



CITY OF NAPA

Community Wildfire Protection Plan

August 2026



Signature Page

The following signatories mutually agree on and approve the final contents of this CWPP:



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Contents

Signature Page	2
Acknowledgments	2
Plan Contact Information	2
Figures & Tables	5
TABLES:	5
FIGURES:	5
Acronyms	7
0. Executive Summary	8
1. Introduction	11
2. Goals and Objectives	12
3. Roles and Responsibilities	12
4. Collaboration	13
5. Existing Conditions	14
Community Information: Applicable Plans and Regulations	14
Community Information: Planning Area	17
Existing Natural and Built Conditions	17
Topography	17
Climate and Weather	17
Vegetation	18
Public Ownership	18
Fire History	18
Fire Mapping and Fuel Models	18
Key Infrastructure	19
Fire Suppression and Response	20
City of Napa Fire Department	20
CAL FIRE Units	23
Responsibility Areas	23
State Responsibility Areas	23
Local Responsibility Areas	23
Federal Responsibility Areas	23
6. Wildland-Urban Interface Identification	23
7. Assessment of Wildfire Hazard and Wildfire Risk	24
Wildfire Intensity and Likelihood	25
Community Values Susceptible to Wildfire	27
Wildfire Risk Map	30
Additional Sources of Information	32

8. Action Plan	34
Ignitability Measures for Structures	46
Ignitability Measures for Critical Infrastructure	46
Wildfire Response and Suppression Capabilities	46
9. Appendices	47
Appendix A: Public Outreach and Engagement	47
Surveys & Results Summary	49
Survey #1: Establishing a baseline	49
Survey #2: Strategies and Prioritization	51
CWPP Working Group Members and Stakeholders	53
Stakeholder list	54
Appendix B: Existing Conditions	57
Topography	58
Climate and Weather	59
Vegetation	59
Appendix C: Implementing the CWPP Using a Leveraging Strategy	67
1. City of Napa Adopted Plans and Policies Relevant to Implementing the Community Wildfire Protection Plan	67
2. Codes and Ordinances	85
3. City of Napa Programs and Implementation Measures	86
4. Adjacent Agencies' Plans and CWPPs	88
5. Compliance with State Laws	100
Appendix D: Projects And Prioritization	106

Figures & Tables

TABLES:

Table 1. Organizations of the City of Napa CWPP Core Team and Advisory Committee, Page 13

Table 2. Leveraging the Napa CWPP, Page 15

Table 3. City of Napa CWPP Fire Station Locations, Page 21

Table 4. Fire Departments within the City of Napa CWPP Planning Area, Page 22

Table 4.a. Napa County Fire Department (CAL FIRE) Mutual Aid Fire Stations

Table 4.b. American Canyon Mutual Aid Fire Stations

Table 5. Acres in each designation of fire hazard severity zones, Page 28

Table 6. City of Napa CWPP Action Plan, Page 36

Table 7. Hazard Reduction strategy and most frequently selected idea or project, Page 51

Table 8. List of Partners Involved in CWPP Development, Page 54

FIGURES:

Figure 1. At Risk Population Profile for the City of Napa, Page 19

Figure 2. Map of the fire department service areas within the City of Napa CWPP planning area, Page 21

Figure 3. City of Napa CWPP wildfire hazard assessment map, Page 26

Figure 4. Map of Fire Hazard Severity Zones in the City of Napa vicinity, Page 29

Figure 5. City of Napa CWPP wildfire risk map, Page 31

Figure 6. Fire Adapted Communities Learning Network Framework Strategy Wheel, Page 34

Figure 7. Examples of outreach activities completed throughout the CWPP development process, Page 47

Figure 8. Map of the City of Napa CWPP Project Submissions for Consideration Through Online Portal, Page 48

Figure 9. Charts showing where respondents (N) resided and property type, Page 49

Figure 10. Perceived Risks and Sources of Risk from Survey #1, Page 50

Figure 11. List of example actions taken by respondents, Page 51

Figure 12. Map of the City of Napa CWPP planning area boundary, Page 57

Figure 13. Map of topographic features within the City of Napa CWPP boundary, Page 58

Figure 14. Map of surface vegetation within the City of Napa CWPP boundary-southern portion, Page 60

Figure 15. Map of surface vegetation within the City of Napa CWPP boundary-northern portion, 61

Figure 16. Map of surface vegetation within the City of Napa CWPP boundary-Miliken reservoir, Page 62

Figure 17. Map of surface vegetation within the City of Napa CWPP boundary-Lake Hennessey reservoir, Page 63

Figure 18. Map of public lands within the City of Napa CWPP vicinity, Page 64

Figure 19. Map of fire history within the City of Napa CWPP boundary and vicinity, Page 65

Figure 20. Locations of mutual aid stations from the 2023 Napa Fire Department Service Analysis, Page 66

Figure 21. Fuel treatments for understory of eucalyptus along Stanley Lane, Page 122

Acronyms

BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
CAL FIRE	California Department of Forestry and Fire Protection
COAD	Napa Valley Community Organizations Active in Disaster (COAD)
CWPM	Community Wildfire Preparedness and Mitigation (CAL FIRE – OSFM)
CWPP	Community Wildfire Protection Plan
FAC	Fire Adapted Community
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zone
FRA	Federal Responsibility Area
FRAP	Fire and Resource Assessment Program
FSR	Fire Safe Regulations
GIS	Geographic Information System
HFRA	Healthy Forests Restoration Act
HVRA	Highly Valued Resource and Asset
LTNC	Land Trust of Napa County
LRA	Local Responsibility Area
NCFF	Napa Communities Firewise Foundation or Napa Firewise
NCRPOSD	Napa County Regional Park & Open Space District
OSFM	Office of the State Fire Marshal
RCD	Resource Conservation District
SIZ	Structure Ignition Zone
SRA	State Responsibility Area
USFS	United States Forest Service
VHFHSZ	Very High Fire Hazard Severity Zone
WUI	Wildland-Urban Interface

0. Executive Summary

Purpose

This Community Wildfire Protection Plan (CWPP) is a team effort to reduce wildfire risks through planning and prioritization. It aims to help the community, agencies, and fire officials work together to plan and prioritize actions like managing vegetation, doing public outreach and education around wildfire topics, and securing funding for wildfire protection. There is urgency for taking action; more than 65% of Napa County has burned in the last seven years, resulting in billions of dollars in damage and thousands of structures lost. Recently fires that spread into cities (i.e. Altadena, Santa Rosa, Lahaina) highlight the possibility of such an event in the City of Napa. This CWPP provides everyone with the tools they need to plan and take action to keep the community safe from the impact of wildfires, recognizing that wildfires do not respect lines on a map and that the cost of inaction is high.

Purpose of the CWPP

The City of Napa CWPP aims to:

- **Enhance Understanding** – Provide a clear view of our current environmental conditions;
- **Identify Hazards** – Pinpoint areas with high fire risk and potential for extreme fire behavior;
- **Foster Engagement** – Create opportunities for public involvement and education of fire preparedness;
- **Protect Communities** – Safeguard vulnerable areas and essential infrastructure;
- **Develop Strategies** – Formulate effective methods to reduce fire risks in our community; and
- **Plan Collaboratively** – Integrate and coordinate with existing plans including the Napa County CWPP to leverage resources and to implement projects that maximize benefits for all Napa County residents.

History of Public Engagement

The creation of this Community Wildfire Protection Plan (CWPP) was a collaborative and multi-phased process designed to ensure comprehensive community involvement and alignment with local wildfire risk mitigation goals in the City of Napa. It began by identifying key stakeholders, including local fire department officials, county emergency services, local community programs, land management agencies, and community organizations. Napa County Resource Conservation District (Napa RCD) acted as a convener for the CWPP process with funding through CAL FIRE's Wildfire Prevention Program as part of the California Climate Investments Grant Program. From these stakeholders, a core planning team was assembled to guide the CWPP's development, with stakeholders to review as needed. See Appendix A for a more detailed description of partners. To ensure participation beyond the stakeholder groups, a public engagement strategy was developed that included online and in-person outreach with multiple touchpoints and communication methods (See Appendix A Public Engagement for more details). This layered public engagement strategy ensured that the final CWPP was not only informed by technical wildfire risk assessments but also deeply grounded in community priorities.

and knowledge. The inclusive planning process will help build local ownership of the plan and set the stage for sustained collaboration and input in the years to come.

Major Stakeholders

The development of Napa City's CWPP involves collaboration among federal, state, and local agencies, special interest groups, and residents, working closely with over sixty agencies, non-profits, and local organizations to make sure we are coordinating efforts and being as effective as possible without duplicating efforts. Examples include the Napa County Resource Conservation District (Napa RCD), the City of Napa Fire Department, the City of Napa Parks Department, the City of Napa Utilities, and Napa Valley Community Organizations Active in Disaster (Napa COAD) and CAL FIRE. Other critical stakeholders who have provided input include established Fire Safe Councils (FSC) and nonprofits like the Napa Community Firewise Foundation (NCFF, or Napa Firewise), having regular meetings with city and county leadership on the CWPP progress, and integrating ongoing work as projects into our CWPP. See Appendix A for a full list of contributing stakeholders.

Overview of Plan Development

This document is intended to serve as a guiding document for strategies to reduce the risk of wildfire occurring and to reduce the damage from wildfire. The rich range of information (via tabs) is contained in the Community Base Map, as well as the various Story Maps. These Story Maps depict Wildfire Hazard in the City of Napa, Priority Projects, and Fire Safe Councils Fire Hazard Reduction Projects, and go into greater detail regarding topics such as the existing vegetation and fuel models across the City of Napa, more effectively than equivalent sections of this document. Hence, while this document covers similar ground, the enhanced levels of detail and searchable tools in the Hub Site make it an irreplaceable resource for the City and its residents. Use the links throughout this document to be directed to the Hub Site, the Community Base Map, the Wildfire Hazard Story Map, and other relevant resources.

Summary of Hazard and Risk

Maps of Fire Hazard and Risk developed during the CWPP process show that areas in the northwest and eastern parts of the City of Napa have the highest hazard and risk while areas in the southwestern part of the City have the lowest. This risk assessment performed for this CWPP closely reflects the Local Responsibility Areas hazard maps that were updated by CAL FIRE in 2025.

Outside the city limits, almost the entirety of City-owned land is designated as a Very High Fire Hazard Severity Zone within a State Responsibility Area. This includes the Milliken Reservoir and the water treatment plant. The Lake Hennessey area is also mapped as a mix of the Very High and High Fire Hazard Severity Zones.

Projects to address these hazards and vulnerable areas range from fuel reduction and forest/watershed health to environmental clearance, mapping, planning, to along with outreach and educational campaigns. For a detailed project list please see Appendix D: Projects. These project types are aligned with the Fire Adapted Community program spanning the entire cycle of wildfire, from ignition prevention, pre-fire hazard reduction treatments, along with outreach and education, planning, to emergency response support and post-fire recovery.

Goals and Objectives resulting from the CWPP

The goals of the CWPP are to enhance understanding, identify and reduce ignitions, hazards, and risks, foster engagement, protect communities, develop strategies, and increase collaborative planning, especially towards potential pursuit of local funding or supplemental resources to implement prioritized elements of this plan.

The objectives are to: inform and implement policies that support integrated fire mitigation and preparedness strategies such as; protecting critical infrastructure; increasing the mapped and documented access for emergency vehicles' response during emergency; improving road networks and communications between residents and emergency responders; developing and providing education resources for target audiences; identifying and considering areas warranting large scale treatments; understanding public health impacts and mitigation strategies; encouraging evacuation preparedness and assistance, and expanding opportunities for community actions by residents.

1. Introduction

Community Wildfire Protection Plans (CWPPs) are collaboratively developed plans focused on reducing wildfire risk to identified community values within a defined planning area. They serve as an important vehicle for assessing local wildfire hazard and risk, coordinating wildfire risk reduction activities, and providing a mechanism for project funding and implementation.

As established by the 2003 Healthy Forest Restoration Act (HFRA), a Community Wildfire Protection Plan is a strategic plan typically developed by a local fire department, federal and state land managers, local governments, and communities. CWPPs organize a community's efforts to protect itself from wildfire and empower citizens to move in a cohesive, common direction. This CWPP is a roadmap for fire hazard mitigation and preparedness for the City of Napa (hereby known as the City) and will offer recommendations intended to mitigate the risks posed by wildfires, including goals for prevention, safety and evacuation, resident mitigation, improving wildfire response, large-scale landscape treatments (fuel management), and more. Input from the public and other stakeholders helped to inform priorities.

In accordance with the 2003 HFRA, the intent of the CWPP, which was developed collaboratively by citizens and state and local management agencies in consultation with Federal agencies^{1, 2}, is to:

- Align with the County, CAL FIRE, and Federal cohesive pre-fire strategies, which include educating homeowners and building an understanding of wildland fire, ensuring defensible space and structure ignition resistance, safeguarding communities through fuels treatment, and protecting evacuation corridors.
- Identify and prioritize areas for hazardous fuel-reduction treatment.
- Recommend the types and methods of treatment that will reduce damage from wildfire.
- Recommend measures to reduce the ignitability of structures throughout the City.

Additional desired results and outcomes include:

- Shared vision of current situation
- Common, shared, and parallel paths for improvement
- Compatible planning documents
- Open statement of priorities
- Increased potential for funding/efficiency
- Great collaboration with partners/stakeholders

¹ Federal agencies are not present in the City of Napa and therefore were not engaged in this CWPP planning process.

² The CWPP is not to be construed as indicative of project "activity" as defined under the "Community Guide to the California Environmental Quality Act, Chapter Three, Projects Subject to CEQA." Any actual project activities undertaken that meet this definition of project activity and are undertaken by the CWPP participants or agencies listed shall meet with local, state and federal environmental compliance requirements.

2. Goals and Objectives

The goals of the City of Napa CWPP, which was collaboratively developed, are to:

- **Enhance Understanding** – Provide a clear and shared vision of current environmental conditions and shared plans for implementation
- **Identify Hazards** – Pinpoint areas with high fire risk and potential for extreme fire behavior;
- **Foster Engagement** – Create opportunities for public involvement and education of fire preparedness.
- **Protect Communities** – Safeguard vulnerable areas and essential infrastructure;
- **Develop Strategies** – Formulate effective methods to reduce fire risks in our community through open statements of priorities; and
- **Collaborative Planning** – Integrate and coordinate with existing plans and organizations including the Napa County CWPP to leverage resources and to implement projects that maximize benefits for all Napa County residents. Open pathways for potential funding and/or resources.

Objectives to implement the CWPP goals:

- Inform and implement policies that support fire mitigation and preparedness
- Vegetation management for fuel reduction and restore ecosystems
- Protect Critical Infrastructure (water and other)
- Increase the mapped access for emergency vehicles response during emergencies
- Improve road networks and standardize communication between residents and emergency responders
- Develop and provide education resources for target audiences
- Consider areas applicable for large-scale treatments
- Mitigate health impacts from fire
- Encourage evacuation preparedness and assistance, including for vulnerable populations
- Expand opportunities for community actions by residents
- Increase resources for post-fire recovery

3. Roles and Responsibilities

Community wildfire protection planning has evolved greatly since 2003 when first established in the Healthy Forest Restoration Act. The process of addressing wildfire risk has expanded beyond collaboration, prioritization of fuel reduction projects and reduction of structure ignitability to include a wide range of additional issues as identified in the City of Napa CWPP. Similarly, the type of interested parties has expanded beyond the collaboration between fire agencies and residents and includes a wide coalition of partners to reach the goal of resilience to wildfire, while supporting many other mutual benefits. For details on organizational differences and a more complete list of stakeholders and partners please see Appendix A.

The following CWPP working groups hold primary responsibility for the development and implementation of plans. The Action Plan (Table 6) shows how these members of the CWPP team were involved in the development of the CWPP and how they will often be the lead organization for project implementation as resources become available. The list below is organized into 3 roles:

- **Core team:** This team met as often as biweekly to provide detailed discussion and input on all aspects of the plan, including target audiences and actions. Core Team members were tasked with attending meetings, sharing expertise and local knowledge with other stakeholders, proposing projects, participating in prioritization, and reviewing plans and offering comments on recommendations and implementation actions.
- **Advisory committee:** this was an extension of the core team and met every few months for higher impact feedback, especially ahead of the stakeholder group or specific to their areas of expertise.
- **Stakeholders:** This larger committee convened as needed to provide strategic oversight and incorporate additional perspectives before broader public outreach commenced. This group provided review of major steps such as publishing of online outreach materials, review of risk assessments and maps, and drafts of documents or process plans. There were over 80 invitees to these meetings, please refer to Appendix A for a list of organizations involved.

Table 1. Organizations of the City of Napa CWPP Core Team and Advisory Committee

CWPP Working Group	
Organization/Agency	CWPP Role
Napa RCD	Core Team
City of Napa Fire Department	Core Team
Napa Valley COAD	Core Team
Napa Firewise	Advisory Committee
City of Napa, Parks and Recreation	Advisory Committee
City of Napa, Utilities Division	Advisory Committee

4. Collaboration

Development of the City of Napa CWPP has benefitted immensely from collaboration with 65 different agencies, non-profits, local community groups, landowners and/or land managers, public health organizations, private companies, and fire and emergency response entities from the City and County of Napa (see Appendix A for full list).

CWPP development involved multiple meetings (both online and hybrid) including four stakeholder meetings that were held throughout the planning process, providing opportunities for residents, businesses, and other interested parties to learn about the plan, voice concerns, and contribute local knowledge. Meetings intended to produce feedback on the publicly available hazard and risk maps, update existing conditions, and identify priority projects for inclusion in the CWPP. These meetings were supported by a range of public outreach efforts, including online surveys to collect feedback on wildfire concerns and preparedness levels, open office hours where residents could speak directly with planners about project ideas, and active

engagement at local events including existing Fire Safe Councils and other preparedness events. Of special note is the collaboration at the City of Napa Fire Life and Safety Day where the CWPP booth was one of many partner organizations and activities. Additionally, the team maintained a suite of online resources, including a dedicated CWPP website with maps, resources, ways to submit feedback and related educational materials. For more on public engagement, see Appendix A.

Fire Safe Councils

Fire Safe Councils (FSC) within the City of Napa proper have not been established but may be determined as part of the CWPP process, to be integrated into Napa Firewise's existing framework of FSCs. Potential divisions of an eastern and a western FSC have been discussed. The two southernmost areas of the city are within (or partially within) two existing Fire Safe Councils: the American Canyon FSC and the Skyline Jamison FSC. The Milliken Reservoir straddles the boundary between the Atlas Peak FSC, the Silverado FSC and the Mt. George FSC. Additionally, the Lake Hennessey property falls within both Lake Hennessey FSC and Hennessey Rector FSC.

As noted above, other FSCs that have contributed to the CWPP include the Coombsville Wildhorse FSC, Mt. Veeder FSC, Silverado FSC, and Mt. George FSC.

5. Existing Conditions

This section provides a snapshot of the current landscape, relevant plans, and community characteristics that influence wildfire risk. This includes vegetation types, topography, climate patterns, land use, and the condition of emergency response resources. Understanding these factors is critical for identifying vulnerabilities, prioritizing areas for treatment, and developing effective mitigation strategies. Accurate knowledge of existing conditions ensures that wildfire protection efforts are tailored to the community's specific needs and environmental context. This background was presented to CWPP teams for validation and as information that informed the creation of this CWPP. For more details on these existing conditions, see Appendix B.

Community Information: Applicable Plans and Regulations

There are many local, state, and federal plans and regulations that will dictate and facilitate how the Action Plan (Table 6) of this CWPP will be implemented. Of note are the local city regulations, the Napa County CWPP, and the Hazard Mitigation Plan. For a more complete review of relevant information, such as policies, actions, ordinances, and legislation please refer to Appendix B.

Table 2 provides a snapshot of which strategies, programs, or projects are supported. This table relates the strategies in the CWPP as noted in the top columns with the various plans, programs and policies listed to the left in the table. The plans policies and programs summarized include:

1. City of Napa Adopted Plans and Policies
2. City of Napa Codes and Ordinances
3. City of Napa programs and implementation measures
4. Adjacent Agencies Wildfire Hazard Reduction Plans + CWPP, and
5. Compliance with State Laws (Legislative/ State requirements)

Table 2. Leveraging the Napa CWPP

Leveraging the Napa CWPP					Lead	CWPP/ Fire Department to lead plan or program				
Existing plans, programs and policies that support CWPP Action Plan					Incorporate	CWPP to be Incorporated Into plan or program				
					Complement	CWPP complements or links to plan or program				
	Supports Priority Action Plan					Supports additional FAC strategies				
	Prevention	Safety & Evacuation	Resident Mitigation	Wildfire Response	Large Scale Landscape Treatment	Regulations, Policies & Plans	Infrastructure & Business	Recovery	Partnerships and Community Engagement	Public Health
City of Napa Adopted Plans and Policies										
City of Napa 2040 General Plan (including Safety and Noise Element of the City of Napa General Plan - Section 08 and other Elements	Incorporate	Incorporate	Incorporate	Incorporate	Incorporate	Incorporate	Incorporate			Incorporate
Hazard Mitigation Plan (HMP), 2021.	Incorporate	Incorporate	Incorporate	Incorporate	Incorporate	Incorporate	Incorporate			
Housing Element, Nov 2023.		Incorporate				Incorporate				Incorporate
City of Napa Fire Department Plans	Incorporate		Incorporate	Incorporate					Incorporate	
Parks and Urban Forest Management - Urban Forest Management Plan					Incorporate				Incorporate	
City of Napa 2024 Council Priority Progress Report		Incorporate					Incorporate			
City of Napa Codes and Ordinances										
Adoption of 2022 California Building Standards Code (amended by City Municipal Code Section 15.04.30). Includes California Fire Code Chapter 15.04.80	Complement		Complement			Complement				Complement
Chapter 8.24 Weed and Rubbish Abatement in Health and Safety Code	Lead		Lead			Lead			Lead	
Title 12 Streets Sidewalks and Public Places including Chapter 12.44 Public Trees and Plants and Chapter 12.45 Trees on public property	Complement		Complement		Complement					
City of Napa programs and implementation measures										
Fire Hazard Abatement Program			Lead						Complement	Complement
Adjacent Agencies Wildfire Hazard Reduction Plans + CWPP										
CAL FIRE Sonoma Lake Napa Unit (LNU) Strategic Plan 2024	Complement	Complement	Complement	Complement	Complement				Complement	
Napa County Community Wildfire Protection Plan (CWPP), 2021.	Complement	Complement	Complement	Complement	Complement	Complement	Complement	Complement	Complement	
Napa County Fire Marshal's Office Defensible Space Program and Napa Fire Wise	Complement		Complement		Complement				Complement	
Napa County Multi-jurisdictional Hazard Mitigation Plan 2020 Update	Complement	Complement	Complement		Complement	Complement			Complement	
Napa County BRIC program (Building Resilient Infrastructure and Communities)	Complement	Complement	Complement		Complement		Complement		Complement	
Napa County's Office of Emergency Management	Complement	Complement	Complement	Complement				Complement	Complement	
Napa County General Plan, 2008 including Safety Element Update Aug 2023	Complement	Complement	Complement	Complement	Complement	Complement	Complement	Complement	Complement	
Napa County Resource Conservation District (RCD) and Inner Coast Collaborative	Complement				Complement	Complement			Complement	
Napa Valley Transportation Authority		Complement				Complement			Complement	
Regional Climate Action and Adaptation Plan (RCAAP)	Complement	Complement	Complement			Complement	Complement		Complement	Complement

	Supports Priority Action Plan					Supports additional FAC strategies				
	Prevention	Safety & Evacuation	Resident Mitigation	Wildfire Response	Large Scale Landscape Treatment	Regulations, Policies & Plans	Infrastructure & Business	Recovery	Partnerships and Community Engagement	Public Health
Leveraging the Napa CWPP (continued)						Lead	CWPP to lead plan or program			
<i>Existing plans, programs and policies that support CWPP Action Plan</i>						Incorporate	CWPP to be Incorporated into plan or program			
						Complement	CWPP complements or links to plan or program			
Compliance with State Laws (Legislative/ State requirements) continued										
AB1823 (2019) Fire Risk Reduction Communities			Complement			Complement			Complement	
AB2911 (2018) +SB99 (2019) subdivisions without secondary egress routes		Complement								Complement
AB3074 (2020) Ember resistant Zone (Zone 0)	Complement		Complement							Complement
SB9 (2021). Housing development approvals.						Complement				Complement
SB99(2019). Identify developments without two emergency evacuation routes upon revision of housing element.		Complement					Complement			Complement
SB246, SB379, SB1035 (2015, 2018). Integrated climate adaptation and resilience strategies with ICARP.					Complement	Complement		Complement		Complement

Appendix C explores the existing adopted plans and policies, codes and ordinances, programs and implementation measures, adjacent agencies' plans, and legislation/ state requirements with their unfunded mandates for local government and explains how they can be leveraged during the implementation of the CWPP.

Community Information: Planning Area

The Community Base Map is available on the City of Napa Hub Site at <https://city-of-napa-cwpp-cityofnapa.hub.arcgis.com/> and provides spatial data about the community. For a detailed description of how this map was created and compared to ongoing efforts, visit the online resources and see section 7. Assessment of Wildfire Hazard and Wildfire Risk.

Existing Natural and Built Conditions

This description is supplemented by the City of Napa CWPP Hub Site, which holds a rich range of information (via tabs) contained in the Community Base Map, as well as the various Story Maps. Maps on the Hub Site depict:

- Integrated Fire Hazard,
- Fire Hazard Severity Zones,
- Fuel Reduction and/or Wildfire Mitigation Projects, and
- Evacuation Concerns

The Hub Site also goes into greater detail regarding topics such as the existing vegetation and fuel models across the City more effectively than equivalent sections of this document. Hence, while this document covers similar ground, the enhanced levels of detail and searchable tools in the Hub Site make it an irreplaceable resource for the City. Use the links throughout this document to be directed to the Hub Site, the Community Base Map, the Wildfire Hazard Map, and other relevant resources.

The CWPP addresses the entirety of the City of Napa, though it focuses notably on Wildland Urban Interface areas designated and defined by the State and adopted locally (by City Council). A map of the WUI can be found in the City's Community Base Map.

Topography

Most of the City of Napa lies on the southern extent of the Napa valley, bounded by ridges on the east and west. These ridges create microclimates, differing wind patterns, and influence fire behavior as discussed in existing conditions Appendix B. The eastern hills and ridges contain some of the tallest mountain tops in the Napa Valley.

Climate and Weather

Weather conditions and the climatic patterns significantly impact both the potential for ignition and the rate, intensity, and direction in which fires burn. The most important weather factors used to predict fire behavior are wind, temperature, and humidity. Of these, wind is the most important influence on fire behavior, with wind direction and intensifies dramatically changing how and where a fire spreads. The wind patterns of most concern are the October-season northeasterly winds for the City of Napa. Temperatures during the summer range from 40's-90's and single digit humidities that can increase the possibilities of ignitions and more intense fire behavior. Humidity can drop to single digits in the summer and fall. For more details, see Appendix B.

Vegetation

Based on 2016 mapping (the latest available vegetation data for the City of Napa), 72% of the City of Napa is mapped as Developed. The next largest vegetation class is Grassland, accounting for only 7% of the city. Next Streams and Reservoirs make up 6% of the city. It is important to note that much of the vegetation between homes was also mapped as 'Developed'.

Outside of the main city boundary, the property surrounding Milliken Reservoir has almost 1000 acres of Shrubland (55%) and a little over 44 acres of Oak woodland (24%). Similarly, Lake Hennessey is surrounded by over 1300 acres of Oak woodland (45%) and Shrubland (11%).

Public Ownership

The majority of lands in the city proper are privately owned but within the city proper, a little over three thousand acres (less than 25% of total land) of the city are mapped as open, public lands. Of these open, public lands 52% is owned by the City of Napa followed by the State of California (mostly the California Department of Fish and Wildlife (235 acres) and the Napa County Flood Control and Water Conservation District (143 acres).

The Milliken Reservoir property is entirely managed by the City of Napa (though there is a Napa County-owned section and a very small area managed with the Land Trust of Napa County). Likewise, the Lake Hennessey property is owned by the City of Napa with some areas with open access and other areas where access is restricted. These additional project areas are outside the city limits but represent 26% of the area covered by the CWPP.

Fire History

Over the past century, much of Napa County has repeatedly burned, particularly outside Napa Valley proper. While the main part of the City of Napa has not been directly impacted by fire, the city and its residents have been affected by smoke and traffic issues raised during wildfire. In 2017, the Nuns fire touched the western boundary of the city; the neighborhoods around Patrick Road, Browns Valley and Alta Heights were all threatened. The LNU complex in 2020 burned throughout Napa County, including land immediately adjacent to Lake Hennessey. The Milliken Reservoir has been burned several times during the Roadside #42 fire in 1964, the Atlas Peak fire in 1981, and the Atlas fire in 2017. Lake Hennessey saw a direct fire in the 1964 fire called P.G.&E. 6, the 1955 Country Roadside #14, and again in the 1981 Atlas Peak fire. (Data source: CAL FIRE.)

Fire Mapping and Fuel Models

Fuel models describe vegetation structure in addition to typical species composition. The most significant factor is the amount and distribution of smaller-diameter fuels, because these materials generally spread wildland fires. Important fuel characteristics are fuel volume, moisture, structure, size class distribution, live-to-dead ratio, packing ratio, and oil content. Each fuel model is a set of numbers that detail the fuel volumes for various fuel classes, as well as the height of the available fuels, and characteristics of its flammability.

These fuel models, along with topography information, create the basis of a landscape file that is used in fire predictive software.

A fine-scale (5m) fuel model data layer that can be used to predict fire behavior under various weather scenarios. This 5m model was used in the development of the hazard map and risk assessment maps (Figure 5 with the explanatory story map on the hub site) which maps unique fuel models in the City of Napa CWPP vicinity.

Key Infrastructure

The City of Napa's CWPP places a strong emphasis on protecting critical infrastructure, namely the municipal water supply (including key reservoirs, water storage, and treatment facilities), hospitals, and schools. Critical infrastructure locations were identified in the collaborative development of the hazard map and specific target areas are addressed in the Action Plan (Table 6).

The plan also addresses the needs of vulnerable populations and economically disadvantaged communities (Fig 1.). Approximately 19% of city residents are under 18 and **20%** are aged 65 or older (US Census via Esri profile). Approximately 9% of households are estimated to be below the poverty level based on income. There may be additional risks during an evacuation for approximately 13% of the population (i.e. no vehicle access or households' disabilities).

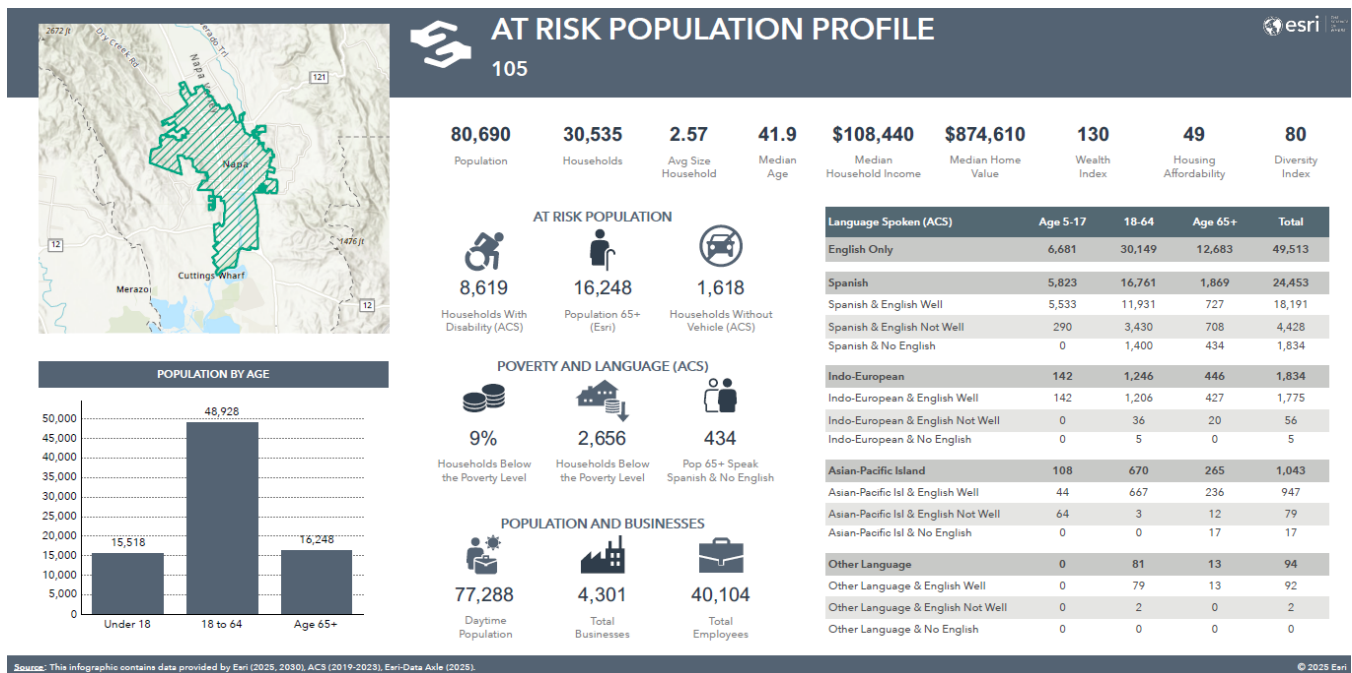


Figure 1. At Risk Population Profile for the City of Napa

Fire Suppression and Response

City of Napa Fire Department

The Napa Fire Department operates 5 stations, whose locations are listed in Table 3 and depicted in Figure 2 below. Per the 2024 Napa Fire Department Annual Report,² 5 engine companies and one truck company are currently in service across 3 daily shifts. Current Fire Department staffing consists of 20 fire captains, 30 firefighter/paramedics, and 12 firefighters per the same annual report.

