Draft

# SAN BENITO COMMUNITY WILDFIRE PROTECTION PLAN
Community Wildfire Protection Plan

October 2024

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Community Wildfire Protection Plan

Prepared for                                                              October 2024
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**ESA**

This Community Wildfire Protection Plan represents the efforts and cooperation of a number of organizations and agencies working together to improve wildfire preparedness, response, and recovery options throughout San Benito County.

Amah Mutsun Land Trust
Bureau of Land Management
California Department of Forestry and Fire Prevention
California State Parks
Central Coast Prescribed Burn Association
Graniterock
Hollister Fire Department
Kanyon Consulting
National Park Service
San Benito Agricultural Land Trust
San Benito County Cattlemen's Association
San Benito County Office of Emergency Services
San Benito Fire Safe Council
San Benito Resource Conservation District
University of California Agriculture and Natural Resources

Consultant team:
Environmental Science Associates
Spatial Informatics Group

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# San Benito Community Wildfire Protection Plan

# Acronyms and Other Abbreviations

| Abbreviation | Definition |
| --- | --- |
| ACOE | U.S. Army Corps of Engineers |
| AMLT | Amah Mutsun Land Trust |
| APCD | Monterey Bay Unified Air Pollution Control District |
| BLM | Bureau of Land Management |
| CDFG | California Department of Fish and Game |
| CAL FIRE | California Department of Forestry and Fire Protection |
| CEQA | California Environmental Quality Act |
| CFPR | California Forest Practice Rules |
| CalTrans | California Department of Transportation |
| CDPR | California Department of Parks and Recreation |
| CDFW | California Department of Fish and Wildlife |
| CHP | California Highway Patrol, Hollister-Gilroy |
| CWPP | Community Wildfire Protection Plan |
| ESA | Environmental Science Associates |
| eNVC | Expected net value change |
| FEMA | Federal Emergency Management Agency |
| FRA | Federal Responsibility Area |
| FHSZ | Fire Hazard Severity Zone |
| FMU | Fire Management Units |
| HFD | Hollister Fire Department |
| HFRA | Healthy Forests Restoration Act of 2003 |
| HIZ | Home Ignition Zone |
| GIS | Geographic Information System |
| LRA | Local Responsibility Area |
| NEPA | National Environmental Policy Act |
| NPS | National Park Service |
| RAWS | Remote Automated Weather Stations |
| RWQCB | Regional Water Quality Control Board |
| SBCCP | San Benito County Conservation Plan |
| SBFSC | San Benito Fire Safe Council |
| SBALT | San Benito Agricultural Land Trust |
| SBMRNA | San Benito Mountain Research Natural Area |
| SBRCD | San Benito Resource Conservation District |
| SRA | State Responsibility Area |
| UCANR | University of California Agriculture and Natural Resources |
| USDA | U.S. Department of Agriculture |
| USFWS | U.S. Fish and Wildlife Service |
| WUI | Wildland Urban Interface |

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San Benito County, CA

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*Preliminary – Subject to Revision*

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# SAN BENITO COMMUNITY WILDFIRE PROTECTION PLAN
## San Benito County, California

## Introduction

### Background and Purpose

For centuries, the Indigenous peoples of what is now known as San Benito County practiced cultural burns throughout the grasslands and forested areas of their sacred home. These controlled fires both mitigated the threat of catastrophic wildfires by reducing fuel loads and fostered biodiversity by enhancing ecosystem resilience. These fires supported California's diverse ecosystems by encouraging the growth of fire-adapted plant species such as chaparral and certain types of oak, which are crucial for sustaining local wildlife. The periodic burning also helped prevent the accumulation of dead vegetation, which can lead to larger, uncontrollable fires, and promoted the regeneration of plants that rely on fire to germinate, such as certain pine species and manzanita. However, the arrival of colonizers and subsequent displacement of Indigenous communities from their ancestral territories led to a decline in these vital practices. In recent decades, amid escalating heatwaves and prolonged droughts, the reduction of traditional cultural burns and fuels reduction treatments has rendered the landscape increasingly vulnerable to devastating wildfires. While there has been a resurgence in efforts to restore and maintain cultural burnings and fuels reduction treatments, greater collaboration and planning is required to adequately prepare for, reduce the risk of, and recover from wildland fire events. In 2003, the U.S. Congress passed the Healthy Forests Restoration Act of 2003 (HFRA) to address the widespread destruction of forests and increased wildfire risk (U.S. Congress, 2003). The HFRA expedites the development and implementation of hazardous fuels reduction projects on federal land and highlights the need for federal agencies to work collaboratively with communities and local jurisdictions.

A key component of the HFRA is the development of community wildfire protection plans (CWPPs), which have been a national standard of practice since the HFRA was signed into law. A CWPP is a community-based plan focused on identifying the local threats of wildfire and conducting hazardous fuels reduction projects within the Wildland Urban Interface (WUI). WUIs are established by communities and are the areas where wildland fuels meet development, often in the form of homes, businesses, infrastructure (e.g., power lines, drinking water supplies), and other valuable assets.

The purpose of this plan is to provide a countywide scale of wildfire risk and protection needs for San Benito County. Targeting these areas for fire risk reduction projects is likely to have the greatest effect in protecting residents' homes, livelihoods, and valued natural resources. The plan also recognizes the importance of learning from and supporting Indigenous-led wildfire management. This partnership, along

with the collaboration between responsible wildfire management and suppression entities in the planning area, provides a framework for preventing future wildfire risk.

San Benito County adopted the previous CWPP in 2010. Between 2010 and 2024, many changes have occurred across the county. The San Benito CWPP provides an updated wildfire risk assessment for the region and identifies wildfire prevention, preparedness, and response projects that will best serve the region's needs now and into the future. Additionally, communities with an established CWPP receive priority for funding of hazardous fuels reduction projects carried out in accordance with the HFRA.

The CWPP meets the minimum requirements of the HFRA by:

- Demonstrating collaboration between multiple agencies at the state and local levels and in consultation with federal agencies and other interested parties.

- Prioritizing and identifying hazardous fuel reduction treatments and recommending the types and methods of treatments to protect at-risk communities and infrastructure.

- Recommending strategies that residents and communities can take to reduce the ignitability of structures.

## San Benito Wildfire Resilience Program

The CWPP is one piece of a larger initiative, funded by the California Coastal Conservancy, to initiate and implement a Wildfire Resilience Program for San Benito County (**Figure 1**). The Program's goals are to:

- Better understand wildfire hazards and risk for communities and resources in San Benito County

- Update the county's CWPP

- Develop an actionable Regional Prioritization Plan of projects to reduce hazardous fuels and risk

- Develop burn plans and environmental documentation for a suite of priority projects

## CWPP Development Process

The 2024 CWPP was developed with input by representatives from local, Tribal, state, and federal agencies; landowners and residents; and community-based groups with a demonstrated commitment to reducing wildfire risk in San Benito County. A team of Core Collaborators provided key oversight and guided the development of the update (**Table 1**). The Core Collaborators met monthly, and more frequently as needed, to develop, implement, and amend the plan.
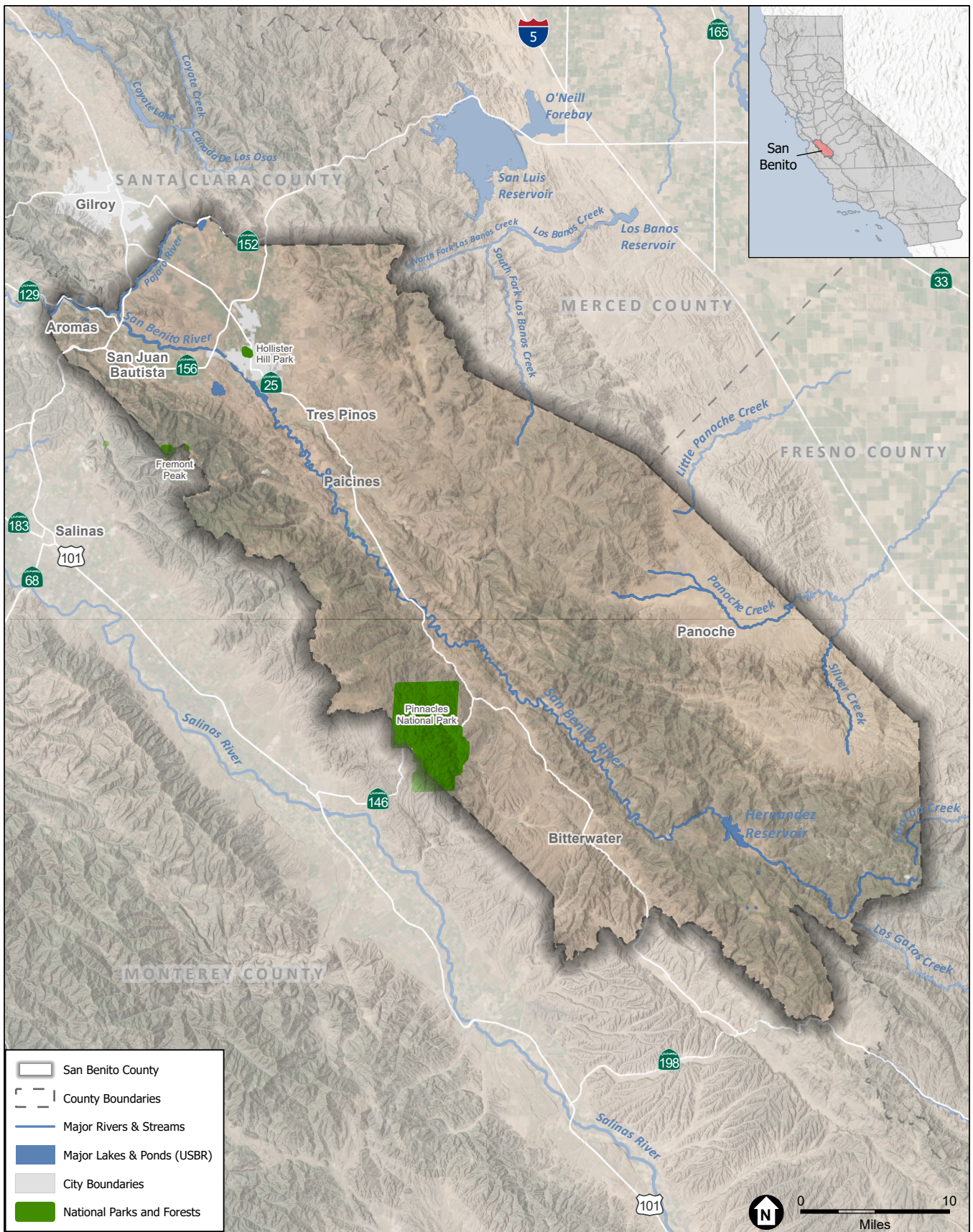
San Benito Wildfire Resilience Program

**Figure 1**
San Benito County, California

**TABLE 1**
**LIST OF CORE COLLABORATORS RESPONSIBLE FOR THE SAN BENITO CWPP**

| Core Collaborators | Organization/Agency |
|---|---|
| Alex Michel | Central Coast Prescribed Burn Association |
| Amelia Ryan | National Park Service |
| Barb Satink Wolfson | University of California Agriculture and Natural Resources (UCANR) |
| Brandon Dorenbush | San Benito County Office of Emergency Services |
| Brice Muenzer | California Department of Forestry and Fire Prevention (CAL FIRE) |
| Charlie Bedolla | Hollister Fire Department |
| Dara Tobias | San Benito County Fairgrounds |
| Devii Rao | UCANR |
| Esak Ordonez | Amah Mutsun Land Trust/Tribal Band |
| Jared Childress | Central Coast Prescribed Burn Association |
| Jason Lingo | San Benito County Cattlemen's Association |
| Kanyon Sayers Rood | Kanyon Consulting |
| Karminder Brown | San Benito Resource Conservation District |
| Keegan Guillory | Bureau of Land Management |
| Kris Mangano | San Benito County Office of Emergency Services |
| Liz Chandler | San Benito Fire Safe Council |
| Lynn Overtree | San Benito Agricultural Land Trust |
| Madison Mitchell | San Benito County Office of Emergency Services |
| Mason Hyland | California State Parks |
| Matt Stanford | CAL FIRE |
| Michael Panitchpakdi | San Benito Agricultural Land Trust |
| Michael Reeves | San Benito Agricultural Land Trust |
| Nick Ciardella | CAL FIRE |
| Nick Milton | CAL FIRE |
| Pat Mapelli | Graniterock |
| Rachel Reed | Graniterock |
| Richard Pitschka | San Benito Fire Safe Council |
| Ryan O'Dell | Bureau of Land Management |
| Sara French | Amah Mutsun Tribal Band |
| Spencer Klinefelter | Central Coast Prescribed Burn Association |
| Valentin Lopez | Amah Mutsun Land Trust/Tribal Band |

NOTES:
ESA staff provided facilitation of the Core Collaborator meetings, staffed by Suzanne Goldstein, Rachel Gregg, and Isabel Jamerson.

The Core Collaborators represented the following entities:

- San Benito Fire Safe Council: The San Benito Fire Safe Council focuses on wildfire prevention through community education, outreach, and fuel reduction projects. They work on creating defensible space, conducting fuel reduction, and organizing fire safety workshops across San Benito County. Their initiatives cover several thousand acres, depending on the scale of specific projects.

- San Benito County: The county covers 893,440 acres, managing land use planning, emergency response, and fire prevention efforts within its jurisdiction. The County coordinates with state and federal agencies on fire management projects and oversees local fire departments. The Office of Emergency Services coordinates efforts to effectively and efficiently respond to and recover from any and all types of hazards and threats, including emergency response and evacuation needs.

- San Benito Resource Conservation District: The Resource Conservation District (RCD) focuses on natural resource management and conservation in San Benito County. Their fire management activities include promoting sustainable land use practices, supporting fuel reduction projects, and assisting with wildfire recovery efforts.

- San Benito Agricultural Land Trust: The San Benito Agricultural Land Trust (SBALT) works to protect agricultural lands through conservation easements and sustainable land management practices. They incorporate fire-resistant strategies into their conservation projects to mitigate wildfire risks. SBALT conserves several thousand acres of agricultural land in San Benito County, focusing on preserving farmland and natural landscapes.

- Amah Mutsun Land Trust/Tribal Band: The Amah Mutsun Land Trust/Tribal Band focuses on preserving and revitalizing the cultural and natural heritage of the Amah Mutsun people. They engage in traditional fire management practices, including cultural burns, to maintain and restore native habitats and reduce wildfire risks. In San Benito County, they manage significant cultural and ecological sites, working on restoration and conservation projects across several thousand acres.

- Central Coast Prescribed Burn Association: The Central Coast Prescribed Burn Association (CCPBA) promotes and implements prescribed burning practices to enhance land management and wildfire resilience. They coordinate controlled burns, manage fuel loads, and provide training for landowners in San Benito County. Their work involves projects that span hundreds to thousands of acres, aiming to improve habitat conditions and reduce wildfire hazards.

- San Benito County Cattlemen's Association: The San Benito Cattlemen's Association represents local ranchers and promotes sustainable grazing practices. Their fire management efforts include advocating for practices that reduce fuel loads and prevent wildfires. Members manage several tens of thousands of acres in San Benito County, employing grazing strategies that enhance land health and fire resilience.

