

Cambria Community Wildfire Protection Plan

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CAL POLY

Executive Summary

The Cambria Community Wildfire Protection Plan (CWPP) provides a strategic framework for reducing wildfire risk and enhancing ecological resilience within one of California’s most fire-prone coastal communities. Cambria contains one of the last remaining native stands of Monterey pine (*Pinus radiata*) forest, a fire-adapted ecosystem currently facing severe threats due to accumulated fuels, prolonged drought, tree mortality, and increased exposure to ignition sources. The wildfire hazard in Cambria is exacerbated by decades of fire exclusion, dense and aging forest structure, limited access for emergency response, and the proximity of hazardous vegetation to homes, infrastructure, and key evacuation routes. Compounding these physical vulnerabilities is the increasing risk of human-caused ignitions, particularly along roadsides, utility corridors, and in recreational or transient-use areas.

This CWPP identifies and prioritizes critical treatment areas across both public and private lands, including Covell Ranch, Fiscalini Ranch Preserve, Rancho Marino Reserve, Strawberry Canyon, and the Santa Rosa Creek corridor. The plan incorporates existing Vegetation Treatment Program (VTP) prescriptions where available and recommends site-specific actions such as shaded fuel breaks, ladder fuel removal, small-diameter tree thinning, pile burning, targeted grazing, and invasive species management. Treatment strategies are aligned with The California Department of Forestry and Fire Protection (CAL FIRE) and Coastal Commission guidance, with emphasis on maintaining ecological function and reducing the potential for stand-replacing fire events.

Recognizing the complexity of managing wildfire risk in the wildland–urban interface, the CWPP also addresses the need for prevention, mitigation, and preparedness measures related to structural ignitability. Through the implementation of this CWPP, Cambria will advance toward becoming a more fire-adapted and resilient community. The plan supports a landscape-scale approach that balances public safety, ecological stewardship, and long-term forest sustainability, ensuring that Cambria’s residents, natural resources, and infrastructure are better protected against the increasing threat of catastrophic wildfire.

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1. Introduction

Community Overview

Cambria is an unincorporated community in San Luis Obispo County, California located 15 miles north of Cayucos and 9 miles south of San Simeon along CA SR-1. Cambria covers a land area of approximately 8.5 square miles and is home to 6,038 residents according to 2023 data from the US Census Bureau. During the summer months, this number can climb to 20,000+ as the area draws a substantial number of tourists who stay in hotels and other short-term rentals. The median age in Cambria is 61.4 years old making it a generally older community. 65% of residents are white and 29% are Hispanic with a notable community of low income, non-English speaking residents. Further breakdown of population demographic information is shown in Figure 1.1

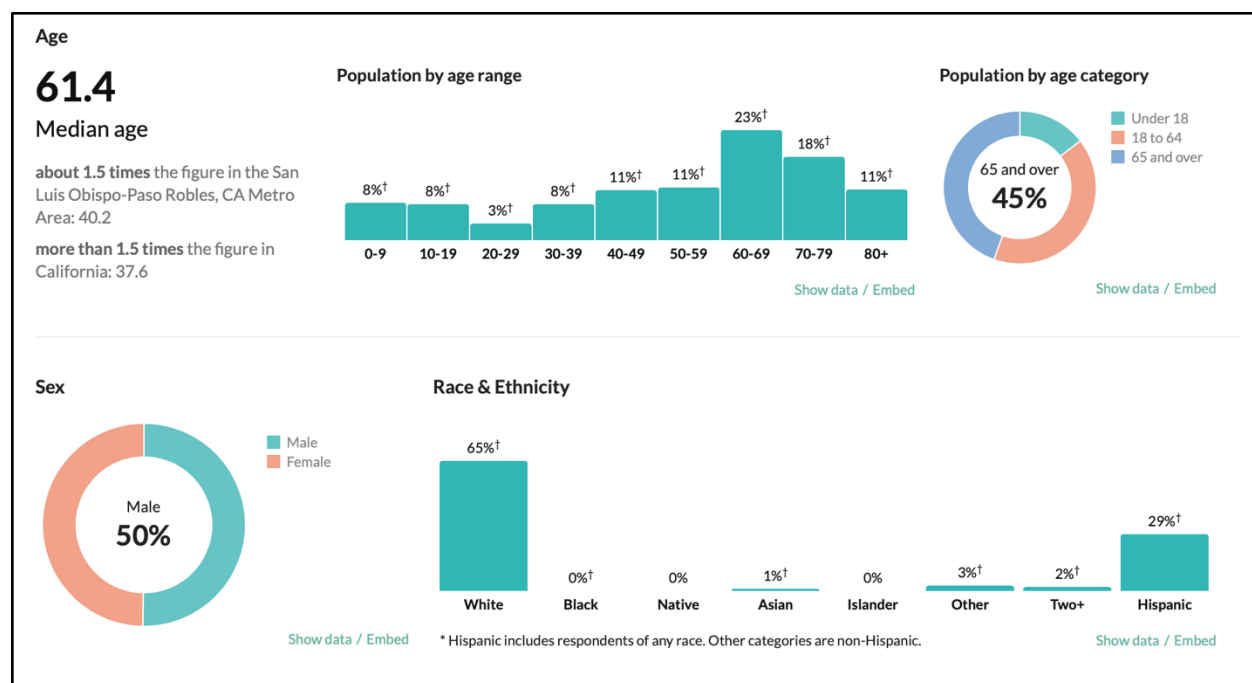


Figure 1.1: Population Demographics (Age, Race, and Ethnicity) for the Community of Cambria from the United States Census Bureau.

Wildfire Concerns

The Cambria area faces an acute and growing wildfire threat, driven by a combination of ecological, climatic, and forest health factors unique to the region. Cambria is home to one of only three native Monterey pine (*Pinus radiata*) stands in the world. Many of the pines in this stand are reaching, or have already reached, the end of their natural lifespan (80-100 years). The forest has not

experienced a stand replacing wildfire in over 150 years, and as a result the landscape is overloaded with aging, dying, and dead trees, creating heavy fuel loading in and around the wildland urban interface (WUI). The WUI is the area where homes and other human development meet or intermingle with undeveloped wildland or vegetation. It's a zone where structures and other human activity intersect with natural, unbuilt areas, creating a transition between built and wild environments. The region's steep terrain, narrow road networks, and recurring droughts further amplify the difficulty of wildfire response and evacuation.

While Cambria experiences cool, damp, coastal conditions for much of the year (often buffered by fog for up to 50 weeks annually) its most dangerous period arrives in the late summer and early fall when temperatures spike, relative humidity drops, and strong offshore winds develop. These conditions create an ideal environment for wildfire ignition and rapid spread, especially through dry pine canopies and accumulates surface fuels. Critically, this weather window often coincides with peak tourist season, when the community's population temporarily triples. This seasonal overlap increases already prevalent challenges of evacuation, public communication, and emergency management, placing both residents and visitors at risk.

In the event of a wildfire, poor urban planning, limited ingress and egress, and narrow roads pose significant evacuation hazards. Much of Cambria is served by winding, single lane roads with few or no alternate routes, creating severe bottlenecks during an emergency. Several neighborhoods, such as lodge hill, and park hill, have only one way in or out. If wildfire were to ignite in the surrounding forested terrain, or a large fire front were to push in under strong wind conditions, it could block critical access to highway 1, Cambria's primary evacuation route. These constraints could delay both resident evacuation and emergency responder access, significantly increasing the likelihood of entrapment and structural loss. Given these challenges, Cambria requires urgent action in the form of vegetation management, infrastructure upgrades evacuation planning, and community education to reduce its extreme wildfire vulnerability.

Local Jurisdictions

Cambria is an unincorporated community with local governance being provided by the County of San Luis Obispo. Most decisions affecting Cambria are made by the County Board of Supervisors and it's subcommittees. Cambria is subject to the regulations and ordinances set forth in the San Luis Obispo County Code as well as the county's general plan and land use/zoning plan.

Cambria is also located within a special district known as the Cambria Community Services District. This district levies taxes on assessed parcels within its boundaries in order to provide services such as fire protection, municipal water, wastewater/sewer, and parks and open spaces. These services are therefore provided at a higher level than they would in other unincorporated county areas without an established community services district.

At the state level, California State Parks is present and has jurisdictional control over state park properties such as Hearst San Simeon State Park and Cambria State Marine Park. State parks also provides law enforcement officers for these properties and surrounding areas. Caltrans had jurisdictional control over State Highway 1 and State Highway 46 while the California Highway Patrol provides law enforcement for the state right of ways and surrounding areas. The California Department of Fish and Wildlife manages some state-owned properties in the area including the Cambria State Marine Conservation Area and provides law enforcement officers for this purpose. Cambria also sits within the California Coastal Zone meaning it is subject to governance from the California Coastal Commission in addition to local governance.

Several open space properties in and around Cambria are owned and/or managed by Cambria's land trust organization Green Space. This non-profit organization provides conservation management and public access for open spaces including Strawberry Canyon. The Cambria CSD owns and operates the remaining non-state owned open spaces in Cambria.

Utilities in Cambria are provided by different agencies depending on the type. Electrical service is provided Pacific Gas and Electric Company. PG&E also owns the electrical transmission and distribution infrastructure in and around Cambria. Natural gas service is provided by Southern California Gas Company. Water and sewer services are provided by the Cambria CSD.

Figure 1.2 shows a map of the area with Cambria CSD's jurisdictional boundary shown along with the boundary of San Luis Obispo County within the context of California. Figure 1.3 shows a map of Cambria with its various neighborhood boundaries and names shown along with certain key infrastructure sites.

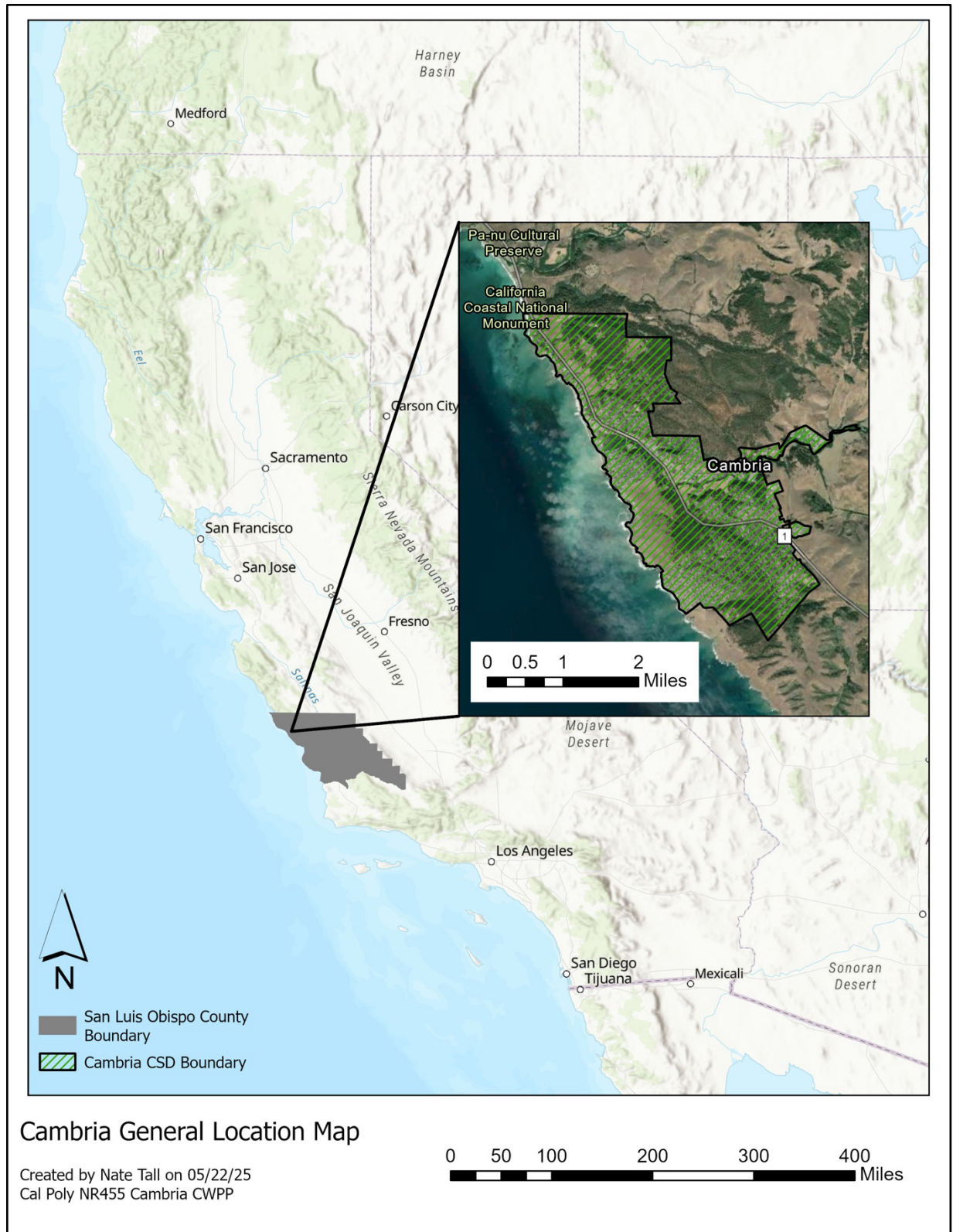


Figure 1.2: Map of project area in relation to California. Jurisdictional boundaries of San Luis Obispo County and Cambria CSD shown.

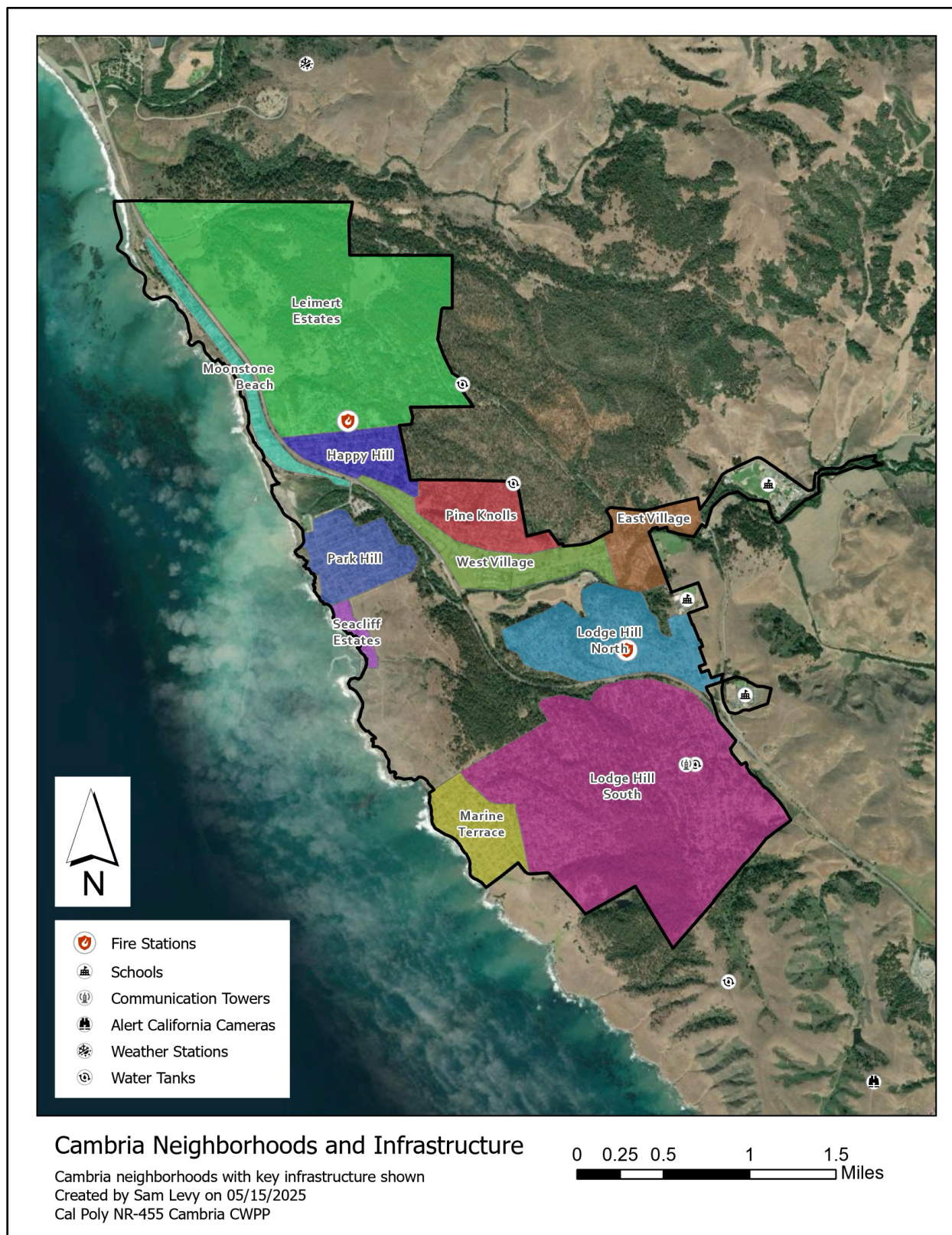


Figure 1.3: Map of Cambria neighborhood names and boundaries with key infrastructure sites.

2. Collaboration

Stakeholders

Collaboration is an integral component in the effective implementation of a community wildfire protection plan. The following section outlines key stakeholders in Cambria and their role in the mitigation of Cambria's wildfire concerns.

