Community Wildfire Protection Plan
Cambria, San Luis Obispo County, CA

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Prepared for:

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NR 455 Wildland-Urban Interface Fire Protection

Spring 2025

Cal Poly San Luis Obispo

Executive Summary

The purpose of the Cambria Community Wildfire Protection Plan (CWPP) is to create guidelines for wildfire prevention, mitigation, and response in the unincorporated community of Cambria, CA. It is intended to be a framework for wildfire hazard assessment and risk reduction.

This CWPP aims to take into account the needs of the community, the natural environment, fire response agencies, and shareholder groups. The Cambria Focus Group of the San Luis Obispo Fire Safe Council and the Cambria Community Services District Fire Department have been integral in bridging gaps between residents and government.

It will identify hazards within and around the community, assets at risk in the built and natural environment, and important factors related to the community demographics. It will also recommend actions to prevent ignitions, mitigate fire spread and damage, prepare the community and agencies for evacuation and firefighting response, and measures for community recovery.

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I. Introduction

A. Community Overview & Demographics

Cambria is a small town off the central coast of California. With a population of approximately 6,038 permanent residents, the town experiences an influx of visitors during summer seasons, which places additional demand on local infrastructure and services. Cambria has a predominantly older population, with a median age of 61.4, reflecting a community largely made up of retirees and long-time residents. Demographically, the town is primarily white, with 71.76% of the population identifying as such, alongside a small Hispanic community and very limited representation from other groups. One of its notable qualities is that Cambria is one of the few places in the world that is home to a native Monterey Pine forest, one of only five remaining stands globally, which enhances the town's ecological importance and the need for conservation and fire prevention efforts. This combination of an aging population, ecological sensitivity, and seasonal population spikes makes Cambria vulnerable to wildfire impacts and highlights the importance of targeted community planning and preparedness.

B. General Description of Fire Problem

Cambria faces increasing wildfire threats due to its location within the wildland-urban interface (WUI), a zone where residential neighborhoods meet dense, flammable forests. The region is dominated by Monterey pine and chaparral vegetation, much of it weakened or dead from years of drought and disease. This accumulation of dry fuel creates ideal conditions for fast-spreading wildfires. Compounding the issue is a lack of natural fire cycles, which historically thinned the forest and reduced fuel buildup.

Efforts to reduce this fire risk include a $7 million vegetation management initiative targeting Cambria's pine forests. These projects aim to restore ecological balance and minimize the fuel load that drives wildfires. However, land management issues persist, particularly on vacant parcels. In 2023 alone, 566 out of 1,901 vacant lots failed weed abatement inspections, leaving tall grass and overgrowth that can accelerate fire spread (White, 2023). The Cambria Community Services District (CCSD) enforces strict deadlines to address these hazards, but compliance remains a challenge.

Cambria’s infrastructure adds another layer of risk. The town is characterized by narrow, winding roads with limited exit routes, making mass evacuation in the event of a wildfire especially difficult. A 2020 evacuation study found that even with optimal conditions, it could take nearly seven hours to fully evacuate the area using both southbound lanes on Highway 1 (Nuworsoo, 2022). These constraints limit the ability of emergency services to respond rapidly, and they increase the importance of residents having well-rehearsed evacuation plans.

Local fire response resources are also limited. Cambria's fire department is not equipped to handle large-scale wildfire events without state or federal support, which is also limited. This reinforces the need for proactive community preparedness. The CCSD hosts emergency readiness meetings to educate residents about defensible space, fire-safe landscaping, and evacuation planning and San Luis Obispo County also offers an Evacuation Assistance Program for individuals with disabilities or mobility challenges, although it advises all residents to have independent plans in case help is delayed.

Ultimately, Cambria's wildfire vulnerability stems from a combination of natural and human-made factors: a flammable ecosystem, climate stress, insufficient land management, and constrained infrastructure. Addressing these challenges requires continued investment in vegetation control, strong community enforcement of fire safety regulations, and improved emergency response planning. With continuous efforts and cooperation among residents, local agencies, and environmental groups, Cambria can work toward becoming a more fire-resilient community.

C. Local Jurisdictions

Wildfire defense in Cambria needs cooperative efforts by various local, county, and state agencies each playing its respective role in maintaining safety for the community. The focal point of local operations is the Cambria Community Services District (CCSD), which has authority over basic services like the Cambria Fire Department. The two organizations interact closely to implement defensible space regulations, manage public lands, and respond to local emergencies. At the county level, San Luis Obispo County Board of Supervisors and SLO County Government help finance and support local fire protection services and emergency planning. Upper Salinas–Las Tablas Resource Conservation District also helps Cambria with land management assistance and regulations.

At the state level, the CAL FIRE San Luis Obispo Unit (SLU) has the responsibility for both suppression and prevention efforts, most especially in wildlands subject to state management. Still more guidance from the California Coastal Commission specifically pertains to Cambria coastal sensitive environments, which at

times require special consideration in fuel treatment or land development planning. Land use and water supply planning protections by the State Water Board also help safeguard watersheds and aquatic habitats locally.

Other than the previous government agencies, CHP and Sheriff's Office are very involved in certain areas. CHP and Sheriff's Office help coordinate evacuations and public safety during wildfires and are also tasked with emergency alert systems such as Reverse 911.

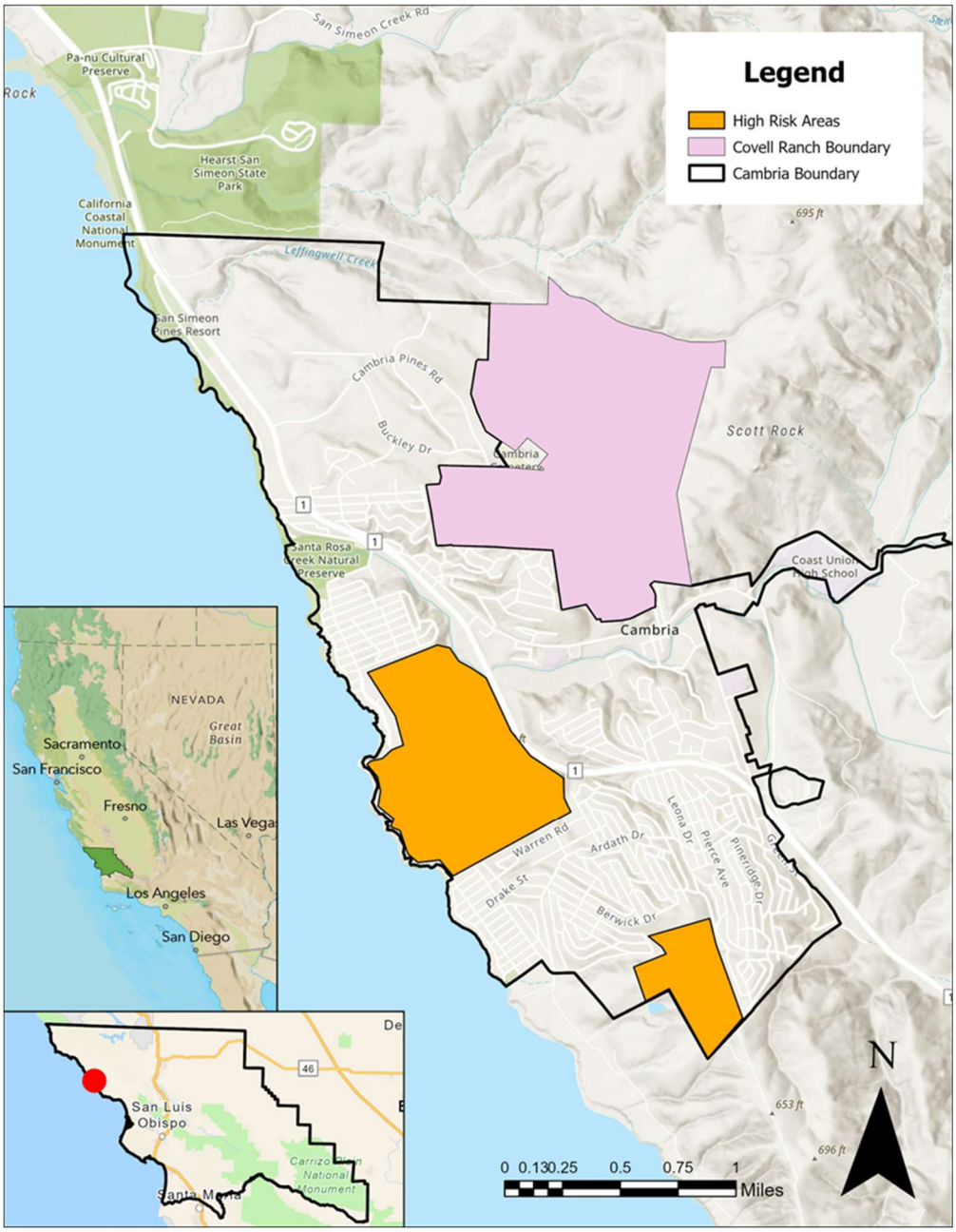

Figure 1: Map of Cambria in relation to San Luis Obispo County and the state of California. Also shown are large, vegetated areas such as Covell Ranch, Fiscalini Ranch, and Rancho Marino.

