel treatments. This is particularly true in southern California, where frequent wildfires have led to the degradation of the native vegetative structure and habitat quality.

Four general areas of benefit have been identified for the proposed fuel treatments found in this plan; increased public safety, enhanced structure defense, protection of critical infrastructure, and natural resource protection. While these four benefits have been identified as the primary purposes of the proposed actions, most treatments will provide multiple benefits.

For this CWPP, fuel treatment prioritization is presented as a function of treatment location in association with the outputs developed as part of the comprehensive risk assessment. Three Planning Units have been identified to simplify the prioritization process:

- Areas South of Interstate 101
- Areas north of Interstate 101 and east of Kanan Road
- Areas north of Interstate 101 and west of Kanan Road

Ranking the three Planning Units for priority treatments is based on the percentage of the highest risk categories within the Units. Using this methodology areas south of the 101 have the highest priority for treatment, followed by area north of Interstate 101 and east of Kanan Road and areas north of Interstate 101 and west of Kanan. Treatments within the Planning Units are prioritized again using the primary risk category associated with each spatially defined treatment (Figure 67-70, Table 15).

As an example of this methodology, treatments identified in the proximity of Liberty Canyon will have the highest priority for implementation given that the area was evaluated as being most at risk from wildfire. However, prioritization by risk should not be the only element used by the jurisdictional landowner/land management agencies for determining which projects to move forward, as projects which are “shovel ready” should be undertaken as funding becomes available.

Table 15 displays the proposed treatments and their associated risk category. Projects that do not have a significant spatial extent or apply to the entire Planning Unit were not mapped and therefore are not included in this table. These projects are no less important to community protection than are the mapped treatment areas. This is particularly true in the area north of Interstate 101 and east of Kanan Road in Chesebro and Palo Comado Canyons. Details of the proposed treatments can be found in Section 7.1 and specific geographic extent, where applicable, can be seen in Figures 68-70.

**Table 15. Fuel Treatment Prioritization for Planning Units**

<b>Proposed &amp; Prioritized Fuel Treatments</b>		
<i>Unit Number</i>	<i>Location</i>	<i>Primary Risk Category</i>
<b>Areas South of Interstate 101</b>		
SI-1	Liberty Canyon Road	Very High
SI-2	Oak Summit Road	High
SI-3	Jim Bowie Road	Very High
SI-4	Jim Bowie Road	High
SI-5	Defender Drive (north)	High
SI-6	Defender Drive (south)	Very High
SI-7	Hydepark Drive	Low
SI-8	Calle Robleda (east)	High
SI-9	Calle Robleda (west)	High

<b>Proposed &amp; Prioritized Fuel Treatments</b>		
<i>Unit Number</i>	<i>Location</i>	<i>Primary Risk Category</i>
SI-10	Vejar Drive	High
SI-11	Cornell Road	Moderate
<b>Areas North of Interstate 101 and West of Kanan Road</b>		
KW-1	Forest Cove Park	High
KW-2	Strawberry Hill Road	High
KW-3	Strawberry Hill Fuelbreak	High
KW-4	Rolling Ridge Drive	N/A
KW-5	Eastvale Court	High
KW-6	Reyes Adobe (north)	Moderate
KW-7	Ridgeway Drive	Moderate
KW-8	Imbler Court/Braemer Court	High
KW-9	Shady Creek Drive	High
KW-10	Lindero Canyon Road/Woodbrook Drive	Moderate
<b>Areas North of Interstate 101 and East of Kanan Road</b>		
KE-1	Argos Street	N/A
KE-2	Medea Creek Trail	High
KE-3	Agoura High – Fountain Place	N/A
KE-4	Carell Avenue/Eagleton Street	N/A
KE-5	Quaint Street/Banfield Drive	High
KE-6	Carell Avenue	Moderate to High
KE-7	Balkins Drive (private)	High
KE-8	Fairfield Road (private)	High
KE-9	Fairfield Road (private)	N/A
KE-10	Fairfield Road (private)	N/A
KE-11	Colony Drive	High
KE-12	Colony Drive	High

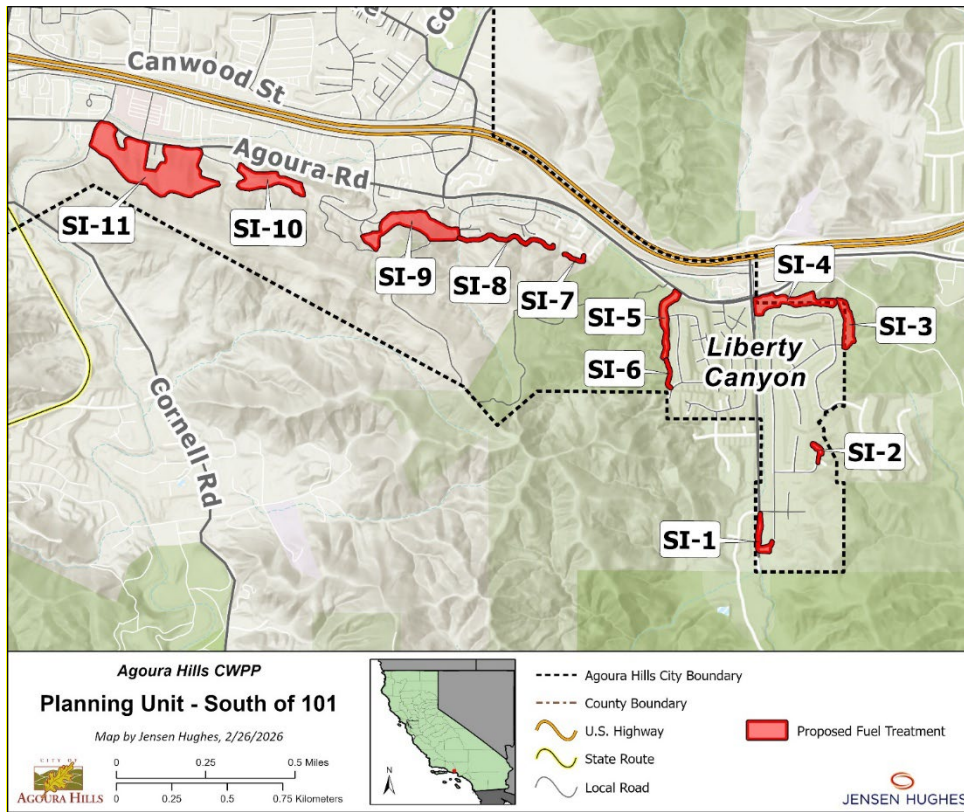


Figure 68: Proposed Fuel Treatments for South of 101 Planning Unit

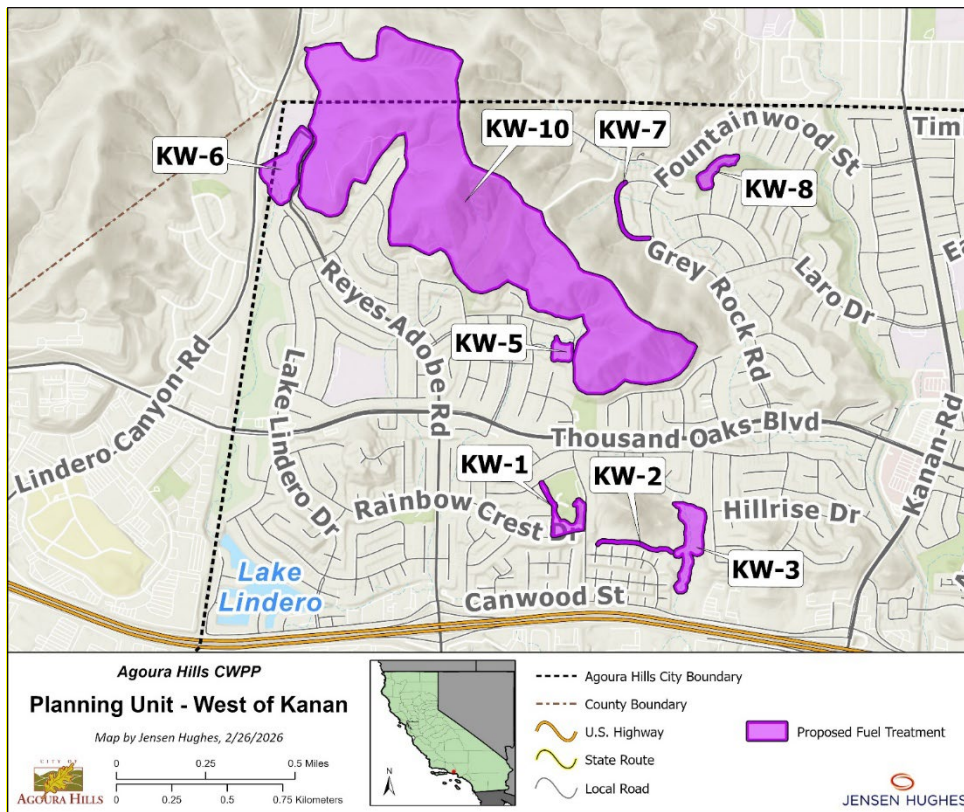


Figure 69: Proposed Fuel Treatments for West of Kanan Planning Unit

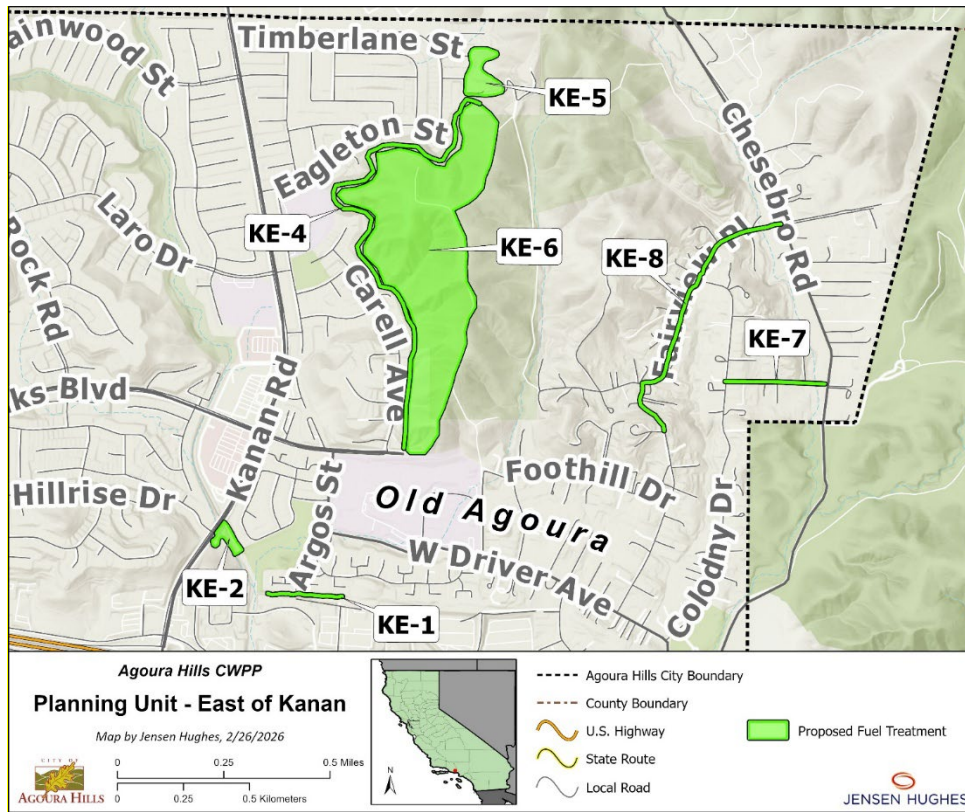


Figure 70: Proposed Fuel Treatments for East of Kanan Planning Unit

## 6.6 WILDFIRE DETECTION AND WARNING SYSTEMS

Wildfires in and around Agoura Hills are currently detected and reported using a variety of methods – public reporting, fire service personnel observations, monitoring cameras, and infrared technologies. Unlike interior building fires where fire is often detected using devices such as smoke-, heat- or flame-detectors, most wildland fires are still detected and reported by human observations.

- + **Public Reporting** – Public wildfire reports have resulted in immeasurable reductions in impacts to life-safety, property, natural environment resources and services, fire suppression costs, and many other community assets/values.

### If you see a wildfire, please call 911.

When reporting a wildfire, provide the following information:

- + Your phone number
- + Location of the fire
- + Whether there are lives or values at risk
- + What is burning? (Trees? Grass? Structures?)
- + Size of the fire
- + How quickly the fire is spreading
- + Color of the smoke

The details you provide are critical in determining the type of response the fire will receive from fire suppression authorities. Your help is greatly appreciated, as it helps allocate resources more efficiently and quickly determine the appropriate response to wildland fire activity.



- + **Infrared Technologies** – Once a wildfire has occurred, CAL FIRE uses ground personnel and aircraft with thermal imaging technology to assist in fire operations. Thermal imaging is utilized for detecting hot spots and areas of residual fire on larger fires during mop up, boundary establishment, fire mapping and fire progression.
- + **Monitoring Cameras** – ALERTWildfire is a program developed and operated through a partnership between the University of Nevada Reno, University of California San Diego, and the University of Oregon. It provides public access to a state-of-the-art camera network that assists first responders such as LACoFD and the public with information about current weather and fire conditions. Live feeds can be accessed at the ALERTCalifornia website: <https://alertca.live/>.
- + **Fire Lookout Towers** – The nearest fire lookout tower is the South Mountain Lookout, located to the north of Camarillo. Towers can be found at the NHLR website: <http://www.nhllr.org/lookouts/us/CA>
- + **Arson Watch** – Under direction from the Los Angeles County Sheriff's Department, Arson Watch volunteers patrol over 185 square miles of the Santa Monica Mountains during periods of extreme fire weather conditions. More information about the Arson Watch can be found at <https://www.arsonwatch.com/>.

## 6.7 PUBLIC NOTIFICATION AND COMMUNICATION

Public notification systems and communication strategies are an evolving process. These systems benefit greatly from the investment of resources into the pre-, during- and post-fire stages, particularly during and after fire incidents to monitor and take stock of both shortcomings and successes in the effectiveness of communications in reaching intended audiences. During an event, having a single source of information is strategic both from the perspective of communication clarity as well as for minimizing resource strain. Where multiple sources of information are necessary, such as due to jurisdictional complexities, a unified message across all sources is crucial. Further, in all communications phases, employing an active and reliable channel for communications and operations is one of the most valuable investments that can be made to improve communications in real-time.

**Top Priority:** Additional technologies, physical infrastructure, detailed analysis/design and enhancements to practices and procedures for public communication and messaging will need to be further developed and implemented to increase the physical resiliency of emergency communication infrastructure to wildfires, as well as to ensure complete, consistent, timely, and effective emergency messaging.

Given the City of Agoura Hills' vulnerable populations combined with public communications infrastructure with vulnerabilities to wildfire, it is imperative that no audience is left behind. There should be a reliable method for reaching everyone, and ideally multiple methods that allow for a quick and coordinated response in the event of a time-sensitive event. The more redundancy that can be built into reaching all audiences, the more investment that can be made in the

infrastructure to do so, and the more that those resources can be front-loaded in anticipation of an event, the more successful communications will be in achieving its goals in an emergency.

As experiences in recent wildfires have shown, and as indicated in public outreach conducted as part of the CWPP development process, additional technologies, physical infrastructure, detailed analysis and enhancements to practices and procedures of public communication and messaging will need to be further developed and implemented to increase the physical resiliency of communication infrastructure to wildfires, as well as to ensure complete, consistent, timely, and effective emergency messaging. Refer to Chapter 7 for recommended actions.

Currently, the Planning Area has a variety of public notification and communication systems (both at the County- and local- level) to help inform the public of a wildfire incident such as area notification systems, social media, radio/TV broadcasting, door-to-door communications, etc.). These existing systems and technologies are identified and described in the sections below.

### 6.7.1 Area Notification Systems

#### + City of Agoura Hills Emergency Information Webpage

The City of Agoura Hills has a dedicated webpage for the public to access information about emergency information such as evacuation information, air quality, health advisories, impacts to City services and information call lines.

#### + County of Los Angeles Emergency Map

The County of Los Angeles Emergency Map is intended for regional emergencies that pose significant threat to large numbers of people and/or property. The page is activated and updated in the event of an emergency. The public should check local media, fire and/or law enforcement for information about smaller, localized events.

The County of Los Angeles Emergency map can be accessed here: <https://lacounty.gov/emergency/>.

#### + Alert LA County (Powered by Genasys)

Alert LA County is an opt-in mass notification program utilized by the County of Los Angeles that allows individuals to receive emergency alerts by text, email and/or phone call. Alert LA County has accessibility features for people with disabilities and others with access and functional needs.



For local-level notifications, see the following webpage: <https://ready.lacounty.gov/emergency-notifications/>.

**+ National Weather Service**

Weather Radio Alerts are used to expand alerts in hazard areas, especially in areas with poor cellphone coverage. Weather Radios that use Specific Area Message Encoding (S.A.M.E.) technology can be programmed for use in Los Angeles County and a limited number of pre-programmed radios have been distributed. A video demonstrating how to utilize this system is located at this link:

<https://www.youtube.com/watch?v=6uAuU8nMEHk&t=4s>.

**+ Wireless Emergency Alerts**

Wireless Emergency Alerts (WEAs) are used to send out urgent alerts and warning messages targeting certain geographic areas. WEAs look like text messages but are designed to get residents’ attention with a unique sound and vibration repeated twice. Residents can ensure their phone is able to receive a WEA by verifying that the appropriate settings are enabled on their phone (by default, the setting is typically enabled, but specific considerations vary by device).

**6.7.2 Social Media**

The City of Agoura Hills is actively connected via social media networks including Facebook, X (formerly Twitter), and Instagram. Local agencies use social media to keep the public up to date on events, advisories, and alerts.

Table 16 summarizes some of the primary social media network links for emergency preparedness in the Planning Area.

**Table 16. Social Media and Media Programs**

<i>Source</i>	<i>Weblink</i>
<b>Los Angeles County</b>	
Los Angeles County Facebook	<a href="https://www.facebook.com/countyofla/">https://www.facebook.com/countyofla/</a>
Los Angeles County Twitter/X	<a href="https://x.com/CountyofLA?ref_src=twsrc%5Egoogle%7Ctwcamp%5Eserp%7Ctwgr%5Eauthor">https://x.com/CountyofLA?ref_src=twsrc%5Egoogle%7Ctwcamp%5Eserp%7Ctwgr%5Eauthor</a>
Los Angeles County Instagram	<a href="https://www.instagram.com/countyofla/?hl=en">https://www.instagram.com/countyofla/?hl=en</a>
Los Angeles County Sheriff Facebook	<a href="https://www.facebook.com/LosAngelesCountySheriffsDepartment/">https://www.facebook.com/LosAngelesCountySheriffsDepartment/</a>
County of Los Angeles Sheriff Twitter	<a href="https://x.com/LASDHQ?ref_src=twsrc%5Egoogle%7Ctwcamp%5Eserp%7Ctwgr%5Eauthor">https://x.com/LASDHQ?ref_src=twsrc%5Egoogle%7Ctwcamp%5Eserp%7Ctwgr%5Eauthor</a>
County of Los Angeles Sheriff Instagram	<a href="https://www.instagram.com/lasdhq/">https://www.instagram.com/lasdhq/</a>
<b>County of Los Angeles Fire Department</b>	
County of Los Angeles Fire Department Facebook	<a href="https://www.facebook.com/LACoFD/">https://www.facebook.com/LACoFD/</a>

Source	Weblink
County of Los Angeles Fire Department Twitter	<a href="https://x.com/LACoFDPIO?ref_src=twsrc%5Egoogle%7Ctwcamp%5Eserp%7Ctwgr%5Eauthor">https://x.com/LACoFDPIO?ref_src=twsrc%5Egoogle%7Ctwcamp%5Eserp%7Ctwgr%5Eauthor</a>
County of Los Angeles Fire Department Instagram	<a href="https://www.instagram.com/lacountyfd/?hl=en">https://www.instagram.com/lacountyfd/?hl=en</a>
<b>City of Agoura Hills</b>	
City of Agoura Hills Facebook	<a href="https://www.facebook.com/CityofAgouraHills/">https://www.facebook.com/CityofAgouraHills/</a>
City of Agoura Hills Twitter	<a href="https://x.com/CityAgouraHills">https://x.com/CityAgouraHills</a>
City of Agoura Hills Instagram	<a href="https://www.instagram.com/cityofagourahills/?hl=en">https://www.instagram.com/cityofagourahills/?hl=en</a>

**6.7.3 Other Public Information Sources**

+ **Watch Duty**

Watch Duty is a non-profit organization made up of volunteers who monitor radio scanners and collaborate to record up-to-date information on wildfires and firefighting efforts. It can be accessed via web browser or mobile app at <https://www.watchduty.org/>.