- Hollister Fire Department: The Hollister Fire Department is responsible for fire suppression, prevention, and emergency response within Hollister and surrounding areas. They engage in community fire safety education, conduct prescribed burns, and work with other local and regional agencies to manage fire risks effectively.

- University of California Agriculture and Natural Resources (UCANR): UCANR provides research, education, and outreach on agricultural and natural resource management, including fire management. They conduct research on fire ecology, offer fire-safe practices education, and collaborate on fire management projects in San Benito County. While UCANR itself does not manage large tracts of land, its programs impact thousands of acres through collaborative projects and research.

- <u>CAL FIRE</u>: CAL Fire is focused on forest management, wildfire prevention and suppression, emergency response, training, and public education. The agency manages state-owned forest lands, engaging in vegetation management and controlled burns to promote healthy forests. CAL FIRE also focuses on fire suppression, emergency response, firefighter and emergency personnel trainings, collaborating with local governments and communities to reduce wildfire risk through land use and wildfire planning, and engages with the public to promote fire safety and preparedness.

- <u>California State Parks</u>: California State Parks oversees several parks in San Benito County, including Hollister Hills State Vehicular Recreation Area and San Juan Bautista State Historic Park. Their fire management responsibilities involve conducting controlled burns, maintaining firebreaks, and ensuring visitor safety through fire prevention measures.

- <u>Bureau of Land Management (BLM)</u>: The BLM manages public lands, including the Clear Creek Management Area, in San Benito County. The Central Coast Field Office's jurisdiction includes resource management, habitat restoration, wildlife protection, public education, and recreational management. The office also engages in fire management through prescribed burns, fuel reduction projects, and collaborative efforts with local firefighting agencies to maintain and restore rangelands and ecosystems.

- <u>National Park Service (NPS) Pinnacles National Park</u>: The NPS manages Pinnacles National Park, which encompasses about 26,000 acres in San Benito County. The NPS plays a critical role in preserving the park's unique geological formations and diverse habitats. Fire management activities include monitoring natural fires, conducting prescribed burns to maintain ecosystem health, and implementing firebreaks and fuel management strategies to protect both the park and surrounding communities.

- <u>Kanyon Consulting</u>: Kanyon Consulting specializes in cultural resource management and environmental consulting, integrating traditional knowledge with contemporary land management practices. They incorporate traditional ecological knowledge into fire management strategies, conduct prescribed burns, and advise on fire-safe practices in San Benito County. The extent of their land management varies by consulting project, covering diverse areas based on client needs.

- <u>Graniterock</u>: Graniterock is a construction and materials company involved in quarrying and land reclamation. While their primary focus is on providing building materials, they engage in fire management by maintaining firebreaks and implementing fire safety measures around their quarry sites. They manage and reclaim land associated with their quarry operations, covering several hundred acres in San Benito County.

## Tribal Partnership

The Amah Mutsun Tribal Band, native to the coastal and inland regions of present-day California, boasts a rich and enduring history deeply intertwined with the lands they have inhabited and stewarded for millennia. The traditional territory of the Amah Mutsun Tribe encompasses all or portions of the counties of San Benito, Monterey, Santa Cruz, and Santa Clara. The arrival of Spanish missionaries in the late 18th century marked a pivotal and devastating chapter in their history, leading to coerced conversion to Christianity, cultural suppression, forced labor, and the disruption of their traditional practices and social structures. Despite these profound challenges, the Amah Mutsun Tribal Band has demonstrated resilience and determination in preserving their cultural heritage and revitalizing cultural practices.

Today, Tribal members actively engage in traditional practices, environmental stewardship projects, and advocacy for land conservation and management, forging a path towards healing and renewal while reaffirming the enduring connection to their ancestral lands. The Tribal Band comprises more than 20

distinct peoples, representing the surviving descendant families of the Indigenous people who survived the Santa Cruz and San Juan Bautista missions. The Amah Mutsun Tribal Band currently has an enrolled membership of nearly 600. These are the Previously Recognized Tribal group listed by the Indian Service Bureau (now known as the Bureau of Indian Affairs) as the "San Juan Band."

The Amah Mutsun Land Trust (AMLT) is an initiative of the Amah Mutsun Tribal Band and serves as the vehicle by which the Amah Mutsun access, protect, and steward lands that are integral to their identity and culture. AMLT supports the re-learning of Tribal history, resurgence of Indigenous management practices, and healing of Indigenous community members. AMLT promotes restoring traditional ecological knowledge and revitalizing relationships with local ecosystems through cultural burns. These Indigenous-led burns involve trainings, stewardship and restoration efforts, record keeping, and traditional ceremonies. This practice of cultural burns improves the climate resilience and biodiversity of local ecosystems while supporting the sovereignty of the Amah Mutsun Tribal Band.

Representatives from the AMLT served as Core Collaborators in the development of this CWPP. This partnership is essential, as the lands at risk of wildfire in San Benito County hold deep cultural and spiritual significance to the Amah Mutsun. These areas are imbued with centuries of Indigenous fishing, hunting, and ceremonial practices and village sites, and hold deep histories, traditional knowledge, and sacredness. Recognizing and respecting this cultural connection is fundamental to fostering effective wildfire management. There are great opportunities to increase the awareness and mindfulness of the cultural history of the Amah Mutsun on both public and private lands, and the work to protect and honor the history of the Tribe is ongoing. Core Collaborators sought out ways to prioritize Indigenous-led efforts throughout the development of the CWPP, as the partnership and inclusion of traditional cultural knowledge and practices to land stewardship enhances the effectiveness of wildfire mitigation, preparedness, and response strategies.

## Community Involvement

The CWPP process is designed to improve public understanding around wildfire risk, prevention, and mitigation. The Core Collaborators conducted public outreach using a multimedia approach, including in-person community meetings, virtual webinars, focus groups, comment cards, email distribution, and social media posts. Four community meetings were held during the preparation of the CWPP between May and August 2024. Feedback and suggestions received from community members were synthesized and used to create objectives and strategies for the San Benito CWPP.

# San Benito County Characteristics

## Management and Planning Context

### Wildfire Management Response Capabilities/Agencies

In California, wildfire management responsibilities are divided among local, state, and federal agencies, each with distinct roles across their respective responsibility areas (**Figure 2**). Local agencies, such as the Aromas Tri-County Fire Department and the Hollister Fire Department, handle fire protection and emergency response within specific communities or jurisdictions in the Local Responsibility Area (LRA). The State Responsibility Area (SRA) is managed by CAL FIRE, focusing on wildland fire protection across unincorporated lands and providing mutual aid to local departments through cooperative

agreements. Federal agencies, including the BLM, manage fire response in the Federal Responsibility Area (FRA) and collaborate with state entities to enhance overall fire management efforts. This tiered structure ensures comprehensive coverage and coordination in managing fire risks across diverse landscapes.

The following section provides more detail on the responsibilities of each of the agencies.
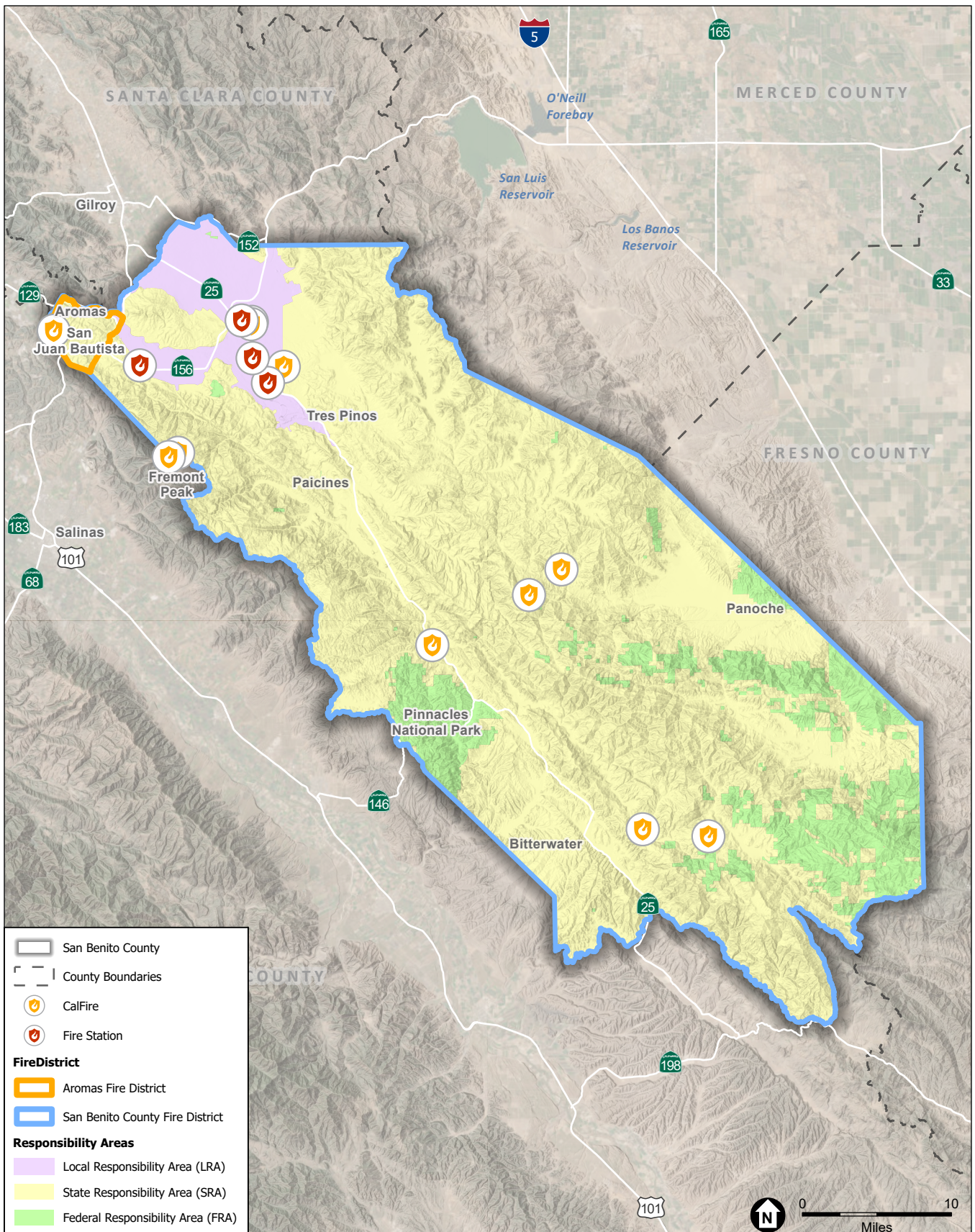
### Hollister Fire Department

The Hollister Fire Department operates four stations in San Benito County. Station 1 and 2 are in the City of Hollister, Station 3 is located at the Hollister Municipal Airport, and Station 4 is in San Juan Bautista. In 2013, the Hollister Fire Department absorbed the San Juan Bautista Volunteer Fire Department and San Benito County Fire Department of San Benito County, assuming the responsibility for the County's fire protection. In 2017, there were 38 active professional firefighters (City of Hollister, 2017).

### Aromas Tri-County Fire Department

The Aromas Tri-County Fire Protection District is a Full Service Non-Enterprise Special District with fire protection and life safety responsibilities for nearly 60 square miles within portions of Monterey, San Benito, and Santa Cruz Counties. The Protection District has a Cooperative Fire Protection Agreement with CAL FIRE. Cooperative Fire Protection Agreements can be for a wide variety of services depending upon a local government entity needs. The Fire District provides a constant daily minimum staffing of one Battalion Chief, one Fire Captain, and one Fire Apparatus Engineer on the primary response engine. The fire station is located at 492 Carpenteria Rd in Aromas CA. It houses two type 1 fire engine2, one type 3 fire engine, one utility pickup and one chiefs command vehicle. An additional CAL FIRE Type 3 wildland engine is also housed at the Aromas fire station and staffed seasonally with a three-person crew.

### CAL FIRE

Four CAL FIRE stations exist in San Benito County: the Bear Valley Station in Bear Valley, the Beaver Dam Station near Bitterwater, the Antelope Station in Antelope Valley, and the Hollister Station in Hollister. A CAL FIRE air attack base and helitack base are co-located at the Hollister Airport (California State Geoportal, 2018). During peak fire season, CAL FIRE ensures all stations are open and staffed 24 hours per day; response capabilities are enhanced; all aircraft are prepositioned and staffed; and crews are staffed, trained, and working. Under the California Master Mutual Aid Agreement, CAL FIRE assists other fire departments when local resources are depleted and Department resources are available, regardless of the type of disaster. In turn, CAL FIRE can access local government fire departments through the same agreement for assistance in wildland fire suppression.

Legend:

- San Benito County
- County Boundaries
- CalFire
- Fire Station

**FireDistrict**
- Aromas Fire District
- San Benito County Fire District

**Responsibility Areas**
- Local Responsibility Area (LRA)
- State Responsibility Area (SRA)
- Federal Responsibility Area (FRA)

SOURCE: Esri, 2024; Google, 2024; CalFire, 2024; ESA, 2024

San Benito Wildfire Resilience Program

**Figure 2**
Fire Agency Service Areas

ESA

### *Bureau of Land Management*

The BLM is responsible for fire management and response on the acres it manages within San Benito County. CAL FIRE maintains a cooperative agreement with the BLM to improve efficiency by having access to federal personnel, equipment, supplies, services, and information to help in times of disaster, when departmental resources are depleted. In turn, CAL FIRE provides assistance through interstate compact agreements to federal and other state wildfire agencies throughout the nation. The BLM is also a member of the California Forest Management Task Force.

## Alignment with Other Plans and Policies

This CWPP is also aligned with multiple federal, state, and local fire plans that affect wildfire preparedness, management, and recovery activities in San Benito County, including:

- The National Fire Plan, developed in 2000, prioritizes firefighter safety, hazardous fuels reduction, collaboration between public and private entities, and rehabilitation of post-fire landscapes. It also encourages the creation of local CWPPs to guide wildfire risk reduction efforts. The 2024 CWPP adheres to the principles identified in the National Fire Plan (U.S. Forest Service, 2000).

- The National Cohesive Wildland Fire Management Strategy is a strategic push to work collaboratively among all vested partners and across all landscapes, using best science, to make meaningful progress towards three goals: Resilient Landscapes, Fire Adapted Communities, and Safe, Effective, Risk-Based Wildfire Response. The National Strategy emphasizes that CWPPs are crucial wildfire risk mitigation tools to manage wildfire preparedness, response, and recovery activities across a multi-jurisdictional, fragmented landscape (U.S. Forest Service, 2014). The 2024 CWPP and strategies align with these three goals.

- The CAL FIRE San Benito-Monterey Unit 2024 Strategic Plan is designed to reduce wildfire risks through proactive measures taken well before fires start. The plan aims to cut firefighting costs and property damage, enhance firefighter safety, and improve ecosystem health by implementing various pre-fire management strategies. These include fire-resistant landscaping, mechanical fuel treatments, prescribed burns, and strict building standards. The plan identifies San Juan Canyon as a priority area at high risk from wildfire as it features a mix of residential structures and large ranches, often in remote locations with limited access. Priority goals for this area include increasing public awareness about wildfire threats and defensible space, and reducing wildland fuels, particularly near key assets and access routes. Proposed actions to achieve these goals involve enforcing fire safety requirements, providing chipper services, clearing fuels along access routes, developing emergency plans, collaborating with local community members, and expanding fuel modification efforts through projects such as the San Juan Canyon Shaded Fuel Break and planned Vegetation Management Projects along the Gabilan Range. The 2024 CWPP aligns with this plan by identifying priority areas for fuels reduction projects and homeowner risk mitigation strategies.