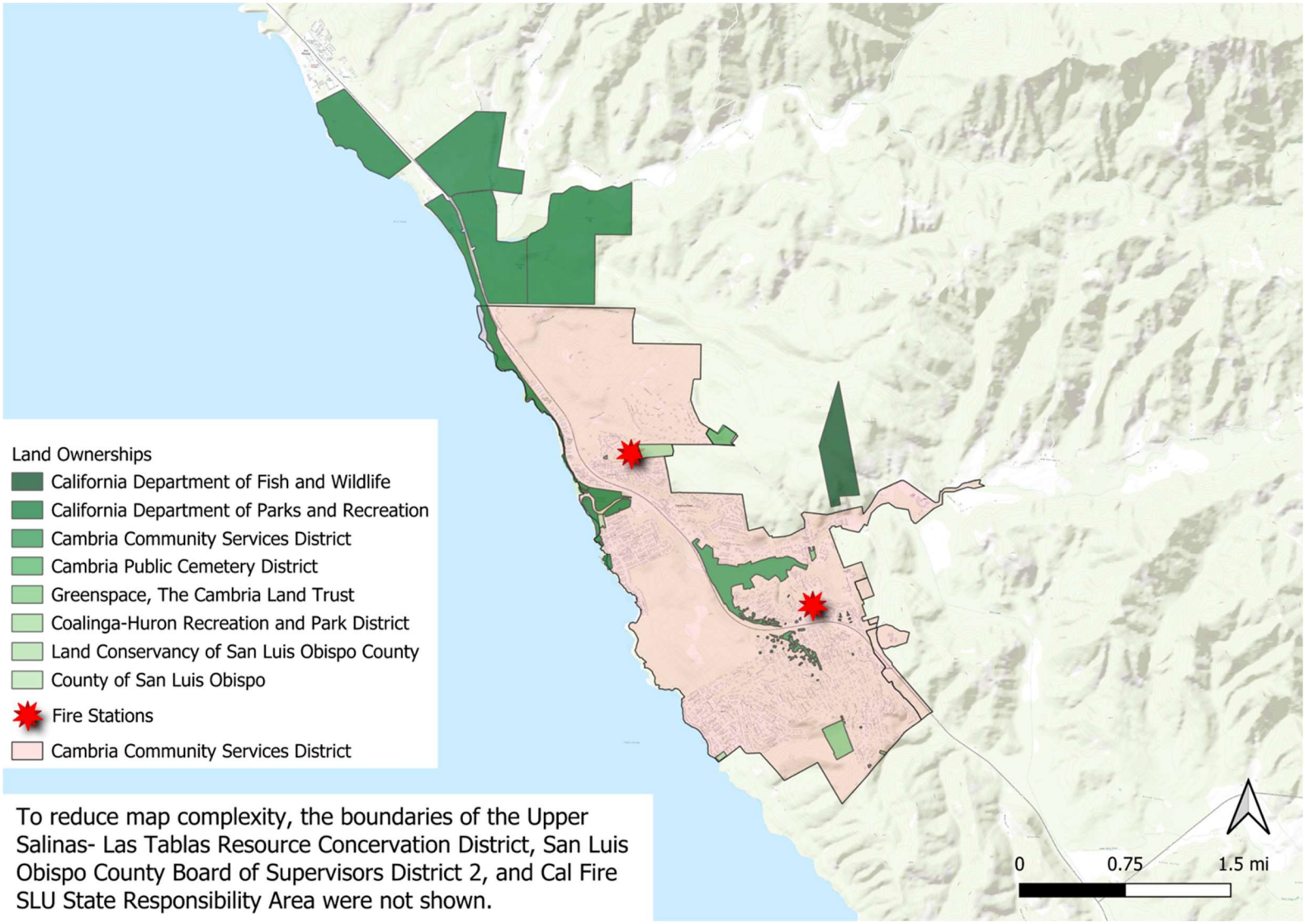

Figure 2: Map of Cambria with the two fire stations shown, as well as parcels owned by different state, county, and non-governmental organizations to show the variety of jurisdictions.

II. Collaboration

A. Key Stakeholders

While the city of Cambria faces issues with potential fire disasters, multiple members throughout the community plan safety regulations to prevent a disaster from occurring. Within the community, there are many knowledgeable members from the fire community who have experienced fires firsthand and understand what resources to use for prevention and mitigation.

Dan Turner, a retired battalion Chief from San Luis Obispo and the Fire chief of Cambria, Michael Burkey, work together with the help of Cal Fire to analyze the potential ignition sources found within Cambria. Their job is to work together to execute mitigation and prevention practices while also interpreting how a potential fire might move through the city. Dan Turner witnessed firsthand the challenges of being stationed far from other fire departments and lacking adequate support during emergencies when he responded to the 1976 Hearst Castle bombing. It was then that he realized the core problem wasn't just the occurrence of fires, but the lack of nearby personnel who could respond quickly delays caused simply by distance (Cal Poly, 2018).

In addition to having members from the firefighting community help design plans to protect Cambria, other members help enforce and educate the community. The Cambria Land Trust is an organization that serves to preserve Cambria's natural landscape by advocating for forest health and regeneration. The buildup of fuels prevents new trees from sprouting and thriving, increasing the risk of invasive species entering and killing trees in forests. They work together with the Cambria Forest

Committee, and it is mentioned that the reduction of fuels(thinning) can help reduce fuels found in Cambria while also adding fuel breaks to stop fire spread. Thinning is promoted as a mitigation strategy because it helps forests better fight off disease outbreaks, it reduces competition for important resources like water and sunlight that are required for tree survival, and it opens up the understory, which can significantly lower the risk of wildfires starting or spreading(Arbor Day Foundation, n.d.)

Education is an important aspect in creating change and emphasizing the dangers that can occur. Fire Safe Council is an organized group in Cambria that works with city representatives, the SLO County fire station, and concerned citizens to educate the general public regarding how fires start, potential ignition sources, escape routes found within Cambria, and ways to prevent fires. The council gets together every month to discuss fundraising for grants in order to fund more firefighting resources and conduct mitigation practices. With these meetings and organized events, they bring awareness to the issue that fires are a danger to Cambria, but with the right prevention measures,

fires can be controlled before they intensify and cause severe damage to Cambria (Fire Safe Council of San Luis Obispo County, n.d.).

Not only does Cambria gain awareness from local organizations, but it also receives expert advice from students attending California Polytechnic University. Students studying Forestry and Fire Sciences at Cal Poly spend an entire quarter learning what factors increase fire behavior and connecting these findings to what potential dangers Cambria may face when conditions are unfavorable. These students then present their findings to the city of Cambria to provide more options to ensure that Cambria is better prepared. These findings are important because they educate both the community and city representatives, who can then use these reports to request funding from the government. To add on, the U.S Fire Administration is involved in preventing fires all throughout the United States. They work with fire stations, including Cambria, by conducting training and data collections to ensure disasters are handled properly with the least number of casualties.

III. Hazard Assessment

A. Fuels Conditions

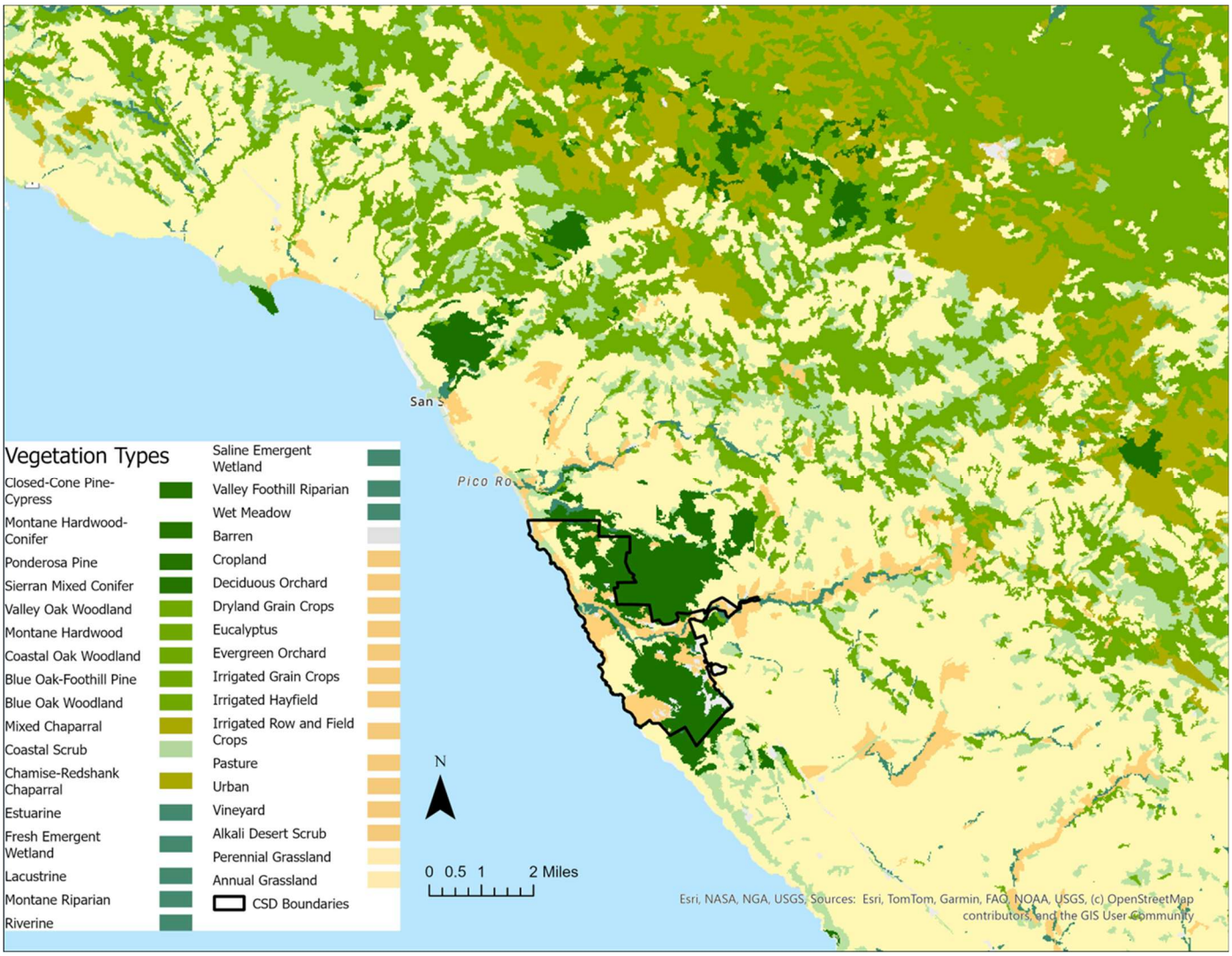

Figure 3: Map of various vegetation types within and around Cambria. Notably, large areas of Closed-cone Pine Forest in Cambria.

Cambria has a significant wildfire threat based on the amount and flammability of vegetation surrounding the town and adjacent natural areas. One of the greatest fears is that there is a huge quantity of fuel in the woods, especially in the dense stands of Monterey pine that are so common in and around town. Dead and dying trees among them are dropping broken branches and have rotting trunks that can burn quickly and intensely. These high-fuel loads are especially dangerous in Cambria's older neighborhoods, where homes are packed tightly, and gardens fall into disrepair.

In addition to large, downed trees, there is a thick layer of vegetation below the forest canopy. There are young pines, brush, and other understory plants that act as ladder fuels, allowing fires to climb from the ground up into the crowns of trees or into nearby buildings. Pine needles, dry grasses, leaves, and woody material on the forest floor are surface fuels that are likely to catch fire, especially under dry and windy conditions.

One of the most important aspects is the Home Ignition Zone. The vegetation within Cambria in nearly all zones extends up to the homes themselves, with minimal or even no defensible space. It has the conditions for structure-to-structure burning and significantly reduces the chances of homes being able to survive a wildfire.