+ **County of Los Angeles Incident Response Webpage**

The County of Los Angeles activates this webpage to provide emergency information related to rainstorms and recent wildfires. It also contains information on the evacuation status of communities within the County and emergency numbers depending on which type of emergency. This webpage can be accessed at <https://lacounty.gov/emergency/>

+ **Southern California Edison Outage Status Map**

Southern California Edison (SCE) maintains a webpage where residents can go to check power outage status: <https://www.sce.com/outage-center/check-outage-status>

**6.8 EVACUATION**

Agoura Hills has some neighborhoods with access and egress challenges which can impact emergency response and public evacuation capabilities. These challenges include baseline congestion on major routes into and out of the city; narrow, winding, and/or steep roads; vegetation growth encroaching on roads; communities with only one way in/out; and complicated public and private road networks.

The City of Agoura Hills is currently finalizing the report from its 2025-2026 Evacuation Analysis in support of the General Plan Safety Element. This study includes more detailed information about challenges and opportunities related to evacuation for Agoura Hills.

**6.8.1 Before a Wildfire Event**

Prior to a wildfire event, a variety of preparatory policies, pre-disaster communication strategies, and wildfire hazard mitigations may help reduce the size and impact of an evacuation. Maintaining road and shoulder vegetation management and clearance programs, particularly for secondary roads and communities with only one access road, can both reduce wildfire impacts and keep evacuation routes open during an event.

Pre-disaster communications can help residents prepare for an evacuation and develop an evacuation plan. Residents can prepare for an evacuation by developing an individualized evacuation plan which includes a

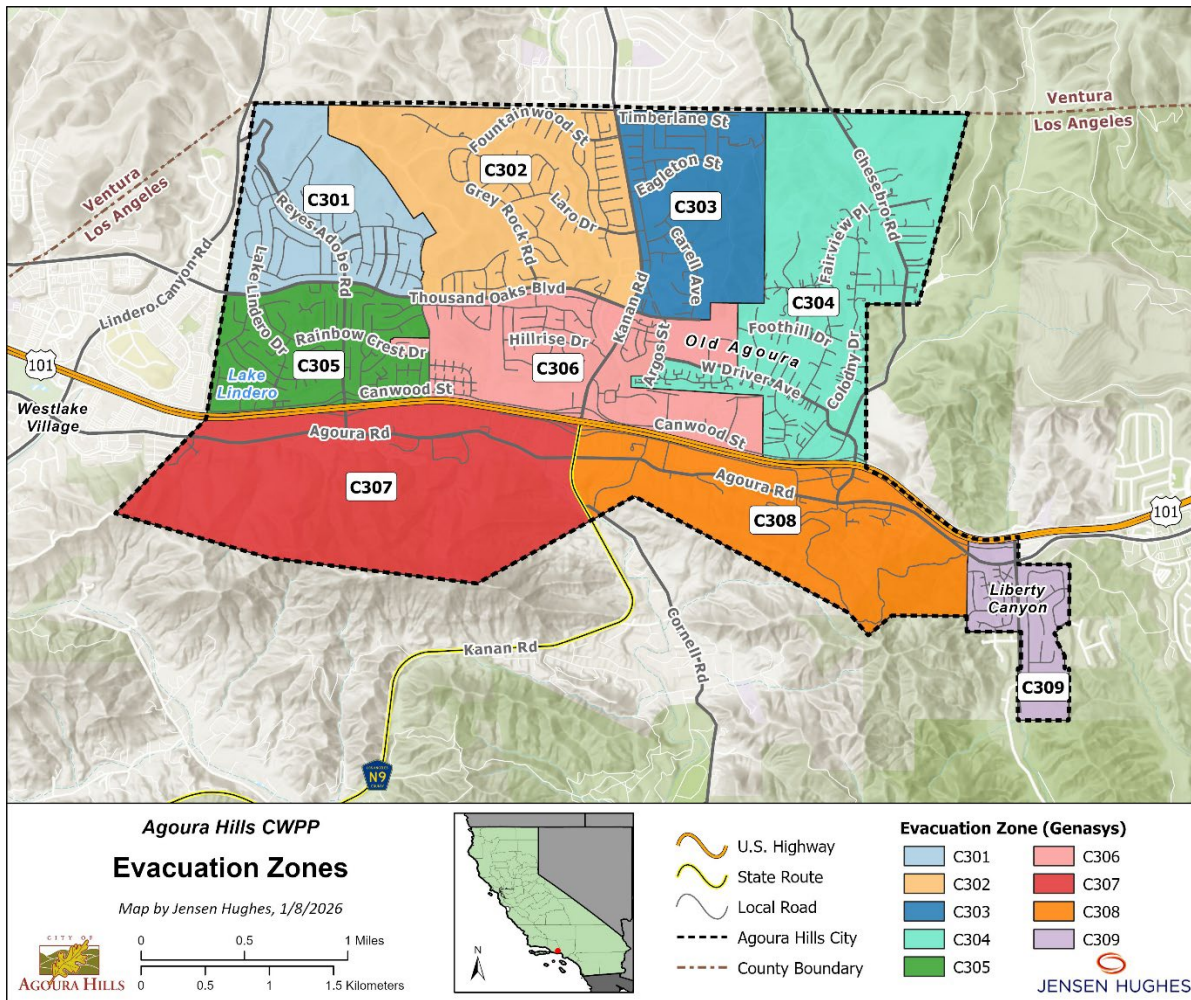
packing list, different route options, and options for where they will go. For additional guidance for individuals and families, information is available from Agoura Hills, including through the AH Alert program, ([https://www.agourahillscity.gov/residents/preparing\\_for\\_emergencies.php](https://www.agourahillscity.gov/residents/preparing_for_emergencies.php)), Ready LA County (<https://ready.lacounty.gov/>), and from the County of Los Angeles Emergency Page (<https://lacounty.gov/emergency/>).

## **6.8.2 During a Wildfire Event**

The Los Angeles County Sheriff's Office is the agency with the authority to order an evacuation during a wildfire (or other emergency) event. This decision is made in consultation with relevant fire agencies and the Incident Commander for the emergency. California law authorizes law enforcement to restrict access to any area where a menace to public health or safety exists due to a calamity such as flood, storm, fire, earthquake, explosion, accident, or other disaster. Refusal to comply is a misdemeanor (Penal Code 409.5).

### *6.8.2.1 Real-Time Evacuation Information*

Agoura Hills shares emergency notifications through AH Alert and Los Angeles County publishes public alerts and notifications via Alert LA County to notify the community of emergency events. Refer to Agoura Hills' website for more information and to sign up for emergency alerts ([https://www.agourahillscity.gov/residents/preparing\\_for\\_emergencies.php](https://www.agourahillscity.gov/residents/preparing_for_emergencies.php)). LA County issues evacuation warnings and orders based on predefined evacuation zones. The evacuation zones for Agoura Hills are shown in Figure 71.



**Figure 71. Evacuation Zones in Agoura Hills.**

Because no single method of notification would accomplish complete public notification, additional communications methods which may be utilized by fire, law enforcement, and other emergency response entities may include:

- + AH Alert (powered by CodeRed)
- + Alert LA County notification system (powered by Genasys)
- + Wireless Emergency Alerts (WEA) message system
- + Emergency Alert System (EAS) broadcasts to radio and television carriers
- + Weather Radio Alerts broadcast in partnership with the National Weather Service
- + Radio and television announcements
- + Watch Duty (mobile app and website)
- + Social media, such as X, Facebook and Instagram

In the event of power outages, additional notification strategies may include:

- + Phone hotline

- + Door-to-door notifications
- + Flyers for in-person distribution
- + Press releases to the media
- + Loudspeakers in vehicles
- + Deployment of Information Stations (i.e., large wooden sandwich boards with posted information at preidentified locations, Temporary Refuge Areas, and/or additional locations identified during the event)

#### 6.8.2.2 *Potential Evacuation Routes*

Access/egress routes in Agoura Hills include US-101 as the key east-west travel route and Kanan Rd. as a major north-south route in the city. Thousand Oaks Blvd. is another major east-west route through the City. These or other routes may be identified as evacuation routes within Agoura Hills during a specific emergency.

It is important to note that during a wildfire event, fire behavior and road conditions may necessitate changes. It is recommended that everyone in the community become familiar with the preferred evacuation routes, identify potential alternatives should fire behavior and/or road conditions require a change and stay connected with emergency notification systems for instructions.

#### 6.8.2.3 *Temporary Refuge Areas/Evacuation Points*

Temporary refuge areas or evacuation points may be identified within Agoura Hills by LACoFD or LA County Sheriff's Department in response to a specific wildfire event. These areas may serve as temporary staging areas and may assist in traffic management based on specifics of the emergency event and the communities impacted or threatened (e.g., temporary refuge areas may be utilized when the evacuation route for a one-way-in-one-way-out community is impacted).

#### 6.8.2.4 *Potential Evacuation Issues*

Outlined below are some issues that may be encountered during an evacuation and should be considered by emergency operations staff responsible for evacuation planning:

- + Residents and business owners may not have established evacuation plans.
- + Residents and business owners may delay evacuation or choose not to evacuate with the intent of defending their homes/businesses or sheltering-in-place. Their evacuation may also be slowed due to packing of personal items. These individuals can put their lives, and those of emergency personnel, at risk.
- + Research on behavior during wildfire evacuations indicates that people tend to take multiple vehicles when evacuating. This introduces additional demands on the road network and should be considered as part of an evacuation management plan. Of CWPP survey respondents who indicated that their household evacuated from recent fires by driving, approximately 55% took two or more vehicles.
- + Vulnerable populations and/or individuals with limited mobility may be less able to respond to, cope with, or recover from wildfire. Approximately 8% of respondents to the CWPP survey indicated that someone in their household has a disability or impairment that would make it hard to leave during a wildfire.

Research on behavior during wildfire evacuations indicates that people tend to take multiple vehicles when evacuating. This introduces additional demands on the road network and can impact life safety.

- + Evacuating pets, service animals, and large animals can pose significant challenges since animals may panic, behave unpredictably, and/or refuse to respond to normal handling approaches. In addition to evaluating these potential evacuation issues, an evacuation field drill is recommended to identify any additional physical, behavioral, operational, communications, or management challenges to the safe and efficient execution of an evacuation order.

## 6.9 PUBLIC EDUCATION AND AWARENESS PROGRAMS

### 6.9.1 County & Regional Programs

#### + **MySafe:LA (also known as Los Angeles Regional Fire Safe Council)**

Fire Safe Councils are grassroots, community-led organizations that mobilize and empower residents to protect their homes, communities, and environments from catastrophic wildfire. Throughout California, FSCs educate homeowners about community wildfire preparedness activities, typically working directly with local fire officials to design and implement projects that increase the wildfire preparedness and response efforts.

Although MySafe:LA primarily serves the greater Los Angeles City region, they host the California Fire Safe Council county coordinator for Los Angeles County and so have a key role in encouraging and coordinating countywide collaboration between wildfire mitigation groups. MySafe:LA, operating with grants from FEMA and CAL FIRE (via the Fire Safe Council Foundation), also helps communities to become NFPA Firewise USA sites or to form Fire Safe Councils.

MySafe:LA sponsors several programs available to residents including:



- o Fire Safe Council Virtual Town Halls: Every month, MySafe:LA, as the primary countywide Fire Safe Council hosts a virtual town hall meeting. These meetings are avenues for residents to stay in touch with what's happening relative to wildfire in Los Angeles. In these meetings, attendees can hear from subject matter experts and share opinions and knowledge to make homes and properties as safe as possible.
- o Wildfire Home Assessments: Residents can fill out the form located here: <https://www.wildfirela.org/wildfire-home-assessment/> to request a free wildfire home assessment.

More information can be found at: <https://www.wildfirela.org/>

#### + **LA County Recovers**

Los Angeles County maintains a website that contains information and resources for residents that have been impacted by wildfires. This includes debris removal, rebuilding, damage maps, and more. It also provides information to assist residents with permitting needs and right of entry forms. This website can be accessed at: <https://recovery.lacounty.gov/>.

#### + **Animal Services**

The City of Agoura Hills receives animal services from the Los Angeles County Animal Care & Control. More information about disaster preparedness for emergency planning with animals can be accessed at the following below:

- o Los Angeles County Animal Care & Control: <https://animalcare.lacounty.gov/emergency-response/>
- o City of Agoura Hills Pets & Emergency webpage: [https://www.agourahillscity.gov/business\\_detail\\_T4\\_R18.php](https://www.agourahillscity.gov/business_detail_T4_R18.php)

#### + **American Red Cross**

The California Los Angeles Region of the American Red Cross seeks to help people prevent, prepare for, and respond to natural and human-caused disasters through the immediate mobilization of people and resources and the provision of community, workplace, and school-based training. In addition to disaster relief, the Region delivers Community-Disaster Education, First Aid/CPR, and other types of life-saving health & safety training to thousands of people across our region to help people prevent, prepare, and respond to emergencies. American Red Cross California Los Angeles Region website is available at <https://www.redcross.org/local/california/los-angeles.html>

+ **National Park Foundation**

The National Park Foundation is the official nonprofit partner of the National Park Service, established by Congress to raise private funds to protect and enhance America's national parks and connect people with these treasured lands. It supports conservation, stewardship, and resilience initiatives across parks nationwide, helping make park infrastructure and natural resources more sustainable and better protected for current and future generations. While NPF does not run a specific Southern California wildfire program by itself, it invests in resilience and sustainability efforts including funding service corps and partners who assist with invasive species removal, ecological restoration, and fuels-related work that supports broader fire resilience goals. Through these partnerships and grant programs, NPF contributes to activities that improve park health and capacity to withstand climate-driven stresses, such as wildfire, which benefit nearby communities and landscapes like those around the Santa Monica Mountains National Recreation Area.



## 6.9.2 Local Programs

+ **CERT**

Community Emergency Response Training (CERT) is a 36-hour course designed for the average citizen so that they can be of help to their neighborhood or business where they work in times of disaster. The CERT program was developed in 1985 by the Los Angeles City Fire Department to provide basic training in safety and lifesaving skills to the general public. It has since been adopted by and enhanced by the Federal Emergency Management Agency (FEMA) and the National Fire Academy.

The City of Agoura Hills has volunteers that are certified CERT and meet on a regular basis to find new ways to prepare and equip Agoura Hills for disasters in their community. More information and how to get involved can be found on the City of Agoura Hills CERT Volunteers website at:

[https://www.agourahillscity.gov/government/departments/city\\_manager/emergency\\_preparedness/cert\\_volunteers.php](https://www.agourahillscity.gov/government/departments/city_manager/emergency_preparedness/cert_volunteers.php). More information about the CERT Program can be found on the LA County Fire Department website at: <https://fire.lacounty.gov/community-emergency-response-team/>.



+ **Local Fire Safe Councils**

- **Agoura Hills Fire Safe Council (AHFSC)** – The AHFSC is a recognized Fire Safe Council by the official California Fire Safe Council with a mission to work with federal, state and local agencies to protect life and property from wildfire in the City of Agoura Hills. AHFSC does this by educating homeowners on how to protect their homes and the surrounding defensible space and participation in various fuel mitigation projects to reduce the impact of wildfires in Agoura Hills open spaces. More information about AHFSC and the education and programs they offer to the community can be found on their website at <https://agourahillsfsc.org/>.



- **Free Vent Mesh Program** – The AHFSC has partnered with the City of Agoura Hills to establish wildfire mitigation programs to harden homes and communities against wildfires including the Free Ember-Resistant Vent Mesh Program. According to the California Building Codes and Requirements (Chapter 7A), homes located in FHSZ designations mandate that they be equipped with non-combustible, corrosion resistant mesh with openings between 1/16 and 1/8 inch. This program offers free mesh to residents in helping to meet these codes and requirements. More information about the program can be found at the AHFSC website here: <https://agourahillsfsc.org/home-hardening-program/>.

- **Santa Monica Mountains Fire Safe Council (SMMFSC)** – The SMMFSC is a regional Fire Safe Council that covers a wide range of cities including the City of Agoura Hills. The SMMFSC aims to partner with residents, partners, and local organizations to promote a collaborative approach to wildfire resilience. They provide many educational and program opportunities to engage the community and local partners and organizations such as their Home Ignition Zone Evaluations, Firewise Support, etc. More information about their programs can be found at: <https://www.smmfsc.org/services>.



+ **Resource Conservation District of the Santa Monica Mountains (RCD SMM)**

– The RCD SMM mission is to promote land stewardship and resource conservation through ecological research, conservation planning and design, habitat restoration, environmental education and community wildfire resilience. The RCD SMM encompasses the Santa Monica Mountains from Point Mugu to Topanga State Park and includes the Simi Hills, Santa Catalina Island, Pierce College, Sepulveda Basin Wildlife Area and Chatsworth Reservoir. As part of their efforts, the RCD SMM provides wildfire resiliency information and services to homeowners and land managers. This includes Home Ignition Zone Evaluations, Fire Demonstration Structure, wildfire resiliency planning, etc. RCD SMM also participates as a facilitator through the U.S. Green Building Council to implement free wildfire defense trainings for landscape and construction professionals. More information about the RCD SMM wildfire programs and services can be found at: <https://rcdsmm.org/wildfire-resilience/>.



+ **Firewise USA**

The Firewise USA Program encourages local solutions for safety by involving homeowners in taking individual responsibility for preparing their homes for the risk of wildfire. The program provides resources to help homeowners learn how to adapt to living with wildfire while encouraging and empowering neighbors to work together to reduce their wildfire risk and prevent losses. Information on Firewise communities located in Los Angeles County can be found at:

<https://www.wildfirela.org/firewise-usa/>.



**FIREWISE USA®**  
RESIDENTS REDUCING WILDFIRE RISKS

The Agoura Hills Firesafe Council has been active in organizing and obtaining Firewise Community status for several areas of the City. Most Firewise Communities are organized around Homeowners Associations, but any group of individuals can come together to work towards Firewise Community status. According to the National Fire Protection Agency (NFPA), benefits from being recognized as a Firewise Community can include:

- Preference is sometimes given to Firewise USA® sites over other candidates when allocations of grant money are made for wildfire safety or fuel mitigation.
- The Departments of Insurance in the states of California, Colorado, Texas, Arizona, Oregon, New Mexico, and Utah have approved insurance discounts for communities recognized by the Firewise USA® program. In 2022 the California Department of Insurance (CDI), signed into law a regulation that requires insurers to consider specific mitigation factors in their rating plans.

Table 17 reflects recent observations made by the Agoura Hills Fire Safe Council regarding the current Firewise communities in Agoura Hills.

**Table 17. Agoura Hills Firewise Community Summary**

Firewise Community	Structure Area	Defensible Space	HOA Controlled Open Space	Principle Concern
Peacock Ridge	Most structures are well maintained with Class A roofing, non-combustible siding with more than 50% of the homes free of wooden attachments.	Freestanding homes have developed an ember resistant zone, and many have needs to address non-native vegetation within the 5-30' zone.	Peacock Ridge HOA maintains some open space and hillsides with the City managing other adjacent open space.	Ingress and egress can only be made on Reyes Adobe Road and Lindero Lake Drive. The area is susceptible to ember cast from nearby open space.
Old Agoura	Most homes are well constructed with Class A roofs, with 50 to 74% having non-combustible siding, however more than 50% of structures have a wooden attachments.	Very few residences have developed an ember free 0-5' zone and approximately 70% of structures in need of work to meet basic defensible space requirements.	No HOA controlled open space.	Defensible space. 5-30' zone needs improvement. Weed abatement needs on City of Agoura Hills property needs annual attention.

