CALIFORNIA WILDFIRE & FOREST RESILIENCE TASK FORCE

CALIFORNIA'S COMMUNITY WILDFIRE RESILIENCE ROADMAP

September 2025

ACKNOWLEDGEMENTS

California's Community Wildfire Resilience Roadmap was informed by a diverse set of partners in California's public, private, and non-profit sectors through the Fire-Adapted Communities Working Group. Subject matter experts and affiliates outside the Working Group also provided valuable insights and contributions. Agencies or organizations that contributed to this effort included:

- Butte County Fire Safe Council
- California Air Resources Board (CARB)
- California Department of Conservation (DOC)
- California Department of Forestry and Fire Protection (CAL FIRE)
- California Department of Housing and Community Development (HCD)
- California Department of Insurance (CDI)
- California Department of Public Health (CDPH)
- California Department of Transportation (Caltrans)
- California Environmental Protection Agency (CalEPA)
- California Fire Safe Council (CFSC)
- California Governor's Office of Emergency Services (Cal OES)
- California Governor's Office of Land Use and Climate Innovation (LCI)
- California Office of Energy Infrastructure Safety (Energy Safety)
- California Polytechnic State University, San Luis Obispo, Wildland-Urban Interface Institute
- California Wildfire and Forest Resilience Task Force Staff
- Community Wildfire Planning Center (CWPC)
- ForEverGreen Forestry
- Gordon and Betty Moore Foundation
- Insurance Institute for Business & Home Safety (IBHS)
- Pacific Gas & Electric Company
- Resources Legacy Fund (RLF)
- Santa Barbara County Fire Safe Council
- Watershed Research and Training Center (WRTC)
- U.S. Forest Service (USFS)
- University of California Cooperative Extension (UCCE)

This project was made possible through funding from a CAL FIRE Fire Prevention Grant, supported by California's Climate Investments, and the Resources Legacy Fund.

Ascent served as the project consultant and led the preparation of this document.

TABLE OF CONTENTS

Attachments

Figures

Tables

LIST OF ABBREVIATIONS

AB	Assembly Bill
Action Plan	*California's Wildfire and Forest Resilience Action Plan*
AQI	Air Quality Index
Baseline Assessment	Baseline Assessment Report
BLM	U.S. Bureau of Land Management
BOF	California State Board of Forestry and Fire Protection
CAL FIRE	California Department of Forestry and Fire Protection
Cal OES	California Governor's Office of Emergency Services
Cal/OSHA	California Division of Occupational Safety and Health
CalEPA	California Environmental Protection Agency
Caltrans	California Department of Transportation
CalVTP	California Vegetation Treatment Program
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBO	community-based organization
CDFW	California Department of Fish and Wildlife
CDI	California Department of Insurance
CDPH	California Department of Public Health
CDSS	California Department of Social Services
CEQA	California Environmental Quality Act
CFSC	California Fire Safe Council
CNRA	California Natural Resources Agency
CPUC	California Public Utilities Commission
CWMP	California Wildfire Mitigation Program
CWPC	Community Wildfire Planning Center
CWPP	community wildfire protection plan

DHCS	California Department of Health Care Services
DOC	California Department of Conservation
DOE	U.S. Department of Energy
DWR	California Department of Water Resources
EIR	Environmental Impact Report
EMSA	California Emergency Medical Services Authority
Energy Safety	California Office of Energy Infrastructure Safety
EPA	U.S. Environmental Protection Agency
FAC	Fire-Adapted Communities
FAC Learning Network	Fire-Adapted Communities Learning Network
FAC WG	Fire-Adapted Communities Working Group
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zone
FRA	Federal Responsibility Area
FWW	Fire Weather Watch
GO-Biz	California Governor's Office of Business and Economic Development
HCD	California Department of Housing and Community Development
HUD	U.S. Department of Housing and Urban Development
IBank	California Infrastructure and Economic Development Bank
IBHS	Insurance Institute for Business & Home Safety
JPA	joint powers authority
LCI	California Governor's Office of Land Use and Climate Innovation
LHMP	local hazard mitigation plan
LRA	Local Responsibility Area
LWDA	California Labor and Workforce Development Agency
NFPA	National Fire Protection Association
NOAA	National Oceanic and Atmospheric Administration
NPS	National Park Service

NWS	National Weather Service
OPR	California Governor's Office of Planning and Research
OSFM	Office of the State Fire Marshal
PBA	Prescribed Burn Association
PFIRS	Prescribed Fire Information Reporting System
$PM_{2.5}$	fine particulate matter measuring 2.5 microns or less in diameter
POD	Potential Operational Delineation
PSPS	Public Safety Power Shutoff
RCD	Resource Conservation District
RFFC Program	Regional Forest and Fire Capacity Program
RFW	Red Flag Warning
Roadmap	*California's Community Wildfire Resilience Roadmap*
RWMP	Regional Wildfire Mitigation Program
SB	Senate Bill
SGC	California Strategic Growth Council
SRA	State Responsibility Area
State	State of California government
Task Force	California Wildfire and Forest Resilience Task Force
TRA	temporary refuge area
UCCE	University of California Cooperative Extension
USDA	U.S. Department of Agriculture
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
Water Board	California State Water Resources Control Board
WMP	wildfire mitigation plan
WUI	wildland-urban interface
WUI Code	Wildland-Urban Interface Code

EXECUTIVE SUMMARY

The Need for Holistic Community Wildfire Resilience

California's wildfire crisis has severely impacted communities across the state. Catastrophic wildfires, including urban conflagrations caused by wildfires burning into communities, have led to tragic losses in human life, property, and community assets; adverse public impacts on people's physical and mental health; local and regional economic impacts; and significant impacts on the natural resources and landscapes that our communities rely on for their well-being.

While fire is a natural and reoccurring element in California's diverse ecosystems and a driving force that has shaped California's landscapes for millennia, many of California's communities developed in areas with significant wildfire hazard potential and are at risk, especially areas in or near the wildland-urban interface (WUI), with many buildings and infrastructure built prior to modern codes and standards. Now, many communities are highly vulnerable to wildfires after over a century of fire exclusion and overreliance on suppression-dominated solutions to our wildfire problems, combined with the growing impacts of climate change. Landscape-focused actions to change our relationship with fire and bring back critically needed management of vegetation and healthy forests and ecosystems are critical. Promoting multi-benefit and nature-based solutions in our landscapes can both protect and benefit communities. However, they are not enough to protect communities or address their critical vulnerabilities.

California's Community Wildfire Resilience Roadmap (hereinafter referred to as "Roadmap") outlines a holistic statewide strategy for community wildfire resilience that the State of California can implement, in collaboration with federal, regional, and local partners across the public and private sectors. The Roadmap addresses critical risks and vulnerabilities, both in the built environment and the people and socioeconomic systems that make up the fabric of our communities, while continuing to make progress in restoring and maintaining the health of our landscapes.

This Roadmap will also serve as a foundational appendix to the 2025 update of *California's Wildfire and Forest Resilience Action Plan* (Action Plan). Many of the Roadmap's core ideas have been elevated into the updated Action Plan to help guide immediate State action, while other ideas and recommendations are retained here to inform future cross-sector planning, investment, and policy development, particularly where additional research, coordination, or capacity-building may be needed.

Background

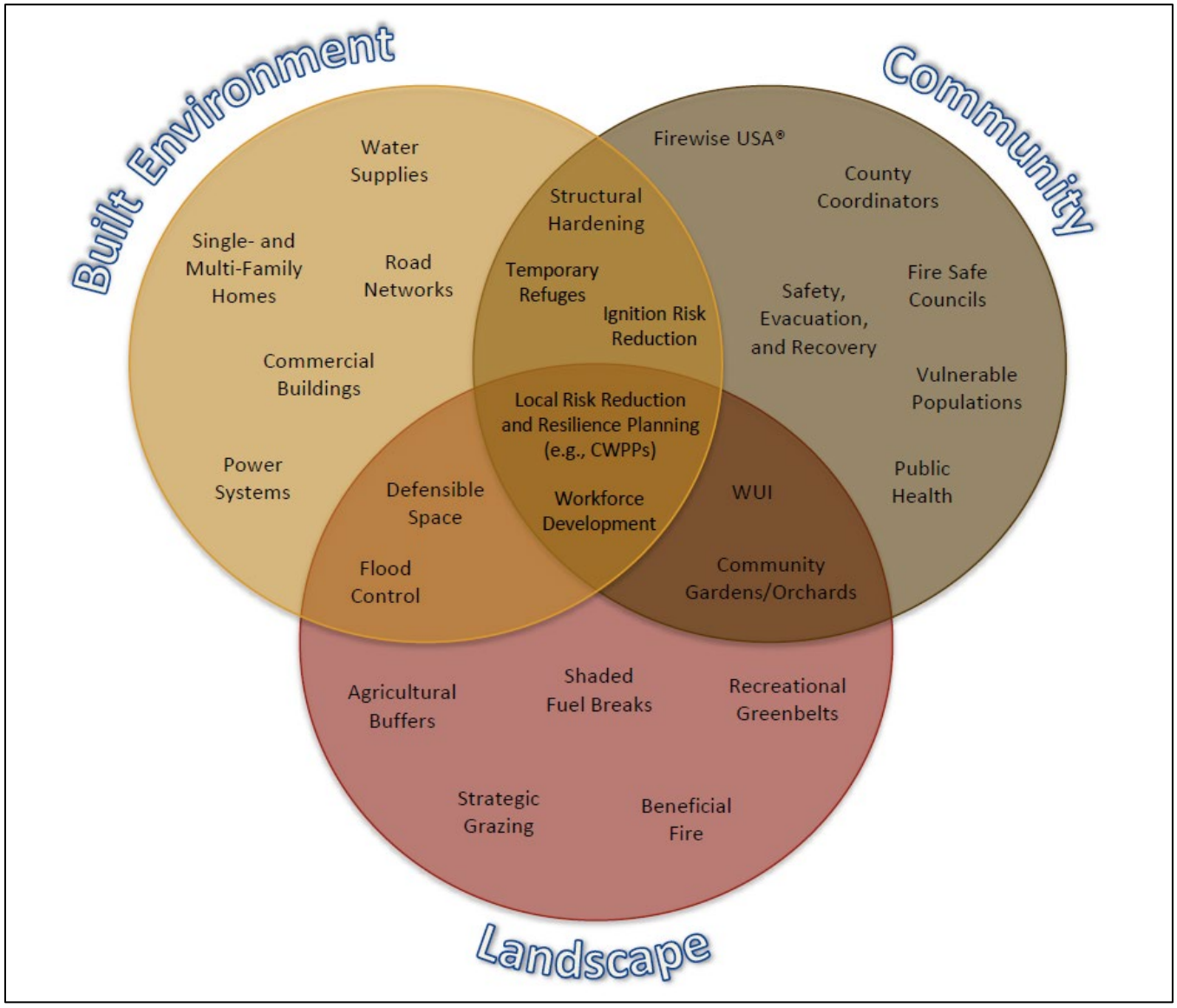
In 2022, the CA Wildfire and Forest Resilience Task Force, with support from CAL FIRE and other organizations, convened the Fire-Adapted Communities Working Group (FAC WG) to monitor and inform community-focused actions included in the 2021 Action Plan, and to develop a shared vision and strategic initiative for holistic community fire adaptation and resilience. The FAC WG's initial efforts coalesced around the conceptual **"fire-adapted**

communities (FAC)" framework as defined in the 2009 *National Cohesive Strategy for Wildland Fire Management*.

The Roadmap project began with a collaborative effort to develop a shared **vision statement** along with a set of **guiding principles** for achieving holistic, statewide community wildfire resilience. The vision statement and guiding principles, included in the main body of the Roadmap, emphasize the urgency of protecting communities, enhancing wildfire resilience, and learning to live better with fire. The vision and guiding principles were intended to unify the efforts of the FAC WG and guide development of a comprehensive and strategic Roadmap to guide the State's efforts, and they should be used as guideposts for ongoing use of this Roadmap and its implementation by the State and other partners moving forward. A **baseline assessment** was also prepared that documented existing programs, policies, regulations, funding sources, and other initiatives that support fire adaptation and resilience work across many different topics in the FAC framework; along with critical gaps, needs, and opportunities for improving community fire adaptation and resilience, based on information gathered from existing research and FAC WG input. The baseline assessment findings directly informed the strategies included in the Roadmap.

Subsequent efforts led to the development of an **integrated multi-domain framework** for achieving holistic community wildfire resilience**,** given the differing contexts or "domains" in which community wildfire mitigation and resilience-building activities can take place at the local or regional level. These domains include the **built environment,** the **landscape,** and the **community** (**Figure 1** below)**.**

Figure 1 Three Domains of Wildfire Resilience



Source: **Based on Moritz et al. 2022**.

Goals, Objectives, and Recommended Actions

The Roadmap includes an integrated set of goals, objectives, and recommended actions for achieving holistic community wildfire resilience statewide across the three domains. The primary goal and domain context are presented, followed by a description of "what is already being done" to promote wildfire resilience statewide in each domain, with examples of policies, programs, regulations, and other initiatives. Local or regional examples are cited in some cases to illustrate where progress is being made.

The primary goal and core objectives for achieving statewide community resilience under each domain are briefly summarized below:

1. **Built Environment**

   Goal: Protect and Bolster the Resilience of Buildings and Infrastructure

   Objectives:

   - Increase Structural Hardening and Defensible Space
   - Increase Critical Infrastructure Hardening
   - Reduce Infrastructure-Related Ignition Risks and Associated Community Impacts
   - Connect Communities with Tools for Data-Informed Decision Making

2. **Landscape**

   Goal: Advance Strategic Treatments and Multi-Benefit Land Stewardship Solutions

   Objectives:

   - Prioritize and Accelerate Strategic Landscape Treatments
   - Promote Multi-Benefit Land Stewardship Solutions
   - Leverage Science-Based Frameworks for Measuring Progress Across Domains

3. **Community**

   Goal: Empower Communities to Prepare, Plan, Implement, and Adaptively Manage Wildfire Solutions Across Domains and Protect Public Health and Safety.

   Objectives:

   - Enhance Local and Regional Planning and Capacity Building Programs
   - Reduce Unwanted Human-Caused Ignitions
   - Strengthen Workforce and Local Economies
   - Improve Safety, Evacuation, and Recovery
   - Address Public Health Impacts of Wildfire

Strategic recommended **actions** are included under each objective. While some recommended actions have been incorporated into the updated Action Plan in some form, others remain in this Roadmap to provide a foundation for future implementation, especially in areas requiring further exploration or engagement. Collectively, the recommended actions included in this Roadmap are intended to address critical gaps and needs across the state where State agencies can lead or partner to accomplish the Roadmap objectives. The recommended actions are intended to complement and not duplicate the many existing/ongoing efforts that are already working towards achieving these goals. Most of the actions may be led by one or more State agencies; however, other non-State actors may also

lead or play critical roles in implementing many of the actions. Thus, while this Roadmap serves as a tool to organize and facilitate statewide efforts and the role of the State in facilitating or supporting community wildfire resilience, it also identifies key partnerships and collaborative efforts that will be needed to ensure successful outcomes.

Cross-Cutting Strategies

The Roadmap also identifies a series of **cross-cutting strategies** that emerged from the strategic planning effort, and several of them are aligned with issues or strategic priorities included in various other CA Wildfire and Forest Resilience Task Force initiatives. They include:

- Support Equitable and Community-Centered Wildfire Resilience
- Enable Collaboration, Partnerships, and Integrated Governance
- Promote Data-Informed Decision-Making
- Advance Strategic Funding Initiatives to Meet Regional and Local Needs
- Streamline and Align Regulations, Processes, and Policies
- Strengthen the Wildfire Resilience Workforce Across Sectors and Communities
- Provide Technical Assistance to Build Local Capacity
- Promote Public Education, Awareness, and Engagement
- Accelerate Innovation and the Use of Technology

All recommended actions in the Roadmap are "tagged" with one or more of these cross-cutting strategies. A matrix showing which cross-cutting strategies apply across all Roadmap actions is included in **Attachment A**.

Monitoring Progress

The Roadmap includes a **Monitoring Progress** section that outlines potential **metrics** and key trends or **indicators** that the Task Force or other partners can use to help assess and track progress in the performance of individual programs or more focused short-term actions, as well as desired trends or outcomes over the long-term based on broader goals and objectives. The Task Force, along with key agencies or organizations identified, may select and prioritize metrics for data collection, analysis, and reporting, and integrate them into public reporting via the Task Force website. Reporting mechanisms could include links to existing dashboards or, if appropriate, development of a new dashboard or similar reporting tools.

INTRODUCTION

California's Community Wildfire Resilience Roadmap (hereinafter referred to as "Roadmap") provides a statewide strategy for supporting fire-adapted and resilient communities throughout California. It serves as a foundational appendix to the 2025 update of *California's Wildfire and Forest Resilience Action Plan* (Action Plan), building on elements of the 2021 Action Plan and informing both current and future potential efforts to advance statewide community-scale wildfire resilience. More specifically, it outlines strategic objectives and recommended actions across three domains that the State of California or other partners can take to promote fire adaptation and resilience. It also includes a framework for monitoring progress and long-term success. The Roadmap project was initiated in 2023 by the California Wildfire and Forest Resilience Task Force (Task Force) and the Fire-Adapted Communities Working Group (FAC WG) established under the Task Force, with support from the California Department of Forestry and Fire Protection (CAL FIRE) and Resources Legacy Fund. The goals of the Roadmap project are to:

- Develop a **holistic, shared vision** for statewide community wildfire resilience that creates the conditions necessary for fire-adapted communities and healthy ecosystems.
- Create a **strategic roadmap** that articulates how the holistic shared vision for fire-adapted and resilient communities will be achieved statewide through the State's efforts, in partnership with a broad and diverse range of actors across the public, private, and non-profit/non-governmental sectors.
- In connection with the roadmap, develop **a framework for measuring statewide progress** using indicators and key metrics or performance measures; and create a **dashboard (or leverage existing dashboards/tools)** to enable effective monitoring and reporting, and serve as a communication tool with the broader public, funders, and decision-makers.

Prior to drafting this Roadmap, a **Baseline Assessment Report** (Baseline Assessment) was completed in late 2023, which summarized the results of initial data-gathering and existing conditions assessment. The report examined: (1) current or ongoing actions in the Action Plan related to community wildfire adaptation and resilience; (2) existing efforts separate from the Action Plan that are related to wildfire adaptation and resilience; and (3) critical gaps or needs that the Roadmap should address. This Roadmap was informed by the Baseline Assessment and builds on its initial findings. While some information from the Baseline Assessment is included in this Roadmap to provide context and acknowledge examples of what is already being done, the Roadmap does not repeat all the detailed background information contained within the Baseline Assessment. Readers are advised to review the Baseline Assessment for more background information, key bodies of research identified, and further context on critical gaps or issues.

The Roadmap also reflects ideas and priorities that have since shaped the 2025 update of the Action Plan.

CALIFORNIA'S WILDFIRE CONTEXT

To understand the need for this Roadmap and what it aims to accomplish, one must first understand California's wildfire context and changing conditions over time across the landscape and the built environment that have led to increased vulnerability in local communities across the state. The subsections below provide some historical context, along with brief discussions on fuels, ignition, climate change, growth in the wildland-urban interface (WUI), and specific wildfire impacts to communities.

Historical Context

Fire is a natural part of California's diverse landscapes and a driving force that has shaped California's ecosystems for millennia. For centuries before Euro-American settlement, approximately 4.5 to 12 million acres burned annually, although there was significant variability in pre-settlement fire regimes across vegetation types and regions (CAL FIRE 2018). Many Native American tribes in California recognized this and facilitated a symbiotic interplay between fire, communities, culture, and the environment. Tribes largely and actively practiced cultural burning—the intentional ignition of fires ranging in size and intensity—to maintain and restore environmental health, enhance water and food security, and promote resilience against devastating wildfires (Lake 2018). This practice, and the tribes' sustainable approach to forest and ecosystem management, was largely displaced as settlers began enforcing a strict fire suppression regime in California throughout the 1800s, which contributed to forest densification and exacerbated wildfire risk (Lake 2018; Johnston-Dodds 2002).

Strict and widespread fire suppression remained prevalent until the 1960s when the National Park Service (NPS) began to acknowledge the negative impacts of this approach on California's landscapes and revised its policies to better coexist with fire (Parsons and Nichols 1986). Concurrently and ever since, California's local, regional, and State agencies have also grappled with this legacy and adapted their policies and practices to reflect lessons learned (LCI 2022a). Today, this work and the relationship between fire and society is more complex than ever due to the emergence of new challenges, such as heightened population vulnerabilities, the expansion of new development and infrastructure into areas more susceptible to wildfire, increasing fuel loads, more flammable invasive species, and climate change.

Fuels, Ignition, and Climate Change

Communities and infrastructure across California face two distinct fire hazards from the natural lands surrounding them, each requiring distinct approaches to mitigating the risks (Keeley and Syphard 2019). In forested portions of the landscape, a century or more of fire suppression and exclusion, as underscored previously, has led to increased fuel loads with each fire return interval skipped, and the proportion of high severity fire in these forests tends to increase as time since last fire increases (Steel et al. 2015). In chaparral and grasslands, human ignition sources have greatly increased the risk of fires in these landscapes, and as a result, these vegetation types are often burning more frequently than their historical rates (Safford and Van de Water 2014).

Today, many of the state's mixed-conifer forested areas are green forests with abnormally high fuel loads and homogenous forest structures that increase the likelihood of crown fires, especially under red flag conditions. In other areas, there has been an increase in the size of high severity patches in recent fires that face a risk of conversion to vegetation types that are at greater risk to future high severity fires (Cova et al. 2023; Coppoletta et al. 2016). Both situations pose risks of wildfires burning out of the wildlands to neighboring communities, as these fires have the potential to create their own wind (Keeley and Syphard 2019). When periods of significant drought are present in unhealthy forests, the mortality from the drought can increase available fuels to the point where it can result in a massive fire event, as seen in the 2020 Creek Fire (Stephens et al. 2022). Proactive forest management with mechanical treatments and beneficial fire can restore forests to historic patterns and removal excessive fuels to reduce the risk of large-scale high severity wildfires and reduce risks to neighboring communities and structures. The pace and scale of these actions need to reach the landscape scale, leveraging recently burned areas that burned at lower severities (North et al. 2021).

In natural lands dominated by wind-driven wildfires, ignition prevention, especially during extreme wind events, is a key strategy for reducing risk to life and property in neighboring areas (Keeley and Syphard 2019). Human sources tend to dominate ignitions in these areas, and the presence and spread of invasive species may exacerbate fire spread. Additionally, in chaparral systems that are burning too frequently, type conversion to more flashy fuels is also being observed, increasing the risk of future fire on those lands. In these areas, removing invasive species, installing non-flammable barriers in areas with high ignition potential (e.g., along roads), creating ember barriers or other measures to disrupt fire spread, and increasing patrols during extreme wind events will reduce the risk of wildfire reaching people and structures.

Exacerbating these risks today is climate change, and it brings with it future risks that can be difficult to quantify. In California, climate change is exacerbating natural hazards that already exist in the state, including wildfires. Wildfire activity has always been intricately connected to climate and continues to be an endemic part of natural systems across the state (CAL FIRE 2018). As climate change presses on, wildfire risk is also steadily increasing due to more favorable conditions for wildfire ignition and spread. For example, increasing temperatures resulting from climate change, which also lead to lower relative humidity, and the growing prevalence of extended drought periods across the state are key contributors to trends in fire-related activity, as they can accelerate the drying and enhance the flammability of vegetative fuels, especially where fuel loads are abnormally high. Additionally, climate change has contributed to a fire season that starts earlier, runs longer, and features conditions that could result in extreme, fuel-driven wildfire events (e.g., due to increasing temperatures and temporally compressed winter precipitation) (MacDonald et al. 2023). In wind-driven fire risk areas, climate change may not impact future fire risk as significantly as in forested systems, and ignitions will likely remain the primary driver of future fire in these systems into the future, especially during significant wind events (Keeley and Syphard 2019).