B. Weather

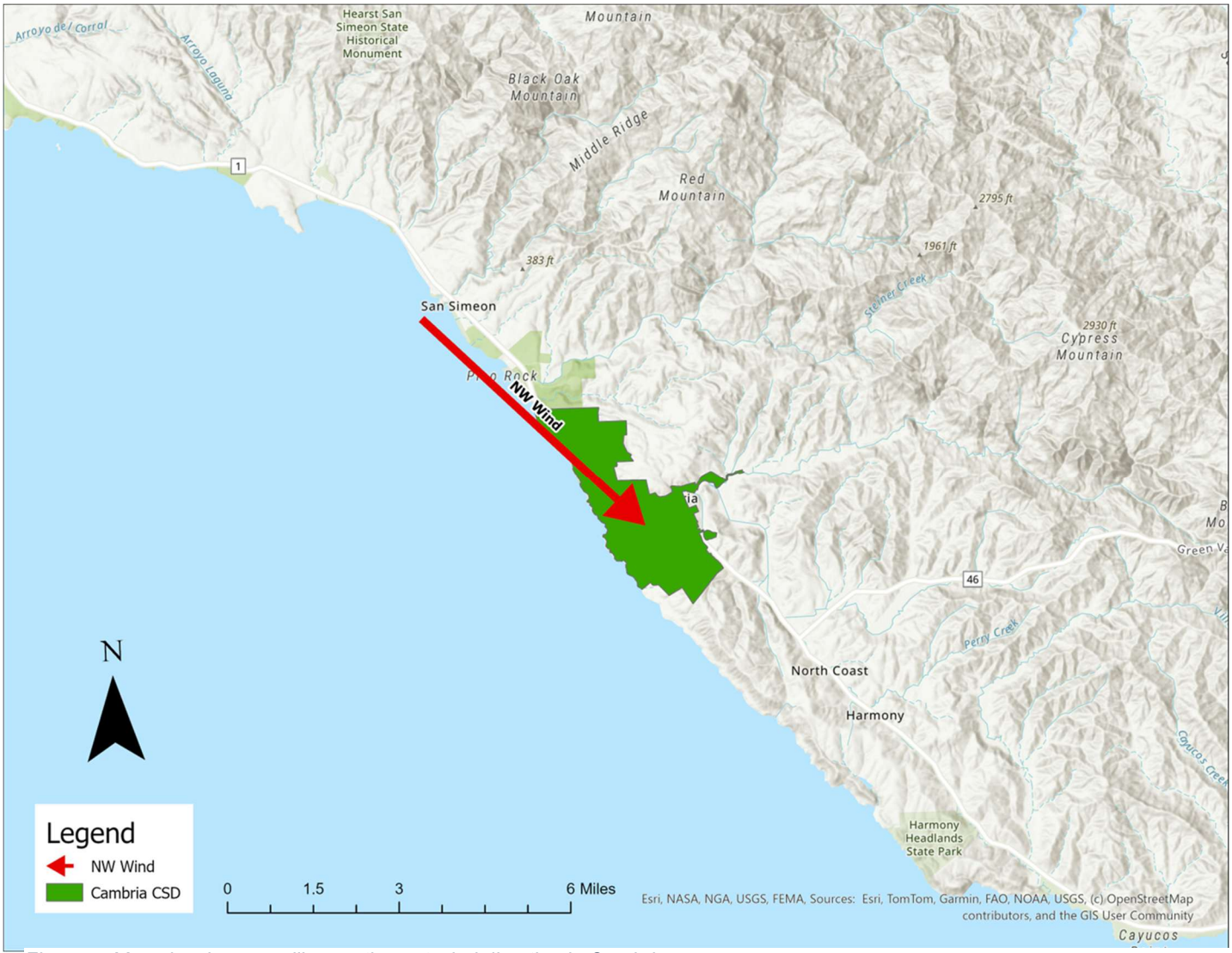

Figure 4: Map showing prevailing north-west wind direction in Cambria

Cambria's climatic patterns also play a significant role in the regional fire hazard. The region has a Mediterranean climate with cool, wet winters and hot, dry summers. This cycle produces a distinct fire season that begins late spring and peaks late summer to early fall when fuel moisture is lowest and atmospheric conditions are most favorable for fire spread.

During spring, temperatures increase, and rainfall lessens, to leave grasses and leaf litter fine fuels dry. Relative humidity begins to decrease, and though lightning is rare, this time has the beginning of increasing fire danger. Summer comes around when the region is in its driest phase. Rainfall is negligible to zero, and even with coastal morning fog, inland areas east of the line of fog, roughly bounded by Highway 1, enjoy low humidity throughout the year. These fall below 25% on hot days. Northwest afternoon winds are common and tend to promote fire spread, particularly where fuel is heavily loaded.

The highest fire risk typically occurs late summer and fall, when hot offshore winds, such as Santa Ana wind episodes, bring dry, hot air off the interior toward the coast. Downslope winds quickly dry fuels, reduce relative humidity, and can advance fires with unprecedented velocity and intensity. Wind speeds during such episodes are frequently over 30 mph, combined with low fuel moisture and slopes, to create very conducive circumstances for fast-moving wildfires.

Winter is the rainy season, with most of Cambria's yearly precipitation falling during this time. Rain does indeed raise fuel moisture and reduce fire danger, but the wet season also creates a quick growth of vegetation that will become dangerous fuel when dry. Occasional winter storms may generate lightning, but these are uncommon and usually are not an issue because fuels and the atmosphere have higher moisture contents.

Table 1: Average and Extreme Weather Conditions in Cambria, CA

	Average	Extreme
High Temperature	75°F	97°F
Low Temperature	58.8°F	54°F
Average Temperature	66°F	—
Precipitation	0.04 inches	0.11 inches
Relative Humidity	67%	72%
Wind Speed	11.8 mph	—

C. Topography

Cambria's topography is notably diverse, shaped by both its coastal proximity and inland terrain. Along the coast, Cambria features a rugged and dramatic shoreline characterized by steep cliffs and rocky outcrops, with Moonstone Beach being a prime example. The coastline also includes low-lying bluffs and sheltered coves, which form small beaches and inlets that are typical of the region's scenic Pacific frontage.

Moving inland, the landscape transitions into rolling hills and uplands that are part of the Santa Lucia Range, a subrange of the larger California Coast Ranges. These inland areas are covered with grasslands, chaparral, and coastal scrub, offering a sharp contrast to the coastal zone. One of Cambria's most distinctive natural features is its rare Monterey pine forest, found in the Cambria Forest Reserve and the Fiscalini Ranch Preserve. This forest is one of only five native Monterey pine stands in the world, making it ecologically significant.

Cambria's elevation ranges from sea level along the coast to approximately 600–800 feet in the interior hills, with some higher elevations along nearby ridgelines. Hydrologically, the region is shaped by several seasonal creeks, including Santa Rosa Creek, which flows from the uplands to the ocean. These streams carve through the terrain, creating small valleys and supporting rich riparian habitats that enhance the area's environmental diversity.

Overall, Cambria's varied topography increases its vulnerability to wildfires. The combination of steep slopes, dense vegetation, limited access, and topographic wind corridors makes the area particularly susceptible to fast-moving, destructive fires. Understanding and managing these terrain-driven risks is crucial to improving fire preparedness and community resilience.

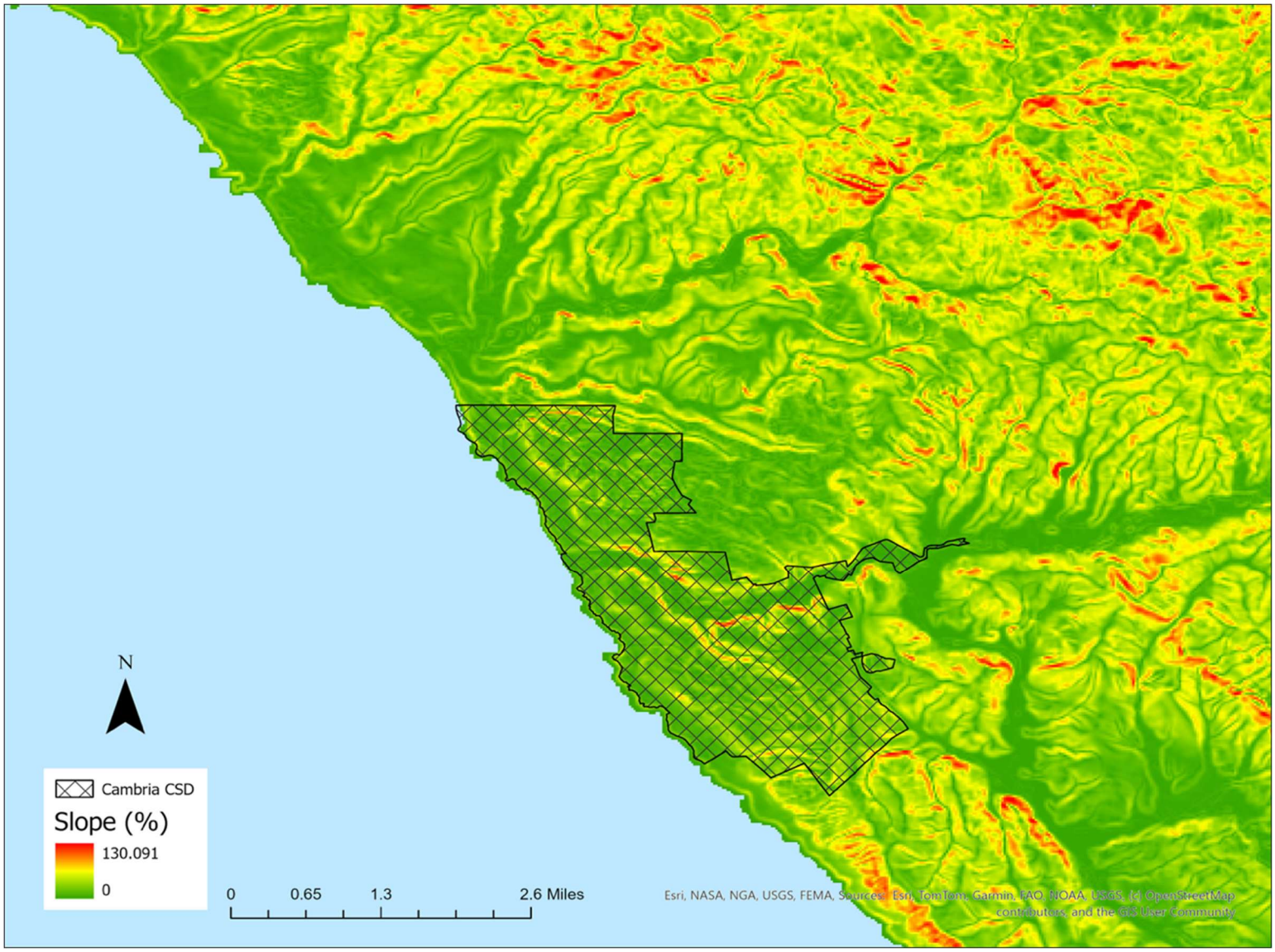

Figure 5: Map of slope in percent in and around Cambria.

D. Fire History

Cambria's most significant historical fire occurred on October 1, 1889, in an event now known as the Great Cambria Fire. The fire began behind the old Proctor Hotel near Main and Bridge Streets, where stacked firewood caught fire. At the time, Cambria lacked a formal fire department or public water utilities, allowing the fire to spread rapidly through the commercial district. Several businesses and seven homes were destroyed. Although this was a structural fire and not a wildland fire, it served as a wake-up call for the town. The devastation prompted the creation of a municipal water system and spurred long-term efforts to improve fire protection and emergency infrastructure.

Remarkably, the Great Cambria Fire remains the only major fire to have occurred within the town itself. However, the broader Cambria area has experienced at least six wildfires in the surrounding hills and forests. These nearby fires haven't directly affected the town but serve as reminders of the area's underlying vulnerability. While Cambria has largely been spared from the large-scale wildfires that have hit much of inland and Southern California, the potential for danger still exists due to the region's natural environment.

Since 2015, Cambria and the surrounding areas of San Luis Obispo County have experienced several significant wildfires that underscore the region's persistent vulnerability. One of the largest and most destructive was the Chimney Fire, which began on August 13, 2016, near Lake Nacimiento, only about seven miles north of Cambria. The fire burned over 46,000 acres, destroyed 70 structures, and forced evacuations in nearby communities (Cal Fire, n.d.). Portions of Highway 1 were closed, and even Hearst Castle was threatened, emphasizing the fire's reach and danger. Another major incident was the Green Fire, which broke out on October 6, 2023, along Highway 46 East, just east of Cambria (Cal Fire, n.d.). It burned 243 acres and prompted evacuation warnings. In August 2024, the Cypress Fire ignited near Cypress Mountain Drive, between Cambria and Paso Robles, burning about 88 acres (Cal Fire, n.d.). Although not as destructive as the Chimney Fire, the Cypress Fire spread quickly and prompted a multi-agency response, including from the Cambria Fire Department. The fire also led to localized power outages and posed a risk to nearby rural properties (Cal Fire, n.d.).