Cambria Community Services District

The Cambria Community Services District manages and provides basic services to the community of Cambria. These services include water and wastewater/sewer services, parks and open space management, facilities management, and fire protection and emergency services. The CSD is a crucial stakeholder as they manage the Cambria Fire Department and Cambria's water system, including fire hydrants and water storage. The district also owns and manages some key open spaces within the community. Close collaboration with the CSD will be crucial for successful implementation of many of the recommendations put forth by this plan.

County of San Luis Obispo

Cambria is located within San Luis Obispo County and, as an unincorporated community, is subject to governance from the County Board of Supervisors and its subcommittees. The county also provides law enforcement services to Cambria via the County Sheriff's Office along with land use planning, emergency services planning and oversight, and a variety of other governmental functions. Close collaboration with the County will again be crucial for the successful implementation of plan recommendations and overall wildfire risk reduction.

Cambria Community and Residents

Cambria is a tightknit community of approximately 6,000 full time residents. In order for the successful implementation of wildfire risk reduction planning, close collaboration and coordination with the residents and businesses of Cambria will be vital. Large portions of this plan focus on community involvement, outreach, and collaboration making the people of Cambria an integral part of the process to create a more fire resilient community.

Upper Salinas-Las Tablas Resource Conservation District

Cambria falls within the boundaries of the Upper Salinas-Las Tablas RCD, a special district designated with the task of leading local conservation efforts on public and private lands. Most major fuels and vegetation treatment projects that occur within the bounds of the district are supported, at least in part, by the district. As such, the RCD is a vital partner for any future resource management projects acting as a lead agency and means of funding for such projects.

California Department of Forestry and Fire Protection

The County of San Luis Obispo contracts its fire protection services to the Department of Forestry and Fire Protection (CAL FIRE) through a cooperative fire protection agreement. As such, most of the unincorporated areas of the county fall within the state responsibility area (SRA). While Cambria does have its own fire department and most of the community is located within the local responsibility area (LRA), Cambria Fire's resources are limited and CalFire operates the only other fire station in the area. Additionally, Cambria is surrounded by SRA land which CAL FIRE is responsible for. Because of this, CAL FIRE is an important stakeholder and collaborator in the implementation of any wildfire mitigation planning within the community. CAL FIRE also establishes fire hazard severity zones, defensible space standards, and provides a number of other pre-fire planning services at the county level in San Luis Obispo.

California Department of Parks and Recreation

The Department of Parks and Recreation (California State Parks) is responsible for the management and protection of several large areas of land around Cambria. Notable inclusions are Hearst San Simeon State Park and Cambria State Marine Park. State Parks is responsible for carrying out vegetation treatment projects within the properties it manages and as such is an important stakeholder and collaborator for the implementation of this project. Additionally, State Parks rangers provide law enforcement branch within the departments properties and will be an important mutual aid resource during a major disaster event. State Parks also operates a small fire department at Hearst Castle.

California Department of Fish and Wildlife

The Department of Fish and Wildlife (CDFW) is responsible for the management and protection of a handful of properties around Cambria including the Cambria State Marine Conservation Area and Cambria State Marine Park in collaboration with State Parks. Any fuel treatments affecting these

properties will require collaboration with CDFW. CDFW game wardens also offer another potential mutual aid law enforcement partner during a major disaster.

California Department of Transportation

The Department of Transportation (CalTrans) is responsible for maintaining and operating state highways including SR-1 and SR-46, both important ingress/egress routes for the community of Cambria. CalTrans is also responsible for vegetation and fuels management within state highway right of ways which are frequent areas of ignition for roadside wildfire starts. Collaboration with CalTrans will be important in the planning of evacuation route improvement and roadside vegetation treatment and management.

California Highway Patrol

The California Highway Patrol (CHP) is responsible for providing law enforcement services within California's state right of ways. In Cambria this includes SR-1 and SR-46. Collaboration with CHP will be important for evacuation transportation management and for their availability as another mutual aid law enforcement agency during a major disaster.

California Coastal Commission

Because Cambria is located within California's coastal zone, many projects require coastal development permits and Coastal Commission approval before they can be implemented. This often includes fuels and vegetation management projects, transportation and infrastructure projects, and more. As such, the Coastal Commission will be an important stakeholder and collaborator in order to ensure regulatory approval for the implementation of wildfire mitigation projects in and around Cambria.

Green Space Land Trust

Green Space, Cambria's nonprofit land trust agency, is an important stakeholder and collaborator in Cambria's fire problem as they own and manage several key open space properties in and around the community, including Strawberry Canyon, a location identified as having a significant need for fuels treatments. Collaboration with the agency will be necessary in order to implement effective fuel management projects on Green Space properties.

Fire Safe Council

The San Luis Obispo County Community Fire Safe Council provides assistance to the community in identifying and funding fire prevention and mitigation projects throughout the county. They also

operate a Cambria specific focus group which seeks to provide a forum for community collaboration between key stakeholders to address wildfire safety issues in Cambria. Their collaboration will be important as they provide a unified entity to facilitate community involvement and multiagency collaboration to target pressing issues and identify funding and solutions.

Pacific Gas and Electric Company

Pacific Gas and Electric Company (PG&E) is the electrical utility services provider for the community of Cambria. They are a key stakeholder for this project and future wildfire safety projects as they own and operate the electrical transmission and distribution infrastructure in and around Cambria. This type of electrical infrastructure is a common ignition source for wildfires in California and collaboration with PG&E to mitigate this risk will be vital to address Cambria's wildfire problem. Additionally, it will be necessary to work with PG&E to address power outages (both planned and unplanned), emergency response during a disaster event, as well as community outreach and preparedness, and post-fire recovery.

Southern California Gas Company

Southern California Gas Company (SoCalGas) is the natural gas utility service provider for the community of Cambria. They are a necessary collaborator to address community safety concerns during a disaster event in regard to natural gas safety, particularly during and after a major wildfire.

Covell Ranch

Covell Ranch is a major private property owner in the Cambria area. Previous collaborative efforts have led to significant fuel treatment projects on property owned by the ranch, and they will continue to be an important stakeholder moving forward as more fuel treatment projects will be necessary on ranch owned property to address Cambria's fire risk. Additionally, this collaboration can serve as a model for agency collaboration with other large, private property owners in the Cambria area who may have parcels that would benefit from treatment projects.

3. Hazard Assessment

Fuel Conditions

The main fuel model throughout Cambria is timber litter. Cambria is also home to one of three native Monterey Pine (*Pinus radiata*) forests on the continent. Monterey Pine is a fire adapted species and produces semi-serotinous cones. To support combustion of surface fuels to open their semi-serotinous cones, their pine needles and cones are highly flammable. Monterey Pine forests thrive in areas with low-moderate intensity fires with a fire return interval of 11-20 years. However, due to fire suppression policies after the Great Fire of 1910, the forests of Cambria have not burned since the Great Fire of 1889, nearly 140 years. Severe fuel buildup, lack of regeneration, and mortality have been a result of fire suppression in Cambria

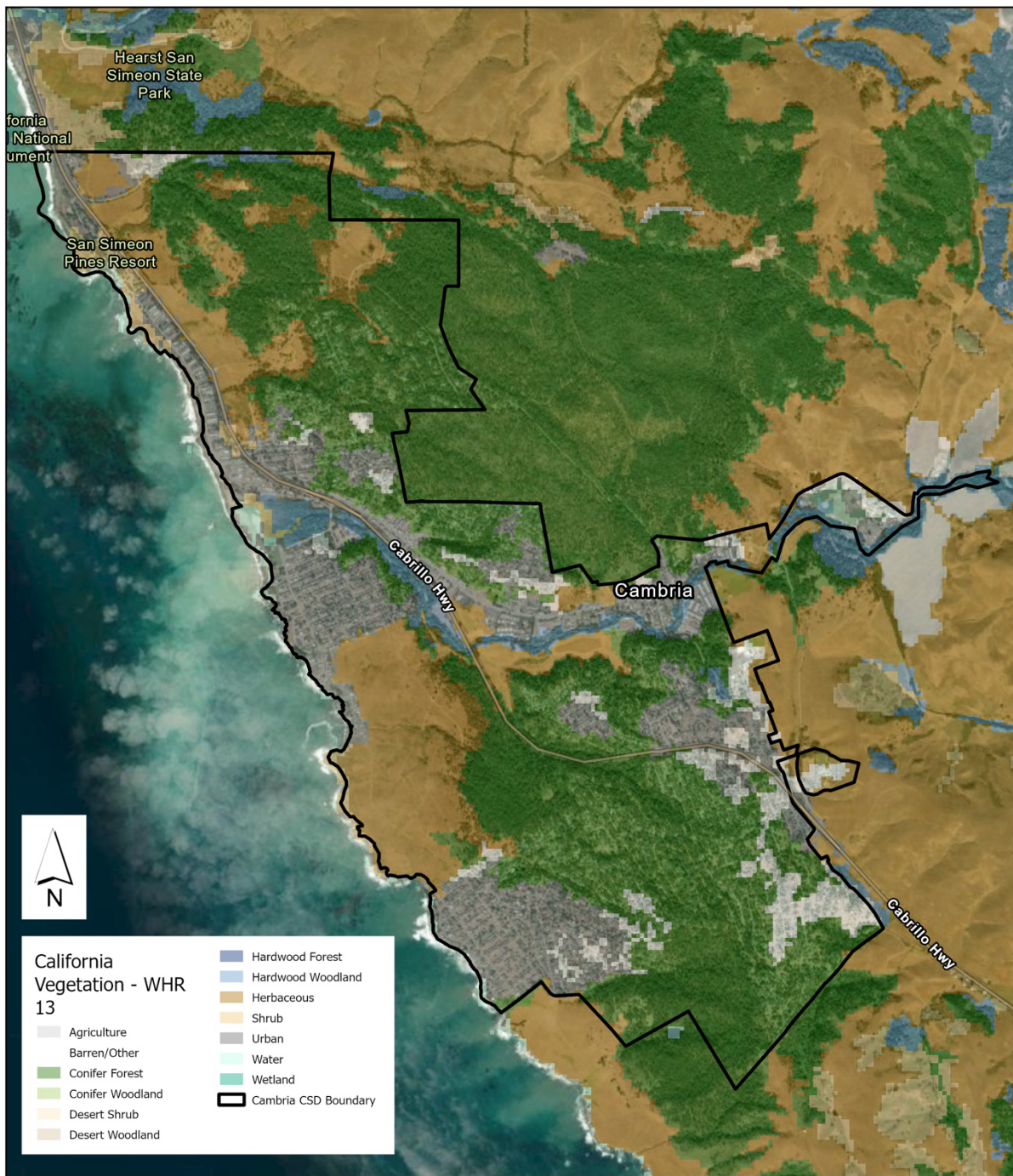
There is dense surface, ladder, and aerial fuels in Cambria's forests. The surface is littered with highly flammable pine needles, cones, and native grasses creating horizontal continuity. Ladder fuels consist of regenerating Monterey Pines and large shrubs creating vertical continuity. Forest density has significantly increased, creating a stand that supports high intensity, stand replacement fires due to the change in fire regime. An example of this can be seen in Figure 3.1. Cambria's forests are composed of many other species, such as Coast Live Oak (*Quercus agrifolia*), Toyon (*Heteromeles arbutifolia*), Coastal Poison Oak (*Toxicodendron diversilobum*), and many native and invasive grasses.

Cambria's Monterey Pine forests are unhealthy, dense, and extremely fire prone. Due to maturity, drought stress, and disease. According to CAL FIRE there are at least 20,000 dead trees throughout Cambria's forest. Drought has run rampant throughout the central coast of California for the past few decades, causing widespread mortality of Monterey Pines. Drought has also decreased the fuels moisture. While fuel moisture does vary day by day due to coastal fog and dew, the average fuel moisture has decreased significantly over the past few decades. Monterey Pines, on average, live for 80-90 years. Maximum seed-bearing age of Monterey Pine is between 15-20 years, according to the United States Forest Service. Due to lack of fire, Monterey Pines are not effectively regenerating and dying due to maturity, leaving dense areas of snags and increased fuel loading. Old Monterey Pines are more susceptible to ignition. They are also more susceptible to disease, such as Pitch Canker. Pitch Canker is a fungal disease caused by *Fusarium circinatum* and spread by bark beetles. It weakened and killed large swathes of Monterey Pines. Increased mortality of

Monterey Pine has created dense, dry, easily combustible fuels throughout Cambria's forests. Collectively, increased fire return intervals and mortality has significantly increased the likelihood of severe and high intensity fires in Cambria's forests.



Figure 3.1: Typical fuel conditions in Strawberry Canyon Open Space with high levels of understory and ladder fuels and high pine mortality.



Cambria Surrounding Vegetation Type

Created by Nate Tall on 5/29/2025
Cal Poly NR455 Cambria CWPP

0 0.25 0.5 1 1.5 2 Miles

Figure 3.2: Vegetation type classification for the Cambria area.

Weather

Weather plays a critical role in determining the timing, intensity, and likelihood of wildfire hazards in Cambria. Throughout the year, Cambria experiences a mild coastal climate, typically influenced by fog and marine layers that help maintain relatively moist fuel conditions for a majority of the time. However, during late summer and early fall, this balance shifts dramatically. The months of July, August, and September mark the hottest period of the year in Cambria, with average temperatures climbing and relative humidity levels dropping. These dryer, hotter conditions result in extremely low fuel moisture and fuel beds that are susceptible to fire, especially the highly flammable Monterey pine litter and understory vegetation. When these conditions coincide with fire favorable wind events, there is potential for an extremely dangerous wildfire situation in Cambria. Table 3.1 shows data from the San Simeon Remote Automated Weather Station (RAWS) from 2024 which is typical for Cambria during this time of year.

Table 3.1: “Fire Season” Weather data for Cambria, July 2024 through September 2024. (Data retrieved from the San Simeon RAWS Station)

Date (2024)	Daily High Temperature (f)		Precipitation (in)	Wind Speed (mph)	
	Average	Extreme	Average	Average	Extreme
July	65.5	71	0.01	4.6	20
August	67.7	80	0.01	4.6	22
September	66.7	77	0.01	4.4	25
3 Month Avg.	66.6	76.0	0.01	4.5	22.3

Rainfall

Rainfall patterns in Cambria play an important role in shaping the region’s seasonal fire hazard. Cambria has a Mediterranean climate, characterized by cool, wet winters and dry summers. The area typically receives between 20 to 30 inches of rainfall annually, with the vast majority falling between November and March. During these winter and early spring months, precipitation helps recharge soil moisture, reduce fire risk, and sustain the health of native vegetation. However, from late spring through early fall, generally May through October, precipitation becomes sparse to nonexistent. This extended dry period allows fine fuels like grasses, pine needles, leaf litter, and invasive brush to desiccate. By late summer, these fuels have undergone months of curing and are

at their driest and most flammable state. The lack of summer rainfall, coupled with high temperatures and low relative humidity, creates an environment where even a small ignition source can spark a fast-moving wildfire. Coastal fog helps keep fuels on the western side of Cambria more moisturized but often does not have a significant effect on the eastern side of the community. These dry-season conditions are further intensified by Cambria's fuel types, particularly dense Monterey pine stands and thick understory shrubs, that respond quickly to heat and wind. The late summer and early fall months represent the peak of wildfire risk in Cambria, when dry fuels, occasional Santa Ana winds, and human activity converge.

Wind

Although the peak heat of summer does not typically coincide with the windiest months, wind direction and behavior still play a critical role in fire spread during hazard periods. In Cambria, the prevailing wind direction is north-northwest (NNW). Cambria is also susceptible to southwest (SW) and offshore, east-northeast (ENE) winds. Of these, NNW and ENE winds are the most relevant to wildfire hazard assessments because they typically occur during fire season. The SW winds usually bring in cooler, moist marine air and are less likely to contribute to fire growth.

In contrast, ENE winds in Cambria are particularly dangerous because they can mimic Southern California's Santa Ana wind conditions. Also known as foehn or gravity winds, they are strong, dry, downslope winds that originate over inland areas and travel toward the coast. As these winds descend from higher elevations, they compress and warm, drastically reducing relative humidity and drying out vegetation even further. These hot, dry gusts can exceed 40 to 60 miles per hour, creating conditions that accelerate fire spread, carry embers far ahead of the flame front, and overwhelm containment efforts. In areas with continuous fuel beds like Cambria's pine forests and grasslands, Santa Ana-like winds can turn a small ignition into a fast-moving wildfire capable of threatening homes and infrastructure in a matter of minutes.

Because of their strength, dryness, and erratic behavior, ENE winds during late summer and early fall are among the most hazardous weather factors influencing wildfire risk in the region. Understanding when and how these winds appear is essential to predicting the spread and behavior of wildfires in Cambria's fire-prone landscapes. Maps detailing predominant wind directions for Cambria can be seen in Figures 3.4 and 3.5.



Cambria Prevailing Wind Pattern

Cambria with prevailing NNW wind pattern shown
 Created by Sam Levy on 05/29/2025
 Cal Poly NR-455 Cambria CWPP

→
 Wind Direction

Figure 3.3: Prevailing NNW wind pattern in Cambria.



Cambria Offshore Wind Pattern

Cambria with offshore ENE wind pattern shown
 Created by Sam Levy on 05/29/2025
 Cal Poly NR-455 Cambria CWPP


 Wind Direction

Figure 3.4: Offshore, ENE, gravity wind event pattern in Cambria.