- The San Benito County Operational Area Emergency Operations Plan provides the foundation for the management of emergencies and disasters through the integration and coordination with other governmental agencies. The plan describes the methods for carrying out emergency operations, the process for rendering mutual aid, the emergency services of governmental agencies, how resources are mobilized, how the public will be informed, and the process to ensure continuity of government during an emergency or disaster (San Benito County Office of Emergency Services, 2023). The Evacuation and Mass Transportation Plan is an annex to the Emergency Operations Plan, outlining how evacuation and mass transportation will be conducted in San Benito County following a large-scale emergency or disaster event, including wildfires. The plan includes information related to evacuation mitigation and preparedness, decision making and coordination, transportation
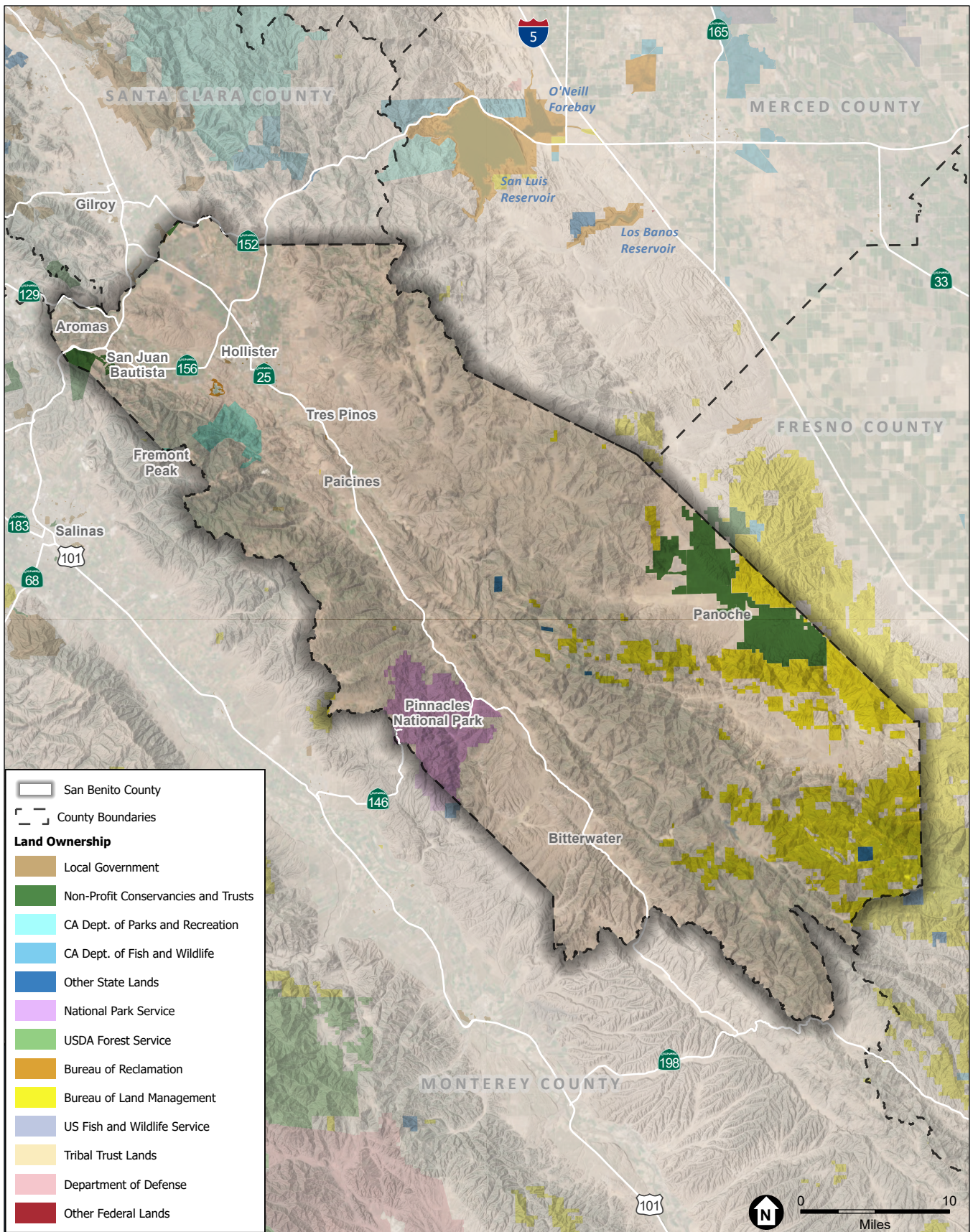
coordination, and accessible transportation considerations. The 2024 CWPP supports the preparedness, response, recovery, and mitigation operations identified in the Emergency Operations Plan.

• The Multi-Jurisdictional Hazard Mitigation Plan serves as a strategy for implementation and maintenance of the mitigation program in San Benito County. The plan incorporates lessons learned from recent California wildfires and provides mitigation actions that increase the resiliency of the community to hazard events. The Wildfire section of the plan informs the updated wildfire risk assessment for San Benito County including wildfire characteristics, location and extent, recent occurrences, and probability (San Benito County Office of Emergency Services, 2022).

• The County of San Benito has initiated the development of a multi-species and multi-phased county-wide Conservation Plan (SBCCP). Benefits of the SBCCP will include more meaningful conservation outcomes for listed and sensitive species, the creation of new open space and recreational areas, and long-term viability of the County's agricultural economy (San Benito County, 2024). The SBCCP is still under development, but will be a useful resource when updating the CWPP and in the planning and design of hazardous fuel reduction projects for the Regional Prioritization Plan.

• The San Benito County 2035 General Plan guides land use, development, and environmental quality. It provides a vision for how the county will grow and change in the future, and addresses the importance and necessity of neighborhood and community action in mitigating wildfire risk. The plan emphasizes the importance of proper land use planning and investment in fire protection resources as San Benito County continues to grow and potential for wildland fires increases. Goal HS-4.1 states that the County shall maintain and implement the CWPP as a mechanism for community input and identification of areas presenting high fire hazard risk. It mandates that the County shall enact the CWPP as a mechanism for community input and identification of areas of fire hazard risk, and that the County shall review the CWPP every two years and update as necessary (San Benito County, 2015).

• Environmental review processes may be required before hazardous fuels reduction projects can be implemented on the ground. Reviews under the National Environmental Policy Act (NEPA) are triggered for federal actions and projects receiving federal funding and permits, while the California Environmental Quality Act (CEQA) applies more broadly to state and local government actions. Projects implementing a CWPP recommendation on federal lands within the WUI defined in a CWPP are afforded expedited NEPA review and are typically conducted by the federal agency responsible for land ownership (e.g. BLM, NPS). Proposed fuel reduction projects on non-federal lands may require compliance with the CEQA or the California Forest Practice Rules (CFPR). Private landowners conducting defensible space projects under PRC 4291 guidelines are not subject to CEQA review requirements. Non-defensible space fuel treatment projects on nonfederal lands that are discretionary and are to be carried out or approved by public agencies would be subject to CEQA review and documentation (CEQA Guidelines 21080(a)).

# County Characteristics

## Overview

This CWPP covers wildfire risk and mitigation strategies for San Benito County, California. Located in central California, San Benito County is bordered by Monterey and Santa Cruz counties to the west, Fresno County to the south, Merced County to the east, and Santa Clara County to the north. Over 90% of the county's land use is allocated for farming, ranching, forestry, and other public uses (San Benito County, 2015). **Figure 3** displays land ownership of local, state, federal, Tribal, and private entities across the county.

## Legend

### San Benito County
### County Boundaries

### Land Ownership
- Local Government
- Non-Profit Conservancies and Trusts
- CA Dept. of Parks and Recreation
- CA Dept. of Fish and Wildlife
- Other State Lands
- National Park Service
- USDA Forest Service
- Bureau of Reclamation
- Bureau of Land Management
- US Fish and Wildlife Service
- Tribal Trust Lands
- Department of Defense
- Other Federal Lands

San Benito Wildfire Resilience Program

**Figure 3**
Land Ownership

ESA

# Demographics

San Benito County encompasses approximately 890,000 acres and supports a population of approximately 67,000 people distributed among two incorporated cities, San Juan Bautista and Hollister, and unincorporated County areas (US Census Bureau, 2022). The majority of residents are concentrated in Hollister and San Juan Bautista, while the remaining population are spread across the rural unincorporated portions of the county. The county includes approximately 21,400 housing units, with the overwhelming majority consisting of low-density housing (one unit per 40 acres, or less). The county's population will likely grow to greater than 77,000 by the 2050s (California Department of Finance, 2022), requiring additional development to accommodate residents.

# Fire Environment

Wildfire risk and behavior are strongly correlated to landscape characteristics and conditions such as topography, vegetation, climate, the WUI, and fire history. These factors heavily influence fire behavior and response tactics by dictating whether and how a wildfire starts, its intensity, its rate of spread across the landscape, and how difficult it is to control.

## Topography

The topography in the region is extremely variable and is affected greatly by the presence of the San Andreas Fault, which bisects San Benito County from approximately Bitterwater in the southeast to San Juan Bautista in the northwest. The San Benito River runs the length of the county along a similar alignment. The two mountain ranges in the county include the Gabilan Range to the southwest and the Diablo Range to the east. Steep, varied terrain characterizes the southern portion of the county while the northern portion near Hollister and San Juan Bautista is relatively flat. Elevations in the County range from approximately 140 feet above mean sea level in the northwest at the confluence of the San Benito River and the Pajaro River up to over 5,200 feet in the southeast near San Benito Mountain.

## Vegetation and Fuels

In addition to weather and topography, vegetation (or fuel) plays a major role in affecting fire behavior and shaping fire hazard potential. Vegetation distribution varies by location and topography, with dramatic differences observed between the northern, agricultural areas and the more mountainous, southern region. Dominant vegetative cover within San Benito County is herbaceous or grassland cover, distributed primarily in the low-lying valley areas and hills south of Hollister. While this fuel type can burn quickly under strong, dry wind patterns, it does not produce the high heat intensity and high flame lengths associated with chaparral fuel types. Other significant vegetative cover types include pine/grass, light brush, and tall chaparral, which are primarily associated with the steeper, upland areas in the southern region. Fire behavior in brush fuel types produces higher flame lengths than that in grassland, although spread rates are typically slower. Fire behavior in woodlands is variable, depending on surface fuel conditions and the presence of ladder fuels.

Invasive and Non-native Species, Diseases, and Pests of Concern

Eucalyptus trees, originally native to Australia, have become problematic in California due to their rapid growth and dense, flammable foliage. In San Benito County, eucalyptus stands contribute to increased

wildfire risk because of their high oil content and the large quantities of highly flammable leaf litter they produce. These characteristics make eucalyptus forests highly combustible and prone to sustaining intense and fast-moving fires. The shedding of bark and leaves from eucalyptus trees further exacerbates fire hazards by adding to the accumulation of dry fuel on the forest floor. With their ability to form dense, monoculture stands, eucalyptus displaces native vegetation, reducing biodiversity and altering fire regimes. As climate change and prolonged drought conditions continue, the risk posed by eucalyptus is expected to increase, leading to more frequent and severe wildfires. Managing these invasive trees is crucial to reducing wildfire risks, involving strategies such as targeted removal and replacement with less flammable vegetation to mitigate the fire danger they present.

Diseases such as Sudden Oak Death and pine pitch canker, along with insect infestations (e.g., goldspotted oak borer), are also of concern as they may cause relatively rapid mortality and subsequent increased dead fuel loads. Standing dead fuels contribute to increased wildfire hazard and require treatment and/or removal, especially within the WUI. Further, care must be taken to avoid transportation of infected tools, chips, and trimmings/plant material into non-infected regions.

## Climate

Weather conditions in the region are affected by topography and proximity to the Pacific Ocean. The area typically has limited fog with temperatures commonly reaching 90 to 100 degrees. Winds in the valley are strongest in the afternoon, averaging upwards to 10-15 mph. Winters are mild with rainfall from 7 to 30+ inches (California Department of Forestry and Fire Protection, 2023). Warming temperatures along with changes in precipitation and vapor pressure deficit, have led to the drying of fuels, thereby influencing wildfire behavior. In recent years, fires in the Southwest have grown larger, more frequent, and more severe, with clear evidence attributing climate change as a significant contributor. The transformation of ecosystems, particularly semiarid to arid forests, has been notable, with large areas experiencing conversions to native grassland or shrubland due to high-severity fires. These changes not only affect vegetation but also pose risks to watersheds, aquatic resources, and the stability of riparian systems. The more arid climate has also hindered postfire ecosystem recovery, limiting tree seedling and shrub establishment, and water availability and quality. The projections for the future suggest that wildfire activity will continue to increase in frequency and severity, endangering lives, property, infrastructure, and natural resources with substantial economic costs incurred from firefighting efforts (NOAA, 2023).