Despite a lack of recent wildfires within the town limits, conditions remain hazardous. These fires illustrate the ongoing wildfire risks facing Cambria, driven by a combination of dense vegetation, drought, and rugged terrain. The absence of major

recent fires may contribute to a false sense of security, even though the natural topography and vegetation make fire preparedness a critical concern for the community.

Figure 6: The Great Fire of Cambria California, 1889

Figure 7: Cambria Fire History 1918-2015, Cal Fire

E. Ignition Sources

Figure 8: The map displays the locations of power lines, all roads within Cambria, and campgrounds in areas where fires can easily ignite.

Cambria is a coastal town located in a wildland urban intermix environment and is prone to many potential ignition sources. Throughout California, power lines are built all throughout populated areas and only make up about 10% of fires, but even with such a low percentage, power lines are the leading cause of the most destructive fires, with 8 of the last 20 disastrous fires being caused by power lines(Legislative Analyst's Office, 2025 February 13). In San Luis Obispo County, according to the SLO Tribune, "70% of fires are caused by power lines, vehicles or equipment use, according to the county's hazard mitigation plan" (Stephanie Zappelli, 2025). Powerlines pose a real issue throughout California but are a main concern specifically in San Luis Obispo County. This hazard is alarming because this county is made up of mostly natural land and farmland that could easily be ignited.

In the town of Cambria, its intermixed environment makes it susceptible to fires caused by power lines. PGNE has power lines through the town, with transmission lines being vital because they distribute power from power plants directly to power lines to fuel homes with electricity. However, the main concern is that the main transmission lines stretch across forested and vegetated areas near San Simeon State Park and Covell Ranch. During the 2023 March rainstorms that occurred in Cambria, weather reports showed that winds reached 10-20 mph with gusts of 20-40 mph(Cambria Community Services District, 2023). Strong winds and heavy rain can cause power lines to collapse and interfere with the dense vegetation in the forested areas of Cambria, potentially leading to wildfires and severe damage to homes, landscapes, and the local population.

Roads are a major concern for potential fire risks due to the interaction between metal components and surrounding vegetation. There is only one major roadway, which is Highway 1, which has no guardrails or fuel breaks along the road. Many roads throughout the neighborhoods lack stop signs, which can create confusion for drivers and potentially lead to an increase in car accidents. In 2020, there were a total of 18 car crashes in the area. While this number may seem low, each incident carries the potential to ignite surrounding vegetation if a vehicle catches fire, potentially resulting in a severe wildfire (Cambria Community Healthcare District,n.d).

Moreover, Cambria is a coastal town and can expect many boats or campers to be towed throughout the day, but with the consistent use of chains used it can pose a risk. While towing these large vehicles, chains can be accidentally dragged along the road, creating friction that then creates a spark. Human negligence is the cause for the majority of fires that occur throughout CA and the country. Due to human negligence, campgrounds are also a potential ignition source for the town of Cambria. Campgrounds serve as a source of escape from the outside world, allowing one to sleep and rest by a campfire, but many campers forget the main important task at hand, which is to ensure that a campfire is put out completely. Cambria has 4 major

campgrounds, located on the south side of town, Camp Ocean Pines is a risk for the town due to it being a kids' campground. Children are often unaware of the serious consequences that fires can cause, and the campground is surrounded by fuel overloads, increasing the risk of wildfires. According to the United States Forest Service, 85% of fires are caused by humans, and many of these fires start with innocent campfires that are not properly supervised(USFS, 2025). Overall, wildfires are more likely to ignite in areas where transmission lines run through dense forested land near Covell Ranch, along roads that lack defensible space, and in campgrounds where campfires are commonly started.

F. Fire Behavior

Cambria, California, faces high wildfire risk due to a combination of environmental, climatic, and community factors. Much of the area is classified as a High Fire Hazard Severity Zone by CAL FIRE, with some northeastern parts designated as Very High. This reflects the region’s vulnerability based on vegetation, topography, and weather. One of the biggest concerns is the large fuel load caused by dense forests of Monterey pines and the buildup of dry vegetation over time. Because natural fires have been suppressed, the forest has become overcrowded with “ladder fuels,” which allow fire to climb from the ground into tree canopies, increasing the likelihood of fast-moving crown fires (Wernik, 2025). The fuels even continue into residential areas. The trees and shrubbery span from home to home with direct contact. If a fire were to ignite and spread to the homes, every house with become a hazard. Cambria’s coastal climate includes dry summers and occasional strong winds, which can help a fire spread quickly, especially given the town’s hilly terrain. The natural winds in Cambria come from the northwest. This means that fires starting north of Cambria are of great concern. The slopes and canyons in the area can direct and intensify fire behavior. Another challenge is that Cambria sits within the wildland-urban interface (WUI), meaning homes are mixed in with flammable wildland vegetation. This creates a serious threat to property and safety, especially with limited road access for evacuation or fire response.

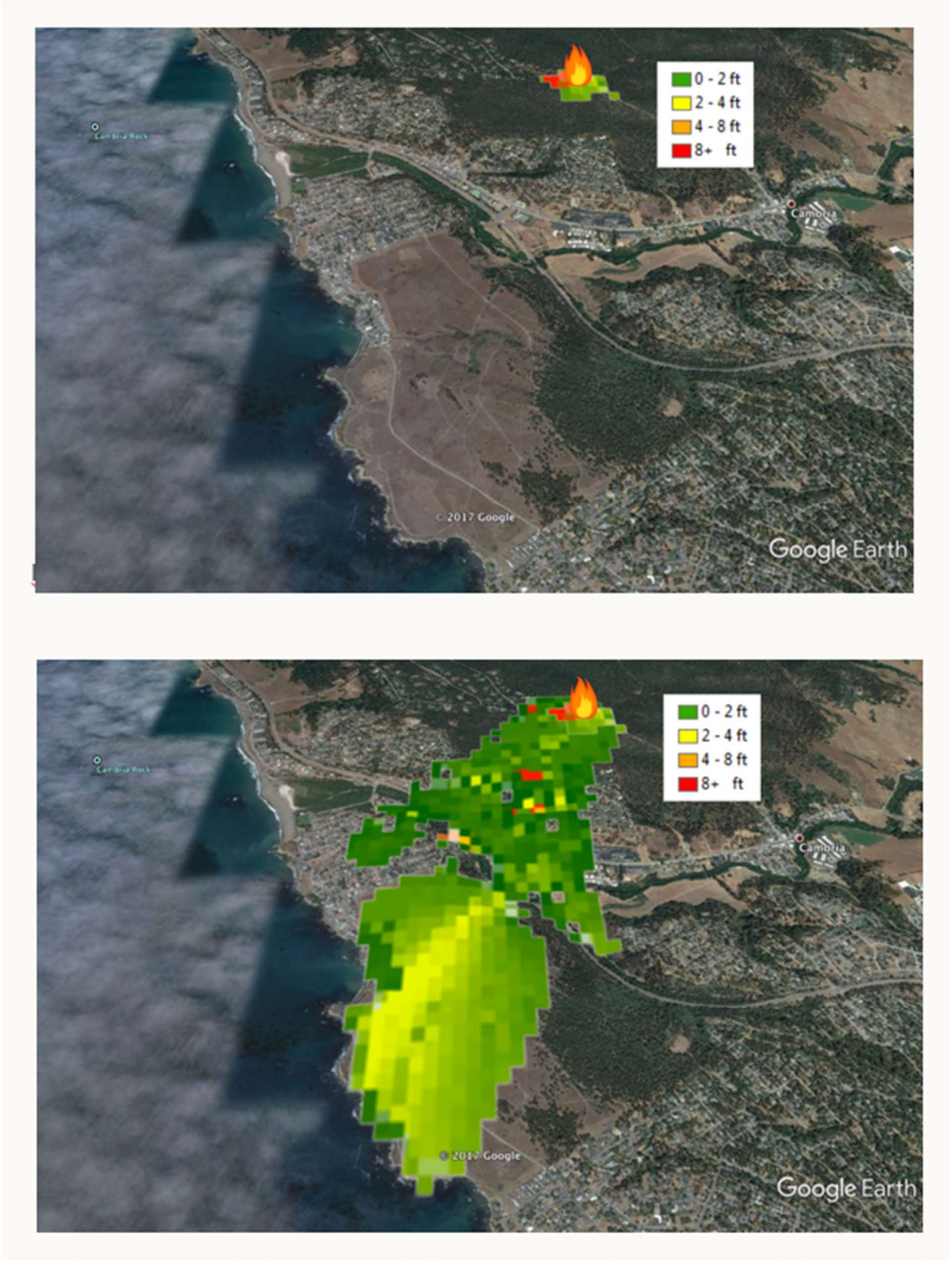

Figure 9: This map portrays the possible fire behavior under normal conditions on the top. And potential fire behavior under severe conditions at the bottom.

IV. Assets at Risk

A. Built Environment

In the built environment, structures such as tightly packed housing pose a significant issue in terms of fire spread and overall vulnerability during wildfires. Many of these homes were constructed using outdated building practices and materials, including highly flammable wooden shingles, single-pane windows that offer little resistance to heat, and minimal or no defensible space due to a lack of vegetation clearance around the structures. These characteristics increase the likelihood of ignition and rapid fire spreading from one home to the next, especially in high-density neighborhoods.

Powerlines are another critically built asset at risk. Overhead lines are particularly susceptible to damage from high winds, falling trees, and fire itself. Downed powerlines are relatively common during wildfire events and often result in the shutdown of electricity to prevent further ignition of sources. For an isolated community such as Cambria, the loss of electrical power can significantly hinder communication infrastructure, complicate emergency alerts and coordination, and put the health and safety of residents at serious risk. Access to basic services like water pumping, refrigeration for medications, and lighting may also be compromised.

Roadways and bridges are also vital components of the built environment that face considerable danger during wildfires. These transportation routes can become blocked by debris or damaged by heat, making them impassable. This not only hinders the evacuation of residents but also delays or prevents fire personnel and emergency responders from reaching affected areas, potentially worsening the situation.

Water tanks and other water infrastructure can be considered built assets at risk. If exposed to high heat or vegetation, they may suffer structural damage or fail to supply sufficient water pressure for firefighting efforts. Maintaining the integrity and accessibility of water storage and distribution systems is crucial for both suppression efforts and post-fire recovery.

Overall, the vulnerabilities in Cambria's built environment highlight the urgent need for updated building codes, improved infrastructure resilience, and community-level planning to reduce the risk and impact of wildfires.

B. Natural Environment

In the natural environment, the Santa Rosa Creek Watershed is a critical ecological asset at significant risk from wildfire. This watershed provides essential habitat for a variety of native and threatened plant and animal species, playing a vital role in the region's biodiversity and ecological balance. A wildfire moving through this sensitive area would not only destroy existing vegetation and habitat but would also have lasting effects on the soil. Burned soils often become hydrophobic, which drastically reduces their ability to absorb rainfall. This condition heightens the risk of erosion, runoff, and subsequent flooding, especially during the first rains following a fire.