Topography

Cambria is characterized by a variety of slopes, exposures, and microclimates that all have the potential to influence fire spread, fuel moisture, and wind behavior. Much of the western part of Cambria, such as Windsor boulevard and the Fiscalini Ranch Preserve, are made up of gentle westward facing slopes. These relatively open areas are close to the coast and heavily influenced by coastal fog and breezes for most of the year. These two factors generally keep fuel moisture content higher in this region as compared to others.

The eastern and northeastern neighborhoods like Lodge Hill, Leimert Estates, Happy Hill, and Pine Knolls are characterized by steeper and more irregular slopes when compared to the western side of Cambria. These steep slopes can increase fire behavior, driving potential fires uphill by preheating fuels and creating a chimney effect that intensifies heat and flame lengths and increases the potential for spotting. Furthermore, these neighborhoods are built into the forest, increasing the risk to structures and complicating evacuation.

Cambria's road network winds through hilly forested terrain, and includes narrow, limited access routes. This creates challenges for both emergency response and the evacuation of residents in the event of an emergency. Topography in these areas not only affects fire behavior, but also how people and resources will be able to move throughout the community when precious minutes matter. Maps detailing Cambria's slope steepness and aspect can be viewed in Figures 3.5 and 3.6 respectively.

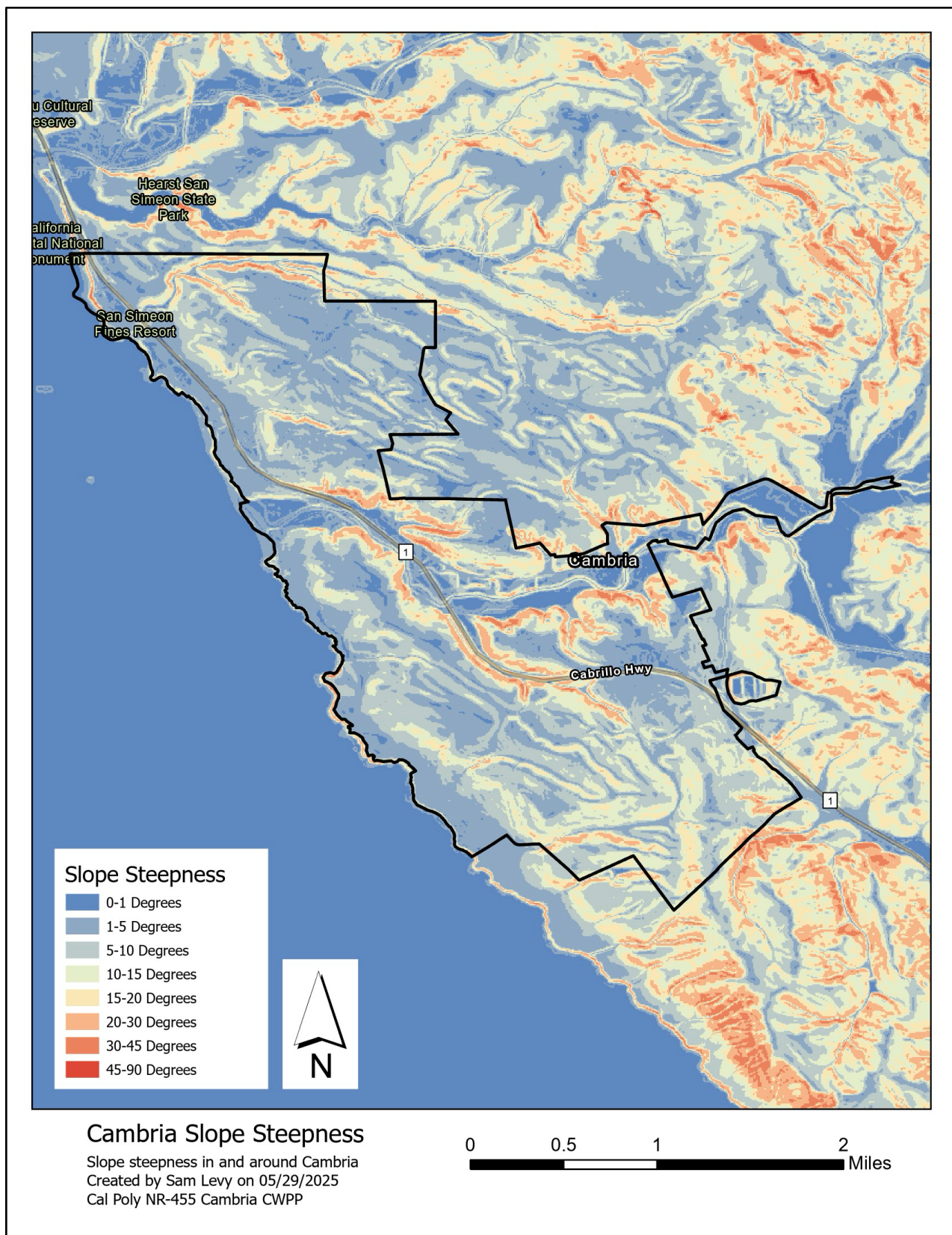


Figure 3.5: Map displaying slope steepness for the Cambria area.

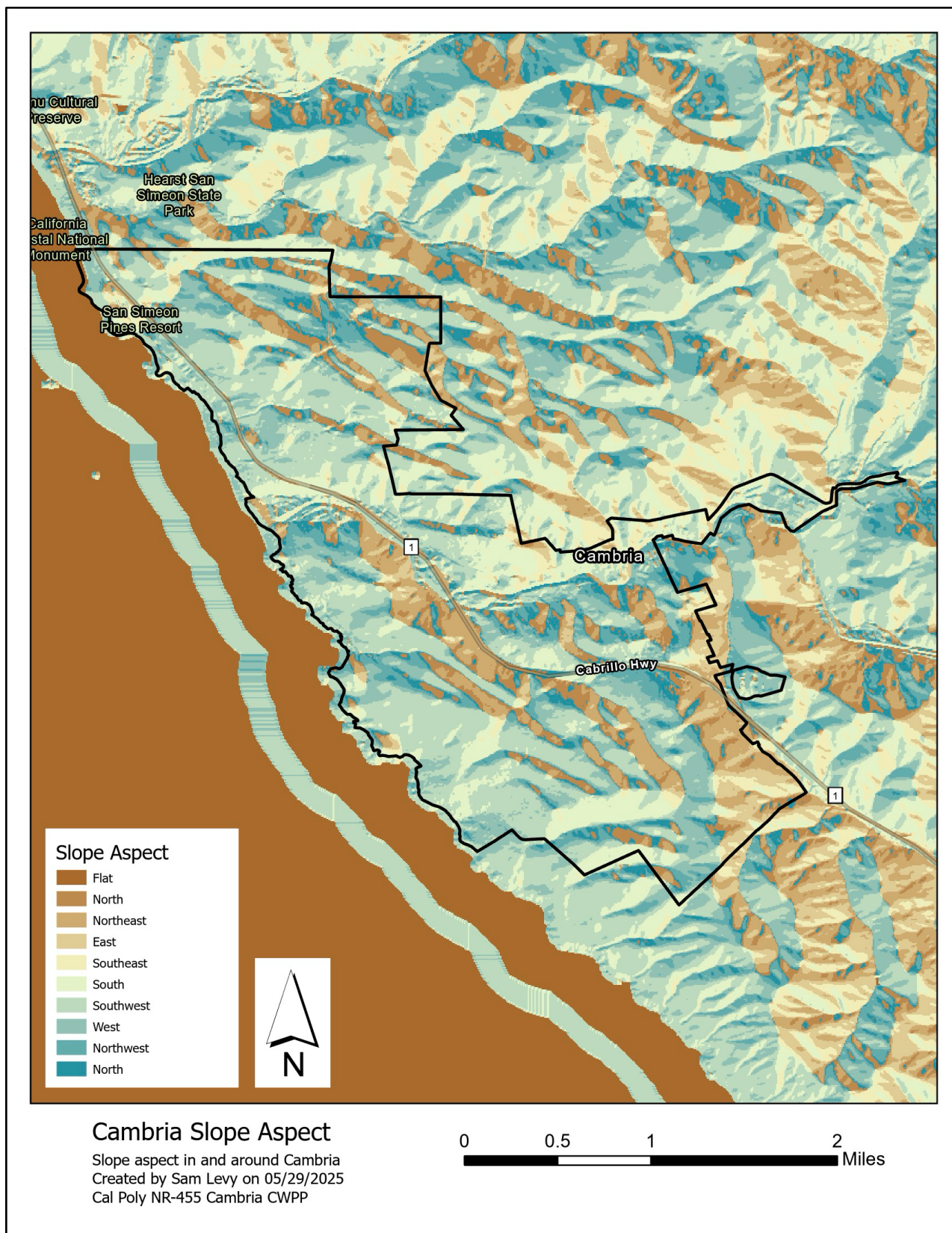


Figure 3.6: Map displaying slope aspect for the Cambria area.

Fire History

Cambria has experienced minimal fire activity throughout its recent history. The last major destructive wildfire in Cambria occurred in 1889. This fire burned down the entire business district on present day Bridge Street along with 7 homes. Since 1889 there have been no major wildfires that have directly affected the community of Cambria. 6 major wildfires have occurred in the general vicinity however including: the Highway 58 Fire (1996), the Las Pilitas Fire (1985), the Logan Fire (1997), the Chispa Fire (1989), the Chimney Fire (2016), and the San Simeon Creek Fire (2003). As a result of this lack of fire for well over a century, the health of the fire dependent Monterey pine forest has suffered leading to large quantities of aging, dead, and dying trees along with extreme understory and ladder fuel loading resulting in an increased risk for the next major wildfire. A map of wildfire history in Cambria and the surrounding area can be seen in Figure 3.7.

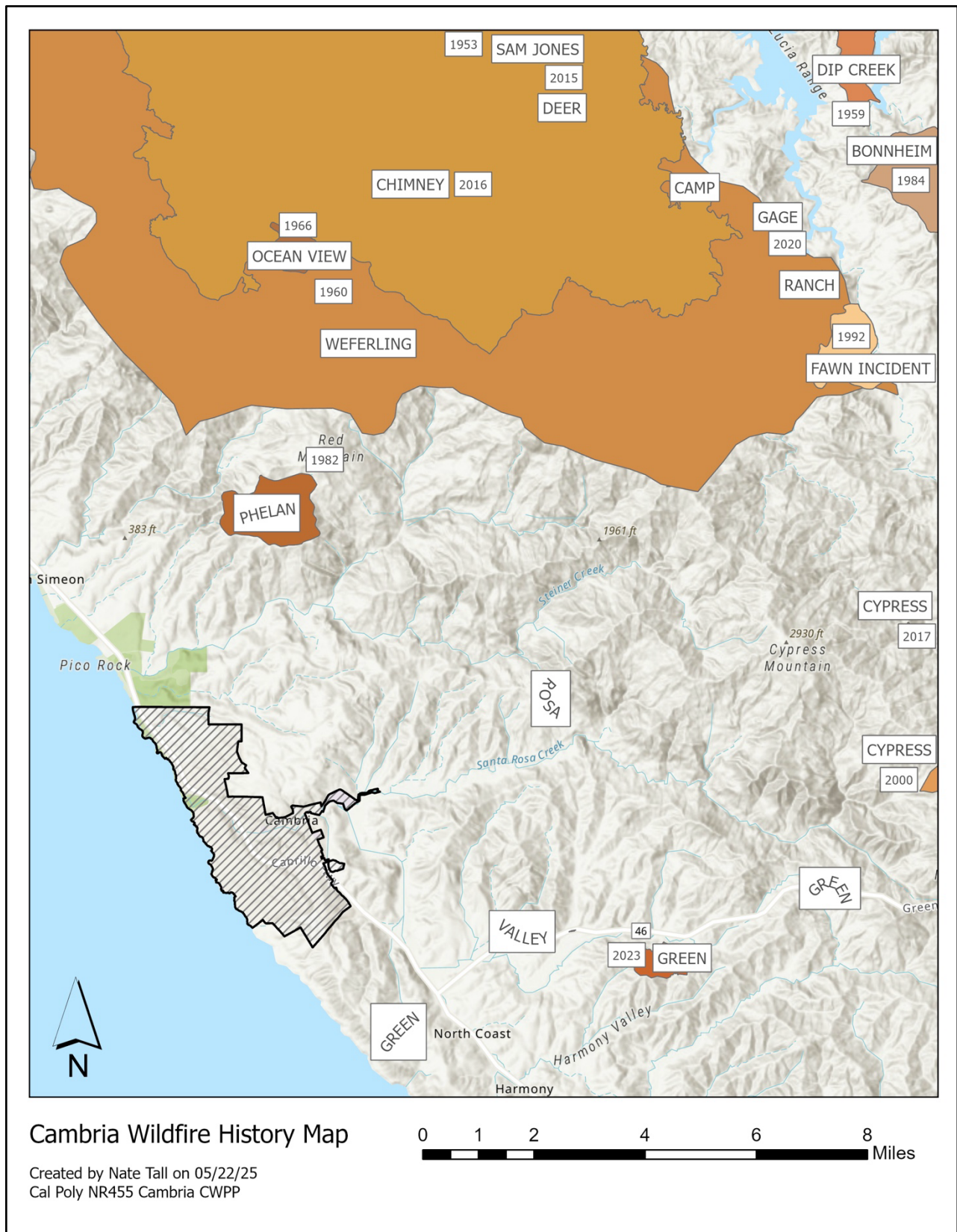


Figure 3.7: Map of historic wildfires in the Cambria area.

Potential Ignition Sources

Human Caused Ignition

Human factors are the leading cause of fire ignition in California. Cambria is situated in a densely packed pine forest and is at high risk of powerline-ignited fires. Per PG&E guidelines (CPUC General Order 95, Rule 35), a 4-foot clearance around overhead power lines is required in a high fire threat district. Although these guidelines are in place, PG&E often lacks the time and personnel to maintain the hundreds of thousands of miles of power lines it owns, making it common to see them running through and up against trees in Cambria. Also among the top sources of ignition is mechanical equipment (ie. lawn mowers, chainsaws, and weed whackers). The proper maintenance and use of these greatly lowers the chance of ignitions occurring. Mowers, chainsaws, and weed whackers should be limited to early morning use and avoided during fire season whenever possible. This helps to ensure surrounding vegetation is at a high enough fuel moisture to resist a potential spark caused ignition. Along with landscaping equipment, vehicles cause a significant number of roadside fires. Proper care when towing helps to ensure sparking chains or trailer components don't cause fires, as does avoiding parking in tall or dry vegetation where hot components under a car could cause ignition. Along with dragging chains and hot car components, car accidents are also a plausible source of ignition. With Highway 1 running through the center of Cambria, a fire ignited by a car accident is another possible source of ignition. Being one of the top tourist attractions on the Central Coast, Cambria experiences a heavy flow of tourists, especially during the hot summer months. With several campsites and hiking trails, a human-ignited recreation fire is possible. This could be from an escaped campfire, cigarette, improperly extinguished campfire, or even fireworks. Additionally, in California, there has been a growing number of wildfires caused by arson. In the last 5 years, California has reported over 70,000 acres burned from intentionally set wildfires, making this another possible ignition source for Cambria. A map of ignition sources and areas identified as likely locations for a wildfire to start is shown in Figure 3.8.

Natural Ignition

While a lightning-ignited fire is an infrequent event in Cambria, the potential does exist, and San Luis Obispo County has experienced thunderstorms that have resulted in ignitions previously. In July of 2015, a storm front moving in from the west caused a thunderstorm that lasted several hours and resulted in hundreds of lightning strikes. It was reported that by mid-morning that day,

Cambria Fire Department had already responded to five pole fires, two tree fires and a chimney fire. Furthermore, in August 2020, much of Northern California and the Central Coast was subject to an intense overnight lightning siege resulting in hundreds of ignitions across the state, some of which turned into massive, destructive wildfires. While an infrequent occurrence in Cambria, the potential for lightning ignited wildfire cannot be ignored.