Firewise Community	Structure Area	Defensible Space	HOA Controlled Open Space	Principle Concern
Morrison Ranch	The community is well built with greater than 75% of structures having Class A roofs, non-combustible siding, and no wooden attachments.	The area is well maintained with 50-74% of the properties having adequate defensible space, and some vegetation management work completed to 200'.	The HOA maintains some open space and hillsides with the City managing other adjacent open space.	Most homes do not have 1/8" mesh screening installed on vents.
Liberty Canyon	The community is well built with greater than 75% of structures having Class A roofs, non-combustible siding. 50 - 74% of structures have no wooden attachments.	Most structures have developed adequate defensible space out to 100' where feasible. A goal to remove remaining pines in the next two years has been established.	There are multiple HOAs in the area which maintain some portion of open space and hillsides.	Multiple jurisdictions have responsibility on the east, south, and west sides of the community, making expanding vegetation treatments complex.
Lake Lindero	Most homes have Class A roofs, with 50-74% having non-combustible siding. More than half the homes have wooden fences, decks or patio covers attached to the structure.	Poorly developed ember resistant zones are common with larger shrubs and trees in need of maintenance. Only 25-50% of homes have adequate defensible space to 30'.	No controlling HOA as some homes were built prior to 1970 before shared amenities triggered the requirement to form a HOA.	Defensible space work to a minimum of 30' is a priority for the community. Addressing overgrown ornamental vegetation is necessary.
Hillrise	The community is well built with greater than 75% of structures having Class A roofs, non-combustible siding, and no wooden attachments.	Approximately 30% of the structures need enhanced defensible space to 30', especially on the south and west of the community	Hillrise Open Space Association maintains the open space and hillside vegetation annually. The Association performs some discing to 200' of structures	Increase the number of homes with 1/8" vent mesh. Continue to work to the goal of removing pines within the next two years

Firewise Community	Structure Area	Defensible Space	HOA Controlled Open Space	Principle Concern
Fountainwood	The community is well built with greater than 75% of structures having Class A roofs, non-combustible siding, and no wooden attachments.	More than ½ the homes have created 0-5' ember resistant zones and most have well managed defensible space to 30'.	MRCA, Santa Monica Mountains Conservancy and the City have open space management jurisdiction adjacent to the community.	Increase the number of homes with 1/8" vent mesh.
Chateau Creek	The community is well built with greater than 75% of structures having Class A roofs, non-combustible siding, and no wooden attachments.	Only 25-50% of homes have fully treated vegetation in the 5-30' defensible space zone. City managed vegetation at Forest Cove Park encroaches on defensible space zone in some areas.	HOA performs annual weed abatement on open space. The HOA shares a boundary with Morrison Ranch HOA.	Work with the City to manage vegetation at Forest Cove Park.
Annandale	The community is well built with greater than 75% of structures having Class A roofs, non-combustible siding, and more than 75% having 18" vent mesh installed.	More than ½ the homes have created 0-5' ember resistant zones and most have well managed defensible space to 30'.	HOA performs annual weed abatement on open space up to 200' in some locations.	Flammable material on patios should be minimized, roof gutters noted to have substantial flammable debris in them.

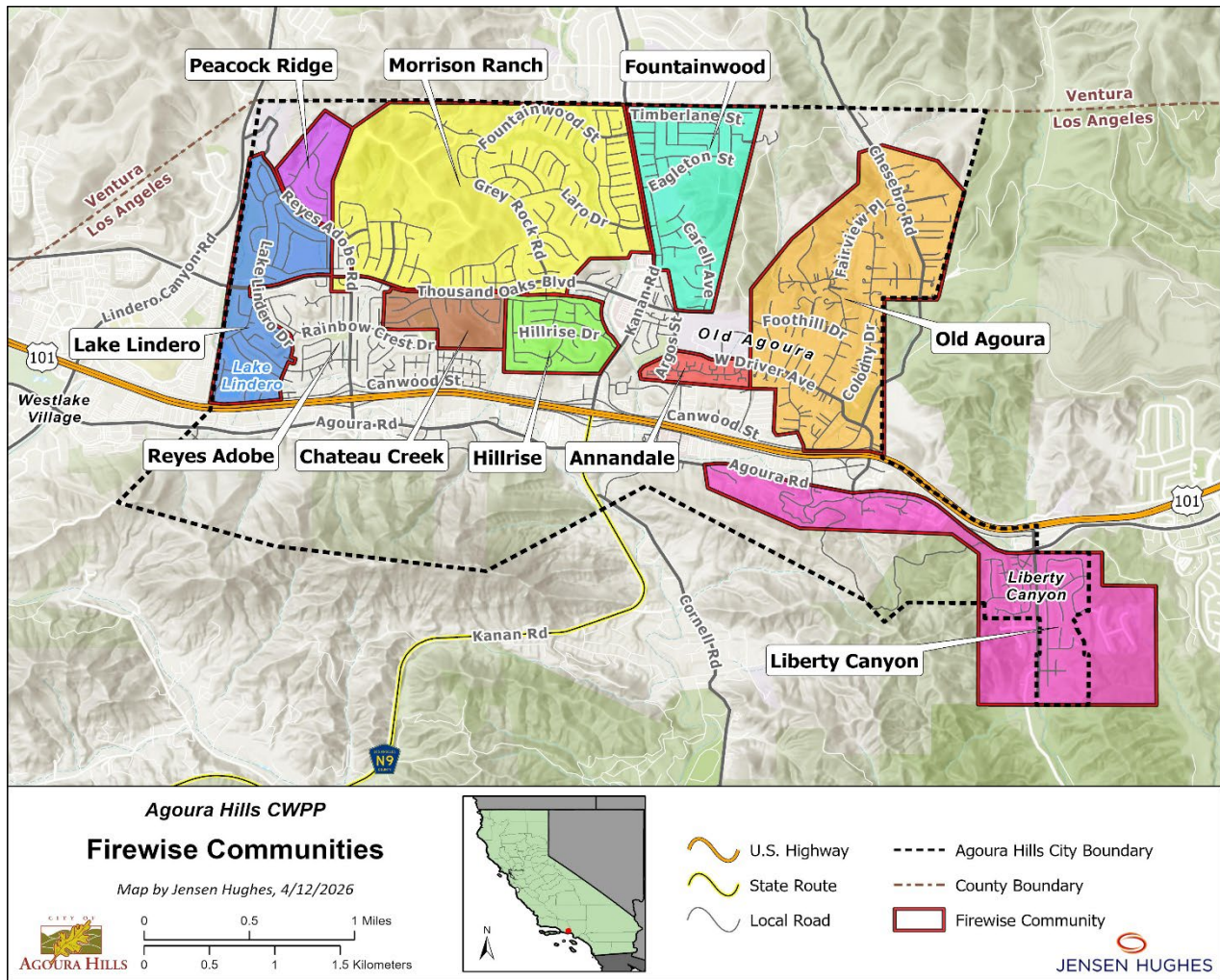


Figure 72. Firewise Communities in Agoura Hills.

### 6.10 FISCAL RESOURCES

Fiscal resources, budgetary constraints, and the involvement of federal, state, and local stakeholders may present challenges in implementing some recommendations outlined in this plan. Working together as a collaborative of involved parties in Agoura Hills through a variety of sources (public, private, volunteer, non-profit, etc.) will be essential. Establishing local priorities for available staffing and funding while still seeking additional funding sources will allow stakeholders to continue enhancing wildfire protection for residents, businesses, visitors, and other interested parties.

Implementation funding may come from a variety of sources. The most common source for large projects is through federal, state, and local grant sources. This list below represents some of the more common grant sources used for wildfire-related projects and activities but is not intended to be all inclusive.

**+ Fire Service Grants and Funding (AFGP)**

Through the Federal Emergency Management Agency’s Assistance to Firefighters Grant Program (AFGP), career and volunteer fire departments and other eligible organizations can receive funding through three different grants to enhance a fire department’s organization’s ability to protect the health and safety of the public first responders and to increase or maintain the number of trained, "front-line" firefighters available in communities.

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**+ Staffing for Adequate Fire & Emergency Response Grant (SAFER)**

The Staffing for Adequate Fire and Emergency Response Grant (SAFER) was created by FEMA to provide funding directly to fire departments and volunteer firefighter interest organizations to help them increase or maintain the number of trained “front line” firefighters available in their communities. The goal of SAFER is to enhance the local fire departments' abilities to comply with staffing, response and operational standards established by the National Fire Protection Association (NFPA 1710 and/or NFPA 1720).

**+ Fire Prevention & Safety Grants (FP&S)**

The Fire Prevention and Safety (FP&S) Grants are part of the Assistance to Firefighters Grants (AFG) and support projects that enhance the safety of the public and firefighters from fire and related hazards. The primary goal of this grant program is to reduce injury and prevent death among high-risk populations. In 2005, Congress reauthorized funding for FP&S and expanded the eligible uses of funds to include Firefighter Safety Research and Development.

<https://www.fema.gov/grants/preparedness/firefighters/safety-awards>

**+ Building Resilient Infrastructure and Communities (BRIC)**

Authorized by Section 203 of the Stafford Act, Building Resilient Infrastructure and Communities (BRIC) will support states, local communities, tribes, and territories as they undertake hazard mitigation projects, reducing the risks they face from disasters and natural hazards. BRIC is a FEMA pre-disaster hazard mitigation program that replaces the existing Pre-Disaster Mitigation (PDM) program. The BRIC program aims to categorically shift the federal focus away from reactive disaster spending and toward research-supported, proactive investment in community resilience. FEMA anticipates BRIC funding projects that demonstrate innovative approaches to partnerships, such as shared funding mechanisms, and/or project design. <https://www.fema.gov/grants/mitigation/building-resilient-infrastructure-communities> Note: the funding source for BRIC grants is currently unavailable, but this grant program may be reopened in the future.

**+ CAL FIRE Grant Program(s)**

CAL FIRE offers a number of grant opportunities that can be used to fund various action items and initiatives developed as part of this CWPP. A full description of these grants can be found here:

<https://www.fire.ca.gov/grants/>

- California Climate Investments (CCI) Forest Health Program
- California Climate Investments (CCI) Urban & Community Forestry Grant Program
- California Climate Investments (CCI) Fire Prevention
- California Forest Improvement Program (CFIP)
- Volunteer Fire Assistance

**+ California Fire Safe Council, USFS State Fire Assistance (SFA) Grant Program**

Funding is provided through a master grant to California Fire Safe Council (CFSC) by the U.S. Forest Service to administer the Grants Clearinghouse program, with CFSC issuing sub-awards to successful applicants to support fire risk reduction activities by landowners in at-risk communities to restore and maintain resilient landscapes and create fire adapted communities. Funds should be utilized in the following categories: Hazardous fuels reduction and maintenance projects on non-federal land; Community Wildfire Protection Plans (CWPP) and other community hazard mitigation and planning; and Prevention and mitigation education and outreach opportunities for landowners and residents in at-risk communities

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**+ Sustainable Transportation Planning Grants**

The California Department of Transportation (Caltrans) provides two planning grant programs that could be used to support any transit system wildfire evacuation studies and/or evacuation planning.

- Sustainable Communities Grants – to encourage local and regional planning that furthers state goals, including, but not limited to, the goals and best practices cited in the Regional Transportation Plan Guidelines adopted by the California Transportation Commission.
- Strategic Partnerships Grants – to identify and address statewide, interregional, or regional transportation deficiencies on the State highway system in partnership with Caltrans. A sub-category funds transit-focused planning projects that address multimodal transportation deficiencies.

**+ CAL OES Hazard Mitigation Grant Program (HMGP)**

Hazard Mitigation Grant Program (HMGP) funds plans and projects that reduce the effects of future natural disasters. In California, these funds are administered by the CAL OES HMGP Unit. Eligible sub-applicants include state agencies, local governments, special districts, and some private non-profits.

**+ Community Wildfire Defense Grants (CWDG)**

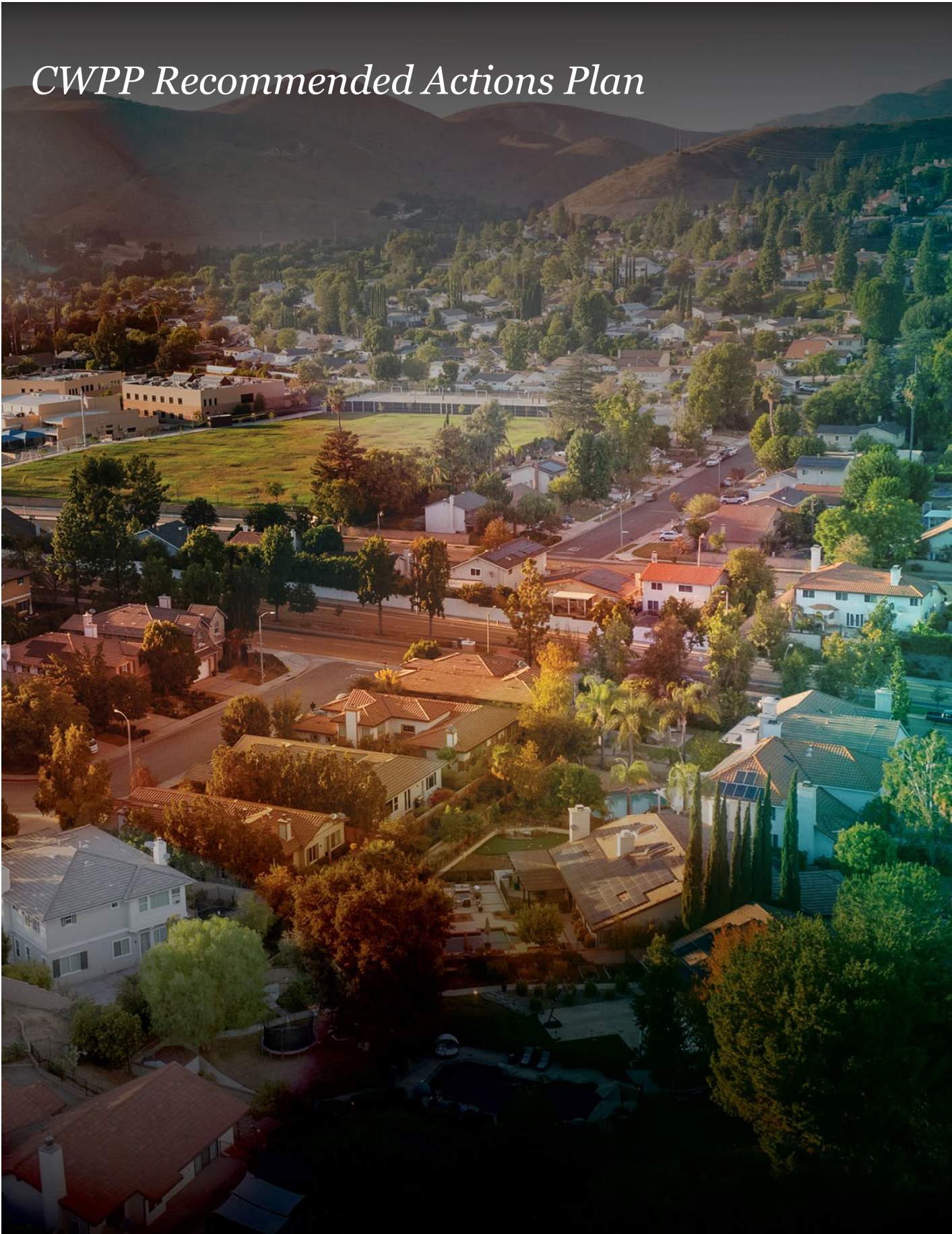
Community Wildfire Defense Grants (CWDG) funds communities and Tribes to plan for and reduce wildfire risk and implement the National Cohesive Wildland Fire Management Strategy. These funds are administered by the USDA and U.S. Forest Service. Eligible sub-applicants include communities that are in an area identified as having high or very high wildfire hazard potential, are low income, or have been impacted by a severe disaster in the last 10 years which increased wildfire risk and/or hazard. These funds can be used to develop and revise CWPPs, or implement projects described in a CWPP that is less than 10 years old.

**+ Santa Monica Mountains Conservancy**

The Santa Monica Mountains Conservancy provides grant funding to non-profit organizations, public agencies, and tribes for projects focused on preserving open space and creating climate-resilient communities.

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# *CWPP Recommended Actions Plan*



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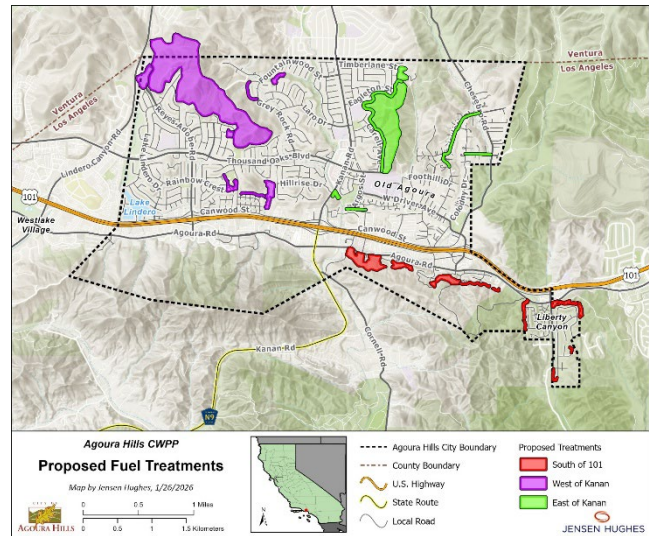
## 7.0 CWPP Recommended Actions

This section provides recommended actions for the City of Agoura Hills. It is a collection of community-wide and planning unit level recommendations and priorities that can be taken by property owners, agencies, and jurisdictional land management agencies to increase the fire resiliency of local communities.

Due to the scale of the CWPP and associated analysis presented in this report, the recommendations are primarily focused on community-wide activities to help inform the development of large-scale projects that will involve coordination and collaboration across multiple stakeholders to complete. The recommendations are intended to provide state, county, and local stakeholders with a tool to inform and direct future projects to reduce wildfire hazards and risks at various scales. The tool, in combination with Chapter 8, is also intended to provide a method to systematically monitor, track and evaluate progress on individual projects and overall CWPP programmatic goals, while also providing a form of accountability.

The recommendations have been organized into city-wide actions and planning unit level actions. The three planning units allow interested parties to focus efforts locally within their neighborhoods. The three units are:

- + Areas South of Interstate 101
- + Areas north of Interstate 101 and east of Kanan Road
- + Areas north of Interstate 101 and west of Kanan Road



No single individual, group or agency is responsible for enacting the recommendations or projects identified in this section. While funding and staffing could be an issue in achieving on-the-ground results, using a collaborative approach, multiple agencies and interested parties can come together to address fire hazard concerns across the Planning Area more effectively and efficiently.

The mitigations are organized into 10 thematic categories:

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|--|---|
| <ul style="list-style-type: none"> <li>A. Codes and Enforcement</li> <li>B. Fuels Mitigation</li> <li>C. Property Protection (Defensible Space)</li> <li>D. Property Protection (Home Hardening)</li> <li>E. Wildfire Resiliency of Critical Infrastructure</li> </ul> | <ul style="list-style-type: none"> <li>F. Public Notification and Communication</li> <li>G. Evacuation Planning and Preparedness</li> <li>H. Public Education and Awareness</li> <li>I. Community and Regional Partnerships, Collaboration and Coordination</li> <li>J. Emergency Response</li> </ul> |
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Note: The actions were developed from results of public polling, stakeholder input, wildfire hazard and risk assessments in the CWPP, existing reports, and documents. The list of actionable items is intended to assist with decision-making, project tracking, accountability, and planning outcomes for the Plan.

7.1 RECOMMENDED ACTIONS – CITY-WIDE

Table 18. Recommended Actions for the City of Agoura Hills

<b>Recommendations for the City of Agoura Hills</b>						
<b>Objective</b>	<b>Number</b>	<b>Action</b>	<b>Related Actions</b>	<b>Agency Partners</b>	<b>Target Date</b>	<b>Status</b>
<b>A. Codes and Enforcement</b>  Keep local codes, standards, and guidance documents up to date with the latest developments in wildfire resiliency research.	<b>CW-1</b>	<b>Review recently published wildfire risk mitigation recommendation reports, testing and research</b> (e.g., FEMA, NIST, IBHS, FSRI), and update local codes, standards, and guidance, as needed.  Resources to be reviewed include FEMA Marshall Fire MAT, IBHS Home Mitigations that Matter, NIST Technical Note 2205 & 2228				
	<b>CW-2</b>	<b>Develop a public education and outreach plan to increase awareness and ensure consistent messaging</b> on maintaining defensible space in accordance with Los Angeles County Fire Code Section 325.2.1, California Public Resources Code 4291, and local ordinances.  Education should include information on Zone 0 or the “ember-resistant zone” (0–5 feet from a structure) in accordance with AB-3074 for both new and existing conditions, as well as updates on changes to Fire Hazard Severity Zones, defensible space inspection requirements, and any associated costs or billing processes. Clear, accessible communication should be prioritized to help residents understand evolving requirements.				

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<b>B. Fuels Mitigation</b>  Manage landscape vegetation to promote the return of fire resilient species and lower vegetation densities.	<b>CW-3</b>	<b>Undertake a study to identify and provide recommendations for mitigating common ignition sources across the City.</b> This will include common sources of ignition in both the public and private sectors and developing strategies for reducing the number and frequency of ignitions. Recommendations and collaboration efforts should be tailored for the appropriate audience (e.g., electrical utilities, homeowners, private industry, schools).				
	<b>CW-4</b>	<b>Coordinate with MRCA, NPS, and Caltrans on mechanical fuel treatments adjacent to the city,</b> particularly in Palo Comado, Chesebro Canyon, Reyes Adobe, Forest Cove, and the 101 Freeway Corridor.				
	<b>CW-5</b>	<b>Seek funding to develop a community chipper program</b> that focuses on neighborhoods east of Kanan Road and south of Hwy-101.				
	<b>CW-6</b>	<b>Work with LACoFD, NPS and MRCA to identify opportunities to implement grazing of herbaceous fuels,</b> particularly in Palo Comodo/Chesebro and Liberty Canyons. Grazing was a historic land use practice in the Agoura Hills vicinity.				