In addition to flooding, increased sedimentation becomes a major concern. Ash, debris, and loosened soil can infiltrate waterways, degrading water quality and disrupting aquatic habitats. For species such as the federally threatened Steelhead Trout and the California Red-Legged Frog, both of which depend on clean, well-oxygenated water and intact riparian zones, this sedimentation can be devastating. Their breeding and feeding grounds may be choked with debris, decreasing reproduction rates and potentially leading to population declines.

Cambria is also home to one of the world's only five native stands of Monterey Pine. This stand is already under stress due to a variety of tree diseases, including pitch canker and bark beetle infestations, which have significantly weakened tree health across the area. These diseases, combined with drought and climate change stressors, have led to large numbers of dead or dying trees, increasing fuel loads and the likelihood of severe wildfire impacts.

Many of the remaining Monterey Pines are over-mature and not regenerating at a sustainable rate, so natural replacement is minimal. Without active forest management, including disease control, replanting, and thinning of deadwood, the stand faces a future of high mortality with little to no recovery. A wildfire sweeping through this already vulnerable forest could result in the loss of this stand.

A. Fuel Modification Needs and Locations

The primary locations that are of highest concern in the Cambria area include: Covell Ranch, Cambria Pines, Fiscalini Ranch, Rancho Marino, and private housing throughout the city. The main fuel modifications to implement include, thinning, weed abatement, surface fuel treatments, and shaded fuel breaks.

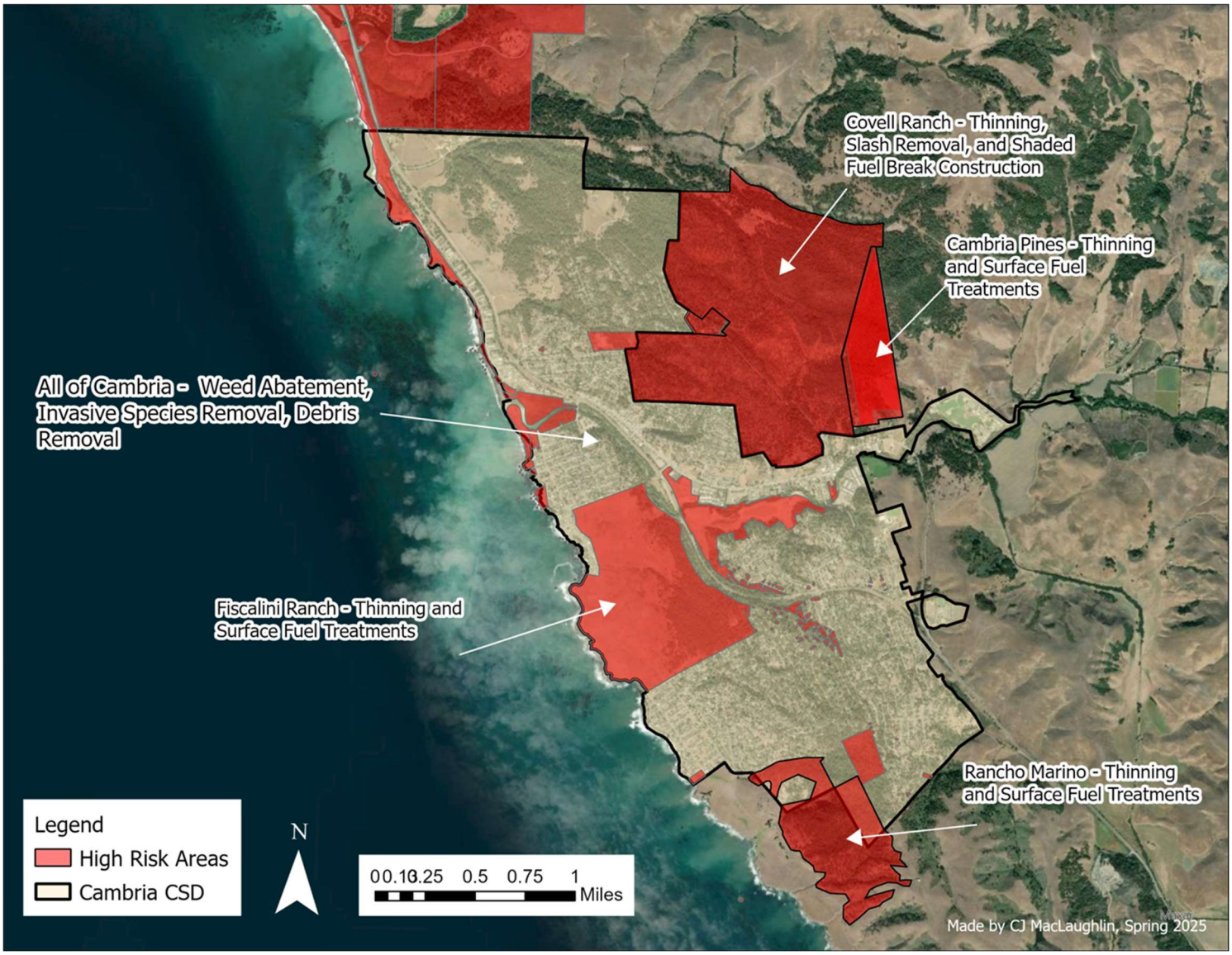

Figure 10: Map of Cambria and High-Risk Areas, as well as recommended treatment types in those areas. Total area of High-Risk area is 1,291 ac.

B. Recommended Actions

Cambria should continue implementing a comprehensive fuel reduction strategy to mitigate wildfire risks while preserving its unique ecological landscape. Key

biophysical treatment methods include selective vegetation removal targeting flammable invasive species like Scotch broom, pampas grass, and fireweed. Ground fuel management is also emphasized, limiting the accumulation of leaves, needles, and other debris to a maximum depth of about 3 inches to reduce surface fuel loads. Additionally, maintaining weeds and annual grasses at heights not exceeding about 4 inches minimizes fire ignition sources. Debris removal is crucial, and all cleared materials should be hauled away to prevent illegal dumping and further fire hazards. Tree limbs and rounds should be left on-site to control the spread of Pine Pitch Canker. These methods are complemented by prescribed burning, thinning, chipping, pruning, and roadway clearance to effectively reduce fuel loads.

The Cambria Community Services District (CCSD) Fire Department's 2025 Fire Hazard Fuel Reduction Program (FHFRP) underscores the importance of these treatments. Property owners are mandated to clear all combustible vegetation and/or debris from their properties by July 1, 2025, to prevent fire hazards and maintain a safe environment (CCSD, n.d). The FHFRP is carried out under the authority of Government Code Sections 61100(d) and (t) and Health and Safety Code Sections 14875 et seq., aiming to abate vegetation and hazardous wildland fire fuels (CCSD, n.d). This annual requirement is an effort to reduce the fire hazard caused by the accumulation of combustible materials on vacant parcels (CCSD, n.d).

Financially, the costs associated with these fuel treatments vary. A study by Resources for the Future found that the total cost of fuel treatment, including planning, preparation, and various treatment methods, can range from $1,321 to $3,195 per acre (Wear et al. 2025). Data also suggests that prescribed burn costs are generally significantly lower, with a mean of approximately $170 per acre, while thinning treatments cost more on average, with mean projected per-acre costs of approximately $577 (Wear et al. 2025). These costs are influenced by factors such as proximity to populated areas, vegetation type, and topography (Wear et al. 2025).

Prioritized areas for fuel reduction in Cambria include Rancho Marino, Fiscalini Ranch, Covell Ranch, and the Cambria Pines Ecological Reserve. These regions are undergoing treatments to restore forest health by reducing tree density to sustainable levels, mimicking natural fire regimes to prevent overgrowth. Additionally, Wildland-Urban Interface (WUI) Zones, where residential developments meet wildland vegetation, are prioritized to protect homes and infrastructure from potential wildfires. Implementing these biophysical treatment methods are crucial steps in enhancing Cambria's resilience to wildfires while preserving its unique ecological landscape.

V. Measures to Reduce Structural Ignitability

A. Prevention Measures

Cambria is located in a coastal area that is susceptible to strong winds and wildfires that can impact the town at any given moment if conditions are unfavorable. However Biophysical measures can be taken to prevent these events from taking place by switching from powerline to solar energy and removing campsites that are in Hazardous areas.

Wildfires are bound to occur at any given moment, whether they occur from human-related causes or from natural causes. However, power lines are a major area of concern due to the devastating damage they can cause. They are often damaged or downed by strong winds or other environmental disasters, which are becoming more frequent due to climate change. Cal Fire reported that as of May 2025, there have been 1,848 wildfires throughout California, and will only increase as climate change levels rise (California Department of Forestry and Fire Protection, 2025).

While wildfires continue to increase, there are still actions that can be taken to prevent sparks from occurring. Cambria can take action by removing overhead power lines and promoting the installation of solar panels on buildings and homes to help prevent fires caused by downed lines. Solar Panels serve as an alternative to produce energy from the sun and do not depend on transmission lines. Remote solar panels are particularly well-suited for Cambria, especially given the town's poor cell reception and small infrastructure. These panels are not dependent on electrical utility grids like power lines but instead store solar energy in batteries to keep generating electricity.

DualSun, a company that works on equipping buildings with solar panels, states that “Photon magazine has recorded no more than 1 incident per 10,000 installations. So a house equipped with properly installed solar panels will not catch fire” (DualSun, 2025). Solar panels offer a higher level of safety and reliability, and if the city of Cambria implements the switch to renewable energy, Cambria will be less prone to wildfires caused by downed power lines if strong weather events were to occur.

While camping is a fun getaway from the outside world, this innocent activity can cause major issues in the city of Cambria. Cambria has four nearby campsites stretching from San Simeon State Park to its very own children's camp, Camp Ocean Pines. Many campers start campfires to keep warm and to enjoy a night under the stars, but when they are done, they forget to fully put out the fire, increasing the chances of disasters occurring. Roughly 85% of fires in the United States are caused by humans, and part of that issue starts with campfires being left unattended and not put out the right way (National Park Service, 2025).

Camp Ocean Pines is a children's campground and serves as an educational site; however, it presents a significant wildfire risk. Many children are unaware of the potential dangers of fire and, like many young children, may view it as a fascinating or fun “toy”. This camp is built inside a forested area that is not thinned, with lots of dry grass surrounding the cabins, but with one accidental mishap. A spark can spread to the dry vegetation around the area and begin to burn the campsite and parts of Cambria.

This issue involves adults as well because many fires are accidentally started by careless campers. For this reason, removing campgrounds in Cambria is the best solution to prevent fires from occurring. Monterey pines located in Cambria are fire-dependent; however, the area has not experienced a major wildfire since October 1889. This long absence of fire has led to significant fuel buildup and has inhibited the regeneration of serotinous trees. This lack of wildfires has only increased the chances of a wildfire occurring, and when it does occur, it will be severely intense. Campers can travel to nearby cities to camp, but Cambria is not an appropriate place for these improper campfires to occur, since it is shown that Cambria will be affected by wildfires in the next 30 years (First Street Foundation, n.d.).

Furthermore, Wildfires can begin with just one spark, whether it's from a match, cigarette, or the use of illegal items. Many fires are started within the unhoused population, and many of the unhoused population set up their campsites in highly vegetated areas, including creeks. In Cambria, the main creek and water source is Santa Rosa Creek, which stretches 16 miles, and its watershed is 48 square miles. Due to its riparian environment, it supports the growth of many different plant species that hold a lot of potential ignitable fuels.