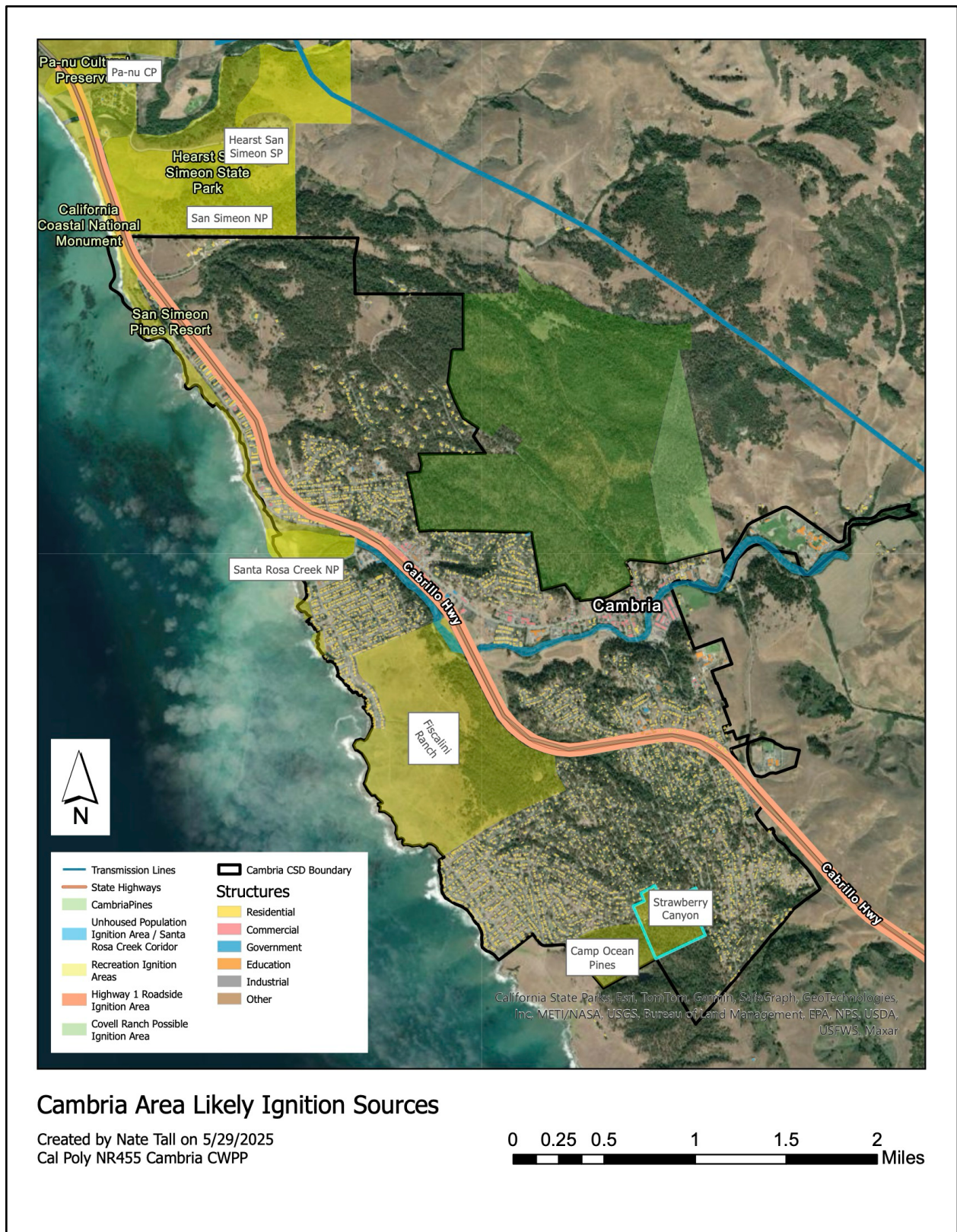


Figure 3.8: Likely ignition sources and areas for a wildfire in and around Cambria

Predicted Fire Behavior

Fire behavior describes how a fire will burn and interact with the environment, depending how on an areas weather, fuels, and topography influences the fire's characteristics (spread rate, intensity, flame length, etc.). Cambria's predicted fire behavior was analyzed by CalFire on August 10, 2015, using FARSITE, a fire analysis tool that simulates potential fire behavior characteristics, fire growth and spread, and conditional burn probabilities under constant environmental conditions (refer to Figure 3.8 & 3.9). FARSITE can compute wildfire growth and behavior for longer time periods under heterogeneous conditions of terrain, fuels, fuel moistures and weather. The following models do not intend to predict survival or loss of structures.

Two simulations were run for fires starting by roadside ignition at Bridge Street (ignition site) to predict fire behavior under average (20mph) and extreme (40mph) North Northwest (NNW) and East Northeast (ENE), Santa Ana, wind conditions. The models represent a 10 a.m. ignition that burned for two days and each line represents the fire's rate of spread over 2 hours.

In Figure 3.9 and 3.10, the model shows an extreme increase to the fires rate of spread, intensity, and severity when comparing normal and extreme wind conditions. Under NNW winds, areas located South Southeast of the ignition point are vulnerable. ENE wind conditions are predicted to cause more circular spread when compared to NNW winds, causing areas in all directions from the ignition site to be vulnerable. Areas located South Southeast of the ignition are most vulnerable under NNW winds while areas located West Southwest are most vulnerable under ENE winds. Fire moving through these areas are predicted to have the greatest rate of spread and flame length under given wind direction and intensity.

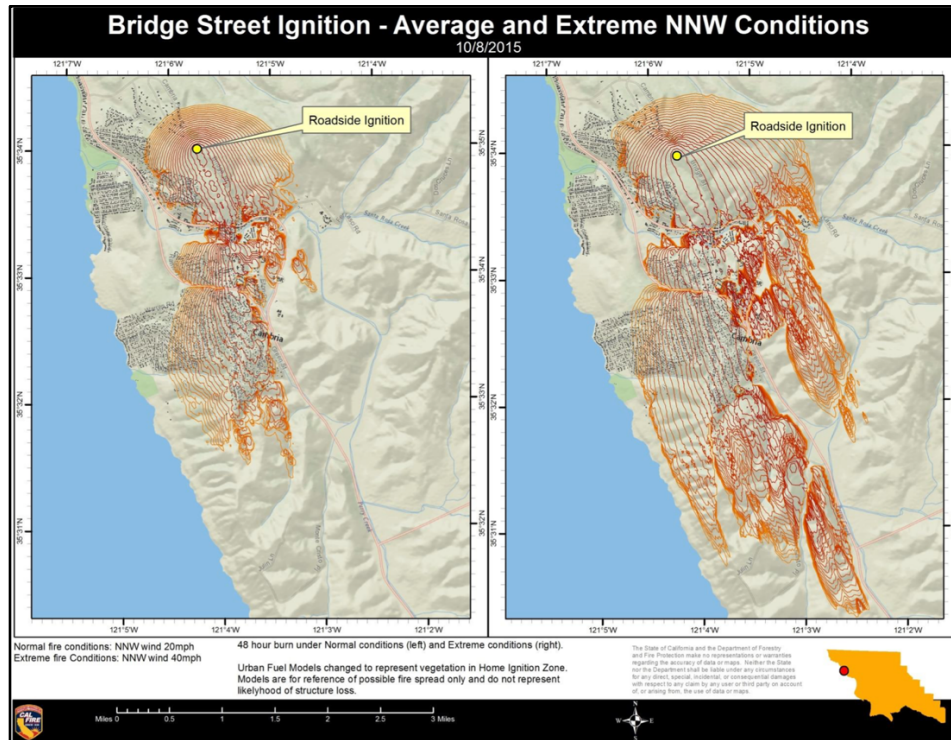


Figure 3.9: Simulated fire behavior for average and extreme NNW wind conditions.
Map from CAL FIRE SLO Pre-Fire Division, 2015.

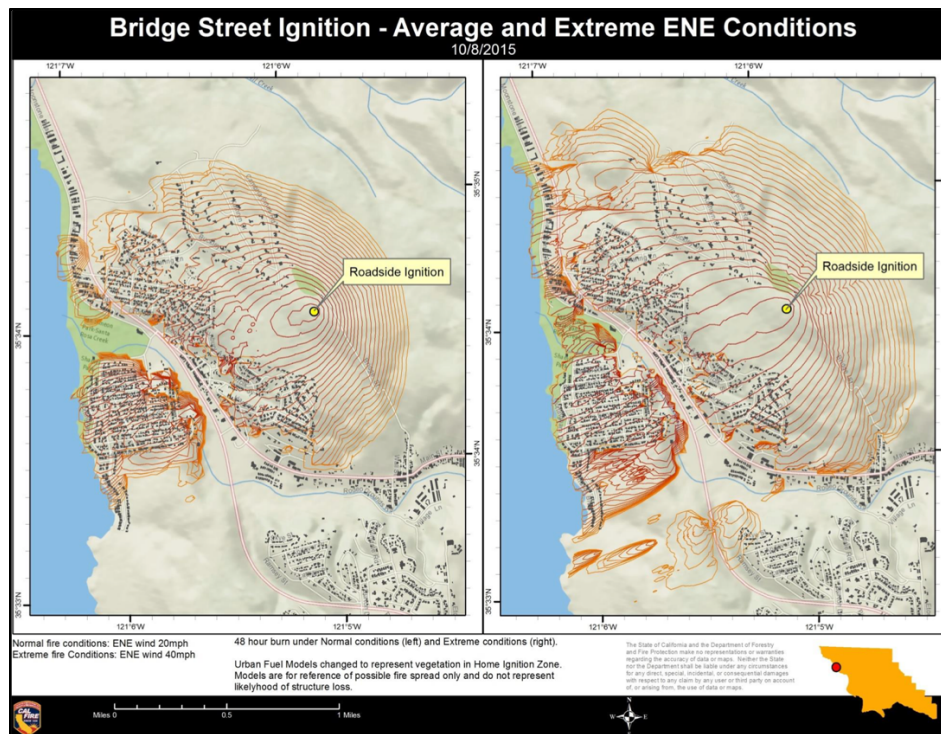


Figure 3.10: Simulated fire behavior for average and extreme ENE wind conditions.
Map from CAL FIRE SLO Pre-Fire Division, 2015.

4. Risk to Assets

For the purpose of this CWPP, assets are values that may be at risk to wildfire. Assets in and around the community of Cambria include communication, power, and transportation infrastructure, tourist and recreation infrastructure and areas, and natural areas.

Built Environment

The community of Cambria has a host of important built assets in and around the community that are essential to daily function. The most crucial built assets in the community include homes, educational institutions, communications infrastructure, major roads, power lines, and water systems. Damage by fire to any one of these major assets would significantly disrupt the community and likely result in negative economic and social benefits for the community of Cambria.

Table 4.1: Built assets at risk in Cambria.

Built Assets	Consequence of Loss Description
Major Roads	Destruction of roads would limit evacuation options, put lives at risk, and decrease access to resources while also creating high repair costs.
Homes	Loss of homes would result in significant displacement of residents, potential threats to occupant safety, and severe financial burdens.
Education Institutions	Loss of schools would disrupt education, create a loss of jobs, and require state and local financed rebuilding.
Power Lines	Damage to power lines would severely disrupt access to information and communication, decrease food availability and access, and result in increased probabilities of temperature-related illness.
Communication Infrastructure	Loss of communication infrastructure would disrupt emergency alerts and communication causing endangerment to public safety and have a high cost of recovery.

<p>Water Systems (Sewer, pumping systems, reservoirs)</p>	<p>Damage to water systems would compromise firefighting capabilities, effect public access to water, require major financial and infrastructural recovery, and decrease sanitation, possibly leading to disease.</p>
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It is important to note that while both roads and power infrastructure are assets at risk, they are also risky assets. Both are potential ignition sources to the community of Cambria. Power lines can fail if trees or their branches fall on them causing them to spark a fire. They can also cause a fire if birds land on them and are electrocuted, causing them to combust and fall to the ground, possibly igniting a wildfire. In Cambria many powerlines are very close to trees, even more are touching trees. Trees are putting pressure on lines themselves. Since Cambria is extremely susceptible to wildfire, powerline ignitions could lead to very intense and severe fires. Furthermore, roads offer an ignition source, as cars driving through town can spark fires in and around Cambria. Thousands of people drive through the community in the summer and fall months raising the potential for this type of ignition in this high wildfire severity time. Throughout Cambria there are 2858 homes and with the loss of these, many residents would have nowhere to go. As much of the population is elderly, many do not have backup plans to turn to if they lose their home. Cambria is home to 24 traditional hotels and up to 121 lodging options, this could be small hotels etc. These options provide huge economic gains for Cambria, as thousands of tourist visit each year and stay in Cambria. These tourists support local businesses and restaurants, further providing fuel for Cambria's economy. Loss of these assets would cripple the community and hinder the recovery process for the city. Cambria is home to two cell towers, one in the community itself and one on Hearst San Simeon State Park, these provide communications to residents. Nearby there is also a repeater tower situated in the Los Padres National Forest to the east of the city. The loss of these communications sites would lead to a struggle for first responders to organize, evacuate, and save everyone. Communications is an essential part of every tragedy fire and losing communications would in no case be good for the community of Cambria. In the case of a fire, water is the most valuable asset for controlling the degree of damage. If the ability to move water to where it is needed is cut off, the firefighting ability is very limited. Upon ignition, water needs to be effectively moved to the area of ignition to extinguish the fire before it becomes too large to control with the already limited resources. Furthermore, the proper running up wells, sewage lines, and reservoirs is required to ensure the proper health of the community. Among all assets, if a loss to one or both

of Cambria's fire stations would be detrimental to the emergency response in the case it is needed. Public safety, increased fire severity, and a high financial cost are outcomes of a loss to fire stations. Figure 4.1 shows a map of built assets at risk in Cambria and Figure 4.2 shows a map of the CAL FIRE designated fire hazard severity zones for the area which can be used to determine the degree of risk to a given asset depending on the zone they fall within.

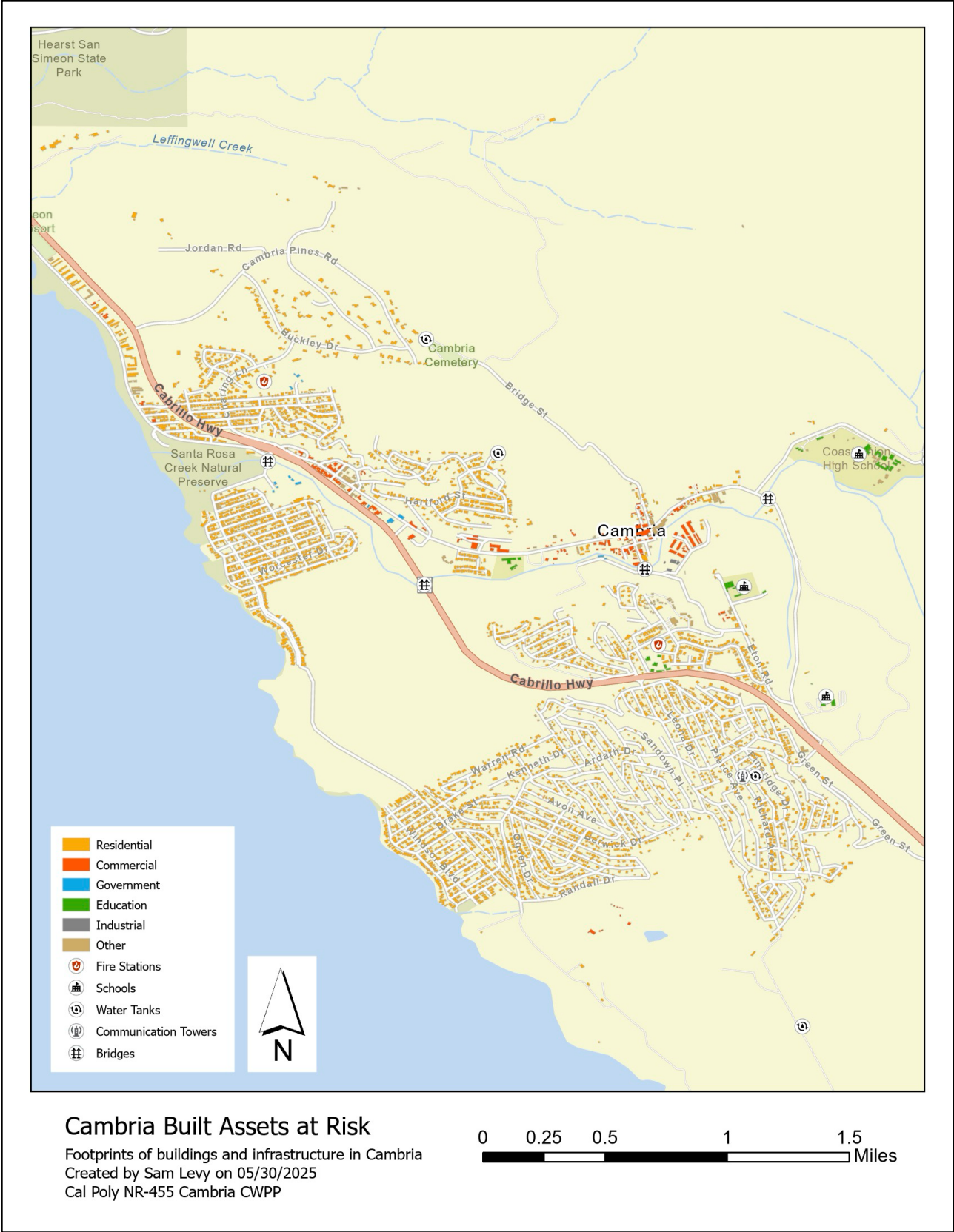


Figure 4.1: Built assets at risk in Cambria shown by use type.