## Wildland Urban Interface

The WUI is generally defined as the area in which humans and the built environment interface or intermix with wildland fuels. *Interface* communities are located in areas in which urban or suburban development directly borders wildland areas (e.g., neighborhood at a forest's edge), while *intermix* communities are located in areas where structures are interspersed within wildland areas and natural landscapes. **Figure 4** displays the WUI for San Benito County, showing interface communities concentrated in the northern, more populated portion of the county.
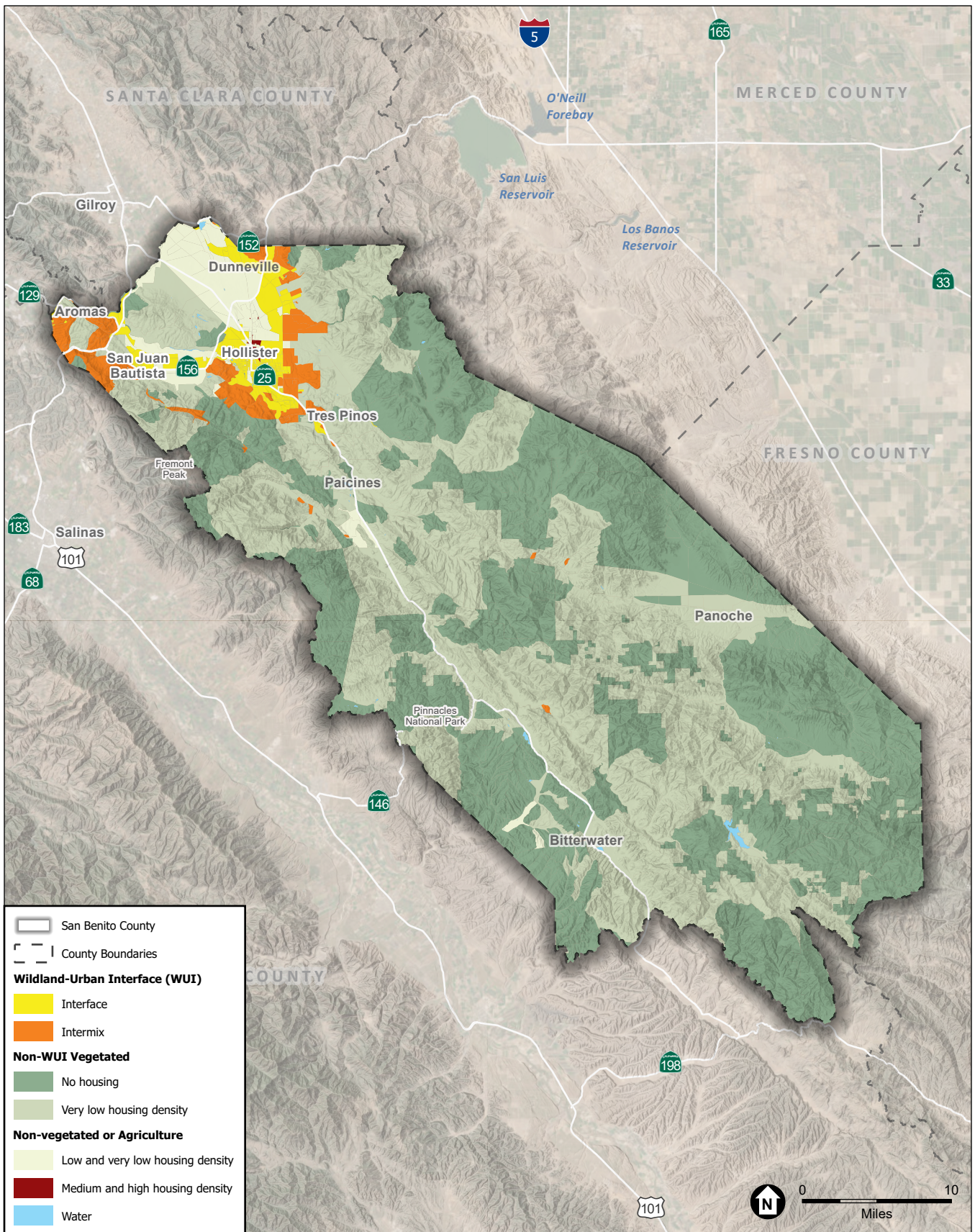
San Benito Wildfire Resilience Program

**Figure 4**
Wildland-Urban Interface (WUI)

Legend:

San Benito County

County Boundaries

**Wildland-Urban Interface (WUI)**
- Interface
- Intermix

**Non-WUI Vegetated**
- No housing
- Very low housing density

**Non-vegetated or Agriculture**
- Low and very low housing density
- Medium and high housing density
- Water

ESA

## Fire History

Fire history is an important component in understanding fire frequency, fire type, significant ignition sources, and vulnerable areas/communities. The topography, vegetation, and climatic conditions associated with San Benito County combine to create a unique situation capable of supporting wildfires. Relative to other areas in the central coast region of California, San Benito County has not been subjected to large-scale wildfires in recent history. While numerous fires have burned in San Benito County, their sizes remain small relative to other fires in the region. For example, the Basin Complex Fire in Monterey County in 2008 burned over 160,000 acres, whereas the fires in San Benito County between 2008 and 2023 have all been under 6,500 acres (CAL FIRE, 2024). The average interval between large wildfires within the County is 5.8 years, with intervals as short as 1 year and as long as 17 years. **Figure 5** displays the extent and location of wildfires occurring in and bordering San Benito County between 1950 and 2023.

# Wildfire Risk Assessment

The wildfire risk assessment for San Benito County used the methods described by Scott et al. (2013) to evaluate wildfire hazard, burn probability, exposure to wildfire, and effects of wildfires on Highly Valued Resources and Assets (HVRAs) of concern. This analysis allows users to evaluate the potential positive or negative effects of wildfire on HVRAs.

Through meetings with the Core Collaborators and community members, a suite of HVRAs were defined for San Benito County. Generally, *resources* are naturally occurring (e.g., riparian habitat, endangered species) or culturally/historically significant, while *assets* are human-made (e.g., utilities, structures). These are features that can be either beneficially or detrimentally influenced by fire. Identifying and prioritizing HVRAs helps evaluate the potential consequences of wildfires and develop targeted strategies to reduce wildfire risk. The HVRAs selected for this project included:

- Critical infrastructure (e.g., communications, emergency response, utilities)
- Cultural/historic resources (e.g., historic sites, cultural resources)
- Natural resources (e.g., ecological reserves, wetlands)
- Populated areas (e.g., communities, recreational facilities)

The Fire Hazard Severity Zones (FHSZs) presented in **Figure 6** are defined based on vegetation type, topography, and climate, and represent the probability of an area burning and potential fire behavior. The FHSZ classification ranges from Moderate to High to Very High. Areas without a classification can still burn although the risk is generally lower. The majority of San Benito County is in a High or Very High FHSZ; the majority of land within the WUI is classified as a Moderate FHSZ.

Wildfire risk is a measure of the probability of fire occurring at different fire intensity levels and the negative and positive effects (or losses and benefits) on HVRAs associated with fire intensity (e.g., flame lengths). Weather data from four Remote Automated Weather Stations (RAWS) in the county were used to create weather scenarios based on historic patterns at the 90th and 97th percentiles to model conditions under more serious but not extremely rare conditions (90th) and more extreme and rare fire behavior (97th). Flame length is a proxy for fire intensity; 0-2 feet (ft) flame length is generally considered low

intensity and therefore less damaging and easier to control while flames greater than 12 ft can indicate a very intense, more damaging, and more challenging to control fire.

**Figure 7** presents annual burn probability for San Benito County. These results present the likelihood of a particular area of burning in a given year. Orange and red colors indicate areas most likely to burn in a wildfire.

The team then generated HVRA response functions to characterize the expected net value change (eNVC) in each HVRA when exposed to wildfire. A positive value in a response function indicates a benefit or increase in value while a negative value indicates a loss or decrease in value. In general, most human-made HVRAs are associated with negative values signifying a negative effect of wildfire on these features, while ecological resources are frequently associated with either lower value change or positive values as wildfires can be beneficial to natural resources at lower intensities. The results of the composite analysis summarizing results across all HVRAs are presented in **Figure 8** ranging from highly detrimental (red) to highly beneficial (green) and **Table 2**.
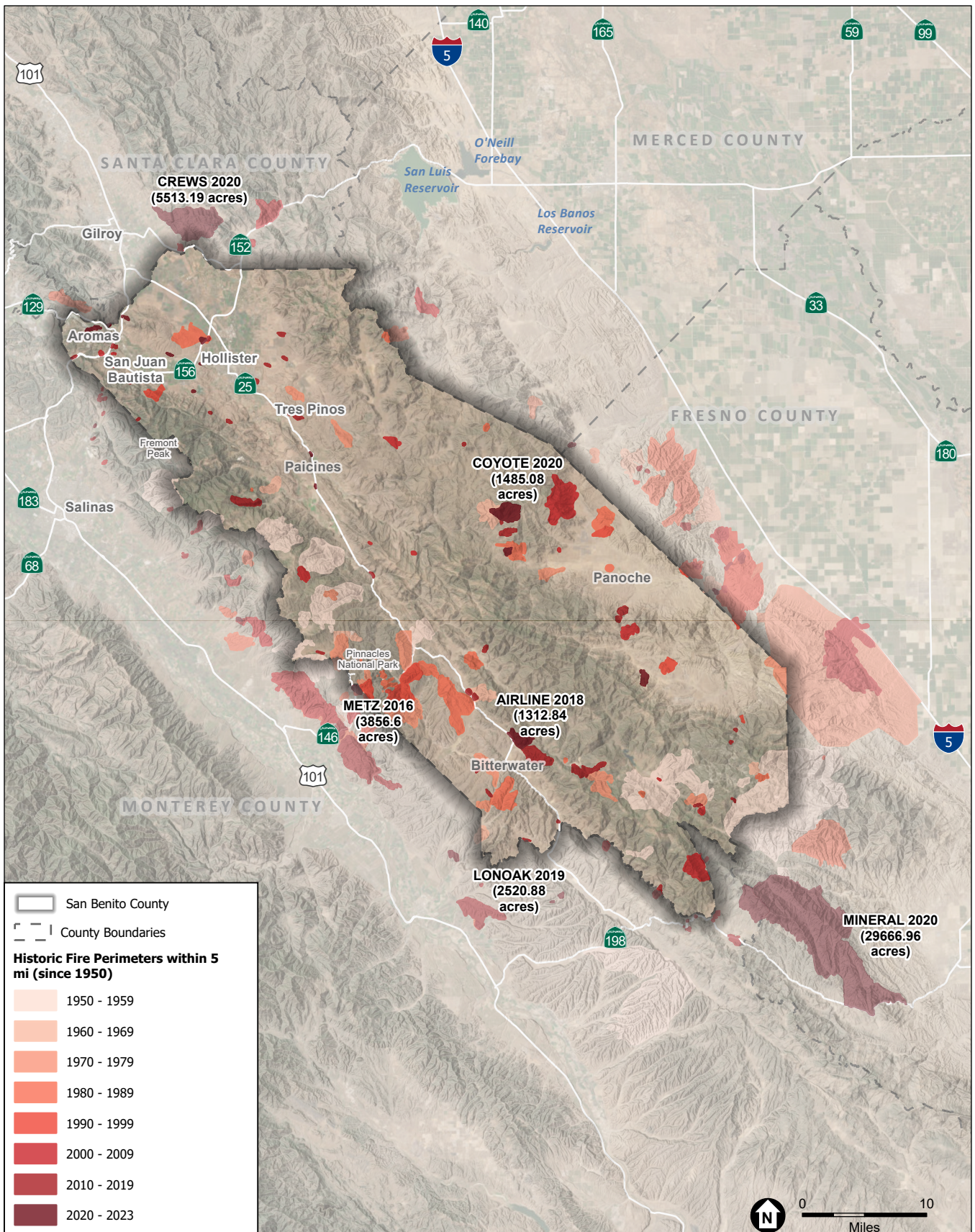
**TABLE 2**
**WILDFIRE RISK TO HVRAS IN SAN BENITO COUNTY ASSOCIATED WITH FLAME LENGTHS.**

| HVRA | Sub-HVRA | Flame Length Range (ft) | | | | | |
|---|---|---|---|---|---|---|---|
| | | 0-2 ft | 2-4 ft | 4-6 ft | 6-8 ft | 8-12 ft | 12+ ft |
| Critical Infrastructure | Communications | 0 | 0 | -33 | -66 | -99 | -99 |
| Critical Infrastructure | Emergency Response | -27.5 | -27.5 | -60.5 | -66 | -93.5 | -99 |
| Critical Infrastructure | Other | 0 | 0 | -19.8 | -66 | -66 | -79.2 |
| Critical Infrastructure | Utilities | -8.25 | -16.5 | -49.5 | -74.25 | -99 | -99 |
| Cultural/Historic | Historic Sites | -33 | -66 | -99 | -99 | -99 | -99 |
| Cultural/Historic | Cultural resources | -33 | -66 | -99 | -99 | -99 | -99 |
| Natural Resources | Ecological Reserves | 33 | 33 | 0 | -33 | -66 | -99 |
| Natural Resources | Wetlands | 0 | 0 | -33 | -66 | -66 | -99 |
| Populated Areas | Community | -33 | -33 | -66 | -66 | -99 | -99 |
| Populated Areas | Recreation Facilities | -33 | -33 | -66 | -66 | -99 | -99 |

NOTE:
Values represent detrimental (maximum value of -100) to neutral or beneficial (0-33).

Figure 9 displays established evacuation routes and zones for San Benito County to inform wildfire risk reduction fuels treatments and community wildfire planning. Primary evacuation routes include Highway 25 and 156 (San Benito County Office of Emergency Services, 2023).

**Legend**

San Benito County

County Boundaries

**Historic Fire Perimeters within 5 mi (since 1950)**

1950 - 1959
1960 - 1969
1970 - 1979
1980 - 1989
1990 - 1999
2000 - 2009
2010 - 2019
2020 - 2023

**Map labels:**

CREWS 2020 (5513.19 acres)

COYOTE 2020 (1485.08 acres)

METZ 2016 (3856.6 acres)

AIRLINE 2018 (1312.84 acres)

LONOAK 2019 (2520.88 acres)

MINERAL 2020 (29666.96 acres)

SANTA CLARA COUNTY

MERCED COUNTY

FRESNO COUNTY

MONTEREY COUNTY

O'Neill Forebay

San Luis Reservoir

Los Banos Reservoir

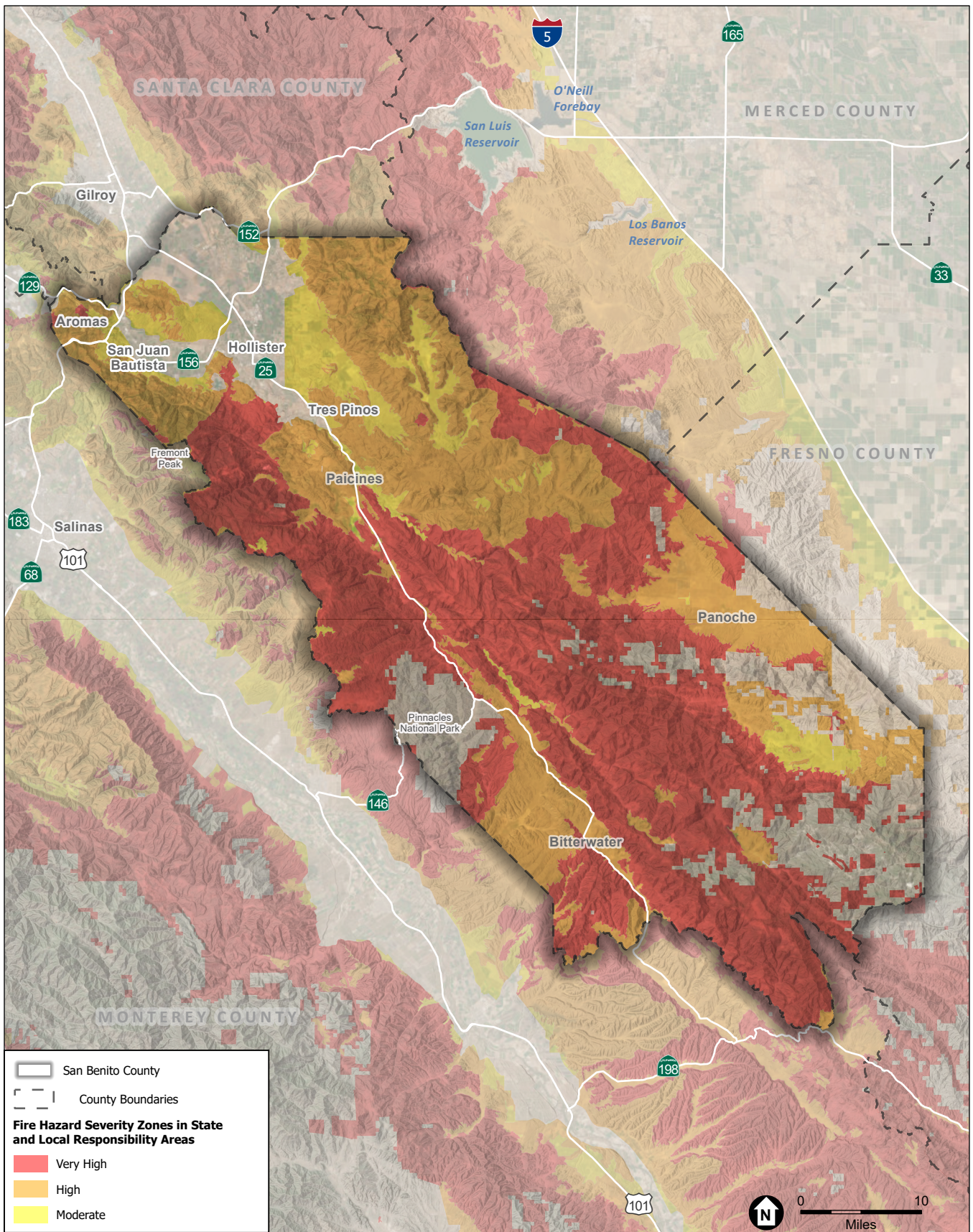Gilroy, Aromas, San Juan Bautista, Hollister, Tres Pinos, Paicines, Fremont Peak, Salinas, Pinnacles National Park, Bitterwater, Panoche