According to SLO county social services, “As of January 22, 2024, there were 1,175 individuals identified experiencing homelessness in San Luis Obispo County, a 19% reduction in local homelessness on a single night compared to the Point-in-Time Count conducted in 2022”(San Luis Obispo County Department of Social Services, 2024). In Cambria, reported by the SLO Tribune, there are roughly 50 homeless campsites ranging from the catholic church, east side of town, and 8-10 unhoused people living on the Fiscalini Ranch Preserve (Kathe Tanner, 2019). If the unhoused population were to establish campsites along Santa Rosa Creek, the use of open flames, whether for warmth, cooking, or other purposes, could pose a serious fire hazard.

Given the dry vegetation in the area, even a small spark from a campfire has the potential to ignite a larger wildfire, endangering not only those in the immediate vicinity but also nearby neighborhoods and the environment. The solution to prevent this issue from occurring is to create a fence line that stretches 16 miles along Santa Rosa Creek and to construct more unhoused shelters. The fence line could incorporate barbed wire

to deter public access to the creeks. Additionally, constructing new shelters for unhoused individuals will encourage them to stay in designated buildings rather than vegetated areas, thereby reducing the risk of fire hazards. This prevention solution will enable vegetation to not interact with human-caused sparks and ensure there is a defensible space between the creek and citizens.

Wildfires in Cambria must be mitigated using sociopolitical approaches that ensure uniform participation in fire hazard reduction. Regulation-driven enforcement of requirements for defensible space is most important. However, enforcement must be accompanied by supportive actions for the most disadvantaged, including elderly residents and low-income households, who will be physically or financially incapable of complying. Suggested actions are to begin initiating a budget program for plant growth management, initiating a municipal trash removal service, and utilizing volunteer labor pools to remove fuels on these parcels.

Efficient communication strategies must also be applied to maximize community-level engagement. Educational outreach must be carried out with multilingual resources and regular face-to-face workshops. These must be incorporated with local emergency organizations and community organizations to have a consistent message. Seasonal and short-term residents such as tourists, who may not receive local alerts, need to be particularly addressed through targeted outreach and rental property compliance inspections.

Policy adaptability is also required in state environmental agency-regulated areas, including the California Coastal Commission, to accommodate ecologically responsive fuel treatments. Strategic interagency cooperation is required to resolve fire mitigation and environmental constraint conflicts. There is a need to revise local ordinances to synchronize fuel reduction policy with ecological preservation needs.

B. Mitigation Measures

Cambria is proactively enhancing its wildfire resilience through a combination of community-based initiatives, policy reforms, and interagency collaboration. Residents are encouraged to participate in the Cambria Fire Safe Focus Group, which meets monthly to discuss fire prevention strategies and community preparedness. Efforts to engage underserved populations, including seniors, renters, and non-English speakers, by developing multilingual emergency alert systems and printed evacuation guides is crucial in Cambria. Partnerships with schools and churches aim to reach socially isolated individuals, while town hall meetings, fire drills, and community workshops focus on evacuation planning and fire resilience. Additionally, the establishment of a community tool library would provide residents with access to equipment such as chainsaws, chipper machines, and water tanks, facilitating defensible space clearance and other fire mitigation activities.

Policy measures are being implemented to further reduce wildfire risks. Local zoning laws are being introduced to limit or regulate development in high-risk fire zones. Building codes are updated to require Class A roofing, ember-resistant vents, and defensible landscaping for all new constructions. Lastly, enforcement of California's 100-foot defensible space law is strengthened through annual inspections and fines, ensuring compliance and enhancing community safety.

Interagency coordination plays a crucial role in Cambria's wildfire mitigation efforts. The community should continue to collaborate with San Luis Obispo County, CAL FIRE, and Los Padres National Forest to conduct cross-boundary fuel reduction and prescribed burns. Joint training exercises with local fire departments and community response teams to improve readiness and response capabilities. These collaborative efforts aim to create a cohesive and comprehensive approach to wildfire prevention and response, ensuring the safety and resilience of the Cambria community.

The use of better construction materials such as fire-resistant roofing, ember-proof vents, and double paned windows can greatly reduce the vulnerability of homes and structures during wildfire. Creating and more importantly maintaining defensible space around buildings by clearing flammable vegetation and debris helps slow fire spread and gives fire personnel a safer area to defend homes. Landscaping with drought-tolerant and fire-resistant native plants further supports defensible space goals while maintaining the region's ecology. Breaking up continuous fuels through selective thinning, strategic plantings, and fuel breaks can prevent fires from becoming uncontrollable. Regular maintenance of these fuel breaks ensures their long-term effectiveness, as well as keeping them clear of overgrowth and debris.

Sites like Rancho Marino and Camp Ocean Pines play a key role in both wildfire mitigation and education. Implementing fuel breaks into these areas can serve as demonstration sites for best practices in land stewardship and fire prevention, while also providing valuable natural buffers that support local biodiversity and slow fire progression toward residential zones. Together, these measures protect the community and also preserve Cambria's unique environmental assets.

C. Preparedness Measures

I. Existing Suppression Infrastructure

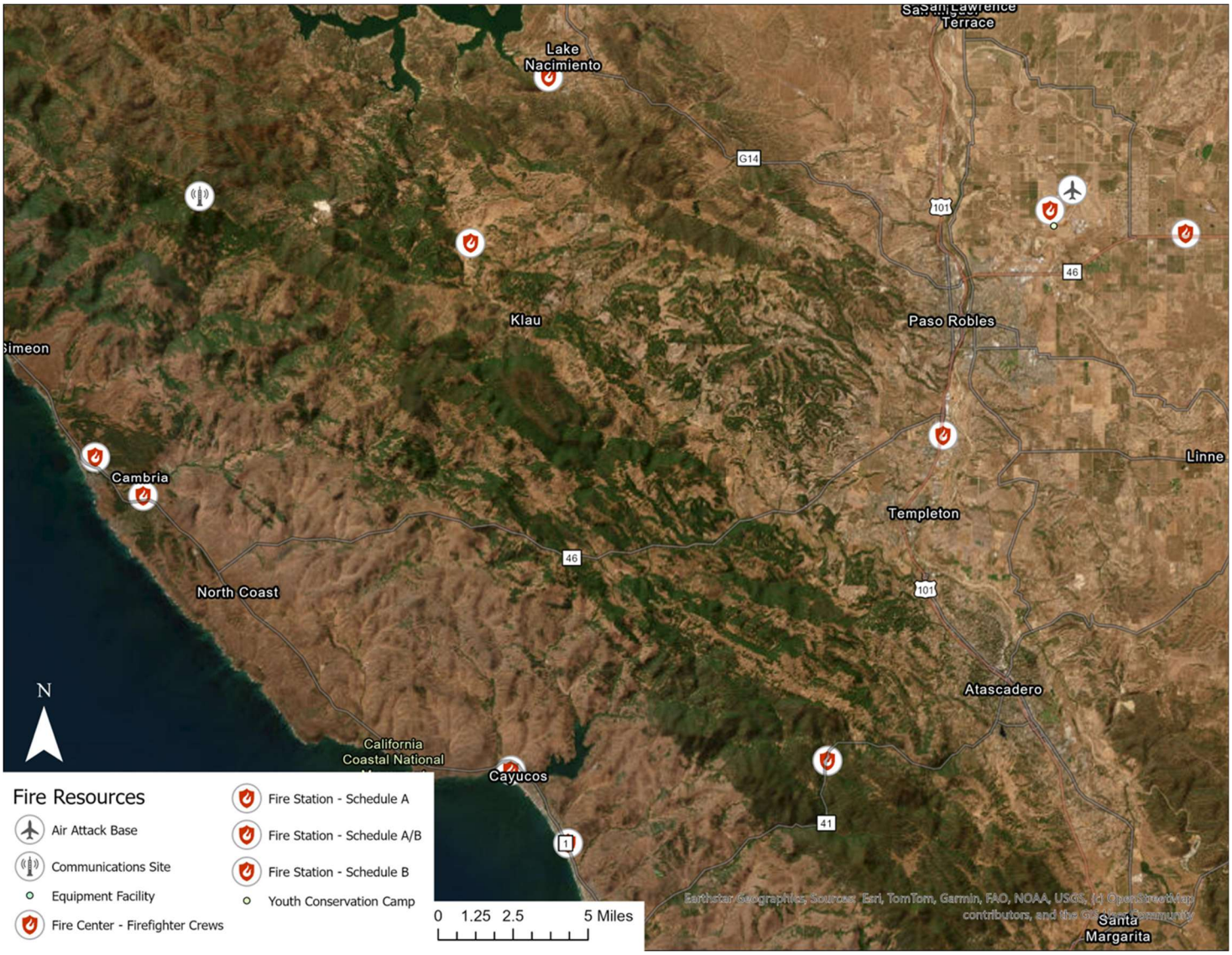

Figure 11: Map of Cambria and its surroundings, and the suppression infrastructure located nearby. The nearest Air Attack base is in Paso Robles, and the nearest station is in Cayucos

Within Cambria there are 369 active fire hydrants. Some are difficult to find or do not work completely. There are a couple blocks in Pine Knolls and Lodge Hill where there could be another hydrant or two added. There are four water tank locations. One of the Leimert Estates, Pine Knolls, Lodge Hill, and just south of Strawberry Canyon. These tanks hold a total of around 1.7 million gallons. We would suggest implementing at least one more tank location either in the Park Hill area or somewhere along Moonstone Beach Drive. This would allow easy access to the water supply near Fiscalini Ranch, as well as the forested area north of Cambria where the greatest concern of fire lies.

The CSD fire department has two type one engines as well as one type three engines. They are supposed to get a new engine every 10 years and that has yet to happen. The last thing Cambria needs is for one of their engines to give out when actually responding to a fire. This is because engines cost anywhere from $500 thousand and $1 million. Programs like the Carl Moyer Program offer funding for newer engines. Also, consistently looking for grants is vital for Cambria. There are always organizations and programs giving out money; Cambria just needs to find it. As Cambria advances and improves fire infrastructure, they also need to maintain the fire infrastructure that they already have in place. Things like hydrants and water tanks.