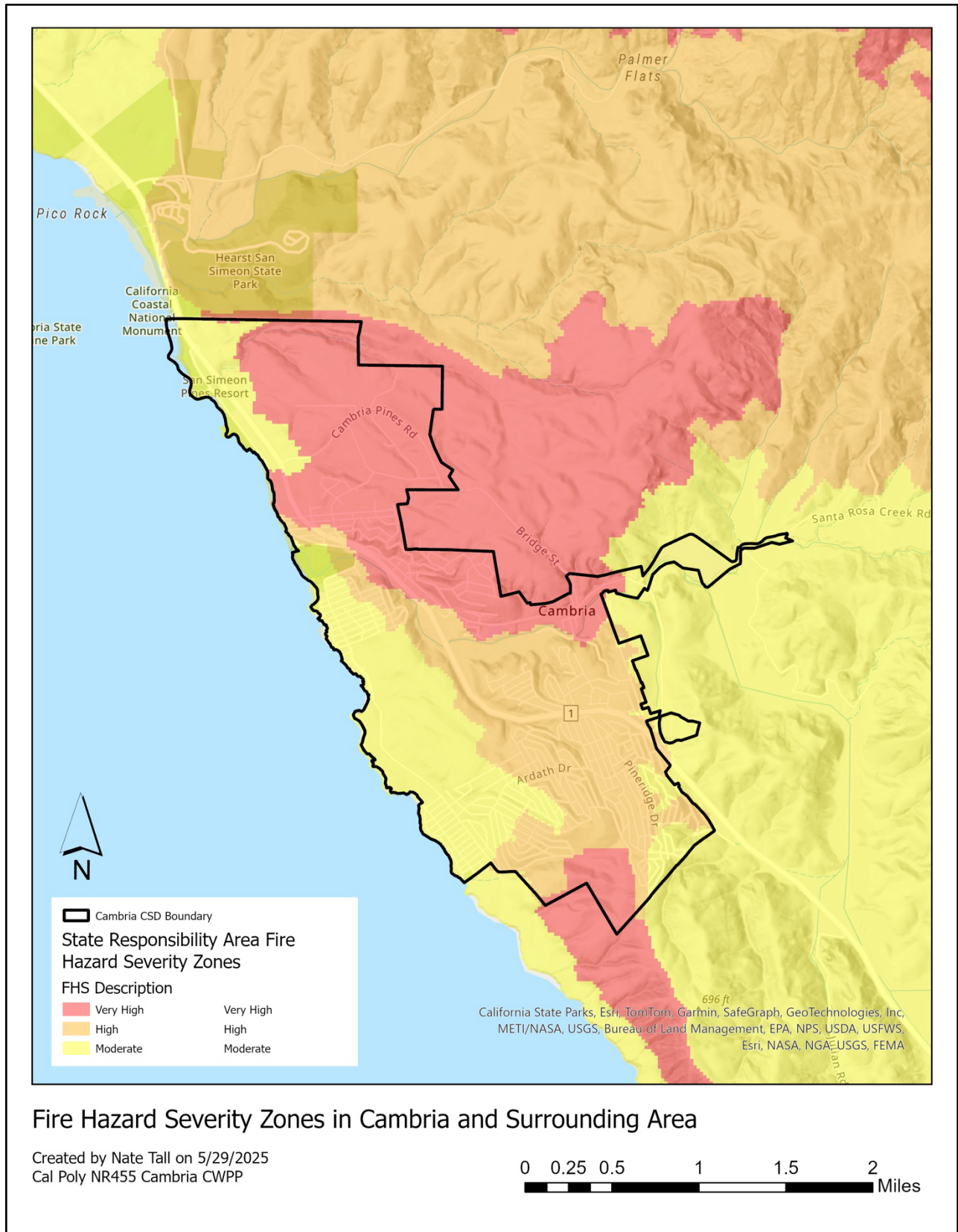


Figure 4.2: Fire hazard severity zones in Cambria and surrounding area.

Natural Environment

Cambria is in a unique spot on the California Coast. To the north is Big Sur and to the south is Montana De Oro as well as point Conception. This makes for some unique climactic conditions as well as natural environment. Due to this and more Cambria is home to many native endangered species. These include but are not limited to, critical habitat for the California Red legged Frog (CRLF), Tidewater Goby, and Western Snowy Plover. Santa Rosa Creek runs right through the middle of Cambria, and this provides habitat for many aquatic and semi aquatic species such as Coastal Steelhead. To the north of the community there is San Simeon creek, also home to a generous amount of wildlife habitat. Beyond this Cambria is home to one of 4 native Monterey pine stands to the world. This has some big implications, if lost, the community would lose its defining natural characteristic. The habitat in Cambria consists of a large area of dense woodland habitat and urbanized area (1600ac), as well as chaparral and grassland vegetation (800ac) and riparian vegetation (100ac). Figure 4.3 shows a map of the natural assets at risk to wildfire in and around the community of Cambria.

Table 4.2: Natural assets at risk in Cambria.

Asset	Consequence of Loss
Oaks and other native trees	Loss of Oaks and other native trees would result in wildlife habitat loss, decreased soil stability, increased water runoff, and loss of native species.
Ranch Preserves: Fiscalini Ranch Preserve, Rancho Marino, Covell Ranch, Strawberry Canyon	Damage to ranch preserves would result in a loss of wildlife habitat, decreased recreation, and loss of jobs and revenue.
Hearst San Simeon State Park	Damage to Hearst San Simeon State Park would results in a loss of habitat, decreased recreation, loss of state jobs and revenue, and decreased tourism.

Camp Ocean Pines	Damage to Camp Ocean Pines results in a loss of habitat, decreased recreation, decreased tourism, and loss of income
Critical Habitat (to endangered species)	Damages to the critical habitats would result in a loss of sensitive species, critical nesting sites for native birds, and overall impact the ecosystem.
Native Fauna	Damages to native fauna would impact the ecosystem, decrease species diversity, and nesting sites.

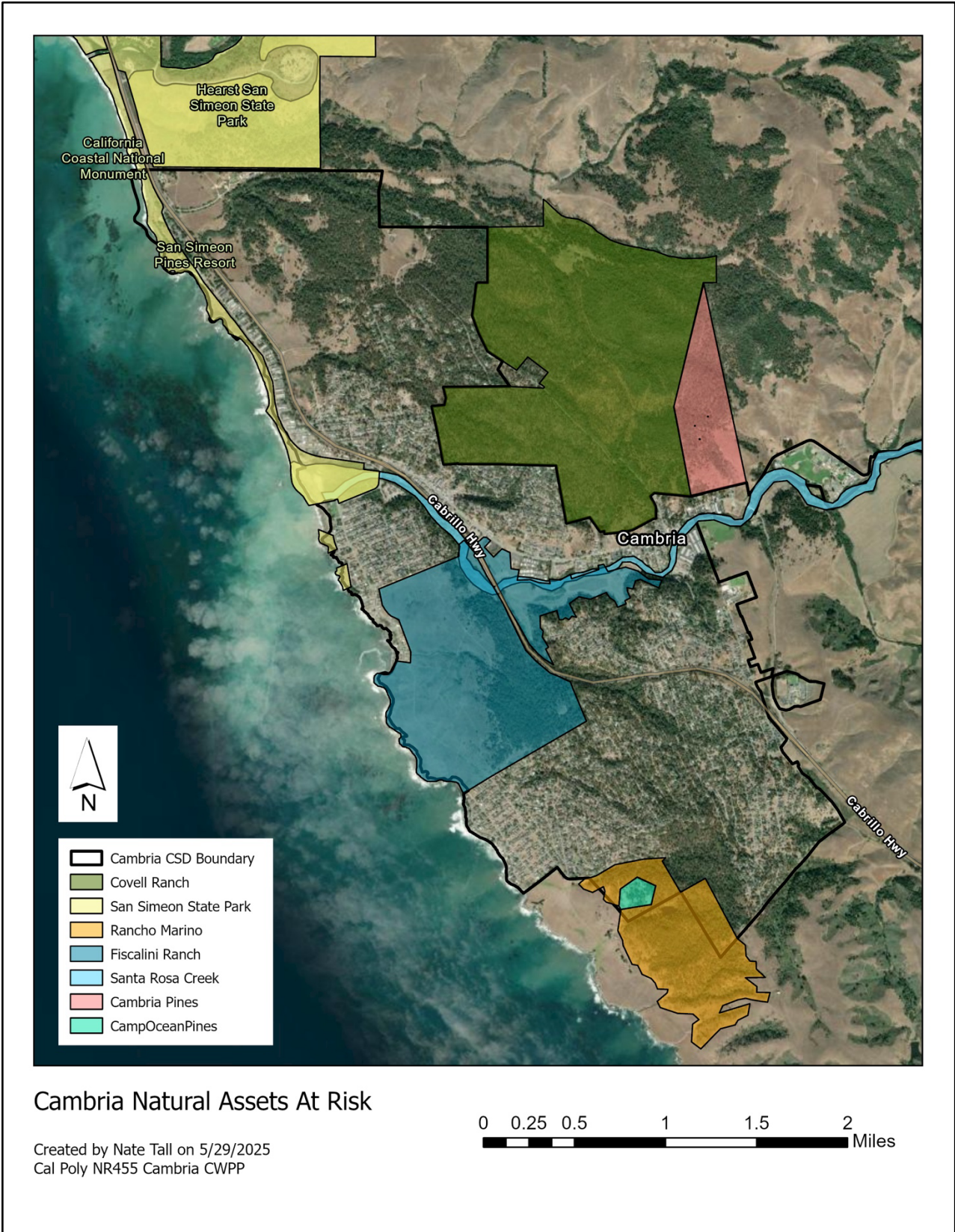


Figure 4.3: Natural assets at risk in Cambria

5. Fuel Reduction Priorities

The following section outlines the most crucial areas in the Cambria area in need of fuels reduction, along with the suggested fuels reduction methods. Priorities for this section have been designated based on previous treatment work, proximity to built and natural assets, and ability to produce destructive fire behavior that threatens the community.

Fuel Modification Needs and Locations

Primary areas to address fuel modification in Cambria are those where fire activity has the ability to greatly increase and bring fire into the WUI zone due to overloading of fuels, and areas closest to possible ignition sources and structures. Lack of fuels management paired with a fire exclusion mindset has seen the fuel loading in Cambria become a significant problem. The result is a dense, unhealthy forest structure with heavy surface fuels, abundant ladder fuels from young trees and shrubs, and tightly packed overstory creating continuous canopy fuels. This buildup creates ideal conditions for high-intensity, stand-replacing wildfires, a departure from the lower-intensity regime the ecosystem evolved with.

Prolonged drought, aging trees, and diseases like pitch canker have further stressed the forest, contributing to widespread mortality and dry, combustible fuels. Estimates suggest over 20,000 dead Monterey Pines currently stand across Cambria. Declining fuel moisture and a high density of snags have made the area extremely vulnerable to ignition and rapid fire spread. Widespread fuel modification in areas with heavy fuel loading is urgently needed to restore ecological balance and reduce wildfire risk.

In addition to large-scale forest management, targeted fuel reduction is especially critical near areas where wildfires are most likely to start. Cambria contains multiple ignition-prone zones, including major roadways like Highway 1, utility corridors with overhead power and transmission lines, and heavily recreated public spaces where accidental ignitions may occur from smoking, campfires, or equipment use.

Table 5.1: Fuel Reduction Locations

Large Scale Fuels Reduction Locations	Targeted Fuels Reduction Locations
Covell Ranch	Roadsides (Highway 1)
Strawberry Canyon / Rancho Marino	Transmission and Powerlines
Fiscalini Ranch	Homes/ Defensible Space
Private Forested Areas with Overloaded Fuels	Recreation Areas
Santa Rosa Creek Corridor	

Recommended Treatment Methods and Actions

Covell Ranch

Covell Ranch is one of the most fire-prone wildland-urban interface zones in Cambria and has therefore become a top priority for vegetation management and fuel reduction. The site is the subject of an active Vegetation Treatment Program (VTP), organized into five treatment units that collectively span over 600 acres. This treatment area directly borders residential neighborhoods, including Bridge Street, Hartford Street, and areas near the Cambria Grammar School, making its management critical for community protection. A map of the treatment area can be seen in Figure 5.1.

Unit 1 (subdivided into 1A, 1B, 1C; approximately 133 acres) is located along the southern boundary of Covell Ranch and is directly adjacent to the community of Cambria, including Bridge Street and the surrounding residential neighborhoods. These units are critical for community protection due to their proximity to homes, businesses, and evacuation routes. The treatment strategy in Unit 1 is closely tied to the maintenance and expansion of an existing shaded fuel break that runs along Bridge Street and wraps around the perimeter of Unit 1. This fuel break is a defensible corridor where surface and ladder fuels are reduced, canopy spacing is increased, and vegetation continuity is broken to slow fire spread and enhance firefighter access. Treatments in this area involve the thinning of small-diameter Monterey pines and oaks ($\leq 8"$ DBH) to create 15–20 foot spacing between retained trees, with a specific focus on removing trees infected with dwarf mistletoe, pitch canker, or western gall rust. The goal is to lower stand density while retaining healthy, vigorous trees that provide structural stability and ecological value. Unit 1C is designated

for handwork only, indicating limited equipment access or higher environmental sensitivity in that subunit. This distinction supports more surgical, low-impact treatment in areas close to homes or sensitive natural features. For unit 1 and the shaded fuel break, regular maintenance is recommended to ensure the effectiveness of the treatment is preserved over time. Maintenance can be carried out by thinning, pile burning, and masticating fuels to be within the limits of the prescription.

Unit 2 (subdivided into 2A, 2B, 2C; approximately 140 acres) lies to the northwest and include sensitive Class II and III watercourses, requiring more nuanced treatment prescriptions that respect buffer zones of 50' (Class II) and 25' (Class III) where slope is <30%. These units follow similar spacing guidelines as Unit 1, but with these additional environmental considerations near riparian zones. For unit 2, regular maintenance is recommended to ensure the effectiveness of the treatment is preserved over time. Maintenance can be carried out by thinning, pile burning, and masticating fuels to be within the limits of the prescription. These treatments should be carried out with respect to the proper buffer zones alongside the watercourses.

Unit 3 (subdivided into 3A, 3B, 3C; approximately 113 acres) comprises younger stands, where the treatment strategy involves thinning trees $\leq 4"$ DBH and maintaining tighter spacing (10–15 feet) to reduce competition and fire continuity. Strategically placed untreated "control pockets" (25-foot diameter, spaced ~40 feet apart) are retained to support habitat structure and microclimate buffering. For unit 3 it is recommended to expand the shaded fuel break in the western side of Bridge Street onto the eastern side of the street in Unit 3. It is also recommended to carry out the previously applied prescription as soon as possible, in order to mitigate the effects of a wildfire that either starts within the ranch itself or approaches the ranch as a flaming front from the east – northeast.

Unit 4 (4A and 4B) and Unit 5 (5A, 5B, 5C) collectively span about 158 acres and occupy the northernmost portion of the property. These upper-slope zones are critical for preventing downslope fire movement toward the community. Units 4 and 5 should be prioritized for the development of site-specific prescriptions that mirror thinning and spacing objectives used in Units 1–3. Given their upper-slope position, treatments here are especially critical to slow potential downslope fire spread toward the community.

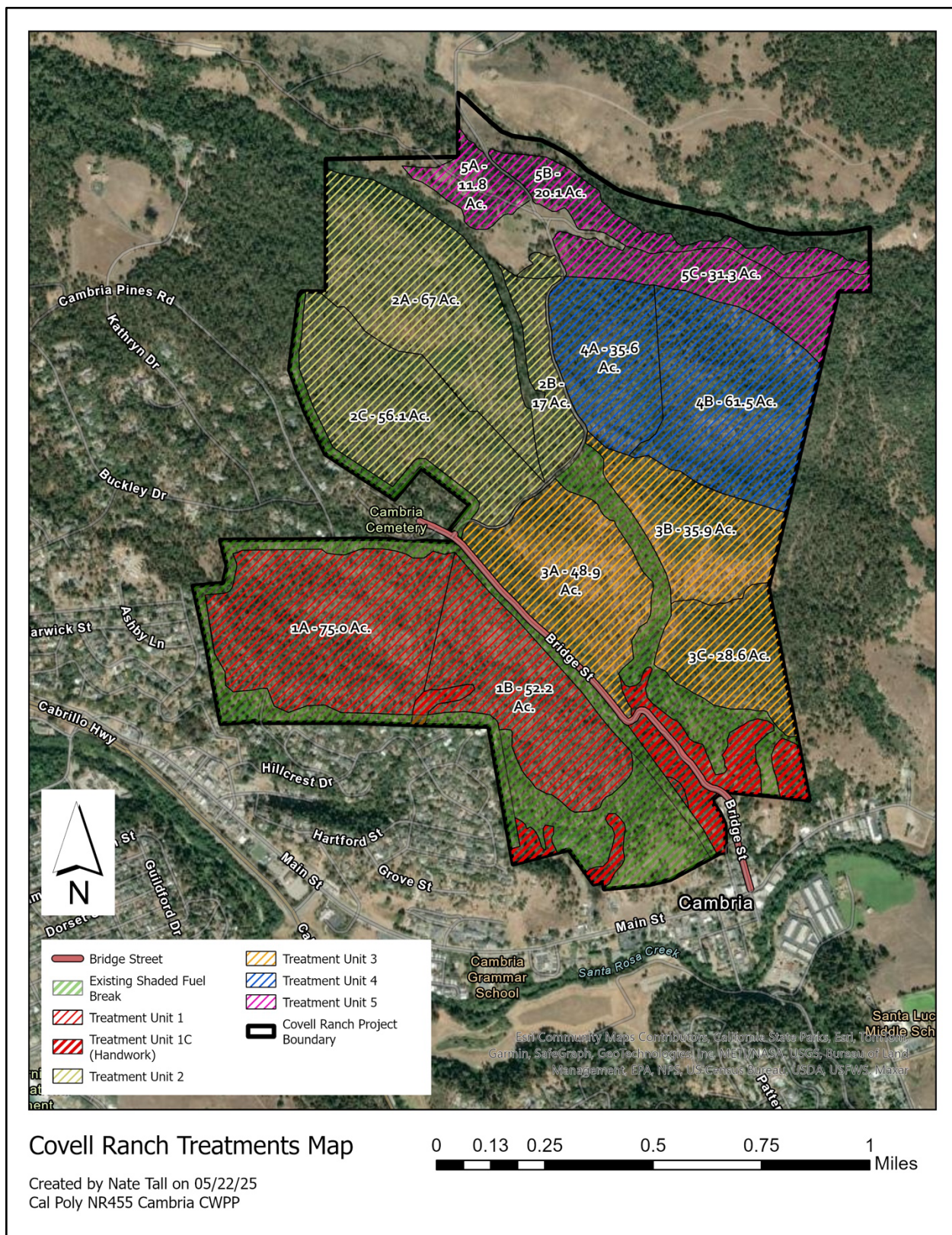


Figure 5.1: Map of vegetation treatment units within Covell Ranch.