SOURCE: Esri, 2024; Google, 2024; CAL FIRE, 2024; ESA, 2024

San Benito Wildfire Resilience Program

**Figure 5**
Fire History

ESA

San Benito Wildfire Resilience Program

**Figure 6**
Fire Hazard Severity Zones
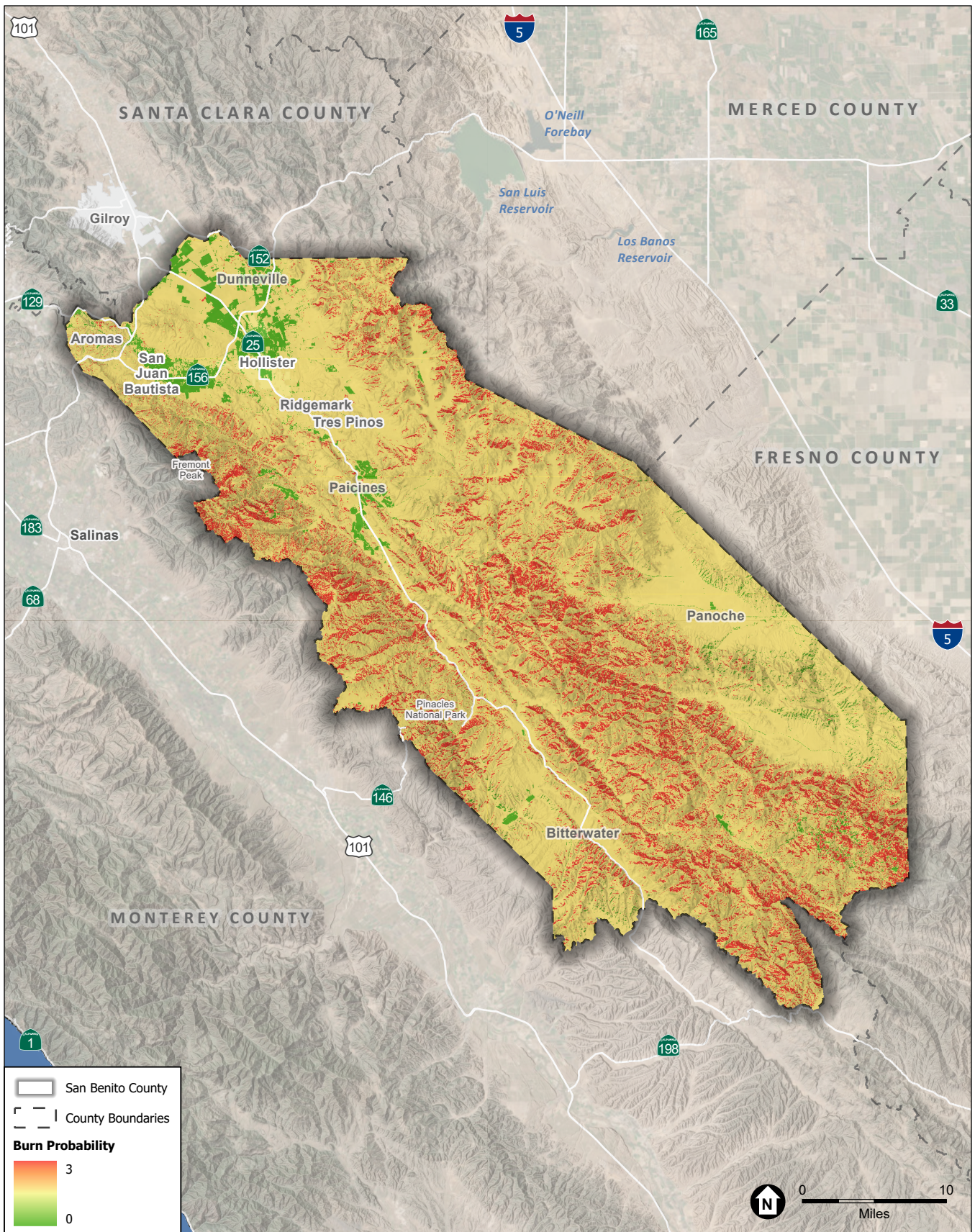
San Benito Wildfire Resilience Program

**Figure 7**
Burn Probability
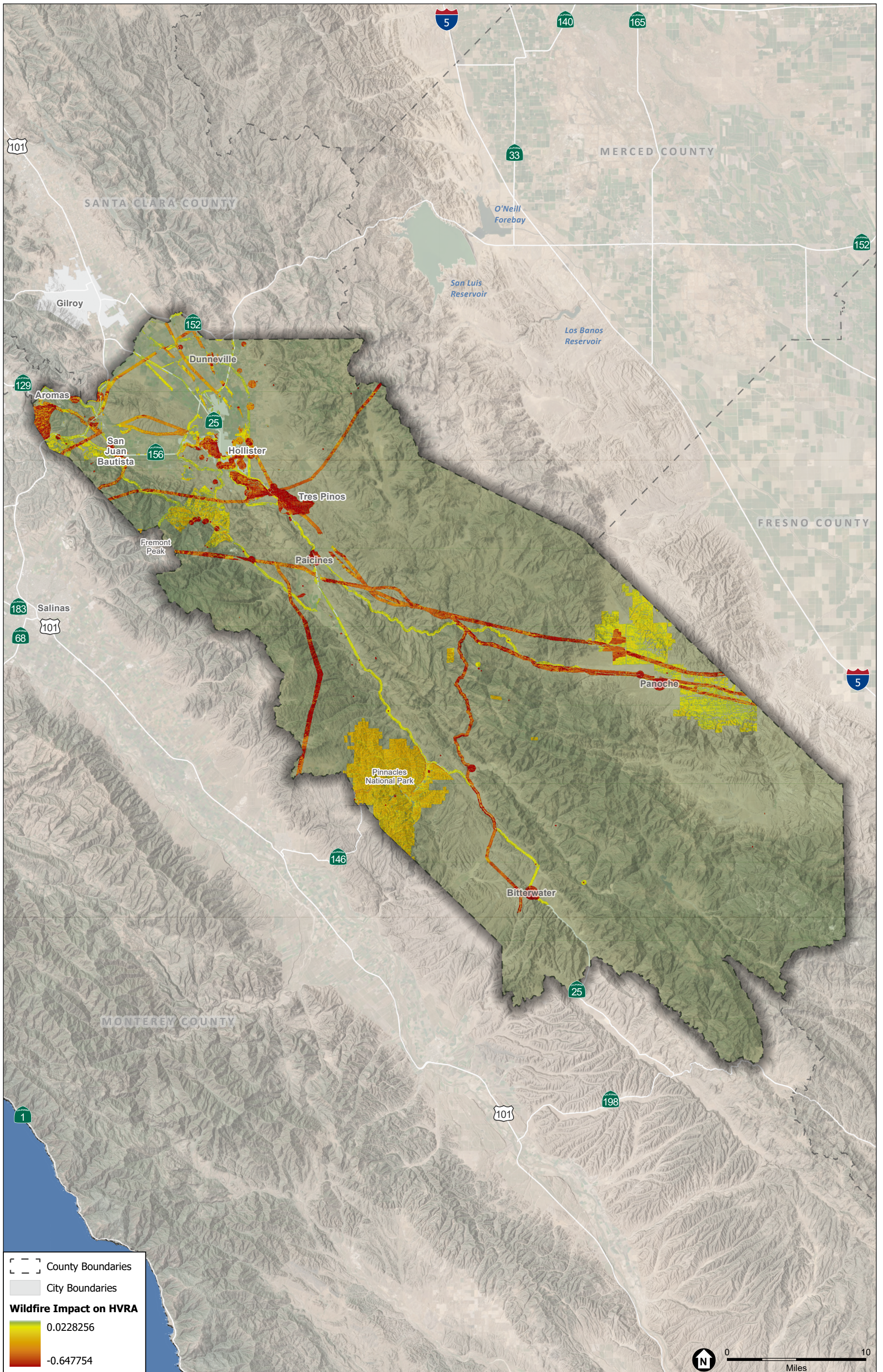
## Legend

**County Boundaries** (dashed)
**City Boundaries**

**Wildfire Impact on HVRA**
0.0228256
-0.647754

San Benito Wildfire Resilience Program

**Figure 8**
Highly Valued Resources and Assets
(HVRA)

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Legend:

**San Benito County**

County Boundaries

**Evacuation Routes**

— Regional Routes (UASI)

— Local Routes: Primary

— Local Routes: Secondary
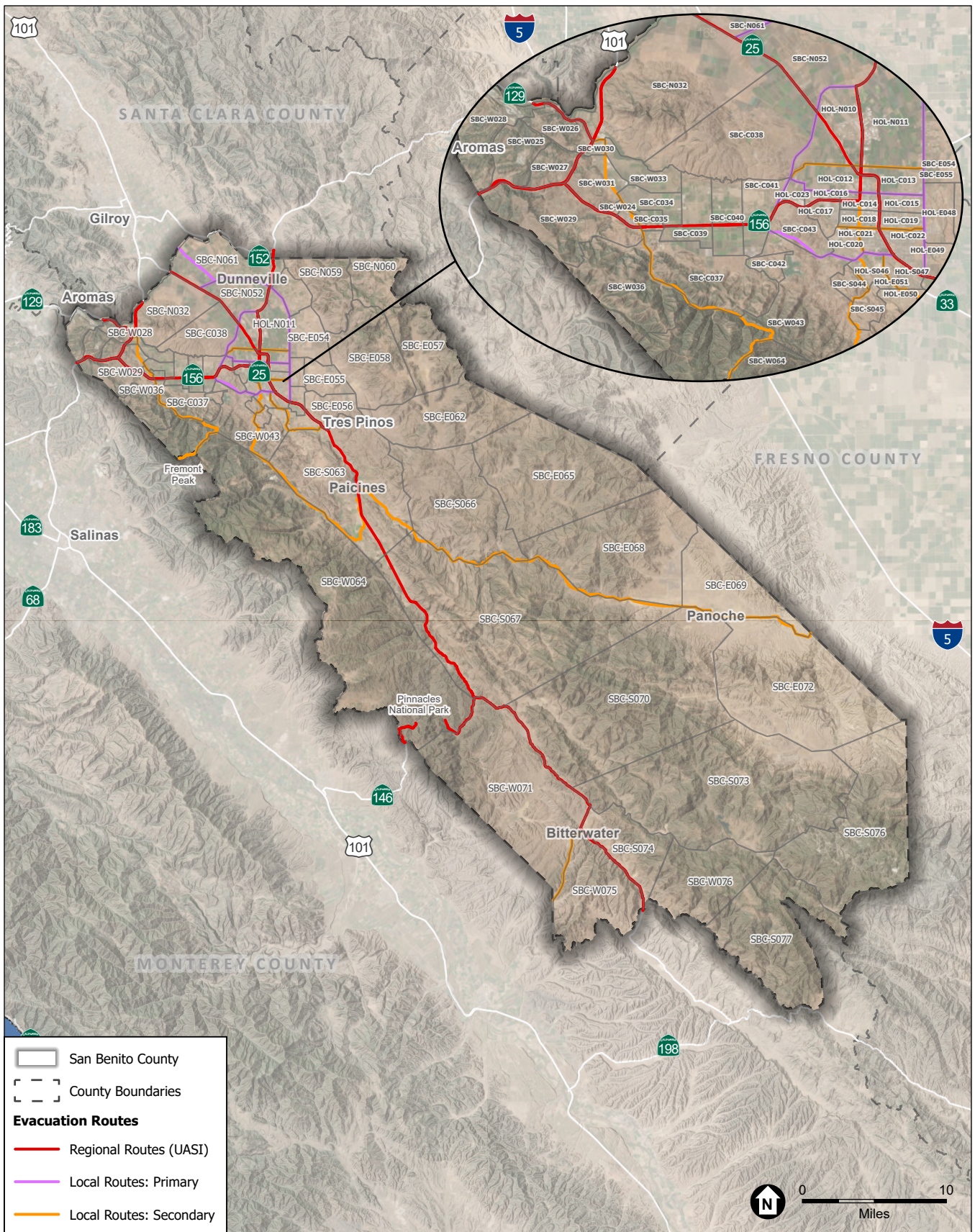
SOURCE: Esri, 2024; Google, 2024; San Benito County, 2024; CalFire, 2024; ESA, 2024

San Benito Wildfire Resilience Program

**Figure 9**
Evacuation routes

# Wildfire Mitigation

## Overview

This CWPP provides key strategies and actions that align with the priorities of the National Cohesive Wildland Fire Management Strategy. The Strategy, established to tackle the complex challenges of wildland fire management in the United States, is composed of three primary components to address both the causes and effects of wildfires while fostering collaboration and resilience (USDA Forest Service 2014), including:

- Fire Adapted Communities
- Resilient Landscapes
- Safe, Effective, Risk-based Wildfire Response

Enabling **Fire Adapted Communities** requires a comprehensive approach that emphasizes resilient building and maintenance, along with broader community engagement. Reducing structural ignitability is a key strategy within this framework, achieved by maintaining defensible space around homes and implementing home hardening practices. Effective wildfire preparedness extends beyond individual property measures. It involves working with community members to adopt fire-resistant landscaping, engaging residents in wildfire preparedness planning, and encouraging participation in Firewise Communities. Improving public education and community engagement is a key part of reducing wildfire risk. Lack of knowledge and unsafe practices significantly increase the risk of loss communities. While many residents understand the wildfire threat, it is crucial to actively involve the community in expanding mitigation efforts across different land ownerships. Designing educational materials for all age groups, utilizing publicly available maps to highlight threats and evacuation routes, and building partnerships between county and Tribal authorities are vital steps in fostering a proactive, well-informed communities capable of effectively managing wildfire risks. A holistic approach ensures that communities are better equipped to manage wildfire risks and protect themselves and their properties.

Vegetation management and hazardous fuel reduction to proactively restore and maintain **Resilient Landscapes** is also important. This includes implementing treatments such as grazing, controlled burns, and thinning to mitigate hazardous fuels, installing fuel and fire breaks to slow the spread of wildfires, managing forests and grasslands to boost ecological health, and safeguarding critical ecosystems.