II. Existing Ingress/Egress

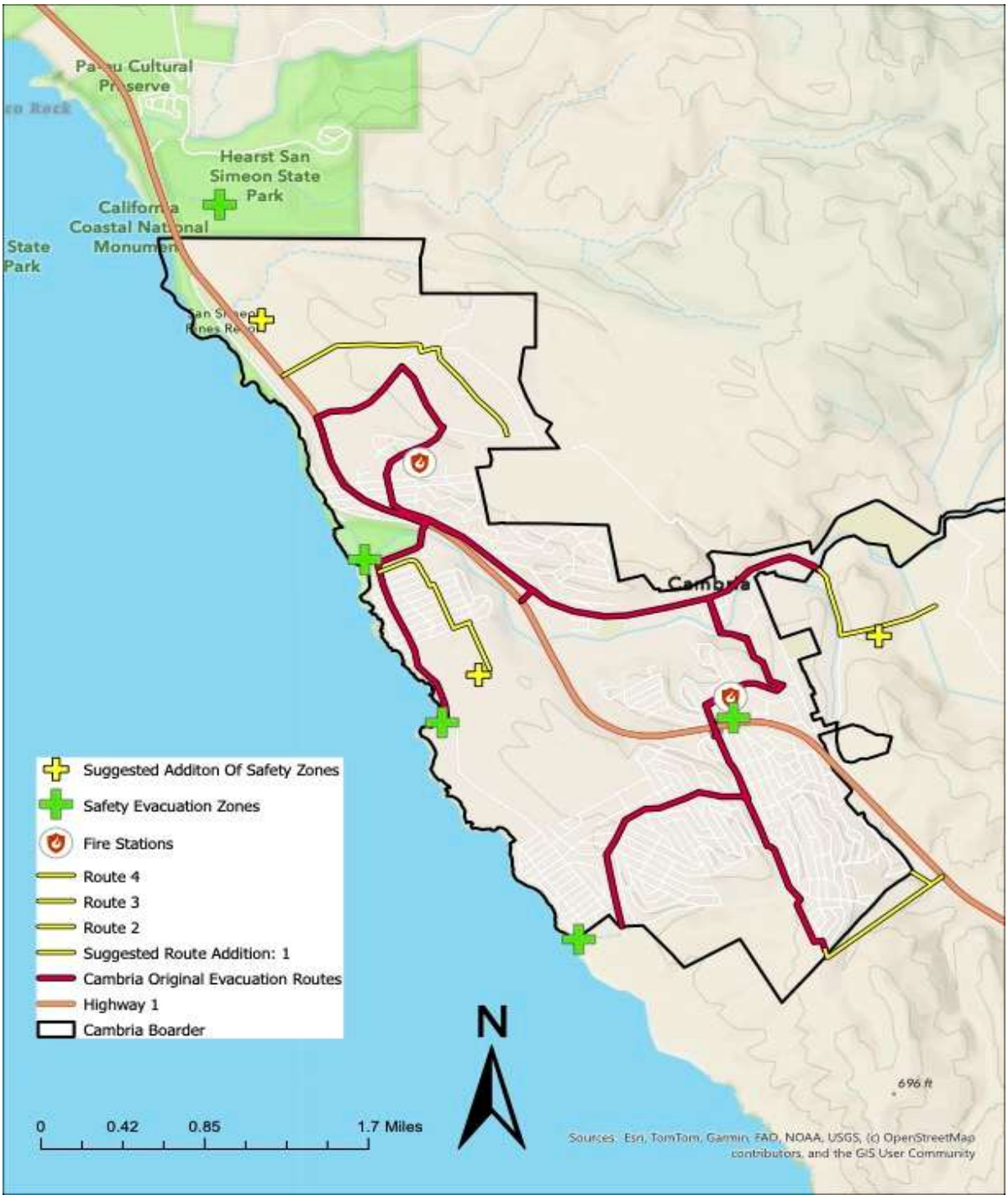

Figure 12: Map showing Cambria escape routes(red), proposed construction of new roads (yellow), Built in Evacuation Zones (green plus), and the construction and clearing of new zones (yellow plus)

Cambria has a set evacuation plan in place in case of an emergency. The plan includes evacuation routes leading toward Highway 1, as well as five designated locations that can serve as evacuation zones in case leaving Cambria is not an option.

The evacuation zones include San Simeon, Shamel Park, the west ranch gate adjacent to Fiscalini Ranch Preserve, Lampton Park on Lampton Street, and the Presbyterian church on Yorkshire Street. However, the evacuation routes pose an issue because there are only two set routes in place, and both of these routes intersect with one another, leading to chaos in the case of an event.

To avoid the concern of conflict between routes, Cambria can construct new roads and evacuation zones to ensure safety and prevent chaos from occurring. The area of interest to construct new and closer evacuation zones is the Fiscalini ranch and near the Cambria grammar school, on Main Street. Main Street is on the same road leading towards the high school, but if something were to occur to the high school, it is better to have a safe option, which will be to clear vegetation next to Main Street and Perry Creek. There is a large plain field that will be perfect for an escape zone if Highway 1 is not optimal for escape.

The construction of roads is vital to ensure every citizen can evacuate safely, which is why it is proposed to create the following escape routes. A new road needs to be built on the north side of town from Jordan Street towards San Simeon and connecting it to Highway 1 by a new highway exit to ensure quicker access to the original evacuation zone in San Simeon.

The homes in the Fiscalini Ranch Preserve area have an evacuation route, which is one road that leads to Highway 1, and poses an issue because there are multiple roads in the neighborhood. However, to escape, drivers will need to get onto the same road, potentially causing traffic jams. For this reason, there needs to be an additional road built on Huntington Road that goes south. This road adds a second route towards the Fiscalini ranch evacuation zone, which allows for a quicker evacuation and fewer traffic collisions. Additionally, there is Green St. located on the north section of Cambria near Highway 1. This is a dirt road that leads to Highway 1 and requires no construction, but is unfortunately private property that is blocked off by a built-in gate. While it is ideal to be able to use this road in the case of an emergency, it all depends on the owner of the property whether they will allow its use. However, Gleason Street is adjacent to Green Street, making it a backup option for a new road to be constructed. Adding a road to Gleason Street will ensure that evacuation routes are available and quicker for residents in the area, instead of having to drive south to reach the highway.

III. Planned Residential Response

Cambria's evacuation planning for emergencies must consider its thin transportation network, terrain, and population base. The population's primary evacuation routes, which all lead onto Highway 1, are overgrown, curved, and subject to overflows, vegetation incursions, and blockages in the case of a wildfire. Improving

these evacuation routes by clearing vegetation, improving signage, and establishing temporary safety corridors must be a huge priority. Evaluation of the feasibility of new secondary access roads or expanded shoulders to merge onto the highway must also be included in future infrastructure planning.

Readiness at the community level for residential responses should be facilitated by providing evacuation route maps, by having neighborhood emergency planning groups, and by evacuating community wide areas as part of evacuation drills. Homeowners should be encouraged to maintain go bags with supplies and engage in preparedness workshops that should be offered by local fire departments.

The redundant integrated alerting system using Wireless Emergency Alerts (WEA), Emergency Alert System (EAS), sirens, and social media should be reinforced. The elderly residents, the disabled, and strangers who are unaware of local conditions should have extra considerations. These individuals need to be registered in advance through involuntary registries and supported by designated neighborhood liaison persons or aid programs. These evacuation policies should exist well in advance of the initiation of a wildfire.

IV. Agency and Residential Training

Training and capacity development for professional and civilian responders are instrumental in enhancing community resilience against wildfire. Fire suppression agencies like CAL FIRE San Luis Obispo Unit, Cayucos, Paso Robles, and Cambria Fire Departments need to undergo coordinated scenario training involving high-risk fire behavior within local topography and meteorology. The interagency exercises need to incorporate command structure coordination (ICS/NIMS), ingress/egress constraints, and live data inputs where possible.

At the residential level, residents should be trained through CERT courses, defensible space drills, and fire preparedness classes. Training activities should include conducting home hardening techniques, fire extinguisher usage, and evacuation procedures by residents. Outreach efforts should be to all classes of residents, including renters and visitors, with priority to conducting participation by seniors and people with mobility impairments.

Training must also include digital literacy on wildfire alert systems, smartphone applications, and evacuation technology. Local capacity is improved and the link between agency work and homeowner responsibility is achieved through community-based training.

VI. Recovery Measures

A. Community Recovery

In the aftermath of a wildfire, it is essential to implement a community recovery plan that addresses both the physical and emotional needs of residents. Providing access to psychological and family counseling can help individuals and families process trauma, rebuild a sense of stability, and foster community healing. Establishing well-equipped evacuation centers is critical to offer immediate access to food, clean water, and safe shelter for displaced residents. Restoring key infrastructure including roads, powerlines, and bridges should be prioritized to ensure mobility, reconnect essential services, and support emergency response and recovery efforts. Clear and timely post-fire information is vital which includes thorough documentation of damages, ongoing updates through mobile alerts, and coordination with organizations like the Fire Safe Council to guide recovery actions and community preparedness. By integrating these elements, the town can strengthen its capacity to recover effectively and build long-term resilience to future wildfire events.

B. Mitigation of Secondary Disasters

Secondary disasters are a risk that needs to be addressed when discussing the possibility of wildfire in Cambria. A wildfire occurring does not mean that another disaster could not occur at the same time or within a short time frame. In fact, wildfires can increase the risk of other disasters and hazards such as landslides, flooding, and sedimentation pollution. When wildfires burn a significant amount of vegetation, the burned area often has little canopy cover or litter/duff layer remaining, meaning rainfall has nothing to slow its velocity before it hits the soil. This increases runoff and flooding risk by changing the timing of water flow in burned areas. In addition to this, soil becomes unstable when the vegetation that was on it is burned off because it loses root stabilization. This combination means that there is a very high risk of landslides and flooding events in post-wildfire landscapes. To mitigate these risks, Watershed Emergency Response Teams (WERTs) must be deployed quickly after a fire to assess the burned area for flood and landslide risk and identify at-risk structures so that measures to stabilize the slopes, such as straw wattles, can be done.

Another secondary disaster is prolonged power outages. Since Cambria's powerlines are entirely above ground, the risk of electrical infrastructure being damaged in a wildfire is very high. This could lead to residents whose homes survived the fire to face power outages for days or weeks at a time. This is especially dangerous because many people may need electricity for medical devices or to power refrigerators to store food. Especially during the hot summer, air conditioning is very important for preventing heat-related illness, which also require electricity. To prepare for this possibility ahead of

time, encouraging residents to invest in generators for emergency situations, increasing vegetation clearance around power poles and lines, and preparing evacuation shelters post fire for having charging stations is realistic in the short term. In the long term, the risk of infrastructure being damaged from wildfire can be lowered by gradually undergrounding the electrical lines, which will also help prevent power line ignitions as well.

Lastly, another post-fire disaster/hazard is the possibility of the fire rekindling and hazard trees. The mop-up stage of the firefighting effort is often one of the most important, because it ensures that once the fire is contained, it is also fully put out. Still, there is a chance that the fire could be rekindled, especially in an environment like Cambria where there are large amounts of large logs and course woody debris (CWD) that once burned, can smolder for days, weeks, or even months. As such, being thorough during mop-up is extremely important. Another hazard with burned vegetation is hazard trees. Many of the locations that have forested areas are also recreational areas, such as Strawberry Canyon. If these areas burn, many of the trees that burn but still stand will be hazardous, and could fall at any moment. This is a risk to recreationists, and must be addressed before these areas can be reopened post-fire. Agencies such as the California Conservation Corps and the California Department of Corrections have crews based in San Luis Obispo County that are skilled at felling and hazard tree removal and can be utilized for lower costs than private contractors.

C. Fuel treatments

Cambria's main goal for the future is to ensure fuel treatments are established to stop potential fire spread. Thinning forests is an important fuel treatment because it removes any excess surface fuels found. This is important because it removes vertical continuity, ultimately preventing crown fires from happening. This treatment can cost around $500-$1900 per acre of forest, but it is currently happening at Covell Ranch with the help of dozers and masticators. The benefits of thinning include the promotion of new growth in vegetation by reducing competition among species and providing more space for trees to thrive, due to the removal of excess fuels.