Napa Fire Department staffing: Station 1 is staffed with a minimum of seven personnel including a three-person engine company, a three-person ladder truck, and a Battalion Chief. Other apparatus housed at that station are cross staffed when necessary. Each of the four remaining stations houses an engine company staffed with a minimum of three personnel. Some of these stations are assigned reserve apparatus and specialty vehicles (e.g., watercraft, utility vehicles, etc.).

Per the January 2023 Napa Fire Department Organizational and Operational Analysis³, “wildfire response is the most demanding event for staffing and resources. NFD daily staffing includes wildland fire apparatus and response. Additionally, the Napa Fire Department operates several specialized apparatuses in addition to standard urban firefighting equipment. The Napa Fire Department also operates a number of special teams, including Technical Rescue, Hazmat Response, Water Rescue and Tactical Paramedics.

The City’s fire response resources are augmented by Mutual Aid (see Fig. 20 Appendix B for map of Mutual Aid Stations. A State-wide master agreement identifies which stations can assist without a need for prior approval. Mutual Aid is provided by stations by the City of American Canyon (three stations), County of Napa (three stations) and CAL FIRE. Two of the Napa County stations are staffed by volunteers. Non-volunteer Mutual Aid Stations are equipped with at least one engine and 3 personnel; the staffing of volunteer stations varies.

² <https://www.cityofnapa.org/DocumentCenter/View/14000/2024-Annual-Report-PDF>

³ <https://www.cityofnapa.org/DocumentCenter/View/10761/Napa-Fire-Service-Analysis>

Table 3. City of Napa CWPP Fire Station Locations

City of Napa Fire Stations		
Fire Station	Location	Staffing
Station 1	930 Seminary St., Napa, CA 94559	Staffed (min. 7 personnel)
Station 2	1501 Park Ave., Napa, CA 94558	Staffed (min. 3 personnel)
Station 3	2000 Trower Ave., Napa, CA 94558	Staffed (min. 3 personnel)
Station 4	251 Gasser Dr., Napa, CA 94559	Staffed (min. 3 personnel)
Station 5	3001 Browns Valley Rd., Napa, CA 94558	Staffed (min. 3 personnel)

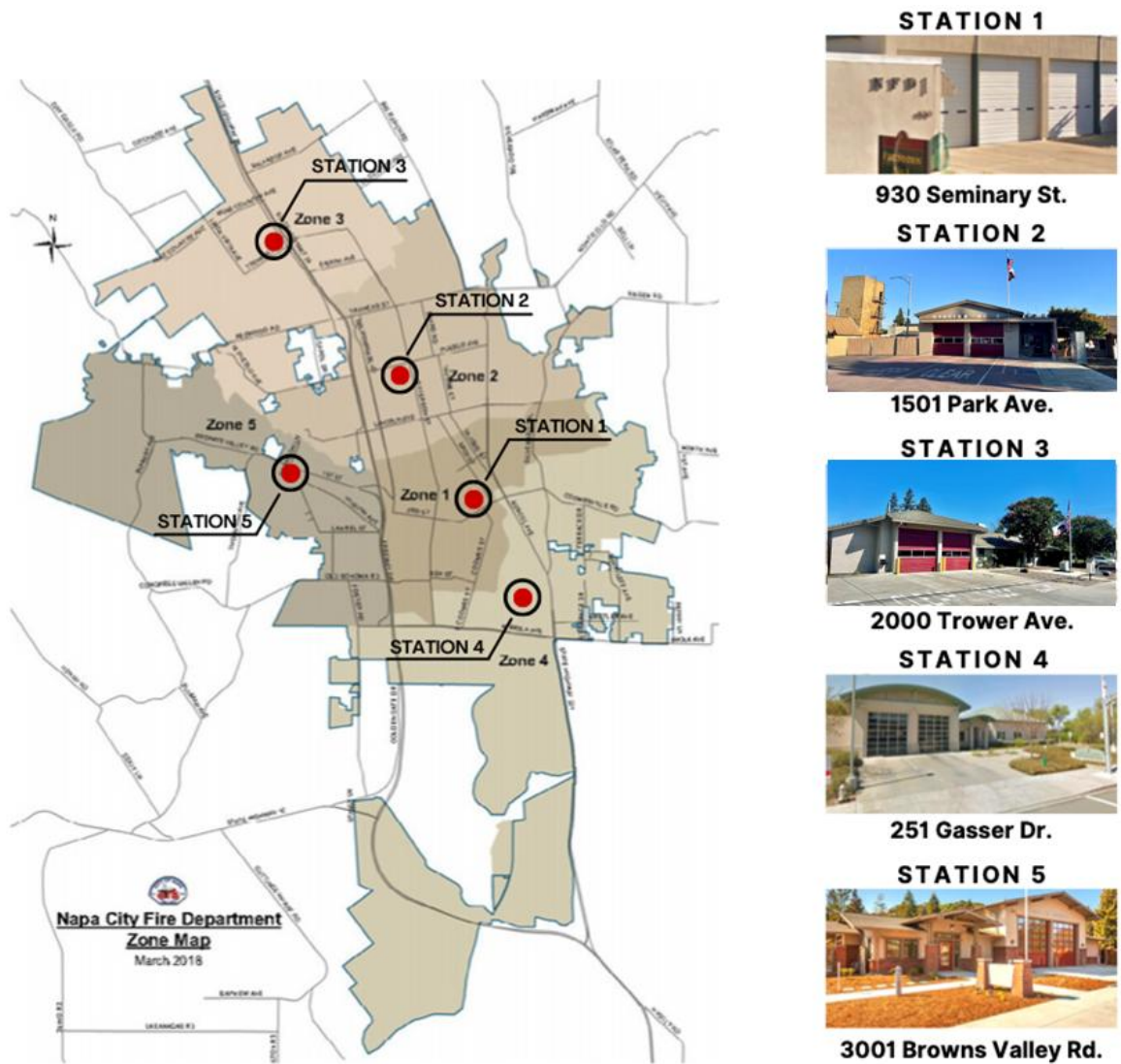


Figure 2. Map of the fire department service areas within the City of Napa CWPP planning area

Fire departments listed in Table 4 are responsible for providing fire protection within the City of Napa CWPP planning area.

Table 4. Fire Departments within the City of Napa CWPP Planning Area

Fire Departments in CWPP Planning Area		
Fire District	Administrative Authority	Description of Geographic Area
Napa Fire Department	City of Napa	Within the city limits
Napa County Fire Department	Napa County	WUI areas in the unincorporated portions of Napa County
American Canyon Fire Protection District (Stations 11 and 211)	City of American Canyon	Mutual Aid Resources throughout City of Napa CWPP area
CAL FIRE	State of California	Shares responsibility for fire protection in the SRA areas

Table 4.a. Napa County Fire Department (CAL FIRE) Mutual Aid Fire Stations

NAPA COUNTY MUTUAL AID FIRE STATIONS ^[1]			
Local Fire Station	Station Number	Volunteer	Address
Carneros	10	Yes	1598 Milton Road, Napa
Carneros	210	Yes	5260 Old Sonoma Rd, Napa
Napa	25	No	1820 Monticello Road, Napa
Greenwood Ranch	27	No	1555 Airport Boulevard, Napa

[1] Fire Stations, <https://www.countyofnapa.org/392/Fire-Stations>, website accessed 9-22-2025.

Table 4.b. American Canyon Mutual Aid Fire Stations

AMERICAN CANYON MUTUAL AID FIRE STATIONS ^[2]			
Station Number	Volunteer	Address	Staff
11	No	911 Donaldson Way East, American Canyon	6
211	No	225 James Road, American Canyon	6
25	No	1820 Monticello Road, Napa	-
27	No	1555 Airport Boulevard, Napa	-

[2] Fire Stations, <https://www.amcanfire.ca.gov/Business/Operations/Facilities>, website accessed 9-22-2025.

CAL FIRE Units

The California Department of Forestry and Fire Protection (CAL FIRE) shares jurisdictional responsibility for fire protection in the SRA areas with Napa County Fire.

Responsibility Areas

The wildland urban interface (WUI) areas in the unincorporated portions of Napa County are protected by the Napa County Fire Department (another stakeholder for this CWPP) and are also designated by state law as State Responsibility Areas (SRAs) for wildland fire purposes. Therefore, the California Department of Forestry and Fire Protection (CAL FIRE) shares jurisdictional responsibility for fire protection in the SRA areas with Napa County Fire. As described above, CAL FIRE evaluates SRA areas for wildfire potential and designates them as Moderate, High, and Very High Fire Hazard Severity Zones (FHSZs).

The following wildland fire responsibility areas are within the City of Napa CWPP planning area.

State Responsibility Areas

A term designating areas where the state has financial responsibility for wildland fire protection. Incorporated cities and land under federal ownership are not included in the SRA.

Approximately 1.1 acres within the City are mapped as SRA. Lands outside the City boundary are classified as SRA. Of the 4,613.1 acres classified as such, 148.5 acres are designated as within a Moderate Fire Hazard Severity Zone, 1,422.1 acres designated as within a High and 3.017 acres were designated as within a Very High Fire Hazard Severity Zone.

Local Responsibility Areas

A term designating areas where the local government is responsible for wildfire protection. The LRA includes incorporated cities and cultivated agricultural land. LRA fire protection is typically provided by city fire departments, fire protection districts, counties, and by CAL FIRE under contract to local government (CA GOPR 2020).

Federal Responsibility Areas

A term designating areas where the federal government is responsible for fire response efforts. Land under federal ownership is in the federal responsibility area (CA GOPR 2020). No area within the City boundary or owned by the City are classified as a Federal Responsibility Area.

6. Wildland-Urban Interface Identification

Major portions of the City are deemed to be within the wildland urban interface, especially on the east and west sides on the outskirts of the city. However, even for areas that are not designated as WUI or even high risk, lessons from recent years have demonstrated how wildfire can spread into any part of the community. For example, the 2017 Tubbs, as well as the 2025 Eaton and Palisades Fires all spread from the wildland into urban areas. The high-resolution vegetative fuels map illustrates how vegetation is continuous from the wildland to leading deep into the City. Additionally, embers from burning foliage can be distributed well into the urban areas of the City.

7. Assessment of Wildfire Hazard and Wildfire Risk

Wildfire hazard refers to the conditions that produce severe behavior in a given area, based on the physical and environmental characteristics of the landscape, regardless of whether any assets of value are present. Wildfire risk accounts not only for the presence of hazardous wildfire conditions but also for the exposure and vulnerability of valued assets.

The “Wildfire Risk” (Story map) can be found on the City of Napa Hub Site (<https://city-of-napa-cwpp-cityofnapa.hub.arcgis.com/>) or directly at [this link](#). A detailed description of how these maps were created along with interactive capabilities for both the Hazard and Risk assessments are included on this site.

Wildfire Hazard

The City of Napa CWPP working group used the following process to incorporate a wildfire hazard assessment and associated map into the CWPP planning process.

Predicted wildfire behavior was derived using standard wildfire behavior prediction software. Two outputs from this modeling effort were utilized: Flame Length and Crown Fire Potential. These two data layers were combined with potential ignition locations (proximity to powerlines, roads, and human habitation) along with owner intervention measures (i.e. fuel mitigation project). Data source: City of Napa, County of Napa.

Predicting Fire Behavior

Fire behavior was simulated using FlamMap, a software program used nationwide that combines information on fuels, weather and topography to describe flame lengths, fire line intensity, rate of fire spread, crown fire potential and more.

For this effort, weather data at the 90th percentile - or the near-maximum hot, dry, windy conditions - was used to predict wildfire behavior possible at each pixel on the landscape. The near-maximum wildfire behavior is an assessment of head fire behavior for a severe weather condition (though usually not the most severe possible). Of the many fire behavior outputs that are used to measure wildfire hazard the analysis focused on the most common measures: flame length, fire line intensity, and type of fire (surface versus crown fire).

Flame Length

Flame length is often the preferred measure of wildfire intensity for its easy conceptualization and observation. Flame length is often correlated to the ability to control a fire. A flame length of 4 ft is generally the limit of what can be attacked with hand crews, and 8 ft is usually looked at as a cut-off point for strategic firefighting decisions on whether to attack the fire directly or instead attempt control through indirect methods. Flame lengths are often used as a proxy for fire intensity because they are highly correlated to higher natural resource impacts.

Crown Fire Activity

Crown fire predicts locations where fire is expected to spread into and possibly consume the canopy of trees or shrubs. The process through which a surface fire transitions to torching is based on the fire line intensity, canopy base height, and foliar (leaf) moisture content. Surface fires are limited to fire burning in grass, short shrubs, and the understory of a treed environment, or locations with tall shrubs. It is important to keep in mind that crown fires and torching can occur only where there are trees and tall shrubs. Short shrub stands can burn intensely and still not torch.

When a fire burns through trees or tall shrub crowns, countless embers are produced and are distributed, sometimes over long distances of several hundred to several thousand feet. These embers can start new fires called “spot fires” which can each grow and confound the even most skilled fire suppression forces. In terms of ecological effects, prediction of torching or crown fire is highly correlated with fire severity and greater environmental impact.

Ladder Fuels

Ladder fuel index is a metric that helps to predict the vertical spread of a fire, or how it might climb up from surface fuels to canopy fuels. This index is important because canopy or crown fires are significantly more destructive than surface fires.

Figures 13-17 in Appendix B provide information about the density of living and dead vegetation in the vertical stratum between 1 and 4 meters above the ground, which serves as a useful proxy for ladder fuels.

Higher values indicate a higher volume of ladder fuels compared to canopy fuels. A high ladder fuel index indicates a propensity of the fuels to torch when trees are present.

The understory may consist of lower branches, or shrubs. Both provide a fire path to the tree canopy.

Wildfire Intensity and Likelihood

Determining wildfire intensity is based on existing vegetation and how it is anticipated to burn under certain environmental conditions. The likelihood is based on whether there's a ready ignition potential nearby and whether wildfire mitigation work has been conducted. Together, these three factors, predicted wildfire behavior, potential ignition sources, and owner intervention measures (which can lower wildfire hazard) were used to determine wildfire hazard.

As opposed to wildfire risk, wildfire hazard is the likely intensity level of a wildfire occurring. For this effort, predicted wildfire behavior was derived using standard wildfire behavior prediction software (FlamMap). Two outputs from this modeling effort were utilized: Flame Length and Crown Fire Potential. These two data layers were combined with potential ignition locations (proximity to powerlines, roads, and human habitation) along with owner intervention measures (i.e. fuel mitigation project).

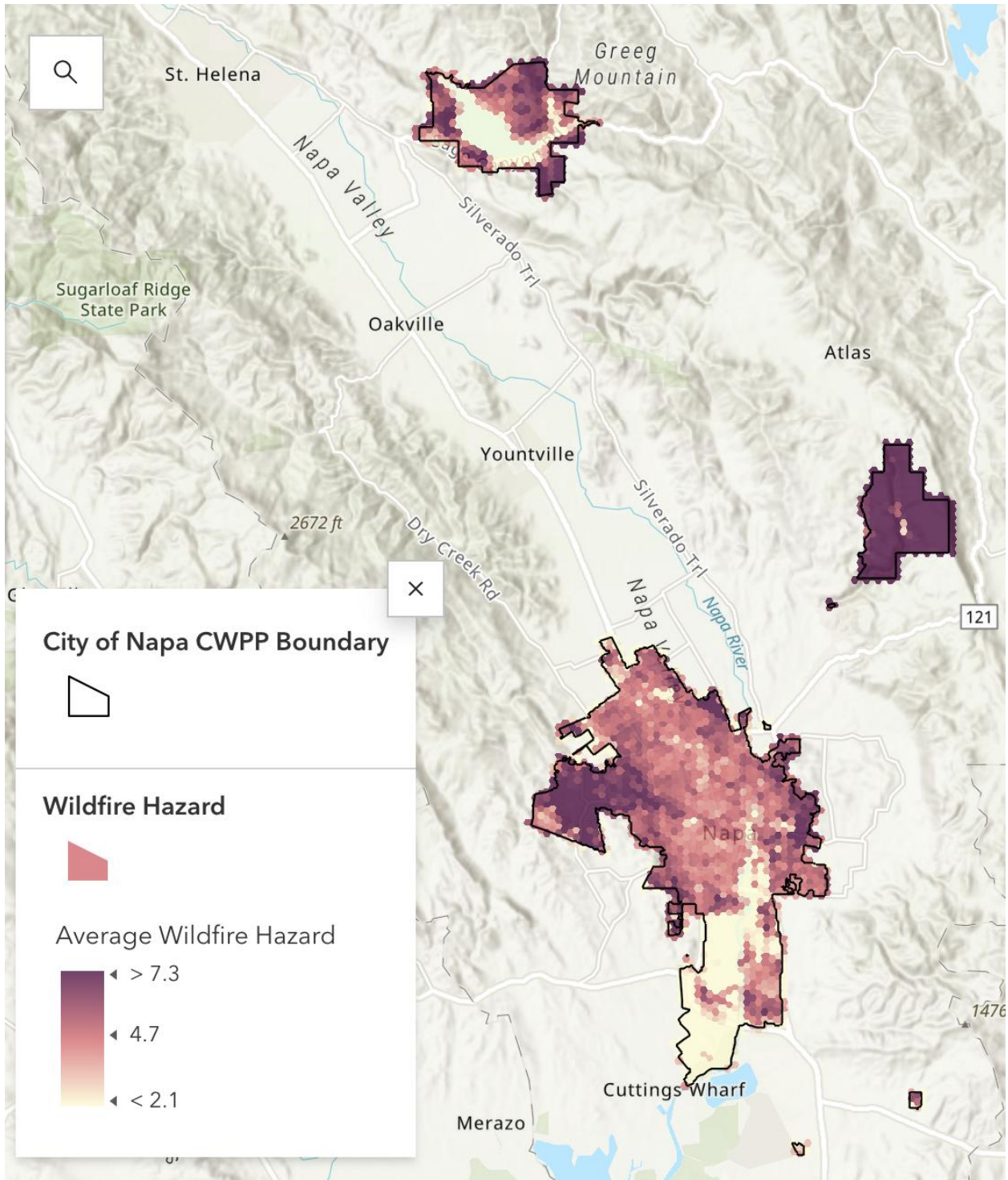


Figure 3. City of Napa CWPP wildfire hazard assessment map

Community Values Susceptible to Wildfire

While it is important to map wildfire hazards, just because a particular location may be likely to experience a devastating wildfire, it doesn't necessarily indicate that there is any specific community asset or value at that particular location. In other words, if no community values exist where high wildfire hazard is predicted, then the area is not necessarily a priority for fuel mitigation work.

An effort was made to identify key community values within the City of Napa's CWPP project area. These included the following: community assets (i.e. hospital, libraries, modular home parks, schools, wineries), natural resource assets (city parks), and infrastructure assets (powerlines, critical water facilities, water sources, and other public facilities).

All these assets were spatially characterized by buffered areas and combined to create a spatial layer highlighting the location of these assets.

Fire Hazard Severity Zones

Figure 4 below shows CAL FIRE's Fire Hazard Severity Zones surrounding and within the City of Napa CWPP boundary. The Fire Hazard Severity Zones outside of the City of Napa limits are designated as State Responsibility Areas and are mapped by CAL FIRE (2023). Most of the areas within the city limits are Local Responsibility Areas newly mapped in 2025, which have been adopted "as is" by the City.

The goal of this mapping effort is to create more accurate fire hazard zone designations such that mitigation strategies are implemented in areas where hazards warrant these investments. The fire hazard zones will provide specific designation for application of defensible space and building standards consistent with known mechanisms of fire risk to people, property, and natural resources.

As shown in Table 5, the new maps of the City indicate most of the City is mapped as either outside a Hazard Severity Zone, or as Moderate. Areas in the east and west are mapped as High. The Milliken Reservoir and the water treatment plant are entirely within a State Responsibility Area, and they have been designated in the Very High Fire Hazard Severity Zone. The Lake Hennessey area is also entirely within a State Responsibility Area and has been mapped as a mix of the Very High and High Fire Hazard Severity Zones⁴.

⁴ Data Source: This dataset provides zones in SRA, as adopted by CAL FIRE in 2023. LRA data is from 2025 (CAL FIRE).

Table 5. Acres in each designation of fire hazard severity zones

Project Area			LRA Designation			SRA Designation		
	Total Acres	Non Wildland	Mod	High	Very High	Mod	High	Very High
City of Napa Area	12,679	1 0,077	1,547	1,053	-	<1	1	-
Foster Rd Property	<1	-	<1	-	-	-	-	-
Hacienda Water Tank	1	-	-	<1	-	-	<1	-
Lake Hennessey Area	2,875	2	-	-	-	149	1,433	1,291
Levitin Way Property	19	8	1	-	-	-	-	-
Milliken Reservoir Area	1,727	1	-	-	-	-	-	1,726
Polson Rd Property	41	27	14	-	-	-	<1	-
Trancas St and Silverado Trl	7	7	-	-	-	-	-	-
Water Treatment Site	4	-	-	-	-	-	-	4

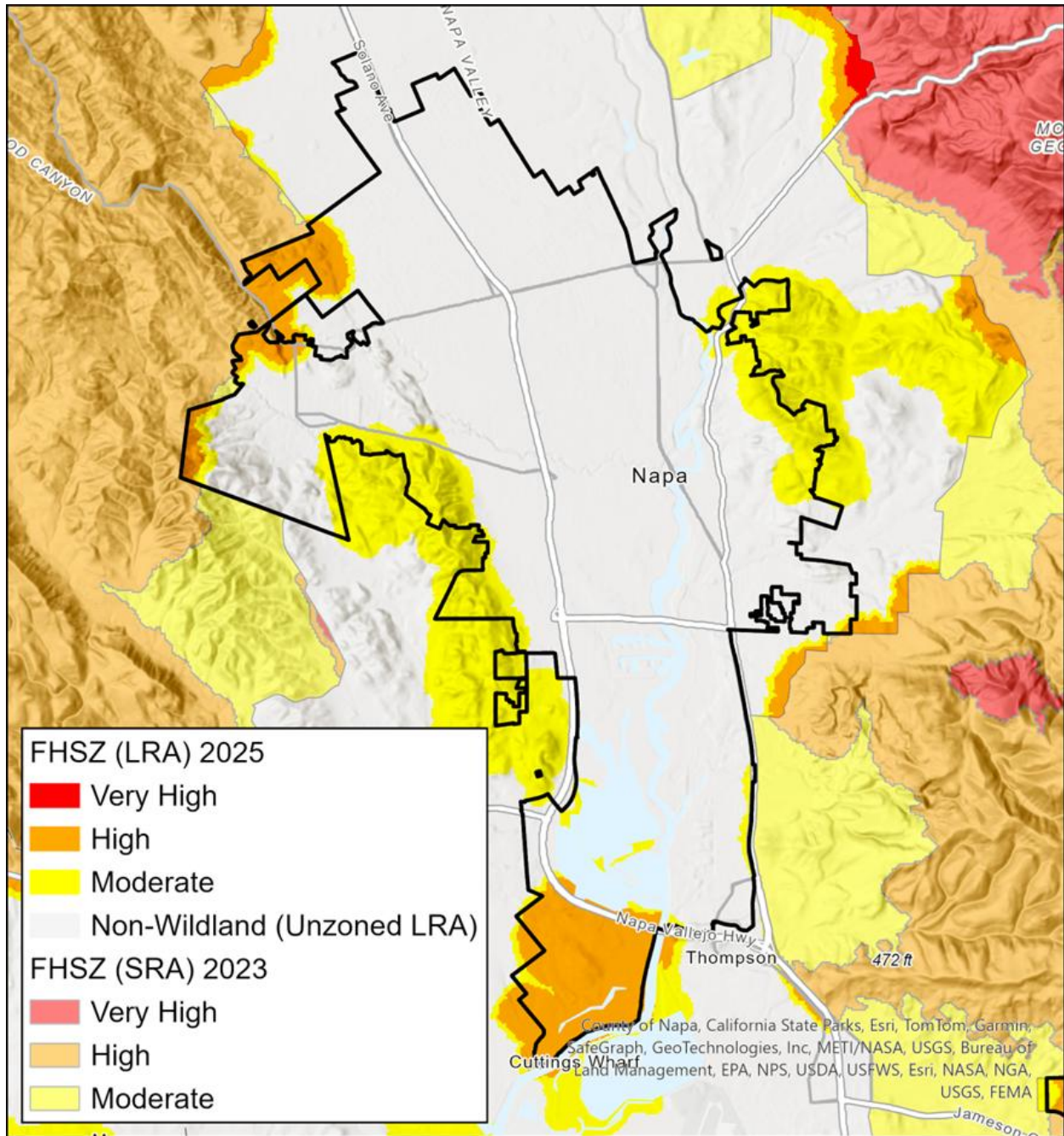


Figure 4. Map of Fire Hazard Severity Zones in the City of Napa vicinity.

Wildfire Risk

Wildfire Risk Map

A Wildfire Risk Map is a spatial representation of the predicted wildfire risk for any given area in the modeled extents. Wildfire risk can be defined as the likelihood of a wildfire occurring and the potential effects it would have on things we care about.

For this effort, we used several data components to derive what we think represents wildfire risk for the City of Napa. It is a combination of two main components:

- Wildfire Intensity and Likelihood (Hazard)
- Community Values Susceptible to Wildfire

Together, the Wildfire Hazard and Community Values were then combined to create a spatial layer that represents not only where a damaging wildfire may exist, but where it will occur along with the community values we want to protect. The areas in bright red on the map are those areas where both coincide and where a fuel mitigation project and/or community awareness programs should be targeted.

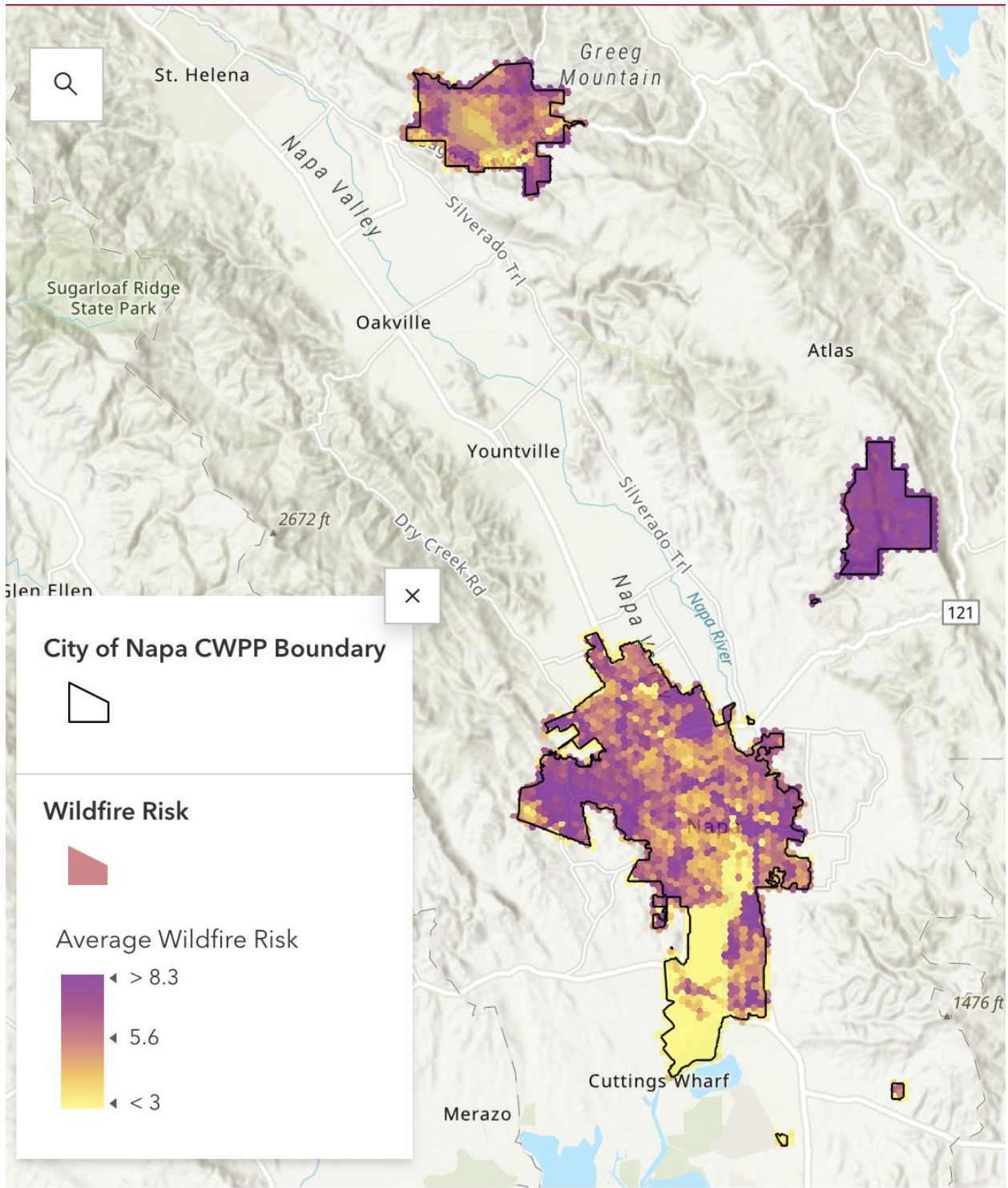


Figure 5. City of Napa CWPP wildfire risk map

Additional Sources of Information

In addition to the above modeling (Fig 5.), comparisons to other efforts have, and will continue to be, evaluated for new information on risks and hazards. Examples of this include the comparison of this modeling with the results of the Local Responsibility Areas (LRA) Hazard Maps that was updated during the development of the CWPP (in 2025). As this information became available, it was carefully reviewed, compared, and integrated into the CWPP as appropriate, including a metric on the prioritization of projects if they were identified in the LRA as high hazard. In this example, the results of both efforts were very similar, but the CWPP process had finer-scale results with more input from the community. Importantly, the results are largely consistent and do not conflict with each other.

There are other upcoming modeling and assessments that will be reviewed, compared, and integrated if applicable. For example, a modeling effort that includes the east and west areas of the City of Napa will identify potential fire pathways and entry points and will be considered for inclusion in the CWPP if available.

Project Development

Project Idea Identification

There were three main methods used to collect potential projects:

- 1.) Collaborative identification of projects with members of the Core Team, Advisory Committee and Stakeholder working groups. This was done through group meetings, brainstorming, breakout virtual rooms, and 1:1 or small group meetings.
- 2.) Leveraging existing plans (See Appendix C: Leveraging for lists) to identify complimentary objectives and projects that were relevant to the City of Napa CWPP. This process informed both project identification and project prioritization.
- 3.) Open solicitations for project submissions. This was done predominantly through an online portal on the City Hub Site but also included mapping exercises at public events and virtual meetings. Invitations to participate in this submission were listed on the main CWPP development websites and sent out to interested parties and via newsletters. Additionally, office hours were held to discuss project ideas or to provide assistance with the portal. Although the portal was mostly used by Stakeholders or those highly involved with the development of the CWPP (for example Fire Safe Council leads), some community members outside the Stakeholder list also submitted projects. The project proponent was contacted about more details as a way to gather implementation-oriented details.

Final Project selection

The Core Team discussed project ideas in detail with multiple iterations of tables produced and discussed. These tables listed the project idea and provided extensive detail on the project description that can be found in the Project Detail section. There were projects discussed that were not included for a variety of reasons, most commonly due to the project being outside the geographic or jurisdictional boundary of the City of Napa CWPP. Many of the projects first discussed are included as sub actions to a broader action and are also listed in the project detail section.

Project Prioritization

Once the project list was finalized, a weighted prioritization system was agreed on. The various factors were used to prioritize projects:

- Life & Safety objective,
- High Hazard area ranking,
- Stakeholder identified priority,
- Critical Infrastructure,
- Benefit to vulnerable populations,
- #1 Identified Survey Strategy and
- If it was listed in an existing plan: (Hazard Mitigation Plan, County CWPP/FSC, Other planning doc (ex: Climate Action Plan, Forest/Urban Forest Management Plan, etc.).

These weights were calculated with the corresponding sum linked to Very High, High, Moderate, and Low priorities as listed in the Action Plan (Table 6).

8. Action Plan

An Action Plan was developed based on the results of the public surveys from the Hub Site, and in tandem with recommendations from the Core Team and expert consultant input. This Action Plan prioritizes projects that fall within the goals of prevention, safety and evacuation, resident mitigation, wildfire response, and large-scale landscape treatments. Some strategies are also covered by existing departments/processes/plans etc., including regulations, policies, and plans; infrastructure and business; recovery; partnership and community engagement; and public health. The following are the goals within the five priority strategies.

The organizing model for this project is Fire Adapted Communities, a national model based on fire resilience (<https://fireadapted.org/>). The Fire Adapted Communities model (Fig. 6) promotes a strategy involving local multi-jurisdictional stakeholders working together to identify risk, mitigate it, and maintain the work over time. Part of the strategy is the creation of an Action Plan to guide prioritization and implementation of projects.