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	<b>CW-7</b>	<b>Work with LACoFD and NPS to identify and maintain strategic fuel breaks</b> that were developed during the Woolsey Fire. Consider using the fire suppression repair map to identify these locations.				
	<b>CW-8</b>	<b>Work with LACoFD, NPS, MRCA and State Parks to identify opportunities to use prescribed fire to treat non-native invasive species.</b> This provides a resource benefit while also breaking up fuel continuity adjacent to the city. Monitor species change after treatment.				
	<b>CW-9</b>	<b>Evaluate city-managed open spaces and parks to ensure that vegetation is maintained</b> in a state of low fire flammability. Focus on the elimination of down woody surface fuels. Priority locations include Forest Cove Park, Medea Creek Park, and Old Agoura Park				
<b>C. Property Protection (Defensible Space):</b>  Improve fuel treatment strategies for defensible space around structures	<b>CW-10</b>	Seek grant funding to support homeowners in removing hazardous tree species (e.g., cypress, pines, eucalyptus) within their defensible space zones, and where appropriate, encourage replacement with fire-resistant or well-maintained vegetation consistent with the “right plant, right place” principle and defensible space guidance.				
	<b>CW-11</b>	Work with LACoFD to <b>ensure that weed abatement and defensible space inspections are conducted and enforced.</b>				

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	<b>CW-12</b>	<b>Leverage and support the work of local FSCs to evaluate and educate properties owners on defensible space requirements.</b> Focus on the development of the ember-resistant zone at structures.				
	<b>CW-13</b>	<b>Develop and post signage along primary travel routes to higher risk neighborhoods identifying compliance dates for fire hazard reduction work.</b> Provide contact information for residents who wish to request support to better understand defensible space requirements and maintenance.				
	<b>CW-14</b>	<b>Develop a list of city-vetted vendors who can provide services for property owners requiring assistance</b> with developing and maintaining their defensible space, and consider leveraging existing partner networks and resources where available.				
	<b>CW-15</b>	Leverage existing databases (e.g., Agoura Hills Fire Safe Council database) to <b>create a new spatial database of HOAs/ Firewise USA neighborhoods</b> that have responsibility <b>for the maintenance of communal defensible space/community buffer zones. Map treated areas.</b>				
	<b>CW-16</b>	Provide community workshops, informational videos, demonstration landscapes and other educational methods to increase the general public’s understanding of <b>best practices around</b>				

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		<b>fire-resistant and drought-resistant plant species, and best practices for landscaping and maintenance.</b>				
	<b>CW-17</b>	<b>Investigate opportunities where HOAs can expand ongoing defensible space actions</b> beyond 200' onto lands managed by the City or Los Angeles County. Evaluate using LACoFD hand crews for labor to control costs.				
	<b>CW-18</b>	Explore opportunities for a <b>city-wide blanket permit &amp; associated funding (for permit and work)</b> to allow private homeowners to maintain defensible space via <b>brush clearing on State Parks land.</b>				
<b>D. Property Protection (Home Hardening)</b>  Improve hardening of existing building stock for increased fire resilience.	<b>CW-19</b>	<b>Provide ongoing education and outreach for residents.</b> Information should include defensible space and home hardening standards to assist homeowners with implementing firesafe practices as well as meeting or exceeding requirements of State, County and Local codes and ordinances. A mix of web-based and in-person formats should be utilized in order to reach all critical audiences.				
	<b>CW-20</b>	<b>Explore funding opportunities to aid property owners in retrofitting existing structures</b> to current WUI building construction standards. Prioritize providing financial resources, physical assistance, and other support to vulnerable populations (e.g., elderly, fixed-income, low-income).				

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		Develop clear program guidelines, criteria, and management strategies. There should be a focus on clarifying to residents what level of work/upgrades triggers certain requirements.				
	<b>CW-21</b>	<p>Consider creating a <b>website that directs homeowners to various home hardening resources</b>:</p> <ul style="list-style-type: none"> <li>• Home hardening products (e.g., CALFIRE WUI products)</li> <li>• Suppliers and hardware stores</li> <li>• Design professionals and contractors</li> <li>• Shared resource programs, such as a tool lending library.</li> <li>• Existing incentives</li> <li>• Insurance carrier discounts</li> </ul>				
	<b>CW-22</b>	<b>Work with the insurance industry</b> and California Insurance Commissioner’s office to recognize <b>risk reduction efforts at landscape, parcel and neighborhood-scales</b> in insurance coverage, premiums, and deductibles. Coordinate and collaborate with county, regional, and local stakeholders, subject matter experts, and academics to systematically identify and quantify the risk reduction measures at various scales to help support insurance needs.				
	<b>CW-23</b>	Consider developing (and updating over time) a <b>parcel- and neighborhood-level WUI risk assessments</b> .				

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<b>E. Wildfire Resiliency of Critical Infrastructure</b>	<b>CW-24</b>	Work to develop agreements with agencies, HOAs, and private landowners to establish and maintain <b>fuel treatments</b> along <b>major routes</b> and <b>roadways</b> , with a primary focus on access/egress-constrained communities and communities with vulnerable populations.				
	<b>CW-25</b>	<b>Conduct a study to evaluate the wildfire resiliency of critical infrastructure and facilities</b> across the City (e.g., water infrastructure, communications systems, and City-owned or government buildings). Prioritize and implement resiliency improvements. Coordinate and collaborate with relevant fire, law enforcement, government, private sector, and other subject matter experts to ensure programs, policies and systems are evaluated, designed, and maintained for quality, fire resistance, durability, functionality, efficiency, and sustainability.				
	<b>CW-26</b>	<b>Evaluate and enhance inspection, maintenance, and visibility of fire hydrants across the City</b> , including coordination with water providers to ensure hydrants are accessible, clearly visible, and free of vegetation or obstructions, and that damaged hydrants are identified and repaired in a timely manner.				

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<b>F. Public Notification and Communication</b>	<b>CW-27</b>	<b>Work with providers to coordinate efforts on analyzing, monitoring, and maintaining enhancements and redundancies to current emergency communication systems</b> such as generator backups, increased cellular coverage via traditional cell towers, repeaters, and other technologies to improve communications.				
	<b>CW-28</b>	Work with emergency responders and other government agencies in and around the City to <b>conduct a review and alignment of current public emergency communication systems and messaging policies</b> , protocols, and procedures. This would include evaluation of the range of target audiences (e.g., residents, visitors, limited English proficiency, elderly, secondary homeowners), with the intent of providing more reliable, timely, informative, and consistent information during/after a major wildfire incident. This may also include the need for training/drills and evaluation/adoption of newly available technologies.				
	<b>CW-29</b>	Seek funding to <b>expand the training, use, and associated infrastructure of local radio systems</b> or other distributed technologies (e.g., NOAA weather transceivers, HAM/GMRS radios) to community groups such as CERT members, Fire Safe Councils, Firewise Communities, and HOAs, particularly where cellular				

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		communication is poor or vulnerable to wildfire.				
<b>G. Evacuation Planning and Preparedness</b>	<b>CW-30</b>	<b>Post on the city website and advertise at local events the county-identified evacuation zones</b> in order to increase public awareness. Consider posting evacuation zone identification signage along primary travel routes				
	<b>CW-31</b>	Develop a strategy for assessing <b>wildfire evacuation vulnerability</b> which may include quantifying evacuation capacities, surveying residents and stakeholders, and identifying and prioritizing improvements to ensure life safety of the public and emergency responders in the event of a major wildfire in or around the City.  <b>Incorporate findings from the City’s 2025/2026 evacuation study into future planning, to ensure that evacuation capacity and roadway constraints are adequately addressed.</b> Include consideration of full buildout conditions and special evacuation needs (e.g., trailers and multi-vehicle households). Continued coordination between wildfire planning and land use efforts will be critical to avoid exacerbating evacuation challenges in high fire hazard areas				

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	<b>CW-32</b>	<b>Identify specific areas and neighborhoods where secondary means of egress</b> are needed to increase evacuation capacity and access for first responders in a wildfire. Where possible, work towards developing and maintaining secondary egress routes for constrained neighborhoods. Identify other strategies as appropriate (e.g., policies to open locked gates).				
	<b>CW-33</b>	<b>Develop additional and redundant communication strategies to reach vulnerable populations during emergency events</b> , including community networks, phone trees, and other targeted outreach methods.  The City should also consider compiling and maintaining a list of vulnerable residents who may need assistance and identify or assign designated point persons or coordinators to support communication and evacuation planning for these populations.				
	<b>CW-34</b>	<b>Incorporate neighborhood security education into evacuation planning in coordination with law enforcement</b> and clear communication to residents to address concerns related to theft during evacuation events.				
	<b>CW-35</b>	Explore opportunities to provide discounted generators and/or battery back ups to				

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		community members for use during PSPS events.				
<b>H. Public Education and Awareness</b>  Educate the public on how to mitigate wildfire hazards and risk and how to appropriately prepare and respond to wildfires.	<b>CW-36</b>	Establish <b>improved communications with Homeowners Associations</b> concerning wildfire mitigation actions – home hardening, defensible space, and maintenance of any common areas within their jurisdiction.				
	<b>CW-37</b>	<b>Ensure public education and communication materials on wildfire preparedness, planning and response are generally accessible.</b>  This may include translation into different languages, common-language descriptions, ADA compliance, and conversion into different formats.				
	<b>CW-38</b>	Adopt, augment and/or develop and implement <b>training curriculum tailored to contractors, real estate agents, insurance representatives</b> , and others to educate and inform on defensible space requirements and ignition-resistant construction. Evaluate and use existing training programs from regional partners where appropriate (e.g., Resource Conservation Districts, neighboring jurisdictions).				
	<b>CW-39</b>	<b>Expand existing voluntary home assessment programs operated by fire agencies, FSCs, RCDs, and other community organizations</b> where residents				

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		can request assistance and education from trained assessors on detailed, individualized information on home hardening techniques, defensible space, and fire safe landscaping. As part of these assessments, focus on the development of the ember-resistant zone around structures.				
	<b>CW-40</b>	Develop a public facing “ <b>one-stop shop</b> ” <b>website for locally specific guidance and best practices</b> for wildfire safety. This may include information on structural hardening and retrofitting, recommended plant lists, landscape design and maintenance, defensible space, evacuation preparedness, and post-fire impacts such as flooding and soil erosion. Provide links to other materials that individuals may want to reference (e.g., IBHS fire testing, FEMA guidance). Provide information on pertinent codes and standards and planning information for the public.				
<b>I. Community and Regional Partnerships, Collaboration and Coordination</b>	<b>CW-41</b>	Encourage, promote, and assist <b>grassroots, community wildfire mitigation and preparedness organizations</b> such as Fire Safe Councils, Firewise Communities, Arson Watch, radio groups, non-profits, etc.  Support may include marketing, outreach, recruitment efforts, GIS support, and others. Help various organizations provide				

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		consistent communications, tools, and outreach.				
	<b>CW-42</b>	Establish and maintain a <b>spatial database of all wildfire mitigation programs and initiatives</b> (such as all existing, planned and completed fuel treatments and areas where CEQA applies) that CWPP stakeholders and interested parties can use as a common repository and tool for ongoing coordination and collaboration. Include other entities adjacent to Agoura Hills that should also be coordinating their efforts. A data management strategy should be developed to establish appropriate protocols, such as public vs private facing data, access and update permissions, and frequency of updates.				
	<b>CW-43</b>	<b>Enhance coordination with adjacent jurisdictions, agencies, and community organizations to support cross-boundary vegetation and fuels management efforts.</b> This should include collaboration with neighboring communities and unincorporated areas (e.g., Oak Park) to align fuel treatment priorities, share information, and identify opportunities for joint implementation and funding. Establish regular communication and coordination protocols to support ongoing collaboration and ensure a consistent approach to reducing wildfire risk across jurisdictional boundaries.				

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	<b>CW-44</b>	<p><b>Improve the cost-efficiency of fuel reduction and fuel maintenance through coordination efforts including:</b></p> <ul style="list-style-type: none"> <li>+ Coordinating between neighboring private landowners so that economies of scale are achieved for fuel reduction actions (e.g., coordinating timing and type of fuel reduction on neighboring properties)</li> <li>+ Long-term service agreements</li> <li>+ Programmatic CEQA approaches</li> <li>+ Investment in pre-planning</li> </ul>				
<b>J. Emergency Response</b>	<b>CW-45</b>	<p><b>Consider the development and implementation of a parking restriction ordinance for Red Flag Warning days</b> to ensure that emergency equipment can access constrained roadways. Prioritize high-risk areas, including neighborhoods with limited access, high evacuation demand, or proximity to schools and other sensitive uses. Neighborhoods south of US-101 should be evaluated as priority locations.</p>				
	<b>CW-46</b>	<p><b>Develop standardized signage that identifies residences with static water sources</b> that can be used during suppression operations should the pressurized system fail. Provide signage free to residents willing to install the identification.</p>				

## 7.2 RECOMMENDED ACTIONS – PLANNING UNITS

The success of wildfire mitigation efforts within each Planning Unit relies on strong collaboration among all stakeholders. Firewise communities and other local groups in each Planning Unit are encouraged to work together to identify and prioritize projects that enhance wildfire resilience across the city. By aligning efforts and seeking funding collaboratively when appropriate, community groups can maximize the effectiveness of their mitigation strategies.

*Note: Geographic location of planning area-specific actions, where applicable, can be found in Section 6.5.2.*

**Table 19. Recommended Actions for the areas south of US-101**

<b>Recommendations – South 101</b>						
<b>Objective</b>	<b>Number</b>	<b>Action</b>	<b>Location</b>	<b>Jurisdiction</b>	<b>Target Date</b>	<b>Status</b>
<b>A. Fuels Mitigation</b>  Manage landscape vegetation to promote the return of fire resilient species and lower vegetation densities.	<b>SI-1</b>	From south of Park Vista Road and Liberty Canyon Road to the State Park property line – Thin out non-natives and dead material on the east side of the road to the terminus of the unmaintained dirt road at the south end of Patrick Henry Road. Homeowners to maintain or remove palms and other non-natives	Liberty Canyon Road	Private		
	<b>SI-2</b>	Work with homeowners along Oak Summit Road to remove or maintain non-native trees and cypress within the Home Ignition Zones and along roadways. Maintain the fuel break in the lighter fuels up to the concrete drainage above the homes. The street has issues with junipers, oleanders, wood fencing, unclean roofs, poor defensible space, and Mexican Feather grass	Oak Summit Road	Private		

<b>Recommendations – South 101</b>						
<b>Objective</b>	<b>Number</b>	<b>Action</b>	<b>Location</b>	<b>Jurisdiction</b>	<b>Target Date</b>	<b>Status</b>
	<b>SI-3 &amp; SI-4</b>	Work with residents to improve defensible space behind the structures on Jim Bowie and Provident Roads. Focus on removal of non-native trees. Look to partner and build off the existing fuel break on City of Calabasas. Extend the fuel break from Provident to Liberty Canyon Road	Jim Bowie Road	Private, City of Calabasas		
	<b>SI-5</b>	Work with MRCA to maintain and extend the fuel break from Agoura Road to the structures along Defender Drive	Defender Drive (north)	MRCA, Private		
	<b>SI-6</b>	Poor clearance (topography limits the easy development of defensible space). Assist homeowners to create adequate separation from the wildland fuels along Defender Drive	Defender Drive (south)	Private		
	<b>SI-7</b>	Work with MRCA to increase the width of the fuel break above Hydepark Drive. At a minimum remove the non-native pines and eucalyptus above the roads end	Hydepark Drive	MRCA, Private		
	<b>SI-8</b>	Look for opportunities to work from Calle Robleda debris basin east to thin the fuels south of the structures. Work with homeowners to remove non-native species within their defensible space zone.	Calle Robleda (east)	Private		

<b>Recommendations – South 101</b>						
<b>Objective</b>	<b>Number</b>	<b>Action</b>	<b>Location</b>	<b>Jurisdiction</b>	<b>Target Date</b>	<b>Status</b>
	<b>SI-9</b>	Thin fuels between Robleda Debris Basin west behind the structures to the dirt road portion of Renee Drive. Use Renee Drive as the southern boundary and work between the road and the structures. Access could be made off Canyon Way also	Calle Robleda (west)	Private		
	<b>SI-10</b>	Thin fuels between the end of Vejar Drive at the disc golf course along what appears to be an old roadbed to Reene Drive.	Vejar Drive	Private		
	<b>SI-11</b>	Investigate grazing opportunities to work with MRCA and private landowners from the trailhead at Cornell Road east towards Vejas Drive, using an existing roadbed as the southern boundary.	Cornell Road Grazing	MRCA, Private		
	<b>SI-12</b>	Establish NO PARKING ON RED FLAG WEATHER DAYS for Canyon Way and the one-way portion of Laura LaPlante Roads	Canyon Way Parking Restrictions	City		
	<b>SI-13</b>	Encourage residents to remove, thin and maintain non-native vegetation with the potential to propagate fire spread (pines, cypress, juniper, eucalyptus. Reverence LACO Fire Fuel Modification Plant List	Area-wide	Private		

**Table 20. Recommended Actions for the areas west of Kanan Road**

<b>Recommendations – Kanan West</b>						
<b>Objective</b>	<b>Number</b>	<b>Action</b>	<b>Location</b>	<b>Jurisdiction</b>	<b>Target Date</b>	<b>Status</b>
<p><b>A. Fuels Mitigation</b></p> <p>Manage landscape vegetation to promote the return of fire resilient species and lower vegetation densities.</p>	<b>KW-1</b>	Remove <i>Acacia redolens</i> from the perimeter of Forest Cove Park. Chip in place to maintain ground cover. Although chips are flammable, they are less so than the vegetation. Maintain irrigation infrastructure as part of overall landscape management.	Forest Cover Park	City		
	<b>KW-2</b>	Thin and/or remove pines from the perimeter of the condominium complex. Start at tennis court and work to Forest Park Cove Road. Remove dead and dying pines and jackpot of dead <i>Acacia redolens</i> .	Strawberry Hills Rd	Private		
	<b>KW-3</b>	Maintain the existing fuel break around Strawberry Hill. Attempt to improve the separation on the east side near Meadow Vista Way. Work within the oak stand to reduce surface fuels and dead/down material. Retain the oak overstory. Work with residents to remove/thin/maintain non-native trees on their property.	Strawberry Hill Fuel Break	Private		
	<b>KW-4</b>	Assure that the utility road above Rolling Ridge Road is maintained to a level to support type 3 engines. Access the road from Ridgebrook Drive at the Las Virgenes Water District water tank.	Rolling Ridge Drive	Las Virgenes Water District. City, LACO Fire		

<b>Recommendations – Kanan West</b>						
<b>Objective</b>	<b>Number</b>	<b>Action</b>	<b>Location</b>	<b>Jurisdiction</b>	<b>Target Date</b>	<b>Status</b>
	<b>KW-5</b>	Work with homeowners to remove/thin the density of the pines at the end of Eastvale Court.	Eastvale Court	Private		
	<b>KW-6</b>	Rehab vegetation in open space off Reyes Adobe Road, south of the elementary school. Remove dead and non-native vegetation and lift the oak canopy off the surface. Chip material in place.	Reyes Adobe (north)	City, Private		
	<b>KW-7</b>	Remove cape honeysuckle, rosemary, brush poppy, and bottle brush ornamental vegetation along the roadway. Reference guidelines found in LACO Plant Selection Guide – Fuel Modification Plant List.	Ridgeway Drive	Private, City		
	<b>KW-8</b>	Work with residents/HOA to remove pines/palms/eucalyptus between Imbler Court and Braemar Court.	Imbler Court, Braemar Court	City		
	<b>KW-9</b>	Maintain the drainage along Shadycreek Drive (Medea Creek). Remove dead material and non-native palms and eucalyptus. Chip material in place.	Shady Creek Drive	City		
	<b>KW-10</b>	Work with LACO Fire concerning the feasibility of developing a prescribed fire unit/grazing unit utilizing existing utility roads	Lindero Canyon Road, Woodbrook Drive	Rancho Simi Recreation and Parks District, City, Las Virgenes Water District, LACO Fire		

<b>Recommendations – Kanan West</b>						
<b>Objective</b>	<b>Number</b>	<b>Action</b>	<b>Location</b>	<b>Jurisdiction</b>	<b>Target Date</b>	<b>Status</b>
		between Lindero Canyon Road and Woodbrook Drive. This would be a complex project involving 225 acres and multiple ownerships.				