Prioritizing **Safe, Effective, Risk-based Wildfire Response** is also crucial, requiring a well-coordinated approach to address immediate threats and protect both the public and firefighters. Enhancing preparedness involves improving resources such as equipment and personnel, but also focusing on coordination, communication, and training. Strengthening cross-agency collaboration, briefing the public on response procedures, ensuring functional firefighting infrastructure, setting up housing for displaced residents, identifying and filling data gaps to document fire hazards, and build capacity within local fire management teams to address backlogged projects are all essential for a robust and effective local wildfire response.

# Reducing Structural Ignitability

Land managers and homeowners play a significant role in reducing wildfire risk and subsequent impacts. Structural ignitability is the primary cause of structural losses during fires in the WUI. The potential ignitability of structures is typically dictated by the use of flammable roofing materials (e.g., cedar shingles) and the presence of burnable vegetation (e.g., trees, shrubs, wood piles) immediately adjacent to homes. Homes with low ignitability can still burn but they are significantly less likely to ignite and are typically more resistant to wildfire damage. The following strategies are recommended for use by homeowners to reduce structural ignitability and wildfire risk.

## Strategy 1. <u>Home Hardening</u>

Preparing, or hardening, your home is an essential way to reduce wildfire risk. The biggest threats homeowners face are direct flames, which typically come from a wildfire or a neighboring house; radiant heat, which emanates from nearby burning objects; and flying embers, which can be incredibly destructive and are capable of igniting homes up to a mile away. To better prepare for wildfires and increase your home's chances of survival, diligently follow CAL FIRE's home hardening guidelines provided below (Thurman, 2022) (**Table 2**).

TABLE 3
HOME HARDENING ACTIONS

| Action | Details |
|---|---|
| Roofs | • Material choice: The roof is the most vulnerable part of your home. Homes with wood or shingle roofs are at high risk of being destroyed during a wildfire. Opt for composite, metal, clay, or tile roofing to resist fires.<br>• Ember sealing: Close off gaps under roof tiles and shingles to block wind-blown embers.<br>• Debris removal: Regularly clear leaves, pine needles, and other debris from the roof to prevent ignition. |
| Chimneys | • Chimney screening: Cover your chimney and stove pipe outlets with a non-flammable screen. Use metal screen material with openings no smaller than 3/8-inch and no larger than 1/2-inch to prevent embers from escaping and igniting a fire.<br>• Keep closed seasonally: Close the fireplace flue during wildfire season when the chimney is not being used. |
| Vents | • Mesh screening: Install 1/16-inch to 1/8-inch metal mesh over vents to block embers. Avoid fiberglass or plastic meshes, which can melt.<br>• Advanced venting: Consider installing ember- and flame-resistant vents, known as WUI vents, for enhanced protection. |
| Windows | • Dual-pane installation: Fit dual-paned windows with at least one tempered glass layer to withstand fire-induced breakage.<br>• Size consideration: Limit the size and number of windows facing large vegetation areas to reduce radiant heat exposure.<br>• Screen addition: Add screens to all operable windows to catch embers and reduce heat. |
| Walls | • Material selection: Avoid flammable siding. Preferred materials include stucco, fiber cement, or specially treated wood.<br>• Full coverage: Ensure the selected materials extend from the foundation to the roofline for comprehensive protection. |
| Decks | • Fire-resistant materials: Construct decks from ignition-resistant building materials* like composite.<br>• Under-deck clearing: Maintain an ember-resistant zone beneath decks by removing all flammable materials.<br>• Slope consideration: For decks extending over slopes, establish a defensible space below to deter flame ascent. |

| Action | Details |
|---|---|
| Patio covers | • Matching materials: Use the same ignition-resistant materials on patio covers as those on your roof. |
| Eaves | • Construction: Box in eaves using ignition-resistant or noncombustible materials to prevent ember entry. |
| Garages | • Emergency tools: Store a fire extinguisher and basic firefighting tools within easy reach. <br>• Power backup: Equip garage doors with battery backups to ensure functionality during power outages. <br>• Ember seals: Apply weather stripping around and under the garage door to block ember entry. |
| Fences | • Material transition: Use noncombustible materials for the portion of the fence that connects to the house to prevent fire spread. |
| Addresses | • Clear marking: Your home's address should be easily visible from the street for quick identification by emergency responders. |
| Driveways | • Clearance maintenance: Keep a minimum of 10 feet of vegetation clearance on either side of driveways and access roads. <br>• Emergency access: Ensure gates open inward and are wide enough for emergency vehicles, and keep overhead branches trimmed. |
| Rain gutters | • Regular cleaning: Keep gutters free from plant debris to prevent ember ignition. <br>• Drip edge installation: Add a noncombustible metal drip edge to protect the roof's edge from ember exposure. <br>• Gutter guards: Use noncombustible gutter covers to keep out debris and reduce maintenance. |
| Water supply | • Hose availability: Install long garden hoses at your property that can reach all areas, including roofs and decks. <br>• Supplementary water sources: Consider installing pumps for pools or wells to increase water availability during fires. |

## Strategy 2. Defensible Space

Defensible space serves as a protective buffer between your home and the surrounding area. When adequately established, it acts as a barrier, slowing or halting the progress of fire that would otherwise engulf your property. It also ensures the safety of firefighters defending your home. There are three defensible space zones within the 100-foot perimeter around your home. The first five feet from your home in Zone 0 is the most important, regularly clearing dead or dry vegetation in Zone 1 is crucial, and reducing potential fuel within 100 feet of your home in Zone 2 will continue to reduce fire risk. To properly manage each zone, read through CAL FIRE's guidelines below (Syphard et al., 2014) (**Table 4**).

TABLE 4
DEFENSIBLE SPACE ACTIONS

| Action | Details |
|---|---|
| Zone 0: Ember-resistant zone five feet from your home | • Use hardscape like gravel, pavers, or concrete. No combustible bark or mulch. <br>• Remove all dead and dying plants, weeds, and debris (leaves, needles, etc.) from your roof, gutter, deck, porch, stairways, and under any areas of your home. <br>• Remove all branches within 10 feet of any chimney or stovepipe outlet. <br>• Limit combustible items (like outdoor furniture and planters) on top of decks. <br>• Relocate firewood and lumber to Zone 2. <br>• Replace combustible fencing, gates, and arbors attached to the home with noncombustible alternatives. <br>• Consider relocating garbage and recycling containers outside this zone. <br>• Consider relocating boats, RVs, vehicles, and other combustible items outside this zone. |

| Action | Details |
|---|---|
| | • Require new development and construction to adhere to Zone 0 defensible space requirements and use of noncombustible materials. |
| Zone 1: Keep it lean, clean, and green within 30 feet | • Remove all dead plants, grass, and weeds.<br>• Remove dead or dry leaves and pine needles.<br>• Trim trees regularly to keep branches a minimum of 10 feet from other trees.<br>• Create a separation between trees, shrubs, and items that could catch fire, such as patio furniture, wood piles, swing sets, etc. |
| Zone 2: Reduce potential fuel within 100 feet | • Cut or mow annual grass down to a maximum height of four inches.<br>• Create horizontal space between shrubs and trees. (See diagram)<br>• Create vertical space between grass, shrubs and trees. (See diagram)<br>• Remove fallen leaves, needles, twigs, bark, cones, and small branches. However, they may be permitted to a depth of three inches.<br>• Keep 10 feet of clearance around exposed wood piles, down to bare mineral soil, in all directions.<br>• Clear areas around outbuildings and propane tanks. Keep 10 feet of clearance to bare mineral soil and no flammable vegetation for an additional 10 feet around their exterior. |

## Strategy 3. <u>Fire-Resistant Landscaping</u>, <u>Spacing</u>, and <u>Vegetation Management</u>

Fire-resistant landscaping is an effective way to prevent the spread of fire to your home. In addition to selecting fire-resistant materials for your home, fire-resistant plants and practices can also reduce the risk of large, damaging wildfires. To identify the appropriate plants and landscaping techniques, reference the strategies listed below (Colorado and Henkin, 2024) (**Table 5**).

TABLE 5
FIRE-RESISTANT LANDSCAPING, SPACING, AND VEGETATION MANAGEMENT ACTIONS

| Action | Details |
|---|---|
| Choose fire-resistant plants and materials | • Cover bare spaces with ground cover plants. Use rock, mulch, flower beds, and gardens as ground cover for bare spaces and as effective firebreaks. Select high-moisture plants that grow close to the ground and have low sap or resin content.<br>• Select fire-resistant shrubs. Examples include hedging roses, bush honeysuckles, currant, cotoneaster, sumac, and shrub apples.<br>• Opt for less flammable trees. Plant hardwood, maple, poplar and cherry trees that are less flammable than pine, fir, and other conifers.<br>• Choose fire-retardant plant species. Plants like rockrose, ice plant, and aloe help resist ignition.<br>• Create fire-resistant zones with other materials. Use stone walls, patios, decks and roadways to create barriers around your home. |
| Fire-resistant plants | • French Lavender<br>• Red Monkey Flower<br>• California Fuchsia<br>• Sage<br>• California Lilac<br>• Society Garlic<br>• Ornamental Strawberry<br>• Yellow Ice Plant<br>• Coreopsis Plant<br>• California Redbud |

| Action | Details |
|---|---|
| Vertical Spacing | • Maintain space between the lowest tree branches and the ground or shrubs.<br>• Remove all tree branches at least six feet from the ground.<br>• Allow extra vertical space between shrubs and trees. Lack of vertical space can allow a fire to move from the ground to the brush to the treetops like a ladder. This leads to more intense fire closer to your home.<br>• Keep at least three times the height of any shrubs between the shrubs and the lowest branches of trees.<br>• Example: A 5-foot shrub is growing near a tree. 15 feet of clearance is needed between the top of the shrub and the lowest tree branch. |
| Horizontal Spacing | • Space between shrubs:<br>• Flat or mild slope (less than 20%): Two times the height of the shrub.<br>• Mild to moderate slope (20-40%): Four times the height of the shrub<br>• Moderate to steep slope (greater than 40%): Six times the height of the shrub<br>• Space between trees:<br>• Flat or mild slope (less than 20%): 10 feet.<br>• Mild to moderate slope (20-40%): 20 feet.<br>• Moderate to steep slope (greater than 40%): 30 feet. |
| Vegetation Management Program (VMP) | • VMP allows public and private landowners to enter a contract with CAL FIRE to use prescribed fire to accomplish a combination of fire protection and resource management goals including prescribed fire and reduction of wildland fire fuel hazards. |

## Strategy 4. <u>Fire-Safe Equipment and Vehicle Use</u>

Living in a wildland area requires responsible use of all equipment, whether you are creating defensible space around your home, mowing the lawn, or parking your car on the side of the road. Equipment like lawn mowers, weed-eaters, chainsaws, grinders, welders, tractors, and trimmers all have the potential to spark a wildland fire. Additionally, motorists play a significant role in the wildfires sparked along our roadways. To minimize the risk of wildfires, adhere to the following CAL FIRE guidelines (Hirschler, 2008) (**Table 6**).

TABLE 6
FIRE-SAFE EQUIPMENT AND VEHICLE USE ACTIONS

| Action | Details |
|---|---|
| Mow in the morning | • When mowing, choose the cooler morning hours before 10am and avoid windy or dry conditions. Remember, lawn mowers are for lawns, not for dry weeds or grass, as metal blades can spark fires when hitting rocks. |
| Check spark arresters | • In wildland areas, spark arresters are required on all portable gasoline-powered equipment. This includes tractors, harvesters, chainsaws, weed-eaters, and mowers.<br>• Keep the exhaust system, spark arresters, and mower in proper working order and free of carbon buildup.<br>• Use the recommended grade of fuel, and do not top it off. |
| Safe equipment use | • Before conducting any grinding or welding operations in wildland areas, secure a permit and ensure you maintain a clear 10-foot radius. Keep a shovel and a fire extinguisher ready to use.<br>• Do not drive your vehicle onto dry grass or brush. Hot exhaust pipes and mufflers can start fires that you will not even see – until it is too late.<br>• Keep a cell phone nearby, and call 911 immediately in the event of fire. |
| Environmental conditions | • To protect water quality, do not clear vegetation near waterways to bare soil. Vegetation removal can cause soil erosion, especially on steep slopes. Always keep soil disturbance to a minimum. |

| Action | Details |
|---|---|
| Vehicle safety | <ul><li>Secure all chains</li><li>Remove dragging parts</li><li>Check tire pressure</li><li>Carry a fire extinguisher</li><li>Properly maintain brakes</li></ul> |

## Strategy 5. <u>Returning Home Checklist</u>

The threats associated with wildfires do not dissipate once the fire is extinguished. The aftermath introduces a range of hazards, including flash flooding, debris flows, structural instability, and compromised trees. To navigate this critical period safely, follow this CAL FIRE's returning home checklist (Siebeneck & Cova, 2021) (**Table 7**).

TABLE 7
RETURNING HOME CHECKLIST ACTIONS

| Action | Details |
|---|---|
| Immediate safety precautions | <ul><li>Await official clearance: Do not return to your home or business premises until it is declared safe by fire officials.</li><li>Beware of flash floods: Wildfires can significantly increase the risk of flash floods, particularly in areas near burned forests or upstream from your location. Avoid these areas to prevent encounters with rapid water and debris flows.</li><li>Emergency communications: Keep a battery-powered radio handy to stay updated with emergency broadcasts, weather alerts, and flash flood warnings.</li><li>Evacuation readiness: Make sure your family is well-acquainted with the evacuation plan, emphasizing the importance of quick and orderly evacuation if needed.</li></ul> |
| On-site safety precautions | <ul><li>Inspect surroundings with caution: Be extremely cautious around trees, power poles, and other structures that may have been weakened by the fire. High winds can easily topple such compromised structures.</li><li>Maintain a fire watch: Regularly check your property for any signs of residual fires, like smoke or hidden embers, especially in concealed areas like roof gutters.</li><li>Gas safety check: Before conducting a thorough inspection of your property, sniff for gas leaks. If you detect the smell of gas, do not attempt to turn on the power; leave this to professionals.</li><li>Safe inspection practices: When inspecting your home, use a battery-powered flashlight. Ensure it is turned on outside before entering to avoid potential ignition of any leaked gasses.</li></ul> |
| Utility and consumption safety | <ul><li>Inspect surroundings with caution: Be extremely cautious around trees, power poles, and other structures that may have been weakened by the fire. High winds can easily topple such compromised structures.</li><li>Maintain a fire watch: Regularly check your property for any signs of residual fires, like smoke or hidden embers, especially in concealed areas like roof gutters.</li><li>Gas safety check: Before conducting a thorough inspection of your property, sniff for gas leaks. If you detect the smell of gas, do not attempt to turn on the power; leave this to professionals.</li><li>Safe inspection practices: When inspecting your home, use a battery-powered flashlight. Ensure it is turned on outside before entering to avoid potential ignition of any leaked gasses.</li></ul> |

## Strategy 6. <u>Post-Fire Management</u>

Post-fire stabilization and recovery play a crucial role in mitigating the aftermath of wildfires. When a fire occurs, the immediate priority is emergency stabilization to prevent further damage to life, property, and

natural resources. This stabilization work begins promptly and may continue for up to a year. Longer-term rehabilitation effort focuses on repairing the damage caused by the fire. This rehabilitation phase starts once the fire is extinguished and continues over several years. The US Forest Service provides the following strategies to ensure that forests recover quickly from wildfires and other disturbances (Zema, 2021) (**Table 8**).