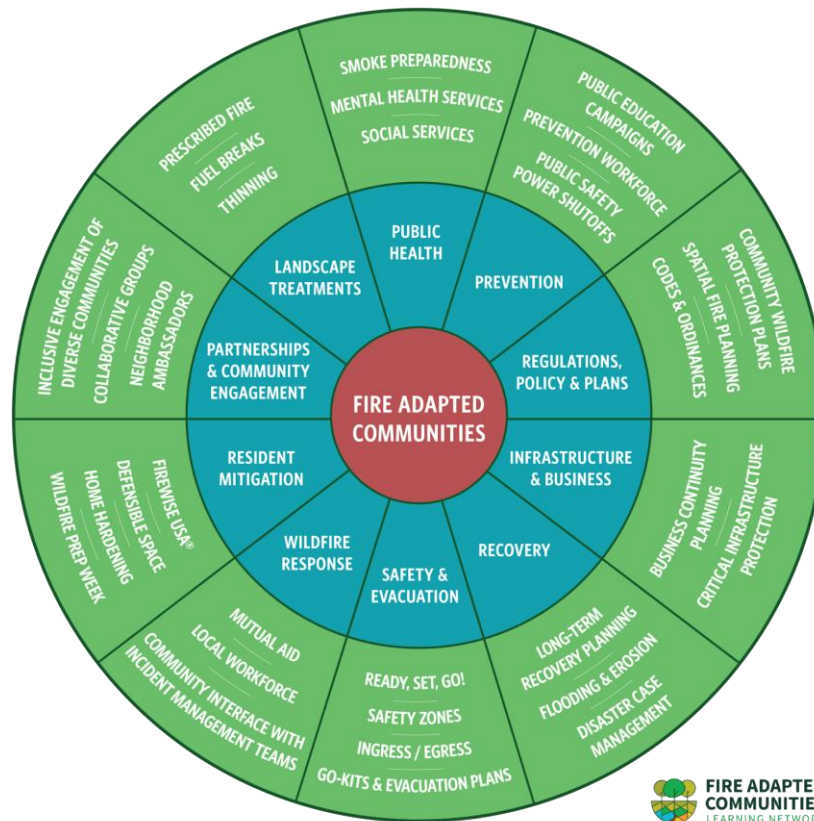


Figure 6. Fire Adapted Communities Learning Network Framework Strategy Wheel

The following City of Napa CWPP Action Plan (Table 6) summarizes and integrates the information and findings from the CWPP to provide specific implementation of projects, programs, or other mechanisms to help achieve the CWPP goals and objectives. The Action Plan includes specific actions pertaining to:

- Landscape management and prioritized fuel reduction treatments
- Reducing structural ignitability
- Any other actions related to hazard and risk reduction within the planning area that help achieve the plan's goals and objectives

The City of Napa CWPP action plan also includes the lead agencies responsible for each action, timeframe for implementation, type of resources needed, and metrics for tracking progress and outcomes.

Key for Action Plan Table 6.

Icons for Resources Required:

Icon	Category/Examples
	Implementation and on-the-ground work- Personnel time
	General/partnership management/grants/planning/policy- Personnel time
	Outreach/collaboration/facilitation/materials creation-Personnel time
	On-the-ground treatment (including roadside clearance, use of heavy machinery, hand crews, etc.)
	Funding for materials/implimentation
	Planning or documentation (official documents, policy changes, landowner/collaborative agreements, etc.)

***Ownership**

City: City of Napa action plan item leadership

County: In County CWPP and/or taking place on County property

Private: Requires collaborative approach to work with private property. These projects are outside the City Responsibility, but efforts can be encouraged with the potential for support by City agencies.

Table 6. City of Napa CWPP Action Plan (Following page)

TABLE 6 - CWPP Action Plan

Action	Lead(s)	*Ownership	Priority	Status	Resources Required	Metric for Success	Notes
GOAL 1: Regulations, policy and plans							
Objective 1.1 Inform and implement policies that support fire mitigation and preparedness							
1.1.1 Alston Park Management Plan	Napa RCD/City of Napa	City	High	Concept		Achieve Forest management plan goals	Develop a Forest Management Plan or Vegetation Management Plan for Alston Park to guide fuel reduction, oak planting and restoration activities.
1.1.2 Weed & Nuisance Abatement Ordinances	City of Napa/ Napa RCD	City	High	Ongoing		Updated ordinance with fire mitigation considerations and language is adopted	Consider updating the weed & nuisance abatement ordinance into a broader reaching policy that reflects a vegetation management ordinance.
1.1.3 Westwood Hills Forest Management plan	Napa RCD/City of Napa	City	High	Ongoing		FMP written and implemented	Plans are in progress and initial funding is secured for vegetation management. Priority treatments include ladder fuels reduction, trail improvement, fire spread risk reduction, and defensible space work.
1.1.4 Development of policies that promote fire safety	Napa Firewise/ City of Napa	City	Moderate	Ongoing		Integrated policies and plans	Develop and interact with ongoing planning efforts and policy creation including those that address structural and vegetative fuels, consider for inclusion in future policy updates for city
1.1.5 Urban Forest Management Plan	City of Napa	City	Low	Concept		Minimal fire risk from urban forest areas	Assess the newly developed Urban Forest Management Plan for opportunities to reduce fire risk, including identification of tree planting needs, selection of tree species and locations, and maintenance.

TABLE 6 - CWPP Action Plan

Action	Lead(s)	*Ownership	Priority	Status	Resources Required	Metric for Success	Notes
GOAL 2: Prevention							
Objective 2.1: Vegetation management for fuel reduction and to restore ecosystems to fire resilient and native ecosystems							
2.1.1 Creeks Project (Citywide)	City of Napa-Multi	City	Moderate	Concept		Healthy riparian system that does not promote wildfire spread	Consider removal of invasive species and to reduce fuel loads and ember risks in riparian areas. For specific examples of creek treatment, please see project Appendix D.
2.1.2 Wildfire resilient Parks (Citywide)	City Parks	City	High	Ongoing		Restored native ecosystem and fuel types that limit fire spread and intensity in WUI	Restored native ecosystem and fuel types that limit fire spread and intensity in WUI
2.1.3 Vegetation Management between Hagen Road/Silverado/First Ave.	City of Napa-Multi	Private	High	Concept		Fuel types that limit fire spread and intensity	Encourage landowners to reduce and maintain vegetation areas Hagen Oak, First Ave., Silverado Trail and Stonecrest. Collaborate with Napa County landowners.
2.1.4 Caswall St. and Lilienthal Ave (near Old Sonoma Rd.)	City of Napa-Multi	Private	High	Concept		Fuel types that limit fire spread and intensity	Encourage fuel reduction along important interface between steep WUI area and development.
2.1.5 Browns Valley Moose Lodge	City of Napa-Multi	Private	High	Concept		Fuel types that limit fire spread and intensity; educational component and/or agreements	Fuel reduction project involving a large area; work with parks department to add our ideas and needs to their ongoing project. Potential for education and outreach.
2.1.6 Hennessey Ridge Road	Napa RCD	Private	Moderate	Concept		Fuel types that limit fire spread and intensity	Consider how to implement vegetation management along Hennessey Ridge Road (both city owned and privately owned land) in the Lake Hennessey

TABLE 6 - CWPP Action Plan

Action	Lead(s)	*Ownership	Priority	Status	Resources Required	Metric for Success	Notes
Vegetation Management							watershed
2.1.7 Area between El Nido to El Monte Fuel treatment	City of Napa-Multi	Private	Low	Concept		Removal of ladder fuels; maintenance plan	Encourage fuel treatment (ladder fuel removal) between El Nido to El Monte drive
GOAL 3: Infrastructure							
Objective 3.1: Protect critical water source infrastructure							
3.1.1 Protect water delivery system	City of Napa-Utilities	City	Very High	Ongoing		Majority of identified water systems have been assessed with some improvements made	Maintaining water tanks, pump stations, water pipes, and treatment plants for drinking water and fire response. High priority to ensure the City's Health and Safety through Clean Drinking Water
3.1.2 Protect watershed	City of Napa	City	High	Concept		Watershed that is resilient post-fire erosion with strong indicators of ecosystem health	Consider how to reduce the risk of fire and erosion potential throughout the watershed while maintaining ecosystem health
3.1.3 Retrofit water infrastructure	Napa Firewise/County	County	High	Proposed		Resilient water sources throughout county	Consider retrofitting critical public safety infrastructure with fire resistant materials and or create defensible space around structures.
Objective 3.2: Protect other critical infrastructure							
3.2.1 Protect communications equipment, and towers, other infrastructure.	City of Napa	City	Very High	Proposed		Identified locations and mitigation plan	Protect Communication equipment, including towers and other infrastructure (esp. radio communication equipment)

TABLE 6 - CWPP Action Plan

Action	Lead(s)	*Ownership	Priority	Status	Resources Required	Metric for Success	Notes
3.2.2 Identify and retrofit other critical infrastructure	Various	City	Very High	Ongoing		Identified and retrofitted infrastructures	Consider retrofitting critical public safety infrastructure with fire resistant materials and or create defensible space around structures.
GOAL 4: Wildfire Response							
Objective 4.1: Increase the access for emergency vehicles response during emergency							
4.1.1 Improve designated emergency vehicle access routes (fire access)	City of Napa - Fire Dept.	City	High	Concept		Access routes identified, treated and maintained	Identify additional roadways that may need clearance of obstructions, modify parking or other restrictions, and any additional needs to create or expand access in the event of an emergency. Identify fire access points, create/maintain vehicle access for emergency use only
4.1.2 Conn Dam to Sage Canyon Rd Egress	City of Napa - Utilities	City	Moderate	Proposed		Accessible evac route	Consider providing secondary emergency egress. Western edge of Lake Hennessey connecting Conn Valley Rd to Sage Canyon Rd.
Objective 4.2: Road networks (safe passages, parking restrictions, clear roadside obstructions)							
4.2.1 Thompson Avenue Shaded Fuel Break	City of Napa- Multi	City	Low	Concept		Fuel types that limit fire spread and intensity	Consider creating shaded fuel break and remove grass and ladder fuels 20-30 feet each side of roadway.
4.2.2 Lower Redwood Rd	City of Napa	City	Low	Proposed		Reduced fuels & improved access	Consider creating shaded fuel break for fire control and improved access route.

TABLE 6 - CWPP Action Plan

Action	Lead(s)	*Ownership	Priority	Status	Resources Required	Metric for Success	Notes
4.2.3 Southwestern Fuel Break	Lake Hennessy FSC/ City of Napa	County	Moderate	Funding requested		Fuel types that limit fire spread and intensity	Treat vegetation to reduce fuel volume, remove ladder fuels 1000 feet from roads
4.2.4 Partrick Roadside Expanded	Mt Veeder FSC	County	Moderate	Complete		Access route in identified area that is maintained and free of ladder fuels	Maintain expanded roadside clearance of Partrick Road
Objective 4.3: Increase response effectiveness through standardizing communication between residents and emergency responders							
4.3.1 Standardized Address signs	Napa Firewise	City	High	Concept		60% have standardized signs	Encourage installation of uniformed address signs for residential and commercial properties, including standardized placards, signs or painted roadside curbs for visual notification for first responders.
4.3.2 Evac Zone Stickers/Magnets	COAD	City	Moderate	In Progress		Majority of residents receive evac zone stickers/magnets in mail; evacuees report knowledge of evac zones in the event of emergency. Also consider sending standard "evacuated" self-posted stickers through sheriff's office	Create stickers/magnets showing evacuation zones or protocols that people can stick to everyday items.

TABLE 6 - CWPP Action Plan

Action	Lead(s)	*Ownership	Priority	Status	Resources Required	Metric for Success	Notes
GOAL 5: Partnerships and community engagement							
Objective 5.1: Develop and provide education resources for target audiences							
5.1.1 Sparking equipment awareness materials	City of Napa/ Napa Firewise/ etc.	County	Moderate	Planned		Material produced and distributed	Develop Public awareness information for wildfire season related to flame/sparking equipment.
5.1.2 Defensible Space program support	Napa Firewise/ County	City	Moderate	Ongoing		Well attended in person events; increase % of residents with defensible space and home hardening.	Develop & conduct a Defensible Space community education program. Create bilingual resources and learning opportunities for businesses and residents.
5.1.3 Bilingual outreach on defensible space and home hardening best practices	City of Napa/ Napa Firewise/ etc.	City	Moderate	Ongoing		At least 1 well-attended workshop; dissemination of materials	Bilingual resources and learning opportunities created for homeowners and business owners
5.1.4 Ignition prevention for landscape professionals	City of Napa/ Napa Firewise/ etc.	City	Moderate	Ongoing		Collaboratively created and disseminated brochure or online resource	Create bilingual handout materials and workshopping about red flag days and ignition prevention. Model materials from County CWPP/City of Yountville.
5.1.5 Reduce frequent fire ignitions	City of Napa/ Napa Firewise/ etc.	City	Moderate	Ongoing		10% less accidental ignitions/year in identified area	Consider methods to limit ignitions in high-risk areas including outreach on ignition sources. Model materials from County CWPP, City of Calistoga.

TABLE 6 - CWPP Action Plan

Action	Lead(s)	*Ownership	Priority	Status	Resources Required	Metric for Success	Notes
	etc.						
5.1.6 Managing riparian vegetation to minimize fire risk and restore habitat	Napa RCD	City	Moderate	Concept		At least 1 well-attended workshop; dissemination of materials	Hold a workshop to teach about common riparian invasive plants with a handout regarding identification and methods of removal.
5.1.7 Identify outreach needs and target audiences	City of Napa-Multi	City	Low	Concept		Collaboratively created and disseminated brochure or online resource	Continue to identify topics or needs around educational resources needed
GOAL 6: Landscape (Large-Scale) Treatments							
Objective 6.1: Provide large scale treatments							
6.1.1 Lake Hennessey Forest Health Improvements	Napa RCD	City	Moderate	Funding requested		Implementation of fuel reduction projects under current plan	Consider collaborative management of the Lake Hennessey area using the Forest Management Plan (1,064 acres)
6.1.2 Support prescribed fire use	County/Prescribed Burn Assoc.	County	Moderate	Ongoing		Acres treated with prescribed fire each year, approved CEQA for Rx burns, landowner agreements obtained, full fire cache, prescribed fire trainings	Conduct prescribed burns as part of wildfire mitigation strategy.

TABLE 6 - CWPP Action Plan

Action	Lead(s)	*Ownership	Priority	Status	Resources Required	Metric for Success	Notes
GOAL 7: Public Health							
Objective 7.1: Mitigate the health impacts from fire							
7.1.1 Smoke/Air quality mitigation resources	County CWPP/ City of Napa	City	Moderate	Planned		Collaboratively created and disseminated brochure or online resource	Develop and disseminate materials about air quality mitigation measures for residents before wildfire season in collaboration with healthcare providers and agencies.
GOAL 8: Safety and Evacuation							
Objective 8.1 Evacuation preparedness and assistance, including for vulnerable populations							
8.1.1 Evacuation planning for vulnerable populations	County CWPP	County	Very High	Ongoing		At least 1 well-attended workshop; dissemination of materials	Compliment to existing programs; Work with local agencies to develop evacuation plans and provide education and outreach to populations vulnerable to wildfire
8.1.2 Evacuation preparedness	City of Napa-Fire Dept.	City	High	Concept		At least 1 well-attended workshop; dissemination of materials	Compliment to existing programs; Consider creation of bilingual materials and workshops on how to prepare for evacuation, the meaning of red flag days, and what to do during an evacuation.
GOAL 9: Resident Mitigation							
Objective 9.1: Expand opportunities for community actions							
9.1.1 General Appraisal-Alta Heights Community	City of Napa-Multi	City	Very High	Concept		Community-led fire mitigation effort	Assess what can be done in Alta Heights to safeguard the area and educate the neighborhood on best practices to reduce the chance of wildfire damage.
9.1.2 Consider Creation of Firesafe Councils	Napa Firewise	City	High	Concept		Establishment of FSCs Firewise USA recognized,	Identify leads and boundaries to establish Fire Safe Councils and pursue NFPA Firewise recognition.

TABLE 6 - CWPP Action Plan

Action	Lead(s)	*Ownership	Priority	Status	Resources Required	Metric for Success	Notes
						especially areas with high fire severity	
9.1.3 Consider City Chipping Program	City of Napa-Multi/FS C	Private	Moderate	Proposed		Host chipping days that serve targeted areas of the city (that do not currently have access to chipping)	Create opportunities for chipping program access to city residents, this could follow the process and outline for Napa county chipping program.
9.1.4 Support fuel reduction around structures	Napa Firewise/County	County	Moderate	In Progress		Most structures have achieved some to high levels of fuel reduction on properties	Encourage fuel reduction projects to reduce impacts to homes and businesses and to provide assistance to private property owners (technical and financial).
9.1.5 Support vegetation management for city property owners and residents	City of Napa	Private	Moderate	Proposed		Identified opportunities and mitigation actions on private land where appropriate	Look for opportunities for neighboring jurisdictions and property owners for vegetation management. Consider a multi-parcel project to improve strategies and consider the Enhanced Resiliency Sites model.
9.1.6 Pennyroyal Street	City of Napa-Multi	Private	Low	Ongoing		Removal of ladder fuels	Consider ladder fuel and invasive species removal, Defensible space could be needed
9.1.7 Grandview Dr	City of Napa-Multi	Private	Low	Concept		Removal of dead trees and reduction in fuels	Consider reducing high fuel load and remove dead trees (including eucalyptus); land is privately owned and project depends on landowner motivation. Similar area south of Stanley Lane.

TABLE 6 - CWPP Action Plan

Action	Lead(s)	*Ownership	Priority	Status	Resources Required	Metric for Success	Notes
GOAL 10: Recovery							
Objective 10.1: Increase resources for post-fire recovery							
10.1.1 Support immediate and long-term recovery programs	City of Napa-Multi	City	High	Concept		Materials and dissemination during event	Identify where and what resources are needed for immediate (ex: shelters, insurance claims, basic needs) and longer-term recovery (erosion, rebuilding, etc.)

Ignitability Measures for Structures

The City has adopted the most recent building and fire codes which reduce the chance of structure ignition. Additionally, the City's outreach and education further supports structure ignition prevention for existing structures, especially in regards to retrofitting features that might make a structure more prone to ignition. Projects in this CWPP advance many outreach and education programs. The weed abatement ordinances, plans review for new development and other outreach methods for existing development serve as additional strategies for this goal.

The Action Plan (Table 6) includes a number of projects and priorities that focus on home hardening and defensible space programs for residents of the City of Napa. 9.1.2 "Consider Creation of Fire Safe Councils" would promote retrofits to existing structures, localized community actions, and defensible space programming, including the potential pursuit of NFPA Firewise recognition that strongly focuses on individual structure mitigation measures. Other examples in the Action Plan include 5.1.2 "Defensible Space program support", 5.1.3 "Bilingual outreach on defensible space and home hardening best practices," and 9.1.3 "Support fuel reduction around structures." These are examples that will include methods to reduce ignitability measures for structures through retrofitting and fuel management.

Ignitability Measures for Critical Infrastructure

The City of Napa CWPP is addressing the reduction of structural ignitability to critical infrastructure including the prioritization of vegetation treatments that reduce risk to drinking water reservoirs and treatment plants, along evacuation routes and communication facilities.

Wildfire Response and Suppression Capabilities

An assessment of the wildfire response and suppression capabilities within the City of Napa CWPP was undertaken to evaluate whether the current resources, organization, and strategies are appropriate for the expected wildfire impingements, and if not, what requires improvement. The following was evaluated:

- Emergency social services support capabilities
- Post fire recovery support capabilities
- Other response support (utilities, public works, etc.)

9. Appendices

Appendix A: Public Outreach and Engagement

As part of developing the Community Wildfire Protection Plan (CWPP) for the City of Napa, a comprehensive public engagement and outreach strategy was designed and implemented. This strategy aimed to reach a diverse cross-section of the community utilizing multiple methods. Whenever possible, materials were translated into Spanish versions and Spanish translation was offered at events. The approach balanced broad outreach with targeted, in-depth conversations to ensure that all voices, especially those with lived experience and specific project ideas, were heard and considered. Throughout this process, facilitators relied heavily on feedback from all three divisions of working groups to determine the appropriate level of effort and engagement with the community.

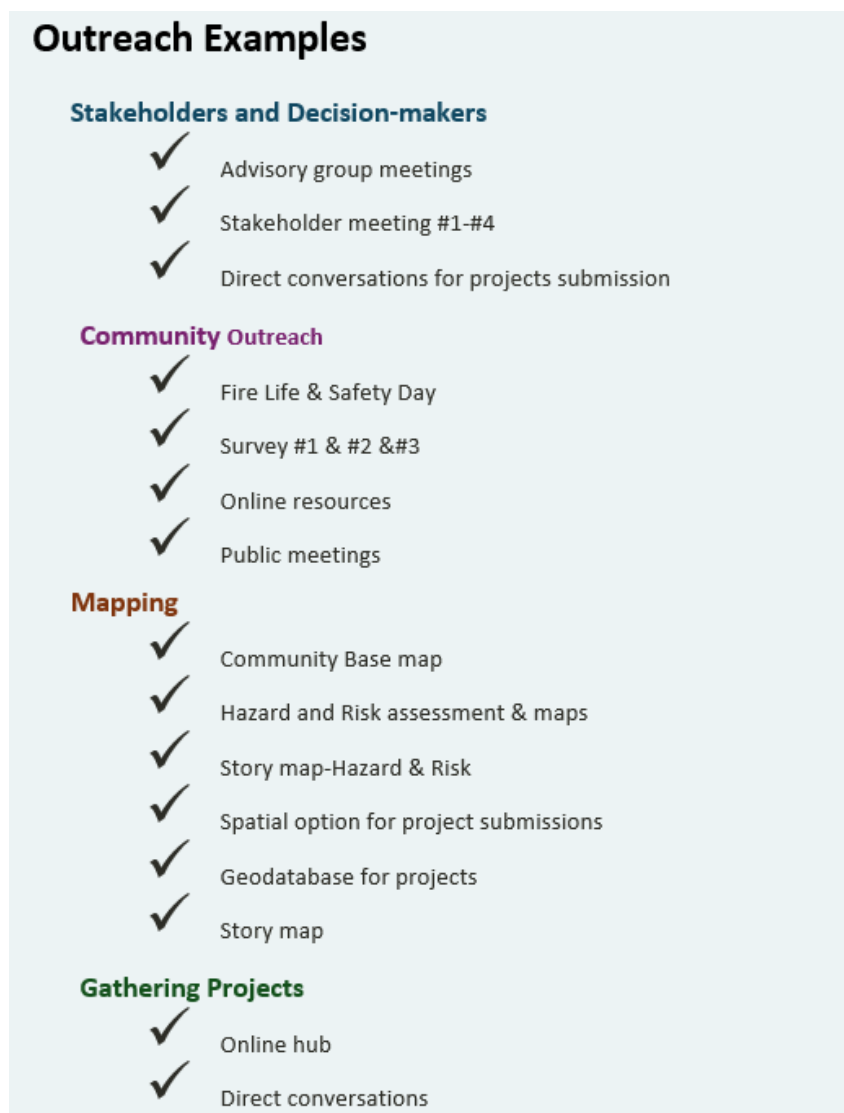


Figure 7. Examples of outreach activities completed throughout the CWPP development process.

Public engagement is a key component in the creation of a CWPP. The Core Team explored several ways to enhance public awareness and involvement, offering public information about the CWPP process, requesting feedback at multiple points, and making online public resources available to follow the process (see Fig. 7 for additional examples). An online Hub Site for the CWPP was designed, and a dedicated email was created to facilitate public comments. Mapping played a key role in assessing hazards and risk, integrating information from other ongoing plans or sources, and offering a visual platform through story maps and spatially representable projects to support informed community discussions and leadership decisions.

The CWPP and the products on the Hub Site serve as the basis for project planning and implementation and additionally offer resources to support community awareness and engagement. A central effort was the development of a Community Base Map to describe the many physical facets of the City of Napa. The Community Base Map can be found at: <https://city-of-napa-cwpp-cityofnapa.hub.arcgis.com/>. An online portal to collect project ideas was also launched with the capability of collecting rough estimates of project areas (Fig. 8). Online videos and open office hours around project submission were offered to the public, however most of the projects submitted were by members of the Stakeholder or Advisory Committees.

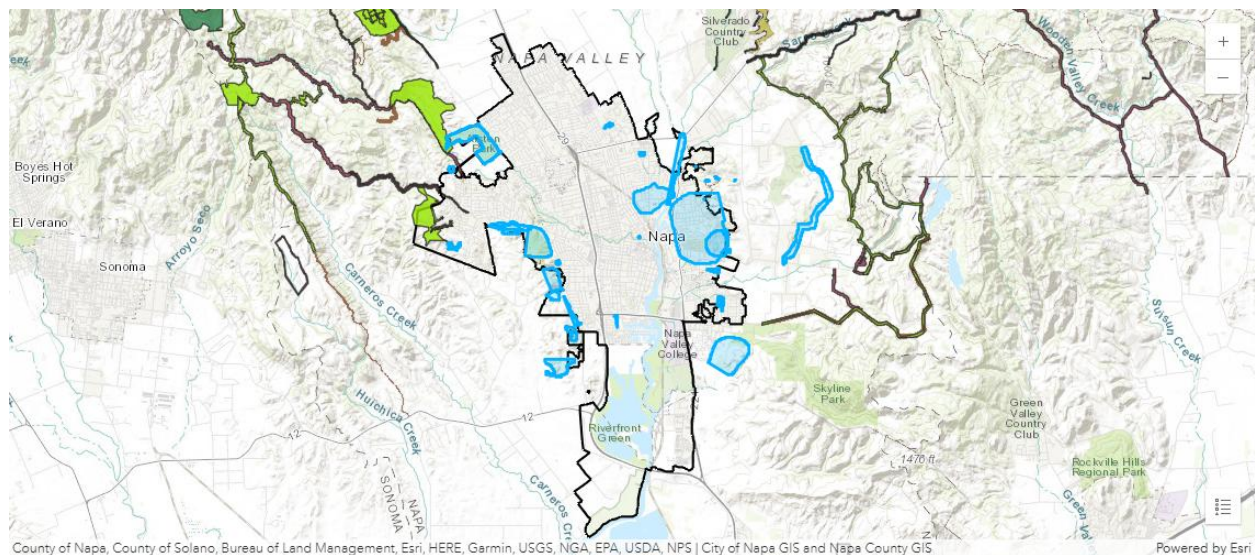


Figure 8. Map of the City of Napa CWPP Project Submissions for Consideration Through Online Portal

In addition to the online Hub Site and resources, the team launched two surveys at different stages of the CWPP development. The first survey was launched in the fall of 2024 and gathered input on community concerns, knowledge base, current mitigation activities underway, and to determine what types of projects would best meet the community needs. The second survey launched in the winter of 2025 asked participants to prioritize different types of projects and strategies which informed the action plan. The final survey was launched in conjunction with the draft CWPP to the Stakeholders group and was only related to comments on the draft rather than the traditional survey methods of the first two surveys.

To expand beyond the online resources, core team members attended and helped organize public events such as the City of Napa Fire Life & Safety Day. This event, held in October 2024, had over 550 estimated attendees and included discussions of risk maps and provided a

valuable space to collect contact information from interested parties. Working in close collaboration with our partners, Core Team members also identified ongoing events where representatives held hundreds of conversations about wildfire mitigation, preparedness, and the CWPP process. When available, surveys and project ideas were also collected at these events.

Surveys & Results Summary

For all the surveys, a few components remained consistent. First the surveys were created and collected through the SurveyMonkey platform. The Core Team and Advisory Committee reviewed the survey questions and agreed on the time period each survey was to remain active and open. The surveys were available in multiple formats including QR codes to the online survey, paper copies that were manually entered into the online survey, and iPad available at in-person events. For online outreach including website postings and email campaigns, a direct link to the survey platform was provided. Providing names and contact information was optional and kept separate from the survey responses.

Survey #1: Establishing a baseline

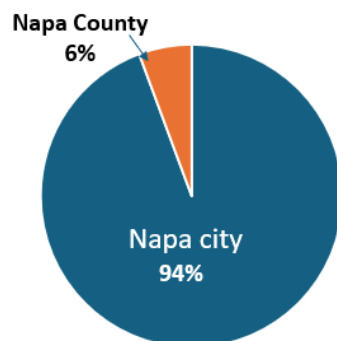
Most of these surveys were collected through in-person outreach events or through online outreach methods. The first survey was seven questions (just over one page front and back with a physical copy) of questions with additional pages for description and additional resources. Some of these surveys were collected at preparedness events and may be biased towards preparedness-orientated people. Even with this context, these questions show ample room to improve.

The majority of respondents lived within Napa City, completed the survey in English, and a slight majority were homeowners compared to renters (Fig. 9)

■ 64 respondents

75% completed in English, 25% completed in Spanish

Where Do You Reside?



Renter v Homeowner?

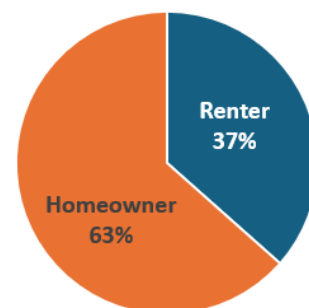


Figure 9. Charts showing where respondents (N) resided and property type.

One objective of the first survey was to establish perceptions of risk from fire and to gauge what concerns respondents might be focusing on. Given the numerous fires in the County and around the City of Napa in the last decade, the high level of perceived risk was not surprising.

The majority of respondents rated wildfire risk as Moderate (45%) or High (31%) (Fig. 10). When asked what the highest sources of risk were, the most frequently selected answers were 'Fire weather,' Fuel load,' and 'Human activities' (including ignition sources and utilities). Interestingly, a low number of respondents selected suppression capacity concerns with 'Limited fire protection,' 'Inaccessible Locations,' and 'Limited water for firefighting,' as the less commonly selected sources of risk.

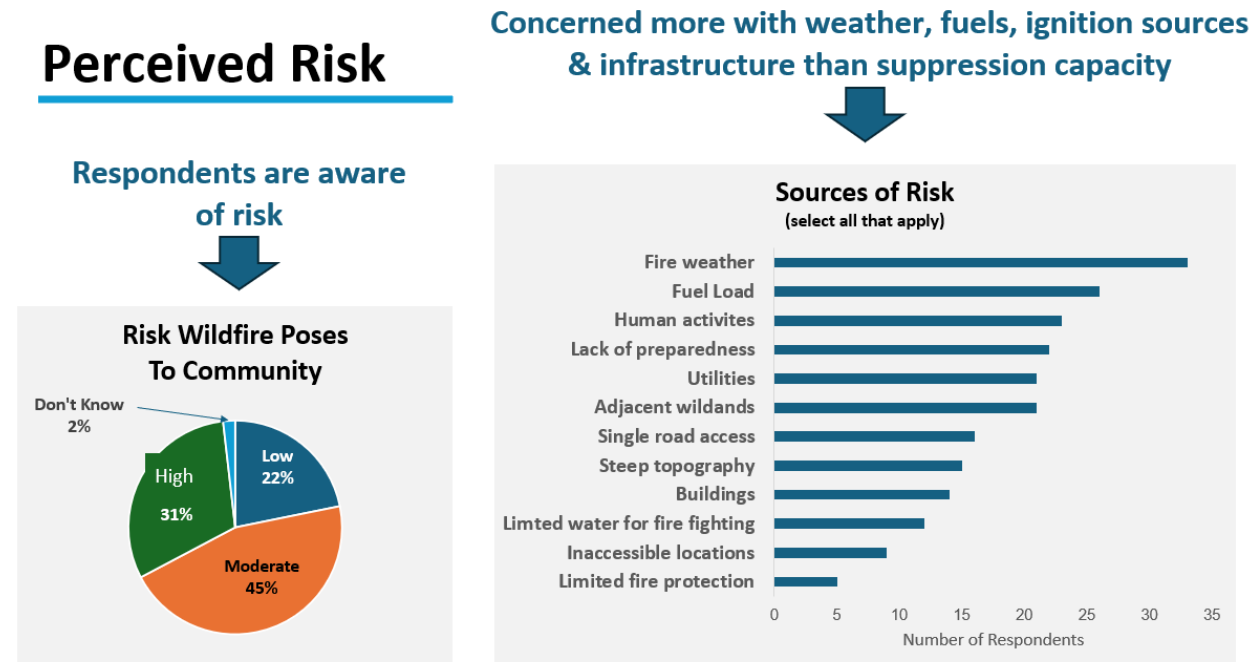


Figure 10. Perceived Risks and Sources of Risk from Survey #1.

The last question asked what actions the respondents themselves had taken (Fig.11) to prepare for wildfire (through a 'select all that apply' list). The majority of respondents had taken some actions and a few respondents selected over half of the listed actions. This portion of the survey helped inform a number of project ideas that are now in the Action Plan (Table 6).

This result also showed that a number of low engagement actions would require minimal resources (i.e. evacuation zone awareness) and these have been listed in the action plan. The least selected actions were mostly actions that had high resource costs of time or funding (i.e. CERT volunteer, collaboration, and advance home hardening practices) or were related to a program that doesn't yet exist (i.e. city chipping program). Moving forward with actions, it will remain important to consider barriers to adopting these programs including cost, time, and restrictions such as what actions are allowed for renters to take on their own.

Preparedness



Figure 11. List of example actions taken by respondents.