Recent wildfire history demonstrates the importance of proactively mitigating the multitude of factors increasing wildfire risk across our natural landscapes that we face today and into a future with climate change. Below is a snapshot of information on recent wildfire history in California. For the "largest," "most destructive," and "deadliest" wildfire statistics from CAL FIRE, this

information is based on data collected since 1932—records from before then are not consistent or reliable.

- The top nine largest wildfires, in terms of area burned, have all happened since 2017 (CAL FIRE 2025a);
- 19 of the 20 largest wildfires have happened since 2000—10 of which came in 2020 or later (CAL FIRE 2025a).
- 18 of the 20 most destructive wildfires, in terms of structures destroyed, have happened since 2003—eight of which came in 2020 or later (CAL FIRE 2025b);
- 13 of the top 20 deadliest wildfires have happened since 2000 (CAL FIRE 2025c); and

Recent history has also highlighted the difference we can make to reduce the risk of these events continuing into the future. In the 2021 Caldor Fire, prescribed fire helped firefighters protect the community of Kirkwood. In Yosemite National Park, where beneficial fire has been a key management tool for decades, high severity fire has remained within historic proportions. And while ignition reduction activities can be challenging to directly tie to reduced fire behavior, dedicated staff and volunteers work tirelessly during extreme wind events to reduce ignition risk and to protect local communities. Greatly increasing these strategic proactive actions across more of our landscape will reduce the likelihood that fires from our natural lands will reach lives and structures, which is taken into consideration in this Roadmap project. At the same time, however, landscape-focused actions are not enough to provide a holistic approach to fire adaptation. Additional action is required to address critical vulnerabilities in the built environment and socioeconomic systems in our communities that cannot be addressed by landscape treatments alone.

Wildland-Urban Interface

The WUI is "any area where the built and natural environments create a set of conditions that allow for the ignition and spread of wildfire" (LCI 2022b). Alternatively, the WUI can be characterized as the "zone of transition between unoccupied land and human development. It is the line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels" (USFA n.d.). Regardless of definition, the WUI is widespread across diverse ecosystems and communities in California. The extent to which a wildfire may impact the WUI depends on many factors, such as where and how homes, businesses, and infrastructure are developed, weather conditions, and the amount, type, and arrangement of fuels, which can include natural vegetation, cultivated vegetation, structures, and additional features (e.g., fences, attachments, propane tanks) (LCI 2022b). Approximately one third of all existing residential units in California are located in the WUI, and this statistic is of particular concern because approximately 90 percent of homes in the WUI today were built before modern codes were enacted to reduce risk in new construction (Berlant, pers. comm., 2023); and, WUI conditions are associated with an increased risk of loss of human life, property, natural resources, and economic assets. There has been a steep increase in structures lost since the turn of the century, and this rise in destroyed assets is not only because of the increase in wildfire size and severity, but also the increasing housing demand and development within the WUI (LCI 2022a).

Wildfire Impacts

Photo Credit: **CAL FIRE.**

Wildfires, especially unwanted and high-severity wildfires and urban conflagrations, adversely affect the built environment, landscape, and community domains with a wide range of impacts. These impacts are exacerbated through heightened social vulnerabilities, ongoing expansion of the WUI, and climate change, among other stressors. Though not nearly an exhaustive list, notable impacts and challenges of catastrophic wildfires on California communities include:

- **Injuries or Death** caused by direct exposure to wildfire or wildfire-related events.
- **Public Health Impacts** caused by wildfire smoke and degraded air quality, or contamination of water supply and soil due to combustion of buildings, pipes, and other materials that release toxins.
- **Property Damage and Loss** caused by direct or indirect wildfire exposure, including ignitions caused by embers, radiant heat, or direct flame contact; smoke or water damage; or other wildfire-related impacts, such as flood-after-fire or debris flow events that can be triggered by intense post-fire precipitation events.
- **Short- and Long-Term Displacement of People**, both during evacuations and as a result of property damage and loss, along with challenges experienced in "receiving communities" where displaced people may seek temporary or long-term housing and services.

- **Lack of Warning and Alert Accessibility** in certain areas of the state.
- **Destruction of Critical Infrastructure**, such as water-, energy-, communications- and transportation-related infrastructure.
- **Roadway Obstructions** such as fallen trees, downed power lines, or other debris, which can result in further evacuation challenges.
- **Public Safety Power Shutoff** (PSPS) events, though a necessary ignition-prevention mechanism, can exacerbate vulnerabilities in certain populations (e.g., those with access and functional needs, low-income individuals).
- **Economic Impacts** due to the destruction of local businesses and agriculture, displacement of residents and workers, along with recovery-related costs.
- **Environmental Impacts**, such as the destruction of local ecosystems and habitats, or adverse effects on watersheds and their associated functions and services (e.g., water quantity, water quality).

The impacts of wildfire are broad and may affect local communities in diverse ways. Because certain stressors exacerbate the wildfire problem now and into the future, a strategic, concerted, and coordinated statewide effort must be made to adapt and build resilience to this hazard.

VISION AND GUIDING PRINCIPLES

In 2023, the FAC Working Group collaborated to develop a shared vision statement and guiding principles for developing this Roadmap. Collectively, the vision and guiding principles serve as critical guideposts for this Roadmap and should guide ongoing statewide implementation and collaboration.

Vision Statement for Fire-Adapted, Resilient Communities

California is experiencing unprecedented wildfire vulnerability in our communities and landscapes because of the combined factors of climate change, fire exclusion, forest and ecosystem management policies, and development in the wildland-urban interface. We must take significant and disruptive actions to make progress in addressing this crisis. California's communities will become prepared, safer, and more resilient to wildfires by redefining our relationship with fire, protecting and sustaining our people and the places we live, and working towards a fire-adapted future.

Our vision for fire-adapted and resilient communities will require working across sectors and scales in new ways by engaging people and institutions to build community capacity and partnerships, leveraging investments, and prioritizing and scaling actions for maximum impact. We will accelerate and improve the effectiveness of fire prevention, planning, preparedness, mitigation, response, evacuation, and recovery. We will embrace holistic and equitable approaches that empower our communities and build sustained wildfire resilience at all scales, while respecting the diverse places and landscapes across our state.

The **guiding principles**, presented in **Table 1**, support the shared vision and articulate the transformative work that needs to happen statewide to achieve the vision.

Table 1 Guiding Principles to Enact Vision for Fire-Adapted, Resilient Communities

Guiding Principles
▪ **Recognize that a complex array of factors is increasing the severity and scale of wildfires and associated risks to the health and safety of communities** (e.g., decades of suppression-dominated solutions to our fire problems, historical and ongoing expansion of development in WUI, climate change, and other factors). We must take decisive and bold action to change our course and build sustained wildfire resilience in the decades to come.
▪ **Redefine our understanding of and relationship to fire** as a natural element in the landscape that must be understood, respected, and managed safely through increased community education, partnerships, and cross-sectoral engagement with Indigenous, Tribal, and scientific and advocacy communities.
▪ **Use holistic, equitable, and community-centered approaches** that empower local action and build community resilience, in partnership with and support from public and private entities. To accomplish this, we will prioritize the following: ▪ **People and the places people live in must be a priority** in how we frame our goals and our actions. Ultimately, effective actions will require partnerships, engagement, learning from each other, and other measures to strengthen our collective capacity to prepare, protect, and adapt our communities to living better with fire. ▪ **Decision-making around governance structures and funding programs must support and increase local capacity and address structural gaps,** with an emphasis on prioritizing equity and centering the needs of our most socially vulnerable and historically marginalized communities. ▪ **The State, working through the Task Force and related agency-led or cross-sectoral initiatives, should continue to partner** with all levels of government, the private sector, local communities, and others, while also identifying new or more effective governance approaches and addressing critical barriers or misalignments. ▪ **Regionally coordinated planning and funding efforts should be aligned with a wide range of place-based community initiatives** and partnerships and build on their priorities and needs.
▪ **Engage and build community capacity** to reduce risks to public health, safety, property, and ecosystems by: ▪ Increasing individual, household, business, and community-wide **preparedness**. ▪ Promoting robust **planning** (e.g., land use, community wildfire protection, local hazard mitigation, emergency response) and ensure effective implementation and alignment of our planning efforts at all scales and wherever possible. ▪ Accelerating and improving the effectiveness of **prevention and mitigation** actions in the physical and built environments by mobilizing community-scale and locally led programs. ▪ Increasing local capacity to **respond, evacuate, and recover** from catastrophic wildfire events.
▪ **Recognize the connections between healthy and vibrant ecosystems and landscapes, and community resilience,** and broaden community engagement and support for the use of beneficial fire and other landscape-management techniques. ▪ **Sustained landscape treatments and management activities within or near the WUI** should be a top priority to maximize community health and safety, while also creating economic opportunities. ▪ **Community wildfire resilience strategies and actions should be complementary to other Task Force initiatives while also avoiding duplication of efforts** (e.g., *Roadmap to a Million Acres*, *California's Strategic Plan for Expanding the Use of Beneficial Fire*, and various other initiatives or policy frameworks to advance forest health and reduce wildfire risk).

Notes: State = State of California government; Task Force = California Wildfire and Forest Resilience Task Force; WUI = wildland-urban interface.

Source: **Compiled by Ascent in 2025**.

COMMUNITY WILDFIRE RESILIENCE FRAMEWORK

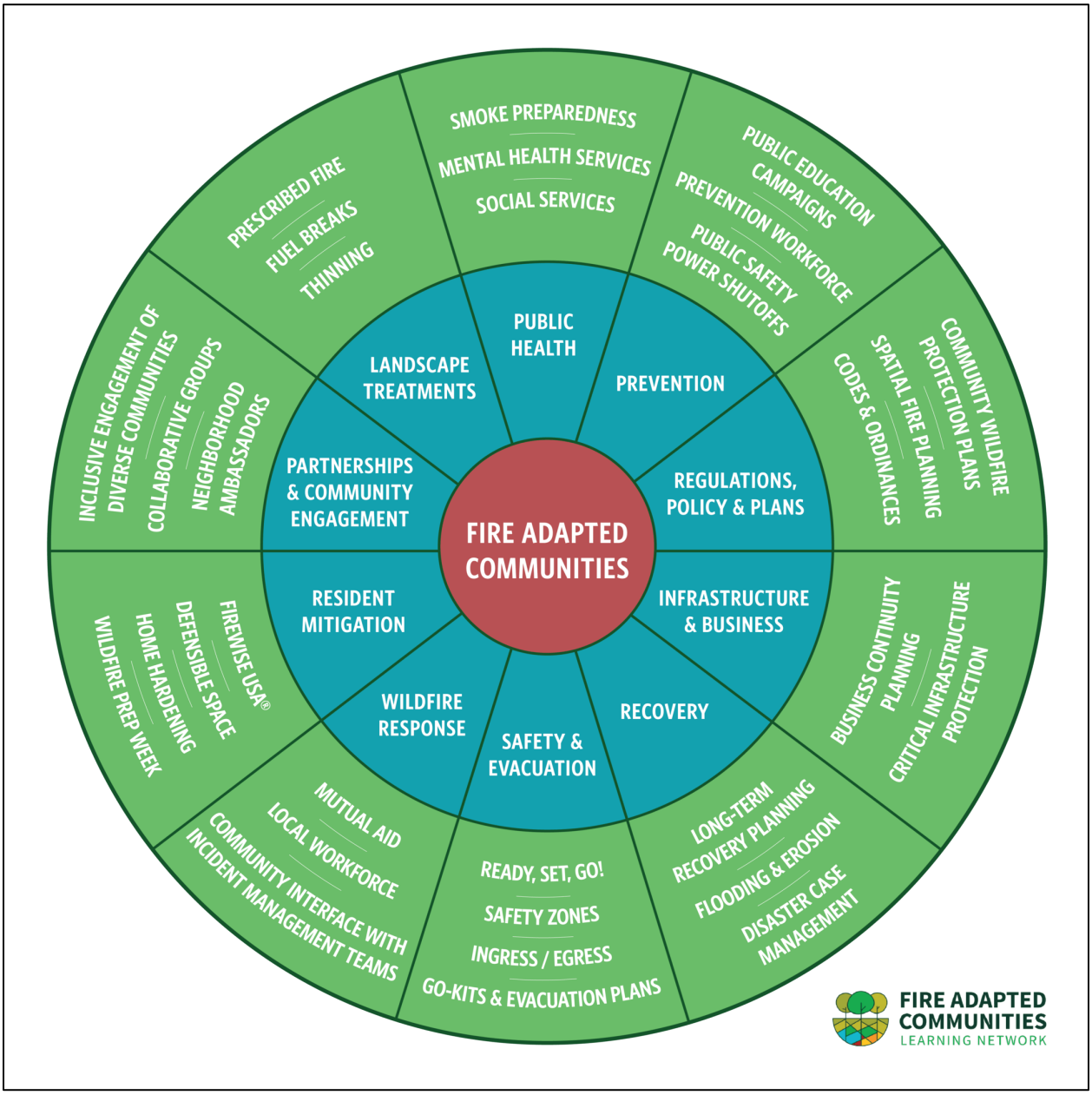
California's statewide framework for community wildfire resilience is informed by several existing conceptual frameworks that promote holistic wildfire adaptation and resilience. These conceptual frameworks are explained in more detail below, followed by a discussion of the integrated, multi-domain strategy for community wildfire resilience included in the remainder of this Roadmap.

Fire-Adapted Communities

The term "fire-adapted communities" (FAC) was originally defined in the 2009 *National Cohesive Strategy for Wildland Fire Management* and further refined into a comprehensive framework published by the Fire-Adapted Communities Learning Network (FAC Learning Network). FAC is a flexible and conceptual framework for promoting holistic fire adaptation and wildfire resilience at the community scale. Importantly, FAC is not a formal designation or certification program, and it is not intended to be used as a prescriptive "one-size-fits-all" approach because every community's journey to living better with fire is unique. The FAC framework has evolved over the last two decades and continues to evolve.

The key components of the FAC framework can be conveyed in terms of **what** needs to be done, **who** needs to be involved, and **when** actions need to occur. **Figure 2** below, also referred to as the "FAC wheel," includes a broad range of topics around **what** needs to be done to advance community wildfire adaptation and resilience on the inner blue ring of the wheel; along with examples of the types of programs and activities that communities can undertake to adapt and build resilience to wildfire under each topic, as shown in the outer green ring. FAC concepts are included throughout this Roadmap, and some components of this Roadmap may align with FAC-related sectors or related programs or activities under individual sectors.

Figure 2 What is a Fire-Adapted Community?

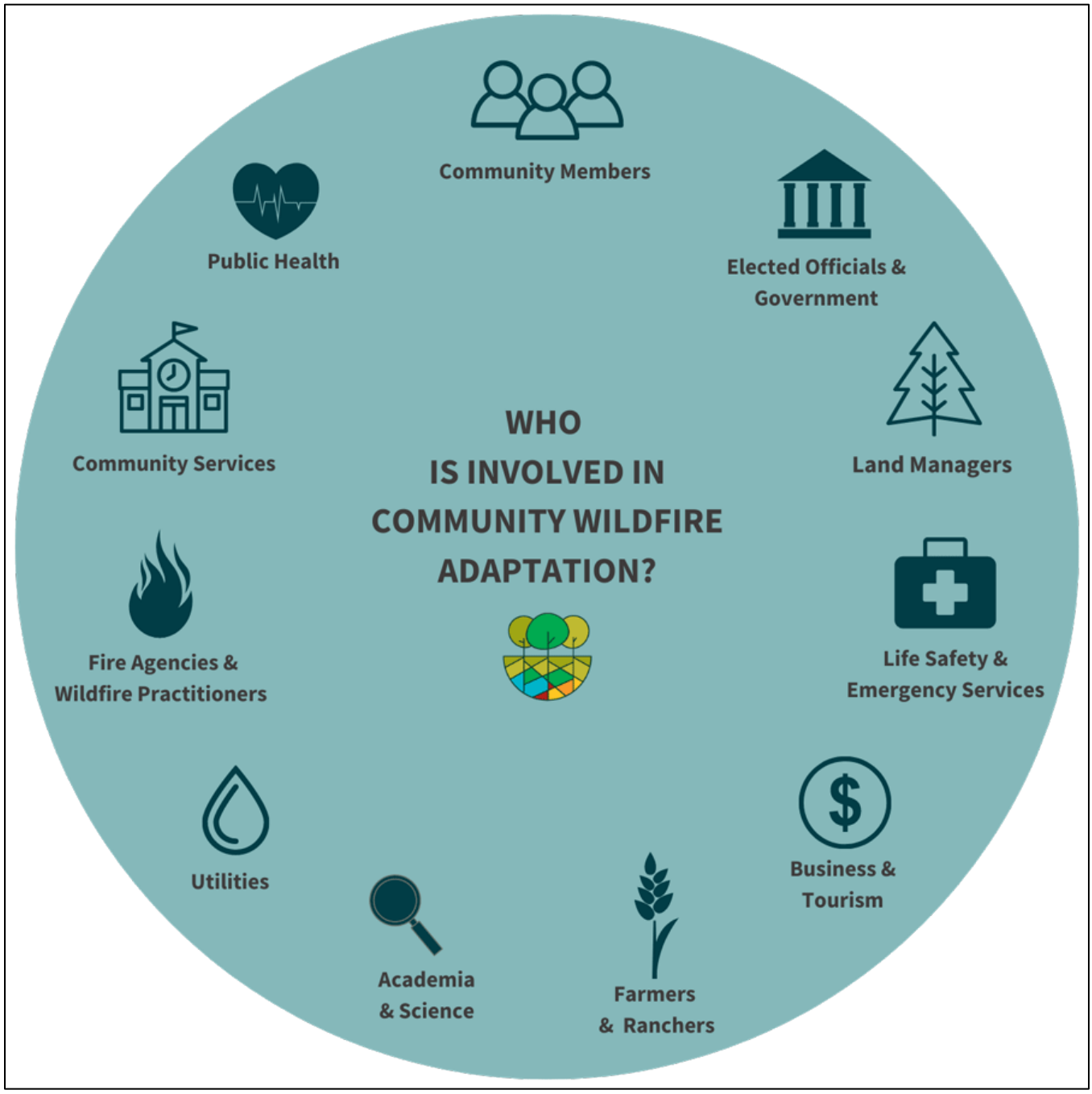


Source: **FAC Learning Network 2024a**.

Figure 3 below illustrates **who** is involved in fire adaptation and resilience, focusing on the diversity of people and institutions that must come together across sectors to play specific roles or work together as partners. As noted by the FAC Learning Network, "everyone has a role to play in fire adaptation and building community wildfire resilience because the work is complex and requires the collaboration of the whole community" (FAC Learning Network 2024b). Like the FAC wheel graphic shown above, this graphic is not meant to be exhaustive. It identifies general segments of organizations and people to represent the broad and diverse experience needed to pursue fire adaptation. Within each of these groups, many subcategories or specific roles in each community may exist. For example, the "Government" segment can include local, state, tribal, or federal governments, while the "Public Health" segment can include local

hospitals, local public or environmental health authorities, non-profit organizations focused on providing clean air spaces, or organizations providing social services to homeless community members.

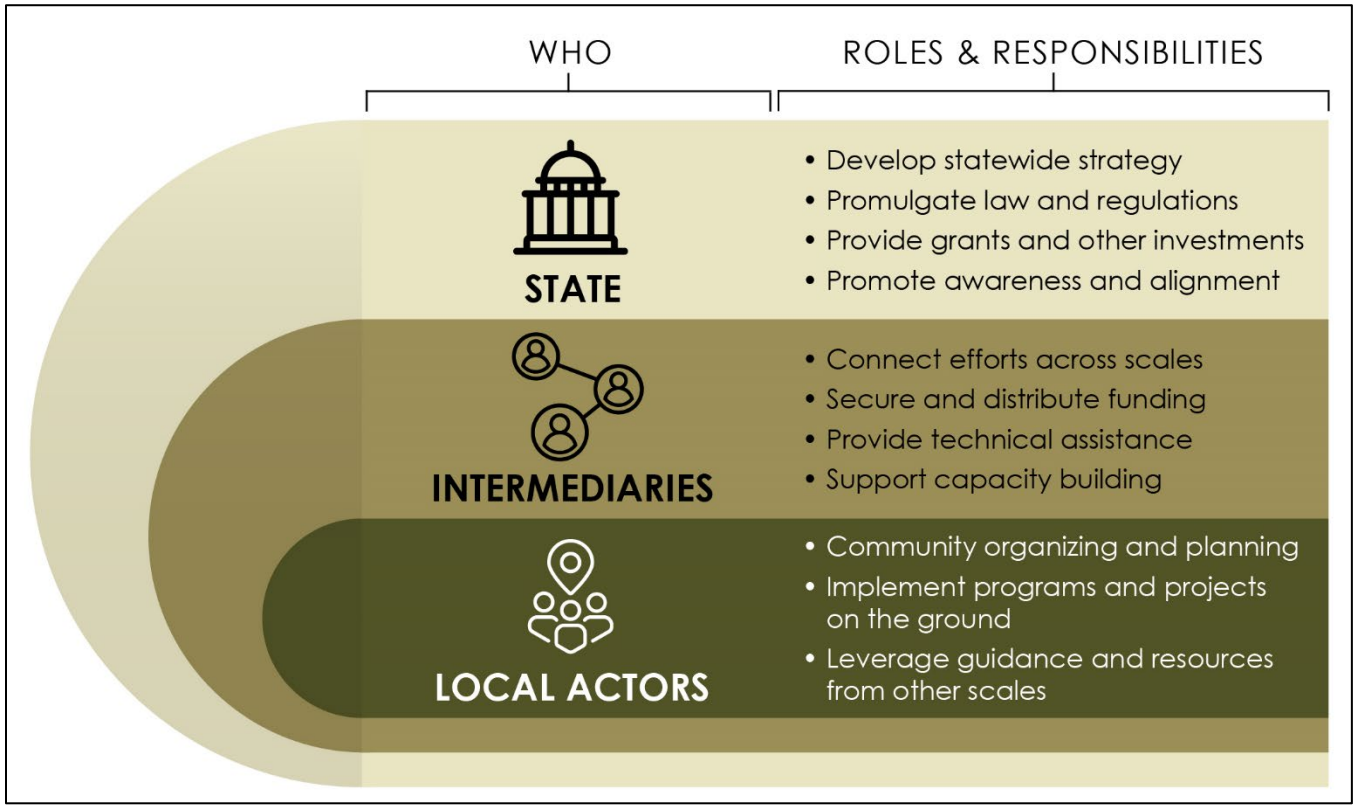
Figure 3 Who is Involved in Community Wildfire Adaptation?



Source: **FAC Learning Network 2024b**.

Importantly, the diverse actors and institutions that work on fire adaptation and community resilience play key roles at various scales in the **fire adaptation system**, as illustrated in **Figure 4** and described further below.

Figure 4 California's Multi-Scalar Fire Adaptation System



Source: **Developed by Ascent in 2025**.