**Table 21. Recommended Actions for the areas east of Kanan Road.**

<b>Recommendations – Kanan East</b>						
<b>Objective</b>	<b>Number</b>	<b>Action</b>	<b>Location</b>	<b>Jurisdiction</b>	<b>Target Date</b>	<b>Status</b>
<b>B. Fuels Mitigation</b>  Manage landscape vegetation to promote the return of fire resilient species and lower vegetation densities.	<b>KE-1</b>	Thin pines behind the high-density housing at the dead end.	Argos Street	Private		
	<b>KE-2</b>	Remove non-natives and maintain a 3’ clearance along the walkways between Chumash Park and Kanan.	Medea Creek Trail	City		
	<b>KE-3</b>	Maintaining the dirt road to a standard to allow for type 3 engine utilization from Thousand Oaks Blvd to Fountain Place.	Agoura High	City		
	<b>KE-4</b>	Work with property owners/HOAs to maintain and improve the fuelbreak behind the structures along Carell Avenue and Eagleton Streets. Focus on thinning pines and other non-natives to minimize potential	Carell Ave, Eagleton Street	Private, Santa Monica Mountains Conservancy		

<b>Recommendations – Kanan East</b>						
<b>Objective</b>	<b>Number</b>	<b>Action</b>	<b>Location</b>	<b>Jurisdiction</b>	<b>Target Date</b>	<b>Status</b>
		ember cast from torching of ornamental trees.				
	<b>KE-5</b>	Work with residents to remove, thin, or maintained non-native trees to mitigate torching potential and ember cast.	Quaint Street, Banfield Drive	Private		
	<b>KE-6</b>	Work with SMMC to evaluate if grazing is an option for areas east of Carell and Eagleton Roads to the ridgeline. Utilize existing road surfaces as unit boundaries. Exclude areas where steep slopes may lead to erosion issues.	Carell Grazing	Private, Santa Monica Mountains Conservancy		
	<b>KE-7</b>	Work with the property owners to assure that roadside pepper trees between Chesebro Road and Colony Drive are maintained and limbed so that the branches are off the ground surface.	Ridgeway Drive	Private		
	<b>KE-8</b>	Cut back vegetation that is encroaching on the road prism to allow for access to emergency responders. Assure 14' vertical clearance from the road surface. Many issues with driveway clearance and gate widths/entry radius which could limit access by type 1 engines.	Fairview Road (private)	Private		

<b>Recommendations – Kanan East</b>						
<b>Objective</b>	<b>Number</b>	<b>Action</b>	<b>Location</b>	<b>Jurisdiction</b>	<b>Target Date</b>	<b>Status</b>
	<b>KE-9</b>	Road surface needs repair to facilitate ease of access during emergency situations.	Fairview Road (private)	Private		
	<b>KE-10</b>	Work with the resident to remove the roadside wood fencing	Fairview Road (private)	Private		
	<b>KE-11</b>	Driveway to multiple properties along Colony Drive need to assure adequate vertical clearance for the driveway accessing the properties. Remove/thin or maintain the non-native pines.	Colony Drive	Private		
	<b>KE-12</b>	Work with the homeowners to remove undesirable shrub species including junipers, rosemary, oleander, plumbago. Reference LACO Fuel Modification Plant List	Colony Drive	Private		
	<b>KE-13</b>	Clear the many electrical drops to residences which are interlaced with vegetation creating a potential for arcing during times of high winds. Areas most in need include Chesebro Road, Colony Drive, Fairview Drive, Foothill Road.	Area-wide	Private, SCE		
	<b>KE-14</b>	Work with the local equestrian community to develop a plan to evacuate the many horses maintained at the properties on the	Area-wide	Private, City, American Humane Society		

<b>Recommendations – Kanan East</b>						
<b>Objective</b>	<b>Number</b>	<b>Action</b>	<b>Location</b>	<b>Jurisdiction</b>	<b>Target Date</b>	<b>Status</b>
		east side of the Planning Unit. Leverage knowledge from local Equestrian Centers.				
	<b>KE-15</b>	Work to develop road associations that can serve as a funding and coordination mechanism to address the condition of private road within the Planning Unit.	Area-wide	Private, City		
	<b>KE-16</b>	Provide standardized pool markers for residents that are willing to make their pools available as a static water source during wildfires.	Fairview Road (private)	City, Fire Dept		

# *Implementation & Monitoring*



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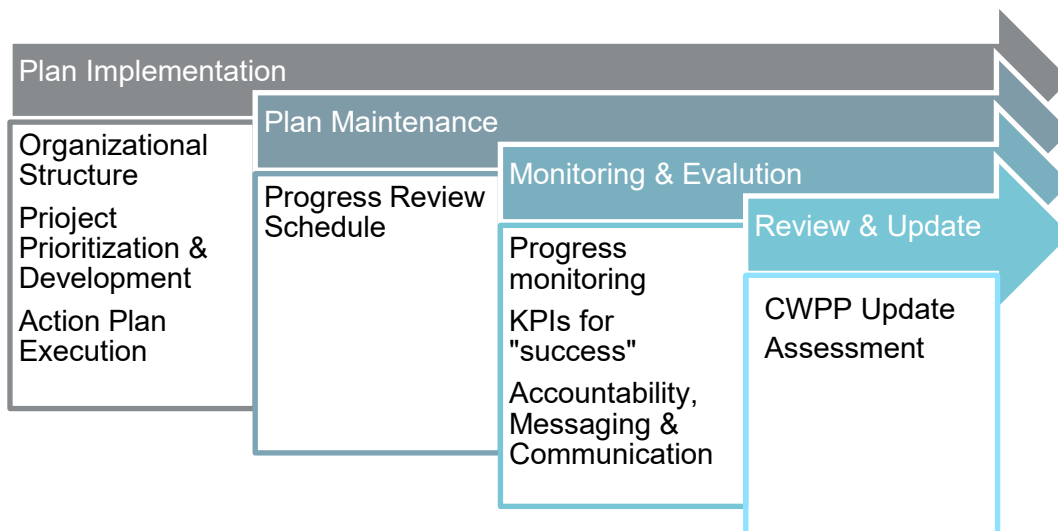
## 8.0 Implementation & Monitoring

A CWPP’s strength depends on its local relevance, the continued, collective action of stakeholders, and its ability to guide the implementation of a diverse set of projects leading to measurable change. The CWPP guides the community on wildfire risk mitigation activities which are based on input from stakeholders, current policy, and science and research. The plan’s utility does not end with its adoption, but continues and evolves through collaborative planning, implementing, monitoring and adapting strategies based on lessons learned. This chapter provides guidance on CWPP implementation and monitoring to accomplish the goals and objectives of the plan. This includes outlining how each aspect of the plan will be executed – responsible parties, timelines and associated funding sources – as well as roles of the designated CWPP management team. In addition, a successful plan establishes monitoring protocols and key performance indicators (KPIs) to evaluate the effectiveness of the plan in reducing wildfire risk at different levels of activity (e.g., project activity level, overall project level, and CWPP programmatic level).

### 8.1 OVERVIEW

Implementing the recommended actions in Section 7.0 and establishing a systematic and dynamic framework for monitoring & evaluating CWPP activities is foundational to achieving the overall goals and objectives identified in the CWPP. The implementation and monitoring strategy includes the following components:

- ❖ **Plan Implementation** describes how the CWPP actions will be operationalized, including a discussion on organizational structure of the CWPP management team (i.e., the convener, advisory committee, and committee membership), project prioritization, the project development process, and action plan execution.
- ❖ **Plan Maintenance** describes how the CWPP will be maintained and updated, including a discussion on annual and semi-annual meetings.
- ❖ **Monitoring and Evaluating** describes how the CWPP actions will be monitored for progress, the metrics used and means to verify successful and timely execution of actions (i.e., projects, programs and policies), the indicators and means to verify CWPP actions are achieving measurable results, and how these metrics are documented and communicated for accountability.
- ❖ **Review & Update** describes the methods by which the CWPP will be updated on a 5 to 10-year basis.



These guiding principles frame the approach for implementation and monitoring of the CWPP:

<i>Guiding Principles</i>	<i>Concepts</i>
<b>Collaborative</b>	<ul style="list-style-type: none"> <li>+ Support and encourage all participants to work together to advance wildfire resiliency</li> <li>+ Review feedback from a representative and balanced set of stakeholders (i.e., government agencies, private sector, non-profits, academia)</li> <li>+ Recognize that time is needed to build trust and understanding</li> <li>+ Be flexible, adaptable and responsive to changing needs as people and organizations respond to change</li> </ul>
<b>Participatory</b>	<ul style="list-style-type: none"> <li>+ Stakeholders must be provided with a variety of ongoing engagement opportunities</li> <li>+ An environment which facilitates the participation of different and diverse actors should be created</li> <li>+ Remove barriers to participation</li> </ul>
<b>Learning &amp; Feedback Mechanisms</b>	<ul style="list-style-type: none"> <li>+ Help all involved to listen to each other, explore new ideas, and apply information in ways that generate new solutions, methods, or opportunities</li> <li>+ Regularly evaluate new data and technology as well as changes in the risk landscape for their impact on CWPP goals, objectives, and actions</li> <li>+ Education, awareness and behavioral changes are culturally, socially and temporally dependent</li> <li>+ Lessons learned should provide feedback into future processes and work</li> </ul>
<b>Resiliency &amp; Patience</b>	<ul style="list-style-type: none"> <li>+ Recognize non-linearity and complexity, including tracking and capturing negative impacts, resistance, and unexpected outcomes</li> <li>+ Acknowledge that transformative change processes take time and often include backlash</li> </ul>
<b>Diversity</b>	<ul style="list-style-type: none"> <li>+ Equitably incorporate diverse people, voices, ideas, and information to lay the groundwork for quality outcomes.</li> <li>+ Foster the implementation of a diverse set of projects to achieve both social and technical needs for wildfire resiliency</li> <li>+ Use quantitative and qualitative approaches for measuring success</li> <li>+ Assess the value of projects through a variety of lenses (social, technical, administrative, environmental, life-safety, property protection)</li> </ul>

## 8.2 PLAN IMPLEMENTATION

This section describes considerations for operationalizing the CWPP including organizational structure, project prioritization and development process, and action plan execution.

## 8.2.1 Organizational Structure

### 8.2.1.1 Convener – City of Agoura Hills

The City of Agoura Hills will serve as the Convener overseeing the CWPP's implementation and maintenance, as well as being the chair of the Advisory Committee described below. The Convener's key roles are:

- + Coordinate Advisory Committee meeting dates, times, locations, agendas, and member notification.
- + Document decisions and outcomes of Advisory Committee meetings.
- + Serve as a communication conduit between the Committee and other key stakeholders (e.g., general public, land resource managers, utilities, Caltrans, other federal/state/local agencies, businesses).
- + Serve as supervisor of the project prioritization process.

### 8.2.1.2 Advisory Committee

The Agency Working Group for the CWPP will become the Advisory Committee and will oversee the implementation, management and maintenance of the Plan. Refer to Section 2.2.2 for a list of Agency Working Group members. Other key stakeholders can be added, either as permanent or ad hoc members. Additional roles and responsibilities of the Committee include:

- + Establishing a schedule for periodic review and updating of the CWPP.
- + Developing and coordinating ad hoc and/or standing committees as needed.
- + Designing or supporting the design of projects based on the recommended actions identified in Section 7.0
- + Identifying funding sources and supporting the coordination and preparation of grant applications
- + Recommending and prioritizing funding of wildfire risk reduction projects.
- + Monitoring and tracking the progress of existing, planned and proposed projects
- + Documenting and disseminating successes and lessons learned
- + Maintaining a CWPP project implementation dashboard and/or other forms of public-facing communications
- + Evaluating and updating the CWPP in accordance with the prescribed maintenance schedule.

## 8.2.2 Project Development and Prioritization Process

In accordance with the Healthy Forests Restoration Act (HFRA), the Advisory Committee will establish community hazard reduction priorities to determine the order of project implementation. However, as this CWPP recognizes a broad range of actions that go beyond the minimum of fuel reduction initiatives required by the HFRA, the Committee will establish an evaluation and prioritization system. This system will ensure that a balanced set of community-based wildfire resiliency projects at different scales are evaluated and ranked for implementation and scheduling. Below are the ten (10) different thematic areas identified in Section 7:

- A. Codes and Standards
- B. Fuels Mitigation
- C. Property Protection (Defensible Space)
- D. Property Protection (Structural Hardening)
- E. Wildfire Resiliency of Critical Infrastructure
- F. Public Notification and Communication
- G. Evacuation Planning & Preparedness
- H. Public Education & Awareness
- I. Community and Regional Partnerships, Collaboration and Coordination
- J. Emergency Response

To prioritize various actions, the Committee will identify a set of evaluation criteria based on primary and secondary considerations. The evaluation criteria should be shared with the public once determined. In general, life safety, followed by property protection, are considered primary criteria for fire safety and wildfire risk mitigation programs. Secondary considerations may include environmental protection, economic benefits, costs, duration, feasibility, technical quality, and others. Table 22 provides descriptions of potential primary and secondary criteria the Committee may consider as part of their evaluation process.

**Table 22. Description of potential project prioritization criteria.**

Criteria	Description
Sample Primary Criteria	1. Life Safety The primary goal of wildfire risk mitigation is to protect life safety of the public and first responders. As people continue to live in the WUI, life safety from wildfire threats is the foremost priority. Life safety consideration include not only loss of life and/or injury as a direct result of wildfire incidents, but also safety of residents during wildfire evacuations, loss of power, and other related impacts.
	2. Property Protection Buildings and critical infrastructure are often vulnerable to wildfire, particularly in the WUI. Mitigating the ignition and spread of wildfire is critical to limiting the loss of and damage to structures and critical facilities. Property loss and damage can devastate communities by displacing residents, disrupting business continuity and impairing local economies, and resulting in significant costs to re-build.
Sample Secondary Criteria	3. Environmental Protection One primary means of protecting the environment is mitigating the risk of wildfires that are accidentally initiated by human sources (e.g., electrical utility faults, dragging trailer chains). Environmental protection may also include evaluating wildfire mitigation projects to ensure that project activities are in balance with other environmental objectives, minimizing negative impacts to the environment and ecological systems and protecting critical environmental services.

Criteria	Description
4. Cost	Cost considerations may include total project implementation costs, cost burdens or pass-through costs to taxpayers, costs to local agencies to operate and maintain a project or program long-term, and costs associated with availability of personnel, equipment, and other resources. Cost considerations should also consider return on investment (ROI) estimates.
5. Technical Feasibility	Recommended actions may be evaluated for their practicality given available data and technologies, as well as the ability to verify the quality of technical systems or products.
6. Scientific / Engineering / Data Driven	Recommended actions may be evaluated for their basis in science, engineering or data-driven merit, which may be substantiated based on recognized consensus standards and/or industry-recognized peer-review processes.
7. Timeline	Recommended actions may be evaluated based on the time necessary to analyze, design, construct, implement, maintain and/or operate. Other considerations may include an anticipated return on investments and when outcomes can be expected to produce measurable results.
8. Scale	Recommended actions may be evaluated for the scale of application (e.g. citywide, local neighborhood) and who the primary beneficiaries of the project would be.

Because of the wide variety of relevant criteria to be synthesized for each action or project, the Committee should develop a simple priority ranking system to assist in the decision-making process. There should be a balance of projects prioritized to satisfy a range of secondary objectives, target audiences or beneficiaries and scales of application. The projects that are presented to the Committee may come from a variety of sources and focus on different aspects of wildfire risk and so may not be readily comparable to one another. Therefore, the project prioritization process needs to be flexible.

**8.2.3 Operationalizing the Action Plan**

Once the recommended actions are prioritized, the Committee will establish a project execution matrix building on the table provided in Section 7.0. The Action Plan table in Section 7.0 is designed to have a simple, high-level monitoring system built into it so it can serve as a starting point for operationalization. Individual actions are assigned a responsible individual, target completion date and status update.

The Action Plan table should be reviewed and updated annually. As new practices and projects are identified they can be added to this matrix.

**8.3 PLAN MAINTENANCE**

For the CWPP to be used to reduce wildfire hazards and risks it must reflect current wildfire risk, human development patterns, impacts of climate change, and needs of the community. Plan maintenance is critical so that it remains up to date and as useful as possible.

The Committee will be responsible for maintaining and updating the CWPP through a series of meetings. A sample outline of plan maintenance meetings is provided in Table 23.

**Table 23. Plan Maintenance Meeting Schedule**

<i>Semi-Annual Meeting</i>	<i>Annual Meeting</i>	<i>Five-Year Review</i>
Review current Action Plan	Update risk assessment data and findings (if needed)	Review Plan update questions
Identify new issues and needs	Discussion of methods of continued public engagement	Update Action Plan as necessary
Prioritize/reprioritize potential projects	Document and distribute successes and lessons learned	Update risk assessment data and findings

**8.3.1 Semi-Annual Meeting**

The Committee will meet on a semi-annual basis to:

- + Review existing Action Plan to determine status of recommendations and projects
- + Review and prioritize ongoing funding of wildfire risk reduction projects
- + Identify new issues that have emerged since the previous review meeting
- + Develop or support the development of specific projects based on the recommended actions
- + Prioritize potential wildfire mitigation projects
- + Identifying funding sources and supporting the coordination and preparation of grant applications
- + Identify and coordinate any ad hoc and/or standing committees
- + Monitor and track the progress of existing, planned and proposed projects
- + Document and disseminate successes and lessons learned

**8.3.2 Annual Meeting**

The Committee shall meet annually to review any necessary updates to the risk assessment data and findings, get updates on local CWPP planning efforts, discuss methods of continued public engagement, and document successes and lessons learned based on actions that were accomplished during the past year.

The Committee shall coordinate on the development and maintenance of a city-wide Wildfire Preparedness and Resilience Digital Dashboard to ensure that maps, data, mitigation projects and status of projects in the Plan are current and updated as appropriate. Following each annual meeting, a meeting summary should be published for public review.

**8.3.3 5-Year Review**

The Committee shall conduct a complete review of the CWPP at a minimum of 5-year intervals to ensure its continued relevance. Significant changes in policy, budget, or environmental conditions should trigger more frequent reviews.

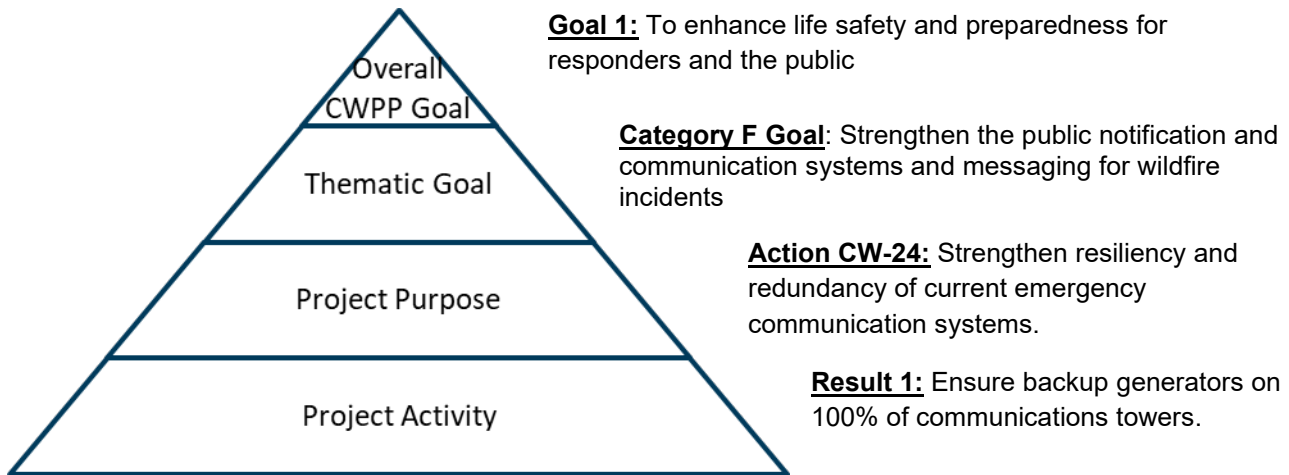
The review process allows participating parties to update accomplishments, consider new projects and evaluate the effectiveness of past actions across the Planning Area. See more detail in Section 8.5.

## 8.4 MONITORING & EVALUATION (M&E)

Monitoring and Evaluation (M&E) is a systematic process used in project- and program-management to track performance, assess progress, and ensure that objectives are met efficiently and effectively. It involves collecting, analyzing, and evaluating data to improve decision-making, accountability, and project or programmatic outcomes.

### 8.4.1 Overview

Effective wildfire risk mitigation programs require the ability to measure the level of success. This is done by identifying and measuring key performance indicators (KPIs) that measure outcomes at various CWPP programmatic scales – i.e., at the overall CWPP level, objective/thematic level, individual project level and project activity level. See Figure 73 for a graphical representation of the different levels, along with the associated objective at the different levels. For each level of objective, there will be at least as many KPIs as there are activities or tasks, results, purposes and goals at the respective level.



**Figure 73. Schematic representation of the different CWPP programmatic levels with sample goals and objectives identified at each level**

There are several approaches to developing KPIs. Ideally, the indicators will include a mixture of measures that each serve one of the following purposes:

- (1) Monitoring and Tracking Progress – Indicators that verify the completion status of the program, project, task or activity
- (2) Measuring Effectiveness – Indicators that provide a measure or proxy for desired outcome or result

**Framing Questions for M&E**

- + What is the measure of improvement (indicators) for each action item?
- + Who is the target group for the improvement?
- + Where is the improvement intended to take place?
- + What is the intended change in terms of quality and/or quantity?
- + When is the improvement intended to take place?