Survey #2: Strategies and Prioritization

Survey #2 had a lower response number (N=29) than survey 1. Due to the low response rate, the open- period to take the survey was extended with additional time but this only resulted in a few additional responses. This was the most extensive survey with 11 multi-answer questions that reached over 5 pages in physical format. Results show that many online respondents opened but did not answer beyond the demographic questions. These were not included in the number of respondents or the analysis, and many indicate that the survey was too lengthy for many attempted respondents.

Similar to the first survey, the majority of respondents elected to take the survey in English, were based in the City of Napa, and had a fairly even split between owners and renters.

Table 7. Hazard Reduction strategy and most frequently selected idea or project

Hazard Reduction Strategy	Top Idea(s) or Project (s)
Regulations, policies and plans	Program to improve insurance affordability and availability
Prevention	Funding/resources for defensible space and vegetation removal

Infrastructure & Business	Critical infrastructure protection (power distribution, communications)
Wildfire Response	Fire ignition detection for early response
Partnerships and community engagement	Collaborative groups (e.g. CERT, Firewise and other engagement groups)
Landscape treatments (large scale vegetation management)	Management of urban forests including removal of dead and dying trees Various fuel reduction methods (shaded fuel breaks, goats, rx fire)
Public health	Smoke preparedness (alerts, clean air centers, indoor air filters) Social and health services (disadvantaged communities, unsheltered populations, underlying health conditions, outdoor workers)
Safety and Evacuation	Entries/exits for evacuation routes & emergency responder access
Resident mitigation	Work with owners of large parcels and community open space for vegetation/fuel removal
Recovery	Immediate to short-term recovery support (short term shelter, vulnerable populations, tenant needs, displaced workers, language barriers)

The format of this survey was based on the Fire Adapted Communities framework (see Figure 6), where each of the 10 hazard reduction strategies were described and respondents were asked to select their top projects or ideas that they would like to see under that category. For each hazard reduction strategy, there were anywhere from 4-6 ideas or projects and respondents were asked to select 2-3 of these. Table 7 above shows the strategy and the top idea, with some categories that list 2 top ideas where there were ties or near ties. Finally, respondents were asked to rank the 10 hazard reduction strategies in which Prevention was most often ranked as number 1.

Results from survey #2 were used to inform the priorities and ideas listed in the final Action Plan as well as discussion points in guiding the process of project idea selection. Given the low sample size, these results were not used as the primary method for prioritization of projects.

CWPP Working Group Members and Stakeholders

The implementation strategy of the Napa CWPP recognizes the benefit of working across organizational boundaries and leveraging resources across a wide variety of partners. The below list includes examples of partner-types and their roles.

- City of Napa City Council and departments: City efforts can be achieved through plan integration and consistency with existing programs and campaigns supported by City Council and in many departments including Fire, Community Development, Economic Development, Police, Parks and Recreations Services, Public Works, and Utilities. A multi-department task force was created during the development of the CWPP.
- Adjacent public agencies: Fire does not recognize jurisdictional boundaries. Neighboring fire agencies respond through mutual aid agreements and the State Emergency Management System. Many of the region's residents evacuate along the same routes. Given these facts, adjacent cities and public lands management agencies share many of the goals identified in the City of Napa CWPP. These include CAL FIRE Sonoma-Lake-Napa Unit, Napa County, Napa County Resource Conservation District, and Napa Valley Transportation Authority. Many of these partners have adopted plans, programs, and on-going projects that include addressing wildfire hazards.
- Regional multi-agency collaboratives: The Napa Valley has several multi-agency collaboratives. These include the Inner Coast Collaborative, Napa Wildfire Resilience Coordinating Group, and the Napa County Climate Action Committee Countywide Climate and Adaption Plan collaborative. The Napa County CWPP, created by Napa Firewise, identifies projects for funding. Shared mitigation approaches can begin to address some of the more difficult regional challenges. Continued involvement can offer new approaches from other regions for the implementation of the City of Napa CWPP.
- Other stakeholders: Successful implementation of the CWPP will require collaboration with other stakeholders to reach areas that the public sector does not or cannot manage. Two key partners will be Napa Firewise Communities Foundation (Napa Firewise) and Napa Valley Community Organizations Active in Disaster (COAD). Napa Firewise is maintaining and updating the Napa County CWPP as well as working with local Fire Safe Councils for their CWPP updates. These efforts are funded and ongoing. COAD is instrumental in preparing the community for disaster. Stakeholders include residents, property owners, HOAs, community organizations, Firewise communities and special interest groups. Many of these private landowners play key roles as they are the only people who can make the final decision about their own property: to retrofit their home to be ignition resistant, maintain their gardens, or prepare their family for evacuation.

Stakeholder list

Table 8 is an extended list of partners that have and will continue to be involved in the CWPP implementation. Please note the Core Team and Advisory Committee are listed earlier in Roles.

Table 8. List of Partners Involved in CWPP Development

CWPP Stakeholders	
Agency / Organization	Role
Federal Government	
Department of Veterans Affairs	Stakeholder
State / Tribal Governments	
California Department of Forestry and Fire Protection (CAL FIRE)	Stakeholder
California Department of Transportation	Stakeholder
California Office of Emergency Services	Stakeholder
California Air Resources Board	Stakeholder
University of California Cooperative Extension	Stakeholder
Suscol Intertribal Council	Stakeholder
Local Jurisdiction Departments	
City of Napa Parks Department	Advisory
City of Napa Public Works	Advisory
Napa Police Department	Stakeholder
Napa County Sheriff's Department	Stakeholder
Napa County Planning, Building, and Environmental Services (PBES)	Stakeholder
Napa County Office of Education	Stakeholder
Napa County Office of Emergency Services (OES)	Stakeholder
Napa Valley Community Organizations Active in Disaster (COAD)	Core Team
Napa Chamber of Commerce	Stakeholder
Napa Hispanic Chamber of Commerce	Stakeholder
Flood Control District	Stakeholder
Napa Valley Unified School District	Stakeholder
County of Napa Public Works	Stakeholder
Napa County Open Space District	Stakeholder
Local Fire / Forestry and Natural Resource Groups or Organizations	
Community Emergency Response Team (CERT)	Stakeholder
Napa City Fire Department	Core Team
Napa County Fire	Stakeholder

CWPP Stakeholders	
Agency / Organization	Role
Napa County Resource Conservation District (Napa RCD)	Core Team
Napa Communities Firewise Foundation	Advisory
Napa County Prescribed Burn Association (PBA)	Stakeholder
Fire Safe Councils	
Coombsville Wildhorse Fire Safe Council	Stakeholder
Hennessey Rector Fire Safe Council	Stakeholder
Lake Hennessey Fire Safe Council	Stakeholder
Mt. George FSC	Stakeholder
Mt. Veeder Fire Safe Council	Stakeholder
Silverado Fire Safe Council	Stakeholder
Skyline Park	Stakeholder
Napa Parks and Recreation Foundation	Stakeholder
Napa County University of California Cooperative Extension (UCCE)	Stakeholder
Critical Infrastructure Companies or Districts	
Pacific Gas and Electric	Stakeholder
Providence Health	Stakeholder
Mentis Health	Stakeholder
Napa State Hospital	Stakeholder
Other Organizations	
Napa Valley College	Stakeholder
Visit Napa Valley	Stakeholder
Center for Volunteers and Nonprofit Leadership (CVNL)	Stakeholder
Napa Valley Community Housing	Stakeholder
Community Action of Napa Valley	Stakeholder
Red Cross	Stakeholder
Napa Family CanDo	Stakeholder
Napa Valley Farmworker Foundation	Stakeholder
Cope Family Center	Stakeholder
Fair Housing Napa Valley	Stakeholder
Napa Community Animal Response Team (CART)	Stakeholder
Puertas Abiertas	Stakeholder
Napa Valley Community Foundation	Stakeholder
On the Move	Stakeholder

CWPP Stakeholders	
Agency / Organization	Role
Community Leaders Coalition	Stakeholder
Napa Valley Expo	Stakeholder
Abode	Stakeholder
Crosswalk Church	Stakeholder
Boys and Girls Club	Stakeholder
VOICES Youth Programs	Stakeholder
United Policy Holders	Stakeholder
Molly's Angels	Stakeholder
Gasser Foundation	Stakeholder
Napa Valley Transit Authority	Stakeholder
Napa Valley Vintners	Stakeholder
Napa Valley Grapegrowers	Stakeholder

Appendix B: Existing Conditions

The following maps and descriptions provide additional information on the existing conditions summarized in Section 7. Assessment of Wildfire Hazard and Wildfire Risk.

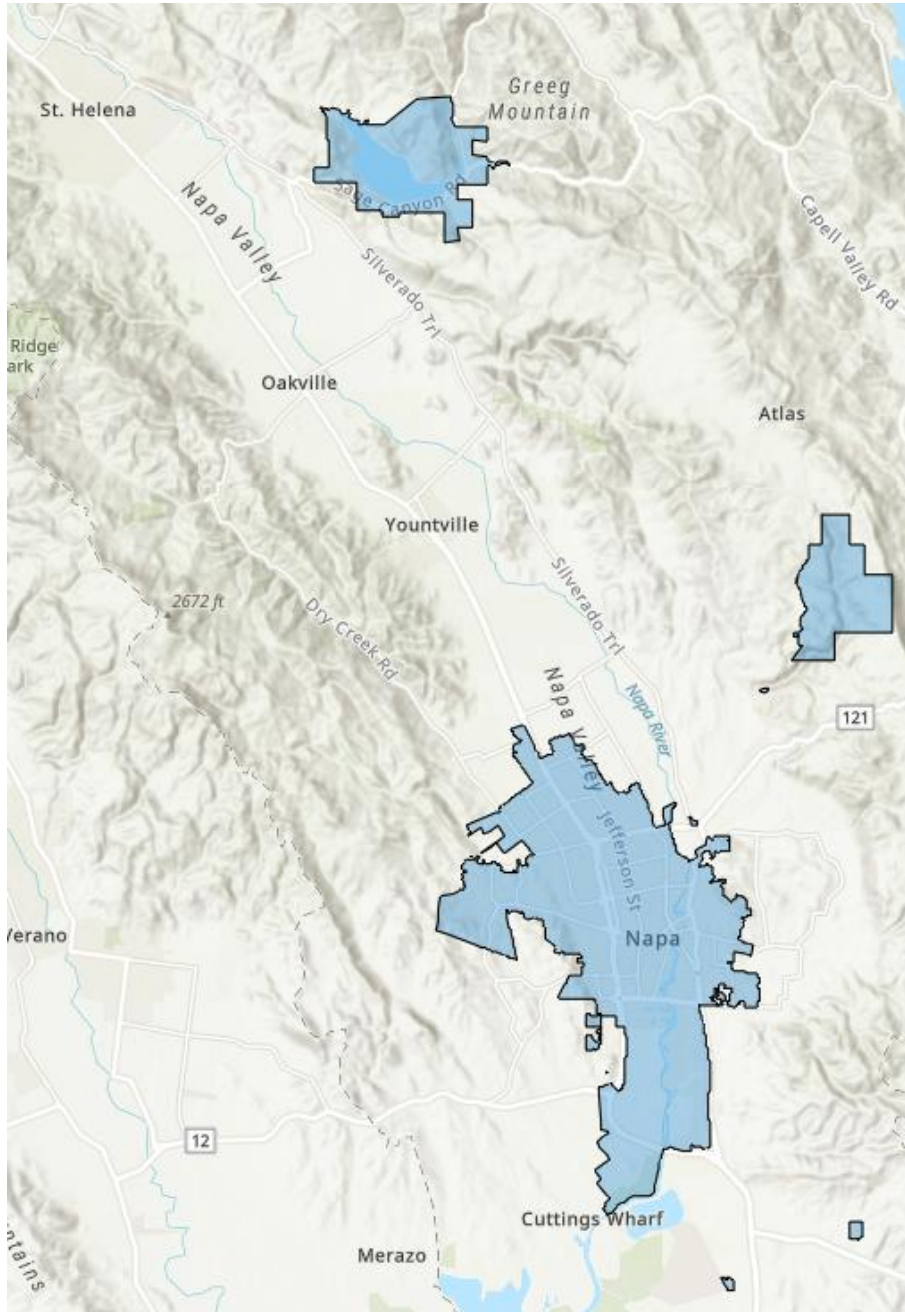


Figure 12. Map of the City of Napa CWPP planning area boundary.

Topography

Most of the City of Napa lies on the southern extent of the Napa Valley, bounded by ridges on the east and west.

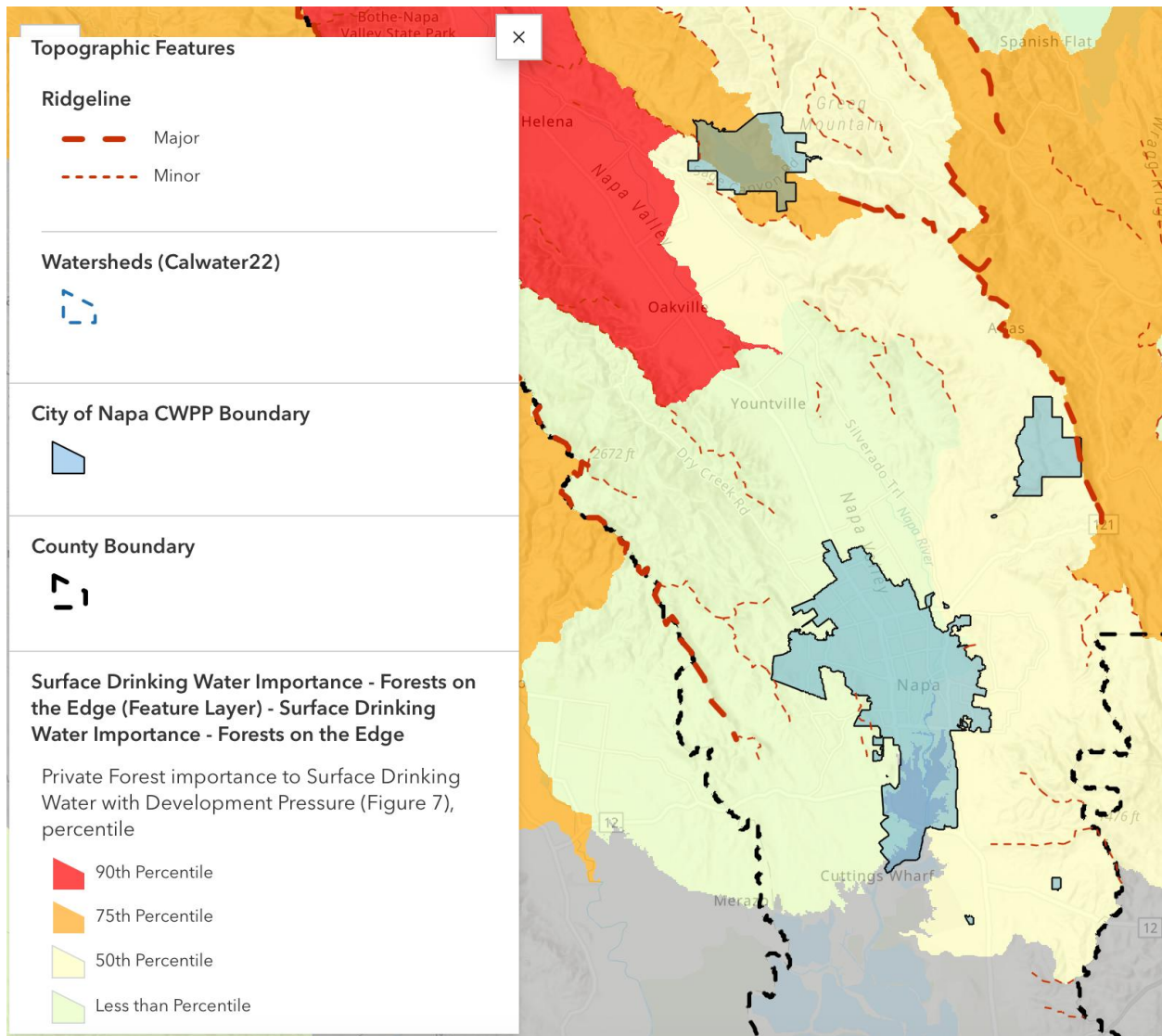


Figure 13. Map of topographic features within the City of Napa CWPP boundary.

Climate and Weather

Weather

This section adds additional details to the Climate and Weather patterns and further explains their influence on fire behavior and risk.

1. Temperatures and Humidities

Summer days are usually warm but comfortable; temperatures normally range from lows in the 40's and to highs in the 90's, with an occasional high reaching a maximum of 105 degrees Fahrenheit. Humidity can drop to single digits in the summer and fall.

The City of Napa lies in a relatively protected area and would be subject to occasional episodes of several still, stagnant air formed by stationary highs during summer months. This overall weather pattern -- characterized by continuous high temperatures and low relative humidities -- enhances the possibilities of ignition, extreme fire behavior and extreme resistance to fire control.

1. Winds

The most important influence on fire behavior is wind. Wind can greatly affect the rate of fire's spread and the output of a fire. Wind increases the flammability of fuels both by removing moisture through evaporation and by angling the flames so that they preheat the fuels in the fire's path. The direction and velocity of winds can also control the direction and rate of the fire's spread. Winds can carry embers and firebrands downwind that can ignite spot fires ahead of the primary front. Gusty winds cause a fire to burn erratically and make it more difficult to contain.

Wind will tend to follow the pattern of least resistance and is therefore frequently deflected and divided by landforms. Canyon slopes produce pronounced daily up-canyon and down-slope winds caused by differential heating and cooling of air during the day. This occurs region-wide and on a local scale.

Much of the area is characterized by north-to-south aligned ridges. These ridges slow the regionally dominated southwesterly winds. However, strong winds from the northeast could produce strong up slope and erratic winds. The Bay south of Napa provides strong influence in the wind directions and speed, providing a cooling effect from a southerly wind in the mornings.

The winds that create the most severe fire danger typically blow from the north, usually in October. Winds from the east and north bring low humidity and elevated fire danger and can wreak havoc on the forested and chaparral covered areas, causing fire to spread to the south. These winds are the same ones that blew during the largest fires in Napa County.

These northeasterly events generally last from 15 to 35 hours, but in 2000, 2003, 2005, 2017, 2018, 2019, and 2020 these events in October and November lasted for 5 to 14 days. This type of wind could "push" a fire from the upper eastern slopes of Napa Valley down across into the vineyards on the valley floor to the higher slopes to the west and beyond into Sonoma County.

Vegetation

The following vegetation maps (Figures 14-17) are expanded to show detail for the City of Napa proper and the two reservoirs under the City's jurisdiction.

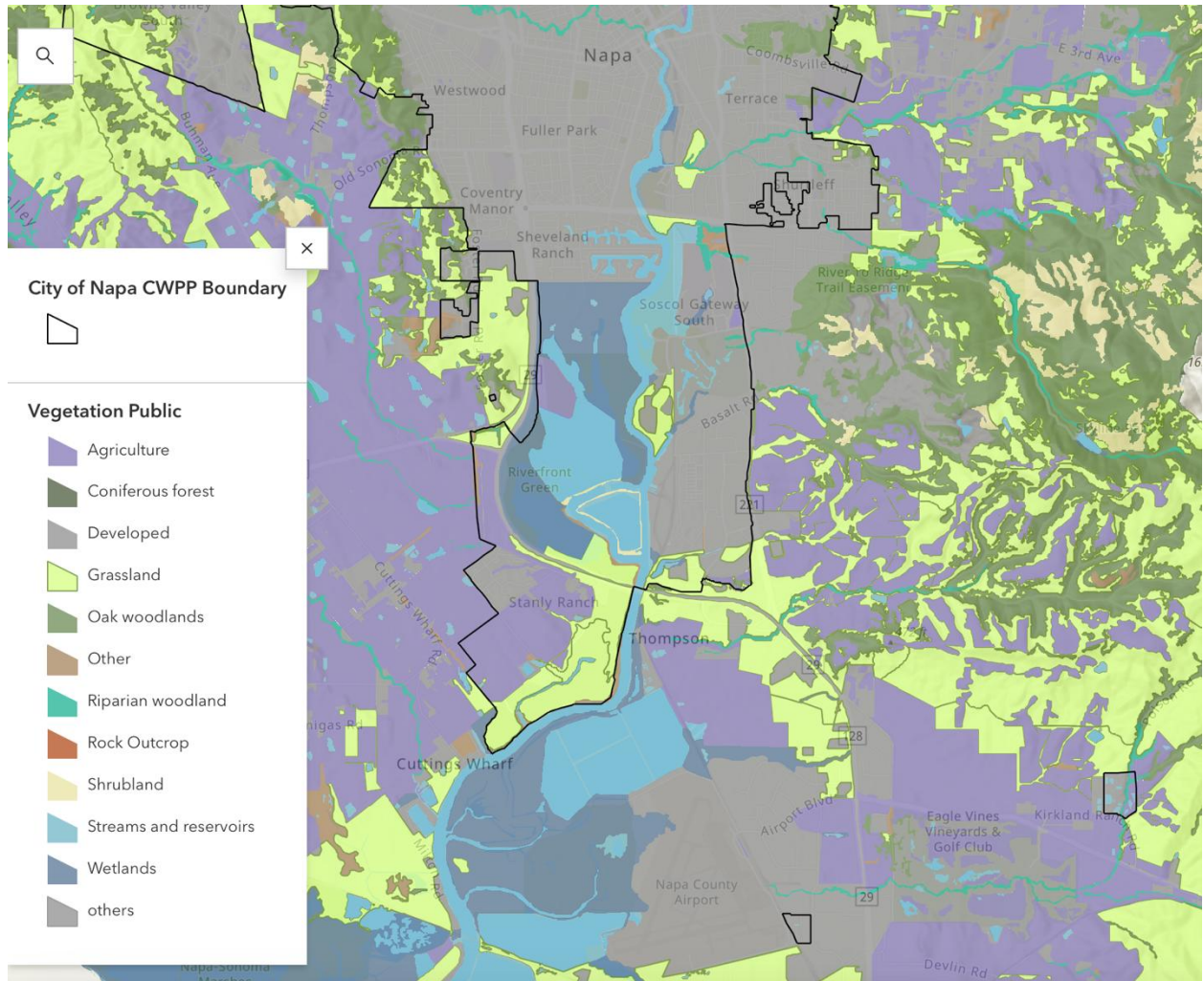


Figure 14. Map of surface vegetation within the City of Napa CWPP boundary-southern portion.

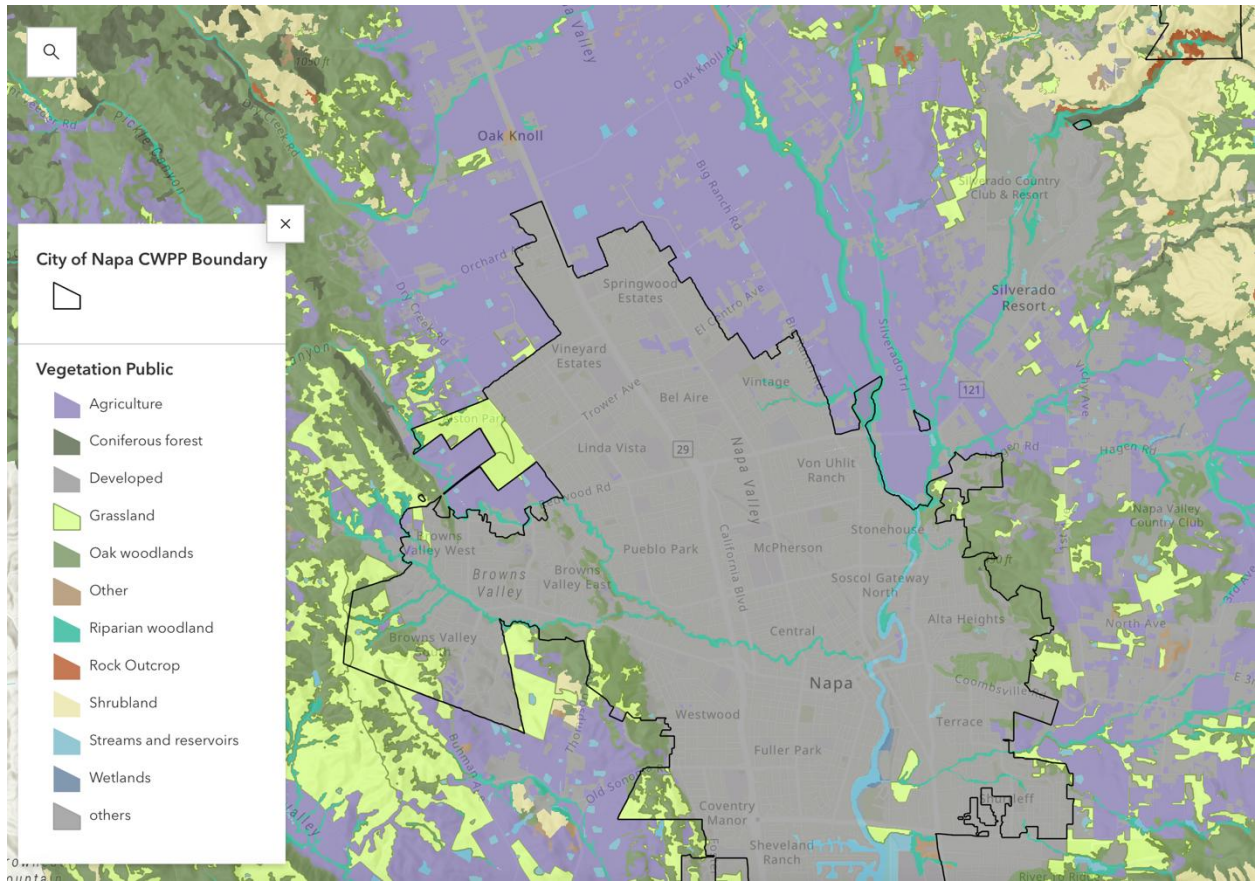


Figure 15. Map of surface vegetation within the City of Napa CWPP boundary-northern portion.

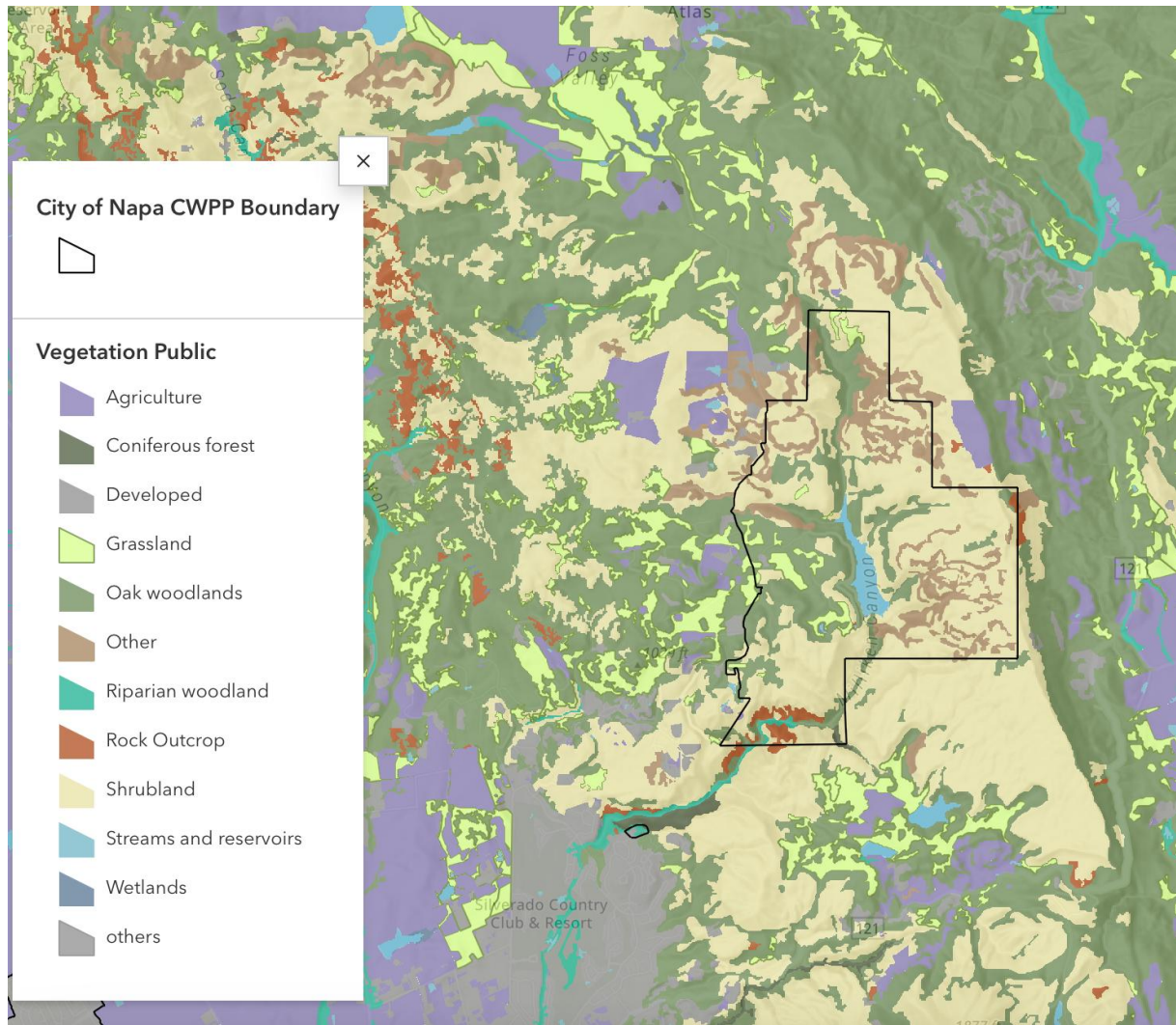


Figure 16. Map of surface vegetation within the City of Napa CWPP boundary-Miliken reservoir.

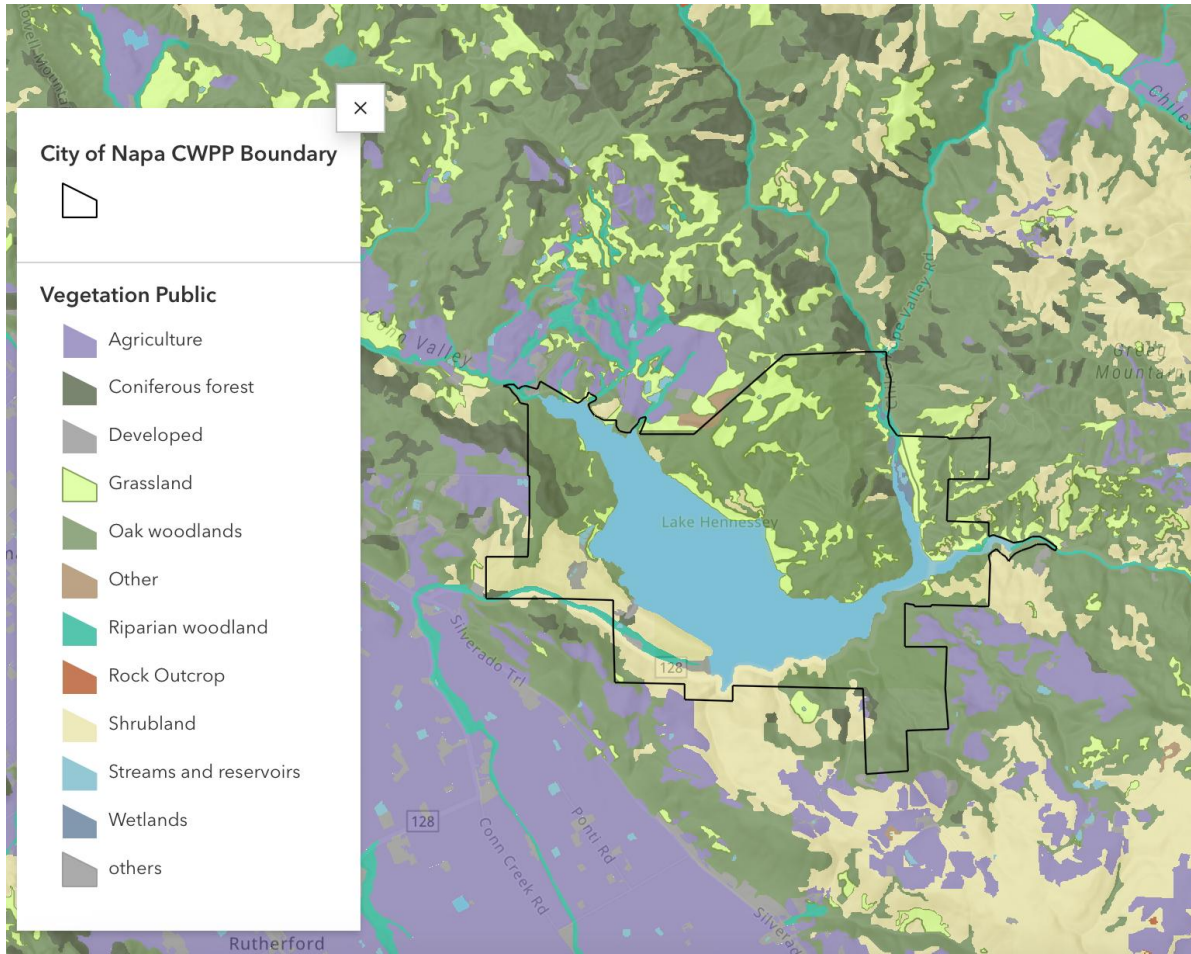


Figure 17. Map of surface vegetation within the City of Napa CWPP boundary-Lake Hennessey reservoir.