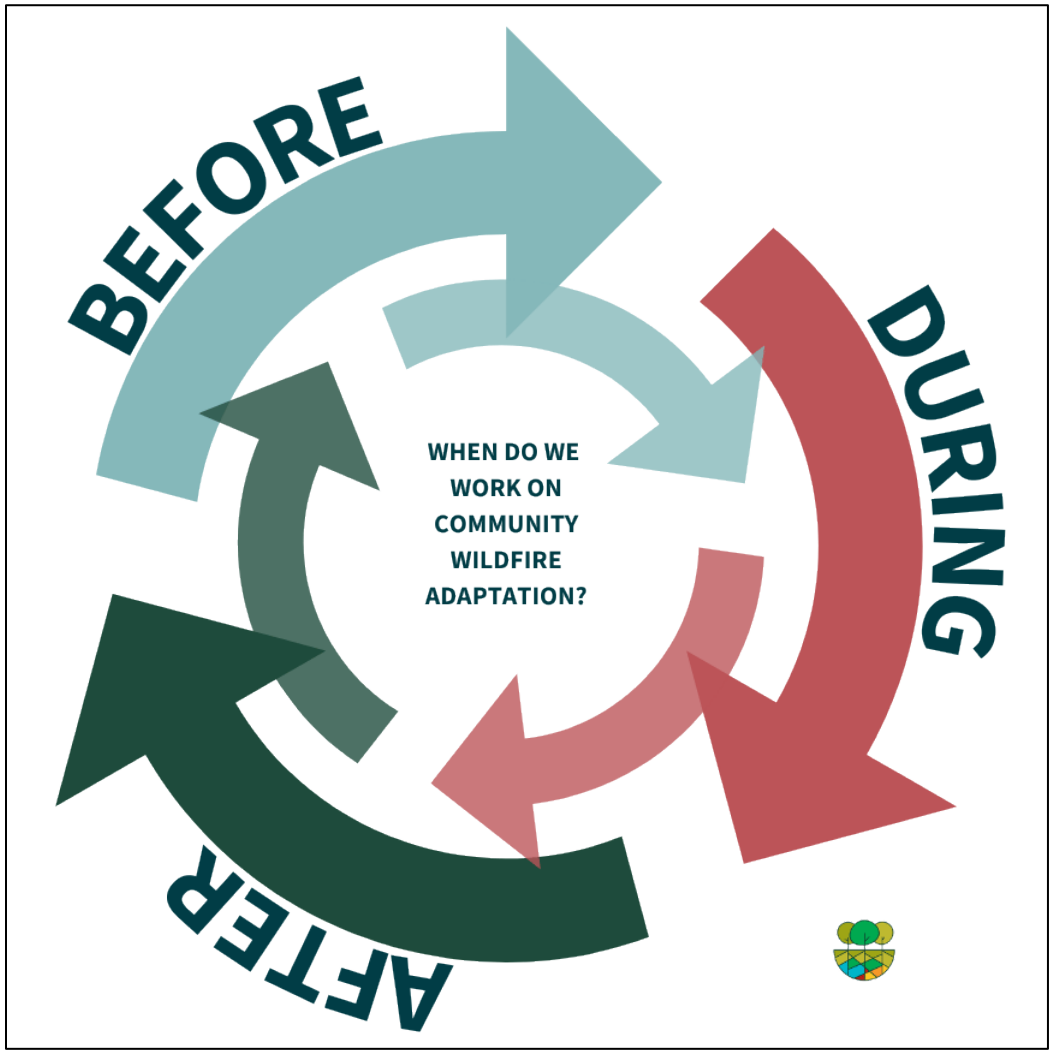
- At the **statewide** scale of the system, state and federal agencies, non-profits, educational institutions, and others play critical roles by promoting alignment of strategies and planning frameworks; promulgating and updating laws and regulations; developing analytical tools, models and data-sharing platforms or dashboards; and allocating grants and other investments for programs and projects implemented at the regional or local scale.
- **Intermediaries,** operating at the local or regional scale, play a critical role in translating statewide policy and strategy into more specific regional or local plans, distributing funding, providing technical assistance and capacity building, and connecting statewide efforts to regional and local efforts on the ground. They can help de-conflict plans and strategies being developed at all scales. Intermediaries can also help local groups coalesce and support their development by providing tools and tailored support for unique local wildfire resilience needs. Examples of intermediaries in the current system, including, but not limited to:
  - State conservancies.
  - Regional Forest and Fire Capacity Program (RFFC Program) grantee organizations serving large multi-county regions or subregions.
  - County coordinators placed through the County Coordinators program, funded by CAL FIRE and managed by the California Fire Safe Council.
  - Special districts, such as Resource Conservation Districts (RCDs).

  - Joint powers authorities (JPAs) formed for the express purpose of wildfire resilience at the regional or countywide scale (e.g., Marin Wildfire Prevention Authority).

- At the **local scale**, wildfire resilience actors and needs are highly variable. In some cases, community actors at this scale are collecting their own resources and developing strategies and plans and turning those into action. In other cases, people are not yet organized, or they need additional external resources and funding to enact their vision. In most cases, regional or State resources are needed to expand the pace and scale of the programs and projects people are working on to ensure all community members have access and that shared wildfire risk is truly mitigated. Actors at the local scale are highly diverse and the ways they organize themselves are variable. However, no matter the form or community context, work at this scale requires people coming together to take collective action across a range of fire adaptation issues.

Finally, **Figure 5** below illustrates **when** work on fire adaptation and resilience occurs throughout the entire fire cycle (i.e., before, during, or after wildfire). As noted by the FAC Learning Network, "the work of wildfire adaptation is neither linear nor homogenous. Communities (or portions of communities) may be in a state of recovery while simultaneously preparing for, or responding to, another wildfire" (FAC Learning Network 2024c). Accordingly, the State, local communities, and other actors may need to collaborate and consider what actions need to be taken before, during, or after a wildfire to help communities better prepare for, respond to, and recover from wildfires. "Different partners may have different roles at different points in the cycle and recovery can often take years. Many actions, tools or resources may also make sense throughout the entire fire cycle (either for a whole community or for part of a community)."

Figure 5 When Do We Work on Community Wildfire Adaptation?



Source: **FAC Learning Network 2024c**.

Regional Wildfire Mitigation Program

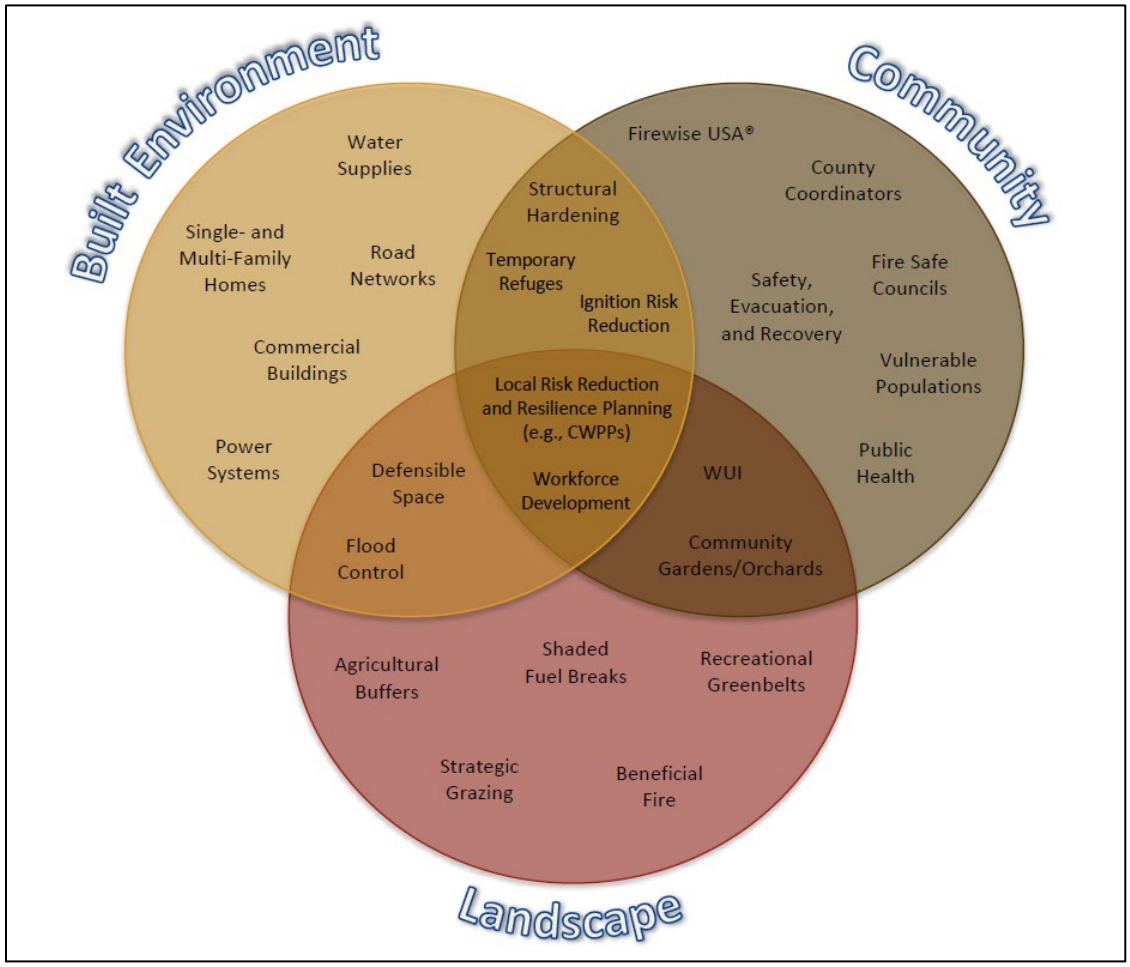
A newer conceptual framework, known as the Regional Wildfire Mitigation Program (RWMP), was developed by an interdisciplinary team of wildfire resilience experts to provide a scalable and replicable model for assessing and reducing multiple risks and building community wildfire resilience. The RWMP focuses on multiple domains at a regional or countywide scale, and it was first conceptualized as a countywide approach for Santa Barbara County (Moritz et al. 2022). The RWMP process includes scoping and assessing risks, exposure, and vulnerability of people, resources, and assets; and identifying and prioritizing implementing strategies and actions to reduce risks and increase resilience across three conceptual domains, including:

- The **Built Environment domain**, which encompasses all types of buildings (e.g., homes, businesses, institutions) and infrastructure (e.g., roads, bridges, energy grid, water supply) that are present in a community and may be at risk to wildfires, particularly older structures and infrastructure that may need to be retrofitted to reduce risk.

- The **Landscape domain**, which includes natural and working lands of all types where wildfires first ignite and can spread through vegetation, such as forests, grasslands, scrublands, or chapparal; along with managed open spaces such as parks, agriculture, or other uses, which can also be vulnerable, but also can slow the spread of wildfires.
- The **Community domain,** which includes a diverse range of people, institutions, and organizations that interact across sectors and scales, forms the connective tissue for planning, organizing, capacity-building, and implementing actionable programs and projects on the ground across both the built environment and landscape domains.

Figure 6 below conceptually depicts the three domains, examples of strategies or interventions within each domain, and examples of points of connection or overlap across domains. This diagram is conceptual and does not fully represent how these three domains interact in any given community or region. For example, the Community domain is not intended to describe a place or be limited to specific geographies, and the Community domain intersects or threads across the Built Environment and Landscape in ways that are highly complex and variable from place to place.

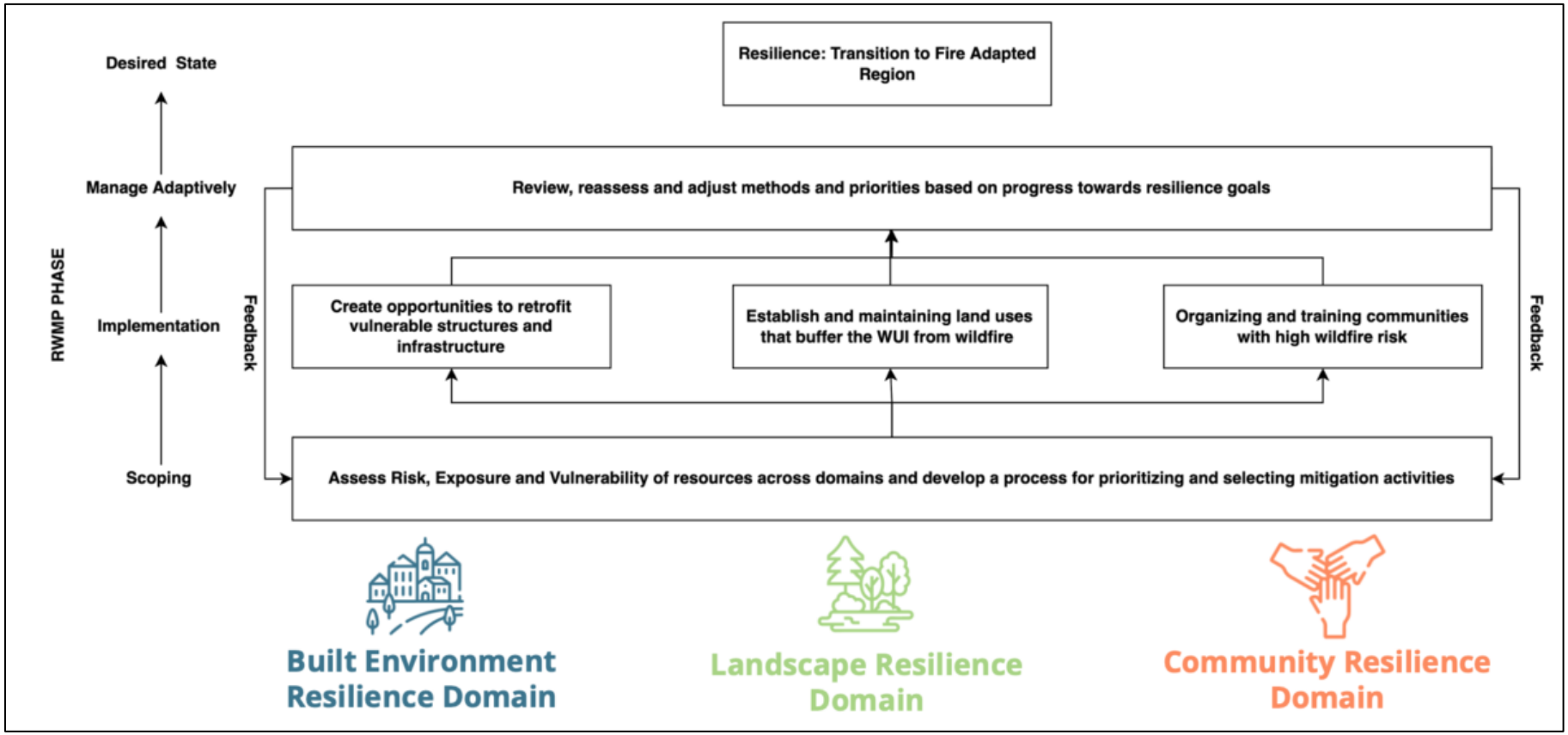
Figure 6 Three Domains of Wildfire Resilience



Source: **Based on Moritz et al. 2022**.

Figure 7 illustrates a conceptual model for applying the RWMP across these three domains at the regional scale through a multi-phased scoping, planning, prioritization, implementation, and adaptive management process.

Figure 7 RWMP Conceptual Model



Note: WUI = wildland-urban interface.

Source: **Santa Barbara RWMP 2025**.

The RWMP model was developed to focus primarily on WUI risk reduction at the regional scale. It was not originally intended to be used at a statewide scale or encompass the broader range of fire adaptation and resilience topics included in the FAC framework. Importantly, the RWMP conceptual model is presented here for illustrative purposes only and is not intended to be presented as a one-size-fits-all approach to assessing or reducing risk, as each community or region's process may be unique. However, the RWMP may be useful to communities or regional actors seeking to employ a comprehensive approach to regional wildfire resilience.

An Integrated, Multi-Domain Strategy for Statewide Community Wildfire Resilience

This Roadmap combines the three domains used in the RWMP framework with key topics in the FAC framework to provide a holistic and integrated multi-domain approach to supporting community wildfire adaptation and resilience statewide. It recognizes some of the key relationships between domains as well as their unique characteristics and needs, and promotes a science-informed approach to building wildfire resilience across California's diverse communities. Adjustments to the scope and extent of each domain ensure that key topics in the FAC framework are included (e.g., public health and recovery are included under the "Community" domain).

Table 2 below provides a summary of the 12 core objectives under the three domains in this Roadmap. Each domain is described in more detail later in this Roadmap, along with the core objectives and recommended actions designed to further statewide progress in achieving the core objectives. While this Roadmap organizes core objectives under the three domains, it is important to note that several core objectives inherently span across all domains. Their placement within specific domains reflects the Roadmap's structure and is not a limitation of their scope.

Table 2 Three Domains and Core Roadmap Objectives

Domain	Core Objectives
Built Environment	▪ Increase Structural Hardening and Defensible Space ▪ Increase Critical Infrastructure Hardening ▪ Reduce Infrastructure-Related Ignition Risks and Associated Community Impacts ▪ Connect Communities with Tools for Data-Informed Decision Making
Landscape	▪ Prioritize and Accelerate Strategic Landscape Treatments ▪ Promote Multi-Benefit Land Stewardship Solutions ▪ Leverage Science-Based Frameworks for Measuring Progress Across Domains
Community	▪ Enhance Local and Regional Planning and Capacity Building Programs ▪ Reduce Unwanted Human-Caused Ignitions ▪ Strengthen Workforce and Local Economies ▪ Improve Safety, Evacuation, and Recovery Programs ▪ Address Public Health Impacts of Wildfire

Source: **Compiled by Ascent in 2025**.

Cross-Cutting Strategies for Advancing Community Wildfire Resilience

Advancing community wildfire adaptation and resilience statewide will require coordinated and accelerated action across scales, sectors, and domains. In addition to the specific objectives and recommended actions identified under each domain, several cross-cutting strategies are identified that are critical to the success of this Roadmap. These cross-cutting strategies, described in **Table 3** below, are closely aligned with the vision and guiding principles outlined previously. Recommended actions included in the following Roadmap sections for each domain are tagged with one or more applicable cross-cutting strategies using the corresponding abbreviated "Strategy ID" denoted in the table. **Attachment A** includes a summary matrix of all recommended actions included in this Roadmap with applicable cross-cutting strategies.

Table 3 Cross-Cutting Strategies

Strategy ID	Strategy & Description
Equity	**Support Equitable and Community-Centered Wildfire Resilience:** The State will promote equitable and community-centered approaches to wildfire resilience by prioritizing people and the places in which they live, especially vulnerable and historically underserved communities. Meaningful engagement should go beyond outreach and should be conducted in the language of the community, at times and locations that are accessible, and in ways that are culturally competent and trauma informed. Trusted local organizations should be leveraged as effective messengers, where possible.
Collaboration	**Enable Collaboration, Partnerships, and Integrated Governance:** The State will continue promoting governance and decision-making structures that are collaborative, build capacity, and empower both regional and local partners to take holistic, integrated action across domains. The State will also encourage and foster cross-sector partnerships with private, non-profit, academic, and philanthropic interests. Recognizing the value of ongoing dialogue and shared learning, collaboration should be cultivated over time through sustained engagement, trust building, and mutual support.
Data	**Promote Data-Informed Decision-Making:** The State will promote and support the ongoing evolution of innovative tools, platforms, models, datasets, and guidance, to support more effective hazard and risk assessments, regional and local planning, built environment and landscape interventions, community awareness and engagement, transparency and accountability, and other needs across the prevention, mitigation, response, and recovery spectrum. The State may support or partner with other efforts led by academic, research, or private sector institutions (e.g., WUI Data Commons, Wildfire Science & Technology Commons), while in other cases the State may lead certain efforts to provide consistent statewide platforms or resources to support regional/local actors.
Funding	**Advance Strategic Funding Initiatives to Meet Regional and Local Needs:** The State will continue to fund critically needed programs that support wildfire planning, capacity-building, and implementation projects on the ground across domains. However, key strategic focus areas moving forward should include: (1) reducing the administrative burden for competitive State wildfire funding sources; (2) providing more predictable

Strategy ID	Strategy & Description
	and stable ongoing funding sources (e.g., block grants); (3) accelerating funding for priority programs or projects that are consistent with priorities in adopted regional and local plans, such as RPPs, CWPPs, LHMPs, general plan safety elements, or other relevant plans; and (4) evolving statewide funding programs to remove barriers and allocate resources where they are needed most, while also avoiding one-size-fits-all requirements and respecting unique regional or local contexts.
Streamlining	**Streamline and Align Regulations, Processes, and Policies:** The State will work to reduce administrative, regulatory, and procedural barriers that slow down the pace and scale of wildfire resilience projects across California. This includes streamlining environmental review, regulatory permitting, and related compliance processes, aligning regulations across agencies, and providing clear and consistent guidance to reduce confusion and delays. Where possible, the State will also identify opportunities to integrate wildfire resilience into existing planning and funding mechanisms, helping ensure consistency and efficiency while supporting multi-benefit outcomes and maintaining core environmental protections and public health safeguards.
Workforce	**Strengthen the Wildfire Resilience Workforce Across Sectors and Communities:** The State will invest in the development, diversification, and retention of a skilled wildfire resilience workforce to meet the growing demand for wildfire resilience efforts. This includes supporting workforce development pipelines across sectors such as utilities, construction, and planning, among others. Special attention will be given to improving equitable access to training and employment opportunities, particularly in vulnerable communities, and to aligning workforce development with community and regional resilience priorities.
Technical Assistance	**Provide Technical Assistance to Build Local Capacity:** To ensure that all communities, especially those with limited resources or technical expertise, can access, apply for, and implement wildfire resilience efforts, the State will expand access to technical assistance. This includes supporting regional and local actors with planning, project development, grant management, and regulatory compliance, among other items. Technical assistance will be tailored to community contexts and may be delivered through various modes.
Education & Outreach	**Promote Public Education, Awareness, and Engagement:** The State will continue to support education and outreach efforts that inform and empower residents, businesses, and community institutions to understand wildfire risks and take meaningful action. This includes expanding access to risk communication tools, culturally and linguistically appropriate messaging, and trusted community engagement channels. A strong focus should be placed on reaching vulnerable populations and building long-term community trust and participation in resilience efforts across domains.
Innovation	**Accelerate the Use of Innovation and Technology**: The State will foster a culture of innovation by supporting the development, testing, and scaling of transformative approaches to wildfire resilience. This should include not only emerging technologies, but also novel practices, partnerships, and systems that chart new pathways for wildfire risk reduction. Innovation efforts should span sectors to co-create solutions that are adaptable and responsive to California's diverse needs, engaging with academic institutions, philanthropy, private industry, and community organizations.

Notes: CWPP = community wildfire protection plan; LHMP = local hazard mitigation plan; RPP = regional priority plan; State = State of California government; WUI = wildland-urban interface.

Source: **Compiled by Ascent in 2025**.

1. BUILT ENVIRONMENT

Goal: Reduce risk and bolster the resilience of buildings and infrastructure.

Broadly, the built environment domain encompasses all types of buildings (e.g., homes, businesses, institutions) and infrastructure (e.g., roads, bridges, energy, water) throughout the state. Together, these assets form the backbone of California's communities, providing shelter, economic stability, and essential services that are vital for daily life. As wildfire threats increase, driven by several factors such as climate change, increased fuel loads, and WUI development (among many others), reducing the built environment's vulnerability to wildfires and bolstering its resilience is critical. A resilient built environment both protects human lives and property and maintains the stability and functionality of our communities. The built environment can also be a source of risk (e.g., ignitions from energy infrastructure), and thus reducing risks generated by the built environment is also included under this domain.

Achieving resilience in the built environment requires a comprehensive approach that addresses multiple objectives, with a key focus on "mitigations that matter" in reducing wildfire susceptibility and risk. This concept emphasizes the importance of implementing effective and impactful measures that directly address the most pressing vulnerabilities of the built environment, along with reducing potential risks generated by the built environment. Additionally, mitigations must be appropriately scaled and prioritized based on local and regional context and needs.

Photo Credit: **CAL FIRE**.