Some sample framing questions for M&E are provided in the callout box. For example, indicators can measure the quantity and/or quality of what a project intends to achieve, and in what specific period the improvements are intended to take place (i.e., employing the SMART concept – specific, measurable, attainable, relevant and time-bound – for goal setting <sup>11</sup>). To be able to determine if improvements have taken place, it is necessary to have baseline data for comparison. Note: Often it is challenging to develop KPIs that directly correlate the effectiveness of an individual project in achieving overall CWPP programmatic goals, due to the complexity and influence of numerous external factors.



**Figure 74. SMART concept for informing the development of indicators at various programmatic scales of the CWPP action plan.**

Note: As KPIs are specific to individual projects and overall programs, the following sections provide general guidance to help inform the development of KPIs for both aspects of M&E, and what they might look like at various project and programmatic levels through sample templates and examples.

**8.4.2 Monitoring & Tracking Progress**

Indicators for monitoring and tracking the progress of the overall CWPP program as well as progress at the individual project level should follow common project management practices. These are measurable values used to assess progress, efficiency, and impact during project execution. They help in tracking whether a project is on course and meeting its objectives. Indicators can be categorized into different types and forms of measurement such as the following:

<sup>11</sup> Doran, G.T. There’s a SMART way to write management’s goals and objectives. *Management Review* 70, 35-36 (1981).

#### + Process indicators

- Budget utilization (%) – Tracks the percentage of the budget spent versus the total budget.
- Project or Task completion rate (%) – Percentage of projects or tasks completed versus planned.
- Timeliness of Project or Task completion (%) – Measures how many projects or activities are completed on time.
- Stakeholder engagement levels (# of meetings, feedback received) – Tracks collaboration and participation of stakeholders.

#### + Output indicators

- Number of deliverables completed (#) – Tracks tangible outputs (e.g., acres treated, reports, trainings, software developed).
- Training sessions conducted (#) – Tracks capacity-building initiatives.

#### 8.4.2.1 CWPP Programmatic Level

Through the operationalization of the action plan process described above, the Advisory Committee shall develop an overall CWPP programmatic timeline for all projects, programs and policies that will be undertaken in the next 5 years. This will serve as the primary monitoring and tracking tool for CWPP progress and completion of recommended actions. Indicators for progress updates and/or project completion will vary depending on the nature of the project but can be based on the deliverables identified in the scope of work for each project (e.g., monthly progress reports, interim and final reports).

Sample progress monitoring metrics provided in this section can be tailored to reflect CWPP programmatic level progress. The Advisory Committee should consider coordinating with GIS partners to include the programmatic level progress indicators on a CWPP data dashboard for accountability and reporting out to the general public.

#### 8.4.2.2 Project Level

At the project level, indicators for monitoring project processes should be derived to reflect deliverables which are part of the scope of work and project schedule.

### 8.4.3 Measuring Effectiveness

Measuring the effectiveness of the overall CWPP and associated projects in achieving impact requires a structured approach using KPIs, data collection, stakeholder feedback, cost-effectiveness analysis, and sustainability assessments. One major challenge of measuring impact is that changes may not be observable for years or decades after project implementation and/or that impacts may be intangible, such as human behavioral changes or broad-scale changes in public awareness.

To determine whether a CWPP program or individual project has successfully achieved its intent, it is crucial to use a combination of qualitative and quantitative assessment methods and indicators. The specific indicators will depend on the goals & objectives identified at each objective level. Refer to Figure 73. In addition, each indicator should include some means of verification.

Below are some sample indicators and suggested means of verification:

#### + Outcome Indicators – These indicators measure the short- to medium-term effects of project implementation.

- Improvement in resident skills or knowledge about wildfire preparedness & resiliency (%) – Measured through assessments or surveys.

- **Satisfaction rate of implemented programs (%)** – Assessed through surveys and feedback from beneficiaries.
- Adoption rate of new processes, technologies, codes, standards, and/or policies (%) – Tracks how many users embrace project interventions.
- + **Impact Indicators** – These indicators measure the long-term changes brought about by the project.
  - **Reduction in high hazard or high risk areas (%)** – Measures reduction in high fire severity or high risk areas (by acres and by % change)
  - **Increase in number of hardened homes with compliant defensible space (#)** – Quantify the number of homes with compliant home hardening and defensible space features.
  - **Reduction in number of human-caused ignitions (#)** – Track the annual ignition rates for various forms of ignitions by human and natural sources.
  - **Policy changes influenced (#)** – Tracks whether the project led to changes in wildfire codes, standards, local ordinances or other policies.
  - **CWPP Database Traffic (#)** – Track the number of visitors engaging with the City of Agoura Hills website, CWPP data dashboard and other online wildfire resiliency resources in the region.
  - **Number of Firewise Communities and/or Fire Safe Councils (#)** – Track the number of new communities or councils formed, the formation of other wildfire resiliency community groups, and/or an increase in the number of participants in existing groups.

#### 8.4.3.1 *Sample M & E Templates*

Monitoring, evaluation and learning are key aspects at all levels of the CWPP program to effect change and lead to sustainable wildfire resiliency. The Advisory Committee should integrate these concepts into every grant proposal, project RFP and/or project scope of work. At the project level, M&E indicators should be explicit activities that the project team develops to measure project progress as well as medium to long-term measures of project impact effectiveness. The Committee can adopt these medium-to-long term impact indicators for M&E of the overall CWPP program.

The following matrix provides an example of M&E indicators to verify that a project meets its intent by leading to changes in wildfire risk reduction or resiliency. This matrix is intended to serve as a roadmap for continued success after completion of the project activities, and how the impact of the project can be evaluated against CWPP programmatic level goals and objectives.

CWPP Program Objective(s)	Indicators	Means of Verification
<p>Overall Goal</p>	<p><b>Goal 1:</b> To enhance life safety and preparedness for first responders and the public</p> <ul style="list-style-type: none"> <li>• Increased number of hardened homes with compliant defensible space (#)</li> <li>• Reduced high hazard or high risk areas (%)</li> <li>• Reduced wildfire impacts on life, property, environment and critical infrastructure</li> <li>• Reduced number of catastrophic wildfires</li> <li>• Reduced number of human-caused wildfire ignitions</li> </ul>	<ul style="list-style-type: none"> <li>• Adoption of CWPP</li> <li>• Implementation of x% of CWPP Action Plan projects by Year 1; x% by Year 2; x% by Year 5.</li> <li>• Annual statistics and trends on the # of human-caused wildfire ignitions, # of catastrophic wildfires, # of casualties, # of loss/damaged structures, # loss/damaged critical infrastructure</li> <li>• Reduce high hazard areas by x% and # acres by Year 5</li> <li>• Reduce high risk areas by x% and # acres by Year 5</li> <li>• Achieve x# hardened homes with compliant d-space by Year 2; x#, by Year 5</li> </ul>

CWPP Program Objective(s)	Indicators	Means of Verification
<p>Project Objective / Thematic Category</p>	<p><b>Category F – Public Notification and Communication:</b> Strengthen the public notification and communication systems and messaging for wildfire incidents</p>	<ul style="list-style-type: none"> <li>• Expansion of cell tower grid, associated equipment, power supplies and other technologies</li> <li>• Expansion of user base of the local radio system and other forms of distributed communication technologies (e.g., NOAA weather transceivers, HAM/GMRS radios)</li> <li>• Alignment of public emergency communication and messaging operations and plans. (e.g., expansion of use of Genasys and Nixle)</li> <li>• Agency coordination on training/drills and evaluation/adoption of newly available communication technologies.</li> </ul>

CWPP Program Objective(s)	Indicators	Means of Verification
<p>Project Purpose</p> <p><b>Action CW-34:</b> Strengthen resiliency and redundancy of current emergency communication systems.</p>	<ul style="list-style-type: none"> <li>• Identification of “dead zones” within Planning Area</li> <li>• Evaluation of cell tower and repeater vulnerabilities to wildfire exposure or loss of power during a wildfire incident</li> <li>• Design of new cell tower and repeater locations in spatial optimized locations for coverage and costs</li> <li>• Installation of x# of cell towers and x# of repeaters to achieve 90% redundant coverage.</li> <li>• Build relationships and collaborate with providers to maintain generators and power backups.</li> </ul>	<ul style="list-style-type: none"> <li>• “Dead zone” mapping and improvement plan with prioritizations</li> <li>• Vegetation management plan for cell towers. Maintenance schedule and completed task orders</li> <li>• Purchase orders and invoices for installations</li> <li>• Memorandum of understanding for providers of generators and power backups.</li> </ul>
<p>Specific Project Results</p>	<ul style="list-style-type: none"> <li>• Specified by Project Team</li> </ul>	<ul style="list-style-type: none"> <li>• Deliverables specified in scope of work / contract</li> </ul>

**8.4.3.2 Special Topic – M & E for Fuel Treatments**

Monitoring of fuel treatments is the only way to know if activities on the ground are resulting in a more fire resilient landscape and increased safety for people and property. Committing to a monitoring plan can lead to a more effective program by providing an understanding of how implemented actions affect wildland fire and protect values at risk. In general, federal and state agencies have their own requirements for monitoring fuel treatment effectiveness and changes to the existing environment because of implemented actions. The recommendations for monitoring presented below can be used by individuals and groups that do not have specific internal monitoring requirements.

Monitoring information should be used to:

- + Review the efficacy and cost effectiveness of a treatment.
- + Identify if modifications to treatment prescriptions are required.
- + Collect information regarding species response to treatments.
- + Document outcomes on what happens when a wildfire moves through a treatment.

The Colorado Forest Restoration Institute has developed simplified guidelines for plot monitoring which can be applied to any treatment unit, but which are most appropriate when applied to treatments which have some

spatial extent, <https://cfri.colostate.edu/wp-content/uploads/sites/22/2018/10/2018-Simple-Plot-Protocol.pdf>. A method to augment plot monitoring involves the establishment of photo points to evaluate changes to the landscape over time. A guide to photo point monitoring can be found at <https://pacifieducationinstitute.org/wp-content/uploads/2020/08/1.-Photo-Point-Monitoring.pdf>.

### 8.5 REVIEW & UPDATE

The wildfire environment of the Planning Area is dynamic and constantly evolving. To keep the CWPP relevant and accurate, a complete Plan update should be set at five to ten year intervals. This interval is also consistent with the requirements of the Disaster Mitigation Act of 2000 applicable to local hazard mitigation plans. During the Plan updates, certain questions should be asked to determine what actions are necessary to update the Plan. Table 23 provides a sample list of questions that can be used by the Committee to update the CWPP.

**Table 24. Five-Year Plan Review Questions  
CWPP Review Questions**

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**Background Data – Section 1**

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Has the wildfire protection framework at the local, state, or federal level changed?  
 Have responsibilities of partner agencies changed?  
 Has recent fire occurrence been accurately reflected in the Plan? If not, are these occurrences significant?

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**Risk Assessment Data – Section 2**

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Has the wildfire risk across the Planning Area changed? If so, has the risk changed significantly?  
 Have new tools emerged to better evaluate the wildfire hazard and/or risk?  
 Have communities in or near the Planning Area developed plans and implemented activities that might change the overall risk for the Planning Area?

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**Outreach Data – Section 3**

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Are there new stakeholders that should be brought to the table?

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**Action Plan Data – Section 4**

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Do the goals, objectives, and actions of the CWPP adequately address current or expected conditions?  
 Do the goals, objectives, and actions of the CWPP still accurately reflect the values and needs of the community?  
 Have actions been effectively implemented?  
 Are there new funding sources available to address the wildfire hazards, risks and vulnerabilities?  
 Are there actions that should be added or removed from the Action Plan matrix?

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**Plan Implementation Data – Section 5**

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Are the structures and methods established for implementing the Plan still relevant and effective?

Have there been any lessons learned from wildfires in other parts of the state that are applicable to the Planning Area?

Has implementation occurred as anticipated?

What obstacles and challenges have arisen that have prevented or delayed implementation? (e.g., legal, financial, institutional)

What opportunities have arisen that could accelerate implementation?

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## Appendix A – Glossary

The following provides terms found in or relating to this plan (see more at <http://www.nwccg.gov/glossary>):

- + **1-Hour Timelag Fuels (a.k.a., one-hour fuels):** Fuels consisting of dead herbaceous plants and roundwood less than about ¼ inch (6.4 mm) in diameter. Also included is the uppermost layer of needles or leaves on the forest floor.
- + **10-Hour Timelag Fuels (a.k.a. ten-hour fuels):** Dead fuels consisting of roundwood ¼ to 1 inch (0.6 to 2.5 cm) in diameter and, very roughly, the layer of litter extending from immediately below the surface to ¾ inch (1.9 cm) below the surface.
- + **100-Hour Timelag Fuels (a.k.a., hundred-hour fuels):** Dead fuels consisting of roundwood in the size range of 1 to 3 inches (2.5 to 7.6 cm) in diameter and very roughly the layer of litter extending from approximately ¾ of an inch (1.9 cm) to 4 inches (10 cm) below the surface.
- + **1,000-Hour Timelag Fuels (a.k.a., thousand-hour fuels):** Dead fuels consisting of roundwood 3 to 8 inches in diameter and the layer of the forest floor more than 4 inches below the surface.
- + **Active Crown Fire:** A fire in which a solid flame develops in the crowns of trees, but the surface and crown phases advance as a linked unit dependent on each other.
- + **Aspect:** Direction a slope faces.
- + **Canopy Spacing:** The distance from the edge of one tree canopy to another. Crown spacing varies from open (with 10 feet or more of space between tree canopies) to closed (where trees may be growing in very close proximity with little space between them).
- + **Crown Fire:** A fire that advances from top to top of trees or shrubs independently of a surface fire. Crown fires may be “running” or “dependent” to classify the degree of independence from the surface fire.
- + **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.
- + **Direct Attack:** A method of fire suppression where actions are taken directly along the fire’s edge. In a direct attack, burning fuel is treated directly, by wetting, smothering, or chemically quenching the fire or by physically separating burning from unburned fuel.
- + **Fire Apparatus Access Roads -** The means for emergency apparatus to access a facility or structure for emergency purposes. Roadways must extend to within 150 feet of all portions of the exterior of the first floor of any structure and must meet specified criteria for width, pavement characteristics, roadway gradient, turning radius, etc. Fire apparatus access roads are also referred to as fire lanes.
- + **Fire Behavior:** The manner in which a fire reacts to the influences of fuel, weather, and topography.
- + **Fire Frequency:** Temporal fire occurrence described as a number of fires occurring within a defined area within a given time period.
- + **Fire Intensity:** A general term relating to the heat energy released by a fire.
- + **Fire Lane Identification -** Signs or curb markings that allow fire apparatus access roads to be readily recognized so that they will remain unobstructed and available for emergency use at all times.
- + **Fire Potential:** The likelihood of a wildland fire event measured in terms of anticipated occurrence of fire(s) and management’s capability to respond. Fire potential is influenced by a sum of factors that includes fuel conditions (fuel dryness and/or other inputs), ignition triggers, significant weather triggers, and resource capability.

- + **Fire Regime:** The characterization of fire's role in a particular ecosystem, usually characteristic of particular vegetation and climatic regime, and typically a combination of fire return interval and fire intensity (i.e., high frequency, low intensity/low frequency, high intensity).
- + **Fire Return Interval:** The length of time between fires on a particular area of land
- + **Fire Weather:** Weather conditions that influence fire ignition, behavior, and suppression.
- + **Flame Length:** The distance from the base to the tip of the flaming front. Flame length is directly correlated with fire intensity.
- + **Flaming Front:** The zone of a moving fire where 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.
- + **Fuel:** Any combustible material, which includes but is not limited to living or dead vegetation, human-built structures, and chemicals that will ignite and burn.
- + **Fuelbed:** 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.
- + **Fuel Loading:** The amount of fuel present expressed quantitatively in terms of weight of fuel per unit area.
- + **Fuel Model:** Mathematical descriptions of fuel properties (e.g., fuel load and fuel depth) that are used as inputs to calculations of fire danger indices and fire behavior potential.
- + **Fuel Moisture Content:** The quantity of moisture in fuels expressed as a percentage of the weight when thoroughly dried at 212 degrees Fahrenheit.
- + **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.
- + **Gates and Barriers** - Devices that restrict pedestrian and vehicle ingress and egress to and from a facility.
- + **Gate and Barrier Locks** - Devices that are installed on gates and barriers to secure a property or facility.
- + **Goals:** A goal is a broad statement of what you wish to accomplish, an indication of program intentions.
- + **Ground Fire:** Fire that consumes the organic material beneath the surface litter ground, such as a peat fire.
- + **Hose Pull** - The effective distance (150 feet is standard) that firefighters can drag a hose from fire apparatus to attack a fire. Hose pull is measured along a simulated path of travel accounting for obstructions and not "as the crow flies."
- + **Intensity:** The level of heat radiated from the active flaming front of a fire, measured in British thermal units (BTUs) per foot.
- + **Ladder Fuels:** Fuels that provide vertical continuity between strata, thereby allowing fire to carry from surface fuels into the crowns of trees or shrubs with relative ease. Ladder fuels help initiate and ensure the continuation of crowning.
- + **Local Responsibility Area (LRA)** – Land where a city/county has primary financial responsibility for the prevention and suppression of wildland fires. LRA land is generally located within city boundaries.
- + **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.

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- + **Mid-flame Windspeed:** The speed of the wind measured at the midpoint of the flames, considered to be most representative of the speed of the wind that is affecting fire behavior.
  - + **Objectives:** They contribute to the fulfillment of specified goals and are measurable, defined, and specific.
  - + **Passive Crown Fire:** Also called torching or candling. A fire in the crowns of trees in which single trees or groups of trees torch, ignited by the passing front of the fire.
  - + **Safety Zone:** A preplanned area of sufficient size and suitable location in the wildland expected to prevent injury to fire personnel without using fire shelters.
  - + **Red Flag Warning:** Term used by fire weather forecasters to alert forecast users to an ongoing or imminent critical fire weather pattern.
  - + **Riparian:** Situated or taking place along or near the bank of a watercourse.
  - + **Spotting:** Refers to the 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.
  - + **State Responsibility Area (SRA)** – Land where the State of California (i.e. CAL FIRE) has primary financial responsibility for the prevention and suppression of wildland fires. All SRA land is located within County unincorporated areas; SRA does not include lands within city boundaries or in federal ownership
  - + **Strategy:** The general plan or direction selected to accomplish incident objectives.
  - + **Surface Fire:** Fire that burns loose debris on the surface, which includes dead branches, leaves, and low vegetation.
  - + **Surface Fuels:** Fuels lying on or near the surface of the ground, consisting of leaf and needle litter, dead branch material, downed logs, bark, tree cones, and low stature living plants.
  - + **Topography:** Referred to as “terrain.” The term also refers to parameters of the “lay of the land” that influence fire behavior and spread. Key elements are slope (in percent), aspect (the direction a slope faces), elevation, and specific terrain features such as canyons, saddles, “chimneys,” and chutes.
  - + **Understory:** Term for the area of a forest which grows at the lowest height level below the forest canopy. Plants in the understory consist of a mixture of seedlings and saplings of canopy trees together with understory shrubs and herbs.
  - + **Values at Risk:** People, property, ecological elements, and other human and other intrinsic values within the City. Values at Risk are identified by stakeholders as important to the way of life in the City and are particularly susceptible to damage from undesirable fire outcomes.
  - + **Very High Fire Hazard Severity Zone (VHFHSZ)** – A designated area in which the type and condition of vegetation, topography, fire history, and other relevant factors increase the possibility of uncontrollable wildland fire. Structures within a VHFHSZ require special construction features to protect against wildfire hazards; please consult with the local building department and refer to CBC Chapter 7A for specific requirements
  - + **Wildland Fire Environment:** The surrounding conditions, influences, and modifying forces of fuels, topography, and weather that determine wildfire behavior.
  - + **Wildfire Risk Area** – Land that is covered with vegetation, which is so situated or is of such an inaccessible location that a fire originating upon it would present an abnormally difficult job of suppression or would result in great or unusual damage through fire, or such areas designated by the fire code official. For purposes of this document, Wildfire Risk Area includes Very High Fire Hazard Severity Zones (see above), Wildland-Urban Interfaces (WUI), and similarly hazardous areas
-

## Appendix B – Firefighting Capacity & Fire Behavior

Evaluating the effectiveness of firefighting resources against wildfire is a complex matter. On the same wildland fire there are locations where firefighters can be successful in defending structures or securing portions of the fire’s perimeter, while at the same moment firefighters elsewhere on the fire are being over matched by the intensity and rate of spread of the fire. Elements such as the alignment of the fire spread (head or flanking fire versus backing fire) can significantly change the fireline intensity faced by firefighters. Other elements which can influence firefighter success include access, topography, the ability to secure a safe operational space, and the availability of aerial resources (including based on wind conditions) to support ground operations.