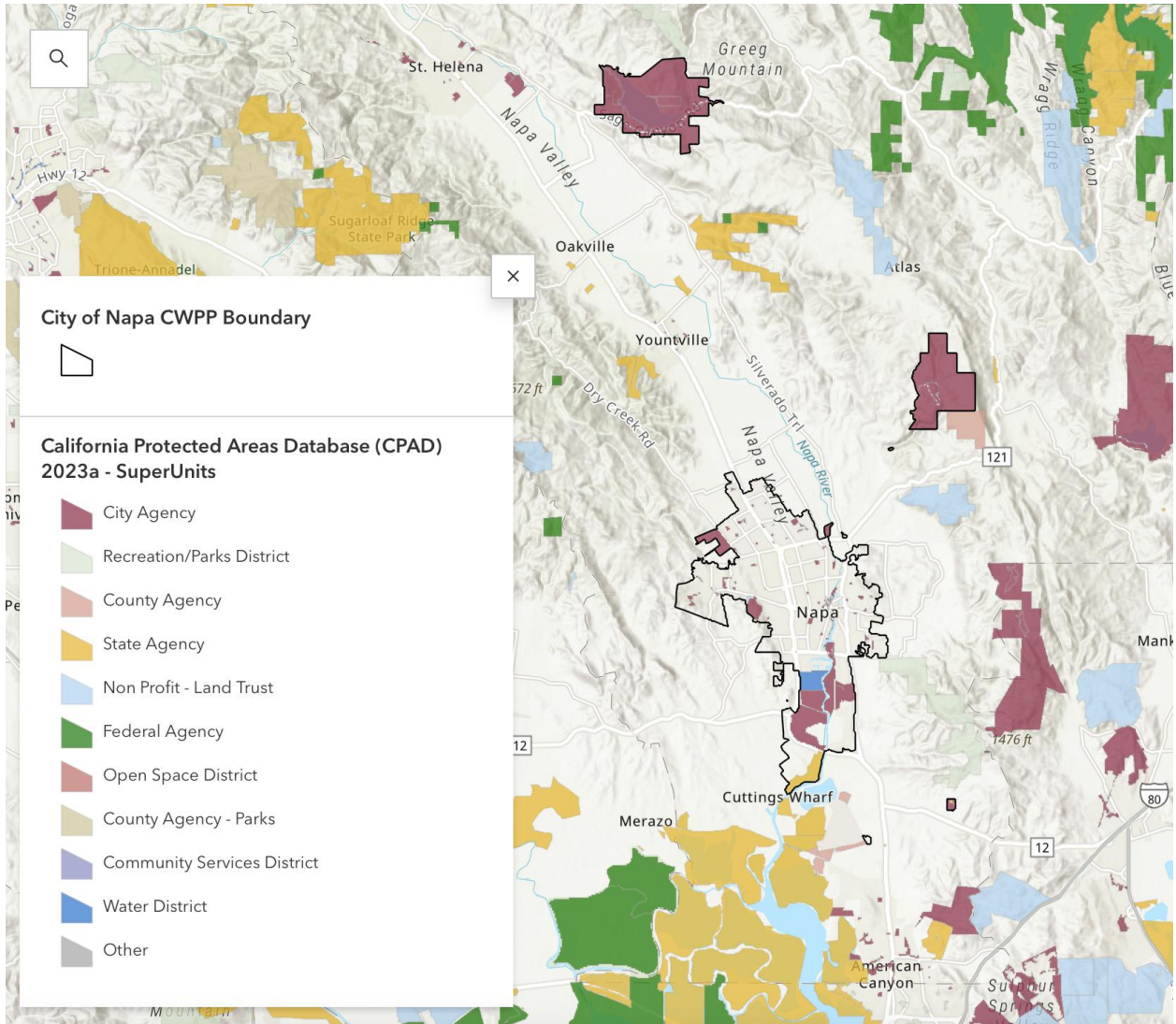


Figure 18. Map of public lands within the City of Napa CWPP vicinity.

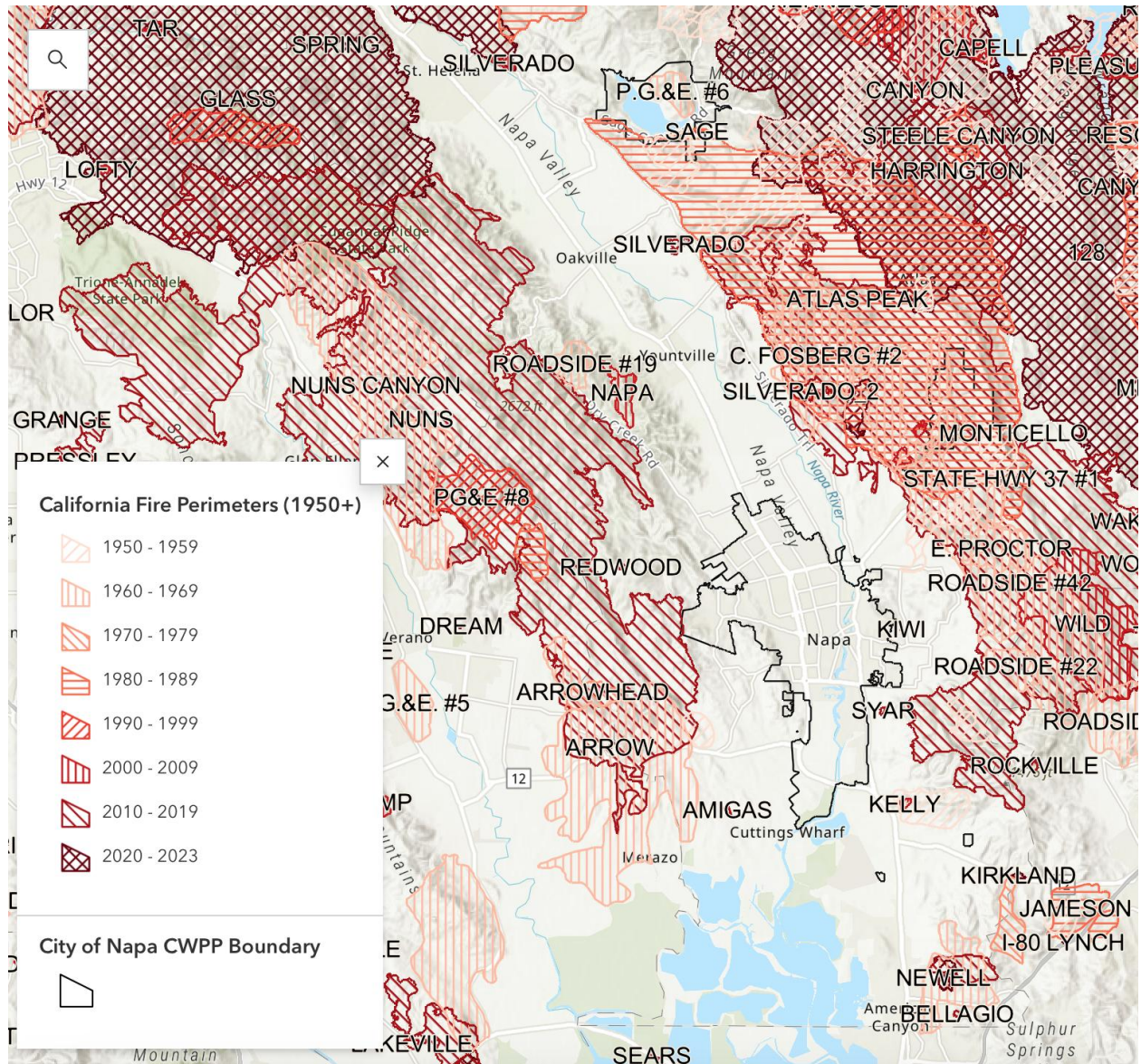


Figure 19. Map of fire history within the City of Napa CWPP boundary and vicinity.



Figure 20. Locations of mutual aid stations from the 2023 Napa Fire Department Service Analysis. Note: NCFD Station #210 is now built and operational (2025 updated).

Appendix C: Implementing the CWPP Using a Leveraging Strategy

The following explores the existing adopted plans and policies, codes and ordinances, programs and implementation measures, adjacent agencies' plans, and legislation/ state requirements with their unfunded mandates for local government and explains how they can be leveraged during the implementation of the CWPP.

1. City of Napa Adopted Plans and Policies Relevant to Implementing the Community Wildfire Protection Plan

City of Napa 2040 General Plan

The City of Napa 2040 General Plan⁵ is a comprehensive, and long-range statement of community priorities and values developed to guide public decision-making in future years. Napa adopted plans and ordinances reflect Napa's values and actions, and many relate to community wildfire protection. Many of the adopted plans directly address wildfire. Others recognize that wildfire is an issue that impacts the plan's topic and offers the opportunity for leverage.

*Although the area covered by the General Plan "is not designated as being located within a Fire Hazard Severity Zone (FHSZ) by CAL FIRE, the City considers wildfire to be a serious risk to life and property. In particular, the City considers the densely developed perimeters of the Planning Area along Silverado Trail to the east and Redwood Road to the west as especially susceptible to damage from wildfires."*⁶

The General Plan includes an Appendix A: Implementation program that identifies implementation mechanisms, applicable policies, responsibility and Implementation timeline. An Environmental Impact Report was prepared for the General Plan that may be tiered off of in order to address some of the programs identified in both the General Plan and the CWPP.

Relevance to the CWPP:

The Safety Element (one of the nine Elements included in the General Plan) is a key planning document as it is required by state law with an 8-year mandated update in conjunction with the Housing Element.

There is an opportunity to link the General Plan and the CWPP updates to address wildfire risks and mitigation measures. Thirteen goals and 41 policies related to wildfire are identified in the Elements of the General Plan ranging from Safety to Transportation, Climate Change and Public Health and Equity.

Safety & Noise Element of the City of Napa General Plan – Section 08⁷

⁵ City of Napa, 2040 General Plan. <https://www.cityofnapa.org/259/General-Plan> Accessed 7/24/24.

⁶ City of Napa, 2040 General Plan, Pp 8-16 (230).

⁷ City of Napa, 2040 General Plan. Pp 8-1 (216).

The General Plan Safety & Noise Element's goals, objectives, and policies serve as a guide to day-to-day decisions that are essential for responsive government⁸. Decisions made by Napa City Council and its advisory boards, and commissions about the physical development of the City should be consistent with the goals, objectives, and policies of this Plan. The City Council and Planning Commission use the General Plan when evaluating land use changes and making funding and budget decisions. It is used by the Zoning Adjustments Board and City staff to help regulate development proposals and make decisions on projects. The policies of the Plan apply to all property, both public and private, within the Napa city limits. Although partners and the surrounding agencies are not legally obligated to comply with the Plan, mutual cooperation benefits all agencies.

The Safety & Noise Element was adopted October 2020 as a part of the City of Napa 2040 General Plan as required by State law. Senate Bill 1241 (Kehoe 2012) modified Government Code Section 65302 and 65302.5 requiring cities and counties to address fire risk in State Responsibility Areas (SRA) and very high fire hazard severity zones (VHFHSZ) in the Safety Element of their general plans. The Safety Element is required by state law to be updated every eight.⁹ The 2020 document was not reviewed by the Board of Forestry for conformance with Government Code 65302.5(b).¹⁰

Within the Safety & Noise Element most of the current wildland fire programs and strategies are found in Section 8-6.¹¹ Also addressed in this Section are: Peak-load Water Supply Requirement, and Minimum Road Widths and Clearances Around Structures. Section 8.8 addresses Emergency Preparedness Response.¹²

Two Safety goals and 11 policies relate to wildfire¹³:

GOAL SN-5: Work to prevent urban fires and exposure to wildfires, as well as protect life and property from fire dangers.

SN 5-1 Implement best practices to address wildfire prevention on open space land within and around the City.

SN 5-2 Facilitate communication and education to the community about fire safety, wildland fire protection measures, and evacuation/ emergency response to wildland fires.

⁸ City of Napa, 2040 General Plan. Pp 8-1 (216).

⁹ https://abag.ca.gov/sites/default/files/documents/2021-07/1_Briefer_IntegratedPlanning.pdf In 2021, Accessed 7/24/24. SB1035 (GC65302) and SB379 (GC 65302.g.4) required update of Safety Element every eight years upon the next Housing Element update. Note: The Local Hazard Mitigation Plan is required to be updated every five years.

¹⁰The draft element of or draft amendment to the safety element of a county or a city's general plan shall be submitted to the State Board of Forestry and Fire Protection.....The adoption or amendment to the safety element of its general plan for each city or county that contains a very high fire hazard severity zone as defined pursuant to subdivision (i) of Section 51177

https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=65302.5.&lawCode=GO V Accessed 7/24/24.

¹¹ City of Napa, 2040 General Plan, Section 8-6 Pp 8-16 – 8-17 (230-231).

¹² City of Napa 2040 General Plan, Pp 8-19 to 8-20 (233-234).

¹³ City of Napa 2040 General Plan, Pp 8-23 to 8-24 (237-238).

SN 5-3 Continue to educate property owners and the public about local fire hazard prevention programs, vegetation management strategies, and other disaster preparation activities in areas threatened by wildfire.

SN 5-4 Ensure that future development plans provide adequate evacuation routes, vegetation management policies, and fire-reduction design measures, as appropriate.

SN 5-5 Regularly assess adequacy of emergency response and evacuation routes and identify any need for road extensions to serve neighborhoods that do not have sufficient evacuation routes or access for emergency services.

SN 5-6 Support efforts to improve the provision of emergency fire services for areas north of Fire Station 5.

GOAL NRC-6: Help prepare for and mitigate various hazards that affect the Napa community.

SN 6-1 Work with Downtown businesses to establish plans and procedures guiding response to natural disasters.

SN 6-3 Inform and educate community members about natural hazards and safety procedures.

- *Centralize and familiarize the community with the City's and County's emergency information sources and ensure that these are accessible to those who have limited English speaking ability, as well as those with limited internet access.*
- *Work with the Napa Valley Community Emergency Response Team to improve public emergency preparedness.*

SN 6-4 Effectively coordinate disaster response and preparation strategies with County, regional, State, and federal agencies in the event of major seismic activity, flood, or wildland fire.

SN 6-5 Coordinate with other local public agencies to facilitate resilient telecommunication networks and infrastructure during disasters.

SN 6-6 Facilitate expansion of the telecommunication system to ensure widespread community access during a disaster.

Policies found in other Elements of the General Plan

In addition to the Safety & Noise Element, relevant policies related to wildfire can be found in five other elements: the Transportation Element, Community Services, Park and Recreation Element, the Climate Change and Sustainability Element, as well as the Historic and Cultural Resources Element.

The Transportation Element – Section 03

The Transportation Element addresses the City's infrastructure, facilities and programs for various transportation modes, including automobile movement, bicycling, and walking. Topics include emergency evacuation routes¹⁴. One Transportation goal and four policies relate to wildfire¹⁵:

GOAL TE-9: Provide safe evacuation routes in case of emergencies and natural disasters, including flooding, earthquake, and fire.

TE 9-1 Establish clear emergency evacuation routes as part of the next update of the Local Hazard Mitigation Plan, and support community education on these emergency evacuation routes.

TE 9-2 Coordinate with the Fire and Police Departments on traffic calming projects to ensure adequate access for emergency responders.

TE 9-3 Identify and address potential obstacles to emergency evacuation routes within public rights-of-way, like above ground power lines, aging trees, and defensible space around routes which could impede evacuation efforts.

TE 9-4 Coordinate with NVRTA and NVUSD on emergency bus or shuttle operations for those who are not able to drive, including students, persons living at retirement homes, and within disadvantaged communities.

The Community Services, Parks and Recreation Element (CSPR) Element – Section 04

The Community Services, Parks and Recreation Element includes policies related to fire, and emergency services, recreational parks and open space. This Element also addresses Utilities (Section 4.4), including water supply, electricity infrastructure, and bioenergy (biomass gasification) Open space related to conservation is addressed in Chapter 7: Natural Resources Conservation.

Two Public Safety and Emergency Services goals and eight policies relate to wildfire¹⁶:

¹⁴ City of Napa 2040 General Plan, Pg 3-14 (100).

¹⁵ City of Napa 2040 General Plan, Pp 3-21 – 3-22 (107-108).

¹⁶ City of Napa 2040 General Plan, Pp 4-36 – 4-37 (144-145).

GOAL CSPR-1: Maintain safety services that are responsive to community needs and provide a safe and secure environment for people and property in the City.

CSPR 1-1 Provide responsive, efficient, and effective police and fire services that promote a high level of public safety.

CSPR 1-2 Provide fire prevention and emergency response services that minimize fire risks and protect life and property, including fire prevention, fire-related law enforcement, and public education and information programs.

CSPR 1-3 Locate and maintain police and fire equipment, facilities, and staffing at locations and levels that facilitate effective service delivery.

CSPR 1-4 Require that new development contributes funds to offset the proportionate impact of development on the provision of City facilities needed to provide adequate police and fire services.

CSPR 1-5 Continue to incorporate input from the police and fire departments in the development review process to include requirements for development projects to be designed and operated in a manner that minimizes the potential for criminal activity and fire hazards and maximizes the potential for responsive police and fire services.

CSPR 1-8 Continue to provide community programs, volunteer opportunities, and fire safety education to residents of appropriate age.

CSPR 1-9 Periodically review and update the Fire Department Strategic Plan as conditions warrant.

CSPR 1-11 Establish suitable response times for the Police and Fire departments as part of the strategic planning process for each department.

GOAL CSPR-3: Improve disaster preparedness for wildfires, including plans for evacuation routes, meeting spots, wildfire mitigation strategies, and coordination with CalFire and the Napa County Fire Department.

CSPR 3-1 Maintain mutual aid agreements and communication links with CalFire, Napa County Fire Department, and other surrounding jurisdictions that allow for supplemental aid from other police, fire, and public works personnel in the event of emergencies.

CSPR 3-2 Protect key City facilities as part of emergency preparedness, including drinking water sources and infrastructure, and maintain solid waste services and emergency debris management during emergencies.

CSPR 3-3 Support efforts to provide enhanced alerts and communications to vulnerable and underserved communities during fire and evacuation events.

The City's Emergency Operation Plan provides greater detail on emergency management.

In addition to the public safety and emergency services, there are Dry Utilities (electricity infrastructure), as well as Solid Waste and Recycling goals (biomass utilization) of interest. One Dry Utilities and one Solid Waste and Recycling goals and five policies relate to wildfire¹⁷:

GOAL CSPR-5: Provide for utilities and infrastructure that deliver safe and reliable services for current and future residents and businesses.

CSPR 5-2 Work with power and dry utility providers, property owners, and developers to underground service lines in existing neighborhoods and require underground service lines for new projects where feasible.

CSPR 5-4 Invest in the replacement and rehabilitation of aging infrastructure.

GOAL CSPR-8: Improve programs to reduce waste accumulation in landfills.

CSPR 8-1 Promote sustainability measures for businesses and residents to reduce waste, such as municipal composting, recycling, and expanded education on the benefits of the green waste recycling program.

CSPR 8-2 Promote education for residents and businesses on the benefits of reducing waste, such as citywide curbside composting.

CSPR 8-5 Implement all aspects of SB 1383 (Mandatory Organics) including collection and capture of compostable and recyclable materials from residential, commercial and industrial generators within the City. SB 1383 is broad reaching in scope with requirements for auditing, enforcement, edible food recovery and local use of organic products like compost and mulch.

CSPR 8-6 Incorporate BioEnergy and dry Anerobic Digestion technology at City's Materials Diversion Facility. Use of these technologies would capture and create renewable and sustainable energy from compostable organic materials. It would also provide a significant local contribution towards progress on climate action.

CSPR 8-7 Support programs to reach the statewide goal of ensuring that 75 percent of solid waste generated is either reduced at source, recycled, or composted from the year 2020 forward, per AB 341, SB 1383, and the City's own Disposal Reduction Policy (R2012- 100).

¹⁷ City of Napa 2040 General Plan, Pg 4-38 (146) and Pg 4-39 (147).

Historic and Cultural Resources Element – Section 05

The Historic and Cultural Resources Element provides guidance on the City's historic and archaeological resources, its approach to historic preservation, and strategies to promote education and awareness. One Historic and Cultural Resources goal and one policy relates to wildfire¹⁸:

GOAL HCR-1: Preserve and enhance Napa's historic resources. Encourage rehabilitation and adaptive reuse, as well as sensitive, context-compatible infill design.

HCR 1-3 Encourage seismic strengthening to protect the City's valuable historic properties from future earthquakes, wildfire, and other events caused by climate change. This includes the development of incentives to encourage property owners to retrofit their buildings.

Climate Change and Sustainability Element – Section 06

The Climate Change and Sustainability Element (CCS) presents a framework outlining the City's strategies for combatting climate change and its impacts; including wildfires. This element seeks to protect the City's natural and built resources—including property, water, vegetation, wildlife, open space, and air—while furthering sustainability and reducing the City's contribution to climate change. Goals include introducing more greenery and natural habitat into the City that will need to be managed to reduce the risk of hazardous fuels and wildfire. Goals and policies around expanding the urban forest should be coordinated with wildfire goals. Green infrastructure also includes a policy regarding conversion of biomass.¹⁹

The relationship between wildfires, climate change, and energy security presents a complex problem in Napa, and throughout California. To reduce the risk of such wildfires, the energy provider Pacific Gas and Electric Company (PG&E) has instituted Public Safety Power Shutoffs (PSPS) when the weather forecast indicates that people's safety, lives, homes, and businesses may be in danger. As the City relies on PG&E for its gas and electrical needs, Napa residents can be affected by PSPS, including power outages during extreme weather conditions. The General Plan contains policies to help ensure that Napa residents have access to power even during PSPS and other power outages.

¹⁸ City of Napa 2040 General Plan, Pg 5-16 (168).

¹⁹ City of Napa 2040 General Plan, Pg 6-8 (182).

Three Climate Change and Sustainability goals and six policies relate to wildfire²⁰:

GOAL CCS-1: Further the City's sustainability initiatives to reduce the community's GHG emissions, and foster green development patterns – including buildings, sites, and landscapes.

CCS 1-1 Implement immediate and sustained actions in support of achieving net zero climate pollutants from public and private operations within the City by 2030.

GOAL CCS-3: Promote cost-effective, natural methods to improve the City's infrastructure and resilience to climate change, while furthering Napa's goal of a healthier and more sustainable urban environment.

CCS 3-3 Install a BioEnergy system at the City of Napa Materials Diversion Facility to reduce solid waste generation and produce renewable energy through the conversion of biomass.²¹

GOAL CCS-6: Considering power shutdowns that affect the Napa community, promote sustainable energy generation practices and further develop energy security that is resilient to wildfire and related climate disasters

CCS 6-1 Establish programs to evaluate new projects on their contribution to community resiliency toward climate disasters.

CCS 6-2 Promote renewable energy generation and storage to decrease reliance on outside sources and minimize impacts from public safety power shutdowns.

CCS 6-4 Promote renewable energy generation on City-owned sites and the deployment of micro-grids for energy independence and lifeline operations in the event of power shutdowns.

CCS 6-5 Evaluate technologies to reduce reliance on fossil fuel-powered backup generators and study programs to transition to more climate- friendly options—including battery storage, solar-powered generators, and small-scale wind turbines—in appropriate areas.

²⁰ City of Napa 2040 General Plan, Pg 6-10 (184).

²¹ City of Napa 2040 General Plan pg. 4-19 (127) Planned Improvements. Bioenergy (also known as “biomass gasification”). This planned technology improvement would take urban wood waste and the woody fraction of yard trimmings and convert them to a synthetic gas that in turn can produce renewable energy. Under so-called “BioMat” legislation (SB 1122), up to 3 megawatts (MW) of bioenergy can be produced and sold back to the electrical grid at a floor price. The City is in the process of purchasing and ultimately developing a little over 3 acres of land to the south of the City's current Materials Diversion Facility (MDF) from the Napa-Vallejo Waste Management Authority for the BioEnergy project. This is necessary as the current footprint of the City's MDF does not have adequate space for the proposed 3 MW BioEnergy project. Beyond utilizing wood waste locally and providing a renewable energy source, the BioEnergy project would also produce a “biochar” product from the solid ash that has value and agricultural benefits as a slow “time-release” source of nitrogen or possibly serve as a water filtration product for wastewater or drinking water systems.

Natural Resources Conservation – Section 07

The Natural Resources Conservation Element includes all components required by State law for conservation, including water, vegetation, wildlife, open space, and air to improve the environmental well-being of the community. While the City is largely urbanized, there are four primary habitat types in the Planning Area that are known to be used by sensitive plant, animal, and fish species: Riparian, Aquatic, Wetlands, Woodland, Grassland, and Chaparral.²²

There are seven major open spaces: Alston Park (157 acres), Trancas Crossing Park (33 acres), J. F. Kennedy Park (350 acres), The Stanley Ranch area, The Westwood Hills Park/Timberhill Park (128 acres), South Jefferson Park (27 acres), Skyline Wilderness Park (850 acres in adjacent Napa County).

One Open Space and Natural Areas goal and three policies can relate to potential development, increased risk and management of potentially hazardous vegetative fuels, even though they do not specifically mention wildfire.

GOAL NRC-3²³: Develop a balanced and integrated open space network reflecting a variety of considerations—resource conservation, production of resources, recreation, and aesthetic and community identity—as well as connections between various open space components, and compatibility with land use planning.

NRC 3-1 Maintain land designated as Open Space in Figure 7-2 in natural and/or recreational use and require that development or grading on hillsides (if allowed) preserves the integrity and appearance of natural hillsides and other landforms wherever possible. Development shall conform to the City of Napa Hillside Overlay District requirements with the goal to prevent cut-and-fill and other destructive developmental practices.

NRC 3-2 Encourage, at the time of any discretionary approval, development in sensitive areas to cluster development, or to build vertically, rather than horizontally, so as to retain natural areas and habitat.

NRC 3-3 Utilize greenways and trails to connect the City's open space network. Additional policies related to trails are included in Chapter 4: Community Services, Parks, and Recreation.

²² City of Napa 2040 General Plan, Pg 7-2 (196).

²³ City of Napa 2040 General Plan, Pg 7-16 (210).

Public Health and Equity – Section 09

The Public Health and Equity Element addresses the environmental and social determinants of health, as reflected in the social aspects and physical conditions of the City.²⁴ This element outlines strategies to ensure that all Napa residents may live, work, and recreate in neighborhoods that offer an equitable chance at good health and opportunity. This Element includes clean air and includes smoke from wildfires.

One Healthy and Sustainable Natural Environment Goal and two policies related to smoke from wildfires.²⁵

GOAL PHE-3: Promote clean air and water, a healthy natural environment, and pollution-free neighborhoods to reduce disparate health impacts resulting from environmental pollutants in vulnerable communities.

PHE 3-1 Protect sensitive receptors such as schools, childcare centers, senior living facilities, and residences from the impacts of stationary and non-stationary sources of pollution by ensuring adequate buffers or mitigation measures.

PHE 3-2 Regularly measure and assess environmental changes as they pertain to public health, such as by coordinating City air quality monitoring and improvement activities and infrastructure with Napa County and regional programs, including efforts administered by neighboring communities. Coordinate with the County and regional partners when planning for the public health implications of climate change, including wildfire smoke effects.

Hazard Mitigation Plan (HMP).

In 2021, the City of Napa updated their Hazard Mitigation Plan²⁶ (HMP), first developed in 2015. The Update used new research methods and information systems, with more comprehensive data sets. The Plan is organized in 6 elements: 1. introduction, 2. what's new 3. planning process, 4. risk assessment, 5. mitigation strategy, and 6. plan implementation. The 2021 HMP was adopted by the City Council of the City Napa on 5/17/2022 per City Council Resolution R22022-042. Plan monitoring and updates are on a five-year planning cycle. A comprehensive plan evaluation update will occur if a disaster occurs, or at the 5-year mark of the 2021 plan (2026).

The HMP update confirms the goals from the 2015 City of Napa Hazard Mitigation Plan:

Goal 1: Promote a flood safe community.

Goal 2: Promote an earthquake safe community.

Goal 3: Promote a fire safe community.

Goal 4: Promote an overall natural hazard-safe community.

Goal 5: Create a more disaster resilient community.

The HMP also identifies successful mitigation activities since 2015 including: participation in the first County-wide Community Wildfire Protection Plan (2021), City of Napa Emergency Operations Plan (2018), America's Water Infrastructure Act Risk and Resilience Assessment

²⁴ City of Napa 2040 General Plan, Pg 9-2 (240).

²⁵ City of Napa 2040 General Plan, Pg 9-28 (266).

²⁶ Hazard Mitigation Plan (HMP) <https://mitigatehazards.com/napahmp/> for update process and plan. The Plan was submitted for FEMA approval 1-26-2022. Accessed 8/1/24.

(2020), Utilities Hazard Mitigation Efforts with seven Hazard Mitigation Grant Program (HMGP) grants at various stages of execution (include generators, pumps and pump stations).

Through the risk assessment process, wildfire was identified as a hazard of greatest concern, scoring as “most likely” and with “catastrophic wildfire” on the risk matrix.²⁷ The Wildfire Hazard Profile²⁸ identifies local conditions related to wildfire including:

- the slender valley floor with steep, hilly, wooded terrain on the east and west,
- winds characteristically from the south originating from the San Francisco Bay, with occasional high winds north winds
- steep slopes often in combination with highly flammable vegetation and inaccessible wildlands
- high levels of recreational use can also increase wildfire risk and hazards of significant proportion

City of Napa Risk Matrix

		IMPACT			
		Minor	Limited	Critical	Catastrophic
PROBABILITY	Highly Likely	Medium	High	Extreme	 WILDFIRE
	Likely	Medium	 DROUGHT  CLIMATE CHANGE  EXTREME WEATHER	 FLOOD  EARTHQUAKE	Extreme
	Possible	Low	 SOIL STABILITY  SLOPE FAILURE	 PANDEMIC  DAM FAILURE	High
	Unlikely	Low	Low	Medium	Medium

In addition to local conditions the following are identified to increase the risk of wildfire:

- Sudden Oak Death
- Wildland urban interface and urban conflagration
- De-energization and PSPS Event (public safety power shut offs)
- Extreme fire behavior (large wildfires can also generate their own weather patterns, triggering feedback loops of destruction)

The risk assessment also looked at:

- Past events, the eight wildfires near the City of Napa that burned over 10 acres from 2000 to 2020.
- Recent large wildfire events outside of the City of Napa, including the LNU Lightning Complex in 2020, and the Atlas, Tubbs and Patrick Fire in 2017. Note: The Glass Fire in August 2020 was not included in the assessment.
- The frequency and probability of future wildfire occurrences, considering both the key factors of fuel, topography and weather as well as the historic wildfire return intervals
- The severity and extent of wildfire, as well as human health impacts, creating a composite wildfire severity map using three different sources: the CAL FIRE WUI Tree

²⁷ HMP, pg. 273.

²⁸ HMP pp 231-252.

Mortality map, the California Public Utilities Commission Fire Threat Tier map, and the CAL FIRE Fire Hazard Severity Zones map.

- Warning time, which can be short requires rapid response, with a continued focus on more rapid detection and alert systems.
- Secondary hazards such as direct economic loss (harvestable timber) or indirect economic (reduced tourism and commerce, contamination in reservoirs, destruction of transmission lines, flooding, landslides etc.)
- Climate change impacts related to hot dry spells which include more extreme fire behavior, more ignitions, more difficult fire management and drier vegetative fuels. More rain events could increase post fire flooding.

The risk assessment includes a Wildfire Vulnerability Analysis describing population, physical health (from smoke) and mental health hazards, property values, critical facilities and infrastructure (lifeline exposures). The assessment also looks at changes in development since the 2015 HMP, as well as future trends. The HMP recognizes that the City of Napa has gone to great lengths to ensure future development within hazard areas is minimized and mitigated to the greatest extent possible.

Wildfire Problem Statements.

As part of the mitigation action identification process, the Planning Committee for the City identified issues and weaknesses (also called problem statements) for its facilities. Identification was based on the risk assessment and vulnerability analysis utilizing the RAMP mapping tool and wildfire hazard data. Six Wildfire problems along with the related mitigation alternatives are listed below.²⁹

<i>Problem No.</i>	<i>Problem Description</i>
Ps-WF-CN-11	Napa wastewater treatment facility requires additional defensible space to protect from the impact of wildfire.
Ps-WF-CN-12	Planning is needed to designate WUI areas throughout the City to better understand wildfire risk and potential impacts.
Ps-WF-CN-13	City communication facilities and towers and raw water pipeline infrastructure are at risk of wildfire impacts.
Ps-WF-CN-14	Timberhill Park has an excess of flammable fuels that could exacerbate wildfire.
Ps-WF-CN-15	Timber Hill Park has access issues affecting fire response.
Ps-WF-CN-16	Lake Hennessey is susceptible to water quality impacts post-wildfire.

²⁹ HMP, from Table 4-68, pg. 252.