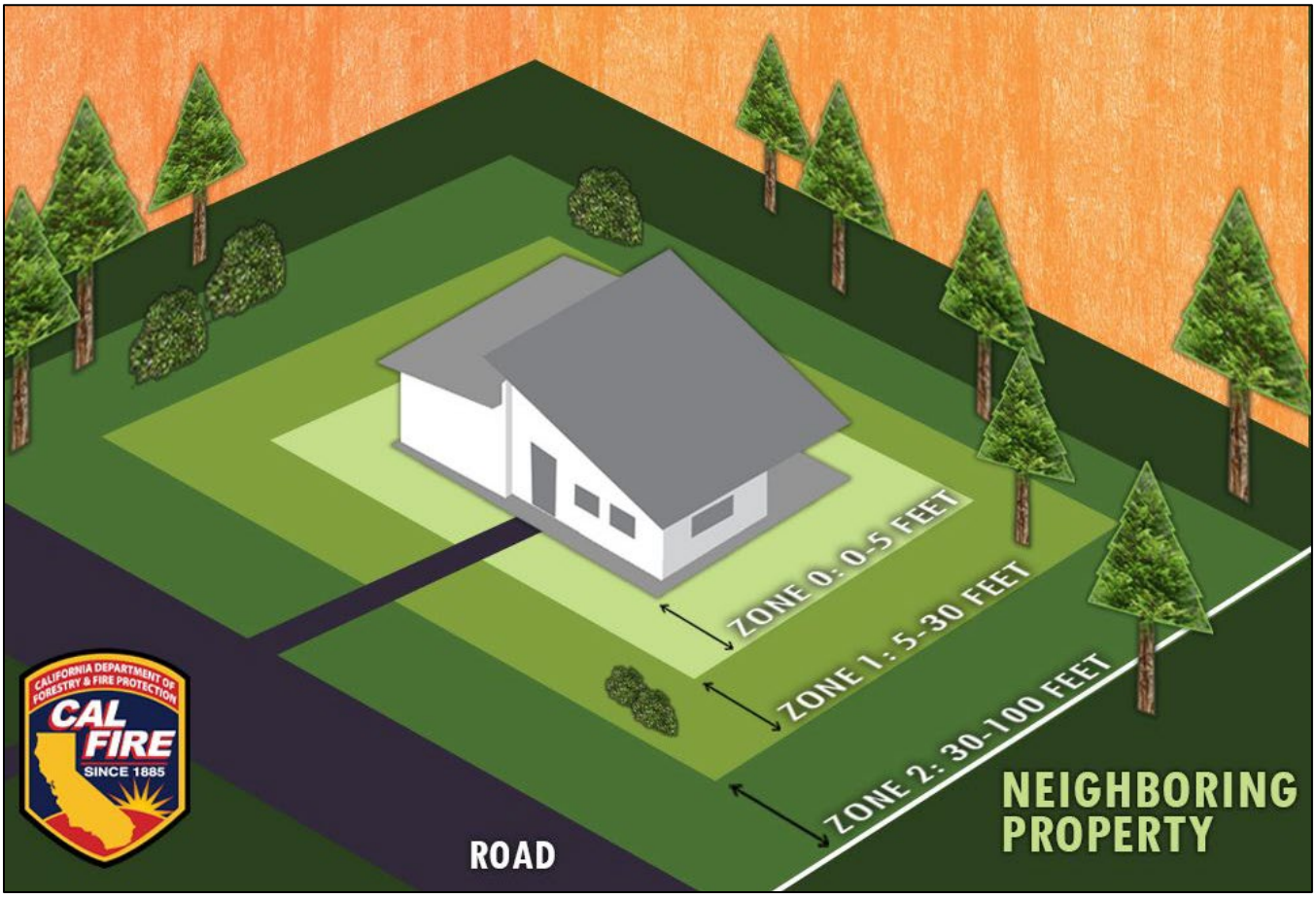
What is Already Being Done?

Various efforts are already in place or underway across California to reduce risk in the built environment. Two of the most prominent ways to reduce risk in the built environment, generally, are **hardening structures** and **maintaining defensible space** in developed areas that are at increased risk, typically in or near the WUI.

- **Structural hardening** includes either retrofitting older buildings that were constructed prior to modern fire codes (i.e., 2008 or earlier) using non-combustible or fire-resistant materials in roofing, siding, windows, vent screens, decking; or building new buildings using these techniques as defined in the latest codes and standards.
- **Defensible space** refers to thinning or removing vegetation or other combustible material near structures in developed areas or establishing and maintaining an ignition-resistant zone around structures, which can slow or stop the spread of fire. This space is typically divided into three zones based on distance from structures, with each zone requiring different vegetation management practices to reduce fire risk (see **Figure 8** below, which depicts each of the three zones).

Scientific research has demonstrated that structural hardening and defensible space practices are among the most effective practices to improve structural survivability. Both structural hardening and defensible space are guided by various codes and regulations, notably the new **California Wildland-Urban Interface Code (WUI Code)** adopted in February 2025, which is now contained in Title 24, Part 7 of the California Building Code. The California WUI Code superseded the previous Chapter 7A standards and establishes a consolidated, unified set of minimum construction standards for the protection of life and property. It requires construction materials and methods to resist the intrusion of flames, radiant heat, and embers projected by wildfire, and contributes to a systematic reduction in conflagration losses. Similarly, the California WUI Code, along with Public Resources Code Section 4291, establishes minimum defensible space requirements around applicable structures.

Figure 8 Defensible Space Zones



Source: **County of Placer n.d.**

Additionally, regarding defensible space, Assembly Bill (AB) 3074 (Friedman 2020) requires new regulations to establish an ember-resistant "Zone 0" within five feet of structures in Very High Fire Hazard Severity Zones (FHSZs). On February 6, 2025, Governor Newsom issued an executive order (N-18-25) directing the California State Board of Forestry and Fire Protection (BOF) to complete the "Zone 0" rulemaking process by the end of 2025.

To help accelerate structural hardening and defensible space efforts at the neighborhood and community level, the **California Wildfire Mitigation Program (CWMP)** was established. This program, developed in partnership between CAL FIRE and the California Governor's Office of Emergency Services (Cal OES) pursuant to AB 38 (2019), is a statewide program that funds structural hardening, defensible space, and vegetation management projects in high-risk neighborhoods, focusing on socially vulnerable communities and providing financial assistance for low- and moderate-income households. Lake, Siskiyou, Shasta, El Dorado, Tuolumne, and San Diego Counties were prioritized as the initial demonstration counties for the CWMP, as they exemplified a strong overlap of high wildfire risk and high social vulnerability at the parcel and census-tract level. The CWMP dashboard includes all progress that has been made to date under the program.

In addition to the CWMP, an array of additional programs and initiatives are being implemented across the nation and in California, aimed at promoting community wildfire resilience through structural hardening and defensible space. Some of these programs include:

- **Firewise USA® Recognition Program.** The National Fire Protection Association (NFPA) administers the Firewise USA® recognition program, which provides a collaborative framework to help neighbors reduce fire risk and better mobilize across communities at the local level. This program is part of California's efforts to ensure that communities are prepared for wildfire, and the Office of the State Fire Marshal's (OSFM's) new Community Wildfire Preparedness and Mitigation Division works to assist local communities in receiving this designation, where over 740 communities have already achieved the designation (NFPA 2022).
- **Wildfire Prepared Home™ Program.** The Wildfire Prepared Home™ program through the Insurance Institute for Business & Home Safety (IBHS) is a voluntary program that uses science-based home hardening data to reduce wildfire risk. The program's efforts are intended to implement a system of preventative measures for homes and yards to protect against wildfire. A Wildfire Prepared Home™ designation is beneficial because it exemplifies a home with reduced wildfire risk and makes homeowners eligible for insurance discounts under the California Department of Insurance's (CDI's) "Safer from Wildfires" initiative. Currently, the program is accessible to single-family households of up to three stories in California and is designed to address wildfire risk reduction at the parcel level.
- **Safer from Wildfires Initiative.** The Safer from Wildfires initiative was created by an interagency partnership between Insurance Commissioner Ricardo Lara and the emergency response and readiness agencies in Governor Gavin Newsom's administration in 2022. Safer from Wildfires is based on a ground-up approach to wildfire resilience with three layers of protection—for the structure, the immediate surroundings, and the community. New regulations promulgated under the initiative require that insurance companies operating in California must provide discounts if homeowners have implemented specific property-level defensible space and structural hardening measures based on a unified list of mitigation measures that was approved by the partnership agencies.
- **Local Programs.** Communities across the state are enacting voluntary programs aimed at bringing existing homes up to current building code standards and implementing defensible space to increase wildfire resilience. Funding assistance is often a key component of these programs to support residents' ability to participate. As an example, the Mendocino County Fire Safe Council is implementing "Defensible Space Assistance for Income-Eligible," which is a program to help low-income seniors and physically disabled persons adhere to defensible space regulations (LCI 2022b).

Beyond reducing vulnerability through measures that mitigate physical risk to the built environment, a truly resilient built environment must also minimize its potential contribution to wildfire ignition and risk. Notably, electric utilities play a significant role in preventing ignitions across the state. According to the California Public Utilities Commission (CPUC), electric utility infrastructure has historically been responsible for less than 10 percent of reported wildfires, but fires attributed to power lines consist of roughly half of the most destructive fires in California history (CPUC 2024a). This reality underscores the need for urgent action to ensure this trend

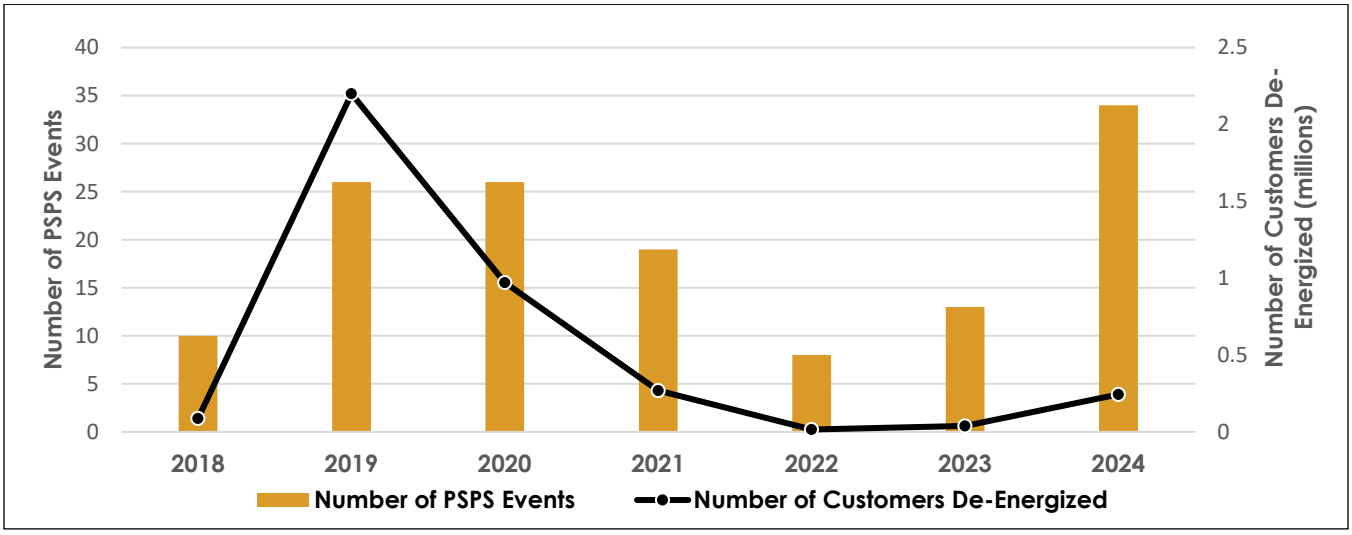
does not continue. Some examples of existing efforts to prevent or reduce ignitions from electric utility infrastructure are listed below.

- **Utility Wildfire Mitigation Plans**. Senate Bill (SB) 901, introduced by Senator Dodd in 2018, required electric utilities to prepare a wildfire mitigation plan (WMP) that includes protocols for vegetation management, infrastructure inspections, deenergizing portions of the electrical distribution system, and actions the utility will take to ensure that its system will achieve the highest level of safety, reliability, and resilience, among other elements. At their core, WMPs have a strong emphasis on ignition prevention, as they are actionable fire prevention plans that assess overall ignition probability and estimated wildfire consequences along electric utility lines and equipment.
- **Infrastructure System Hardening**. Across California, electric utilities are already taking steps to harden their infrastructure, consistent with requirements outlined in WMPs such as deploying covered conductors, installing fire-resistant metal/composite poles, and undergrounding overhead infrastructure—which refers to either: (1) the conversion of existing overhead electric distribution and transmission infrastructure, which includes poles, wires, and related equipment, to underground facilities; or (2) the construction of new electric lines, line extensions, and service extensions built underground. Together, these initiatives have proven to make wildfire-prone areas safer, along with providing an array of other benefits. When it comes to undergrounding, about 33 percent of California's more than 200,000 miles of distribution lines have been undergrounded to date (CPUC 2024b).
- **Public Safety Power Shutoff Events**. While controversial, investor-owned utilities across the state have the authority to issue PSPS events within the bounds of requirements and guidance from the CPUC. If enacted, PSPS events proactively cut power to electrical lines as a measure of last resort if the utility believes that there is an imminent and significant risk that high winds may topple electrical lines or cause major vegetation-related issues leading to increased risk of wildfire ignition. **Figure 9** below displays the number of PSPS events that have occurred across the state from 2018 to 2024, along with the number of customers who were de-energized as a result.

> "**While PSPS events may reduce the risk of utility-associated wildfires, [they] can leave communities and essential facilities without power, which brings its own risks and hardships, especially for vulnerable communities and individuals**" (CPUC 2024c).

While this subsection provides a snapshot of some of the key efforts being taken across the state, numerous additional programs, initiatives, and other efforts are enhancing the resilience of California's built environment. By building on these efforts and continuing to innovate and expand, California can further reduce wildfire risk and ensure that our homes, businesses, and critical infrastructure are better prepared for wildfire.

Figure 9 Number of Statewide Public Safety Power Shutoff Events from 2018 to 2024



Notes: The data presented in this figure are the aggregate totals across all tracked investor-owned utilities, which include Liberty Utilities, Pacific Gas & Electric, PacifiCorp, San Diego Gas & Electric, and Southern California Edison / PSPS = Public Safety Power Shutoff.

Source: CPUC 2025.

Built Environment Objectives and Recommended Actions

The objectives and recommended actions listed in **Table 4** below (and further detailed in the following subsections) aim to reduce the vulnerability of California's buildings and critical infrastructure to wildfire. They focus on advancing practical, high-impact solutions that can be scaled to local needs, such as improving defensible space, hardening buildings and infrastructure, minimizing ignition risks, and equipping communities with the data and tools needed for informed decision-making. These efforts can work in tandem to increase safety, continuity, and resilience across the built environment.

Table 4 Objectives and Recommended Actions – Built Environment

Objectives	Recommended Actions
Increase Structural Hardening and Defensible Space	**Action 1-1:** Support Local Implementation of Science-Based Standards
	Action 1-2: Develop Comprehensive Wildfire Mitigation and Risk Reduction Framework
	Action 1-3: Incentivize Resilient Rebuilding Efforts
	Action 1-4: Leverage and Expand the "Safer from Wildfires" Insurance Initiative
	Action 1-5: Diversify and Simplify Access to Mitigation Financing
	Action 1-6: Integrate Policy Review and Monitoring into Wildfire Mitigation
Increase Critical Infrastructure Hardening	**Action 1-7:** Insure and Harden Critical Community Assets
	Action 1-8: Strengthen and Protect Water Infrastructure Systems
	Action 1-9: Assess and Harden Transportation Infrastructure

Objectives	Recommended Actions
Reduce Infrastructure-Related Ignition Risks and Associated Community Impacts	**Action 1-10:** Establish Fire-Safe Roadways in Critical Wildland-Urban Interface Areas
	Action 1-11: Adopt and Utilize the Industrial Fire Precaution and Activity Level System
	Action 1-12: Expand Support for Electric Utility Systemwide Hardening Efforts and Technology Upgrades
	Action 1-13: Launch a Utility Wildfire Resilience Partnership Program
	Action 1-14: Improve Public Safety Power Shutoff Messaging
	Action 1-15: Prepare and Protect Vulnerable Populations for Public Safety Power Shutoff Events
Connect Communities with Tools for Data-Informed Decision Making	**Action 1-16:** Leverage New Platforms to Enable Data-Informed Decision Making
	Action 1-17: Finalize and Operationalize a Public Wildfire Catastrophe Mode
	Action 1-18: Inventory and Share Best Practices from Model Wildfire Mitigation Programs
	Action 1-19: Establish a Statewide Structural Hardening and Defensible Space Database
	Action 1-20: Report Structural Hardening and Defensible Space Data Publicly

Source: **Compiled by Ascent in 2025**.

Objective: Increase Structural Hardening and Defensible Space

While important steps have already been taken by the State, along with local and regional actors across the public and private sectors, more needs to be done to accelerate the pace and scale of structural hardening and defensible space at the parcel, neighborhood, and communitywide scales.

Action 1-1: Support Local Implementation of Science-Based Standards

Support the statewide transition to updated, science-based defensible space and structural hardening regulations by increasing local awareness and aligning local codes and policies with new State standards, including the forthcoming Zone 0 regulations and the California WUI Code. This comprehensive effort will empower action at the local level through proactive coordination and new initiatives around public education, inspection, financial assistance, technical support, and outreach delivered in partnership with local governments, community-based organizations (CBOs), and more. In parallel with this effort, adopt statewide data standards for home ignition vulnerability and community-level wildfire risk, which will help guide consistent implementation and enable integration with other statewide planning and mitigation programs. See also related objectives and actions under the Community domain.

Potential Actors: BOF, CAL FIRE, CBOs, Local Fire Agencies, Local Fire Safe Councils, Local Governments

Cross-Cutting Strategies: Collaboration, Data, Education & Outreach, Funding, Innovation, Technical Assistance

Action 1-2: Develop Comprehensive Wildfire Mitigation and Risk Reduction Framework

Building on the CWMP, the State is working to develop and introduce a broader wildfire home hardening and risk reduction framework. This framework aims to support vulnerable communities by helping them access State and federal funding while customizing home hardening and defensible space programs to fit each neighborhood's unique wildfire resilience needs. The framework will remain adaptable, evolving over time in response to community feedback.

Potential Actors: CAL FIRE, California Fire Safe Council (CFSC), CWMP JPA, Local Fire Safe Councils, Local Governments, NGOs

Cross-Cutting Strategies: Education & Outreach, Equity, Funding, Technical Assistance

Action 1-3: Incentivize Resilient Rebuilding Efforts

Increase the resilience of post-fire reconstruction by developing a streamlined, incentive-based program that encourages rebuilding to standards meeting or exceeding minimum requirements outlined in the California WUI Code, such as the IBHS Wildfire Prepared Home™ or other advanced standards. This could include: (1) creating a unified application process for property owners to access both State and federal recovery funds, contingent on requiring rebuilding projects to meet or exceed resilient rebuilding standards; (2) establishing an efficient permitting system to reduce bureaucratic challenges for rebuilds that meet enhanced standards; (3) partnering with the insurance industry to promote policy discounts for structures rebuilt to higher standards; and (4) periodically evaluating the programs' effectiveness and adjusting it as needed.

Potential Actors: CAL FIRE, Cal OES, California Department of Housing and Community Development (HCD), CDI, Federal Emergency Management Agency (FEMA), Insurance Companies

Cross-Cutting Strategies: Funding, Innovation, Streamlining

Action 1-4: Leverage and Expand the "Safer from Wildfires" Insurance Initiative

Collaborate across public and private sectors to leverage and expand the "Safer from Wildfires" initiative and related regulations. Efforts should focus on updates to the regulations to strengthen the connection between insurance pricing incentives and risk reduction investments, with a priority emphasis on science-based risk reduction standards for structural hardening and defensible space, prioritizing Zone 0 (i.e., "mitigations that matter").

Additionally, collaborative efforts should accelerate ongoing development, recognition, and scaling of risk reduction programs (e.g., Wildfire Prepared Home™, CWMP) to ensure that pricing incentives are connected to appropriately designed mitigations at both the property and neighborhood or community scales. This effort should also address the needs of vulnerable community members who are uninsured or underinsured due to affordability barriers.

Potential Actors: CAL FIRE, CDI, IBHS

Cross-Cutting Strategies: Collaboration, Equity, Funding

Action 1-5: Diversify and Simplify Access to Mitigation Financing

In coordination with appropriate public and private sector partners, identify and remove administrative and legislative barriers to financing mechanisms that help offset the costs of mitigation projects that do not qualify for deep subsidies (e.g., CWMP), while also protecting and maintaining the insurability of assets of mutual interest to both property owners and lenders. Some examples may include expanding voluntary property tax assessments (e.g., PACE financing districts), developing State tax rebates or credits, or working with private lenders to develop home equity loans or line of credit products designed exclusively for wildfire risk reduction projects. Pairing new mitigation project financing or incentives with insurance incentives through compliance with Safer from Wildfires (or equivalent) program standards should be a priority to maximize participation and align efforts.

Potential Actors: CAL FIRE, CDI, Financial Institutions, Insurance Companies

Cross-Cutting Strategies: Collaboration, Funding, Streamlining

Action 1-6: Integrate Policy Review and Monitoring into Wildfire Mitigation

Regularly review existing policies, regulations, and codes that may hinder or support wildfire risk mitigation in the built environment. This may include identifying barriers to implementing defensible space and structural hardening, as well as monitoring emerging policy proposals, legislative initiatives, and regulatory changes that could influence future mitigation efforts. This review process should include collaboration with local entities to ensure that policy insights are grounded in direct experience and inform adaptive planning and implementation.

Potential Actors: CAL FIRE, California Governor's Office of Land Use and Climate Innovation (LCI), CFSC, Local Fire Agencies, Local Fire Safe Councils, Local Governments

Cross-Cutting Strategies: Collaboration, Streamlining, Technical Assistance

Objective: Increase Critical Infrastructure Hardening

Strengthening the resilience of critical infrastructure, including water systems, transportation infrastructure, and other critical community assets, is essential to protecting communities, supporting emergency response, and maintaining essential services during and after wildfire events.

Action 1-7: Insure and Harden Critical Community Assets

Launch a comprehensive initiative to identify barriers and develop solutions for insuring and hardening critical community assets (e.g., infrastructure, public facilities, institutions) in high-risk areas. This may include conducting targeted assessments, creating financial or technical assistance programs to help local entities improve asset insurability, exploring mechanisms to expand access to affordable insurance coverage for public assets, and prioritizing upgrades to assets that serve vulnerable populations.

Potential Actors: California Department of Transportation (Caltrans), CBOs, CDI, Local Governments

Cross-Cutting Strategies: Equity, Funding, Technical Assistance

Action 1-8: Strengthen and Protect Water Infrastructure Systems

Identify and address vulnerabilities in water infrastructure systems that can fail, underperform, or become damaged during wildfires. Some key risks may include power loss, loss of water pressure, pipe and tank failure, and post-fire contamination, especially in systems with aboveground components (e.g., storage tanks, distribution pipelines, power-dependent pumps). Additionally, high-intensity fire events can melt plastic components, disable pumping stations, or compromise conveyance and treatment facilities, threatening long-term water quality and availability. This comprehensive effort, which should involve direct support from the State in the form of technical assistance, guidance, and funding for resilient water systems, may include:

- Conducting systemwide vulnerability assessments to identify high-risk, priority assets.
- Retrofitting or replacing vulnerable infrastructure with fire-resistant materials, burying exposed lines where feasible, and shielding aboveground assets from radiant heat.
- Installing redundant power systems or microgrids to maintain functionality during outages.
- Expanding strategically located water storage capacity and access points (e.g., dry hydrants).
- Creating and maintaining defensible space around key water facilities.
- An elevated level of coordination between local water districts, fire agencies, and emergency managers to ensure infrastructure design, upgrades, and emergency response plans are aligned.

Potential Actors: Cal OES, California Department of Water Resources (DWR), CPUC, Local Fire Agencies, Local Water Districts

Cross-Cutting Strategies: Collaboration, Funding, Innovation, Technical Assistance

Action 1-9: Assess and Harden Transportation Infrastructure

Conduct a statewide assessment to identify high-risk transportation infrastructure and corridors, and based on findings, implement targeted hardening and maintenance measures to increase system reliability during wildfires. Specific actions, which should be coordinated with appropriate entities to ensure cross-sector alignment, may include:

- Inventorying and prioritizing critical transportation routes in high-risk areas, and integrating this information into local planning efforts (e.g., community wildfire protection plans [CWPPs]).
- Retrofitting or replacing vulnerable infrastructure (e.g., bridges, signage, culverts, guardrails) with non-combustible materials, where feasible.
- Integrating fire-resistant design standards into transportation improvement projects, particularly in the WUI.
- Incorporating wildfire risk criteria into regional transportation plans, capital improvement programs, and climate adaptation efforts.

Potential Actors: CAL FIRE, Cal OES, Caltrans, Local Fire Agencies, Local Governments, Local Transportation Agencies

Cross-Cutting Strategies: Collaboration, Funding, Innovation, Technical Assistance

Objective: Reduce Infrastructure-Related Ignition Risks and Associated Community Impacts

Reducing wildfire ignition risks linked to infrastructure systems (e.g., electric utilities, roadways) remains a critical priority that requires proactive mitigation, improved operational practices, and stronger coordination across scales to protect communities.