Rancho Marino/ Strawberry Canyon

Rancho Marino Reserve (RMR) and adjacent Strawberry Canyon lie along the southwestern boundary of Cambria, making them key landscape features in both ecological conservation and wildfire risk management. This area contains roughly 187 acres of dense Monterey pine forest, part of the rare and sensitive Cambria population, along with riparian woodland and a mosaic of coastal scrub. With decades of fire exclusion, widespread tree mortality, steep slopes, and proximity to populated areas such as Camp Ocean Pines, this corner of Cambria poses a high fire risk and is a critical priority for vegetation treatment.

Vegetation management at Rancho Marino follows two distinct prescriptions: ecological restoration and the installation of a shaded fuel break. While both share the goal of reducing fire risk and improving forest health, they are adapted to different parts of the landscape with site-specific objectives.

Ecological restoration treatments are proposed for up to 170 acres across the broader RMR landscape. These treatments aim to restore forest structure and resiliency by mimicking the natural fire regime of low- to moderate-intensity fires occurring every 11–20 years. Currently, dense understory vegetation and accumulated woody debris pose a high risk of stand-replacing fire. Treatments involve thinning live Monterey pine trees up to 8 inches DBH, prioritizing those infected with pitch canker or mistletoe, and removing dead, dying, or irreversibly diseased trees. Understory ladder fuels would be reduced through hand and limited mechanical methods to break vertical continuity, while preserving ecological features like woodrat middens and downed woody debris in mosaic patterns to maintain habitat function. Surface fuels would be piled and burned under controlled conditions in the wet season. This restoration work is designed to reduce competition for light, water, and nutrients while enhancing the growth and carbon storage capacity of residual dominant and co-dominant trees. Over time, this approach supports native regeneration, lowers the risk of catastrophic fire, and enables future use of prescribed burning to sustain ecosystem health.

Shaded fuel break installation is planned for 17 acres along Randall Road, extending 400–500 feet south toward Camp Ocean Pines, a children’s camp hosting over 5,000 visitors annually. This treatment is designed to provide firefighter access, create defensible space, and facilitate emergency evacuation or shelter-in-place scenarios in an area with a single access road and steep

terrain. The shaded fuel break would thin small-diameter trees and ladder fuels while spacing native shrub clumps at 75–100 feet to reduce horizontal continuity. Surface and jackpot fuels would be piled for later burning. Unlike the restoration prescription, the fuel break is designed to have more visible contrast to surrounding untreated forest and a greater emphasis on tactical defensibility. Both the shaded fuel break and ecological thinning should be implemented as prescribed in order to most efficiently provide fuel treatments to the area.

Fiscalini Ranch

Fiscalini Ranch Preserve, a 437-acre coastal property located within Cambria’s wildland-urban interface, plays a crucial role in community safety and ecological health. Though it has seen periodic management efforts in the past, it is now part of a larger coordinated planning effort to implement broad-scale fuels reduction and forest restoration across Cambria’s native Monterey pine forest.

As part of the North Coast Planning Project, Fiscalini Ranch will be included in a set of site-specific forest health and wildfire resilience treatments funded by recent California Climate Investment (CCI) grants through CAL FIRE. These grants, secured by the San Luis Obispo County Community Fire Safe Council and the Upper Salinas-Las Tablas Resource Conservation District, are supporting an area-wide strategy that prioritizes fuel load reduction and forest regeneration. The current phase of planning for Fiscalini involves developing a detailed management plan that considers both wildfire hazard reduction and long-term ecological sustainability.

Although treatment prescriptions are still in development, it is recommended that they include thinning of dead and dying trees, removal of small-diameter trees to reduce competition for light and water, and selective reduction of dense shrub layers. Treatments should mimic natural fire processes, such as those that would have occurred at 12–20 year intervals under a healthy fire regime, by reducing horizontal and vertical fuel continuity while encouraging regeneration of fire-adapted Monterey pine. Techniques should include manual or mechanical thinning, shaded fuel breaks near the developed edge of Cambria, invasive species removal (such as French broom and pampas grass), prescribed burning, and herbivory through targeted grazing.

A significant portion of this work should be focused in the Monterey pine stands on the eastern side of the ranch, where tree density, fuel accumulation, and proximity to residential areas create an

elevated fire risk. This denser inland area requires more urgent attention to improve defensibility along closest to the urban edge. Fiscalini Ranch's location, bordering neighborhoods and running along the coastal bluffs, makes it a particularly important area for fire prevention. By integrating it into a larger, landscape-scale effort that also includes Covell Ranch, Rancho Marino, Strawberry Canyon, and other properties, the community will benefit from a more consistent and collaborative management strategy.

Private forest lands with fuel overload

Many privately owned forested parcels in and around Cambria (particularly on the northeastern side of town and northwest of Covell Ranch) contain dense, overgrown stands of Monterey pine, oak, and chaparral with significant surface and ladder fuel accumulation, similar to the Covell Ranch area. These areas often experience high tree mortality due to pitch canker, drought stress, and old age, resulting in stands with large numbers of snags, dry woody debris, and closely spaced regeneration. Because these lands lie upslope and upwind of developed neighborhoods and within potential fire run corridors, particularly in the event of an east- or northeast-driven fire front, they pose a serious threat to both ecological and community safety. Fire originating or spreading through these areas would have a direct line to more populated zones below such as the Leimert Estates, Happy hill, and Pine Knolls neighborhoods, as well as eventually threatening the rest of the community.

Given these risks, treatments on these private forested parcels should be pursued with landowners, and it is recommended that they follow a prescription similar to that used on Covell Ranch. This includes thinning small-diameter trees to achieve 15- to 20-foot spacing, prioritizing the removal of dead and diseased trees, and reducing surface fuels through mastication, pile burning, or hand removal. Creating shaded fuel breaks and managing regrowth through regular maintenance will be essential to ensure long-term effectiveness of the treatments. These efforts, although more logistically complex due to private ownership, could be critical to reducing large-scale fire risk and protecting adjacent neighborhoods.

Santa Rosa Creek Corridor

The Santa Rosa Creek corridor runs through the center of Cambria, from the eastern hills to the coastal zone, forming a continuous, densely vegetated riparian area bordered by homes, roads, and infrastructure. Fuel loading problems here mirror those seen throughout Cambria, driven by

decades of fire suppression, drought, and tree mortality, which have led to heavy accumulations of surface and ladder fuels in a confined, linear environment. The dense vegetation includes riparian hardwoods, regenerating Monterey pines, poison oak, and invasive grasses, creating vertical and horizontal fuel continuity that poses a significant wildfire risk, mainly in the dryer fire season. Additionally, the creek is frequently used by unhoused individuals for informal shelter, and several smaller fires in recent years have been linked to warming fires or cooking activities within the corridor.

To reduce fire hazard and improve public safety, targeted fuel reduction treatments are recommended along the creek, particularly where it borders residential areas and evacuation routes. A relevant example can be found in Paso Robles, where the Salinas River corridor underwent extensive understory thinning to reduce fire risk and discourage camping in hazardous areas. Similar treatments should be applied in Santa Rosa Creek: thinning ladder fuels and overgrown vegetation, removing invasive grasses, and breaking up fuel continuity in ways that respect riparian habitat sensitivity. However, fuel reduction alone will not resolve ignition risks tied to human activity. A broader, dedicated plan to expand homeless services and reduce dependence on high-risk encampments is needed to fully address the ignition potential in this corridor.

Roadsides

Roadside corridors throughout Cambria can be ignition prone, especially during fire season, due to their constant exposure to human activity and vehicle-related sparks. Many roads are bordered by dry grasses, pine needles, cones, and shrubs that create continuous surface fuels capable of carrying fire quickly. Roadsides also play a dual role during wildfire events, serving as both common ignition points and critical evacuation and access routes.

Highway 1, which runs along the western edge of Cambria, is a particularly high-risk corridor. It passes through areas of dense Monterey pine, grassland, and coastal scrub, much of which is unmanaged and adjacent to residential development. Sparks from vehicles, roadside equipment, or discarded cigarettes have the potential to ignite these fuels, especially during peak fire season. In addition to Highway 1, interior streets like Bridge Street, Windsor Boulevard, and access roads into neighborhoods such as Lodge Hill and Park Hill also exhibit dense roadside fuels with limited setbacks between vegetation and pavement.

To reduce fire risk along these corridors, several measures are recommended. Regular mowing or grazing in grassy areas can reduce the buildup of flashy fuels that ignite easily. Shrubs and ladder fuels should be thinned or removed along road shoulders, and buffer zones of 10 to 30 feet should be maintained to break fuel continuity. Pine litter and debris that accumulates along pavement edges and in drainage ditches should be cleared on a recurring basis, particularly during the fire season. Vegetation should also be cleared around signage, utility poles, and road access points to improve visibility and ensure safe access for emergency vehicles.

Transmission and Powerlines

In Cambria, powerlines run not only through forested ridgelines and open spaces but also densely through residential neighborhoods. Many of these neighborhood lines are suspended over narrow streets bordered by mature Monterey pines, coast live oaks, and other overgrown vegetation. Trees growing directly beneath or in contact with powerlines are a major ignition risk, particularly during high winds or low relative humidity conditions when branches can arc, break, or fall onto energized lines. In several areas, vegetation is visibly encroaching on both utility infrastructure and nearby homes. When branches or tree crowns contact both a home and a powerline, the potential for structure ignition increases dramatically. These conditions are widespread in older neighborhoods where trees have grown unchecked for decades, often under limited oversight or on private property where vegetation maintenance is inconsistent. This overlap between overgrown vegetation, exposed infrastructure, and dense residential development makes neighborhood powerline corridors a hazardous ignition source in Cambria. The combination of wind, dry fuels, and aging infrastructure presents a constant threat to public safety, especially during peak fire season. Vegetation removal, particularly of trees touching or close to wires and structures, is a necessary component of any comprehensive fuel reduction and wildfire prevention effort in these areas.

Homes/ Defensible Space

Cambria's residential neighborhoods are heavily embedded within wildland vegetation, creating a classic wildland-urban interface where structure ignition is a major concern. Many of the homes in Cambria (especially those built prior to the 1990s) were constructed using more flammable materials, such as wood shake roofing, single-pane windows, and vent designs that allow ember intrusion. These older structures are significantly more vulnerable to ignition from embers

(according to CalFire, 60-90% of structure ignitions are a direct result of ember cast), radiant heat, and direct flame contact.

In many neighborhoods, vegetation is overgrown, and flammable material accumulates near structures, including but not limited to pine needles on roofs and gutters, shrubs against siding, wood piles near entrances, and vegetation within 5 feet of the structure. In some cases, tree canopies directly overhang homes or brush grows beneath decks, creating uninterrupted vertical fuel ladders from the ground to the eaves. While defensible space is one of the most effective tools for protecting structures from wildfire, compliance and enforcement in Cambria have been inconsistent. Many residences remain overgrown due to absentee ownership, steep terrain, lack of resources, resident physical inability to remove vegetation, and a variety of other reasons. The topic of defensible space, both in terms of homeowner responsibility and policy implementation, will be addressed in greater detail in the Biophysical and Sociopolitical Mitigation sections of this report.

Recreation Areas

Recreation areas throughout Cambria and its surroundings pose a notable wildfire risk due to frequent human activity, seasonal crowding, and proximity to flammable vegetation. These areas often include campgrounds, trail networks, open spaces, and youth camps. These are all places where cooking, smoking, or equipment use may inadvertently spark fires. Many of these sites are located within or adjacent to dense Monterey pine forests or coastal scrublands, where fuel loads are high and access for fire suppression may be limited. During the late summer and fall months, when fuels are dry and winds are more intense, these areas experience peak visitation, increasing the potential for accidental ignitions. Examples include San Simeon State Park, which hosts campgrounds and trails within fire-adapted ecosystems, and Camp Ocean Pines, a forested youth camp located in a high-risk wildland-urban interface. These and other recreation sites highlight the importance of fuel management in areas with regular public use. Some of these locations have plans in the works, that should continue to be pursued and followed through with.

To reduce fire risk, targeted fuel reduction along trails and around structures should be prioritized to limit fire spread potential. In grass-dominated areas, managed grazing can effectively reduce flashy surface fuels. Around camping zones, buffer areas cleared of flammable vegetation can help contain escaped embers from campfires and cooking equipment. These measures are critical for

protecting both human life and the surrounding landscape. A map showing all proposed fuel treatment areas is shown in Figure 5.2.

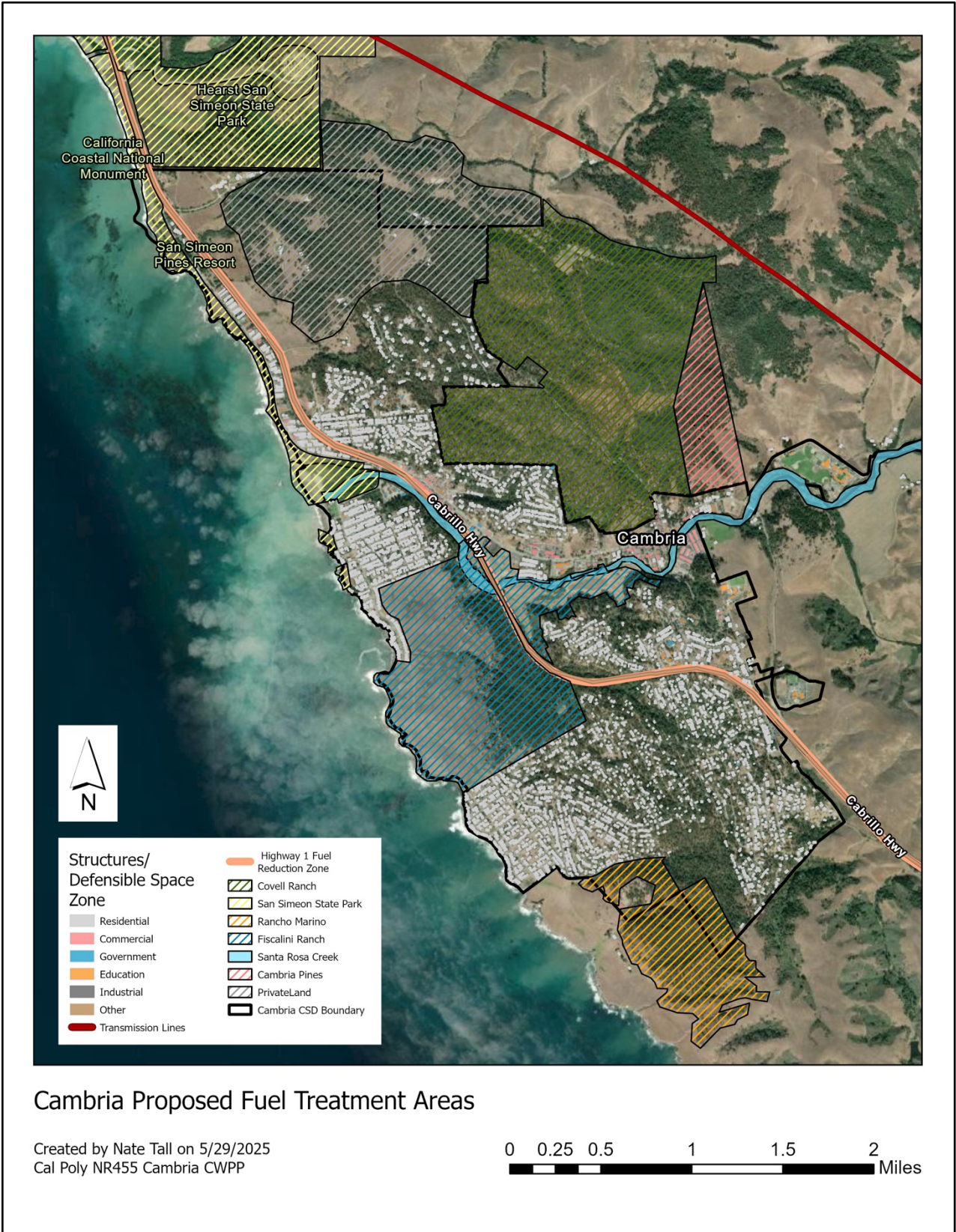


Figure 5.2: Proposed fuel treatment areas in and around Cambria.