Mitigation Strategy

The HMP looked at how to align mitigation actions with existing planning and regulatory capabilities of the City.³⁰ These include the following related to wildfire, indicating its status, current mitigation use, and future opportunity to expand and integrate:

- Planning and regulatory capabilities
 - Construction and future development regulations
 - 2019 Building Codes
 - Building code effectiveness grading schedule (BCEGS) Rating – unknown at this time
 - Public Protection (ISO class) – Class 2 rating (limited use in mitigation planning)
 - Hazard specific ordinance – weed and rubbish abatement (Chapter 8.24)
 - Zoning ordinance – discretion to reduce density allowance with presence of physical hazards (17.08.050) – limited use in mitigation planning
 - Growth management ordinance – currently the rural urban limit. The 2022 General Plan anticipates all growth within the existing rural urban limit line.
 - Hazard reduction programs (annually conducted)
 - Capital Improvements Program (CIP) or Plan – not currently used for mitigation actions, but strong opportunity to integrate hazard mitigation
 - Hazard related public outreach program - (limited use in mitigation planning)
 - Hazard Plans
 - General Plan Safety element
 - CAL FIRE Sonoma-Lake-Napa Unit 2020 Strategic Fire Plan
 - Napa Fire Department Strategic Plan (2015-2020)
 - The Napa County Community Wildfire Protection Plan (2021)
 - Open Space and Land Management Plan
 - City of Napa Emergency Operations Plan (2018)
 - Napa County Emergency Operations Plan (2024 adopted 2025) as part of operational area
 - Climate Action Plans – not currently used but new Regional Climate Action and Adaptation Plan underway
 - Sustainable Community Plan (SB375) through ABAG
- Financial Capabilities. Financial resources for hazard mitigation including levy for specific purposes with voter approval (seldomly used); utility fees; benefit assessments (seldom used); system development fee, various bonds to incur dept, capital improvement funding. Three resources were identified as having future opportunities to expand and integrate: levy for specific purposes with voter approval, benefit assessments and system development fee.
- Education and Outreach resources include websites dedicated to hazard topics, dedicated social media (Facebook page), hazard information available at library/ Planning desk; annual public safety events; ability to field public technical assistance request; public safety newsletters or printed outreach, Napa Communities Firewise Foundation and 12 Fire Safe Councils, and Napa County Resource Conservation District.

³⁰ HMP, pp 263-267.

- Administrative and Technical Capabilities include community planning and development services, and warning systems/ services (such as Napa Nixle System).

Federal and State Funding Opportunities

The HMP provides detail on potential grant programs,³¹ including several related to wildfire and preparedness: FEMA Hazard Mitigation Assistance Grants, Assistance to Firefighters Grant program, Fire Prevention and Safety grants, Emergency Management Performance Grants, Regional Catastrophic Preparedness grants, State and County Community Development Department Block Grants, Cal OES Proposition 1B grants for transit system and disaster response projects.

Mitigation Actions

The City of Napa selected a range of appropriate mitigation actions to work toward achieving the HMP's goals. These initiatives are summarized in *Mitigation Actions tables* (pages 22-25). *Table 5-6* is a more expansive mitigation action tracker including: responsible party, estimated cost, estimated benefit, time frame, potential funding sources, etc.

There are 18 mitigation actions related to wildfire: three extreme priority, eight high priority, three medium priority and four low priority. Some actions weren't identified for wildfire, but are advantageous for multiple hazards such as: the extreme weather property protection mitigation for cost share with private property owners tree trimming away from powerlines to prevent power outages (and ignitions), or the flood mitigation recommending distribution of NOAA weather radios to high risk limited income families (for red flag alerts).

The prioritized mitigation actions are categorized into six types of actions:

- Public Education and Awareness: ma-AH-CN-3 general awareness + ma-AH-CN-5 business emergency preparedness plans, ma-FL-CN29 NOAA weather radios, and ma-WR-CN-42 develop Fire Safe Councils and implement 2021 CWPP,
- Emergency Services: ma-AH-CN-13 evacuation routes; and ma-WF-CN-61 maintain fire access roads and evacuation routes
- Prevention: ma-AH-CN-57 back-up generators @ critical facilities & sheltering locations; and ma-WF-CN-50 Timberhill Park demonstration fuels treatment and emergency access project
- Property protection: ma-WF-cn-41 structure protection plans; ma-EW-CN-58 cost share for tree maintenance to avoid damage; ma-EW-CN-59 replace dying and dead evergreen vegetation; ma-WF-CN-44 building plan review; ma-WF-CN-45 vegetation management/ weed abatement; ma-WF-CN-48 Lake Hennessy Pipeline Protection Project; and ma-WF-CN-63 Milliken Raw Water Pipeline Hardening Project.
- Structural projects: ma-W-CH-43 upgrade water utility infrastructure; and ma-WF-CN-47 replace Lake Hennessey intake pump station defensible space/ construction upgrade
- Natural Resource Protection: ma-WF-CN-46 watershed protection efforts Lake Hennessey & Lake Milliken (drinking water supplies)

Responsible parties include the Fire Department and other City Department partners: City Council, Community Development, Economic Development, Police, Public Works, Utilities. Implementation actions also identify partners such as: Napa Communities Firewise Foundation, and property owners.

Plan Implementation and Maintenance

³¹ HMP, pp 268-272.

As required by the Disaster Mitigation Act 2000, the City of Napa Council has officially adopted the HMP. Plan implementation, monitoring, evaluating and updating, as well as incorporating the recommendations and underlying principles in other planning mechanisms are detailed in the HMP.

Relevance to the CWPP: There is an opportunity to link the HMP with the CWPP updates, as the HMP often looks to the CWPP to address wildfire risks and mitigation measures. Mitigation strategies can support the CWPP in the following areas:

- Public Education and Awareness
- Emergency Services
- Prevention
- Property protection
- Structure projects
- Natural Resource Protection.

Housing Element.

The Housing Element³² is an update of the City of Napa's previous Housing Element approved in 2015. On November 6, 2023, the City of Napa City Council approved and adopted the 2023-2031 Housing Element and submitted it to the Department of Housing and Community Development for review. On December 11, 2023, the Department found the 2023-2021 Housing Element to be in *substantial compliance with State Housing Element law*.³³ The Housing Element is required by state law to be updated every eight years.³⁴ The Napa Safety & Noise Element has not been reviewed by the California Board of Forestry and Fire Protection in conjunction with the Housing Element Update.³⁵

The Housing Element update 2023-2031 recognizes the hazards presented by wildfire. *Wildfires can also be a major concern, especially on the outskirts of the city where urban development interfaces with wildland areas of Napa County.*³⁶ It identifies the elevated displacement risk for lower income households due to natural disasters, especially wildfires.³⁷ It recognizes the recent updates of the Hazard Mitigation Plan, which focuses in part on mitigating wildfire impacts on the residents of Napa.³⁸ Costs in the region have also been impacted by the loss of residential units to wildfires in the past several years.³⁹

Provisions in the City of Napa Municipal Code aid in reducing wildfire risks by ensuring the installation of protection features, like hydrants, and sufficient emergency access and water

³² Housing Element. <https://www.cityofnapa.org/262/Housing-Element>.
<https://www.cityofnapa.org/262/Housing-Element> Accessed 9/14/24.

³³ Department of Housing and Community Development Division of Housing Policy Development. Letter of substantial compliance with State law. 12/11/23.

³⁴ SB1035 and SB379 require update of Safety element every eight years upon the next housing element update.

³⁵ Upon the next revision of the housing element on or after January 1, 2014, the safety element is required to be reviewed and updated as necessary to address the risk of fire for land classified as state responsibility areas and land classified as very high fire hazard severity zones. (Gov. Code, § 65302, subd. (g)(3).)

³⁶ City of Napa Housing Element, Environmental considerations, pg. E-56.

³⁷ City of Napa Housing Element, Issue 3 Disproportionate Housing Needs contributing factor, pg. 46.

³⁸ City of Napa Housing Element, pg. C-72.

³⁹ City of Napa Housing Element, pg. E-51.

capacity. In addition, new development must comply with the City's Building Code, which references the state standards and are some of the strongest standards in the nation.⁴⁰

Goal H4 Energy Conservation and Infrastructure Improvement specifically mentions in program H4-2.1 that when reviewing development, the City will use the criteria of: "Provides for adequate, safe, and accessible internal and external multi-modal traffic circulation, including emergency evacuation."

Relevance to the CWPP: The Housing Element shares implementation measures related to the CWPP Action Plan priorities of: safety and evacuation, as well as regulations, policies and plans, and public health. *Note:* The Housing Element did not mention the *Safety Element* or *Board of Forestry Assessment as required by state law (Gov. Code, § 65302 (g)(3))*.

City of Napa Fire Department Plans

The 2024 Fire Department Annual Report⁴¹ highlights the annual accomplishments of the Fire Department including: the expansion of staffing and resources for fire positions and response equipment, completed assessments and fuel reduction projects, and the award and initiation of a grant for development of the Community Wildfire Protection Plan. Relevant to wildfire protection, it reports 216 weed abatement inspections, an over 190% increase over 2022, and issuance of 56 notices to abate.

The Organization & Operational Analysis (OOA) (Jan 2023)⁴² was designed to assist the Napa Fire Department (NFD) in anticipating community growth, risks and development, and maintaining or enhancing service as the community grows. NFD is an all-hazards public safety agency providing traditional structural fire suppression, wildland firefighting, medical first response (MFR), and special operations including water rescue, structural collapse, confined space rescue, high- and low-angle rope rescue, and hazardous materials response.

NFD deploys its apparatus and personnel from five fire stations located throughout the city, with a separate fire department administration facility (shared with other city departments) that does not house apparatus. Wildfire response is the most demanding event for staffing and resources. NFD daily staffing includes capacity for wildland fire response. NFD also has access to a significant number of mutual aid resources, including American Canyon Fire Department stations 11 and 211, and Napa County Fire Department stations 12, 25 and 27.

In addition to emergency operations, NFD provides fire inspections, code enforcement, plan reviews, and several public education/prevention programs through its Fire Prevention Division. The Fire Investigation Team, consisting of operations personnel, conducts fire-cause and arson investigations

Prevention or mitigation of unintentional injuries or fires is a critical function of a fire department. Educational programs provide the best opportunity to reduce fires and injuries in the community. A fire and life safety program to reduce risks requires a coordinated approach and should

⁴⁰ City of Napa Housing Element, pg. E57.

⁴¹ 2024 Annual Report. <https://www.cityofnapa.org/DocumentCenter/View/14000/2024-Annual-Report-PDF>

⁴² NFD Fire Service Organizational and Operational Analysis, Jan 2023. (O&OA)
<https://www.cityofnapa.org/DocumentCenter/View/10761/Napa-Fire-Service-Analysis>

include other partner organizations in the community that may provide the same or similar services. These partnerships allow NFD to become a community partner and build relationships to reduce risks. In addition, developing fire and life safety programs requires a continual review of incident data to determine the types and frequency of responses. The OOA reports that NFD does not currently have a dedicated employee that focuses on public fire and life safety education to reduce risks in the community. It relies on the operations division for station tours and truck displays. NFD hosts an annual Fire and Life Safety Day during October, demonstrating what the fire department can do and prevention and mitigation tips. In addition, NFD has posted videos on its website on fire extinguisher safety, weed abatement tips, hands-only CPR, and kitchen safety.

Recommendations of the OOA to enhance current fire and life safety programs included: the development of a Community Risk Reduction Plan, and that NFD should consider reinstituting the position of a dedicated public educator but changing the position title to Community Risk Reduction Coordinator.⁴³ This position would allow coordination of all Community Risk Reduction programs and integration with operations. The OOA also identifies that there are sporadic locations in the city where tree canopies may create a threat during optimal wildfire conditions; thus, there is a need in these locations to ensure mitigation efforts are conducted.⁴⁴ Without proper weed abatement, small fires in the city could spread to buildings, creating hazardous conditions during extreme drought conditions.

Napa Fire Department Strategic Plan

The most recent Napa Fire Department Strategic Plan⁴⁵ was released July 31, 2015 and covered 2015-2020. It identified the vegetation management program and public education as a part of the core program. Disaster preparedness (response, planning and training) is identified as one of the five critical issues with an initiative for public education and community risk reduction, five associated objectives and critical tasks.

Parks and the Urban Forest Management

The City of Napa Parks and Recreation Services Department provides residents with access to more than 54 parks that cover over 950 acres of park land.⁴⁶ For the last 34 years the City of Napa has been recognized by the National Arbor Day Foundation as a Tree City USA. Six urban forestry staff mostly work with Public Works on street trees and around facilities. Their work includes planting, pruning, and tree replacement. Napa has a Parks, Recreation and Trees Advisory Commission (PRTAC).

The City is currently developing an Urban Forest Management Plan (UFMP). The UFMP will benchmark the existing urban forest, communicate direction and develop a shared vision for the care, preservation, and enhancement of the urban forest over the next 40 years. The development of the UFMP involves a comprehensive review and assessment of the structure and composition of Napa's tree resource, the extent and distribution of tree canopy and other land cover within the community, guiding documents that impact urban forestry, the current service and funding levels, and the community's vision for the future. Feedback from stakeholders/managing partners and community members is a crucial part of the development

⁴³ O&OA pg. 178

⁴⁴ O&OA Pg 159

⁴⁵ NFD Strategic Plan 2015 -2020 <https://www.cityofnapa.org/DocumentCenter/View/2637/Napa-Fire-Department-Strategic-Plan>

⁴⁶ <https://www.cityofnapa.org/355/Parks-Trees>

of the UFMP. Information gained from the community engagement activities will guide the recommendations in the plan.

As of September 2024, the Urban Forest Management Plan did not include any wildfire related issues. The community resource inventory did not address open space parks, creek/ river corridors or private property. There is an opportunity to include some of the issues that are common to both wildfire and urban forest management.

Relevance to the CWPP: Parks and urban forest management offers several long-term goals that support the CWPP especially those related to vegetation management and abatement of hazards on both public and private property.

City of Napa 2024 Council Priority Progress Report⁴⁷

In early 2023, during the Napa City Council's annual strategic plan workshop, City staff provided an overview of the City's financial health, as well as accomplishments and challenges from the past year. In addition to the core services provided by the City to ensure the community's safety, provide public infrastructure, and offer important recreational opportunities, the City Council worked to identify five priorities for FY 2023-24 and FY 24-2025. In no particular order, these include Climate Action & Sustainability, Traffic Safety (for all modes of transportation), Housing & Homelessness, General Plan Implementation and Public Infrastructure. *Relevance to the CWPP:* The City Council will be a reviewing entity of this CWPP and can match priorities identified that align with CWPP projects in the Action Plan (Table 6).

Infrastructure

No documents were found relating to City of Napa infrastructure improvements beyond the General Plan (in the Community Services Parks and Recreation Element, Climate Change and Sustainability Elements), and in the Hazard Mitigation Plan.

Relevance to the CWPP: Infrastructure improvement plans can support CWPPs with priorities of prevention, safety and evacuation, as well as regulations, policies and plans, and infrastructure and business.

⁴⁷ <https://www.cityofnapa.org/DocumentCenter/View/10264/CITY-COUNCIL-PRIORITY-PROGRESS-REPORT-2024?bidId=>

2. Codes and Ordinances

The City of Napa Building Division and Code Enforcement Division adopted the 2022 California Building Standards Code together with local amendments with an effective date of January 1, 2023, as amended by City Municipal Code Section 15.04.30⁴⁸. The City will be looking to adopt new codes in late 2025. No amendments were made to the California Fire Code related to wildfire (Chapter 15.04.080).⁴⁹ These building codes and the enforcement process directly support the prevention and resident mitigation priority actions, and are key tools in regulations, policies and plans supporting public health in the built environment.

The City has adopted several local amendments to the City of Napa code that relate to wildfire prevention and hazardous vegetation including:

- Chapter 8.24 Weed and Rubbish Abatement in the Health and Safety Code.
- Title 12 Streets, Sidewalks and Public Places include:
 - Chapter 12.44 Public Trees and Plants
 - Chapter 12.45 Trees on private property including “significant trees” (Chapter 12.45.070) and ‘Safeguarding protected native trees” (Chapter 12.45.80).
- Chapter 17.52.180 Fire hazard areas in Title 17 Zoning Code, Chapter 17.52 Site and Use Regulations include mapping of high fire hazard severity zones and potential contents for fire hazard reduction plans before approval of new projects.

Napa’s Tree Preservation Standards protect trees on public property and on private properties where trees have been designated as “Significant Trees” or are “Protected Native Trees.” The protection is aimed at construction activity but could also limit pruning or removal for wildfire mitigation if strictly enforced. Four Napa Municipal Codes relate to trees:

- Public Trees and Plants NMC 12.44. Protection of trees, and landscape materials (shrub, groundcover or other plants). Property owners shall be responsible for complete maintenance of landscape materials, other than street trees, planted in the right of way adjoining their property, including weed abatement. Code includes violations, penalties, and enforcement.
- Protected Native Tree NMC 12.45.080. Safeguarding protected native trees includes the requirement of a permit to remove or prune (branches greater than 4”) a protected native tree. Seven native species ranging in size from 6” to 36” or greater are identified. Code includes detailed safeguards, permits, and replacements.
- Significant Tree Programs NMC 12.45.030. Identifies trees or groves of trees that were evaluated on seven criteria for uniqueness including: historic significance, horticultural rarity, size or age, aesthetic value, prominence to public view, habitat protection and native to Napa Valley. Nomination of significant trees is with consent of the property owner. Code includes detailed protections, permits, and replacement.

⁴⁸ <https://www.cityofnapa.org/228/Building-Division> and <https://ecode360.com/NA4976>

⁴⁹ California Fire Code (Part 9 of Title 24; based on the 2021 International Fire Code, published by the International Code Council). Appendices: Appendix Chapter 4 (Special Detailed Requirements Based On Use and Occupancy), B, BB (Fire Flow Requirements for Buildings) C, CC (Fire Hydrant Locations and Distribution), F (Hazard Ranking) H (Hazardous Materials Management Plans and Hazardous Materials Inventory Statements), and K (Temporary Haunted Houses, Ghost Walks and Similar Amusement Uses). Amendments: as set forth in the Napa Municipal Code Section [15.04.080](https://ecode360.com/43394049#43394049). <https://ecode360.com/43394049#43394049>

- Hazardous Trees Abatement NMC 12.45.120. Director of Parks and Recreation Services can find a tree, shrub or plant on private property “hazardous” are require the property owner abate the hazard. Code includes appeal from notice, performance of work by Department, notice of payment due and the lien process to collect. Hazards may include if the plant: (1) appears dead, dangerous, or likely to fall; (2) obstructs a street or sidewalk; (3) harbors a serious disease or infestation threatening the health of other trees, shrubs or plants; (4) interferes with vehicular or pedestrian traffic; or (5) poses any other significant hazard. Required action may include pruning or replacement and removal of the tree, shrubs or plant.

Civil penalties are established and a process for hearings and collection of penalties are established for all of the codes in NMC12.45.140 and 12.45.150.

Relevance to the CWPP: In addition to the building and fire codes, there are several other codes that support the CWPP Priority Action Plan areas of prevention, safety and evacuation, resident mitigation, large scale treatment, regulations policies and plans, partnerships and community engagement and public health, including:

3. City of Napa Programs and Implementation Measures

Comparison of Implementation of Napa Municipal Code and Napa County Defensible Space Code

Napa Municipal Code Chapter 8.24 Weed and Rubbish Abatement Code details the City’s fire hazard abatement program.⁵⁰ It declares all weeds, thistles, rank grass, brush, berry vines and dead or dying trees located on private property (including sidewalk area), streets and alleys as public nuisances. It also identifies all rubbish, trash, inoperative and/or abandoned vehicles, and all other such accumulations that contribute to the fuel load or hinder the clearing of properties or delay fire-fighting operations (including alleys and sidewalks).

All properties are required to be completely cleared by June 1st of each year and then maintained throughout the fire season. The end of fire season is determined by CAL FIRE and is typically around November 1st, or only after measurable amounts of rainfall.

Inspections by the Fire Department begin annually during the first week of June. Properties not in compliance are posted with a Notice To Abate; an Administration Citation may be issued to the Property Owner, and compliance ordered within ten (10) calendar days. A copy of the posting notice will be mailed with or without the citation.

In the event the property owner fails to bring the property into compliance within 10 calendar days after the posting, the City’s contractor will be issued a work order to complete the work. The property owner will be billed for all contractor costs incurred, including an Administrative Fee of 10% (minimum \$100.00) per parcel. Additional citations may be issued for Failure to Comply with the City Ordinance. Should the property not be maintained throughout the fire season, Municipal Code Section 1.24.060(A) (3) allows for an additional citation to be issued for each day of additional violation of the same code section within a 12-month period.

The code includes provisions for request for extension of time or to appeal the inspection, as well as appeal the determination of cost should the city perform the removals. The City Council

⁵⁰City of Napa weed abatement program <https://www.cityofnapa.org/931/Weed-Abatement-Program>

reviews appeals on the matter of costs. If costs are not paid the Fire Prevention Bureau sends information to the City Auditor who adds the costs as a lien against the property. The charge is collected in the same manner and at the same time as city taxes. If not paid, the charge will be treated as any other lien, and the property could be sold for delinquent taxes.

The key difference between the Napa Municipal Code⁵¹ and the Napa County Fire Hazard Abatement Ordinance (Chapter 8.36 Fire Protection)⁵² is the definition of “public nuisance.” The County Ordinance goes beyond weeds and dead and dying trees to include uncontrolled growth and/or accumulation of prohibited materials creating fire hazard within defensible space. Detailed definitions identify combustible vegetation, defensible space, ember resistant zone, fire hazard green waste, prohibited materials, rubbish, structure, and weeds.

Two additional differences are that the County Ordinance refers to the adopted Defensible Space Guidelines⁵³ with further details.

- The Ordinance and Guidelines detail the ember resistant zone, as well as property owners’ responsibilities to provide defensible space on their own land for any adjacent property’s structure located less than 100 feet from the property line.
- In May 2021, Napa County Defensible Space Guidelines were amended and identify prohibited plant species.⁵⁴ Napa County Code section 8.36.030 defines a list of pyrophytic plant species that should not be planted within 30 feet of structures. Pyrophytic species are fire-prone vegetation that is adapted to or fuels rapid burning, high heat output, and ember creation.

⁵¹ Napa Municipal Code Chapter 8.24 Weed and Rubbish Abatement, <https://ecode360.com/43391667> Accessed 8/21/24.

⁵² Napa County Code of Ordinance, https://library.municode.com/ca/napa_county/codes/code_of_ordinances?nodeId=TIT8HESA_CH8.36FIP_RIRHAAB Accessed 8/21/24.

⁵³ Resolution No. 2021-49 adopting the Napa County Defensible Space Guidelines. <https://www.countyofnapa.org/DocumentCenter/View/20532/Defensible-Space-Guidelines-PDF---Updated-in-2021?bidId=> accessed 8/21/24

⁵⁴ Napa County Defensible Space Guidelines. Resolution No 2021-40. Adopted 5/4/21 <https://www.countyofnapa.org/DocumentCenter/View/20532/Defensible-Space-Guidelines-PDF---Updated-in-2021?bidId=> Napa County's Prohibited and Suggested Plants for Fire Safety. Napa County Code section 8.36.030

Defensible Space Self Inspection Form

<https://www.countyofnapa.org/DocumentCenter/View/22186/Defensible-Space-Self-Inspection-Form-PDF>

4. Adjacent Agencies' Plans and CWPPs

Adjacent cities and public lands management agencies share many of the goals identified in the Napa CWPP. Neighboring fire agencies respond through the mutual aid agreements and the State Emergency Management System.

Relevance to the CWPP: Shared mitigation approaches can begin to address some of the more difficult regional challenges identified in the CWPP, especially those concerning safety and evacuation, wildfire response, large-scale landscape treatment, recovery, partnerships and community engagement, and public health and equity.

CAL FIRE Sonoma Lake Napa Unit (LNU) Strategic Plan, 2024.

The LNU Strategic Fire Plan (2024)⁵⁵ is a product of the implementation of the 2018 State Fire Plan. The State Fire Plan provides an analysis procedure to assess fire fuel hazards and risks in order to design and implement mitigating activities. LNU project priorities for 2024 include:

1. Supporting defensible space and home hardening;
2. Public arterial and collector road fuel reduction projects;
3. WUI community fuel breaks;
4. Landscape level fuel reduction;
5. Emergency responder incident response planning and ingress projects and
6. Tactical ridgetop fuel breaks.

The City of Napa is identified as a Community at Risk (Section III.B., Table 2). LNU programs include: emergency command center in St Helena, a fire prevention program, information and education program, school programs, juvenile fire setter intervention program, fairs and public events, the fire information center, media outreach, printed materials, training bureau, conservation camp programs (Delta and Konocti Conservation Camps), LNU fuels reduction crew, LNU firefighter hand-crew, air program, vegetation management program (VMP), vegetation treatment program (CAL VTP), resource management program and fire suppression repair.

Napa County Community Wildfire Protection Plan (CWPP)

The Napa County CWPP,⁵⁶ updated in March 2021, describes on a county-wide scale, fire hazard and risk, both displaying CAL FIRE derived products as tabs on the Community Base Map, and county-specific analysis of hazard and risk, based on new high-resolution fuels maps and fire behavior analysis, plus a multitude of other weighted factors. The CWPP aggregates projects from individual community-level fire safe councils (FSCs) and other stakeholders county-wide.

⁵⁵ CAL FIRE Sonoma- Lake- Napa (LNU) Unit Plan, 2024. <https://34c031f8-c9fd-4018-8c5a-4159cdf6b0d-cdn-endpoint.azureedge.net/-/media/osfm-website/what-we-do/community-wildfire-preparedness-and-mitigation/fire-plan/2024/2024-sonoma-lake-napa-solano-yolo-colusa-unit-fire-plan.pdf?rev=08276600f1ef4c5888c0da1982fdaf9d&hash=0FF5BFB74D966C263A14D581EDF48CAE>

⁵⁶ Napa County CWPP Update March 15, 2021. <https://cwpp-napafirewise.hub.arcgis.com/> and <https://cwpp-napafirewise.hub.arcgis.com/documents/b2ca7f50aa9f41b68c9156f5e7c4e0c5/explore>

The CWPP projects are organized into an Action Plan that sets the stage for implementation by defining the scope, partners, type of resources needed for implementation, funding source and general level of funding that might be required. The Napa County CWPP Action Plan prioritizes:

1. Evacuation corridors and containment:
 - Major corridors, e.g., state highways (29, 121, 128)
 - Secondary corridors, e.g., County roads, and
 - Select containment lines.
2. Community perimeter fuel breaks and forest health projects,
3. Projects that protect drinking water, critical Infrastructure and landscape-scale projects.

There are five major categories of projects identified in the CWPP Action Plan as displayed below:

1. Fuel management
2. Wildfire response support
3. Community education and outreach
4. Critical Infrastructure
5. Planning

FUEL MANAGEMENT	
<i>Project Type</i>	<i>Project Type Description</i>
FMAG	Protect evacuation routes by removing hazardous trees and reducing fuel volumes within 100- feet on both sides of emergency access and evacuation routes as defined by Napa County; priority is to treat areas within the perimeter of the 2020 fires
FuB Rd	Create perimeter fuel breaks around communities by treating vegetation, linking low fuel volume locations and working with large landowners
RD	Treat roadside vegetation to provide emergency access and egress; remove hazard trees and thin understory and coniferous canopy
Water	Protect drinking water reservoirs and facilities through vegetation management in the immediate sub-watershed to limit sediment movement into reservoirs hardening. Create defensible space around all facilities
Health	Improve forest health and resiliency by managing vegetation to reduce fuel volume, vegetation density and creating a forest structure that mimics that found in a natural fire regime
Landscape	Promote containment by treating vegetation along strategic containment locations to reduce fuel loads and restore fuel conditions and fire regimes. Identify as boundaries key ridgelines and access roads
Restore	Restore and rehabilitate wildlands and defensible space in communities that have burned
Power	Prevent Ignitions from powerlines by removing vegetation from within striking distance and around selected power poles
Link	Treat vegetation between vineyards to augment containment opportunities
COMMUNICATION AND EDUCATION	
<i>Project Type</i>	<i>Project Type Description</i>
DS	Educate and promote creation and maintenance of defensible space
911	Install 911 signs and address badges that indicate access and water supply

Call	Augment current notification systems during emergency
Zones	Educate residents about criteria of locations suitable for emergency refuge
Prev	Prevention ignitions from mechanical devices by informing workers of best practices
WILDFIRE RESPONSE SUPPORT	
<i>Project Type</i>	<i>Project Type Description</i>
Contain	Support fire containment by maintaining select dozer lines installed during wildfires. Re- align select dozer lines to limit environmental impacts
911	Install 911 signs and address badges that indicate access and water supply
Knox	Install Knox Box facilities at base of roads with information (water supply, access, power shutoff) to assist emergency responders
Pass	Establish agreements with landowners/neighbors' law authorities, to allow access in emergency
Turnout	Improve roads by creating turnouts along roads through vegetation removal or minor dirt removal, or improving road surface
PLANNING	
<i>Project Type</i>	<i>Project Type Description</i>
PlanGeo	Develop a geodatabase to track project implementation and maintenance
PlanRef	Participate fully in General Plan and Local Multi-hazard Mitigation Plan revisions
CRITICAL INFRASTRUCTURE	
<i>Project Type</i>	<i>Project Type Description</i>
I	Protect critical infrastructure (e.g., cameras, communication towers, water treatment plants) from wildfire damage through creation of defensible space and ignition resistant construction
IW	Protect drinking water facilities by creating defensible space around all facilities and retrofitting structures with ignition-resistant construction

Relevance to the CWPP: The Napa County CWPP offers existing conditions analyses, evaluation criteria, long-term goals and an action plan that supports the CWPP, especially those related to priorities and specific projects that would benefit from regional coordination.

Napa County Fire Marshal's Office Defensible Space Program and Napa Firewise

Napa County Fire Department works closely with Napa Community Fire Foundation (Napa Firewise)⁵⁷ to provide wildfire prevention programs. The Fire Marshal's Office programs include defensible space & Firewise planting, chipper program and fuel reduction projects.⁵⁸ The defensible space program includes information on burning permits, the county-wide chipper program and the defensible space cost share program through Napa Firewise. The Napa County Fire Department provides a free chipping service to all residents who live in the unincorporated areas of Napa County. The program has criteria that the property resident has to meet in order for chipping to take place.

⁵⁷ Napa Firewise <https://napafirewise.org/>

⁵⁸ Napa Fire Department Office of the Fire Marshal <https://www.countyofnapa.org/3134/Defensible-Space>

The Napa County Wildfire Fuel Mapper⁵⁹ was created to help residents, fire safe councils, and other land managers locate and understand fire hazards on their property. The application aggregates fine-scale fuels and fire hazard datasets to deliver information via custom maps and reports. The simple interface helps community members to understand planning and regulatory requirements specific to their location. Formerly available only to Sonoma County residents, the Wildfire Fuel Mapper has recently been expanded to all of Napa County, with funding from Napa Firewise Foundation. Napa Firewise also has developed a project database tool to learn about fuel reduction projects across Napa County.

Additional Napa Firewise programs include development of Firewise communities (recognized by Firewise USA), and local fire safe councils, education programs on defensible space, home hardening, fire preparedness, *Reflect to Protect* address signage program and the *Wildfire Resilience Action Program* (WRAP). Napa Firewise also updates the Community Wildfire Protection Plan. Formed in 2004, and incorporated in 2007, the non-profit foundation's current 5-year fuel reduction plan⁶⁰ includes: roadside fuel reduction, fuel break and fuel reduction, environmental studies, infrastructure (road, dozer line maintenance etc.) and maintenance of earlier projects.

Napa County Multi-Jurisdictional Hazard Mitigation Plan 2020 Update, and 2024-25 update in progress.⁶¹

The 2020 Napa County Multi-Jurisdiction Hazard Mitigation Plan (MJ HMP) was approved by FEMA on August 13, 2020. The MJ HMP included the cities of American Canyon, Calistoga, St. Helena and the Town of Yountville in addition to other jurisdictions (Napa County Flood Control and Water Conservation District, Napa County Office of Education, Napa Valley College, Howell Mountain Mutual Water Company). City of Napa has its own HMP, but will be included in the pending Napa County Multi-jurisdictional HMP estimated to be completed in late 2025 or early 2026.⁶² Wildfire is considered a “high priority county-wide, profiled hazard.” The MJ HMP includes a wildfire hazard profile, 52 problem statements, hazard prioritization, areas of concern, and capability assessments. Twenty-five mitigation strategies are identified specifically for wildfire, and include responsible party, timeframe, estimated capital costs, maintenance costs, potential funding sources and priority. The mitigation types include prevention, property protection, structural projects, public education and awareness, and emergency services.

Napa County's Office of Emergency Services

The Napa County Office of Emergency Services (OES) provides information about emergency preparedness, response and recovery, maintains and updates county emergency plans as needed, and trains the community for disasters.⁶³ OES coordinates the services of the County's long-range emergency preparedness program, is responsible for planning, implementation,

⁵⁹ https://wildfirefuelmapper.org/county_idx.html?id=Napa

⁶⁰ NCF 5 Year Fuel Reduction Plan https://napafirewise.org/wp-content/uploads/2021/04/NCF-5_year-fuels_reduction_plan.pdf

⁶¹ Napa County Multi-Jurisdictional Hazard Mitigation Plan 2020 Update. <https://mitigatehazards.com/napa-county-mjhmp/>

⁶² Napa County Board of Supervisors Agreement with Dynamic Planning. <https://napa.legistar.com/LegislationDetail.aspx?ID=6479791&GUID=D17D9CDD-D244-4F78-AB57-821F9703A09F>

⁶³ Napa County Office of Emergency Services (OES) <https://www.countyofnapa.org/353/Office-of-Emergency-Services>

coordination and direction of area-wide Emergency Services Programs, and maintains Napa County's Emergency Operations Plan and Hazard Mitigation Plan. They also administer and coordinate emergency preparedness training, education, and public information programs.