Action 1-10: Establish Fire-Safe Roadways in Critical Wildland-Urban Interface Areas

Identify and prioritize topographically significant ridgelines and other critical locations in the WUI where vegetation along State highways and other key transportation corridors can be modified to create strategic roadside fuel breaks, which can reduce roadside ignition risk, improve firefighter access, slow fire spread, and enhance operational control during wildfire events. Implementation should be informed by local and regional fire behavior modeling, evacuation route planning, and input from fire management professionals. This effort will also aim to streamline permitting and maintenance agreements and ensure fuel break designs incorporate co-benefits such as pollinator habitat or erosion control, where feasible.

Potential Actors: CAL FIRE, Caltrans, Local Fire Safe Councils, Local Governments, RCDs, U.S. Bureau of Land Management (BLM), U.S. Forest Service (USFS)

Cross-Cutting Strategies: Data, Streamlining

Action 1-11: Adopt and Utilize the Industrial Fire Precaution and Activity Level System

Support the adoption and effective implementation of the Industrial Fire Precaution and Activity Level system across California to help reduce wildfire ignition risks associated with infrastructure and industrial and commercial operations. This system, currently being developed by the USFS to replace the Project Activity Level and Industrial Fire Precaution Level systems, establishes clear, weather-informed thresholds and activity restrictions for permitted operations based on wildfire risk.

Potential Actors: Air Districts, BLM, CAL FIRE, California Air Resources Board (CARB), California Geographic Coordination Centers, USFS

Cross-Cutting Strategies: Collaboration, Data, Innovation

Action 1-12: Expand Support for Electric Utility Systemwide Hardening Efforts and Technology Upgrades

Enhance guidance for electric utilities' continued efforts in: (1) hardening existing electric utility infrastructure in areas with the highest wildfire risk, as described in each utility's WMP; and (2) implementing technology upgrades to optimize their operations and to help prevent utility-related ignitions. Infrastructure system hardening includes undergrounding overhead infrastructure, deploying covered conductors, and installing fire-resistant metal/composite poles. Technology upgrades may include bolstering weather monitoring infrastructure for more precise tracking of high-risk weather conditions (e.g., heat, aridity, high winds), calibrating tracking tools to ensure data accuracy, installing enhanced sensors on energized lines, and integrating machine learning and artificial intelligence technologies. Federal funding (e.g., U.S. Department of Energy) may be available and will be critical to sustain and support hardening efforts (see Implementation section for additional info on funding). CPUC and the California Office of Energy Infrastructure Safety (Energy Safety) will continue to regulate and oversee the electric utilities' plans, accomplishments, and expenditures.

Potential Actors: CPUC, Electric Utilities, Energy Safety, Technology Developers, U.S. Department of Energy (DOE)

Cross-Cutting Strategies: Collaboration, Funding

Action 1-13: Strengthen and Scale the Utility Wildfire Resilience Partnership Program

Support the continued development and expansion of the utility wildfire resilience partnership program to align electric utility wildfire mitigation investments and projects with broader landscape and community resilience priorities. This program will provide a coordinated structure for collaboration on project planning, data sharing, and strategic co-investments by: (1) developing a shared planning framework to promote alignment between utility WMPs and other regional or community-based wildfire resilience plans (e.g., CWPPs); (2) facilitating cross-sector partnerships to integrate utility investments with adjacent non-utility projects; (3) promoting consistent and equitable engagement practices so that all communities (especially high-risk communities) have the opportunity to inform utility investments and planning; (4) leveraging shared data platforms to improve transparency, prioritization, and monitoring; and (5) providing State-supported facilitation and resources to help all regions and communities participate.

Potential Actors: CAL FIRE, CBOs, CPUC, Electric Utilities, Energy Safety, Local Fire Safe Councils, Local Governments

Cross-Cutting Strategies: Collaboration, Data, Funding, Technical Assistance

Action 1-14: Improve Public Safety Power Shutoff Messaging

Improve public messaging on the role of PSPS events in reducing ignition risk and how individuals and households can best prepare for these events, empowering local governments, CBOs, and other local partners as trusted messengers. Messaging efforts should be locally tailored and prioritize vulnerable populations that would be most affected by PSPS events, such as those that rely on power for medical needs, and additionally, should consider "messaging fatigue" realities already seen throughout the state.

Potential Actors: CBOs, CPUC, Electric Utilities, Local Governments

Cross-Cutting Strategies: Education & Outreach, Equity

Action 1-15: Prepare and Protect Vulnerable Populations for Public Safety Power Shutoff Events

Coordinate with electric utilities, local partners, and community representatives to adequately prepare and protect vulnerable populations from the adverse potential impacts of PSPS events. This requires whole community planning, with an emphasis to considerations for individuals who rely on power for medical devices and assistive technology. As such, this may include encouraging the establishment of mutual aid agreements, revising notice requirements, and informing residents about existing incentive programs for battery storage systems that can function during an outage (e.g., CPUC's Self-Generation Incentive Program), along with other measures.

Potential Actors: CBOs, CPUC, Electric Utilities, Local Governments

Cross-Cutting Strategies: Education & Outreach, Equity, Collaboration

Objective: Connect Communities with Tools for Data-Informed Decision Making

Expanding access to high-quality, actionable data is essential to advancing wildfire resilience in the built environment. Communities, agencies, and practitioners need better tools to understand local risk, prioritize mitigation investments, inform insurance and land use decisions, and track progress over time. Ultimately, this will enable more transparent, science-based, and equitable decisionmaking across all scales.

Action 1-16: Leverage New Platforms to Enable Data-Informed Decision Making

Support and leverage the widespread adoption and utilization of platforms currently under development, such as the WUI Data Commons and the Wildfire Science & Technology Commons, to enable more data-informed decision making, policy development, and collaboration. The WUI Data Commons will provide a shared, open-access platform that integrates various datasets relevant to wildfire risk in the WUI (e.g., housing density, vegetation, fire history, topography, local planning policies), and as such, it can help actors across multiple scales identify high-risk areas, align mitigation investments, evaluate land use planning decisions, support grant applications, and monitor changes over time. The Wildfire Science & Technology Commons will offer a collaborative platform to access science, artificial intelligence-driven models, and shared knowledge aimed at accelerating technological innovations for wildfire mitigation. Advancing awareness, training, and technical support for these platforms should also be included in this effort to enhance the ability of communities and agencies to make transparent, science-based decisions and collaborate more effectively across boundaries.

Potential Actors: Academic Institutions, CAL FIRE, Cal OES, California Natural Resources Agency (CNRA), CFSC, LCI, Local Fire Safe Councils, Local Governments

Cross-Cutting Strategies: Collaboration, Data, Innovation, Technical Assistance

Action 1-17: Finalize and Operationalize a Public Wildfire Catastrophe Model

Support the completion and deployment of California's first public wildfire catastrophe model. Once finalized, this model should be leveraged across the insurance, planning, and wildfire mitigation sectors to inform more transparent and data-driven decision making across different scales. Some key applications include ensuring fairer insurance rate setting practices, expanding access to insurance coverage (especially in high-risk areas), and informing strategic wildfire risk reduction investments and land use planning. To ensure successful deployment and long-term utility of this model, the State and its partners should focus on several key implementation components:

- Sustaining a transparent, science-based model development and governance process.
- Ensuring ongoing model updates and calibration as wildfire risk and land use conditions evolve.
- Developing clear guidance, training, and tools to support widespread adoption.
- Aligning model outputs with other tools and datasets, such as risk mapping and evacuation planning platforms.

This model should serve not only as a technical tool but also as a vehicle for advancing equity and accountability in wildfire resilience efforts, helping to ensure that vulnerable communities can access insurance and mitigation benefits.

Potential Actors: CAL FIRE, Cal OES, Cal Poly Humboldt, CDI, LCI, Local Governments

Cross-Cutting Strategies: Collaboration, Data, Equity, Innovation, Technical Assistance

Action 1-18: Inventory and Share Best Practices from Model Wildfire Mitigation Programs

Inventory and evaluate the effectiveness of the many local voluntary structural hardening and defensible space programs implemented across the state, along with statewide initiatives such as the CWMP. Results of the inventory should be shared publicly (e.g., CAL FIRE's Clearinghouse Data Center) to highlight and share best practices to replicate and expand successful programs or inform similar new programs.

Potential Actors: Academic Institutions, CAL FIRE, CFSC, County Coordinators, Local Governments

Cross-Cutting Strategies: Education & Outreach

Action 1-19: Establish a Statewide Structural Hardening and Defensible Space Database

To promote efficient, strategic data sharing, and to address the challenges of coordinating inspections between overlapping jurisdictions, partner with local fire agencies and CBOs to establish and incentivize the use of a centralized, statewide defensible space database, where users can input data on local inspections and defensible space compliance measures. As part of this effort, common definitions of key terms should be established, among other clarifications (e.g., what constitutes an inspection, citation, or compliance measure) to ensure greater data consistency and reliability. This action may be combined or linked with Action 1-15.

Potential Actors: CAL FIRE, CBOs, Local Fire Agencies

Cross-Cutting Strategies: Collaboration, Data

Action 1-20: Report Structural Hardening and Defensible Space Data Publicly

Compile and publicly disseminate home hardening program activity and defensible space inspections and/or program activity data on a regular basis (e.g., annually), while considering aggregation and anonymization of data to respect privacy considerations. The data should include information on the number of unique parcels inspected, what potential actions were taken by property owners to reduce risk, and the percentage of parcels inspected and upgraded across jurisdictions in high-risk areas. This will help program administrators, researchers, and policymakers assess any gaps or overlaps in programs and the effectiveness of various efforts to reduce risk. This action may be combined or linked with Action 1-15.

Potential Actors: CAL FIRE

Cross-Cutting Strategies: Data

2. LANDSCAPE

Goal: Advance strategic treatments and multi-benefit land stewardship solutions

Some of California's greatest assets are its diverse and dynamic landscapes—forests, shrublands, grasslands, rangelands, and other natural and working lands—that provide critical ecological and societal benefits. These landscapes support biodiversity, sequester carbon, sustain water supplies, and form the natural heritage of many communities, including those stewarded by tribes. However, these landscapes, when not strategically managed and compounded with external stressors, can increase the risk of catastrophic wildfires or high-intensity conflagration that reaches California's communities, particularly in the WUI. To reduce these risks, it is essential to invest in the proactive stewardship and restoration of landscapes, ensuring they are healthy, resilient, and capable of sustaining their many functions into the future. This requires a thoughtful approach that incorporates both modern science and traditional ecological knowledge, supports the use of beneficial fire, and prioritizes actions based on landscape conditions, community vulnerability, and ecological value. When managed strategically, California's landscapes can serve as natural wildfire buffers, while also advancing broader climate, ecological, and community resilience goals.

Photo Credit: **CAL FIRE**.

What is Already Being Done?

Many existing efforts and resources are already dedicated to strategically and sustainably managing the array of diverse landscapes across the state. The 2021 Action Plan alone included over 50 actions that have been completed or are ongoing that pertain to fuel breaks and landscape resilience projects—and fuels reduction more broadly. Some examples of these actions include CAL FIRE's efforts to develop and maintain 500 fuels management projects (i.e., Action 2.9), Caltrans' efforts to develop a framework for "safe road corridors" (i.e., Action 2.25) and expand highway treatments along 2,600 miles of high-risk roadways (i.e., Action 2.27). In addition to the actions from the Action Plan that have been or that are being implemented, there are many other State plans and programs focused on landscape treatments, some of which are presented below.

- **CAL FIRE Forest Stewardship Program**. With the aim of encouraging good stewardship of California's private forestland, the CAL FIRE Forest Stewardship Program provides technical information and assistance to landowners to promote sound forest management (e.g., pre-fire fuel management) and to assist communities in solving forest-related issues.
- **CAL FIRE Prescribed Fire Claims Fund Pilot Program**. Despite a high success rate for prescribed fires going according to plan (i.e., over 99 percent in 2022), residual risk remains when working with fire. To help obtain sufficient liability coverage, the Prescribed Fire Claims Fund Pilot Program was established by SB 926 (Dodd 2022) in September 2022. This program, with

a limited funding of $20 million, supports the use of beneficial fire to demonstrate the minimal risk associated with prescribed burning to encourage private insurers back into the market and foster a safer wildfire management approach.

- **CAL FIRE Vegetation Management Program**. The CAL FIRE Vegetation Management Program is a cost-sharing program derived from SB 1704 (Keene, 1980) that focuses on the use of prescribed fire, and some mechanical means, for addressing wildland fire fuel hazards and other resource management issues in State Responsibility Area (SRA). The program allows private landowners to enter a contract with CAL FIRE to use prescribed fire to accomplish a combination of fire protection and resource management goals, and implementation of related projects is done by CAL FIRE Units. Approximately 25,000 acres have been treated per year through the program since it was first established in 1982.
- **California Vegetation Treatment Program**. The California Vegetation Treatment Program (CalVTP), developed by BOF, is a critical component of the State's multi-faceted strategy to address California's wildfire crisis that documents vegetation treatment data and supports treatment projects to reduce hazards and restore healthy ecological regimes. This statewide program includes a range of methods, including the use of prescribed burning, mechanical treatments, manual treatments, herbicide application, and prescribed herbivory as tools to reduce hazardous vegetation around WUI communities and to construct fuel breaks. The CalVTP Program Environmental Impact Report (EIR) also provides a powerful California Environmental Quality Act (CEQA) compliance tool to expedite the implementation of wildfire resilience projects. To date, over 500,000 acres of wildfires resilience projects have been expedited under the CalVTP.
- **State of Emergency Proclamations and Temporary Suspension of Environmental Rules.** On March 1, 2025, Governor Gavin Newsom issued a state of emergency proclamation that temporarily suspends State statutes, rules, regulations, and requirements for expediting critical fuels reduction projects. This includes, but is not limited to, environmental laws such as CEQA and the California Coastal Act. The proclamation emphasizes that any activities performed under the suspension of statutes, rules, regulations, and requirements must "balance expeditious fuels reduction and environmental protection." This may be accomplished by adhering to the State Environmental Protection Plan, or a comparable plan. The Proclamation also directs BOF to update, expand, and make more efficient the CalVTP Program EIR. In accordance with the Governor's Proclamation, CNRA and the California Environmental Protection Agency (CalEPA) developed and published guidance in April 2025 regarding eligible projects and initiated an accelerated 30-day review process for filing and receiving State approvals for Suspensions Requests.

  Also on March 1, 2025, the White House issued an executive order to immediately increase domestic timber production and streamline federal policies to enhance forest management, reduce wildfire risks, and decrease reliance on imported timber. Consistent with the order, the USFS, BLM, and USFWS also seek to eliminate all undue delays within their respective permitting processes and to suspend, revise, and rescind existing policies that impose an undue burden on timber production.

- **California's Strategic Plan for Expanding the Use of Beneficial Fire**. *California's Strategic Plan for Expanding the Use of Beneficial Fire* outlines a roadmap for significantly increasing the pace and scale of forest management activities through 2025. It sets specific acreage targets for various stakeholders, including State and federal agencies, California tribes, and partner CBOs; the goal is to implement beneficial fire on 400,000 acres annually by 2025, statewide. Additionally, the plan intends to help build a sustainable culture of beneficial fire that will guide forest management in California for decades into the future (Task Force 2022).

"California is at an unprecedented crossroads; we must act to prepare our forests and other wildlands to be more resilient to fire threats, or we risk losing the natural systems upon which the state has thrived" (Task Force 2022).

- **Roadmap to a Million Acres**. The *Roadmap to a Million Acres* is a comprehensive strategy developed by the Task Force aimed at building capacity to meet a minimum of 1 million acres treated annually by 2025. It has three key elements: (1) statewide interagency strategies that align the work of federal, State, local, and tribal governments; (2) an interagency tracking system and Forest Data Hub to provide consistent data systems to track progress and assess the condition of our landscapes; and (3) a regional framework for investing in programs and projects tailored to the priorities and risks in each region.

Numerous other local efforts are completing or leveraging State plans and programs. For example, the Napa Communities Firewise Foundation is funding wildfire mitigation project implementation in local neighborhoods. Specifically, these projects involve activities related to landscape treatments—roadside hazardous fuels reduction, shaded fuel breaks, and historic fire road maintenance—which are all designed to moderate wildfire intensity, facilitate safe evacuation, and provide firefighter access for improved fire suppression in the event of a wildfire. As of September 2024, 228 of these projects have been funded, encompassing 3,200 acres treated (NCFF 2024). This is just one of many examples where local activities are collectively contributing to statewide goals in strategically managing landscapes to reduce the risk of catastrophic wildfires and protect communities. Building upon these efforts will ensure that California sustainably and strategically maintains its diverse landscapes to help bolster wildfire resilience for years to come.

Landscape Objectives and Recommended Actions

The objectives and recommended actions listed in **Table 5** below (and further detailed in the following subsections) aim to advance strategic landscape treatments and multi-benefit land stewardship solutions that both protect and enhance communities.

Table 5 Objectives and Recommended Actions – Landscape

Objectives	Recommended Actions
Prioritize and Accelerate Strategic Landscape Treatments	**Action 2-1:** Operationalize Fire Management Zones
	Action 2-2: Expand Strategic Fuel Break Networks in Alignment with Fire Management Zones
	Action 2-3: Increase Community Support for the Use of Beneficial Fire
	Action 2-4: Address Landscape Treatment Workforce Needs
	Action 2-5: Develop Model Online Landowner Agreements
	Action 2-6: Accelerate Efforts to Streamline Environmental Review and Permitting
Promote Multi-Benefit Land Stewardship Solutions	**Action 2-7:** Protect and Maintain Open Space Buffers
	Action 2-8: Advance Community Stewardship of Sustainable Landscape Management
Leverage Science-Based Frameworks for Measuring Progress Across Domains	**Action 2-9:** Establish a Multi-Domain Wildfire Resilience Data Hub

Source: **Compiled by Ascent in 2025**.

Objective: Prioritize and Accelerate Strategic Landscape Treatments

Scaling up the pace and effectiveness of fuels reduction and forest health treatments in the landscape is crucial to community protection and reducing wildfire severity across California's diverse ecosystems.

Action 2-1: Operationalize Fire Management Zones
Develop and implement operational zone plans for Potential Operational Delineations (PODs), also known as fire management zones, in coordination with key landowners and regional partners. These plans should define priority fuel treatments, suppression strategies, and ignition reduction efforts needed to support safe and effective fire management, and may be integrated into CAL FIRE Unit Plans, CWPPs, and other regional fire plans.
Potential Actors: CAL FIRE, Caltrans, Local Fire Safe Councils, Local Governments, NGOs, Private Landowners, RCDs, USFS
Cross-Cutting Strategies: Collaboration, Data

Action 2-2: Expand Strategic Fuel Break Networks in Alignment with Fire Management Zones
Accelerate the implementation and maintenance of strategic fuel breaks within and along the boundaries of established fire management zones (i.e., PODs), prioritizing projects near communities, critical infrastructure, and evacuation routes. Fuel break networks should be coordinated with applicable landowners, integrated into CAL FIRE Unit Plans and regional fire strategies, and maintained over time to ensure long-term benefits and functionality.
Potential Actors: BLM, USFS, CNRA, CAL FIRE, Cal OES, Caltrans, Local Fire Safe Councils, Local Governments, NGOs, Private Landowners, RCDs
Cross-Cutting Strategies: Collaboration, Data

Action 2-3: Increase Community Support for the Use of Beneficial Fire

Accelerate and normalize the use of beneficial fire (e.g., prescribed fire, cultural burning) as a foundational strategy for reducing hazardous fuels, restoring ecosystem health, and building fire-adapted communities. This action supports and builds upon the implementation of *California's Strategic Plan for Expanding the Use of Beneficial Fire*. Key components of this may include:

- **Community Education**: Develop localized outreach campaigns and educational materials to improve public understanding of the benefits of beneficial fire and reduce opposition to its use, particularly in the WUI. Education efforts should emphasize the importance of beneficial fire, defensible space, and resident action and preparedness.
- **Support for Landowners**: Expand access to training, technical assistance, and streamlined liability protections and permitting processes for landowners and groups like Prescribed Burn Associations (PBAs), who play a critical role in empowering local implementation.
- **Adaptive Planning and Funding**: Strengthen cross-agency coordination and regional funding partnerships to align prescribed fire planning with wildfire resilience goals, reduce administrative burdens for grantees, and ensure sustainable funding streams. Support a research and adaptive management program to measure outcomes and incorporate learning into future fire strategies.

Potential Actors: BLM, CAL FIRE, CBOs, CNRA, Local Fire Agencies, Local Governments, Prescribed Burn Associations (PBAs), RCDs, University of California Cooperative Extension (UCCE), USFS

Cross-Cutting Strategies: Collaboration, Education & Outreach, Equity, Funding, Streamlining, Technical Assistance

Action 2-4: Address Landscape Treatment Workforce Needs

Develop new programs and funding streams, and/or modify or expand support for existing programs, to bolster the workforce needed to increase the pace and scale of wildfire resilience and landscape treatment projects, which may include supporting education and training programs (e.g., UCCE's Forest Stewardship workshops), establishing new curriculum pathways through community colleges and workforce boards, and more. Workforce development efforts should prioritize industry-recognized certifications (e.g., chainsaw operation, heavy equipment use, burn boss qualifications) and provide access to necessary tools and equipment, particularly for small contractors, tribal crews, and local organizations. To ensure long-term workforce sustainability, address key barriers such as low wages, housing costs, childcare access, and mental health needs. Programs should prioritize equitable access to career opportunities for individuals from disadvantaged or fire-affected communities and offer clear advancement pathways across sectors (e.g., Conservation Corps, Forestry and Fire Recruitment Program).

Potential Actors: Academic Institutions, BLM, CAL FIRE, California Department of Conservation (DOC), CBOs, NPS, USFS, USFWS

Cross-Cutting Strategies: Collaboration, Equity, Funding, Workforce

Action 2-5: Develop and Promote Model Online Landowner Agreements

Develop and promote model landowner agreement templates that can be accessed and customized online to reflect local legal, environmental, and community conditions. For example, the Napa Firewise Foundation is an example of a local entity providing such a template. These templates would make it easier for property owners to grant permission for hazardous fuel treatments on private land, helping to accelerate project scoping, permitting, and implementation. Agreements should be designed for broad usability by local governments, CBOs, RCDs, and other implementing partners, and integrated into broader planning and treatment workflows to support efficiency, transparency, and trust.

Potential Actors: CAL FIRE, CBOs, DOC, LCI, Local Governments, RCDs

Cross-Cutting Strategies: Streamlining, Technical Assistance

Action 2-6: Accelerate Efforts to Streamline Environmental Review and Permitting

Building on the Governor's March 2025 State of Emergency Proclamation, collaborate across federal, State, and local agency partners to enhance coordination, streamline environmental review, and create expedited permitting options for large-landscape treatments across all land ownership types and responsibility areas (i.e., Federal Responsibility Area [FRA], SRA, Local Responsibility Area [LRA]). This can include, but is not limited to:

- **CEQA**: As described in the Proclamation, BOF, in coordination with CAL FIRE and key stakeholders, is taking immediate steps to update the CalVTP Program EIR to increase CalVTP's efficiency and utilization for large projects, including regional landscapes. These actions may include expanding CalVTP coverage to include the LRA, facilitating projects in the coastal zone, enabling projects to benefit from combined CDFW approvals through the Cutting the Green Tape initiative, and adding coverage for projects with biomass cost-recovery components.
- **Regulatory Permitting:** Explore options to increase the ease and efficiency—and reduce costs—of complying with applicable regulations and permitting requirements, including the federal Endangered Species Act, the California Endangered Species Act, and the California Coastal Act, among others. Align regulatory permit streamlining efforts with the CalVTP Program EIR update, where feasible, to enable expedited permit approvals. For example, in 2021, the State Water Resources Control Board adopted its statewide Vegetation Treatment General Order to streamline water quality permitting for vegetation treatment activities that are within the scope of the CalVTP PEIR.
- **Environmental Workforce:** Consider utilizing the Intergovernmental Personnel Act to loan local government staff or Woody Feedstock Aggregation Pilot Program staff to USFS to increase staff capacity for NEPA review and THP processing.