**TABLE 8**
**POST-FIRE MANAGEMENT ACTIONS**

| Action | Details |
|---|---|
| Immediate postfire stabilization | • Evaluate and address soil erosion<br>• Apply effective mulch treatments like agricultural straw, wood strands, and wood shreds |
| Reseeding and replanting | • Evaluate if a forested area needs to be replanted or can regenerate naturally<br>• Avoid replanting invasive plants<br>• Use the climate-smart restoration tool, native seed mix tool, and climate-wise reforestation toolkit to choose the right plants and trees for postfire restoration<br>• Evaluate if prescribed fires are appropriate for the area. |
| Burnt fire management | • Leave undisturbed buffers along streams at least twice as wide or wider than buffers found in unburnt forests<br>• Utilize the habitat mapping tool to identify probably woodpecker habitat<br>• Evaluate whether "salvage logging" is appropriate for the area. |
| BAER Funding | • Apply funding from the Burned Area Emergency Response (BAER) program to help stabilize, rehabilitate, and restore lands, and treat post-fire invasive species |

# Strategy 7. Animal Safety

Wildfires have significant implications for animal safety, particularly for horses and cattle. safeguarding animals during wildfires contributes to the overall resilience of ecosystems and communities impacted by these disasters. During these natural disasters, several critical factors come into play. To better prepare and support animals during wildfires, consider the following strategies (Irvine et al., 2023) (**Table 9**).

**TABLE 9**
**ANIMAL SAFETY ACTIONS**

| Action | Details |
|---|---|
| Defensible Space | • Store hay, bedding and other livestock feed away from stables and in a dry, covered area. Use a 15' – 30' firebreak of cleared land, concrete pad, gravel driveway or dirt path<br>• Keep aisles, stall doors, and barn doors free of debris and equipment for quicker access in and out in an emergency |
| Evacuation plan | • Evacuation plan: Know where to take animals in an emergency. Contact local fairgrounds, stockyards, or friends for temporary shelter.<br>• Transport arrangements: If you do not have a trailer, arrange transport with companies or neighbors in advance.<br>• Essential documents: Keep animals' medical records, registration papers, and photos, along with your disaster kit.<br>• Emergency animal care: If leaving animals behind, leave them in a cleared area with enough hay for 48-72 hours. Do not rely on automatic watering systems. |
| If you must leave your pet | • Take them in: Leave pets indoors, not chained outside.<br>• Secure room: Use a safe room without windows and good ventilation. |

| Action | Details |
|---|---|
| | • Food & water: Leave dry food and fresh water in non-spill containers. Consider a dripping faucet or bathtub water. |

# Reducing Hazardous Fuels

Additional strategies to reduce hazardous fuels include:

- Controlled Burning: This management technique is employed by CAL FIRE, Tribal practitioners, private landowners, and on BLM and NPS property by trained professionals. Controlled or prescribed burns may be conducted by private landowners under permit from CAL FIRE, or under contract with CAL FIRE under the statewide Vegetation Management Program (VMP). The VMP is a cost-sharing program that focuses on the use of prescribed fire, and mechanical means, for addressing wildland fire fuel hazards and other resource management issues on SRA lands.

- Vegetation Thinning: Thinning involves an overall reduction of woody biomass to break up the horizontal and vertical continuity of fuels. Site-specific conditions should dictate thinning percentages in relation to structures and will be heavily dependent on topography, vegetation type, and building construction characteristics. In cases where shrubs and/or trees require removal, root systems should be left intact where needed to maintain slope stability. In such cases, annual treatment of stump growth or resprouting may be needed to maintain reduced fuel load volumes.

- Fuel Breaks: Fuel breaks are intended to modify fire behavior and spread by altering fuel beds in a linear alignment, typically situated along ridgetops and may include retained trees (shaded fuel breaks).

- Roadside Fuel Treatments: This technique is intended to reduce the likelihood of ignition sources along roadways (such as weeds) and maintain access/egress capabilities for communities.

- Tree Removal: Removal of trees within the WUI should focus primarily on removing dead and dying trees, however live tree removal may be necessary to improve vegetation spacing and reduce overall fuel continuity. Tree removal may require oversight by a Registered Professional Forester (RPF).

- Dead/Dying Plant Removal: Removal of dead and dying plant material from the WUI will help reduce low fuel moisture biomass. This practice should also be conducted in combination with vegetation thinning efforts and may help reach or completely satisfy thinning objectives in some areas.

- Exotic/Invasive Plant Removal: Removal of non-native and invasive plants will help reduce the presence of undesirable species and enhance thinning efforts aimed at reducing overall biomass levels. Example undesirable species that can contribute to wildfire risk include palm trees (various species), pepper trees (Schinus spp.), French broom (Genista monspessulana), poison hemlock (Conium maculatum), hardinggrass (Phalaris aquatica), and pampas grass (Cortaderis jubata).

- Mowing: Mowing of native, non-native grasses, and exotic weeds should be conducted to maintain grass heights at four inches or lower. Focus should be primarily on invasive weed prevention, suppression, and monitoring, and properly timed and implemented grassland management (e.g., mowing, grazing) that promotes the establishment of less volatile native perennial grasses. Mowing should take place before 10 a.m. to reduce the risk of wildfire resulting from mowing activities.

- Chipping: Chipping and spreading of existing dead biomass or that resulting from fuel reduction efforts within the WUI is an effective method for weed suppression. Chip or mulch depth should not exceed 6 inches.

- <u>Grazing</u>: Livestock (including goats) have proven to be an effective method for reducing fuel volumes in wildland-urban interface areas. Management, maintenance, public safety, and environmental permitting issues should be considered prior to use.

Through the CWPP planning process, a number of potential hazardous fuel treatment projects were identified. **Figure 10** presents six planned projects. Additional projects are listed in the following section and will be further identified in the Regional Prioritization Plan.

# Recommended Strategies for Implementation

## Goal 1. Enable Fire Adapted Communities

### *Increase capacity for community-based wildfire planning*

- Create a Wildfire Coordinator position to facilitate community-based, countywide wildfire planning, training, and coordination
  - Track and share accomplishments of CWPP and related projects implementation
  - Track and identify diverse funding sources for partners
  - Enhance and maintain relationships with and among Hollister Fire Department, CalFire, Central Coast Prescribed Burn Association, UC Cooperative Extension Fire Advisor, San Benito Fire Safe Council, Tribal entities, and local Firewise Communities
- Enhance and maintain partnerships with local farming and ranching communities
- Enhance and maintain relationships with County Supervisors and other elected officials to coordinate countywide fire resilience policies and programs

### *Enhance community education and outreach to reduce human-caused ignitions and reduce structural ignitability*

- Organize community workshops and demonstrations of homeowner landscaping and home hardening techniques
- Collaborate with communities throughout the county to attain and maintain Firewise status (or other complementary community-led wildfire preparedness and response efforts)
  - <u>Existing</u>: Rancho Larios HOA (San Juan Bautista), San Juan Canyon (San Juan Bautista), Rancho Aromitas (Aromas)
  - <u>New</u>: Hidden Valley HOA (Hollister)
  - <u>Other potential communities</u>: Cienega, Stonegate, Thousand Trails, Willow Springs, South County (consider messaging for South County communities to engage in Firewise or a separate locally-led effort)
- Encourage communities to collaborate on neighborhood-scale wildfire preparedness measures
  - Develop neighborhood safety plans
    - Identify a location for resources that residents can use during shelter-in-place (non-perishable food, etc.)
    - Community gatherings that educate while serving to build relationships with neighbors. For example, assemble go-bags as a community activity or train on communications (phone, GMRS radios, other)

- – Encourage participation in the Community Emergency Response Team (CERT) all-hazards training programs to better prepare individuals, families, and neighborhoods for all types of emergencies

  - – Encourage attending Ham Cram to obtain an amateur radio license. Participate in the San Benito County Amateur Radio Association.

- Develop a wildfire awareness program for schools and colleges.

  - – Design materials for all ages (7-70+)

  - – Develop programs at existing and new schools (e.g., Hollister High School, Gavilan College)

- Establish a go-to website for community access to wildfire resources, including state and local ordinances and building codes

  - – Homeowner resources such as Ready for Wildfire and Ready Set Go

  - – Identify materials and locations to share similar materials for those without internet access

  - – Resources for live fire notices and updates, such as Watch Duty, Pulse Point, and Nixel

- Increase and encourage participation in the Ag Pass program by ranchers and farmers

### *Establish and enforce standards for homeowners to reduce structural ignitability*

- Strongly encourage defensible space, home hardening, and clearance on private property

  - – Defensible space zones around homes and structures (e.g., Zone 0: 0-5 feet from structure; Zone 1: Within 30 feet of structure; Zone 2: Within 100 feet of structure or the property line)

  - – Structural hardening (e.g., non-combustible materials)

  - – Clear flammable vegetation/materials and maintain ingress/egress routes

  - – Require new development and construction in moderate to high fire hazard zones to adhere to Zone 0 defensible space requirements and use of noncombustible materials (e.g., concrete, bare soil, rocks; cannot include anything combustible, such as wood chips or any live or dead vegetation)

- Increase capacity of homeowners to comply with these recommendations

  - – Develop neighborhood programs to help elderly and disabled residents (or others who are unable to implement defensible space and hardening) to implement these measures

  - – Collaborate with insurance companies to create incentives for implementing defensible space in return for reduced insurance premiums

  - – Identify funding sources for homeowners to implement structural ignitability reduction tasks. Collaborate with County supervisors and other partners to develop a match funding program for community members to implement these tasks.
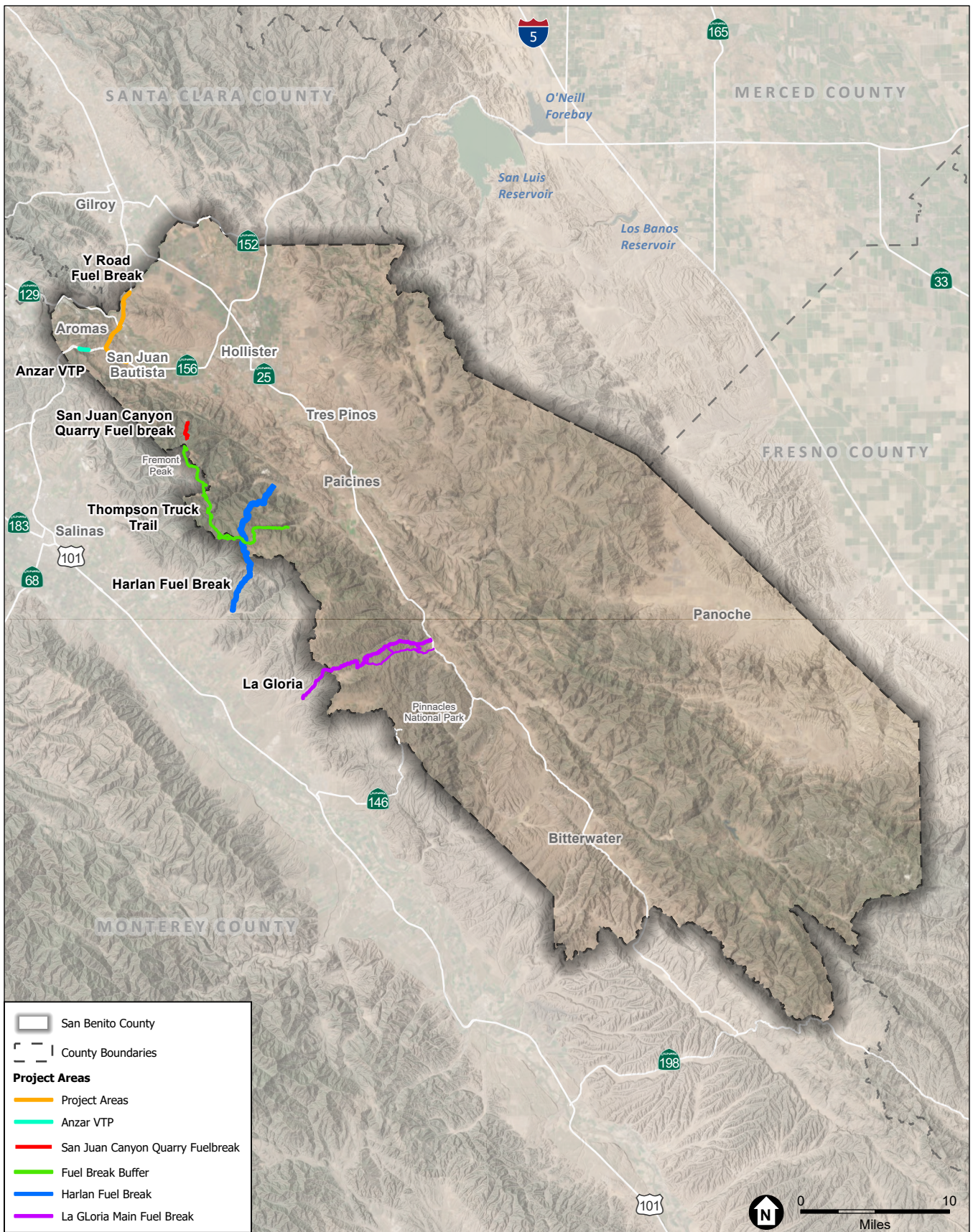
San Benito Wildfire Resilience Program

**Figure 10**
Fuel Reductions Priority Projects

ESA

# Goal 2. Restore and Maintain Resilient Landscapes

## *Reduce hazardous fuel loads on publicly and privately owned lands*

- Livestock grazing/herbivory
- Thinning
- Prescribed fire
- Slash and pile burning
- Chipping
- Pruning
- Herbicide application
- Livestock grazing/herbivory

## *Example Projects*

- Completed
  - Bitterwater Area Prescribed Burn (2019), Indian Canyon Prescribed Burn (2021), Nyland Property Prescribed Burn (2023), Wildfarmers Prescribed Burn (2023), Gabilan Range Prescribed Burn (2023)
- Planned
  - Fremont Peak Prescribed Burn
  - Cienega Vegetation Management Program in south San Benito County (partnership between CAL FIRE, Wilbur Ranch, Enz Ranch, Clements Ranch, Private Landowners) (CAL FIRE 2024)
  - Gabilan Vegetation Treatment Program in San Juan Canyon (partnership between CAL FIRE, California State Parks, Private Landowners) (CAL FIRE 2024)
  - Thompson Truck Trail, Cienega Road to San Juan Canyon Road on the West side of San Benito County Line (partnership between CAL FIRE, San Benito Fire Safe Council, Private Landowners, University of California Davis) (CAL FIRE 2024)
  - Harlan Notice of Exemption in Grass Valley Road, Chualar Canyon, Gabilan Range (partnership between CAL FIRE, Private Landowners, University of California Davis) (CAL FIRE 2024)
  - Panoche Vegetation Treatment Program in Antelope (partnership between CAL FIRE, BLM) (CAL FIRE 2024)
  - Moody Vegetation Management Program in San Benito County (partnership between CAL FIRE, Private Landowners) (CAL FIRE 2024)
  - Waterman Vegetation Management Program Northwest of the Pinnacles National Park between Highway 25 and the Monterey County line (partnership between CAL FIRE, Private Landowners) (CAL FIRE 2024)
- Proposed CCPBA Prescribed Burn projects
  - Ranch in Gabilan Range
  - Ranch south of Pinnacles NP
  - Ranch southeast of Pinnacles NP

&ndash; Ranch north of Pinnacles NP

&ndash; Ranch in Panoche Valley

&ndash; Property near Mount Harlan

### *Construct and maintain strategic fuel breaks to prevent or slow the spread of fire*

- Identify locations for new fuel breaks and buffers (e.g., rural areas, around critical facilities)

- Maintain/improve existing fuel breaks and buffers (previously constructed, natural breaks [e.g., rivers, creeks], roadside fuels treatments) using best ecological practices (e.g., shaded fuel breaks, clean equipment to reduce accidental transport of invasives, support native grasses and shrubs)

### *Example Projects*

- Harlan (Grass Valley Road, Chualar Canyon, Gabilan Range) (partnership between CAL FIRE, Private Landowners, University of California Davis) (CAL FIRE 2024)

- La Gloria (Paicines, La Gloria Road, North of Pinnacles National Park) (partnership between CAL FIRE, Private Landowners) (CAL FIRE 2024)

- Y Road (Highway 101 x Y Rd x Highway 156; San Juan Bautista) (partnership between CAL FIRE, California Department of Transportation, Private Landowners) (CAL FIRE 2024)

- San Juan Canyon Fuel Break from the quarry south of Hillside Road southeast across private land ridgelines to San Juan Canyon Road (partnership between CAL FIRE, Private Landowners, San Benito Fire Safe Council, California State Parks) (CAL FIRE 2024)

### *Manage invasive species that may contribute to wildfire severity and spread in high fire risk areas*

- Eucalyptus management, including strategic removal in high fire risk areas (e.g., cost-sharing program for removal)

- Weed and grass management, including strategic removal in high fire risk areas, in collaboration with the San Benito County Weed Management Area partners

- Encourage planting fuel breaks with native vegetation, which has been shown to be more fire resistant than non-native invasive weeds (annual grasses and species such as thistles).