A common standard used to evaluate the potential of firefighting resources to succeed on the fire ground are fire suppression interpretations based on flame length found in the Wildland Fire Incident Management Field Guide (NWCG, 2014). Generally, these interpretations evaluate what type of firefighting resources would be required to successfully suppress the head of a wildland fire based on the observed fire length (Appendix Table B-1). Since flame lengths can be directly related to potential firefighting success, these breakpoints are used for classifying modeled fire behavior throughout the CWPP.

**Appendix Table B-1. Fire Behavior Characteristics and Suppression Capabilities**

Flame Lengths (feet)	Fireline Intensity (BTU*/foot/Second)	Interpretation
0-4	0-100	Fires can be generally attacked at the head or flanks by persons using hand tools. Handlines should hold the fire.
4-8	100-500	Fires are too intense for direct attack at the head of the fire by persons with hand tools. Handlines cannot be relied upon to hold the fire. Equipment such as dozers, engines and retardant aircraft can be effective.
8-11	500-1,000	Fires may present serious control problems – torching out, crowning and spotting. Control efforts at the head of the fire will probably be ineffective.
11+	1,000+	Crowning, spotting and major fire runs are common. Control efforts at the head of the fire are ineffective.

**Caution:** This is not a guide to personnel safety; fires can be dangerous at any level of intensity; Wilson (1977) has shown that most fatalities occur on small fires or isolated sections of large fires.

\*British Thermal Unit, a measure of energy

The classifications in Appendix Table B-1 provide insights into resource capabilities but can be misinterpreted if applied out of context. For example, 8-foot flame lengths can be successfully suppressed by engine crews using hose lines if they are able to approach the fire from a direction where convective and radiant heat are focused away from the firefighters. The same 8-foot flame length will likely overwhelm firefighters positioned in a manner where they are receiving large portions of the heat flux from the fire. This can be the case where firefighters are performing structure defense or attempting a frontal assault on the advancing fire front. It has been found that convective energy transferred by wind gusts, fire whirls, or air turbulence can significantly increase the total heat

transfer to the firefighter and increase the required safety zone size necessary to engage the fire (Butler, Cohen, 1998).

The most likely scenario for the next major wildland fire event in Agoura Hills involves wildfire approaching populated areas from the north under Santa Ana wind conditions. There is the possibility of fire transitioning from a wildland fire into a WUI fire and/or urban conflagration. This type of scenario can rapidly outpace resources, and can force first responders to shift their focus from fire containment to structure protection and protection of life safety/evacuation. An advancing Santa Ana wind-driven fire would likely push large amounts of heat and embers ahead of the actual flaming front, creating multiple spot fires in unpredictable locations. This impacts the ability of firefighters to establish a distinct containment line, and makes the establishment of a safe operational space very difficult. Protocol requires that firefighters have a safe operational space, and to move to safety if they do not. Additionally, first responders should have quick access to a "safety zone" if needed, and that safety zone should allow them to work without resorting to exceptional tactics like the deployment of personal "fire shelters." Research indicates that the radius of a safety zone should be at least four times the flame height, assuming operations in zero wind. When factoring in radiant and convective heat, very large safety zones are required for firefighters to engage a fire. The defensible space standards found in California PRC 4291 are designed not only to improve the potential for an individual structure to survive a wildfire, but also to improve the likelihood that firefighters will have a baseline safe operational space from which to work.

## Appendix C – Fuel Treatment Guidelines & Techniques

This appendix provides fuel treatment prescriptions and guidelines to assist agencies and property-owners in implementing fuel treatments. This prescriptive guidance incorporates fire behavior assessment factors and best management practices (BMP) for achievable wildfire hazard mitigation actions. Understanding and working within BMP standards will help minimize impacts to surrounding natural resources.

### C.1 PRIMARY TRAVEL ROUTES FUEL TREATMENT PRESCRIPTIVE GUIDELINES

The following table describes the intensity levels for primary travel routes fuel treatments:

**Appendix Table C-1. Primary Travel Routes Fuel Treatment Prescriptive Guidelines**

Location →	Primary Zone (A) (up to 50' from centerline) (distance may be constrained by terrain & accessibility)	Secondary Zone (B) (50' – 100' from centerline) (distance may be constrained by terrain & accessibility)
<b>Fuel Type ↓</b>		
<b>Grass/ Forbs</b>	Reduce fuel depth to 1 inch.	Treatment not needed.
<b>Surface dead/down material</b>	Remove all large (>3-inches diameter) dead/down material.	Remove up to 75% of >3" diameter dead/down material.
<b>Chaparral/Shrub</b>	Remove all chaparral vegetation within this zone. Retain the root crown to promote soil stability.	Remove up to 75% of chaparral vegetation. Widely spaced small pockets or clumps of shrubs are permitted. Clumps of chaparral remaining should be healthy, early seral stage plants. Chipped or masticated material may be "blown" back onto the slope where feasible to enhance soil coverage.
<b>Trees Overstory* (without chaparral/shrub understory)</b>	Limb up all trees to 6-ft. or ½ of live crown height, whichever is less. Remove branches extending over roadways to a minimum height of 15-feet. Thin smaller trees leaving larger trees (6-inch DBH) with crown spacing up to 10 ft.	Same treatment as Zone A with the exception of overstory spacing. Overstory canopy should be denser than Zone A to provide shading of the surface to limit potential development of grass or shrub understory vegetation.
<b>Trees Overstory* (with chaparral/shrub understory)</b>	Thinning specifications, same as Trees Overstory (without understory), but remove all understory chaparral/shrubs below trees in this zone.	Remove all chaparral from the understory of the tree canopy. Where crown cover allows, ensure shading of the surface to limit potential development of grass or shrub understory vegetation.

\*Any treatments involving oaks must comply with the Agoura Hills Oak Tree Protection regulations.

Note: as of May 2026 Zone Zero requirement have not been finalized by CAL FIRE.

## C.2 VEGETATION TREATMENT PRESCRIPTIVE GUIDELINES

The following table describes prescriptive guidelines for vegetation management in the Home Ignition Zone (HIZ).

**Appendix Table C-2. Vegetation Treatment Prescriptive Guidelines**

Location →	Primary Defense Zone (A) <i>(5' – 30' of a structure)</i>	Fuel Reduction Zone (B) <i>(30' – 100' of a structure)</i>	Fuel Reduction Zone (C) <i>(100' and beyond a structure)</i>
Fuel Type ↓	<i>Based on California Public Resources Code 4291</i>		<i>Based on Firefighter Safety</i>
Grass/ Forbs	Reduce fuel depth to 1" or less.	Reduce grass height to 4" or less. Longer grass in discontinuous open areas is acceptable.	Treatment may not be needed.
Surface Dead/Down Material	Remove all dead/down materials.	Reduce dead/down flammable material to < 3" depth; and 3 tons/acre. Non-contiguous isolated dead material acceptable.	Reduce heavier pockets of dead/down flammable material to < 5" depth; < 5-7 tons/acre. Non-contiguous, dead material acceptable.
Chaparral/ Shrub	Remove all but individual specimen chaparral plants. Individual ornamental/native shrubs should be spaced at a minimum 2x shrub height.	Remove up to 75 percent of chaparral vegetation. Allow for discontinuous small groupings of chaparral/shrubs. Any retained chaparral should be healthy with dead material pruned from the plant.	Less intensive brush removal with up to 30 foot for spacing of pockets and clumps of chaparral and shrubs. Retained vegetation should be healthy and at the young-growth stage with dead material pruned from the plants
Trees Overstory* (without chaparral/shrub understory)	Thin smaller trees leaving larger trees (>than 6-inches DBH) at 10–20-foot crown spacing (based on slope, tree size, and type); limb/prune lower branches 6-feet above grade level, or lower 1/3 of tree height on smaller trees.	Thin smaller trees leaving larger trees (> than 6-inches DBH) at approximately 10-foot crown spacing (based on slope, tree size, and type); limb/prune lower branches 6-feet up, or lower 1/3 of tree height on smaller trees and removing all dead	Limb and prune lower branches of larger trees up to 6-feet and removing all dead branch wood where feasible.

		branch wood where feasible	
<b>Trees Overstory* (with chaparral/shrub understory)</b>	Thinning specifications are the same as Trees Overstory without Chaparral/shrub understory in Zone A. Understory: remove chaparral; maintain ornamental shrubs in a healthy condition.	Thinning specifications are the same as Trees Overstory without Chaparral/shrub understory (Zone B). Understory: occasional less dense chaparral/shrub and small tree clumps may be retained.	Thinning specifications are the same as Trees Overstory without chaparral/shrub understory in Zone C. Understory: specifications are the same as Chaparral/Shrub Zone C
<i>*Any vegetation treatments involving oaks must comply with the City of Agoura Hills Oak Tree Protection regulations.</i>			

### C.3 IMPLEMENTATION GUIDELINES FOR VEGETATION TREATMENT LEVELS

The following guidelines apply to the implementation of fuel treatments:

- + CEQA may be required prior to implementation of all site-specific projects.
- + Shrubs will vary in size randomly scattered across the project area. Chipped material should not exceed 4-inches in depth.
- + No piles will be retained on site.
- + Boundaries between treatment levels will maintain free-form shapes and feathered edges that replicate natural patterns; avoid straight lines by scalloping and feathering along edges of vegetation. The feathering of edges includes undulating edges horizontally and diverse heights of the brush retained on site.
- + Precautions will be taken to prevent scarring of trees or retained shrubs by equipment.

**Invasive Species/Noxious Weeds:**

- + To limit the spread and establishment of invasive plant species/noxious weeds into project areas, all off-road equipment used during project implementation will be washed free of invasive exotic weeds and seeds before entering project areas. If any equipment works in an area where weeds occur, it will be washed to remove weed propagules prior to entering other work locations.
- + All equipment staging areas will be located away from known areas with noxious weed occurrences and outside of riparian habitat area.

**Cultural Resources:**

- + Any known cultural resources within the proposed treatment area will be protected. If any sensitive cultural resources are found, work will stop and a qualified Archaeologist will be notified.

**Soil and Watershed:**

- + Minimize damage to surface soil structure to reduce potential for erosion and sediment transport to drainages.
- + No mechanical equipment use on slopes greater than 30 percent with following exception: Mastication can occur on slopes greater than 30 percent where the equipment is operating on slopes less than 30 percent and accessing steeper slopes with a boom arm.

- + Chipped or masticated material should be retained on site where feasible to enhance soil coverage.

### **Tree Removal/Tree Maintenance**

- + Any vegetation treatment that involves oak trees will be subject to the policies and provisions of the City of Agoura Hills Municipal Code, Division 7, 9657 - Oak Tree Preservation Program.
- + Non-native pines, eucalyptus, acacia, cypress should be prioritized for removal.
- + Any pruning of protected tree species will follow the ordinances of the jurisdictional agency.
- + The transportation of any firewood generated during the removal of non-native tree species should be limited to prevent spread of potential insects or diseases.

## **C.4 RECOMMENDED BEST MANAGEMENT PRACTICES**

- + Environmentally Sensitive Habitat Areas (ESHA) will be marked on the project area maps and physically identified on the project site. Protection measures defined in a project specific implementation plan will be followed in ESHA.
- + Known landslide and unstable areas should be avoided for safety reasons and because vegetation treatment activities may result in increased potential for mass wasting and erosion.
- + Heavy equipment will not work on slopes greater than 30 percent. Movement of any heavy equipment across slopes should be minimized. Heavy equipment will not be used in riparian areas.
- + No servicing or refueling of equipment will occur on site. Operators must remove residues, waste oil, engine coolants, and other harmful materials from all worksites. Spill containment will be established prior to any on-site servicing or refueling.
- + When treating herbaceous/grass fuels; mowing or weed whipping is the preferred over discing to limit soil disturbance.
- + To protect streams and stream courses, the following shall be implemented:
- + Activities within the riparian zone of any blue line stream channel shall be subject to a setbacks defined in a project specific implementation plan
- + Location and method of stream course crossing should be identified and marked on the project site prior to fuel reduction activities to protect the stream course.
- + Project generated vegetation debris shall be removed from the stream course.
- + Water bars or other erosion control structures will be located as necessary to limit run-off and sediment movement into stream courses.
- + Work will not occur during the migratory bird nesting season unless an assessment is conducted to determine active nesting or breeding behavior. Assessments shall be conducted within ten days prior to the start of work.
- + No known threatened, endangered, sensitive (TES) or rare plants or animals, including migratory birds, will be disturbed, or harmed. Measures to avoid disturbance to TES may be required if known species are present or suitable habitat is found on-site in areas accessible to TES. Avoidance and/or mitigation measures may include:
  - Buffer zones around nests and dens,

- Limitations to types of equipment and/or times used,
  - Limited operating periods,
  - TES monitoring prior to or during activities,
  - Additional snag and down log retention.
- + Any requirements provided from ESHA consultation with local, state, or federal agencies.

## C.5 FUEL TREATMENT IMPLEMENTATION TIMING

The treatment of hazardous fuels as proposed in this CWPP are not of the type or magnitude that could have a negative effect on species response from the various plant communities associated with the Planning Area. Typically, the use of prescribed fire, mastication or crushing to eliminate standing chaparral requires the consideration of how individual species will recover following a treatment. Species response to prescribed fire often is related to the seasonality of the treatment. Lower intensity spring-time prescribed fires when used to eliminate chaparral vegetation has been found to favor the recovery of sprouting chaparral species over those that require a recovery response from seeds stored in the soil. Over time, the continued use of low intensity fire can shift the species composition of a chaparral stand (Beyers, Wakeman, 1997).

Herbaceous vegetation/Grass – Herbaceous fuels are most effectively treated following curing of the individual plants. When cured, these grass-like fuels have dispersed their seeds helping to assure their continued presences as part of the landscape. Treating herbaceous fuels after they have cured also minimizes regrowth following treatment. When looking to eliminate non-native herbaceous fuels, treating this vegetation before it has set seed will help to reduce the abundance of a species on the landscape over a period of years. Herbicides can also be effective in killing targeted non-native species before they sow their seed. However, the use of herbicides on public lands can be controversial and require an impact analysis following California Environmental Quality Act (CEQA) or National Environmental Protection Act (NEPA) protocols.

Oaks – The most widely recommended time to prune oak species is during July or August, when the trees are not normally growing, and when the dry weather is less likely to support pathogens that may attack the wounds. As much as possible, avoid pruning large limbs as this exposes the tree to possible infection that can take many years to recover [https://calscape.org/Quercus-agrifolia-\(Coast-Live-Oak\)](https://calscape.org/Quercus-agrifolia-(Coast-Live-Oak)), accessed December 8, 2025.

Article XI: Zoning, Part 2: Special Regulations, Division 7: Oak Tree Preservation Guidelines, Appendix A provides details of the City's oak tree protection and permitting process. Property owners are advised to contact the Planning Division prior to undertaking any oak tree maintenance or removal to understand site specific regulations. The following is a sample of existing oak tree ordinances:

No person, partnership, firm, corporation, government agency, or other legal entity shall cut, prune, remove, relocate, endanger or damage any tree protected by this section on any public or private land located within the incorporated areas of the City of Agoura Hills except in accordance with the conditions of a valid oak tree permit issued by the department of planning and community development or the planning commission pursuant to the provisions of section 9657 through 9657.5.

Except as otherwise provided in section 9657.4, no person shall cut, prune, remove, endanger or encroach into the protected zone or relocate any oak tree on any public or private property within the city unless a valid oak tree permit has been issued.

Chaparral – Treatments of chaparral species traditionally focus on thinning or removal of stands of this vegetation. The removal of chaparral with hand tools is not time sensitive regarding species response, as most chaparral species will sprout from an underground root complex. To eliminate chaparral species from a

treatment zone, the use of herbicides to kill regrowth or grubbing out the roots is required. Both treatments required attention over time to fully eliminate chaparral from the desired area

In general, properties in Agoura Hills must meet requirements for defensible space specified in the State of California Public Resources Code Section 4291. These defensible space standards are enforced by the Los Angeles County Fire Department through an annual inspection program which requires homeowners to meet defensible space standards by June 1 of the calendar year. In addition to defensible space inspections, the County of Los Angeles Agricultural Commissioner is responsible for enforcing the County's weed abatement program. This program is focused on undeveloped properties which meet one of the criteria found at, <https://acwm.lacounty.gov/all-about-weed-abatement/>.

Larger parcel owners should contact the City's Planning Division concerning removal of chaparral of other native vegetation under their control. City specific design criteria, permitting or resource protection standards may apply for areas beyond 200-feet of a structure.

## Appendix D – Community Outreach Results

As part of the CWRA process, a community survey was administered from February 20, 2025 to May 12, 2025. The survey was intended to gather feedback from the public to better tailor community-based activities, educational programs, services, policies, and other projects to be locally relevant, inclusive, and sustainable while mitigating wildland fire risks. The public survey received 371 online responses and 10 in-person responses. Refer to Appendix C of the CWRA for an overview of survey results. The analysis below builds upon the summary analysis in the CWRA project to examine relationships between key survey questions to allow for a more nuanced understanding of the public's experiences, concerns, and priorities which can allow for more targeted actions and activities. Given the number of respondents to the survey and information about some responses, the survey results are not indicative of the entirety of Agoura Hills and do not represent a statistically significant sample of the population. However, valuable information about individual's experience can be gleaned from the survey responses.

### D.1 ANALYTICAL APPROACH

#### D.1.1 Cross Tabulation Analysis

Cross-tabulation analysis was conducted to examine relationships between key survey variables. Primary stratification variables included:

- + Q1: Length of residency in Agoura Hills
- + Q2: Neighborhood of residence

These variables were paired with preparedness, mitigation behavior, insurance impacts, risk perception, and barriers to action responses (e.g., Q9, Q14, Q16, Q17, Q18, Q19, Q35).

For each pairing, percentage distributions were calculated within each subgroup to allow direct comparison across residency duration and neighborhoods. Results are reported using row- or column-based percentages as appropriate to ensure interpretability.

#### D.1.2 Statistical Testing (Chi-Square, Cramer's V, FDR Adjustment)

To assess whether observed differences between groups were statistically significant, chi-square tests of independence were performed for each cross-tabulation. Effect sizes were calculated using Cramer's V to evaluate the strength of association, independent of sample size. Because multiple comparisons were conducted, False Discovery Rate (FDR) adjustment was applied to p-values to control for Type I error inflation. Adjusted p-values were used when determining statistical significance.

Interpretation of findings considered:

- + Statistical significance (FDR adjusted p-values)
- + Magnitude of association (Cramer's V)
  - Cramer's V values between 0.10–0.30 indicate small-to-moderate associations, while values above 0.30 indicate moderate-to-strong relationships.

### D.1.3 Open-ended Thematic Coding

Open-ended responses (Q36–Q39) were reviewed using a structured thematic approach. Blank and non-substantive responses were removed prior to analysis.

For Q36 and Q37, recurring two-word phrases were identified to detect common concern and action patterns. These phrases were grouped into broader themes (e.g., home hardening, evacuation access, insurance, training) through bigram analysis. Each response was coded for the presence of these themes, and theme frequencies were calculated. Differences between residents who reported feeling prepared and those who did not were assessed using percentage-point comparisons.

For Q38 and Q39, responses were reviewed manually and grouped into policy-relevant categories (e.g., evacuation infrastructure, housing density, power outages, insurance, communication, enforcement). Frequently referenced terms—such as specific roadway names—were counted to quantify recurring infrastructure concerns.

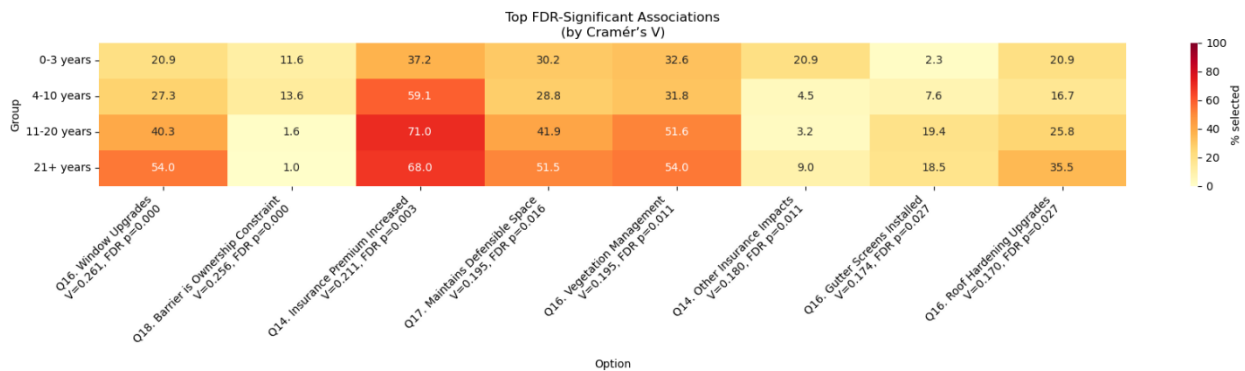
Findings are presented using theme frequency summaries and selected illustrative examples to highlight dominant resident narratives and policy-relevant patterns.