Potential Actors: BOF, CAL FIRE, California Department of Fish and Wildlife (CDFW), California State Water Resources Control Board (Water Board), CNRA, DOC, LCI, Local Governments, USFS

Cross-Cutting Strategies: Collaboration, Streamlining, Workforce

Objective: Promote Multi-Benefit Land Stewardship Solutions

Land stewardship creates opportunities to both reduce wildfire risk, restore ecological health, protect working landscapes, and strengthen community connections to the land. By conserving and actively managing open spaces as natural buffers, and by empowering local entities to engage in sustainable landscape management, California can advance wildfire resilience with a range of co-benefits.

Action 2-7: Protect and Maintain Open Space Buffers

Incentivize the conservation, strategic use, and active management of open space areas (e.g., agricultural areas, rangelands, community gardens, regional parks, nature preserves) as large-scale buffers that reduce wildfire risk to communities. Efforts can include conservation easements, land use designations, and providing funding for integrated land management activities, such as grazing, prescribed fire, or invasive species control. Encouraging the integration of open space buffers into general plans, CWPPs, and regional plans, while also prioritizing projects that layer fuels management with ecosystem stewardship, can also enhance community access, economic viability, and other co-benefits.

Potential Actors: CAL FIRE, CBOs, DOC, California State Parks, California State Conservancies, Land Trusts, Local Governments, RCDs, UCCE

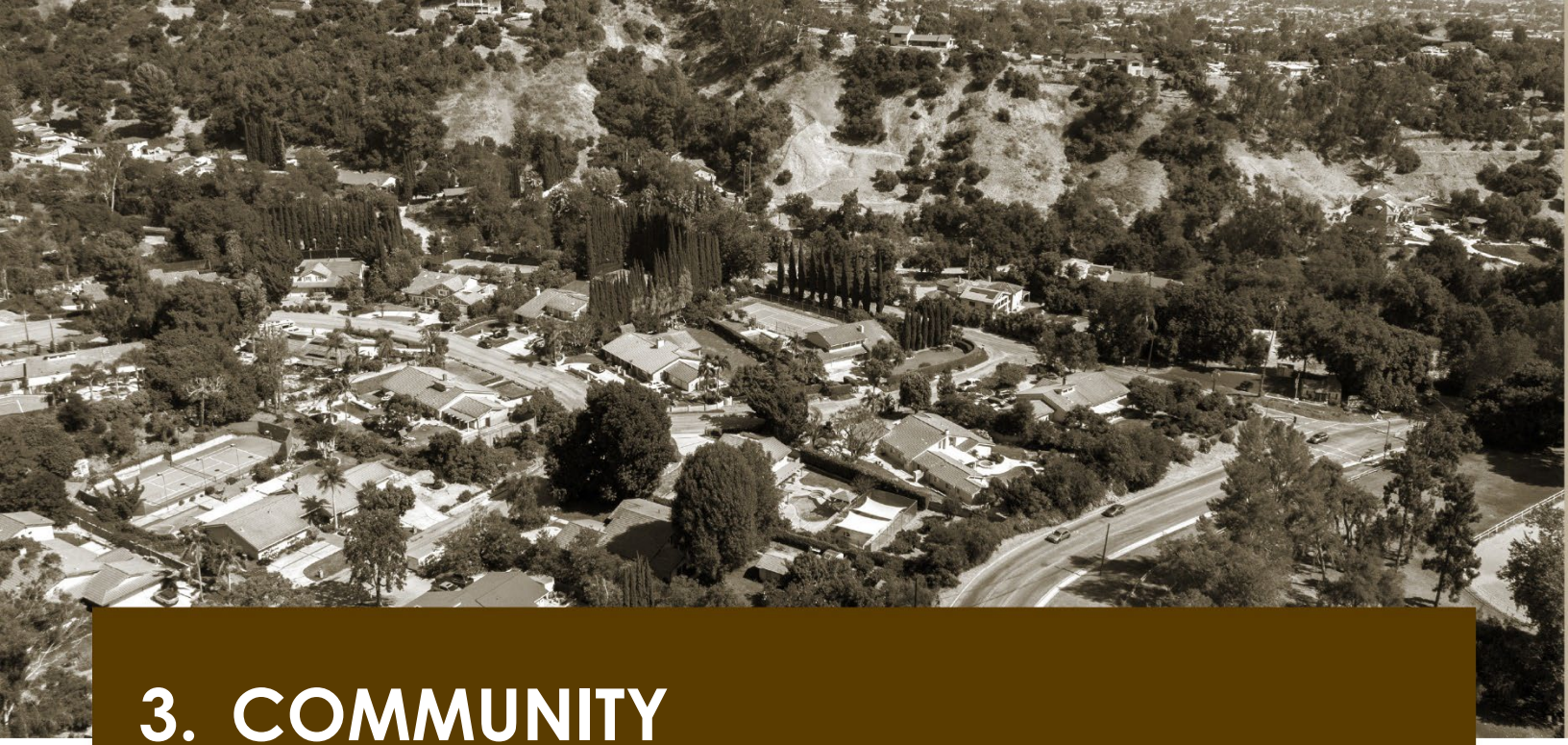
Cross-Cutting Strategies: Collaboration, Funding

Action 2-8: Advance Community Stewardship of Sustainable Landscape Management
Increase community involvement in land stewardship by expanding programs and partnerships that support local engagement in ecosystem restoration, invasive species control, and other actions that reduce wildfire risk while enhancing ecological health and biodiversity. Aim to co-design programs with residents, tribes, and landowners to increase capacity, build trust, and foster a sense of shared responsibility.
Potential Actors: CAL FIRE, Local Fire Safe Councils, Local Governments, RCDs
Cross-Cutting Strategies: Collaboration, Education & Outreach

Objective: Leverage Science-Based Frameworks for Measuring Progress Across Domains

Advancing wildfire resilience requires consistent, transparent, and science-based approaches to tracking progress across all domains (i.e., Built Environment, Landscape, Community). Developing new, integrated tools and data platforms will help support better planning, priority-setting, and accountability over time.

Action 2-9: Establish a Multi-Domain Wildfire Resilience Data Hub
The 2021 Action Plan called for establishing a Data Hub to serve as a multi-institutional information clearinghouse for collecting and making available up-to-date and actionable information to accelerate wildfire resilience planning, priority-setting, and reporting. Since then, the Task Force has developed an Interagency Treatment Tracking System and a series of data-rich Regional Resource Kits to help local and regional agencies better plan, prioritize, and evaluate the multiple benefits of forest and wildland health projects. Subject to available funding, the Task Force should develop a California Wildfire and Landscape Resilience Data Hub for science-based products, tools, and data systems, including the Interagency Treatment Tracking System, Regional Resource Kits, and other platforms to better prioritize and measure progress in achieving community, built environment, and landscape resilience.
Potential Actors: Task Force
Cross-Cutting Strategies: Collaboration, Data, Innovation



3. COMMUNITY

Goal: Empower communities to prepare, plan, and implement wildfire solutions across domains, and protect public health and safety.

At the heart of wildfire resilience are the people who live in, contribute to, and are served by California's communities. This includes not only individuals and households, but also the institutions, organizations, and networks that govern, support, and connect them, such as local governments, community-based organizations, state agencies, academic institutions, and more. These entities form the connective tissue that links strategic planning and investments across both the built environment and landscape, enabling more coordinated, equitable, and locally grounded approaches to wildfire risk reduction.

As wildfire threats become more complex and pervasive, empowering communities with the tools, resources, and capacity to prepare for, respond to, and recover from wildfire events is essential. A resilient community is one that is informed, organized, and equipped to navigate emergencies, protect its most vulnerable people, and shape a safer future through inclusive planning, education, and partnerships. Building community resilience requires sustained investments in local capacity, social infrastructure, and trusted communication networks that reflect and reinforce the unique strengths and needs of each place.

What is Already Being Done?

Many existing efforts and resources are already dedicated to cross-sector and multi-scalar collaboration, planning, capacity building, and localized efforts to ensure community preparedness and readiness to respond, evacuate, and recover from wildfires.

A few examples of programs and/or local, regional, or statewide organizations that may serve as **intermediaries or local actors** on the ground, and other initiatives that promote resilience in the Community domain, are highlighted below.

- **Regional Forest and Fire Capacity Program**. DOC administers the RFFC Program, which provides block grants to regional entities and to eligible coordinating organizations to develop, prioritize, and implement strategies and projects that promote wildfire and forest resilience through regional priority plans (DOC 2024).

Regional Profiles and Regional Resource Kits are two resources that have been developed to support RFFC Program grantees. Regional Profiles, compiled by the Task Force, summarize the social context and ecological conditions of community and ecosystem wildfire resilience in each of California's four diverse regions (i.e., Sierra Nevada, Northern California, Central California, Southern California). Regional Resource Kits are sets of tools and data to accelerate the work by regional collaboratives to reduce wildfire risk and improve the conditions of forested and shrub landscapes.

- **California Fire Safe Council and Local Fire Safe Councils.** The CFSC is a California non-profit corporation, formed as a project of CAL FIRE in 1993. Upon its establishment, CFSC brought together corporations, community leaders, and government agencies to educate California residents about the dangers of wildfires and how to prevent them. Under the leadership of the California Fire Alliance, it was determined that the CFSC should facilitate a more efficient way to get federal fire prevention and mitigation funding to local communities, namely from four primary federal agencies. These agencies now provide large grants to CFSC to conduct, select, manage, and monitor subgrants to local community groups, such as local Fire Safe Councils, County Coordinators, homeowner associations, local governments, fire departments, and other entities working on defensible space, community fire planning, education, and other wildfire resilience activities. Since 2004, the CFSC has provided more than 1,200 grants totaling more than $118 million in grant funding to help build a fire-resilient California, which includes resident mitigation-related activities (CFSC 2023a).
- **County Coordinator Program.** The County Coordinator Program, funded by CAL FIRE and managed by CFSC, is intended to educate, encourage, and develop countywide collaboration and coordination among various wildfire mitigation groups. The program provides counties with $175,000 to hire a County Coordinator, whose roles include: (1) building consensus across active wildfire mitigation groups in their county; (2) analyzing gaps in countywide wildfire resiliency and emergency preparedness and developing recommendations to fill these gaps; and (3) developing mechanisms to improve outreach and coordination efforts. Since 2021, this program has funded 52 out of 58 counties in California to hire and/or place a County Coordinator in pursuit of countywide wildfire practitioner collaboration, and the program is working to expand its reach to all 58 counties (CFSC 2023b).

Planning is one of the most powerful tools for addressing and mitigating wildfire hazards and related risks and building more resilient communities. However, local and regional agencies must also balance wildfire-related planning efforts with how communities make land use and development decisions, provide safe and equitable housing choices, manage and enhance

open space and ecosystem health, maintain and repair infrastructure, and promote the long-term future well-being of communities under a changing climate. Local and regional governments, among other entities around California, recognize the complexity of these issues and are already using many different plan types to address wildfire while also balancing overall community planning needs. Examples of plan types that are used to address wildfire and related issues include:

- **Community Wildfire Protection Plans**. Community wildfire protection plans (CWPPs) are voluntary planning and funding prioritization documents, first established by the federal *Healthy Forests and Restoration Act of 2003* as an incentive for communities to engage in comprehensive forest and fire hazard planning and help define and prioritize local implementation and funding needs (LCI 2022b). They provide communities with an opportunity to influence where and how federal, state, or other regional and local agencies can implement fuel reduction projects on federal lands, as well as how additional funds may be distributed for projects on non-federal land. CWPPs can also be used to prioritize built environment investments to protect buildings and critical infrastructure. CWPPs can be developed at a variety of scales, from smaller sub-areas of counties or cities, to countywide or regional CWPPs; and they can be prepared by a broad range of actors. For more information on CWPPs and how they can be used in California, see CAL FIRE's California CWPP Toolkit and related resources.
- **Local Hazard Mitigation Plans**. Local hazard mitigation plans (LHMPs) are voluntary plans that help communities prevent or minimize risks within their jurisdiction to reduce response and post-disaster costs, though the federal government does require them to receive FEMA assistance for mitigation projects. Local governments can work with their local emergency management agencies, local fire authorities, Cal OES, CAL FIRE, and Fire Safe Councils to ensure effective, integrated, and consistent wildfire prevention and hazard mitigation programs across numerous plans, including LHMPs (LCI 2022a, 2022b).
- **Climate Adaptation and Resilience Plans**. Climate adaptation and resilience plans help communities assess their vulnerability to the local impacts of climate change and outline strategies to adapt to those impacts. Though these plans typically address adaptation and resilience for a wide array of hazards and impacts, wildfire is a prominent consideration, as communities must adapt to changing conditions like increased temperatures, volatile precipitation patterns, and shifts in flora and fauna, which can all contribute to wildfire risk.
- **General Plans, Zoning, and Other Local Plans**. All cities and counties in California are required to adopt a general plan, which sets forth a long-term vision of a community's future land use and development, while also addressing housing, conservation, open space, safety, transportation and circulation, and other important aspects of a community's physical and social well-being. SB 1241 (Kehoe 2012) revised general plan safety element requirements such that all cities and counties whose planning area is within the designated SRA, or in a Very High FHSZ in LRA, must address and incorporate specific information and policies to address wildfire hazards and risks. General plans are broad documents that are often accompanied by other local plans or codes that serve to implement the goals and policies of the general plan, which can include specific plans, precise plans, community plans, master plans, and neighborhood plans; as well as zoning or subdivision codes. Each of these

plan types and related codes and ordinances provide an opportunity to integrate wildfire hazard and risk considerations into their contents.

In addition to the various plans prepared at the local and regional level, several **State plans, programs, guidance documents, and related resources** are available to support and inform local and regional planning approaches. While not exhaustive, some examples of these types of plans, programs, and resources are listed below.

- **California State Hazard Mitigation Plan**. The *California State Hazard Mitigation Plan* is California's primary hazard mitigation guidance plan that provides an analysis of the state's historical and current hazards, describes the State's hazard mitigation goals and objectives, and details the State's hazard mitigation strategies and actions. It serves as a resource for local planners developing their own LHMPs by giving them a starting point for understanding the risks they face in their jurisdictions and how to address them, including those pertaining to wildfire.
- **Fire Hazard Planning Technical Advisory**. The *Fire Hazard Planning Technical Advisory*, last updated and published in August 2022, is one of a series of technical advisories provided by LCI as a service to professional planners, land use officials, and CEQA practitioners. This technical advisory provides broad guidance for addressing fire hazards, reducing risk, and increasing resilience in general plans and other related land use plans and regulations (LCI 2022a).
- **Wildland-Urban Interface Planning Guide**. Published by LCI in August 2022, the *Wildland-Urban Interface Planning Guide: Examples and Best Practices for California Communities* is intended to help planners, wildfire mitigation practitioners, and other decisionmakers understand the range of options available to support WUI planning in California. Throughout the guide, community examples are provided to help readers understand how different planning tools (e.g., plans, regulations) are being implemented across the state (LCI 2022b).
- **Wildfire Resilience Plan Alignment Guide**. Developed by LCI, the *Wildfire Resilience Plan Alignment Guide* is part of a series of Climate Resilience Plan Alignment Guides, which serve as collaboration tools for local government staff and decisionmakers, tribes and tribal-serving organizations, community members and non-profits, regional entities, and others to coordinate and align local and regional planning efforts. This guide provides direction for and context on the preparation, implementation, and alignment of local plans to comprehensively address wildfire risks and build resilience under a changing climate.

A resilient community is one that prepares for wildfire before it occurs, knows how to respond during an active event (including evacuation and safety protocols), and is supported in its recovery through coordinated efforts that promote rebuilding, healing, and long-term adaptation.

- **Ready, Set, Go Campaign.** One of the most recognizable efforts for community preparedness in advance of wildfires is the **"Ready, Set, Go" campaign**. This campaign is promoted by CAL FIRE, along with many local and regional governments and agencies around the state.

- **"Ready"** means preparedness, which includes creating family disaster plans, assembling emergency supply kits, designating emergency meeting locations outside the fire hazard area, and having fire extinguishers on hand, among other activities.
- **"Set"** is for when a wildfire is approaching, and means being ready to evacuate as soon as possible, alerting family and neighbors, dressing in appropriate clothing, turning utilities off, and survival tips in case people may be trapped.
- **"Go"** emphasizes leaving early, which corresponds with better chances of survival and helping to keep roads clear of congestion.

- **Emergency operations plans** are required local plans for jurisdictions across the state, as mandated by the California Emergency Services Act and reinforced by the Standardized Emergency Management System regulations. Evacuation considerations are not the only element included in these plans, but they are one of the many critical elements. Further, State laws passed in recent years are aimed at assessing and improving evacuation routes across the state, including **AB 747 (Levine 2019)**, **AB 1409 (Levine 2021)**, and **SB 99 (Nielsen 2019)**, which require that evacuation routes be identified and areas with limited ingress or egress be addressed in local general plans.
- **Local business resilience initiatives** can focus on business continuity, which is of vital importance to reduce the impacts of natural hazards and disasters to businesses themselves, along with the communities in which they are a part of. Small businesses contribute much of the employment and wages in communities across the country, and particularly in more self-contained rural areas, the small business community is the backbone of local economies—widespread business closures resulting from hazards, such as wildfire, can have significant and long-lasting impacts on the economic health of communities. One such organization that has been involved in local business continuity and resilience initiatives is Valley Vision, which initiated the Capital Region Business Resiliency Initiative to increase awareness and preparedness for potential hazard-related risks faced by small businesses.
- **Disaster Recovery Programs.** When it comes to wildfire recovery, and disaster recovery more broadly, numerous federal and State programs provide funding to communities and individuals that have been adversely affected, both in the short- and long-term phases of recovery. While not an exhaustive list, some of the notable programs include:
  - **FEMA's Public Assistance and Individual Assistance Programs**,
  - **U.S. Department of Agriculture's (USDA's) Disaster Assistance Programs**, and
  - **U.S. Department of Housing and Urban Development's (HUD's) Community Development Block Grant Programs**.

Protecting public health is another vital component of a fire-adapted and resilient community. As such, the primary focus of many prior and ongoing efforts has been on wildfire smoke. Some of the most notable public health efforts pertaining to wildfire smoke are listed below.

Photo Credit: **CAL FIRE**.

- **Smoke Ready California**. Smoke Ready California serves as the statewide campaign that provides coordinated messaging and content to help residents plan for and protect themselves from smoke impacts. Some of the guidance included in Smoke Ready California includes checking the local Air Quality Index (AQI), using CARB-certified air cleaners, and staying indoors during smoky conditions (CARB 2024).
- **California Smoke Spotter**. The California Smoke Spotter mobile application, developed by CARB, was first launched in 2021 as part of California's efforts to balance air quality protection with fire protection and land management goals. While prescribed fire and smoke impacts remain the primary focus of the application, it was expanded to include information on wildfires in 2022. Some key features of the application, which is available in both English and Spanish, include: (1) a 72-hour smoke forecast; (2) personalized alerts for multiple locations; (3) current AQI data; (4) latest information on wildfires and prescribed fires; and (5) a health section that shows users how to protect themselves from smoke (CARB 2023).
- **Prescribed Fire Information Reporting System**. The Prescribed Fire Information Reporting System (PFIRS) serves as an interface between air quality managers, land management agencies, and individuals who conduct prescribed burning in California to facilitate communications on planned burns and approvals (CARB n.d.). CARB is currently pursuing significant enhancements in ease-of-use, data collection, and reporting for PFIRS, which will enable more efficient reporting and analysis of the effects of prescribed fire and smoke.
- **Clean Air Centers**. Established by AB 836 (Wicks, 2019), the Wildfire Smoke Clean Air Centers for Vulnerable Populations Incentive Pilot Program through CARB provides $5 million in grant funding to establish clean air centers, which includes: (1) upgrades to existing ventilation systems of facilities; (2) purchasing high-efficiency air filters for facilities whose ventilation

systems are ready to be equipped with such air filters; and (3) purchasing portable air cleaners so that cities, counties, and emergency management organizations, among others, can deploy them as needed to create temporary clean air centers (CARB 2022).

- **Protection from Wildfire Smoke Standard**. The California Division of Occupational Safety and Health (Cal/OSHA) voted to permanently adopt the *Protection from Wildfire Smoke Standard* in February 2021, which originally began as a temporary measure to protect vulnerable workers from the health impacts of wildfire smoke (DIR 2021). This standard requires employers to be prepared to protect workers from unhealthy air due to wildfire smoke, and it applies to workplaces where: (1) the current AQI for fine particulate matter measuring 2.5 microns or less in diameter ($PM_{2.5}$) is 151 or greater; and (2) the employer should reasonably anticipate that employees may be exposed to wildfire smoke.

In addition to the efforts described in this subsection, numerous additional programs, initiatives, and other efforts are being implemented at various scales to reduce the vulnerability of California's communities to wildfire. Expanding on these efforts is paramount to building long-term resilience and ensuring that all people are both protected from fire-related risks and supported in the event of a disaster.

Community Objectives and Recommended Actions

The following objectives and recommended actions listed in **Table 6** below (and further detailed in the following subsections) aim to deepen the resilience of California's communities by investing in the systems, partnerships, and programs that strengthen local capacity and community function. Recognizing that communities are at the forefront of wildfire susceptibility and risk, this domain focuses on people, along with community planning and governance.

Table 6 Objectives and Recommended Actions – Community

Objectives	Recommended Actions
Enhance Local and Regional Planning and Capacity Building Programs	**Action 3-1:** Sustain and Align Investments in Local and Regional Capacity
	Action 3-2: Promote Coordinated Regional Planning and Implementation Across Domains
	Action 3-3: Support Local Funding Mechanisms and Incentives
	Action 3-4: Scale Up Wildfire Resilience Capacity and Technical Assistance
	Action 3-5: Increase Awareness and Use of Planning Guidance for Wildfire Risk Reduction
	Action 3-6: Support Local Planning Alignment Through Targeted Technical Assistance
	Action 3-7: Improve Local Planning Capacity Through Cross-Training and Structural Support
Reduce Unwanted Human-Caused Ignitions	**Action 3-8:** Develop and Implement Ignition Management Plans
	Action 3-9: Connect Red Flag Warnings and Fire Weather Watches with Community Action
	Action 3-10: Develop Local Campaign Guidance for Ignition Prevention
Strengthen Workforce and Local Economies	**Action 3-11:** Provide Ongoing Woody Feedstock Aggregation Program Funding
	Action 3-12: Address Structural Hardening and Defensible Space Workforce Challenges
	Action 3-13: Expand and Support the Electric Utility Workforce for Wildfire Ignition Prevention
	Action 3-14: Develop Continuity Planning Support for Small Businesses and Local Government

Objectives	Recommended Actions
Improve Safety, Evacuation, and Recovery Programs	**Action 3-15:** Develop Region-Specific Evacuation Plans and Support Strategies
	Action 3-16: Leverage Real-Time Mobility Data to Monitor Evacuation Progress
	Action 3-17: Expand and Sustain Funding for Comprehensive Evacuation Planning
	Action 3-18: Prepare an Equitable Emergency Notification Strategy
	Action 3-19: Integrate Social Vulnerability Data Across All Phases of Wildfire Planning
	Action 3-20: Establish Pre-Disaster Recovery Planning as a Standard Practice
	Action 3-21: Develop Post-Fire Recovery Guidance and Technical Assistance
	Action 3-22: Simplify and Further Integrate Equity into Recovery Funding and Support
	Action 3-23: Address Challenges Resulting from the Federal Disaster Declaration Process
	Action 3-24: Support Holistic and Community-Led Recovery Programs
Address Public Health Impacts of Wildfire	**Action 3-25:** Develop a Wildfire Smoke and Health Data Platform
	Action 3-26: Develop Evidence-Based Best Practices for Responding to Wildfire Smoke
	Action 3-27: Increase Public Health Sector Representation
	Action 3-28: Research Smoke-Related Population Impacts
	Action 3-29: Improve Clean Air Center Accessibility
	Action 3-30: Encourage Informal Clean Air Networks
	Action 3-31: Provide Vulnerable Facilities and Homes with Air Filtration Devices
	Action 3-32: Update Indoor Air Pollution Report
	Action 3-33: Improve Outdoor Worker Safety and Access to Personal Protective Equipment
	Action 3-34: Develop a Coordinated Mental Health Response

Source: **Compiled by Ascent in 2025**.