The Napa County Emergency Operations Plan⁶⁴ adopted in 2020 addresses wildfires and related topics such as mass evacuation, PG&E Public Safety Power Shutoffs (PSPS), climate change, emergency functions and agency responsibilities, as well as providing emergency planning and services for people with access and functional needs.

Napa County General Plan⁶⁵

The County's General Plan serves as a broad framework for planning the future of Napa County. This General Plan is the official policy statement of the County Board of Supervisors to guide the private and public development of the County. The Napa County General Plan was completed in June 2008 and is slated for an update. Sections of the General Plan have been updated more recently, including the Housing Element and Safety Element. Both updates incorporated experiences from more recent wildfires, and include assessments of loss of housing due to wildfire, price increases, resident displacement, difficulty of obtaining fire insurance, as well as evacuation related issues.

The Housing Element (included in the General Plan) was updated in January 2023 and includes 1 goal and 1 policy related to wildfire:

GOAL H-5: Facilitate rebuilding of housing lost in wildfires. (pg. 42)

Policy H-4k: Expedite the permitting process for re-construction of housing units lost in wildfires.

The Safety Element (included in the General Plan) updated in August 2023, identifies emergency preparedness and evacuation planning, wildfire and climate change as key issues and develops goals and policies for each. Four goals relate to wildfire:

Goals SAF-1: Safety considerations will be part of the County's education, outreach, planning, and operations in order to reduce loss of life, injuries, damage to property, and economic and social dislocation resulting from fire, flood, geologic, and other hazards. (Pg SAF-24)

Goal SAF-2: The County will be prepared in the event of a disaster to protect residents and businesses from impacts and further harm, while beginning post-disaster reconstruction of uses destroyed by hazards or natural disasters as soon as reasonable. (Pg SAF-25)

Goal SAF-3: The County will address and reduce hazards caused by climate change, with climate change adaptation.

⁶⁴ Napa County Emergency Operations Plan 2020.

https://www.countyofnapa.org/DocumentCenter/View/20613/EOP-Napa-County_Dec-2020

⁶⁵ Napa County General Plan, June 2008.,. Includes 2023-2031 Housing Element, January 24, 2003 (pp 221 – 581) and Safety Element Update, August 2023 (pp 620 – 660).

<https://www.countyofnapa.org/1760/General-Plan>

Goal SAF-10: Effectively manage forests and watersheds, and to protect homes and businesses from fire and wildfire and minimize potential losses of life and property. (Pg SAF-37)

Thirteen policies relate to evacuation and address dissemination of emergency planning information, update of evacuation planning actions, and provision of evacuation information to residents, businesses and tourists. Policies also require emergency action planning for all critical facilities, hardening and redundancy for public safety buildings, and providing backup generators in public facilities. They also focus on limiting development to protect life and property from wildfires. Policies prioritize capital improvements on evacuation routes in need of repair, including a biannual assessment of roads typically used as evacuation routes and for those routes serving dense rural communities. A policy provides farm workers with emergency protection resources. The final three policies related to evacuation include developing a Natural Hazard Awareness Week campaign, coordinating with utility agencies when developing a climate action plan, and working with organizations to enhance disaster communication processes.

Twenty-seven policies relate to wildfire include: promoting intergovernmental cooperation and training, collaborating with other agencies for implementation of wildfire and hazard plans, maintaining consistency with California Codes, coordinating with fire agencies to plan for fire prevention and suppression, and minimizing hazards in high wildfire hazards areas for new residential development. Policies also support prescribed fuel management programs, meeting or exceeding fire safety standards for county buildings and roads and supporting new technology in fire suppression and prevention. New developments are required to prepare a fire protection plan in compliance with fire safety standards. Preservation and maintenance of existing fire prevention techniques include fire trails, defensible space and community fire breaks. The County will work with others to ensure fire breaks are maintained; including seeking grant funding. Wildfire related policies also include using the CWPP as guidance for implementation, addressing and mitigating human causes of ignition, continuing the County chipper program, assisting private property owners with fuel reduction, regularly updating the County defensible space ordinance, and supporting neighborhood based Firewise councils. Policies also address retrofitting critical public safety infrastructure, conducting prescribed burns, requiring care facilities to retrofit with fire-resistant materials, completing vegetation management projects, and constructing fuel breaks and roadside treatment projects. Policies require proper addressing and signage, working with utility providers to move utility lines underground, and improving egress in wildland urban interface areas. The final three policies focus on farmworker wildfire education, locating public facilities outside of high fire risk areas where feasible and implementing recommendations to improving fire safety and evacuation for existing subdivisions with only one point of egress.

A single policy under the climate change adaptation goals focuses on implementing fuel reduction techniques around all buildings located in high wildfire risk areas.

Appendix B of the December 2022 Draft Napa County Safety Element Emergency Evacuation Assessment provides a general, programmatic assessment of emergency evacuation routes for the County of Napa. This assessment is consistent with Assembly Bill 747 (AB 747) and Senate Bill 99 (SB 99) requirements. The document provides an assessment of roadway capacity under three scenarios. Emergency evacuation assessment is an emerging field, therefore, there is no established standard methodology. Fehr and Peers (the authors of the assessment) have adopted existing methodologies in transportation planning for this analysis. The analysis

establishes seven evacuation zones and routes to their respective evacuation destinations. For each zone, a roadway link from the Solano Napa Activity- Based Model (SNABM) that represents the bottleneck segment on its evacuation route was identified as its “evacuation gateway.” Six tables in the assessment identify: evacuation demand of the evacuation zones, outbound capacity of evacuation gateway links, evacuation time required under each of the three evacuation scenarios, and additional demand with a potential new development. Six maps indicate parcels with only one access route, and distances to evacuation gateways under each of the three evacuation scenarios.

Potential measures are identified that can enhance the evacuation process through both the supply side (increasing evacuation capacity) and demand side (managing evacuation volumes):

Supply-side Strategies

- Increasing capacity through the use of contraflow lanes or shoulders
- Managed traffic control, including turn restrictions and route or ramp closures, to maximize outflows from evacuation areas
- Faster clearing of fire-induced road closures
- Street parking management on high hazard days.

Demand-side and Information-side strategies

- Communication systems and strategies that improve disaster alerts
- Dynamic route guidance and monitoring
- Phased evacuations
- Reducing vehicle volumes during evacuations, such as by requiring households to evacuate in as few vehicles as possible.

Napa County Resource Conservation District (RCD) and Inner Coast Collaborative

Napa County Resource Conservation District (Napa RCD)⁶⁶ is a local non-regulatory organization whose mission is to promote responsible watershed management through voluntary community stewardship and technical assistance. The RCD covers over 500,000 acres in Napa and Solano Counties; all of Napa County and a small portion of western Solano County. Established in June 1945 as a special district under Division 9 of the California Public Resources Code, the RCD was created to develop and further soil and water conservation. Napa RCD has four program areas: Forest Health, Watershed Health, Regenerative Agriculture, and Community Engagement. Within the Forest Health program, Napa RCD provides forest management and wildfire resilience technical and financial assistance, supports local and regional coordination and capacity building, and as education and awareness building regarding forest health and wildfire resilience. Napa RCD also hosts the Napa Prescribe Burn Association (PBA), a county-wide volunteer-based mutual aid group made up of community members, landowners, property managers, and local agency partners. The Napa PBA is dedicated to responsibly using prescribed fire as a tool to reduce the risk of catastrophic fire and to restore forest health. The group provides the necessary education, training, and resources to conduct safe and effective controlled burns in Napa County.

The Napa RCD also hosts the new Napa Wildfire Resilience Coordinating Group (NWRCG)⁶⁷ to work towards a common goal of restoring and maintaining resilient landscapes and creating fire adapted communities in Napa County. The members commit to working towards this goal by advancing knowledge and skills, sharing organizational roles, priorities and activities, facilitating

⁶⁶ <https://naparcd.org/>

⁶⁷ Draft Memorandum of Understanding Napa Wildfire Resilience Coordinating Group, Nov. 21, 2024.

relationship building and project visibility. The group looks to identify opportunities for jointly prioritizing, planning and implementing fuel treatment projects and community outreach and education efforts. They support on-the-ground efforts by sharing resources, expertise and hands-on-learning opportunities, as well as overcoming financial and process-based barriers to collaborative efforts, improving efficiencies of project planning and implementation. They propose seeking financial and policy support from federal, state, county and municipal governments and their leadership, as well as leveraging local, regional, state and federal partnerships to address critical barriers to project planning and implementation. Lastly, they support Community Wildfire Protection Planning and other local and regional fire and forest resilience-related planning efforts. Inner Coast Collaborative. The Inner Coast Collaborative⁶⁸ is a regional partnership focused on improving forest health and fire resilience that spans 5,500 square miles across Colusa, Lake, Napa, Solano, Sonoma, and Yolo Counties (i.e., the Inner Coast region). Funded by a Regional Forest and Fire Capacity Program block grant, the Inner Coast Collaborative focuses on regional planning and coordination, project planning and provision of technical assistance, and building and sustaining capacity. Activities supported by this endeavor will range in scale from a single community, an entire county, or the whole region.

Napa RCD was awarded a Regional Forest and Fire Capacity Block grant to support regional planning and collaboration, project planning, and capacity building to improve forest health, fire resilience, and community wildfire preparedness across Colusa, Lake, Napa, Solano, Sonoma, and Yolo Counties (i.e., the Inner Coast region). This endeavor is a collaborative effort between lead partner organizations in each of the six counties and is coordinated and administered by Napa RCD.

The objectives of the collaborative are:

Building a pipeline for shovel-ready projects

- Project planning, environmental review, and permitting
- Development of technical assistance (TA) models and provision of TA
- Support collaboratives or groups to identify project priorities and act on them.

Building and sustaining capacity

- Identifying and supporting capacity building needs (internal organizational, local, regional)
- Prescribed Burn Association (PBA) and Fire Safe Council (FSC) development and support
- Supporting administration of regional cost-share programs
- Community outreach, education and demonstration projects
- Fund development

Regional Coordination and Planning

- Regional and statewide coordination
- Regional outreach and engagement strategy development
- Regional Priority Plan (RPP) development

⁶⁸ Napa RCD, Inner Coast Collaborative. <https://naparcd.org/forest-health/icc/>

Napa Valley Transportation Authority

The Napa Valley Transportation Authority (NVTA) is a Congestion Management Agency formed in 1998 as a joint effort by the Cities of American Canyon, Calistoga, Napa, and St. Helena; the Town of Yountville; and the County of Napa. NVTA serves as the countywide transportation planning agency. They provide short- and long-term regional planning, working closely with local, regional, state, and federal partners to improve Napa County's streets, highways, and bicycle and pedestrian paths. The agency's goals, duties, and composition make it easier for local governments to tackle the increasingly complex problem of traffic congestion.

The *Napa Valley Countywide Transportation Plan. Advancing Mobility 2045*⁶⁹ identifies the need for the new maintenance facility that will support sustainability goal, as well as providing resilience in case of natural disasters and power outages, such as during wildfires. NVTA must also plan for a battery storage facility that will provide backup power for NVTA electric vehicles during power outages. This backup capability would be a vital resource during emergency evacuation events. Wildfires were considered a part of the goals during public outreach: *Goal #2 - improve system safety in order to support all modes and serve all users*. A few comments asked about planned evacuation routes in the case of an emergency or natural disaster.

The *NVTA 2045 Plan* discusses technology to improve roadway operations that could improve mass evacuations. These include advanced communications and signaling technologies as a way to improve traffic flow and person throughput and reduce congestion on existing roadways. Using technology to enhance traffic operations is often a more sustainable and more feasible alternative to adding more lanes to increase roadway capacity. These technologies could include:

- Advanced Signal Technologies for signal timings that adjust in response to changing traffic conditions using real-time detection data and algorithms, to reduce delays. Traffic signal systems can also give priority to transit or emergency vehicles.
- Changeable Message Signs: Today's changeable message signs (CMS) are a well-established means of providing a variety of traveler information to drivers on freeways and major roadways. They provide information about incidents, travel times to key destinations, and alternate or diversion route recommendations. Electronic roadway signs are used to provide variable speed limits, lane usage guidance (e.g., lane closed due to incident ahead or buses allowed to run on shoulder), or to manage reversible lanes.
- In-Vehicle Signing (Virtual Changeable Message Signing): An emerging concept to augment or even replace traditional changeable message signs is to deliver geo-targeted, en-route traveler information directly to a vehicle or in-vehicle device. Leveraging the ubiquity of internet-connected smart phones and in anticipation of the wider adoption of connected vehicle (CV) technologies, there is an opportunity to provide better-targeted traveler information to road users at a much lower cost. In the near-term, the virtual CMS concept involves making relevant information available through a public data portal that is accessible to third-party information service providers (ISPs). These ISPs would subscribe to that data and make it available to the vehicle through a personal information device or an integrated display. Further in the future, when CV technologies are either mandated or widely adopted, the virtual CMS concept

⁶⁹ Adopted May 2021. <https://nvta.ca.gov/planning-and-projects/planning/regional/countywide-transportation-plan-vision-2045/>

would also use roadside radios and an application to broadcast relevant messages to equipped CVs. Such infrastructure- to-vehicle (I2V) communication could also occur without a connection to a central system, which may benefit remote locations where communications capabilities are limited.

- **Dynamic Lane Assignment:** Dynamic lane assignment reallocates road space in response to changes in demand to create a more efficient use of existing roadway infrastructure. This approach can function as an alternative to constructing more lanes by providing additional capacity for certain kinds of traffic at certain times. Examples include reversible lanes on highways and arterials, merge (or junction) control on highway ramps, and, most applicable to Napa, part-time highway shoulder use

Advanced roadway technologies will require a supporting communications backbone and should be managed by a centralized Traffic Operations Center (TOC). These investments would not only improve typical traffic operations, but would allow for enhanced emergency operations (e.g., traffic could be efficiently directed out of Napa Valley during an emergency, such as wildfire).

NVTA also developed the *Napa Valley Community Based Transportation Plan* (CBTP) July 2020⁷⁰. The CBTP 's focus is to improve mobility options and close transportation gaps for low-income and disadvantaged communities in Napa County. Five of the eight communities of concern (low income or disadvantaged) are in City of Napa: South downtown Napa, Westwood neighborhood, East Imola, Northeast Napa, and Northwest Napa. While there is no specific mention of wildfire or evacuation in the plan, the efforts to improve mobility options and close transportation gaps are needed. An *Accessible Transportation Needs Assessment* (ATNA)⁷¹ is currently underway and expected to be completed by January 2025. There is the opportunity to coordinate with the CWPP.

Regional Climate Action & Adaptation Plan (RCAAP)

In 2020, six jurisdictions in Napa County formed the Climate Action Committee (CAC) to take coordinated action regarding the countywide commitment to address climate change. The Napa Countywide Climate Program is administered by Napa County under a Joint Powers Agreement with the Cities of American Canyon, Calistoga, Napa, and St Helena and town of Yountville. The County is advised by the Climate Action Committee (CAC) standing body of 12 appointees consisting of two elected officials from each of the six jurisdictions. The CAC is administered and staffed by Napa County. Resolution R2022-30 detailed the City of Napa's commitment to address climate change.⁷²

The Regional Climate Action and Adaptation Plan (RCAAP) aims to reduce greenhouse gas emissions and increase resilience to climate change impacts throughout the Napa region. The

⁷⁰ <https://nvta.ca.gov/planning-and-projects/planning/regional/atna/> and <https://nvta.ca.gov/planning-and-projects/planning/regional/cbtp/>

⁷¹ <https://nvta.ca.gov/planning-and-projects/planning/regional/atna/>

⁷² In 2021, each local government adopted Resolutions or Proclamations regarding the "Countywide Commitment to Address Climate Change." The resolutions include efforts to: A climate emergency exists and threatens our region, state, country, and world. Each jurisdiction commits to a goal of net zero climate pollution by or before 2030 and to implement both immediate and sustained actions to achieve the goal. Each jurisdiction recognizes the need to work with community organizations, businesses, schools, regional partners, and jurisdictions to support comprehensive, immediate, and sustained action to achieve collaboratively with each other and alongside community organizations, businesses, schools, and regional partners goals of net zero climate pollution by or before 2030.

plan guides Napa County, the cities of American Canyon, Calistoga, Napa, and St. Helena, and the Town of Yountville. The RCAAP will prioritize emission reduction in the areas of transportation, building energy, waste disposal, water use, and land use. The RCAAP will also promote preparedness for climate-related hazards such as extreme weather, wildfires, and floods by strengthening critical infrastructure, restoring natural ecosystems, and improving emergency responses. The current draft of the RCAAP lists six measures under the “PREPARE FOR AND ADAPT TO INCREASED WILDFIRE RISK” strategy.

1. Map and identify locations that are newly at risk, or at higher risk for fire hazards because of climate change.
2. Coordinate with State and local agencies to establish post-fire ecological recovery programs.
3. Ensure that best practices for wildfire mitigation that apply to the region are implemented consistently throughout the county.
4. Plan new development strategically in High or Very High Fire Hazard Severity Zones
5. Enhance forest resilience, reduce tree mortality, and manage beetle infestations
6. Improve public awareness and community resilience against wildfire smoke⁷³

A public draft RCAAP is open for review/comment with a final plan expected in Winter 2024/25. The 6 measures listed above are taken from the September 2025 draft RCAAP.

The 2017 Napa County Climate Action Plan Final Draft⁷⁴ (County CAP) offers some ideas for including wildfire issues in the RCAAP. The 2017 plan identified the increased wildfire risk in the surrounding hills, as well as temperatures and changes in precipitation patterns associated with climate change. Mitigation efforts included adoption of the 2010 Uniform Fire Code, the Firewise Program, and the Chipping Program to have helped reduce Napa County’s wildfire risk. However, the County is still quite vulnerable and at high-risk for wildfires. The County is also only one of four counties to have road standards that meet the Board of Forestry’s stringent requirements. Climate change is projected to increase this current risk by anywhere from 10 to 20 percent, and the County will need to continue to adapt to this projected increase. Therefore, the adaptive capacity for risks associated with wildfire is considered medium in the 2017 County CAP.

The 2017 County CAP identifies five measures for preparing for increased risk of wildfire.

1. Map and Identify Locations That Are Newly at Risk, or at Higher Risk for Fire Hazards.

⁷³ <https://www.countyofnapa.org/3732/Regional-Climate-Action-Adaptation-Plan-> and <https://climateactionnapa.konveio.com/project-overview>

⁷⁴ Napa County Climate Action Plan 2017.

https://www.napawatersheds.org/managed_files/Document/8763/Final%20CAP-combined.pdf Note: In June 2017, a revised Final Draft Napa County CAP for unincorporated areas was presented to the BOS. It has not been adopted, due to a Sonoma County Superior Court ruling on a legal challenge to that county’s CAP brought by California River Watch environmental group. The Court ruled in favor of River Watch, citing deficiencies with the Programmatic Environmental Impact Report (PEIR). Most significantly, the Court felt the plan failed to adequately measure the totality of the county’s carbon footprint by not accounting for the global reach of its tourism and wine industries. In June 2018 the Grand Jury reviewed the Napa County CAP <https://www.napa.courts.ca.gov/system/files/gj-17-18-climate-action-plan-work-progress-h.pdf> and recommended a regional approach to account for all GHG emissions sources and to coordinate efforts to mitigate climate change effects.

2. Map Critical Infrastructure Locations Vulnerable to Wildfires.
3. Collaborate Dissemination of Information with the Napa County Firefighters Association.
4. Coordinate Emergency Preparedness Systems.
5. Collaborate on Programs to Reduce Fire Hazards.

The County CAP also identifies implementation assumptions and adaptation measures for each of the five measures. The measures require collaboration and funding.

The environmental review documents prepared in 2019 for the County CAP⁷⁵ identify potential impacts for GHG reduction measures. These include vegetation management activities, such as use of mechanical equipment (chippers, masticators, loaders), prescribed fire, and hauling of biomass. Short-term impacts could include air quality, physical impacts related to tree and vegetation removal, fuel consumption, and GHG emissions. Longer term impacts could include biological resources (special-status species and their habitat), cultural, historical, paleontological or tribal cultural resources related to ground disturbing activities, and vehicle trips. The EIR also recognizes that the potential for ignition exists primarily as a result of the introduction of hot motorized equipment into areas that may be dry and prone to sparking wildfires during grading and site preparation activities for other identified measures. However, all potential project types will be required to undergo the County's discretionary review process, including subsequent project-specific environmental review and mitigation consistent with CEQA. Projects will be required to implement project-specific mitigation which would minimize or avoid wildfire risks to the extent feasible in compliance with CEQA Guidelines Section 15126.4. Impacts will be minimized through implementation of the 2008 General Plan policies and standard project conditions that will reduce the potential for wildfire consistent with federal and State requirements, as well as all applicable project-specific mitigation measures that will minimize impacts. Therefore, the overall impact of the wildfire mitigations impact was considered in the Environmental Impact Report to be less than significant.

Relevance to the CWPP: A regional Climate Action Plan can offer several long-term goals and mitigation measures that support the CWPP, especially those related to a prepared community and regional resilience. Specifically, an updated Climate Action Plan that complies with new state requirements to address wildfire could support prevention, safety and evacuation, resident mitigation, regulations, policies & plans, infrastructure and business, recovery and public health.

⁷⁵ The County CAP included an environmental impact report (EIR) filed with the California Environmental Quality Act Clearinghouse in 2019. <https://ceqanet.opr.ca.gov/2018072058/2>.

5. Compliance with State Laws

State laws set minimum standards for local government in many areas of wildfire protection. Some state laws include incentives through grant programs, while others are unfunded mandates. New requirements are usually identified by the enabling legislation initiated either as Assembly Bills (AB) or Senate Bills (SB), that once passed and signed into law by the governor, are incorporated into sections in the Civil Code (CC), Government Code (GC) Public Resource Code (PRC), etc.

Relevance to the CWPP: Since the increase in devastating wildfire activity in 2017, many new California laws have been passed, some of which have yet to take full effect. These new or forthcoming requirements support the CWPP Action Plan in areas of prevention, safety and evacuation, resident mitigation, large scale landscape treatments, regulations policies and plans, recovery and public health. Recent legislation includes:

AB38 (2019) - Real estate transaction certifications.

As of July 1, 2021, AB-38 requires a seller of real property located in a High or Very High Fire Hazard Severity Zone (FHSZ) provides the buyer with documentation that the property is in compliance with defensible space requirements if the residential home was built before January 1, 2010. (Section 51178 of the Government Code or Article 9 of Chapter 1 of Part 2 of Division 4 of the Code commencing with Section 4021.) Disclosure requires documentation of compliance with Section 4291 of the Public Resources Code or local vegetation management ordinances. Disclosure is listed on the real estate Natural Hazard Disclosure (NHD) report as an AB-38 Notice.

AB747 (2019) and AB1409 (2020) - Evacuation routes: capacity, safety and viability under range of scenarios.

This legislation requires, upon the next revision of a local hazard mitigation plan on or after January 1, 2022, that the safety element to be reviewed and updated as necessary to identify evacuation routes and their capacity, safety, and viability under a range of emergency scenarios. Added to GC 65302.15.

AB1550 + SB535 (2012/ 2016) - Identification of priority populations.

Disadvantaged communities (DAC) in California are specifically identified for investment of proceeds from the state's Cap-and-Trade Program also known as "California Climate Investments (CCI)". These investments are aimed at improving public health, quality of life and economic opportunities in California's most burdened communities, and at the same time, reducing pollution that causes climate change. In 2016, Assembly Bill 1550 directed CalEPA to identify DACs and also established the currently applicable minimum funding levels from the CCI proceeds. Eleven census tracts in Napa are identified as low-income communities.⁷⁶ Projects in DAC areas are given precedence in grant applications related to State CCI funding.

⁷⁶ Priority populations map. <https://webmaps.arb.ca.gov/PriorityPopulations/> Accessed 9/14/24

AB1823 (2019). PRC 4290.1 - Fire Risk Reduction Communities

In 2019, Assembly Bill 1823 amended Public Resource Code Section 4290.1 to require that, on or before July 1, 2022, the State Board must develop criteria for and maintain a list of local agencies considered to be a "Fire Risk Reduction Community" located in the SRA or VHFHSZ, identified pursuant to GC § 51178, that meet best practices for local fire planning. Criteria used to develop the Fire Risk Reduction Community list including recently developed or updated CWPPs, adoption of the board's recommendations to improve the Safety Element, participation in Fire Adapted Communities and Firewise USA programs, and compliance with the Board's minimum fire safety standards.

To date, the City of Napa has not applied for recognition as a Fire Risk Reduction Community.⁷⁷ The next application period is in early 2026. The ten criteria for consideration include⁷⁸:

- 1) Local ordinance designated very high fire hazard severity zones (VHFHSZ) (GC51179(a),
- 2) Findings for all tentative and parcel maps approved for areas in SRA or LRA VHFHSZ since 1/1/2013,
- 3) Safety element review within the last 8 years,
- 4) Recommendations from subdivision review
- 5) Local requirements that exceed state Fire Safe Regulations (14CCR §§1270.00 – 1276.04),
- 6) Local defensible space ordinance that exceed 14CCR §1299.03,
- 7) WUI interface code that exceeds Chapter 49, Part 9 of Title 24 of California Code of Regulations
- 8) Zoning ordinance or special overlay zone that includes fire hazard mitigation requirements which exceed state minimum requirements.
- 9) Comprehensive retrofit code of plan for existing homes
- 10) Identified wildfire as a high priority hazard in a local hazard mitigation plan.

⁷⁷ The City is not on the 2024 Fire Risk Reduction Community List. <https://bof.fire.ca.gov/projects-and-programs/fire-risk-reduction-community-list/> The Fire Risk Reduction Community List, as mandated by [PRC 4290.1](#), is "a list of local agencies located in a state responsibility area or a very high fire hazard severity zone...that meet best practices for local fire planning." The List is developed and maintained by the Board of Forestry and Fire Protection, with the first iteration beginning July 1, 2022, and updated every two years thereafter.

⁷⁸ Section 1268.01 Criteria for local agencies that are cities, city and county or counties. Effective 2/7/22. [https://govt.westlaw.com/calregs/Document/I3D481FB0F23811EC9A868E8571115B92?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=\(sc.Default\)&bhcp=1](https://govt.westlaw.com/calregs/Document/I3D481FB0F23811EC9A868E8571115B92?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default)&bhcp=1) Accessed 9/19/24.

AB2911 (2019). PRC 4290.5 - Subdivision Review Program

The Subdivision Review Program⁷⁹ was developed to fulfill the requirements of Assembly Bill 2911 (Friedman), and several goals of CAL FIRE's 2019 Strategic Plan. AB 2911 added Section 4290.5 to the Public Resource Code, which requires the CA Board of Forestry and Fire Protection (the Board), in consultation with the State Fire Marshal and the local jurisdiction to identify existing subdivisions with more than 30 dwelling units located in the State Responsibility Area (SRA) or Local Responsibility Area (LRA) Very High Fire Hazard Severity Zone, identified pursuant to Section 51178 of the Government Code, without a secondary means of egress route that are at significant fire risk. Additionally, the Board in consultation with the State Fire Marshal and the local government that identified the subdivisions shall develop recommendations to improve the subdivision's fire safety.

The Subdivision Review Program is a resource that provides CALFIRE Units and local jurisdictions support in fire hazard planning to:

1. Work collaboratively with CAL FIRE Units, Land Use Planning Program, and local jurisdictions in providing technical assistance related to specific fire hazard planning within the Safety Element of the General Plan.
2. Provide guidance on the Subdivision Map Act related to Very High Fire Hazard Severity Zones (VHFHSZ's).
3. Provide guidance and support to group leaders with the application process in becoming Firewise USA communities.
4. Assist local CAL FIRE Units to work cooperatively with local governments and stakeholders with the development and creation of more fire resilient communities.

The subdivision review program provides the CWPP the opportunity to implement safety and evacuation and wildfire response mitigation measures in vulnerable areas of the city. No such areas have been identified within the City of Napa. However, four areas in the County located to the northeast of the City were identified as a subdivisions with more than 30 dwellings without a secondary means of egress route and at significant fire risk. These include Canyon Drive, Stone Mountain Circle, Westgate Drive and Saint Andrews Drive.”⁸⁰

SB9 (2021) – Housing Development: Approvals.

SB9 “California Housing Opportunity and More Efficiency (HOME) Act,” was adopted in 2021 and requires cities to allow one additional residential accessory dwelling unit (ADU) onto parcels zoned for single-dwelling units. SB9 is complementary with the ADU Law (GC 65852,2 and 65858,22). SB9 is but one housing law among many that have been adopted to encourage the production of homes across California. The City of Napa partners with Napa Sonoma ADU and other jurisdictions around Napa and Sonoma counties to support residents in planning for and

⁷⁹Subdivision Review Program. <https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/subdivision-review-program> . Accessed 9/19/24.

⁸⁰ Subdivision Review Program viewer. <https://experience.arcgis.com/experience/74787e13de0c443eb80e27abc176b8fa-data?s=id%3Afa176881e36e46b18b1dccfd531cab07-191d881666b-layer-11%3A48> Accessed 9/19/24.

building ADUs.⁸¹ The City of Napa Housing Element or other ADU resources do not currently recognize the need to coordinate ADU policies and zoning updates with the CWPP.

SB99 (2019). Safety Element: Emergency evacuation routes.

SB99 amended GC65302 to require cities or counties to identify developments without two emergency evacuation routes, upon the next revision of the housing element (after January 1, 2020). No such development has been identified in the City of Napa (see also AB2911).

SB246, SB379, SB1035 (2015, 2018). Integrated climate adaptation and resilience strategies with ICARP.

The Integrated Climate Adaptation and Resiliency Program (ICARP) ([PRC 71350-71360](#)) drives California's response to climate impacts, prioritizing equitable approaches that integrate mitigation and adaptation. ICARP's home within the Governor's Office of Planning and Research (OPR) enables the State to coordinate local, regional, and state efforts to support cohesive strategies. ICARP achieves this statutory directive through four primary workstreams⁸²:

1. Policy and Programmatic Alignment: ICARP aligns and coordinates adaptation at all levels of government via the Technical Advisory Council, the California Climate Adaptation Strategy, long-term disaster recovery and resilience, and more.
2. Climate Services: ICARP supports a statewide community of adaptation practitioners through direct technical assistance at the local and regional levels; decision-support tools such as the Adaptation Clearinghouse, Vulnerable Communities Platform, and Cal-Adapt; and coordinating with other State agencies to align climate adaptation guidance and other resources.
3. Actionable Climate Science: ICARP coordinates the California Climate Assessment, a Science Advisory Group, and other state-funded climate science research, data, tools, and initiatives.
4. Direct Investments: ICARP manages three new climate resilience grant programs and supports state and federal funding and finance alignment through a Cooperative Technical Partners agreement with the Federal Emergency Management Agency (FEMA).

SB1035 and SB379 Safety Elements

SB 1035 (Jackson, 2017) (Gov. Code § 65302) and SB 379 (Jackson, 2015) (Gov. Code § 65302.g.4) require all cities to address climate change adaptation and resilience in their general plan safety element (including wildfire). SB 379 was triggered by the next update of a jurisdiction's local hazard mitigation plan (updated every five years) or before 1/1/2022, whichever is first. SB 1035 built off SB 379, requiring the safety element to be updated every eight years upon the next housing element update.

⁸¹ <https://www.cityofnapa.org/876/Accessory-Dwelling-Units>. Accessed 9/19/24.

⁸² About ICARP <https://opr.ca.gov/climate/icarp/> Accessed 9/19/24.

SB1241 + SB2160. Include fire risk in SRA and VHFHSZ in Safety Element. Safety Element Assessment by Board of Forestry.

SB1241 and SB2160 require local government include considerations from OPR Fire Hazard Planning.⁸³ They also require local government to transmit information on local fire hazard severity zones, the safety element and tentative map or parcel map to the California Board of Forestry to review. This includes fire hazard mapping and maps in Napa's LHMP that show emergency service facilities. Future updates will need to identify areas lacking service and maps of roads that do not conform to current standards. Also needed are a map of developments that do not conform to current state and local standards for access, water supply, fire flow, signage and vegetation clearance. (Gov. Code, § 65302, subd. (g)(3).)

The safety element is required to include:

- Fire hazard severity zone maps available from the Department of Forestry and Fire Protection.
- Any historical data on wildfires available from local agencies or a reference to where the data can be found.
- Information about wildfire hazard areas that may be available from the United States Geological Survey.
- The general location and distribution of existing and planned uses of land in very high fire hazard severity zones (VHFHSZs) and in state responsibility areas (SRAs), including structures, roads, utilities, and essential public facilities. The location and distribution of planned uses of land shall not require defensible space compliance measures required by state law or local ordinance to occur on publicly owned lands or open space designations of homeowner associations.
- The local, state, and federal agencies with responsibility for fire protection, including special districts and local offices of emergency services. (Gov. Code, § 65302, subd. (g)(3)(A).)

Based on that information, the safety element shall include goals, policies, and objectives that protect the community from the unreasonable risk of wildfire. (Gov. Code, § 65302, subd. (g)(3)(B).) To carry out those goals, policies, and objectives, feasible implementation measures shall be included in the safety element, which include but are not limited to:

- Avoiding or minimizing the wildfire hazards associated with new uses of land.
- Locating, when feasible, new essential public facilities outside of high fire risk areas, including, but not limited to, hospitals and health care facilities, emergency shelters, emergency command centers, and emergency communications facilities, or identifying construction methods or other methods to minimize damage if these facilities are located in the SRA or VHFHSZ.
- Designing adequate infrastructure if a new development is located in the SRA or VHFHSZ, including safe access for emergency response vehicles, visible street signs, and water supplies for structural fire suppression.
- Working cooperatively with public agencies with responsibility for fire protection. (Gov. Code, § 65302, subd. (g)(3)(C).)