## D.2 RESIDENCY DURATION (Q1) AND WILDFIRE PREPAREDNESS

Appendix Table D-1 shows that reported preparedness levels vary modestly across residency-duration groups. However, these differences were not statistically significant based on Chi-Square testing. In other words, longer-term residents do not report significantly higher preparedness than newer residents.

**Appendix Table D-1. Do you feel prepared for wildfire today? (by Residency Duration – Q1)**

Residency Duration	Total n	Yes (%)	No (%)
0–3 years	30	46.7%	53.3%
4–10 years	51	66.7%	33.3%
11–20 years	50	48.0%	52.0%
21+ years	161	57.1%	42.9%



**Figure D-1. Residency Duration and FDR-Significant Preparedness Associations (Q1 Pairings)**  
**Percentage of respondents within each residency-duration group selecting each response option for survey items showing statistically significant associations after FDR adjustment. Effect sizes are reported using Cramer’s V.**

Figure D-1 presents the distribution of selected preparedness- and mitigation-related responses across residency-duration groups (Q1), limited to associations that remained statistically significant after False Discovery Rate (FDR) adjustment. Reported percentages reflect the proportion of respondents within each residency group who selected the corresponding response option. Cramer’s V values are shown to indicate the strength of association. Several clear tenure-based patterns emerge.

- + Longer-term residents (21+ years) report substantially higher rates of window upgrades (54.0%) and roof hardening upgrades (35.5%) compared to newer residents (0–3 years: 20.9% and 20.9%, respectively).
- + Similarly, maintenance of defensible space and vegetation management activities increase consistently with residency duration, with 21+ year residents reporting the highest engagement levels.
- + Insurance-related impacts also vary by tenure.
- + Residents living in Agoura Hills for 11–20 years report the highest rate of insurance premium increases (71.0%), followed closely by those residing 21+ years (68.0%), suggesting that longer-term homeowners may be disproportionately affected by insurance market shifts.
- + In contrast, newer residents report higher rates of ownership-related constraints and certain barriers to upgrades, though these effects are smaller in magnitude.

Overall, the results indicate a structured preparedness gradient by residency duration: longer-term residents report greater engagement in structural mitigation actions and defensible space practices, as well as higher exposure to insurance impacts. Effect sizes (Cramer’s V ranging approximately from 0.17 to 0.26) suggest moderate associations between tenure and key preparedness behaviors.

### D.3 NEIGHBORHOOD-LEVEL (Q2) DIFFERENCES IN RISK PERCEPTION AND PREPAREDNESS

**Appendix Table D-2. Do you feel prepared for a wildfire today? (by Neighborhood – Q2)**

Neighborhood	Total n	Yes (%)	No (%)
Other (please specify)	83	55.4%	44.6%
Morrison Ranch Estates	47	76.6%	23.4%
Old Agoura	35	37.1%	62.9%
Lake Lindero	33	45.5%	54.5%
Fountainwood	29	58.6%	41.4%
Hillrise	25	60.0%	40.0%
Liberty Canyon	19	68.4%	31.6%
Annandale I/II	7	42.9%	57.1%

Peacock Ridge	6	33.3%	66.7%
Avalon	5	60.0%	40.0%
Town and Country	2	0.0%	100.0%
Indian Hills	1	100.0%	0.0%

Appendix Table Appendix Table D-2 shows variation in self-reported wildfire preparedness (Q35) across neighborhoods, with Morrison Ranch Estates and Liberty Canyon reporting relatively higher preparedness levels, while Old Agoura, Peacock Ridge, and Town and Country report lower levels. *Note: Neighborhoods with small sample sizes (n<10) should be interpreted cautiously as percentage values may not be stable.*



**Figure D-2. Neighborhood-Level Differences in FDR-Significant Preparedness Associations (Q2 Pairings) Percentage of respondents within each neighborhood selecting response options that showed statistically significant associations after False Discovery Rate (FDR) adjustment. Effect sizes are reported using Cramer's V.**

Figure D-1 presents neighborhood-level differences for survey items that remained statistically significant after FDR adjustment. Percentages represent the share of respondents within each neighborhood selecting the corresponding response option. Cramer's V values indicate moderate-to-strong associations across several variables. Substantial geographic variation is observed in preparedness behaviors, perceived barriers, and insurance impacts.

- + Preparedness (Q35).** Reported preparedness levels vary considerably across neighborhoods. Indian Hills (100.0%), Morrison Ranch Estates (76.6%), Liberty Canyon (68.4%), and Avalon (60.0%) report relatively high levels of residents feeling prepared for a wildfire. In contrast, Annandale I/II (42.9%), Old Agoura (37.1%), Peacock Ridge (33.3%), and Town and Country (0.0%) report lower levels of preparedness.

- + **Insurance Impacts (Q14 – Premium Increases).** Insurance premium increases are widely reported but unevenly distributed. Town and Country (100.0%), Hillrise (75.0%), Peacock Ridge (75.0%), Morrison Ranch Estates (71.0%), and Old Agoura (62.8%) show particularly high reported impacts. These findings may indicate concentrated insurance pressure in specific neighborhoods or may indicate individuals who felt the impacts of insurance in these communities were more likely to respond to the survey.
- + **Structural Mitigation (Q16 – Window Upgrades).** Window hardening upgrades show strong variation across neighborhoods, with Fountainwood (69.4%), Hillrise (59.4%), Lake Lindero (51.2%), and Town and Country (50.0%) reporting higher engagement. Other neighborhoods report limited uptake.
- + **Barriers and Housing Context (Q18, Q19).** Ownership constraints and single-access community status also differ sharply by neighborhood. Avalon (83.3%) and Liberty Canyon (85.7%) show particularly high rates of respondents living in single-access communities, which may influence evacuation planning and perceived vulnerability. However, some residents who indicate they are in single-access communities are in communities with more than one egress route, suggesting a need for targeted education and evacuation planning.

Overall, the results demonstrate meaningful geographic variation in wildfire preparedness, mitigation behaviors, and insurance exposure. Effect sizes (Cramer’s V approximately 0.25–0.49) indicate moderate-to-strong associations between neighborhood of residence and key preparedness variables. These patterns suggest that wildfire outreach, mitigation incentives, and risk communication strategies may need to be tailored at the neighborhood level rather than implemented uniformly across the city.

## D.4 OPEN-ENDED RESPONSE ANALYSIS (Q36-39)

### D.4.1 Q36 Major Wildfire Concerns

Bigram analysis was conducted on 248 non-empty responses to Q36. Extracted bigrams captured 51.2% of responses (127 responses), indicating strong thematic concentration around recurring phrases. The coverage rate indicates that over half of open-ended responses clustered around recurring thematic phrases, suggesting structured and repeated concern patterns rather than isolated comments.

The most frequently occurring bigrams were:

- + Home hardening (45)
- + Vegetation maintenance (20)
- + Evacuation planning (20)
- + Evacuation routes (14)
- + Home insurance (7)

These results indicate that structural mitigation, vegetation management, evacuation logistics, and insurance pressures dominate resident concern narratives.

### D.4.2 Q36 Roadway Mentions in Major Concerns

When residents referenced specific geographic concerns, the following roads were most frequently mentioned:

**Appendix Table D-3. Most Frequently Mentioned Roadways in Open-Ended Concern Responses (Q36)**

Road	Mentions
Agoura Rd	14
Kanan Rd	13
101 Freeway	12
Thousand Oaks Blvd	2
Driver Ave	2
Liberty Canyon	2
Medea Creek	2

The concentration of mentions on Agoura Road, Kanan Road, and the 101 Freeway indicates strong concern regarding evacuation traffic flow and corridor-level bottlenecks. This reinforces the centrality of evacuation infrastructure in perceived wildfire vulnerability.

**D.4.3 Q37. Actions Taken in Response to Wildfire Concerns**

Bigram analysis was conducted on 205 non-empty responses to Q37. Extracted bigrams captured 56.1% of responses (115 responses), reflecting consistent patterns in mitigation behavior.

Most frequent action-oriented bigrams include:

- + Home hardening (58)
- + Firewise community (15)
- + Evacuation bag / packing evacuation bag (multiple variants; total 33)
- + Fire safe council (10)
- + Insurance agent / contact insurance (17 combined references)

These findings indicate that residents most commonly respond through structural upgrades, evacuation readiness, and insurance-related actions.

Across Q36 and Q37, three consistent patterns emerge:

1. Structural mitigation (home hardening) is the most dominant theme, both as a concern and as an action.
2. Evacuation infrastructure and traffic corridors are highly salient, particularly specific roadway bottlenecks.
3. Differences between prepared and not-prepared residents suggest that perceived preparedness may hinge more on completed structural upgrades and formal training than on evacuation awareness alone.

#### **D.4.4 Q38. Suggested Public Education & Program Improvements**

A total of 116 substantive responses were retained for analysis in Q38 after removing blank and non-substantive entries. Open-ended responses to Q38 indicate that residents' recommendations for improving wildfire preparedness education were highly programmatic in nature. Residents overwhelmingly framed public education in terms of actionable programs rather than general awareness campaigns.

##### 1. Expanded Home Hardening Guidance

- Home hardening / fire hardening / hardening guidance (21)
- Defensible space / vegetation removal guidance (11)
- Inspections (home inspection / fire dept inspection / door-to-door inspection) (9)
- Grants / financial assistance / incentives (8)
- Ember-resistant vents / vent screening (5)

##### 2. Expansion of CERT and Training Programs

- Training / classes / seminars (fire/emergency specific) (14)
- Evacuation education / evacuation planning instruction (10)
- CERT (6)

##### 3. Firewise and HOA-Based Community Organization

- HOA involvement / HOA partnership (8)
- Community coordination / Neighborhood-level organization (7)
- Firewise (4)

#### **D.4.5 Q39. Final Comments: System-Level Vulnerability Concerns**

After removing non-substantive entries, 69 responses were retained for qualitative analysis, forming the basis for the thematic findings presented in this section. Open-ended final comments (Q39) reveal resident vulnerability concerns regarding:

- + Evacuation capacity constraints
- + High-density development near limited roadway infrastructure (particularly Kanan Road)
- + Power outage management and public utility accountability
- + Homeowners insurance availability and affordability
- + Perceived communication breakdowns during recent wildfire events
- + Calls for stronger enforcement of property hardening standards

The dominant narrative in Q39 centers not on individual preparedness, but on systemic vulnerabilities: constrained evacuation infrastructure, housing growth in high fire severity zones, prolonged power shutoffs, and perceived lack of coordinated leadership.

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#### *D.4.5.1 Evacuation & Traffic Gridlock (Primary Concern)*

- + Kanan Rd / Kanan Road / Kanan (10)
- + Lindero Canyon (Rd) (4)
- + Reyes Adobe (Rd) (3)
- + 101 / 101 Freeway / 101 fwy (4)
- + Gridlock (1)
- + Bottleneck / bottle neck (1)
- + Single-lane roads (1)
- + Traffic nightmare / nightmare during evacuation (1)

#### *D.4.5.2 High-Density Housing Opposition*

- + STOP high density (3)
- + Life-threatening (1)
- + Formula for disaster (1)
- + Fight state mandate (1)
- + State-mandated housing (2)

#### *D.4.5.3 Power Outage & Utility Accountability*

- + Three-week power outages (1)
- + Cell towers down (2)
- + Planned power shutoffs (1)
- + Hold Edison accountable (2)
- + Bury power lines (2)

#### *D.4.5.4 Stronger Home Hardening Enforcement*

- + Enforce municipal code (2)
- + Cite non-compliant homeowners (2)
- + Mandatory hardening (2)
- + Remove tropical plants / palms (3)
- + Require ember-resistant vents (2)

#### *D.4.5.5 Insurance Crisis*

- + Quadrupled insurance (1)
- + Insurance gouging (1)

- + FAIR Plan not sufficient (2)
- + Need discounts for Firewise (1)

*D.4.5.6 Communication and Coordination Failures*

- + Miscommunicated evacuation orders (2)
- + No internet / no cell service (4)
- + Broken alert systems (2)
- + Unclear leadership / coordination failure (3)
- + Decentralized information (1)

## Appendix E – Public Workshops

The following is a sample agenda provided as part of the public workshops held at the Agoura Hills Event Center.





### Workshop Agenda

<b>Meeting Title:</b>	City of Agoura Hills Community Wildfire Protection Plan (CWPP) Public Workshop
<b>Meeting Dates, Times &amp; Locations:</b>	March 17 <sup>th</sup> , 2026 at 5:00-7:00 pm PST Agoura Hills Recreation & Event Center 29900 Ladyface Ct. Agoura Hills, CA 91301

<i>Item Timing</i>	<i>Item Description</i>
5:00 – 5:10 pm (10 min.)	<b>Agoura Hills Welcome &amp; Introduction (Agoura Hills)</b> <ul style="list-style-type: none"> <li>+ Overview of the City of Agoura Hills</li> <li>+ Purpose of Workshop</li> <li>+ What is a CWPP?</li> <li>+ Agenda Overview</li> </ul>
5:10 – 5:20 pm (10 min.)	<b>Fire Agency Introduction (LACoFD)</b>
5:20 pm – 5:35 pm (15 min.)	<b>Agoura Hills CWPP Development Process (JH)</b> <ul style="list-style-type: none"> <li>+ CWPP Development Process Overview</li> <li>+ CWPP Planning Area</li> <li>+ What do we do with a CWPP?</li> <li>+ CWPP Partners/Collaborators</li> <li>+ Public Engagement</li> </ul>
5:35 – 5:45 pm	<b>10-minute Break</b>
5:45 – 6:05 pm (20 min.)	<b>CWPP Review (JH)</b> <ul style="list-style-type: none"> <li>+ CWPP Sections</li> <li>+ Hazards vs. Risks</li> <li>+ Wildfire Hazards Mapping</li> <li>+ Climate Change Impacts</li> <li>+ Community Wildfire Resiliency</li> </ul>
6:05-6:20 pm (15 min.)	<b>CWPP Action Plan &amp; Recommendations (JH)</b> <ul style="list-style-type: none"> <li>+ Summary of Recommendations</li> <li>+ Fuels Mitigation</li> <li>+ CWPP Themes</li> <li>+ Recommendations</li> </ul>
6:20-6:55 pm (35 min.)	<b>Q&amp;A (all – Agoura Hills facilitates)</b>
6:55 – 7:00 pm (5 min.)	<b>Next Steps &amp; Closing (Agoura Hills)</b>

Copies of the full presentations are available through the City of Agoura Hills.

## Appendix F – AWG Project Prioritization

The Agoura Hills Community Wildfire Protection Plan (CWPP) lists and describes a total of 46 City-wide recommendations (see Chapter 7). To facilitate implementation of the CWPP, a goal of the development process was to identify a set of the priority actions of key stakeholders, practitioners, and experts working on wildfire mitigation and resiliency in Agoura Hills. To this end, the Agency Working Group (AWG), which has guided and provided input on the development of the CWPP, were asked to identify priority actions that met one of two criteria:

- + Actions that would help address the biggest needs or biggest risks related to wildfire resiliency
- + Actions that were most practical, most feasible, or easiest to accomplish (including those that may not require outside funding and/or extensive compliance requirements)

Based on the AWG's voting and discussion, ten (10) actions are outlined below which were identified as priorities by multiple individuals/groups. These have been grouped into several overarching themes and a summary of the discussion around each theme is included below. There were additional actions that received a single vote, but they have been left off this list to provide a succinct priority list.

The priority recommended actions identified by the AWG will be shared with the City Council's CWPP Ad Hoc Committee, which provides direction and guidance on the CWPP development process for the City of Agoura Hills, and ultimately with the full City Council. Although this list of priority recommended actions is not binding, and all actions listed in the CWPP are considered important to improving wildfire resilience, this will serve as a starting point for project implementation and for seeking additional project funding.

**Note:** The members of the AWG also indicated which of the Planning Unit specific recommendations they considered priority actions. The Planning Unit actions identified as priorities by the AWG aligned with the priority levels provided in the CWPP. Given this alignment, Planning Unit recommendations are not detailed further in this summary.

### COMMUNICATION METHODS & INFRASTRUCTURE

A key priority theme was improving communication with the public during emergency events. This includes exploring alternate and redundant communication strategies as well as improvements to infrastructure to improve reliability and cell service. It was noted that improving cell service during Public Safety Power Shutoff (PSPS) events would help reduce anxiety and fear around PSPS situations. Specific CWPP recommendations are:

- + CW-25: Conduct a study to evaluate the wildfire resiliency of critical infrastructure and facilities across the City (e.g., water infrastructure, communications systems). Prioritize and implement resiliency improvements. Coordinate and collaborate with relevant fire, law enforcement, government, private sector, and other subject matter experts to ensure programs, policies and systems are evaluated, designed, and maintained for quality, fire resistance, durability, functionality, efficiency, and sustainability.
- + CW-32: Develop additional/redundant communications strategies to reach vulnerable populations during an emergency event. This may include community networks/phone trees and other targeted methods of communication.

### PUBLIC EDUCATION & COMMUNITY GROUP SUPPORT

Much of the currently ongoing public education projects in Agoura Hills are coordinated by community groups, including the Agoura Hills Fire Safe Council and Santa Monica Mountains Fire Safe Council. This theme centers

around both bolstering and expanding public education and supporting those groups who are already doing much of this outreach. Regarding the selection criteria noted above, the AWG discussed that short-term, more immediately implemented projects might focus on defensible space, since there are more systems and funding mechanisms in place for defensible space. Structural hardening is critical to wildfire resilience, but since there are fewer systems in place and funding can be more difficult to secure, developing new projects around structural hardening may be a longer-term goal with more strategizing needed. Specific CWPP recommendations are:

- + CW-2: Develop a public education outreach plan to increase awareness on, and ensure consistency of messaging about, maintaining defensible space in accordance with Los Angeles County Fire Code Section 325.2.1, California Public Resources Code 4291, and local ordinances. Education should include information on Zone 0 or “ember-resistant zone” (0-5 feet from a structure) in accordance with AB-3074 for both new and existing conditions. This includes providing updates on upcoming and/or new code changes
- + CW-12: Leverage and support the work of local FSCs to inspect and educate properties owners on defensible space requirements. Focus on the development of the ember-resistant zone at structures.
- + CW-19: Provide ongoing education and outreach for residents. Information should include defensible space and home hardening standards to assist homeowners with implementing firesafe practices as well as meeting or exceeding requirements of State, County and Local codes and ordinances. A mix of web-based and in-person formats should be utilized in order to reach all critical audiences.

## FUEL TREATMENTS/VEGETATION MANAGEMENT

The consensus around this theme was a desire to support different fuel treatment methods (e.g., mechanical, grazing, prescribed fire) with the need to prescribe methods to projects as appropriate for the location, scale, and other specifics of the treatment. It is understood that the Los Angeles County Fire Department (LACoFD) provided some input on specific fuel treatments as part of the CWPP development process but that specific prescription of methods is beyond the scope of the CWPP development process. To that end, specific CWPP recommendations are:

- + CW-6: Work with LACoFD, NPS and MRCA to identify opportunities to implement grazing of herbaceous fuels, particularly in Palo Comodo/Chesebro and Liberty Canyons. Grazing was a historic land use practice in the Agoura Hills vicinity.
- + CW-8: Work with LACoFD, NPS, MRCA and State Parks to identify opportunities to use prescribed fire to treat non-native invasive species. This provides a resource benefit while also breaking up fuel continuity adjacent to the city. Monitor species change after treatment.

## OTHER PRIORITY PROJECTS

Other priority projects which do not fall under one of the themes above but which were identified by the AWG were:

- + CW-1: Review recently published wildfire risk mitigation recommendation reports, testing and research (e.g., FEMA, NIST, IBHS, FSRI), and update local codes, standards, and guidance, as needed. Resources to be reviewed include FEMA Marshall Fire MAT, IBHS Home Mitigations that Matter, NIST Technical Note 2205 & 2228
- + CW-22: Work with the insurance industry and California Insurance Commissioner’s office to recognize risk reduction efforts at landscape, parcel and neighborhood-scales in insurance coverage, premiums, and deductibles. Coordinate and collaborate with county, regional, and local stakeholders, subject matter

experts, and academics to systematically identify and quantify the risk reduction measures at various scales to help support insurance needs.

- + CW-41: Improve the cost-efficiency of fuel reduction and fuel maintenance through coordination efforts including:
  - Coordinating between neighboring private landowners so that economies of scale are achieved for fuel reduction actions (e.g., coordinating timing and type of fuel reduction on neighboring properties)
  - Long-term service agreements
  - Programmatic CEQA approaches
  - Investment in pre-planning