Objective: Enhance Local and Regional Planning and Capacity Building Programs

Empowering local and regional actors is crucial to strengthening wildfire resilience across the state, as many communities need more support to effectively plan, fund, coordinate, and implement projects on the ground. By sustaining investments, expanding technical assistance, improving access to planning tools and guidance, and more, the State can help ensure that communities are better equipped to build resilience.

Action 3-1: Sustain and Align Investments in Local and Regional Capacity
Evaluate, maintain, and strategically expand existing programs and investments (e.g., RFFC Program, County Coordinators Grant Program, CAL FIRE Wildfire Prevention Grants) that fund coordination and capacity-building efforts across jurisdictions and support resilience projects led by intermediaries or other local entities. These entities work collaboratively to ensure investments are streamlined, mutually reinforced across sectors and scales. Efforts should prioritize historically underserved and high-risk communities, including through statewide programs like the CWMP, which channels funding directly to vulnerable communities and neighborhoods. Successful implementation will ensure that communities have the staff, partnerships, and/or sustained funding and capacity necessary to plan and implement wildfire resilience projects and strategies over the long term.
Potential Actors: CAL FIRE, Cal OES, CBOs, CFSC, CNRA, DOC, LCI, Local Fire Safe Councils, Local Governments, RCDs
Cross-Cutting Strategies: Collaboration, Equity, Funding, Technical Assistance

Action 3-2: Promote Coordinated Regional Planning and Implementation Across Domains

Strengthen the alignment between local and regional wildfire resilience efforts by using the RFFC Program as a hub for integrating and aligning community-scale planning, such as CWPPs, into broader regional strategies, and expanding the program to incorporate the Built Environment and Community domains. This approach could also leverage the conceptual RWMP framework, to support the development and implementation of holistic plans that reflect diverse community values across the three domains (e.g., landscape function, recreational access, watershed health, structure protection, public health and safety) and incorporate ongoing investments from public and private partners. Efforts should ensure that the RFFC Program includes mechanisms for adaptive management, transparent evaluation, and accessible dissemination of outcomes to inform continuous learning and improvement.

Potential Actors: DOC, RFFC Program Grantees

Cross-Cutting Strategies: Collaboration, Funding

Action 3-3: Support Local Funding Mechanisms and Incentives

Support local governments and special districts in developing local funding and financing mechanisms (e.g., local or regional tax measures, resilience financing districts). Local funding and financing mechanisms can help to provide long-term, sustained local funding sources that complement or leverage State and federal investments or financing mechanisms for structural or infrastructure hardening, defensible space, and community-scale fuels reduction projects. Support could include synthesizing and sharing best practices and providing technical assistance (e.g., campaigning, messaging, and polling support) to prepare these entities to successfully develop local cost-sharing agreements or pass local funding measures. Concurrently, explore the potential for a State tax credit and explore other economic incentives and logistical support to reduce the cost burden of structural hardening and defensible space projects.

Potential Actors: California Governor's Office of Business and Economic Development (GO-Biz), California Infrastructure and Economic Development Bank (IBank), California Strategic Growth Council (SGC), LCI, Local Governments, JPAs

Cross-Cutting Strategies: Collaboration, Funding, Technical Assistance

Action 3-4: Scale Up Wildfire Resilience Capacity and Technical Assistance

Sustain and expand technical assistance and training programs that support local and regional wildfire resilience, with a focus on scalable, community-informed approaches. To maximize impact, invest in expanding programs to underserved areas with tailored support for small, rural, and under-resourced communities, which may include technical assistance, staffing increases, developing accessible, multilingual educational materials, and offering culturally competent training. As a model of regional coordination and innovation, the Marin Wildfire Prevention Authority offers a promising case study, with dedicated funding, a shared governance model, and a multi-jurisdictional approach that can inform replication efforts in other regions, especially where cross-boundary collaboration is needed.

Potential Actors: CAL FIRE, Cal OES, CBOs, CFSC, FAC Learning Network, RCDs, UCCE

Cross-Cutting Strategies: Collaboration, Education & Outreach, Equity, Funding, Technical Assistance

Action 3-5: Increase Awareness and Use of Planning Guidance for Wildfire Risk Reduction

Increase awareness of existing State guidance, tools, and resources designed to assist communities and practitioners with reducing wildfire risk and improving resilience. State guidance, tools, and resources include CAL FIRE's *California Community Wildfire Protection Plan Toolkit,* CAL FIRE's *Land Use Planning for Wildfires Trainings,* LCI's *Fire Hazard Planning Technical Advisory*, LCI's *Wildland-Urban Interface Planning Guide: Examples and Best Practices for California Communities*, the Cal OES *California Adaptation Planning Guide*, and LCI's *Wildfire Resilience Plan Alignment Guide*, among others. Increasing awareness can include activities such as educational trainings, webinars, distribution of communication briefs, and other opportunities to elevate awareness among planners, fire officials, building officials, wildfire mitigation specialists, Fire Safe Councils, and others interested in learning and advancing understanding of community planning for wildfire.

Potential Actors: CAL FIRE, Cal OES, Community Wildfire Planning Center (CWPC), LCI

Cross-Cutting Strategies: Collaboration, Education & Outreach, Workforce

Action 3-6: Support Local Planning Alignment Through Targeted Technical Assistance

To promote better land-use planning outcomes and increase wildfire preparedness and community fire adaptation, expand technical assistance to support local planning efforts to develop, update, align, and implement general plan safety elements (and other applicable elements), LHMPs, CWPPs, and other land use or hazard plans. Technical assistance may include advanced trainings, technical webinars, coordinated planning activities between jurisdictions or across functional disciplines, additional funding sources for long-term planning staff and planning- and program-level implementation, expanding the role or capacity of existing programs (e.g., CAL FIRE's Land Use Planning Program), developing model codes and ordinances, and leveraging existing multi-jurisdictional and regional collaboratives, among other actions.

Potential Actors: CAL FIRE, Cal OES, CWPC, LCI

Cross-Cutting Strategies: Collaboration, Technical Assistance, Workforce

Action 3-7: Improve Local Planning Capacity Through Cross-Training and Structural Support

Invest in interdisciplinary cross-training programs to: (1) equip planners, emergency managers, building officials, and fire professionals with a shared understanding of resilience planning tools, land use policy, and hazard mitigation strategies; and (2) encourage the development of structural solutions that support recruitment, retention, and long-term workforce sustainability, such as model job descriptions, flexible staffing models (e.g., shared regional planners), incentive programs for mid- and late-career professionals, and targeted outreach to diversify the workforce. Partnerships with existing fellowship programs (e.g., CivicSpark), academic institutions, and professional associations (e.g., American Planning Association California Chapter) can help deliver tailored technical assistance and mentorship while enabling local governments to implement evolving wildfire resilience mandates and land use policies more effectively.

Potential Actors: Academic Institutions, CAL FIRE, California Labor and Workforce Development Agency (LWDA), DOC, LCI

Cross-Cutting Strategies: Collaboration, Education & Outreach, Workforce

Objective: Reduce Unwanted Human-Caused Ignitions

Building resilience to unwanted, human-caused wildfires in our communities begins with preventing them from igniting in the first place. The vast majority of unwanted wildfires in California are first ignited by people, and addressing these root causes is essential to reducing wildfire ignition risk.

Action 3-8: Develop and Implement Ignition Management Plans
Support the development of ignition management plans to reduce human-caused wildfire ignitions, where the most common sources are identified across a jurisdiction or region and appropriate mitigation efforts are prioritized and implemented, such as public education campaigns, targeted enforcement, infrastructure upgrades, high-risk activity restrictions, and investments in early detection and rapid response capabilities, among others. These plans may be integrated with CWPPs, LHMPs, and other plan types, and should be developed collaboratively with input from local communities and across multiple governmental scales, where appropriate.
Potential Actors: BLM, CAL FIRE, Cal OES, California State Parks, Caltrans, CBOs, County Coordinators, Local Fire Agencies, Local Fire Safe Councils, NPS, USFS
Cross-Cutting Strategies: Collaboration, Education & Outreach

Action 3-9: Connect Red Flag Warnings and Fire Weather Watches with Community Action
Support ongoing collaborative efforts to develop an improved or standardized Red Flag Warning (RFW)/Fire Weather Watch (FWW) product that is salient and meets public warning needs and the needs of the National Weather Service and the fire management community. Research shows that both RFWs and FWWs may not be effective messaging mediums for several reasons, including: (1) there is no single quantitative definition of an RFW or FWW, as different regions use different determining factors; (2) FWWs may be conflated with RFWs; and (3) RFWs and FWWs are issued so frequently that the public may become numb to the products and experience messaging fatigue (NOAA n.d.). These efforts should also include how best to pair the issuance of RFWs/FWWs with messaging on tangible actions that individuals in the community can take to prevent unwanted ignitions.
Potential Actors: CAL FIRE, National Oceanic and Atmospheric Administration (NOAA), USFS
Cross-Cutting Strategies: Data, Education & Outreach

Action 3-10: Develop Local Campaign Guidance for Ignition Prevention
Research and develop guidance and best practices for implementing effective local prevention education campaigns, partnering with local fire agencies and other entities best positioned to collaborate directly with communities. While being mindful of engagement fatigue, campaigns should be tailored in the context of broader prevention, mitigation, and readiness efforts to address the specific needs of communities, uphold the commitment to serve the diverse communities of California, and promote trust and buy-in from residents. Additionally, campaigns should utilize existing resources, where appropriate and feasible (e.g., "One Less Spark – One Less Wildfire" campaign).
Potential Actors: CAL FIRE, CFSC, County Coordinators, California Wildland Fire Coordinating Group, Local Fire Agencies, Local Fire Safe Councils
Cross-Cutting Strategies: Education & Outreach

Objective: Strengthen Workforce and Local Economies

Expanding the skilled workforce is essential to implementing mitigation, prevention, and recovery projects on the ground. It also means supporting local businesses, governments, and emerging sectors that contribute to resilience. As such, the State can play a critical role in supporting communities to build local workforce capacity by facilitating and investing in workforce development and partnering to expand local regional economic development opportunities.

Action 3-11: Provide Ongoing Woody Feedstock Aggregation Program Funding

Advocate for continued Woody Feedstock Aggregation Pilot Program funding to support the pilot entities with biomass aggregation activities on private and non-industrial forest lands. Ongoing funding will finance each pilot entity's operations to coordinate with JPA members to develop and maintain defensible space within their jurisdictions, generate a reliable and sustainable feedstock supply, and support forest sector market development.

Potential Actors: California Forest Biomass Working Group, GO-Biz, LCI

Cross-Cutting Strategies: Funding

Action 3-12: Address Structural Hardening and Defensible Space Workforce Challenges

Address the growing workforce challenges that limit the implementation of structural hardening and defensible space projects by expanding training, credentialing, and job placement opportunities. Together, these efforts will expand the pool of qualified workers across trades and professions, while also helping consumers identify skilled providers. Specifically, these efforts may include:

- Partnering with local institutions and workforce development boards to scale up accessible training programs for contractors, laborers, and landscape professionals performing wildfire mitigation work.
- Collaborating with academic institutions and professional organizations to develop continuing education and WUI competency certifications for existing fire protection, engineering, architecture, and urban planning workforce. These credentials should be recognized and incentivized in relevant procurement processes.
- Integrating WUI-focused curriculum pathways (e.g., minors, concentrations) into related degree programs.

Potential Actors: Academic Institutions, CAL FIRE, CBOs, Local Businesses, LWDA

Cross-Cutting Strategies: Collaboration, Education & Outreach, Equity, Workforce

Action 3-13: Expand and Support the Electric Utility Workforce for Wildfire Ignition Prevention

Support wildfire ignition prevention efforts by helping electric utilities overcome workforce-related barriers that limit implementation of critical projects identified in their WMPs. As part of this effort, develop guidance and coordinated strategies to attract, train, and retain a skilled, diverse, and regionally distributed workforce that can support vegetation management, system hardening, equipment inspection, and other mitigation activities. Some of these strategies may include:

- Incentive programs to prove recruitment and retention in high-demand regions or roles.
- Targeted job training and placement programs.
- Streamlined pathways for transitioning workers from related industries (e.g., forestry, construction).
- Guidance to utilities on integrating workforce needs more explicitly in WMP development and implementation.

Potential Actors: CPUC, Electric Utilities, Energy Safety, LWDA

Cross-Cutting Strategies: Collaboration, Education & Outreach, Streamlining

Action 3-14: Develop Continuity Planning Support for Small Businesses and Local Government
Launch a coordinated effort to assess and strengthen continuity planning for small business and local government operations beginning with a needs assessment to identify barriers, gaps, and capacity challenges, followed by the collaborative development of a business and government resilience toolkit. This toolkit should offer tailored guidance and resources for specific industries, regions, and government functions to support continuity of operations before, during, and after a wildfire event or other hazard events. To supplement the toolkit, establish a technical assistance program to help small businesses and local governments create and implement their own continuity plans.
Potential Actors: CAL FIRE, Cal OES, GO-Biz, Local Governments
Cross-Cutting Strategies: Collaboration, Education & Outreach, Technical Assistance

Objective: Improve Safety, Evacuation, and Recovery Programs

As wildfire threats grow more complex and severe, the State can increase support for communities in efforts to prepare, respond, and recover by focusing on tangible improvements to safety, evacuation, and recovery programs and processes.

Action 3-15: Develop Region-Specific Evacuation Plans and Support Strategies
Support the development of region-specific evacuation plans, including access and support strategies, which go beyond traditional transportation planning to facilitate more equitable and effective wildfire evacuations across jurisdictional boundaries. Strategies should be partially informed by GIS-based analyses that identify and prioritize communities with limited egress, vulnerable populations, and priority facilities requiring evacuation assistance (e.g., hospitals, long-term care facilities, schools). Strategies may include: (1) use of regional evacuation models that encompass ride coordination, demand-responsive transit, paratransit, mutual aid agreements, and other local mobility solutions; (2) application of best practices for implementing evacuation support services, particularly in remote or underserved areas; and (3) incorporating contingency measures such as TRAs and public education on what to do if evacuation is delayed or not possible due to fire behavior or traffic congestion.
Potential Actors: Cal OES, Caltrans, Emergency Management Agencies, LCI, Metropolitan Planning Organizations (MPOs), Local Transportation Agencies, School Districts, CBOs
Cross-Cutting Strategies: Collaboration, Data, Education & Outreach, Equity

Action 3-16: Leverage Real-Time Mobility Data to Monitor Evacuation Progress
Explore and operationalize the use of anonymized, real-time mobility data (e.g., aggregated cellphone location information) to improve situational awareness during wildfire evacuations. Building on available technologies already used in navigation apps, this would enable incident commanders to monitor the number and movement of mobile devices within defined evacuation zones over time, providing insight into the speed, direction, and success of evacuations as they unfold. Real-time "snapshots" can serve as proxy indicators for population presence and evacuation progress without revealing personal or carrier-specific information, and can help flag chokepoints, stalled zones, or incomplete evacuations. Pre-incident baseline data can also help identify population surges and improve planning assumptions. Post-incident, this data can inform after-action reviews and strengthen evacuation modeling tools by comparing predicted and actual outcomes.
Potential Actors: CAL FIRE, Cal OES, CPUC, Emergency Management Agencies
Cross-Cutting Strategies: Collaboration, Data, Innovation

Action 3-17: Expand and Sustain Funding for Comprehensive Evacuation Planning

Maintain existing and develop new long-term funding streams to support local, regional, and tribal governments in developing and implementing evacuation plans, conducting evacuation exercises, creating additional evacuation routes and TRAs, and improving the viability of existing routes (e.g., increased signage). This effort should also ensure that evacuation options are adequate for the size, complexity, and unique needs of each community or region served.

Potential Actors: CAL FIRE, Caltrans

Cross-Cutting Strategies: Funding

Action 3-18: Prepare an Equitable Emergency Notification Strategy

Work to prepare and implement a comprehensive, multi-channel emergency notification strategy that aims to ensure all California residents, particularly socially vulnerable populations, can receive timely and actionable alerts during wildfires and other emergencies. This strategy could build upon and enhance existing systems (e.g., Integrated Public Alert and Warning System, opt-in systems), while addressing gaps in coverage and accessibility. To achieve this, efforts might include: (1) establishing a task force to assess current alert capabilities, identify underserved areas and populations, and suggest possible improvements; (2) supporting local jurisdictions in adopting or upgrading alert systems, including alternative methods like sirens and door-to-door notifications for areas with limited digital access; (3) collaborating with CBOs and other local entities to develop culturally appropriate, multi-lingual messaging and outreach programs that encourage enrollment in alert systems and increase awareness of emergency preparedness; (4) exploring the creation of a grant program to assist localities in integrating their systems with State and federal platforms, helping ensure interoperability and consistent messaging across jurisdictions; and (5) periodically testing and evaluating all alert systems, with particular attention to reaching vulnerable populations.

Potential Actors: CAL FIRE, Cal OES, CBOs, Emergency Management Agencies, FEMA, Local Fire Agencies

Cross-Cutting Strategies: Collaboration, Education & Outreach, Equity, Funding, Innovation

Action 3-19: Integrate Social Vulnerability Data Across All Phases of Wildfire Planning

Support the systematic integration of social vulnerability data into planning tools, datasets, and decision-making frameworks to identify high-risk populations early, inform equitable evacuation phasing and communication strategies, and ensure inclusive post-disaster recovery assistance. This may include leveraging tools such as the ICARP Vulnerable Communities Platform, as well as ingress/egress data and public and private sector demographic tools. Local and regional planners should engage CBOs serving these populations to co-design evacuation and recovery strategies. Doing so ensures more accurate and locally relevant data, taps into trusted community networks, and strengthens social infrastructure for future resilience.

Potential Actors: CAL FIRE, Cal OES, California Department of Public Health (CDPH), California Department of Social Services (CDSS), CBOs, LCI

Cross-Cutting Strategies: Data, Equity, Innovation

Action 3-20: Establish Pre-Disaster Recovery Planning as a Standard Practice

Develop and implement appropriate strategies to ensure that pre-disaster recovery planning becomes a standard practice in communities across the state, empowering local governments and CBOs. These strategies may include developing tailored guidance, establishing requirements or incentives, building tracking mechanisms, and reallocating funding and resources to ensure widespread development, maintenance, and implementation of pre-disaster recovery plans. As appropriate, these plans should utilize principles from existing resources, such as FEMA's *Pre-Disaster Recovery Planning Guide for Local Governments*.

Potential Actors: CAL FIRE, Cal OES, CBOs, FEMA, LCI

Cross-Cutting Strategies: Collaboration, Funding, Technical Assistance

Action 3-21: Develop Post-Fire Recovery Guidance and Technical Assistance

Explore publishing and regularly updating a set of comprehensive guidance (similar to Cal OES's *Post-Disaster Long-Term Recovery Plan Guide*) and offer technical assistance for both local governments and individuals regarding post-fire recovery funding options, best practices, and other resources tailored to different regions and community types. The guidance could be made available in multiple languages and designed to be accessible to those with lower literacy levels and through a variety of information channels, including existing ones and new ones, as needed. Technical assistance could focus on helping local agencies and individuals navigate barriers to accessing funding and may include opportunities for peer learning to share best practices and lessons from communities that have undergone recovery.

Potential Actors: Cal OES, California Department of Health Care Services (DHCS), CBOs, CDSS, GO-Biz, HCD

Cross-Cutting Strategies: Education & Outreach, Equity, Technical Assistance

Action 3-22: Simplify and Further Integrate Equity into Recovery Funding and Support

Encourage recovery processes that address wildfire-specific considerations while promoting efficiency, effectiveness, consistency, transparency, and equity. This may include: (1) collaboration with federal partners to explore ways to simplify eligibility, determination, and application processes, reducing administrative burdens; (2) streamlining regulations, revising or removing strict requirements, and adjusting data and funding allocation methods to avoid cycles of inequity often associated with recovery funding programs; and (3) enhancing technical support for recovering communities, such as by supporting the hiring of trained community navigators to assist community members in accessing recovery funding and resources who are culturally competent, represent the communities they serve, and have experience in navigating State and federal assistance programs.

Potential Actors: Cal OES, CDSS, FEMA, HCD, HUD

Cross-Cutting Strategies: Collaboration, Equity, Funding, Streamlining, Technical Assistance, Workforce

Action 3-23: Address Challenges Resulting from the Federal Disaster Declaration Process

Collaborate with federal partners to improve the clarity, consistency, and accessibility of the federal disaster declaration process, which can be challenging to navigate and may result in delays or inequities in assistance. Where federal reform is not feasible or timely, explore the development of State-driven strategies to address gaps or challenges arising from the current process. These efforts should aim to enhance the efficiency and effectiveness of disaster response and recovery, reduce administrative burdens on local governments, and ensure that assistance reaches socially vulnerable and disproportionately affected communities in a timely and equitable manner.

Potential Actors: CAL FIRE, Cal OES, FEMA

Cross-Cutting Strategies: Collaboration, Equity, Funding

Action 3-24: Support Holistic and Community-Led Recovery Programs
Support and resource locally driven, holistic recovery programs that prioritize the well-being of residents and the full spectrum of community needs (e.g., housing stability, mental and physical health, social cohesion, education continuity, economic resilience), aligning funding, technical assistance, and staffing support across agencies and sectors. This includes removing barriers to funding access for CBOs that provide culturally competent recovery services and serve as trusted local connectors. Recovery protocols should be revised to incorporate non-physical recovery metrics (e.g., mental health outcomes, school re-enrollment rates, displacement patterns) and incentivize cross-sector partnerships between local governments, CBOs, health providers, schools, and more.
Potential Actors: Cal OES, CBOs, CDPH, CDSS, HCD
Cross-Cutting Strategies: Collaboration, Equity, Funding, Streamlining, Technical Assistance,

Objective: Address Public Health Impacts of Wildfire

Wildfires are associated with an array of both direct and indirect public health impacts, most notably (but not exclusively) from wildfire smoke. Addressing these impacts requires the implementation of more coordinated, proactive strategies that protect vulnerable populations and help maintain community wellbeing.

Action 3-25: Develop a Wildfire Smoke and Health Data Platform
Create, operate, and maintain a statewide wildfire smoke and health data platform integrating wildfire smoke and health data from multiple databases. This would include: (1) establishing protocols for data sharing, documentation, and quality control; (2) promoting open-source platforms and decision support tools; and (3) developing and maintaining data products that retrospectively track air pollution concentrations attributable to smoke. Ultimately, this will provide a greater understanding of the negative health impacts of wildfire smoke, and adjacently, will provide insights into the linkages between forest health and mitigation measures (e.g., prescribed fire) on human health outcomes.
Potential Actors: CAL FIRE, CARB, CDPH, Task Force
Cross-Cutting Strategies: Collaboration, Data, Innovation

Action 3-26: Develop Evidence-Based Best Practices for Responding to Wildfire Smoke
Develop a toolkit of evidence-based best practices for public health response to wildfire smoke, including communication strategies, healthcare delivery protocols, and mitigation measures. This resource will support local health agencies and other local government agencies, sensitive receptor facilities (e.g., schools, childcare facilities), and CBOs across California in preparing for and responding to smoke events, with a focus on protecting vulnerable populations.
Potential Actors: Air Districts, CARB, CBOs, CDPH, Healthcare Providers
Cross-Cutting Strategies: Collaboration, Education & Outreach

Action 3-27: Increase Public Health Sector Representation

Increase and prioritize public health sector representation on advisory boards, such as the Task Force, to strengthen the linkages between public health, forest management, and wildfire preparedness and resilience. As part of this effort, develop and deliver cross-training to support local collaboration, funding optimization, and resource sharing between local health jurisdictions, wildfire professionals, and other community partners.