### *Implement restoration of fire-adapted ecosystems and post-fire recovery activities*

- Facilitate restoration of fire-adapted ecosystems in collaboration with Tribes and other natural resource practitioners (e.g., Hollister Hills, BLM, Pinnacles National Park, San Benito Resource Conservation District, San Benito Agricultural Land Trust, Granite Rock)

- Develop and implement post-fire recovery activities (e.g., seeding, tree planting, reforestation) with partners listed above

### *Facilitate collaboration with Tribes to implement restoration and cultural burns for landscape management*

- Support relaunch of Amah Mutsun Land Trust cultural burn program, including partnerships with private landowners

- Facilitate Indigenous-led management practices, cultural sensitivity trainings, and record keeping (e.g., identification of cultural sites on public and private lands, funding Tribes to conduct these cultural surveys)

### *Facilitate collaboration with ranch owners to implement burns for rangeland management*

- Support relaunch of rangeland improvement projects. Align with CAL FIRE goal to be a resource for the planning and implementation of range improvement burns. CCPBA is expected to take a significant role in these projects.

## Goal 3. Implement Safe, Effective, Risk-Based Wildfire Response

### *Increase/improve water supplies for wildfire suppression*

- Collaborate with San Benito County Office of Emergency Services (OES) and fire departments to identify water sources

- Encourage temporary water storage options on private lands (cisterns, dip tanks)

- Map large private water storage tanks that emergency services has permission to access in an emergency (e.g., Pioneer Park 60,000-gallon water tank)

### *Improve emergency response and mobilization efforts*

- Develop and promote a countywide wildfire evacuation plan that identifies evacuation routes, shelter locations, and staging areas

  – Identify short- and long-term options (e.g., schools, libraries, Bolado Park, etc.)

  – Distribute maps of community evacuation zones developed by OES to residents

  – Create an MOU between the Fairgrounds and OES and/or Hollister Fire, Sheriff's Office, and others for an evacuation location for livestock and/or people.

- Identify Potential Operational Delineations (PODs), or small planning units within the county that share features (e.g., roads, ridges, waterbodies, fuel types), for improved fire management and response.

- Complete CAL FIRE Pre-Fire Plans for high-risk communities

- Establish a GIS database of pre-approved valuable resources during a wildfire response. For example, ranch roads, gates, bridges, and water sources that are vetted prior to an emergency and in a database accessible by emergency services agencies.

### *Increase wildfire response capacity*

- Obtain funding for additional training, equipment, and personnel to improve response capacity in rural areas.

  – Improve capacity of local fire management teams to address backlogged projects and streamline processes.

- Develop and implement residential education and outreach programs to ensure ease of response.

- Improve access to homes and structures.

  – Ensure clearance of driveways (e.g., maintain 12 ft wide by 15 ft tall clearance needed for large firefighting equipment).

  – Clear identification of house numbers, street names, and other identifiable signs.

# Funding Opportunities

## General Grant Opportunities

A variety of grants are available to support wildfire prevention, mitigation, and response, and they are open to government entities, fire departments, community groups, and non-profits. These grants fund a range of activities including fire prevention education, equipment purchases, and hazardous fuels reduction projects. For example, FEMA's Fire Prevention and Safety Grants provide resources for fire departments to enhance safety programs, while the USDA's Community Wildfire Defense Grant Program helps communities develop and implement wildfire protection plans. These funding opportunities are designed to reduce wildfire risks, improve community preparedness, and support effective response efforts (**Table 10**).

**TABLE 10**
**GENERAL FUNDING OPPORTUNITIES FOR WILDFIRE PREVENTION, MITIGATION, AND RESPONSE ACTIVITIES**

| Name | Funding Body | Eligibility | What it funds |
|---|---|---|---|
| Fire Prevention and Safety (FP&S) Grants | These grants are a part of FEMA's AFG Grants | Fire departments, national, state, local, tribal and non-profit organizations | Program is to provide critically needed resources to fire departments and non-profit organizations to carry out fire prevention education and training, fire code enforcement, fire/arson investigation, firefighter safety and health programming, strategic national projects, prevention efforts, and research and development |
| Community Wildfire Defense Grant Program | USDA | Local governments representing communities located in an area with risk of wildfires; Indian Tribes; non-profit organizations; state forestry agencies | The program provides funding to communities for two primary purposes: 1. Develop and revise Community Wildfire Protection Plans (CWPP); 2. Implement projects described in a Community Wildfire Protection Plan that is less than ten years old. It also helps communities in the wildland urban interface (WUI) implement the three goals of the National Cohesive Wildland Fire Management Strategy. |
| FM Global Fire Prevention Grant Program | FM Global | Fire departments and brigades, as well as national, state, regional, local and community organizations | Funding to support a wide array of fire prevention, preparedness and control efforts, including pre-fire planning, fire prevention education/training and arson prevention/fire investigation. |
| Community Wildfire Assistance | BLM | local fire departments, counties, and non-profit organizations. | focused on prevention, education, mitigation and cooperator assistance. The BLM partners with communities to provide funding and technical expertise for hazardous fuels reduction on adjacent non-federal lands, completing Community Wildfire Protection Plans (CWPPs), prevention efforts to reduce human-caused fires, and wildland fire training for fire departments and rangeland fire protection associations (RFPAs). |

| Name | Funding Body | Eligibility | What it funds |
|---|---|---|---|
| California Wildfire Prevention Grants | Cal Dept of Forestry and Fire Protection (FIRE) | Local communities and governments | Projects that benefit or focus on assisting those with disadvantaged and low income, disabled, or elderly populations will receive additional priority. Projects that demonstrate a carbon benefit by reducing the carbon emissions during the implementation of the project will also be prioritized. |
| CFF Grand Opportunity | California Fire Foundation (CFF) | Southern, Central, and Coastal California-based fire departments, firefighter associations, federally-recognized tribes, and local nonprofit organizations | Vegetation Mitigation & Fuels Reduction Efforts<br><br>Education, Planning and/or Community Outreach Campaigns<br><br>Personal Protective Equipment or Specialized Firefighting Equipment Purchases |
| Wildfire Recovery and Forest Resilience Directed Grand Program | Sierra Nevada Conservancy (SNC) | public agencies, including federal agencies qualifying 501(c)(3) nonprofit organizations tribal entities recognized on the current United States Federal Register or the Native American Heritage Commission as a California Native American tribe | This program supports the planning and implementation of forest health projects that promote wildfire recovery and forest resilience in California's Sierra-Cascade region.<br><br>The goal is to create more climate- and fire-resilient forested landscapes, reduce wildfire risk for communities and ecosystems, and accelerate recovery from recent wildfires. We prioritize multi-benefit, large-scale, and high-impact forest and watershed health efforts. |
| US Forest Service State Fire Assistance (SFA) grants for California | California Fire Safe Council | Varies depending on program | Varies depending on program |
| Environmental Quality Incentives Program (EQIP) | USDA - Natural Resources Conservation Service (NRCS) | Varies by state | NRCS works one-on-one with producers to develop a conservation plan that outlines conservation practices and activities to help solve on-farm resource issues. Producers implement practices and activities in their conservation plan that can lead to cleaner water and air, healthier soil and better wildlife habitat, all while improving their agricultural operations. Financial assistance for practices may be available through EQIP. |

# State, Local, and Tribal Governments

State, local, and tribal governments can access several key grants to support wildfire management and disaster preparedness. FEMA's Fire Management Assistance (AFG) Grants cover a wide range of needs from debris removal to infrastructure repairs. The Pre-Disaster Mitigation (PDM) Grant Program provides funds for planning and implementing measures to reduce future disaster risks and reliance on federal aid. Additionally, the Tribal Homeland Security Grant Program helps tribes enhance their preparedness and resilience through core capabilities essential for national security. These grants collectively aim to strengthen disaster response and mitigation efforts at the local and tribal levels (**Table 11**).

**TABLE 11**
**WILDFIRE FUNDING AVAILABLE TO STATE, LOCAL, AND TRIBAL GOVERNMENTS**

| Name | Funding Body | Eligibility | What it funds |
|---|---|---|---|
| Fire Management Assistance (AFG) Grants | FEMA | states, local and tribal governments | Category A: Debris removal, Category B: Emergency protective measures Category C: Roads and bridges, Category D: Water control facilities, Category E: Public buildings and equipment, Category F: Public utilities, Category G: Parks, recreational and other facilities |
| Pre-Disaster Mitigation (PDM) Grant Program | FEMA | State, local, tribal and territorial governments | Funds are used to plan for and implement sustainable cost-effective measures designed to reduce the risk to individuals and property from future natural hazards, while also reducing reliance on federal funding from future disasters. |
| Tribal Homeland Security Grant Program | FEMA | Directly eligible applicants | The Tribal Homeland Security Grant Program (THSGP) plays an important role in the implementation of the National Preparedness System by supporting the building, sustaining and delivery of core capabilities essential to achieving the National Preparedness Goal of a secure and resilient nation. |

## Homeowners and Landowners

Grants for homeowners and landowners play a crucial role in enhancing forest health and wildfire preparedness. These financial resources enable individuals to restore damaged forests, implement essential fire prevention measures, and manage their land more effectively to reduce wildfire risks. By supporting activities such as forest restoration, home upgrades for ember resistance, and comprehensive land management, these grants help to build more resilient landscapes and safer communities (**Table 12**).

**TABLE 12**
**WILDFIRE FUNDING AVAILABLE TO HOMEOWNERS AND LANDOWNERS**

| Name | Funding Body | Eligibility | What it funds |
|---|---|---|---|
| Emergency Forest Restoration Program | USDA - Farm Service Agency | Only owners of nonindustrial private forests with tree cover existing before the natural disaster occurred are eligible to apply. The land must be owned by a private individual, group, association, corporation or other private legal entity that has decision making authority on the land and does not use the land for business purposes. | EFRP helps the owners of non-industrial private forests restore forest health damaged by natural disasters. The EFRP does this by authorizing payments to owners of private forests to restore disaster damaged forests. |
| Wildfire Community Preparedness Day Grant | National Fire Protection Association (NFPA) | Homeowners, non-profits, schools | Funds will help homeowners achieve basic fire prevention tasks, like replacing old roof shingles and siding that could potentially allow embers into the home. |

| Name | Funding Body | Eligibility | What it funds |
|---|---|---|---|
| California Forest Improvement Program | Cal Dept of Forestry and Fire Protection (FIRE) | Cost-share assistance is provided to private and public ownerships containing 20 to 5,000 acres of forest land | Cost-share assistance is provided to private and public ownerships containing 20 to 5,000 acres of forest land including: Preparation of a Forest Management Plan by a Registered Professional Forester (RPF); RPF Supervision of the following: Reforestation, Site Preparation, Trees and Planting, and Tree Shelters; Stand Improvement: Pre-commercial Thinning or Release, Pruning, and Follow-up (includes mechanical, herbicide and/or slash disposal follow-up); and Forestland conservation practices / fish and wildlife habitat improvement |

# Fire Departments, Law Enforcement, and Emergency Services

Grants for fire departments and emergency services are vital for strengthening community protection and response capabilities. They provide critical support for staffing, training, and acquiring essential equipment, which ensures that emergency services are well-prepared to handle disasters. These grants also facilitate technological advancements and improvements in operational readiness, ultimately enhancing the safety and efficiency of first responders as they work to safeguard lives and property during emergencies (**Table 13**).

**TABLE 13**
**WILDFIRE FUNDING AVAILABLE TO FIRE DEPARTMENTS, LAW ENFORCEMENT, AND EMERGENCY SERVICES**

| Name | Funding Body | Eligibility | What it funds |
|---|---|---|---|
| Staffing For Adequate Fire and Emergency Response (SAFER) Grants | These grants are a part of FEMA's AFG Grants | Fire Departments | Funds will assist local fire departments with staffing and deployment capabilities to respond to emergencies and ensure that communities have adequate protection from fire and fire-related hazards |
| Firehouse Subs Public Safety Foundation Grant | Fire House Subs Pub Safety Foundation | All types of public safety agencies, including fire departments, law enforcement, EMS, public safety organizations, non-profits, and schools are eligible. | Grant provides fund for emergency equipment items |
| Jeremiah Lucy Grant Program | Leary Firefighters Foundation | Fire Departments | TRAINING: To enhance the professional development of fire departments. EQUIPMENT: To provide the best of the best equipment to help keep firefighters and the communities they serve safe. TECHNOLOGY: To ensure that fire departments update along with technological advances. |
| Volunteer Fire Assistance (VFA) Grant Program | State Forestry Agencies through USDA Forest Service | Any fire agency or volunteer fire department that serves a community of 10,000 or less may apply. | State forestry agencies establish criteria defining priorities based on need. Each fire department grant request is compared to the criteria and grants are allocated to meet the greatest needs for equipment, training, or organizational assistance. |

| Name | Funding Body | Eligibility | What it funds |
|------|--------------|-------------|---------------|
| <u>First Responder Grand Program</u> | Gary Sinise Foundation | Law Enforcement Departments, Fire Departments, and Paramedic or EMS departments. | Grant provides help to critical funding for emergency relief, training, and essential equipment to ensure first responders can perform to the best of their abilities. |

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