⁸³ Governor's Office of Planning and Research. Fire Hazard Planning Technical Advisory. 2022 Update. https://opr.ca.gov/docs/20220817-Fire_Hazard_Planning_TA.pdf , <https://bof.fire.ca.gov/media/bswb1awt/ada-safety-element-assessment-2020.docx> and Government Code 65302.5 Accessed 9/19/24.

The safety element shall also attach or reference any fire safety plans or other documents adopted by the city or county that fulfill the goals and objectives or contains the information required above. (Gov. Code, § 65302, subd. (g)(3)(D).) This might include Local Hazard Mitigation Plans, Unit Fire Plans, Community Wildfire Protection Plans, or other plans.

Fire Safe and Defensible Space Regulations (PRC 4290 and 4291)

PRC Section 4290⁸⁴ gives the State Board the authority to adopt regulations for minimum fire safety standards applicable to SRA lands under the authority of the department, and to VHFHSZs. The Fire Safe regulations are codified in CCR, Title 14 (Natural Resources), Division 1.5 (Department of Forestry), Chapter 7 (Fire Protection) under Subchapter 2 (**SRA Fire Safe Regulations**). These regulations generally address the following:

- Standards for signs identifying streets, roads, and buildings.
- Minimum private water supply reserves for emergency fire use.
- Fuel modification² standards for fuel breaks and greenbelts.
- Road and driveway standards for emergency fire equipment access and public evacuation.

They do not supersede local regulations that equal or exceed minimum regulations adopted by the State (PRC § 4290(c)).

PRC Section 4291 defines and describes mandatory fire protection measures and responsibilities for maintaining defensible space that apply to all property within the SRA in California. Per GC § 51182, defensible space regulations also apply to all properties in the VHFHSZ within the Local Responsibility Area (LRA). The defensible space requirements generally include, but are not limited to, the following:

- 100 feet minimum of vegetation management (“defensible space”) around homes
- Removal of dead/dying vegetation
- Vegetation removal around chimneys/stovepipes

Depending on the area, defensible space requirements may include certain exemptions and exceptions from code. Moreover, jurisdictions may require extension of the minimum distance beyond property lines or as needed for insurance. The State Board provides directions for complying with the defensible space regulations in CCR Title 14, §§ 1299.01- 1299.05 which incorporates by reference additional information outlined in the State Board’s General Guidelines for Creating Defensible Space.

Due to the passage of AB 3074 (2020), defensible space compliance will soon require more intense fuel reduction activities and the creation of an ember-resistant zone within 5 feet of a structure “Zone 0”. The State Board is required to provide additional guidance and must amend the regulations to reflect these changes on or before January 1, 2023 (note: no guidance as of September 2024).

⁸⁴ https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=4290&lawCode=PRC and https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=4291&lawCode=PRC
Accessed 9/19/24.

Appendix D: Projects And Prioritization

The Action Plan (Table 6) summarizes the main objectives and actions while the following sections will outline additional descriptions for the projects and examples of associated subprojects. A description of how project ideas were collected, organized, and prioritized can be found in the Action Plan Section 8.

Key for Action Plan Projects.

Black: City of Napa action plan item leadership

Maroon: In County CWPP and/or taking place on County property

Blue: Requires collaborative approach to work with private property. These projects are outside the City Responsibility, but efforts can be encouraged with the potential for support by City agencies.

Project Details

GOAL 1: Regulations, policy and plans

Objective 1.1 Inform and implement policies that support fire mitigation and preparedness

1.1.1 Alston Park Management Plan

Priority: High

Description: Consider developing a Forest Management Plan or Vegetation Management Plan for Alston Park to guide fuel reduction, oak planting and restoration activities.

Additional Notes: Not yet identified specific projects, hasn't been any emergency access planning for higher risk areas. Wish to provide emergency access – for all open space parks.

Additional Resources Notes: Finalized management plan, funding and time to implement plan

1.1.2 Weed & Nuisance Abatement Ordinances

Priority: High

Description: Consider updating the weed & nuisance abatement ordinance into a broader reaching policy that reflects a vegetation management ordinance.

Additional Notes: Look at County ordinance for language but expand out to include defensible space and more broad vegetation management (4291). "The City of Napa has an existing policy 8.24.010 "DUTY TO REMOVE" which addresses hazardous vegetation and accumulations of combustible materials. This is enforced and properties not in compliance may receive a citation. <https://www.cityofnapa.org/DocumentCenter/View/7821/Weed-Abatement-Courtesy-Reminder-Letter>"

Additional Resources Notes: Time for conversations with local officials on importance of this ordinance update

1.1.3 Westwood Hills Forest Management plan

Priority: High

Description: Plan is in progress and initial funding is secured for vegetation management. Priority treatments include ladder fuels reduction, trail improvement, fire spread risk reduction, and defensible space work.

Additional Notes: Napa RCD has initial funding for vegetation management work at the park once the FMP is complete. Priority treatments captured within the FMP will likely focus on French broom management to reduce ladder fuels, improve trail use, and reduce the risk of spread when completing other identified treatments. Other identified treatments include defensible space work around the Carolyn Parr Nature Center, landowners adjacent to the park entrance, and the neighborhood to the east. Additionally forest thinning, management of invasive eucalyptus, and grassland management will also be necessary once the French broom is managed. Other priorities include decommissioning social trails and improving erosion control measures along the old firebreak road. Napa RCD will continue to offer French broom removal volunteer events at the park. Manual, mechanical treatments; habitat restoration. Other low-level priorities include decommissioning social trails and improving erosion control measures along the old firebreak road. Napa RCD will continue to offer French broom pulling events at the park.

Additional Resources Notes: staff time for writing and implementing plan

1.1.4 Development of policies that promote fire safety

Priority: Moderate

Description: Develop and interact with ongoing planning efforts and policy creation including those that address structural and vegetative fuels, consider for inclusion in future policy updates for city

Additional Notes: Participate with ongoing planning efforts where policies are created (HMP, etc.). Similar effort identified in County CWPP.

Additional Resources Notes: Staff time and input into policies

1.1.5 Urban Forest Management Plan

Priority: Low

Description: Assess the newly developed Urban Forest Management Plan for opportunities to reduce fire risk, including identification of tree planting needs, selection of tree species and locations, and maintenance.

Additional Notes: Identify opportunities with the newly developed Urban Forest Management Plan. This may include assessment of the urban forestry network through a fire lens, including identification of tree planting needs and locations while taking the fire risk into account, and mitigation through tree maintenance and selection of tree species, locations, and surrounding vegetation.

Additional Resources Notes: Urban Forest Mgmt. Plan (with updates), tree crews and planting crews

GOAL 2: Prevention

Objective 2.1: Vegetation management for fuel reduction and restore ecosystems to fire resilient and native ecosystems

2.1.1 Creeks Project (Citywide)

Priority: Moderate

Description: Consider removal of invasive species and reducing fuel loads and ember risks in riparian areas.

Additional Notes: Manual and mechanical treatments; habitat restoration.

Additional Resources Notes: Time (\$) for plan development and regulatory for riparian area work; equipment and hand crews for removal and native plant establishment funds if applicable

SUBPROJECTS FOR 2.1.1

2.1.1.a Partrick road creek network

Description: Fuel reduction and invasive species removal; maintenance from County CWPP.

Lead(s): County CWPP-Core Team

Project Status: Concept

Resources: Time (\$) for plan development and for regulatory approval; \$ for on-the-ground implementation and/or equipment for treatment

Metrics: Healthy riparian system that does not promote wildfire spread

Notes: Manual and mechanical treatments; habitat restoration.

2.1.1.b Silverado Creek

Description: Fuel reduction

Lead(s): City of Napa

Project Status: Funding requested

Resources: \$ for on-the-ground implementation and/or equipment for treatment

Metrics: Healthy riparian system that does not promote wildfire spread

Notes: Manual treatment. Napa County Flood Control District can provide permit coverage for this Silverado Creek project at no cost to the city.

2.1.1.c Browns Valley Creek

Description: Improve fire resistance where possible; implement projects that are not in opposition to the restoration efforts for habitat improvement (including fish passage considerations and native plant species) and flood protection measures.

Lead(s): City of Napa-Multi

Project Status: Concept

Resources: Equipment and labor, native and appropriate species for planting

Metrics: Reduced fire risk, improvements in habitat (especially fish survival rates), reduced flood risk.

Notes: Careful consideration of fire protection measures and how these treatments would interact with other ongoing efforts and goals will be needed. Work with Napa

County and City entities before fuel reduction projects to meet multiple goals. Manual and mechanical treatments. Fuel Reduction project-This is a large area that will connect with the parks department on this project to add in our ideas/need to their ongoing project. Could link to Connolly Ranch for education and outreach.

2.1.2 Wildfire resilient Parks (Citywide)

Priority: High

Description: Consider how to manage parks to be wildfire resilient, including creek vegetation maintenance and invasive species management.

Additional Notes: Overarching project that covers all the city parks and neighboring parks that need to be treated for wildfire mitigation and in conjunction with habitat restoration

Additional Resources Notes: Staff time, hand crews, machinery

SUBPROJECTS FOR 2.1.2

2.1.2.a Buhman Park

Description: Fuel treatment coupled with education aimed at school and neighbors

Lead(s): City of Napa-Multi

Project Status: Maintenance

Resources: Maintenance phase with opportunities for outreach. Time (\$) for plan development, maintenance of park and creek. Time (\$) for development of educational opportunities/connections/materials for school and neighbors addressing fencing choices and home hardening + more

Metrics: Improvement and maintenance of fuels in city-owned portions of park, curriculum integrated into educational programs.

Notes: Park and nearby area have been treated and is in decent shape. Manual, mechanical treatments; habitat restoration.

2.1.2.b Shurtleff Park

Description: Ladder fuel and invasive species removal with education and outreach potential (near school). Defensible space and large landowner fuel reduction are also needed.

Lead(s): Napa RCD

Project Status: Concept

Resources: Hand crews for continued treatment and removal of invasives; educational materials

Metrics: Removal of ladder fuels and invasives; maintenance

2.1.2.c Westwood hills park-fuel reduction implementation

Description: Remove invasive species and ladder fuels to reduce wildfire risk and improve trails. Defensible space and thinning of mature trees to increase spacing and improve forest health.

Lead(s): Napa RCD

Project Status: Ongoing

Resources: Hand crews, mechanical treatments, education

Metrics: Restored native ecosystem and fuel types that limit fire spread and intensity in WUI

Notes: Manual and mechanical treatments; habitat restoration. Try to clean up lower areas of the park, which are closer to defensible space, especially at entry areas of the park. Invasive species/ladder fuel removal to reduce wildfire risk and improve trails. Defensible space and thinning of mature trees to increase spacing and improve forest health.

2.1.2.d Floodwall Creek Project-Oxbow Preserve

Description: Invasive plant removal; manage for fire, ember cast, ignitions, and riparian ecology. Work with other organizations on creek restoration throughout the area.

Lead(s): City of Napa-Multi

Project Status: Active

Resources: Resource sharing agreements across partners; \$/time to implement

Metrics: Less than 10% cover of invasive species

Notes: Manage parks to be wildfire resilient, including parks with creeks Manual and mechanical treatments; habitat restoration. West side of river will need to be carefully coordinated to protect the floodwall. From Westin hotel up to Lincoln and north, invasive plant removal; work with other entities working on creek restoration. Plan started with other entities. McKenzie drive park has many invasives, treat throughout area and Oxbow Preserve on both sides of Napa River. Manage for ember cast across the river, ignitions in grass, couple with riparian ecology and fire

2.1.2.e Timberhill Park

Description: Maintain shaded fuel break.

Lead(s): City of Napa-Multi

Project Status: Maintenance

Resources: Hand crews and mechanical

Metrics: Removal of ladder fuels; maintenance

Notes: Ladder fuel removal to provide access to Timberhill park, also maintenance in timber hill. Initial treatment complete, linked to masticated/dozer line in Timberhill/areas treated though Napa County CWPP.

2.1.2.f City Park California Native Plant Pollinator Habitat

Description: Consider development of Native Plant Pollinator Habitats to support pollinators, enhance biodiversity, and establish plants that are less fire prone, particularly in areas that create defensible space for urban areas. If considered for City parks, future sites would be vetted to identify long-term maintenance partnerships with local organizations. Provide community enjoyment, water filtration, and support wildlife and serve as an educational resource.

Lead(s): Parks and Recreation

Project Status: Concept

Resources: Hand crews for removal and replacement of invasives with native pollinators, educational resources developed.

Metrics: Native plants and pollinator garden, brochures regarding native plant fire resistance

Notes: Manual treatment; habitat restoration. It could have benches and pathways, serve as an educational source for local schools and clubs, and as an example of how to develop a resilient native landscape for anyone in the local community including developers, landscapers and the like. Native plant habitats are important in helping in the mitigation of climate change.

2.1.3 Vegetation Management between Hagen Road/Silverado/First Ave.

Priority: High

Description: Encourage landowners to reduce and maintain vegetation areas Hagen Oak, First Ave., Silverado Trail and Stonecrest. Collaborate with Napa County landowners.

Additional Notes: Offer support to private landowners to engage in work

Additional Resources Notes: Hand crews, mechanical, approval

2.1.4 Caswall St. and Lilienthal Ave (near Old Sonoma Rd.)

Priority: High

Description: Encourage fuel reduction along an important interface between steep WUI area and development.

Additional Notes: Manual and mechanical treatments.

Additional Resources Notes: Hand crews, mowing

2.1.5 Browns Valley Moose Lodge

Priority: High

Description: Fuel reduction project involving a large area; work with parks department to add our ideas and needs to their ongoing project. Potential for education and outreach.

Additional Resources Notes: Hand crews, equipment, landowner agreements/private ownership work.

2.1.6 Hennessey Ridge Road Vegetation Management

Priority: Moderate

Description: Consider how to implement vegetation management along Hennessey Ridge Road (both city owned and privately owned land) in the Lake Hennessey watershed

Additional Notes: The vegetation management could include removal of hazardous trees and brush, selective thinning and limbing up branches, and piling and burning to increase overall forest health, as well as ingress and egress for residents and wildfire suppression forces (who used the top of this road as a staging area during 2020 fires, according to a private landowner on Hennessey Ridge Rd.).

Additional Resources Notes: Heavy equipment, hand crews, mowing, landowner agreements

2.1.7 Area between El Nido to El Monte Fuel treatment

Priority: Low

Description: Encourage fuel treatment (ladder fuel removal) between El Nido to El Monte drive

Additional Resources Notes: Hand crews and mechanical

GOAL 3: Infrastructure

Objective 3.1: Protect critical water source infrastructure

3.1.1 Protect water delivery system

Priority: Very High

Description: Maintaining water tanks, pump stations, water pipes, and treatment plants for drinking water and fire response

Additional Notes: High priority to ensure the City's Health and Safety through Clean Drinking Water

SUBPROJECTS FOR 3.1.1

3.1.1.a Canterbury Drive

Description: Treatment of 13 acres of high fuel load/canopy cover.

Lead(s): County

Project Status: Concept

Resources: Hand crews and mechanical

Metrics: Removal of ladder fuels along designated road; maintenance plan

3.1.1.b City Water Tower #2

Description: Treating the understory to protect water towers and homes

Lead(s): Water District

Project Status: Concept

Resources: Hand crews, mechanical

Metrics: Fuel types that limit fire spread and intensity

Notes: Manual and mechanical treatments.

3.1.1.c Hacienda Water Tank

Description: Treat area for infrastructure protection.

Lead(s): Water District

Project Status: Concept

Resources: Hand crews, mechanical treatments, landowner agreements/actions

Metrics: Fuel types that limit fire spread and intensity, enhanced access

3.1.1.d Milliken Creek Water Treatment Plant

Description: Maintain area around water treatment plant owned by Napa City and privately owned land around it. Silverado Fire Safe Council has attempted to manage it.

Lead(s): Napa Firewise

Project Status: Ongoing

Resources: Milliken Creek Water Treatment Plant

Metrics: Maintain area around the water treatment plant owned by Napa City and privately owned land around it. Silverado Fire Safe Council has attempted to manage it.

Notes: Manual and grazing treatments. To date, the Silverado Fire Safe Council has tried to manage it.

3.1.1.e Lake Hennessey critical infrastructure protection & hardening

Description: Fuel reduction and structure hardening around critical infrastructure and ingress/egress that Napa County has planned.

Lead(s): City of Napa

Project Status: Planned

Resources: Hand crews, mechanical

Metrics: Fuel types that limit fire spread and intensity

Notes: (NCity 8) This includes: pipeline protection through fuel reduction, defensible space /construction upgrade around intake Pump Station,

3.1.2 Protect watershed

Priority: High

Description: Consider how to reduce the risk of fire and erosion potential throughout the watershed while maintaining ecosystem health

Additional Notes:

Additional Resources Notes:

3.1.3 Retrofit water infrastructure

Priority: High

Description: Consider retrofitting critical public safety infrastructure with fire resistant materials and or create defensible space around structures.

Additional Notes: (HM-04-2020)

Additional Resources Notes: Manual, equipment

Objective 3.2: Protect other critical infrastructure

3.2.1 Protect communications equipment, towers, and other infrastructure.

Priority: Very High

Description: Protect Communication equipment, including towers and other infrastructure (esp. radio communication equipment)

3.2.2 Identify and retrofit other critical infrastructure

Priority: Very High

Description: Consider retrofitting critical public safety infrastructure with fire resistant materials and or create defensible space around structures.

Additional Notes: Critical infrastructure examples include care facilities, medical centers, schools and resources like water and power stations. fortifying structures, managing surrounding vegetation, and ensuring redundant, fire-resilient systems. Related to County CWPP projects:(NC-07-2013) (SH-09-2020) (NC-44-2020)

Additional Resources Notes: Manual

GOAL 4: Wildfire Response

Objective 4.1: Increase the access for emergency vehicles response during emergencies

4.1.1 Improve designated emergency vehicle access routes (fire access)

Priority: High

Description: Identify additional roadways that may need clearance of obstructions, modify parking or other restrictions, and any additional needs to create or expand access in the event of an emergency. Identify fire access points, create/maintain vehicle access for emergency use only

Additional Resources Notes: Staff time and crews, potential landowner agreements and policy changes

SUBPROJECTS FOR 4.1.1

4.1.1.a Fire Access_3: Montecito to HWY

Description: Remove ladder fuels, link access points from Montecito to HWY 121 for access to Montecito Heights (41 acres with multiple landowners).

Lead(s): City of Napa-Multi

Project Status: Concept

Resources: Landowner agreements, hand crews

Metrics: Access route in identified area that is maintained and free of ladder fuels

Notes: 41 acres, multiple (4-6) landowners with mostly large holders. Manual and mechanical treatments.

4.1.1.b Old Sonoma Road South

Description: Treat area south of Old Sonoma Rd to maintain passageway and prevent ignitions; a portion adjacent to the southern portion has been transferred to the city for access and treatment.

Lead(s): City of Napa-Multi

Project Status: Concept

Resources: Fine fuel reduction, maintenance, ignition prevention awareness campaigns

Metrics: Fuel types that limit ignitions, fire spread along access routes

Notes: This area has burned in the past, along a main transportation corridor with steep slopes, maintaining passageways and preventing ignitions. This project is separated into North and South by Old Sonoma Rd, a major access route. The Northern project is adjacent to more development and may need to be prioritized.

4.1.1.c Old Sonoma Road N

Description: Treat area north of Old Sonoma Rd adjacent to development to maintain passageway and prevent ignitions.

Lead(s): City of Napa-Multi

Project Status: Concept

Resources: Fine fuel reduction, maintenance, ignition prevention awareness campaigns

Metrics: Fuel types that limit ignitions, fire spread along access routes

Notes: This area has burned in the past, along a main transportation corridor with steep slopes, maintaining passageways and preventing ignitions. This project is separated into North and South by Old Sonoma Rd, a major access route. A portion next to the southern portion has been transferred to the city for access and treatment.

4.1.1.d Ashlar to First Ave. and Monticello

Description: Collaborate to create containment line fuel break: modify vegetation to reduce fuel, decrease fire intensity and assist ground-based firefighting.

Lead(s): City of Napa-multiple departments

Project Status: Proposed

Resources: Hand crews, mechanical treatments, heavy equipment, landowner agreements

Metrics: Accessible evac route; maintenance

Notes: Extend walking path to create a shaded fuel break, treat vegetation, and allow for vehicle access. Connecting to Ashlar Drive. In County CWPP as well but work will be done on private property. from Ashlar to First and Ashlar to Monticello in City of Napa.

4.1.1.e El Camino Gate

Description: Collaborate to treat gate area, create a shaded fuel break along the fire access road

Lead(s): City of Napa-multiple departments

Project Status: Concept

Resources: Mechanical treatment, agreements

Metrics: Fuel break creation and maintenance

Notes: Manual and mechanical treatments.

4.1.1.d Linkage to Stonecrest

Description: Work with private property owners to link one side of development to the other by connecting and extending the walking path and dirt road to create an emergency-only access route

Lead(s): City of Napa-multiple departments

Project Status: Concept

Resources: Landowner agreements, hand crews

Metrics: Access route in identified area that is maintained and free of ladder fuels

Notes: Link private driveways to Stonecrest drive (west). In County CWPP.

4.1.2 Conn Dam to Sage Canyon Rd Egress

Priority: Moderate

Description: Consider providing secondary emergency egress. Western edge of Lake Hennessey connecting Conn Valley Rd to Sage Canyon Rd.

Additional Resources Notes: Hand crews, mechanical

Objective 4.2: Road networks (safe passages, parking restrictions, clear roadside obstructions)

4.2.1 Thompson Avenue Shaded Fuel Break

Priority: Low

Description: Consider creating shaded fuel break and remove grasses and ladder fuels 20-30 feet each side of roadway.

Additional Resources Notes: Hand crews, mowing

4.2.2 Lower Redwood Rd

Priority: Low

Description: Consider creating shaded fuel break for fire control and improved access route.

Additional Notes: Reducing the ground and ladder fuels or understory, removing dead/dying trees and vegetation, and limbing up remaining trees as needed to reduce the amount of heat impacting the road during evacuation of the public or access by first responders. Focus on the lower Redwood Rd section adjacent to city (near Alston Park). This will also connect to the Mt. Veeder Rd project by Mt. Veeder FSC. Mt Veeder Rd is a critical mountainous evacuation road. Defensible space along this road is needed as often as every two years. Manual and mechanical treatments.

Additional Resources Notes: Manual and mechanical treatments.

4.2.3 Southwestern Fuel Break

Priority: Moderate

Description: Treat vegetation to reduce fuel volume, remove ladder fuels 1000 feet from roads

Additional Notes: Treatments along north side of Sage Canyon Rd, Lake Hennessey's western edge, east side of Silverado Trail, south side of Conn Valley Rd and south side of Howell Mountain Rd. Manual and mechanical treatments.

Additional Resources Notes: Hand crews, mowing

4.2.4 Partrick Roadside Expanded

Priority: Moderate

Description: Maintain expanded roadside clearance of Partrick Road

Additional Resources Notes: Maintenance

Objective 4.3: Increase response effectiveness through standardizing communication between residents and emergency responders

4.3.1 Standardized Address signs

Priority: High

Description: Encourage installation of uniformed address signs for residential and commercial properties, including standardized placards, signs or painted roadside curbs for visual notification for first responders.

Additional Notes: (NC-53-2020)

Additional Resources Notes: Funding or individual support for new signs

4.3.2 Evac Zone Stickers/Magnets

Priority: Moderate

Description: Create sticker/magnet showing evacuation zones or protocols that people can stick to everyday items.

Additional Resources Notes: \$ to create and disseminate evac zone stickers; mailing plan &/or event distribution

GOAL 5: Partnerships and community engagement

Objective 5.1: Develop and provide education resources for target audiences

5.1.1 Sparking equipment awareness materials

Priority: Moderate

Description: Develop Public awareness information for wildfire season related to flame/sparking equipment.

Additional Notes: (SH-10-2020)

Additional Resources Notes: Time/\$ to create and share educational materials

5.1.2 Defensible Space program support

Priority: Moderate

Description: Develop & conduct a Defensible Space community education program. Create bilingual resources and learning opportunities for businesses and residents.

Additional Notes: (NC-04-2013)

Additional Resources Notes: Staff time to identify processes and facilitate conversations

5.1.3 Bilingual outreach on defensible space and home hardening best practices

Priority: Moderate

Description: Bilingual resources and learning opportunities created for homeowners and business owners

Additional Notes: Pursue the opportunity for community involvement at the neighborhood level

Additional Resources Notes: Workshop facilitation, material creation and dissemination \$ and time

5.1.4 Ignition prevention for professionals

Priority: Moderate

Description: Create bilingual handout materials and workshopping about red flag days and ignition prevention. Model materials from County CWPP/City of Yountville.

Additional Resources Notes: Time/\$ to create and share educational materials

5.1.5 Reduce frequent fire ignitions

Priority: Moderate

Description: Outreach to limit ignitions in grassy areas where fires are frequently started by adjacent landowners (ex: mowing), visitors, and school. Model materials from County CWPP, City of Calistoga.

Additional Notes: Model off County CWPP City of Calistoga for materials.

Additional Resources Notes: Staff time for educational outreach

5.1.6 Managing riparian vegetation to minimize fire risk and restore habitat

Priority: Moderate

Description: Hold a workshop to teach about common riparian invasive plants with a handout regarding identification and methods of removal.

Additional Notes: Habitat restoration. A handout of identification pointers and removal pointers would also be handed out.

Additional Resources Notes: Staff time for workshop development and facilitation, budget to print and disseminate handout

5.1.7 Identify outreach needs and target audiences

Priority: Low

Description: Continue to identify topics or needs around educational resources needed

Additional Resources Notes: \$ and time to identify, create, and manage demonstration sites; facilitation of collaborative efforts

GOAL 6: Landscape(large-scale) treatments

Objective 6.1: Provide large-scale treatments

6.1.1 Lake Hennessey Forest Health Improvements

Priority: Moderate

Description: Consider collaborative management of the Lake Hennessey area using the Forest Management Plan (1,064 acres)

Additional Notes: This includes approximately 320 acres of thinning in areas with high fuel loads and the need to reintroduce fire across the entire property. Additional smaller projects include the need to manage approximately 30 acres of decadent, mature Douglas fir and the removal of invasive species particularly along the Lake's edge. A Forest Management Plan has been completed for the property. Given the size of the property, prioritization of initial treatments will be needed and could include:

- 267 acres of understory thinning, pruning, and pile and burning
- 121 acres of broadcast burning
- 8 acres of timber harvest and understory thinning
- 5 acres of Himalayan blackberry removal from riparian woodlands

Additional Resources Notes: Crews, equipment, regulatory approval, and planning support

6.1.2 Support prescribed fire use

Priority: Moderate

Description: Conduct prescribed burns as part of wildfire mitigation strategy.

Additional Notes: (NC-19-2020)

Additional Resources Notes: Time (\$) for PBA support, e.g. landowner agreements/CEQA/burn plans and purchase of fire equipment

GOAL 7: Public Health

Objective 7.1: Mitigate the health impacts from fire

7.1.1 Smoke/Air quality mitigation resources

Priority: Moderate

Description: Develop and disseminate materials about air quality mitigation measures for residents before wildfire season in collaboration with healthcare providers and agencies.

Additional Notes: Potential partnership between the City, and health care providers including (Kaiser, State Hospital, etc.) along with County Pub Health. Model off St. Helena program.

Additional Resources Notes: \$ to disseminate materials, \$/products for fan filter demos and time to run outreach

GOAL 8: Safety and Evacuation

Objective 8.1 Evacuation preparedness and assistance, including for vulnerable populations

8.1.1 Evacuation planning for vulnerable populations

Priority: Very High

Description: Work with local agencies to develop evacuation plans and provide education and outreach to populations vulnerable to wildfire

Additional Notes: This can include targeted outreach, culturally and linguistically appropriate communication strategies, accessible evacuation assistance, and tailored support services to ensure these demographic groups—especially non-English speakers, children, seniors, and those with limited mobility or no access to vehicles—can effectively access safety resources during wildfire emergencies.

8.1.2 Evacuation preparedness

Priority: High

Description: Consider creation of bilingual materials and workshops on how to prepare for evacuation, the meaning of red flag days, and what to do during an evacuation.

Additional Notes: City-wide education campaign on a variety of evacuation preparedness topics (e.g., know your evac zone, how to prep a go bag, etc.). (including advance evacuations and focusing on block level preparedness activities). Can model off of existing materials from County CWPP/City of Yountville.

Additional Resources Notes: Workshop facilitation, material creation and dissemination \$ and time

GOAL 9: Resident Mitigation

Objective 9.1: Expand opportunities for community actions

9.1.1 General Appraisal-Alta Heights Community

Priority: Very High

Description: Assess what can be done in Alta Heights to safeguard the area and educate the neighborhood on best practices to reduce the chance of wildfire damage.

Additional Notes: Assessment needed, work with community members, potential treatment types; Manual, Rx Burn, grazing, etc.

Additional Resources Notes: Staff time to identify processes and facilitate conversations

9.1.2 Consider Creation of Firesafe Councils

Priority: High

Description: Identify leads and boundaries to establish Fire Safe Councils and pursue NFPA Firewise recognition

Additional Notes: Support two FSCs: one on East side and one on West side

Additional Resources Notes: Volunteer time and support of communities, identification of boundaries and shared information on development of FSC/NFPA

9.1.3 City Chipping Program

Description: Create opportunities for chipping program access to city residents, this could follow the process and outline for Napa County chipping program

Project Status: Proposed

Resources: Equipment and operations staff for chipping program

Metrics: Host 4 chipping days/year that serve targeted areas of the city (that do not currently have access to chipping)

Notes: Location is critical to determine feasibility (e.g. efficient for offloading of chips and publicly accessible)

9.1.4 Support fuel reduction around structures

Priority: Moderate

Description: Encourage fuel reduction projects to reduce impacts to homes and businesses and to provide assistance to private property owners (technical and financial)

Additional Notes: Manual, mechanical, grazing, and other treatments. (SH-03-2020) and (NC-03-2020). Include information about City building and fire codes for areas.

Additional Resources Notes: Staff time, manual, agreements, educational materials

9.1.5 Support vegetation management for city property owners and residents

Priority: Moderate

Description: Look for opportunities for neighboring jurisdictions and property owners for vegetation management.

Additional Notes: Support planning, outreach and implementation through collaboration with a variety of public and private entities including Napa County and State Hospital.

SUBPROJECTS FOR 9.1.5

9.1.5.b Skyline Wilderness Park and Native Plant Nursery

Description: Work with the Native Plant Nursery and the county park to co-produce information and demonstration sites for fire adapted CA Native Plants.

Lead(s): Park and NGO

Project Status: Concept

Resources: \$ and time to identify, create, and manage demonstration sites; facilitation of collaborative efforts

Metrics: Collaboratively created and disseminated brochure or online resource

Notes: Habitat restoration.

91.5.c Protection of State Hospital

Description: Treat vegetation to protect state hospital, protect water tank infrastructure, and utilize/extend access building on existing fuel treatment and access; mix of state and county lands.

Lead(s): Private

Project Status: Other

Resources: Hand crews, mechanical treatments, access

Metrics: Fuel types that limit fire spread and intensity, enhanced access

Notes: Encourage the private property owner to treat vegetation to protect the state hospital, protect water tank infrastructure, and utilize/extend access. Mix of state and county lands, near the quarry and state hospital, for protection and access near the hospital. Build on the existing fuel treatment and access. This project has the potential for more expansive work including invasive species removal, potential for prescribed fire use, roadside maintenance (Other treatment type selected), and CAL VTP planning and implementation.

9.1.5.d Home hardening and zone 0 demo site

Description: Identify private properties with good examples of zone 0/defensible space/home hardening that are aesthetically pleasing and can be showcased for inspiration

9.1.6 Pennyroyal Street

Priority: Low

Description: Consider ladder fuel and invasive species removal, Defensible space could be needed

Additional Notes: This area doesn't need as much attention as others. area between Pennyroyal and Oakmont Court

Additional Resources Notes: Hand crews, education

9.1.7 Grandview Dr

Priority: Low

Description: Consider reducing high fuel load and remove dead trees (including eucalyptus); private landowner so successful completion may depend on landowner motivation.

Additional Notes: High fuel load including eucalyptus and some dead tree removal. One landowner for large acres might find it hard to justify funding for one person and/or to get this project complete depending on the landowner's motivation.

There is also a grove of Eucalyptus trees on private land along Stanley Lane. This area was identified as high risk through the LRA FHSZ process but after discussion with Core Team and a site visit, this project remains a lower priority because of the treatment efforts to remove surface fuels and vegetation along the base of larger trees (Fig 21).

Additional Resources Notes: Mechanical and thinning resources

GOAL 10: Recovery

Objective 10.1: Increase resources for post-fire recovery

10.1.1 Support immediate and long-term recovery programs

Priority: High

Description: Identify where and what resources are needed for immediate (ex: shelters, insurance claims, basic needs) and longer-term recovery (erosion, rebuilding, etc.)

Additional Resources Notes: staff time



Figure 21. Fuel treatments for understory of eucalyptus along Stanley Lane.