Potential Actors: Task Force

Cross-Cutting Strategies: Collaboration, Education & Outreach, Equity

Action 3-28: Research Smoke-Related Population Impacts

Support further research on: (1) resulting population-level health impacts from smoke exposure with specific consideration to how fires burn, what fires burn, and population vulnerability; and (2) the chronic, cumulative, and mental health impacts of smoke exposure. This type of research can be used to develop concentration-response functions that can be used to estimate cases of adverse health outcomes in populations exposed to smoke.

Potential Actors: CalEPA, CDPH, LCI, U.S. Environmental Protection Agency (EPA)

Cross-Cutting Strategies: Collaboration, Equity

Action 3-29: Improve Clean Air Center Accessibility

Building on the progress made to date under the Wildfire Smoke Clean Air Centers for Vulnerable Populations Incentive Pilot Program in building networks of clean air centers, seek additional funding to make clean air centers better resourced and more accessible through extended hours, providing transportation options for those who may need it, and robust outreach to promote further awareness. Additionally, leveraged funding approaches should be considered to co-locate clean air centers as part of community resilience centers that may be funded under existing programs.

Potential Actors: Air Districts, California Air Pollution Control Officers Association (CAPCOA), CARB

Cross-Cutting Strategies: Equity, Funding

Action 3-30: Encourage Informal Clean Air Networks

In coordination with local and regional governments, develop formal recommendations and incentives that encourage local businesses (e.g., restaurants, shops) and other indoor community gathering places (e.g., libraries) to serve as an impromptu, adaptable, accessible network of clean air centers for vulnerable populations during hazardous wildfire smoke events.

Potential Actors: Air Districts, CARB, CBOs

Cross-Cutting Strategies: Collaboration, Data, Education & Outreach, Technical Assistance

Action 3-31: Provide Vulnerable Facilities and Homes with Air Filtration Devices

Develop a statewide program to outfit community facilities (e.g., community centers, libraries, or schools), homes, or other buildings with air filtration devices that do not already have them. While the primary focus of the program should be on subsidizing and providing free air filtration devices to smoke-burdened schools and homes—which can be modeled after the San Joaquin Valley Air Pollution Control District's Clean Air Rooms Program—the program will also seek to provide information and resources for building DIY air filtration devices. The program should establish targeted eligibility criteria to prioritize the most vulnerable community facilities and homes.

Potential Actors: Air Districts, CARB, CBOs

Cross-Cutting Strategies: Education & Outreach, Equity, Funding

Action 3-32: Update Indoor Air Pollution Report

Update the 2005 *Report to the California Legislature: Indoor Air Pollution in California*. The updated report should include a comprehensive literature review, interviews with various stakeholders, a synthesis of progress on research findings, public perspectives, and policy development around indoor air since 2005, and additionally, should provide recommendations on future research, programs, and policy development to improve indoor air quality in California. Ultimately, this will support efforts to reduce indoor air pollution exposures, including wildfire smoke, and improve public health.

Potential Actors: CARB

Cross-Cutting Strategies: Education & Outreach

Action 3-33: Improve Outdoor Worker Safety and Access to Personal Protective Equipment

Increase monitoring and develop strategies to strengthen compliance among employers with Cal/OSHA's *Protection from Wildfire Smoke Standard* to minimize outdoor employee exposure to poor air quality and wildfire smoke. Consider providing free personal protective equipment to employers or CBOs to protect outdoor workers during an active wildfire event.

Potential Actors: Cal/OSHA, CARB, CBOs, CDPH, Labor Unions

Cross-Cutting Strategies: Equity

Action 3-34: Develop a Coordinated Mental Health Response

Identify local needs, gaps, and opportunities to help improve coordination of mental health support for communities affected by wildfire, particularly for vulnerable populations (e.g., low-income, those with access and functional needs). Once those needs are identified, efforts might focus on developing and leading a coordinated public health response to address both short- and long-term effects of mental health effects (e.g., post-traumatic stress disorder, anxiety, depression, substance abuse) related to wildfires. This approach could be comprehensive, sustained, and adaptive, with an emphasis on empowering and strengthening local capacity.

Potential Actors: Cal OES, California Emergency Medical Services Authority (EMSA), CDPH, CDSS, DHCS

Cross-Cutting Strategies: Collaboration, Equity

MONITORING PROGRESS

This section provides the Roadmap's framework for monitoring progress and outcomes in advancing community wildfire resilience. This framework will help to ensure that statewide efforts are collectively on track to realize the vision for fire-adapted and resilient communities and making progress in achieving the core objectives included in this Roadmap.

The State, led by Task Force and partner agencies and organizations, will monitor progress across key metrics and indicators and share data and information with the public and decision makers on where progress is being made, where to direct existing resources or future investments, or where to make specific policy or funding decisions to better align efforts or increase the pace and scale of actions.

The Roadmap's framework for monitoring progress includes potential **metrics** and desired trends or **indicators** associated with each objective, shown in **Table 7** below. Potential data sources, along with agencies or organizations that would have the primary responsibility for collecting, analyzing, and sharing data with the Task Force, are also noted. This table does not represent an exhaustive accounting of all possible indicators or metrics, and potential data sources and potentially-responsible organizations may change over time.

As part of the 2025 Action Plan update, the Task Force is advancing a science-based framework for monitoring and reporting progress across landscape and community wildfire resilience efforts. Where appropriate, selected metrics and indicators from this Roadmap may be elevated into the 2025 Action Plan update's reporting framework, notably through integration into existing or forthcoming statewide platforms. Others will be retained here to guide future potential cross-sector planning, investment, and evaluation.

Table 7 Community Wildfire Resilience Metrics

Objective	Potential Metrics	Desired Trends or Indicators	Potential Data Sources	Potential Data Collection and Reporting Entities
Domain 1: Built Environment				
Increase Structural Hardening and Defensible Space	Pre-Fire Mitigation: ▪ Number of structures retrofitted in high-risk areas vs. total number of structures assessed and considered vulnerable ▪ Percentage of structures meeting hardening standards in high-risk areas ▪ Percentage of hardened structures in vulnerable communities ▪ Number of structures retrofitted per year ▪ Number of defensible space inspections completed per year ▪ Number or spatial extent (e.g., acres) of defensible space treatments applied per year	Pre-Fire Mitigation: ▪ Upward trends in (1) completed structural hardening retrofits in high-risk areas, and (2) completed defensible space treatments in high-risk areas	▪ CWMP Dashboard. ▪ Local or regional dashboard, tracking systems, other (example: SoCoAdapts map/dashboard) ▪ WUI Data Commons (in development) ▪ Wildfire Science & Technology Commons	▪ CWMP JPA ▪ Local or regional agencies or other organizations that are operating hardening and defensible space incentive or technical assistance programs ▪ CAL FIRE, local fire agencies, or others with regulatory authority or programmatic responsibility for tracking, inspection, enforcement, etc.
	Post-Fire Outcomes ▪ Structures damaged or destroyed, based on post-fire inspections, relative to burned area, structure density, or other factors	Post-Fire Outcomes ▪ Downward trend in structures damaged or destroyed by wildland fires or urban conflagrations	▪ CAL FIRE Damage Inspections (DINS) Data ▪ CAL FIRE Statistics ▪ Research & reports on structural damage and loss	▪ CAL FIRE

Objective	Potential Metrics	Desired Trends or Indicators	Potential Data Sources	Potential Data Collection and Reporting Entities
	Insurance: ▪ Number of home insurance policies non-renewed annually by county and by zip code area. ▪ Number of new home insurance policies written annually by each county and zip code area. ▪ Number of home insurance policies renewed annually by each county and zip code area. ▪ Number homes for which an insurance price discount was provided by insurers based on home hardening, or defensible space or because the property is in a Firewise or fire safe community, by county and by zip code. ▪ Number of new policies written in high-risk areas ▪ Number of excess and surplus lines policies written or renewed for homes, by county and by zip code ▪ Annual average premium for home insurance by county and by zip code. ▪ Average deductible for home insurance by county and by zip code. ▪ Number of California Fair Access to Insurance Requirements (CA FAIR) Plan policies renewed and new policies written by county and by zip code	Insurance: ▪ Maintain insurance availability and affordability ▪ Reduce insurance non-renewals ▪ Stabilize and reduce premium costs for properties retrofitted to standards required by Safer from Wildfires or comparable/better standards (e.g., IBHS Wildfire-Prepared Home)	Insurance: ▪ CDI ▪ CA FAIR Plan ▪ Analyses of U.S. Homeowners Insurance Markets, 2018-2022: Climate-Related Risks and Other Factors (Federal Insurance Office, U.S. Dept of Treasury, January 2025) ▪ Mapping the Home Insurance Crisis (Revolving Door Project, April 2025)	▪ CDI ▪ CA FAIR Plan ▪ UC Berkeley Climate Risk Initiative

Objective	Potential Metrics	Desired Trends or Indicators	Potential Data Sources	Potential Data Collection and Reporting Entities
Increase Critical Infrastructure Hardening	▪ Number or extent of facilities or systems hardened in high-risk areas, measured in units appropriate to facility or system type, size, and hardening methods (e.g., linear feet of right of way, number of poles or bridges, acres of watershed, etc.) ▪ Number of critical infrastructure systems or facilities insured ▪ Percentage of public infrastructure assets with insurance and extent of loss coverage.	▪ Upward trend in critical infrastructure hardening activity ▪ Upward trend in insured infrastructure assets.	▪ CDI ▪ WUI Data Commons (in development) ▪ Wildfire Science & Technology Commons	▪ Local, regional, or state agencies that manage critical assets and infrastructure ▪ CDI
Reduce Infrastructure-Related Ignition Risks and Associated Community Impacts	Utility-Caused Ignitions ▪ Number of ignitions caused by electric utilities.	Utility-Caused Ignitions ▪ Downward trend in utility-caused ignitions	▪ CAL FIRE Statistics ▪ CAL FIRE Incident Tracking. ▪ BLM California Wildfire Dashboard. ▪ WUI Data Commons (in development) ▪ Wildfire Science & Technology Commons	▪ CAL FIRE ▪ CPUC ▪ BLM
	PSPS Events ▪ Number of PSPS events. ▪ Number of customers de-energized during PSPS events. ▪ Number of back-up generators or other alternative power supply options deployed.	PSPS Events ▪ Downward trend in reported PSPS event impacts on people	▪ CPUC PSPS Dashboard	▪ CPUC

Objective	Potential Metrics	Desired Trends or Indicators	Potential Data Sources	Potential Data Collection and Reporting Entities
Connect Communities with Tools for Data-Informed Decision Making	*Note: Connecting communities with models, tools, data-sharing platforms, dashboards, or other resources may include many other potential metrics (in addition to those itemized in this table)*	n/a	n/a	n/a
Domain 2: Landscape				
Prioritize and Accelerate Strategic Landscape Treatments	▪ Annual acres treated (all treatment types) ▪ Annual acres treated using beneficial fire ▪ Miles of fuel breaks or number of projects completed.	▪ Increased acres treated annually, relative to 1-million-acre goal. ▪ Increased acres treated using beneficial fire, up to 400,000 acres annually by 2025. ▪ Effectiveness of fuel treatments	▪ Interagency Treatment Dashboard ▪ Fuels Treatment Effectiveness Reporting Dashboard ▪ Fuels Treatment Effectiveness Reports ▪ WUI Data Commons (in development) ▪ Wildfire Science & Technology Commons	▪ Multiple agencies ▪ Task Force
Promote Multi-Benefit Land Stewardship Solutions	▪ Acres of natural and working lands conserved ▪ Progress in achieving Nature-Based Solutions (NBS) Climate Targets	▪ Increase in natural and working lands conserved ▪ Target-specific trends in AB 1757 NBS Climate Solutions Report	▪ 30x30 Conserved Areas Explorer ▪ CNRA AB 1757 NBS Climate Targets	▪ CNRA ▪ DOC ▪ CARB ▪ Various other agencies assigned to monitoring and reporting progress on 30x30 and NBS targets

Objective	Potential Metrics	Desired Trends or Indicators	Potential Data Sources	Potential Data Collection and Reporting Entities
Leverage Science-Based Frameworks for Measuring Progress Across Domains	▪ Establishment of the California Wildfire and Landscape Resilience Data Hub ▪ Data Hub usage analytics	▪ Completion of the Data Hub ▪ Adoption and increased usage of the Data Hub over time	▪ Data Hub ▪ WUI Data Commons (in development) ▪ Wildfire Science & Technology Commons	▪ UC San Diego ▪ CAL FIRE ▪ Local fire agencies ▪ CBOs
Domain 3: Community				
Enhance Local and Regional Planning and Capacity Building Programs	▪ Amount of funding allocated for local/regional planning, programs, or projects. ▪ Number of plans created or updated. ▪ Number of attendees at CAL FIRE Land Use Planner trainings. ▪ Number of technical assistance requests received and assistance provided.	▪ Stabilization or increase in funding allocated annually in relevant programs ▪ Increase in number of plans created or updated ▪ Increase in training attendance ▪ Increase in technical assistance	▪ CA Fire Safe Council Impact Dashboard ▪ Registration or attendee lists from trainings ▪ Web analytics shared by agencies	▪ CFSC ▪ CAL FIRE ▪ DOC ▪ LCI
Reduce Unwanted Human-Caused Ignitions	▪ Number of ignitions caused by humans. ▪ Number of illegal incidents in monitored areas.	▪ Downward trend of ignitions and across all human causes. ▪ Downward trend in illegal incidents in monitored areas	▪ CAL FIRE Statistics ▪ CAL FIRE Incident Tracking. ▪ BLM California Wildfire Dashboard. ▪ WUI Data Commons (in development) ▪ Wildfire Science & Technology Commons	▪ CAL FIRE ▪ BLM ▪ Local fire agencies

Objective	Potential Metrics	Desired Trends or Indicators	Potential Data Sources	Potential Data Collection and Reporting Entities
Strengthen Workforce and Local Economies	▪ Number of trained professionals. ▪ Number of certifications earned. ▪ Professional development participation rates. ▪ Distribution of wildfire resilience workforce development funding across different regions/communities.	▪ Increase in trained professionals, certifications earned, and participation rates ▪ More equitable distribution across regions/communities (may vary considerably depending on program and local needs).	Jobs First RFFC program	▪ GO-Biz ▪ DOC ▪ WRTC
Improve Safety, Evacuation, and Recovery Programs	▪ Number of people accessing information or participating in "Ready-Set-Go" Campaign or other community readiness programs ▪ Number of evacuation plans or other local plans updated (e.g., EOPs, general plan safety element) to address local and regional evacuation needs ▪ Number of people registered for emergency alerts. ▪ Community response rates to evacuation orders. ▪ Language accessibility notifications (numbers of languages). ▪ Number of people successfully evacuated vs. orders issued. ▪ Actual evacuation times experienced during an evacuation, relative to planned/modeled evacuation clearance times	▪ Increase in people accessing information or participating in Ready-Set-Go ▪ Increase in number of evacuation plans, emergency operations plans, or similar plans adopted or updated ▪ Increase in number of people registered for emergency alerts ▪ Increase in community response rates to evacuation orders ▪ Increase in number of languages in which alerts or notifications are available or issued ▪ Increase in resilience hubs or community resilience centers operating, and number of people served.	▪ Web analytics shared by agencies ▪ Local Emergency Operations or Response Plans ▪ General Plans: UC Davis's CA General Plan Database and Mapping Tool ▪ LCI Vulnerable Communities Platform ▪ CA Governor's Office of Emergency Services Public Data Hub ▪ Resilience Analysis and Planning Tool (RAPT) ▪ CA Access and Functional Needs Viewer	▪ Local emergency management agencies ▪ Cal OES ▪ LCI ▪ UC Davis ▪ Local agencies or organizations maintaining and operating resilience hubs or community resilience centers

Objective	Potential Metrics	Desired Trends or Indicators	Potential Data Sources	Potential Data Collection and Reporting Entities
	▪ Number of resilience hubs or community resilience centers activated, and number of people served during activations.	▪ Evacuation times maintained within a reasonable range of planned/modeled evacuation times in evacuation plans		
Address Public Health Impacts of Wildfire	Air Quality ▪ Number of clean air centers. ▪ Percent of population within a community near clean-air centers. ▪ Occupancy rates in clean air centers during incidents. ▪ Number of air filtration systems installed, or funding allocated to updating air filtration systems. ▪ Percent of buildings within a community meeting indoor air quality standards during a wildfire event. ▪ Number of air filtration devices distributed and installed.	Air Quality ▪ Increased number and availability of clean air centers ▪ Increase in air filtration systems installed ▪ Increase in percentage of buildings meeting indoor air quality standards during a wildfire event ▪ Increase in number of air filtration devices distributed and installed.	▪ CARB Clean Air Centers Map. ▪ Other State, regional, or local program data	▪ CARB ▪ CDPH ▪ Regional Air Districts ▪ Local public health departments

Source: **Compiled by Ascent in 2025**.

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ATTACHMENT A

RECOMMENDED ACTIONS AND CROSS-CUTTING STRATEGIES MATRIX

Recommended Actions	Cross-Cutting Strategies								
	Equity	Collaboration	Data	Funding	Streamlining	Workforce	Technical Assistance	Education & Outreach	Innovation
Domain 1: Built Environment									
Action 1-1: Support Local Implementation of Science-Based Standards		✓		✓			✓	✓	✓
Action 1-2: Develop Comprehensive Wildfire Mitigation and Risk Reduction Framework	✓			✓			✓	✓	
Action 1-3: Incentivize Resilient Rebuilding Efforts				✓	✓				✓
Action 1-4: Leverage and Expand the "Safer from Wildfires" Insurance Initiative	✓	✓		✓					
Action 1-5: Diversify and Simplify Access to Mitigation Financing		✓		✓	✓				
Action 1-6: Integrate Policy Review and Monitoring Into Wildfire Mitigation		✓			✓		✓		
Action 1-7: Insure and Harden Critical Community Assets	✓			✓			✓		
Action 1-8: Strengthen and Protect Water Infrastructure Systems		✓		✓			✓		✓
Action 1-9: Assess and Harden Transportation Infrastructure		✓		✓			✓		✓
Action 1-10: Establish Fire-Safe Roadways in Critical Wildland-Urban Interface Areas			✓		✓				
Action 1-11: Adopt and Utilize the Industrial Fire Precaution and Activity Level System		✓	✓						✓
Action 1-12: Expand Support for Electric Utility Systemwide Hardening Efforts and Technology Upgrades		✓		✓					
Action 1-13: Launch a Utility Wildfire Resilience Partnership Program		✓	✓	✓			✓		
Action 1-14: Improve Public Safety Power Shutoff Messaging	✓							✓	
Action 1-15: Prepare and Protect Vulnerable Populations for Public Safety Power Shutoff Events	✓	✓						✓	
Action 1-16: Leverage New Platforms to Enable Data-Informed Decision Making		✓	✓				✓		✓
Action 1-17: Finalize and Operationalize a Public Wildfire Catastrophe Mode	✓	✓	✓				✓		✓
Action 1-18: Inventory and Share Best Practices from Model Wildfire Mitigation Programs								✓	
Action 1-19: Establish a Statewide Structural Hardening and Defensible Space Database		✓	✓						
Action 1-20: Report Structural Hardening and Defensible Space Data Publicly			✓						
Domain 1: Built Environment – Total	**6**	**13**	**7**	**10**	**4**	**0**	**9**	**5**	**7**

Recommended Actions	Cross-Cutting Strategies								
	Equity	Collaboration	Data	Funding	Streamlining	Workforce	Technical Assistance	Education & Outreach	Innovation
Domain 2: Landscape									
Action 2-1: Operationalize Fire Management Zones		✓	✓						
Action 2-2: Establish Strategic Fuel Break Networks in Alignment with Fire Management Zones		✓	✓						
Action 2-3: Increase Community Support for the Use of Beneficial Fire	✓	✓		✓	✓		✓	✓	
Action 2-4: Address Landscape Treatment Workforce Needs	✓	✓		✓		✓			
Action 2-5: Develop Model Online Landowner Agreements					✓		✓		
Action 2-6: Accelerate Efforts to Streamline Environmental Review and Permitting		✓			✓	✓			
Action 2-7: Protect and Maintain Open Space Buffers		✓		✓					
Action 2-8: Advance Community Stewardship of Sustainable Landscape Management		✓						✓	
Action 2-9: Establish a Multi-Domain Wildfire Resilience Data Hub		✓	✓						✓
Domain 2: Landscape – Total	**2**	**8**	**3**	**3**	**3**	**2**	**2**	**2**	**1**
Domain 3: Community									
Action 3-1: Sustain and Align Investments in Local and Regional Capacity	✓	✓		✓			✓		
Action 3-2: Promote Coordinated Regional Planning and Implementation Across Domains		✓		✓					
Action 3-3: Support Local Funding Mechanisms and Incentives		✓		✓			✓		
Action 3-4: Scale Up Wildfire Resilience Capacity and Technical Assistance	✓	✓		✓			✓	✓	
Action 3-5: Increase Awareness and Use of Planning Guidance for Wildfire Risk Reduction		✓				✓		✓	
Action 3-6: Support Local Planning Alignment Through Targeted Technical Assistance		✓				✓	✓		
Action 3-7: Improve Local Planning Capacity Through Cross-Training and Structural Support		✓				✓		✓	
Action 3-8: Develop and Implement Ignition Management Plans		✓						✓	
Action 3-9: Connect Red Flag Warnings and Fire Weather Watches with Community Action			✓					✓	
Action 3-10: Develop Local Campaign Guidance for Ignition Prevention								✓	
Action 3-11: Provide Ongoing Woody Feedstock Aggregation Program Funding				✓					
Action 3-12: Address Structural Hardening and Defensible Space Workforce Challenges	✓	✓				✓		✓	

Recommended Actions	Cross-Cutting Strategies								
	Equity	Collaboration	Data	Funding	Streamlining	Workforce	Technical Assistance	Education & Outreach	Innovation
Action 3-13: Expand and Support the Electric Utility Workforce for Wildfire Ignition Prevention		✓			✓			✓	
Action 3-14: Develop Continuity Planning Support for Small Businesses and Local Government		✓					✓	✓	
Action 3-15: Develop Region-Specific Evacuation Plans and Support Strategies	✓	✓	✓					✓	
Action 3-16: Leverage Real-Time Mobility Data to Monitor Evacuation Progress		✓	✓						✓
Action 3-17: Expand and Sustain Funding for Comprehensive Evacuation Planning				✓					
Action 3-18: Prepare an Equitable Emergency Notification Strategy	✓	✓		✓				✓	
Action 3-19: Integrate Social Vulnerability Data Across All Phases of Wildfire Planning	✓		✓						✓
Action 3-20: Establish Pre-Disaster Recovery Planning as a Standard Practice		✓		✓			✓		
Action 3-21: Develop Post-Fire Recovery Guidance and Technical Assistance	✓						✓	✓	
Action 3-22: Simplify and Further Integrate Equity into Recovery Funding and Support	✓	✓		✓	✓	✓	✓		
Action 3-23: Address Challenges Resulting from the Federal Disaster Declaration Process	✓	✓		✓					
Action 3-24: Support Holistic and Community-Led Recovery Programs	✓	✓		✓	✓		✓		
Action 3-25: Develop a Wildfire Smoke and Health Data Platform		✓	✓						✓
Action 3-26: Develop Evidence-Based Best Practices for Responding to Wildfire Smoke		✓						✓	
Action 3-27: Increase Public Health Sector Representation	✓	✓						✓	
Action 3-28: Research Smoke-Related Population Impacts	✓	✓							
Action 3-29: Improve Clean Air Center Accessibility	✓			✓					
Action 3-30: Encourage Informal Clean Air Networks		✓	✓				✓	✓	
Action 3-31: Provide Vulnerable Facilities and Homes with Air Filtration Devices	✓			✓				✓	
Action 3-32: Update Indoor Air Pollution Report								✓	
Action 3-33: Improve Outdoor Worker Safety and Access to Personal Protective Equipment	✓								
Action 3-34: Develop a Coordinated Mental Health Response	✓	✓							
Domain 3: Community – Total	**16**	**24**	**6**	**13**	**3**	**5**	**10**	**17**	**3**
All Domains – Total	**24**	**45**	**16**	**26**	**10**	**7**	**21**	**24**	**11**