6. Measures to Reduce Structural Ignitability

Prevention Measures

Biophysical Prevention Measures

The dense Monterey pine stands in Cambria make powerline vegetation clearing a vital biophysical strategy for wildfire prevention. The trees which hold ecological and cultural value for the community face increased threats from drought stress as well as limb failure raise the chances of branches striking overhead powerlines. Powerline contact stands as a verified source of wildfire ignition which becomes increasingly dangerous during the frequent high wind events and dry conditions characteristic of our area. The Public Resources Code Sections 4292–4296 along with General Order 95 dictate that Pacific Gas and Electric (PG&E) must keep specific distances ranging from 4 to 10 feet between energized powerlines and surrounding vegetation based on the powerline voltage according to California law. The regulations become more rigorous in High Fire-Threat Districts such as Cambria because the combination of fuel load with local weather conditions and topography results in increased wildfire danger. Local observations reveal that a significant number of Monterey pines have grown too close to powerlines, and some in direct contact despite existing regulations. The proximity of trees to powerlines creates hazardous conditions for electrical arcing which may set dry vegetation on fire. The Cambria Fire Safe Focus Council along with the local fire department and community members have documented specific problem areas that show a need for more consistent maintenance efforts. The cooperation between PG&E and local authorities must improve along with establishing a reporting system to enable residents to identify where threats may be present. Aerial imagery tools can also help spot potential hazards before they develop into emergencies. Cambria can protect our natural environment and community by prioritizing this work and building partnerships between utility providers and public agencies with residents to decrease powerline-related ignitions. An example of vegetation obstructing powerlines in Cambria can be seen in Figure 6.1.



Figure 6.1: Example of vegetation obstructed powerlines.

Roadside ignitions pose a major wildfire threat to Cambria because Highway 1 runs straight through the community. The daily traffic of vehicles makes it easy for sparks from hot converters or blown tires to ignite dry roadside vegetation. The risk of roadside fires becoming dangerous wildfires decreases when 10 to 20 feet of vegetation is trimmed back from the road edge and this cleared area is extended in zones where topography or wind could direct fire toward residential areas. To create this space requires mowing of grass alongside removal of dead branches and other debris and reduction of dense growth that might escalate flames onto tree crowns. It involves changing highly flammable plants to native fire-resistant species in suitable locations. Fire buffer zones serve dual purposes by preventing fire spread and creating a secure operating space for

firefighters during an outbreak. The remote-operated Burn Bot machine which performs low-intensity prescribed burns in narrow spaces was tested as a potential tool to maintain the ignition zone. The machine provides safe treatment of grass and brush without the risk of endangering human crews and an escaped prescribed burn. The Burn Bot demonstrates how new technological solutions enable us to maintain critical prevention measures with improved efficiency.

Sociopolitical Prevention Measures

Preventing wildfire ignitions requires more than vegetation removal and home fortification because community behavior education and enforcement must also become central to the strategy.

Cambria's wildland-urban interface creates ongoing dangers to homes and natural areas which makes establishing a fire-conscious community culture equally critical as landscape treatments.

Public education stands as one of our most effective tools. Educated community members who learn how to prevent wildfire risks become integral to the solution. Through workshops and community gatherings people learn about the right way to operate equipment like mowers and chainsaws and which days it is unsafe to burn. When residents are taught about equipment practices, no-burn days, and defensible space practices, they acquire essential skills to protect their homes. Social media posts, newsletters, and flyers serve as outreach tools that spread important messages throughout the community. Hot and dry weather conditions often lead to the unintentional ignition of fires from equipment that generates sparks. The restriction of equipment during red flag warnings or high fire danger days serves as an essential fire preventive action which succeeds only when people know about it and agencies enforce it.

Visible reminders also play a role. Warning signs about fire danger located at community entry points and popular trails enable residents to recognize current risks and modify their actions to reduce fire hazards. The signs help people recognize that wildfire dangers exist every day and continue to shift. Outreach programs must be established in connection with local services and law enforcement to control the use of fires by the transient populations that rely on fire for warmth or cooking.

Mitigation Measures

Biophysical Mitigation Measures

Biophysical mitigation includes direct actions such as brush clearing and vegetation management to lower wildfire danger and improve home fire resistance. Physical actions remain crucial

protection tools for our community because homes in Cambria are situated near both forested areas and open spaces.

Fuels management stands out as one of the best approaches because it entails eliminating dead or excessive vegetation which might serve as fuel for wildfires. The process involves brush removal and generating material piles which must be burned safely with assistance from organizations such as CAL FIRE and the California Conservation Corps. The recently treated west side of Bridge Street appears significantly more open with less overgrowth compared to its untreated eastern counterpart. But these efforts aren't one-time fixes. The return of fire risk happens when vegetation regrows and maintenance stops. The safety of Cambria depends on continuous fuel reduction and the maintenance of clear shaded fuel breaks. Figure 6.2 shows an example of vegetation treatment mitigation measures completed at Covell Ranch.



Figure 6.2: Images showing Covell Ranch area before (left) and after (right) thinning treatment.

Homeowners can strengthen their properties against wildfires through basic maintenance and smart upgrades. Flammable roof materials and debris accumulated in gutters make houses particularly vulnerable to ignition from windborne embers under favorable conditions. The safest roofing for homes must be Class A fire-resistant with ember-resistant vents and dual-pane windows. While upgrades like these can be expensive, many low-cost steps can still make a big difference: Householders can decrease fire risks by removing debris and trimming branches near rooftops together with putting spark arrestors on chimneys.

Homeowners can enhance their property safety through proper landscaping techniques. California law mandates that homeowners living in fire-prone areas create 100 feet of defensible space

surrounding their homes. Homeowners should reduce vegetation density and maintain clear separation between shrubs while ensuring fire cannot move upward from ground level through vegetation to reach trees and buildings. Landscaping with drought-tolerant and fire-resistant plants such as succulents establishes a yard that maintains safety while requiring minimal upkeep and conserving water. Using gravel or stone rather than bark mulch near your house creates firebreaks and contributes to fire safety through hardscaping.

The physical work carried out by hand crews in open space and homeowners around their yards forms a crucial part of maintaining Cambria's fire-resilient status. By treating and maintaining sufficient properties we establish a protective buffer which reduces fire spread and improves firefighter access thereby safeguarding the whole community.

Sociopolitical Mitigation Measures

Sociopolitical mitigation measures are strategies and policies aimed to reduce wildfire risk and impacts by addressing the human, social, and political dimensions of pre-fire management. One of the main sociopolitical mitigation strategies Cambria currently implements is annual conduction of the Fire Hazard Fuel Reduction Program (FHFRP) to abate vegetation and hazardous wildland fire fuel to decrease fire hazard and risk to assets. The FHFRP is collaboratively managed by the Cambria CSD Fire Department (performs property inspections) and Cambria Community Services District (CCSD) (enforces compliance). The program was adopted when the CCSD Board of Directors declared vegetation and hazardous wildland fire fuels to be a public nuisance. Implementation of the program is authorized by Government Code Sections 61100(d) and (t) and Health and Safety Code Sections 14875 et seq.

Cambria CSD Fire Department clearly lays out the requirements for weed abatement on their website. The requirements are listed below:


1. Remove combustible construction materials and trash from the property.
2. Trim weeds and annual grasses to 4 inches in height. Avoid exposing bare soil or creating a situation that would encourage erosion.
3. All downed trees and rounds or dead limbs within 30 feet of any structure must be removed. Tree stumps fallen over shall be cut and retain no more than six feet of the log within this 30-foot zone.

4. All downed trees beyond 30 feet from any structure 12 inches in diameter or greater may remain on the parcel. However, the entire trunk must be completely on the ground. Materials less than 12 inches in diameter shall be cut and removed from the property.
5. All standing dead trees that pose a safety risk to improved property and/or infrastructure shall be removed.
6. Remove ladder vegetation from under trees and shrubs, maintaining 6 feet of vertical clearance for trees greater than 20 feet in height.
7. All Poison Oak, Scotch/Irish/French or other broom-type plants, Pampas grass, Jubata grass, and (Crocasmia) also known as Fire Weed, shall be removed. Isolated specimens may be left with greater than ten (10) feet separation, and all dead material removed.

Currently, the deadline to comply with the weed abatement requirements is July 1st, 2025. Warnings to abate property will be mailed on April 11th, 2025, and again on May 23rd, 2025. If the property does not meet the requirements (listed above) by the Cambria CSD Fire Department inspection on July 2nd, 2025, the property will be added to the Contract Abatement List. The list is sent to CCSD contractor, currently Paradise Tree Service, who begins abatement on 7/18/2025 and is required to finish by 8/22/2025. Property owners are responsible for the cost of abatement to the contractor and must pay \$100 (if paid in 90 days) or \$200 (paid after 90 days) in administrative fees. In 2024, according to KSBY News, 556 out of 4,119 (13.5%) housing units in Cambria did not comply with weed abatement by the deadline. While 86.5% compliance appears strong, communities are only as protected as the most vulnerable properties. A single house ignition can produce embers that disperse rapidly and over long distances in high wind conditions that can, and often will, ignite well defended homes. Changes to weed abatement policy and enforcement must change by 2026 to ensure proper defensible space and compliance. An example of a weed abatement program notice is shown in Figure 6.3.

CAMBRIA COMMUNITY SERVICES DISTRICT

DIRECTORS:
DEBRA SCOTT, President
MICHAEL THOMAS, Vice President
HARRY FARMER, Director
TOM GRAY, Director
KAREN DEAN, Director



OFFICERS:
MATTHEW MCELHENIE, General Manager
TIMOTHY J. CARMEL, District Counsel

Physical address: 2150 Main Street, #1-A, Cambria, CA 93428
Mailing address: P.O. Box 65 • Cambria, CA 93428
Telephone (805) 927-6223

April 11, 2025

APN: <<INSERT APN>>

Owner Name
Mailing Address
City, State, Zip Code

Dear Property Owner:

NOTICE TO DESTROY WEEDS

Figure 6.3: First notice to destroy weeds under Cambria CSD’s weed abatement program.

In order to improve program effectiveness, the weed abatement deadline should be advanced to May 1st to ensure adequate time to for abatement of non-compliant properties prior to peak fire season (July-September). Implementing community assistance efforts through volunteer abatement days where equipment and labor is provided will increase compliance of properties who can’t physically and/or financially comply. The Cambria CSD should also provide clear tax guidance, helping homeowners capitalize abatement costs to reduce future tax burdens, and assisting businesses and rental owners in claiming deductions that are already approved by the IRS.

Preparedness Measures

Resource Availability

The primary fire protection agency for the community of Cambria is the Cambria CSD Fire Department. Cambria fire is provided and managed by the community services district as an all-risk, advanced life support fire department that serves the bounds of the CSD and surrounding areas through mutual aid agreements with SLO County Fire/CAL FIRE. The department operates out of one station located at 2850 Burton Drive. The department employs one chief, three captains, three firefighter engineers, and six firefighters. Staffing consists of four firefighters per shift with at least one paramedic at all times. The department's apparatus are listed in Table 6.1. In addition to those listed, the department is anticipating delivery of a type-6 wildland apparatus and a surf rescue PWC in the near future. The department's fleet is aging and apparatus such as E-5791 and WT-57 in particular are well past the recommended service life for frontline apparatus and should be replaced. E-5792, the departments first out apparatus is also nearing its recommended maximum service life and will need to be replaced in the next 5 years.

Table 6.1 Cambria CSD Fire Department apparatus inventory.

Apparatus	Year/Make	Type
Engine 5791	2007 Pierce	Type-1 (reserve)
Engine 5792	2017 Pierce	Type-1
Water Tender 57	2002 Pierce/Kenworth	Water Tender
Chief 5700	2023 Chevy	Command
Utility 57	2017 Ford	Utility
Utility 57-1	2013 Ford	Utility
Surf Rescue 57	Zodiac	Surf Rescue Boat
Surf Rescue 57-1	Zodiac	Surf Rescue Boat

San Luis Obispo County operates a cooperative agreement with CAL FIRE to staff the county's fire department. Station 10 is located in the northwest of Cambria and employs year-round personnel trained in cliff and ocean rescue, as well as urban and rural fire protection. This station operates a Type 3, CAL FIRE model 34 wildland engine with that carries 500-gallons of water. However, CAL

FIRE personal from Station 10 can be deployed to other fires throughout California at any time, making support from Station 10 unreliable during fire season.

Mutual aid resources are also available, and Cambria will have to rely heavily on them for any major wildfire incident in the area. These include resources from federal, state, and local government stations. The United States Forest Service operates the Arroyo Grande Flight Crew out of the Arroyo Grande with a Bell 212 type-2 helicopter and accompanying helitak crew. The Forest Service also has type 3 engines located at stations throughout the Los Padres National Forest, however none are particularly close to Cambria. CAL FIRE operates the Paso Robles Air Attack Base at the Paso Robles Airport. Their fleet consists of 2 Grumman S-2T airtankers (1,200-gallon capacity) and a Rockwell OV-10A air tactical observation aircraft. There are plans to add a Lockheed C-130H airtanker (4,000-gallon capacity) in the coming years. A private contract type-1 helitanker is typically stationed at the base during fire season as well. CAL FIRE also operates 2 fire stations in Cayucos which are the next closest ground resources to Cambria. Beyond these Morro Bay Fire, SLO City Fire, Paso Robles Fire, Atascadero Fire, Templeton Fire, San Miguel Fire, additional CAL FIRE assets, and other local departments are all available for mutual aid with varying response times. Figure 6.4 shows a map of the fire stations in and around Cambria with their approximate 10-minute response time areas.

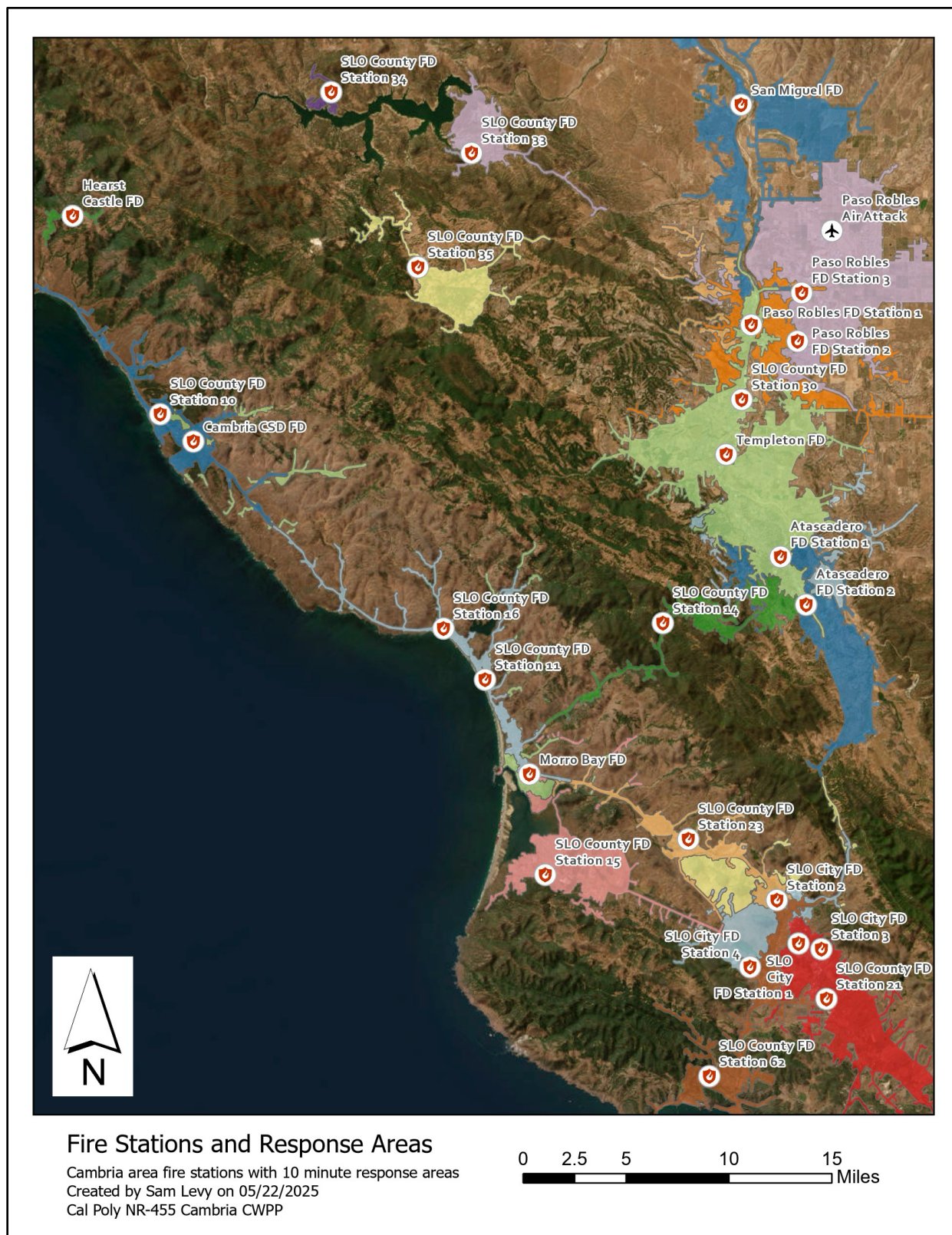


Figure 6.4: Fire stations within the Cambria area with 10 minute response time areas shown based on average drive times under typical conditions.

Existing Suppression Infrastructure

Existing suppression infrastructure in Cambria consists of 368 fire hydrants and 6 water tanks at 4 different tank sites. Fire hydrant spacing varies significantly by neighborhood as does tank capacity depending on tank site. Hydrant density could be increased in some neighborhoods to allow for a higher likelihood of an adequately positioned hydrant. Additionally, hydrant condition and accessibility also varies significantly and could be improved through regular hydrant testing and clearance maintenance. Tank capacity could also be improved by adding tanks to existing sites or establishing new sites in areas far from existing tanks where water pressure is likely to drop the quickest. Tank capacities for the 6 tanks are shown in Table 6.2, and a detailed map of the Cambria's water system including hydrants and tank sites is shown in Figure 6.5.

Table 6.2: Capacities for Cambria's 6 water storage tanks.

Tank Site	Tank Capacity
Fiscalini Tank	320,000 gallons
Leimert Tank	120,000 gallons
Pine Knolls East Tank	490,000 gallons
Pine Knolls West Tank	490,000 gallons
Stuart Street East Tank	125,000 gallons
Stuart Street West Tank	212,000 gallons

Ingress/Egress and Evacuation

Cambria has two primary routes in and out of the community: north on SR-1 towards San Simeon and south on SR-1 towards SR-46 and Cayucos. While Santa Rosa Creek Road can also be used to as ingress and egress route, it is assumed that during a wildfire this road would likely be compromised and unable to safely accommodate any significant evacuation traffic. In order to evacuate from any neighborhood in Cambria, residents must ultimately navigate to SR-1. The number of routes in and out of each neighborhood to and from SR-1 varies with some neighborhoods only having one route. Should a full scale evacuation of Cambria be necessary during a wildfire, these routes are likely to be overwhelmed in their current state and depending on the fire, it may not be possible for all residents to safely evacuate in time. As such, safety zones have also been identified throughout the community as locations residents could go to during a fire where they could safely shelter in areas that won't burn if evacuation is not possible. These evacuation routes and safety zones are shown in Figure 6.6. Also shown are proposed new roadways that would improve ingress and egress for neighborhoods currently lacking in options and capacity along with proposed new safety zones to offer residents more options to take refuge during a fast-moving wildfire. Additionally, as many intersections in Cambria are either stop sign controlled or have no intersection control, several intersections have been identified as candidates for improved intersection control methods in order to mitigate the chaos caused by an evacuation event by improving traffic flow and reducing the likelihood of accidents. Generally speaking, this involves upgrading 4-way stop controlled intersections to traffic signals or roundabouts and uncontrolled intersections to either 4-way stops, traffic signals, or roundabouts. It is worth noting that existing and proposed traffic signals would need to include battery backup in order to be effective during an evacuation when power may be out in the area.

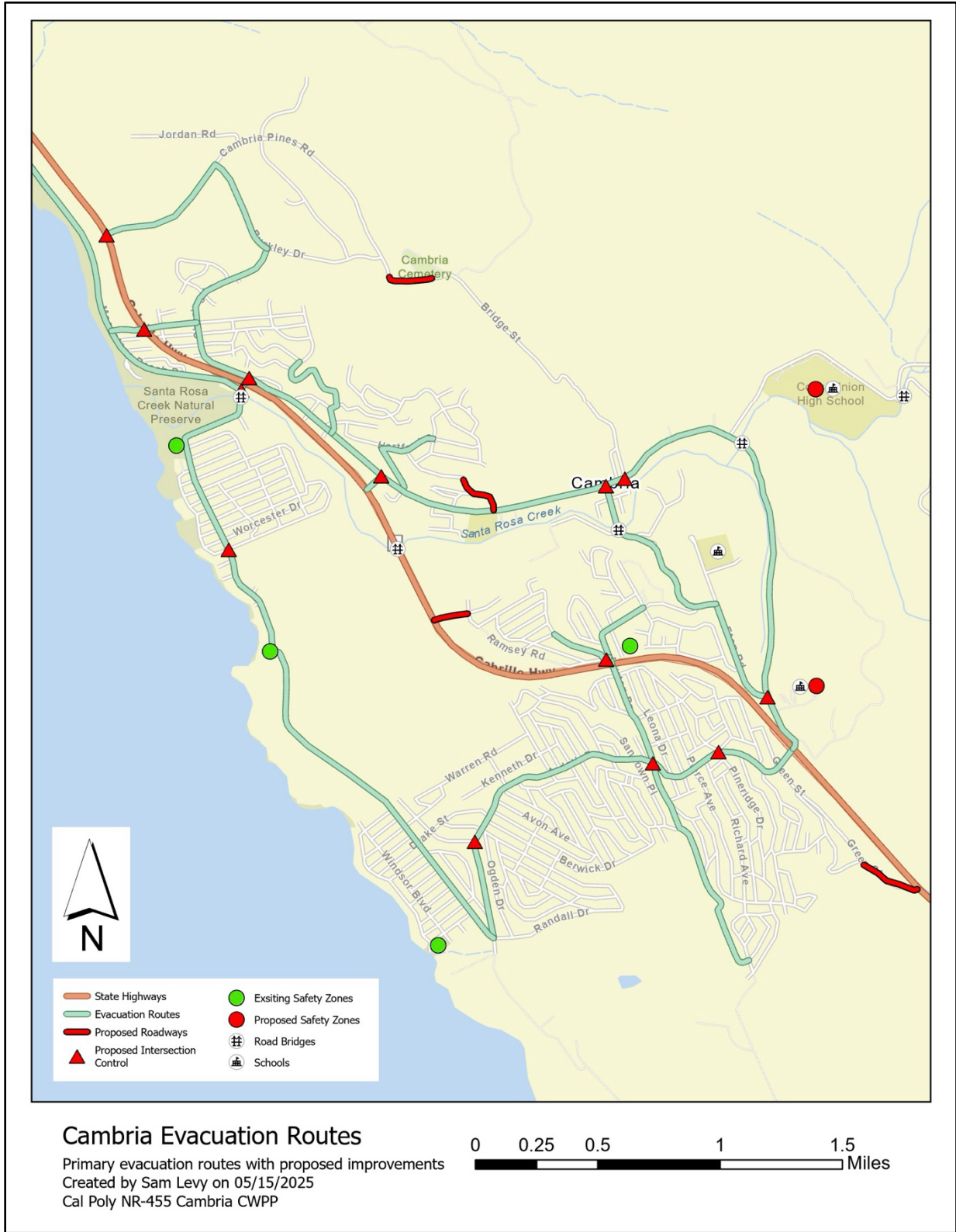


Figure 6.6: Primary evacuation routes in Cambria with proposed improvements to roads, intersections, and safety zones.

Planned Residential Response

During a major wildfire threatening Cambria, evacuation decisions will be made by the incident commander and carried out by law enforcement (SLO County Sheriff and other mutual aid agencies). Having prepared residents who know what to do when this notification is made is essential for a safe and effective evacuation. Residents should know several options for evacuation routes from their homes, know where their nearest safety zones are should they become trapped and evacuation is not possible, and be prepared with plans and go-bags known to every member of the household. Go-bags should contain everything the residents need during an evacuation and plans should be discussed regularly. Additionally, Cambria has a significant older population whose mobility may be impaired resulting in it being difficult or impossible for these residents to evacuate on their own. Identification of where these residents are and plans with neighbors to assist in their evacuation will be essential in ensuring all residents can safely escape a wildfire. Programs such as neighborhood liaison programs (where neighborhood leaders are designated to do outreach and facilitate planning in a given area), and Community Emergency Response Teams (CERT) can help to facilitate wider collaboration and cooperation between community members to ensure all residents in a given area have viable evacuation plans and know what to do in the event of a wildfire.

Agency and Residential Training

Wildfires and accompanying evacuations are stressful and chaotic events that warrant significant preparation. Training for agencies and residents is a critical component of preparedness for these incidents. While agencies train regularly for wildfires and related major incidents, greater training and planning for the collaborative aspects of these incidents, such as how fire agencies should interface with law enforcement and how emergency responders should interface with other agencies like road crews and government leaders could help to ensure these incidents run as smoothly as possible. Additionally, agency and community led trainings and drills for residents to practice what to do in the event of a fire and evacuation could help to ensure everyone in Cambria feels prepared and knows what their plan is when a fire approaches. These trainings could range from full scale evacuation drills to medical specific trainings to simple outreach and awareness campaigns in schools and at community events in order to better prepare all of Cambria's residents.

7. Recovery Measures

Community Recovery

Should a major wildfire occur that affects the community of Cambria, a variety of measures will need to occur to facilitate safe and effective community recovery. The identified measures have been divided into 3 categories: communication, resources, and rebuild actions, which are further explored in this section of the report.

Communication

Effective communication is essential during and after a disaster event such as a wildfire. Often this can be a challenging task for official due to the chaotic nature of these events and the fact certain communication channels may be unavailable, certain affected individuals may be difficult to reach, and there is often a large volume of information to convey. Critical information during and after a disaster event identified in this plan as a high priority for dissemination is shown in Table 7.1.

Table 7.1: List of critical information categories to be disseminated by agencies during and after a wildfire.

Information Category	Phase of Incident
Notification of fire and evacuation orders	Initial response
Updates on fire containment and size	Initial response and suppression
Number of injuries and fatalities	Throughout
Evacuation shelter and assistance centers	Throughout
Road closures and area closures	Throughout
Damage assessment and structures destroyed	Suppression and recovery
Utility service outages and restoration	Suppression and recovery
Fire cause/ignition source	Recovery
Resource availability for affected residents and other pertinent updates on suppression and recovery efforts; changes to resources and information sources	Throughout

In order to disseminate information to as many affected residents as possible, a variety of communication channels will be necessary. Additionally, one agency should be tasked as the

primary purveyor of information for the fire and recovery effort in order to provide a consistent experience and single location to obtain such information. Channels should include web-based communication including a website created for the fire and recovery effort that can serve as a hub for information and resources for effected residents. Other online channels such as news media, social media, and other agency and government websites would then be able to direct users to this hub website. TV news should also be utilized for important updates. Because many residents of Cambria are older and may not regularly use or have access to online channels of information, the use of physical media to distribute updates and resources will also be necessary. This should include pamphlet distribution, flyer and sign posting in prominent areas around Cambria and San Luis Obispo County, as well as in-person town hall meetings for the community to attend where updates can be provided and community members can have questions answered and be provided with assistance in accessing the available resources. A help line should also be established with a phone number that community members can call to have questions answered and be directed in the right direction of the resources they require.

Resources

A variety of resources will need to be offered to affected community members in the aftermath of a major wildfire. Evacuation shelters with basic services like food, water, internet, and medical services will be necessary during and in the time immediately following the fire. These will provide evacuated residents without other options a place to go during the evacuation until they are able to return to their homes and a place for residents whose homes were damaged or destroyed a place to stay in the meantime. As the incident transitions from suppression to recovery, assistance centers will need to be set up to provide affected community members a place to go to apply for state and federal disaster assistance, work with insurance companies, and apply for rebuild permits. These can also serve as places where residents can have questions answered and for basic needs like food and water to be distributed. Given the traumatic nature of wildfire events and the potential loss residents may be dealing with, counseling services should be offered at evacuation shelters and assistance centers.

Rebuild Actions

As the recovery effort after a wildfire continues, damaged and destroyed infrastructure will need to be rebuilt. As soon as it is safe to do so, damaged roads and utility infrastructure (including powerlines, gas lines, and water/sewer infrastructure) should be repaired and rebuilt in order to

restore service to residents and ensure accessibility of the area. Damaged or destroyed public infrastructure buildings such as fire stations, schools, and government centers should also be high priorities for rebuilding and temporary facilities may be necessary to provide service in the meantime. County and state governments should also establish a streamlined and expedited permitting process to allow residents with damaged or destroyed homes and businesses to repair or rebuild these as quickly as possible. That being said, requirements should be put in place to ensure any new construction meets advanced fire code standards, such as the CA State Building Code's Ch. 7A.

Mitigation of Secondary Disasters

In the aftermath of a wildfire, several secondary disasters are possible and must be mitigated in order to avoid further loss of assets and life. These include hydrological concerns such as debris flows and flooding, hazardous materials issues, rekindle incidents.

Hydrological Disasters

Hydrological disasters in the aftermath can include mudslide and debris flow events as well as flooding. High intensity wildfires change the physical and chemical properties of soil within the burn footprint resulting in a significant increase in runoff leading to higher volumes of water entering waterways and increasing the likelihood of flooding during a storm. Additionally, the high runoff. Combined with significant amounts of ash and burnt vegetation and organic matter can lead to significant mudslides and debris flows which pose a serious risk to life and property. In order to mitigate these threats, a thorough assessment of the burned area by a qualified Watershed Emergency Response Team (WERT) will be necessary to determine the risk of hydrological secondary disasters and develop mitigation measures. Such measures could include slope hardening through revegetation or by applying cover materials like geotechnic fabric or straw to reduce runoff. Stream channel clearing may also be necessary to reduce the volume of debris carried by a stream during a storm and allow for more capacity to handle the excess water.

Hazardous Materials

In the aftermath of a significant wildland urban interface fire where structures and other built infrastructure have been destroyed by fire, there is significant potential for hazardous materials to be present. If left untreated, this can pose a serious risk to human health through air and water contamination as well as direct contact with such materials for residents attempting to return to

their homes. In order to mitigate this issue, thorough assessment of hazardous materials by qualified teams before the cleanup phase will be necessary. Additionally, proper removal and disposal of these materials along with education about the risk they pose and what people can do to protect their health are also crucial components in mitigating this problem

Rekindle

Rekindle refers to the possibility of a wildfire to reignite after it was thought to have been put out as a result of prevailing hot spots within the burned area that may flare up and spread into unburned or new vegetation. This is most likely to occur in the weeks and months immediately following containment of the fire but can occur even 6 to 12 months after containment. This disaster can be mitigated by ensuring thorough mop-up of the fire occurs along with regular and thorough patrols of the burn area and containment perimeter after containment has been reached. The use of thermal imaging equipment, either handheld or aurally flown (via manned aircraft or drone), can help to detect hotspots that firefighters may otherwise miss and ensure 100% mop-up of the fire.

8. Conclusions

Summary of Recommendations

The following section provides a summary of the major recommendations made in this CWPP. Recommendations are shown in Table 8.1 and are divided into prevention, mitigation, and preparedness categories. Timelines are provided with short term recommendations being defined as those with a timeline up to 3 years and long-term recommendations as those with a timeline of 4 or more years. Ranked priority and difficulty is also shown as 1 through 3, 1 being the highest priority or difficulty and 3 being the lowest priority or difficulty.

Table 8.1: List of short term (1-3 years) recommendations.

#	Recommendation	Timeline	Priority	Difficulty
1. Prevention Recommendations				
1.1	Continue annual roadside vegetation treatments along major roadways and expand this where possible	ongoing	1	3
1.2	Continue and expand fuel treatments near electrical lines focusing on most susceptible neighborhoods	ongoing	1	3
1.3	Develop management and prevention plan for Santa Rosa Creek Corridor addressing transient ignitions and fuel loading, including plans to address unhoused population	3-4 years	2	1
1.4	Underground powerlines in high-risk areas	5-10 years	2	1
2. Mitigation Recommendations				
2.1	Complete existing Covell Ranch fuel treatment plan	1-2 years	1	2
2.2	Complete existing planned fuel treatment work in Strawberry Canyon and Rancho Marino	1-2 years	1	2
2.3	Improve enforcement of weed abatement and defensible space program, shorten deadline, provide incentives for compliance	2-3 years	2	2
2.4	Develop fuel treatment plans for other major open space areas in and around Cambria	3-4 years	2	1

2.5	Work with large private landowners in and around Cambria to develop and implement fuel reduction treatments similar to those done at Covell Ranch	5-7 years	2	1
3. Preparedness Recommendations				
3.1	Develop apparatus replacement plan for Cambria CSD Fire Department and consider changing the first-out apparatus for EMS/rescue calls to the incoming type-6 or another new apparatus to reduce wear and tear on the type-1 apparatus	1-2 years	3	3
3.2	Develop project to improve directional signage in Cambria including street signs, directions to SR-1, and marked evac routes and safety zones	2-3 years	1	2
3.3	Develop unified outreach and awareness campaign for Cambria specific to wildfires that targets a wide range of audiences and provides consistent information and recommendations	2-3 years	2	2
3.4	Establish additional safety zones on school district properties on the east side of Cambria	2-3 years	1	3
3.5	Develop project to install evacuation warning siren system throughout Cambria to serve as another method of notification during a disaster	3-4 years	2	2
3.6	Develop incentives program and/or resources to existing incentives for residents to harden their homes to Chapter 7A standards	4-5 years	3	2
3.7	Develop project to construct new evacuation use roadway connecting Cambria Pines Rd with Bridge St	4-5 years	2	1
3.8	Develop project to construct new evacuation use roadway connecting Green St with SR-1	4-5 years	2	1
3.9	Develop project to improve ingress/egress routes in other neighborhoods that are currently lacking in route options like Park Hill, Lodge Hill, and Pine Knolls	5-7 years	3	1

3.10	Develop project to improve intersection control along evacuation routes by installing traffic signals (with battery backup), roundabouts, or 4-way stops.	5-7 years	2	1
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Recovery Priorities

This section provides an overview of the actions that should be most prioritized during the recovery phase of a wildfire, they are shown in Table 8.2

#	Recovery Priority
1	Provide frequent, unified communication across a variety of channels addressing all major information categories defined in Table 7.1 in order to keep the public informed during and after a major wildfire
2	Provide a variety of resources including basic needs, counseling, rebuild assistance, question answering, and help navigating assistance with other agencies
3	Adequately mitigate secondary disasters identified in Section 7 of this report and ensure the public is informed of the risks they pose
4	Begin rebuilding actions in a timely fashion ensuring new construction meets advanced fire protection standards and provide temporary facilities where necessary

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