Adding fuel breaks is another form of treatment and is already required by Cal Fire. Cal Fire requires that at least 100 ft of defensible space be built within homes and buildings. This is important because it provides protection against fires by slowing down the rate of spread and intensity. Fuel breaks are also crucial in wildland urban interfaces due to their ability to increase the chances of structure survival.

Additionally, removing invasive species is essential for reducing highly flammable fuels and lowering wildfire risk. French broom is an invasive species found throughout Covell ranch and areas around Cambria, this plant species is very flammable and often grows in clusters. The issue with this species is that if pulled out incorrectly, it can

release its seeds dispersing across forested areas reducing the growth and reproduction of native species, thus increasing fire risk. Removing this species requires moist soil to prevent resprouting and ensuring removal is done carefully before fire season begins (Washington State Noxious Weed Control Board, n.d.).

VII. Conclusions

A. Short Term Recommendations

I. Prevention

Short-term wildfire prevention measures, all aimed at stopping fires before they start, should be prioritized in Cambria. At the top of the list is public education, using signs, social media, and local news to raise awareness about fire risks and encourage safe behavior such as avoiding open flames and properly disposing of cigarettes. Public education should be inclusive to all populations in Cambria: elderly, non-English speaking, tourist, etc. Red Flag Day restrictions should be strictly enforced, prohibiting campfires in or out of fire rings, fireworks, and barbecues during high-risk weather conditions. Additionally, regulations on equipment like weed trimmers and lawn mowers to early morning hours (e.g. before 10am) and requiring spark arrestors on all landscaping machinery will lessen the chance of a spark happening. Lastly, to further reduce accidental ignitions, setting up designated fire-safe smoking zones with metal containers in public areas is recommended.

II. Mitigation

In the short term, Cambria's first priority should be to landscape the residential areas. This issue should never have been allowed to become as severe as it is. Homes are physically touching large fuels like trees and bushes, and those fuels are in contact with the next-door house. This creates continuous fuel which is very difficult to limit the spread of fire. Breaking up this continuity is vital.

Next, Cambria needs to continue their education. The more people that know and understand the rules and plan, the better. Constant education of fire safety laws and regulations as well as the escape plan needs to continue to be a top priority. Making information accessible to both the Spanish-speaking and elderly communities are much tougher to do. Paper and physical information works a lot better with the older generation than electronic information does. Also, all information printed needs to have Spanish copies as well. The Santa Rosa Parish is another great place to spread knowledge to the Spanish-speaking community. They have Spanish services as well as well-known Spanish leaders that can assist the spread of information.

The last short-term mitigation we suggest for now is maintenance on fuel breaks. They can be a useful tool to slow the spread of fire, especially in densely forested areas like Covell Ranch and Strawberry Canyon.

III. Preparedness

For preparedness, the actions that are most realistic in the short term are also the least expensive ones. The easiest action is to continue to conduct community training such as the Emergency Preparedness Community Meeting which was held March 1st, 2025. This meeting was an educational workshop mainly covering evacuations. We recommend that more of these meetings are conducted within the Cambria community to reach a larger number of residents. Workshops and community trainings can also be held on other preparedness topics such as creating a “Go-bag”, which will help community members be more prepared for evacuation by making sure they have a supply of food, water, and important items packed and ready in case of a wildfire. These types of community meetings are relatively low-cost, and the Cambria CSD already had a $4000 budget for awareness and education, so it could be possible to expand these trainings by collaborating with Cal Fire SLU, which has a much larger budget.

Another short-term action would be to improve the signage in residential neighborhoods. There is a distinct lack of stop signs in the majority of 3- and 4-way intersections in Cambria, which makes navigating residential neighborhoods dangerous under normal conditions. Under an evacuation, the lack of stop signs is highly likely to lead to an evacuation and would ultimately slow down the flow of traffic. Additionally, evacuations can be made more efficient by adding signage throughout neighborhoods with directions toward Highway 1. This will make evacuation more efficient since all of the evacuation routes in the various neighborhoods ultimately lead to Highway 1, and under smoke conditions and with residents in a panic, additional signage will help residents evacuate. This will also help evacuation because the large tourist population that is present in Cambria during the peak fire weather conditions is less likely to have ready access to evacuation maps and will be less familiar with navigating through Cambria. Based off of retail stop sign prices and an estimate of the number of 4-way intersections in Cambria, the price of installing stop signs would be a minimum of $5000, not including labor or directional signs for evacuation. The total price for this action would probably be in the realm of $30000, and should take no more than 3 months to install.

A third short-term preparedness action to take, which is possibly the most expensive, would be to host interagency drills and trainings, between the different responding agencies such as Cambria CSD Fire Department, Cal Fire SLU, San Luis Obispo County Sheriff, California Highway Patrol, California Office of Emergency Services, and US Forest Service. A large scale joint training exercise would be

expensive, but necessary. Thankfully, most if not all of the employees involved are salaried, so the cost of doing such an event would mainly be in logistics such as fuel, accommodations, planning, and equipment use. Interagency trainings are very important for insuring that the responsibilities and roles that the different agencies would have during a fire in Cambria are both well-rehearsed and well understood.

Table 2: Table of short-term preparedness actions, their costs, and timeframe.

Action	Timeline	Cost
Community Meetings	1-3 months	$4000-$10000
Signage Improvement	3-4 months	$5000-$30000
Interagency Trainings	3-6 months	$20000-$100000

B. Long Term Recommendations

I. Prevention

In the longer term, Cambria should aim to reduce fire ignition risks through infrastructure and policy improvements. One of the highest-impact goals should be to move overhead power lines underground, thereby minimizing the chance of fires sparked by downed or damaged lines; a known ignition source in many California wildfires. Another long-term priority is the creation of a wildfire prevention education center, which would provide the public with year-round access to safety information, training, and preparedness resources. This would encourage not only residents of Cambria, but also tourists to play their part in Wildfire Prevention. Lastly, Cambria supports the strategic use of prescribed burns during safe weather conditions to remove dry, flammable vegetation that could otherwise pose a serious fire hazard. This controlled method helps restore the natural fire cycle while minimizing the risk of uncontrolled wildfire outbreaks. Together, these immediate and future-focused actions form a comprehensive approach to wildfire prevention, tailored to the specific needs and risks of the Cambria community.

II. Mitigation

The first long term mitigation strategy that we believe is most crucial to implement is changing structure materials. When homes are less likely to ignite, their chances of surviving a fire are much greater. A way to implement this is slowly overtime. For example, when a home’s roof is old and needs to be remodeled, invest in a fire-resistant roof that cannot ignite. Also, building codes could implement a new set of rules for when new buildings get built. These rules should require buildings, especially those

in VHFSZ, to be built with fire resistant materials. This way new homes are not adding to the current problem.

Next, funding should be a top priority in the long term. The CSD fire department is heavily underfunded, still awaiting a new type one fire engine. That is their primary tool for fire suppression and keeping them up to date is crucial, but expensive. Cambria needs to constantly be on the lookout for grants, especially for these types of problems. There are multiple California agencies and organizations looking for communities that need funding. Programs like the CA Wildfire Mitigation Program as well as the Carl Moyer Program are two great examples of ways Cambria can find funding.

Lastly, enforcement of defensible space should be focused on long term. This is a topic that has been spread throughout Cambria, but either not cared about or not fully understood because there is little compliance with this suggestion. Over time, Cambria will find a respectful but optimal way to enforce these rules. Raising fines is one method that we suggest, as well as educating homeowners that compliance with defensible space increases property value as well as having potential insurance discounts.

III. Preparedness

The least expensive long-term recommendation would be to maintain and expand the water resources and access within Cambria. According to Cambria CSD Fire, there are many hydrants that are inoperable, whether there is something wrong with the piping, access, or because it is buried. These hydrants are identified as the fire Department happens to come across them during normal operations, and the inspection schedule of once per year is not being met. The priority would be to do a survey of all of the hydrants and the distances between each hydrant and the furthest house to identify coverage gaps. Once that has been done, replacing faulty hydrants and installing new hydrants in areas where there are gaps in coverage is the recommended action. This portion would likely cost $175,000-$225,000 depending on the number of hydrants. Taking this a step further would mean installing a new water storage tank, which would be more expensive but will actually increase the amount of water available in an emergency, not just the number of access points. Installing a new tank will cost an estimate of $1.7m-$4m.

The next two recommendations cost about the same amount and will most likely take a similar amount of time. One of these recommendations is to improve the ingress and egress within the residential neighborhoods of Cambria. Many of the neighborhoods only have one or two access points with Highway 1, such as the Burton and Ardath streets for the Lodge Hill neighborhood. Adding access points, whether by creating easements with property owners for emergency situations or constructing small road segments to act as connectors, is vitally important to improving evacuation in Cambria. The cost of constructing a single mile of rural/residential two-lane road is

estimated at $1m-$2m. To keep costs down, constructing short, strategic road segments should be kept at under a mile of road. Specific locations include connecting the corner of Green St. and Gleason St. to Highway 1 to improve access to Lodge Hill, Connecting Wilton Dr. to Highway 1 in the western edge of West Village/Pine Knolls, and Connecting Huntington Rd. to Highway 1 in the eastern corner of Park Hill. Access easements on streets such as the Marine Terrace Trail on Fiscalini Ranch and the private road that extends off Green St. in Lodge Hill could be lower cost options that would still have a considerable impact.

The last recommendation is to fund a new engine for the Cambria CSD Fire Department. Their current engine is many years overdue to be replaced, in addition to the standard replacement age of 10 years. This engine has already been briefly out of commission due to mechanical issues, resulting in Cambria Fire needing to borrow an engine from another city's fire department. The cost of a new engine is about $1m, and would be custom-specified to the needs of Cambria FD. This will make Cambria CSD Fire Department more prepared to respond to wildfire and any other emergencies Cambria could face.

C. Priorities

The priorities of this CWPP are first and foremost, the protection of human life. No amount of money or property is more valuable than a human life. Second to this is the protection of structures and ecological resources, such as infrastructure, homes, and the various ecosystems in Cambria. The third priority is to improve fire response. Fourth is to implement effective post-fire recovery measures.

There are a variety of actions recommended that fulfill these priorities, which range in cost and completion time. Some actions fulfill multiple of the above priorities. The actions that are the easiest to implement with the highest impact will be prioritized over more expensive, long term actions. Community engagement, training, and awareness programs are the highest priority, because the training will be utilized most broadly compared to any of the mitigation or prevention measures. Next are biophysical treatments such as fuels reduction to reduce ignition and spread of the fire. Last are long term actions that require the most funding, such as undergrounding of power lines and continuous fuels reduction.

D. Timeline of Actions

Table 3: Timeline of short-term actions

Action	Timeline
Public information campaign on fire prevention	1-3 months
Installation of cigarette disposal containers in public smoking areas	1-3 months
Community preparedness training	1-3 months
Weed abatement and fuels reduction in neighborhoods	3-6 months
Evacuation signage installation	3-6 months
Fuel break maintenance	6+ months, yearly to 5-year rotation
Interagency response preparedness trainings	6+ months

Table 4: Timeline of long-term actions

Action	Timeline
Hydrant maintenance	1+ year, continuous
Prescribed burning	1+ year, continuous program
New Cambria CSD FD Engine	1-2 years
New water tank	1-2 years
Construction of evacuation route connector roads	1-3 years
Wildfire prevention education center	5+ years
Defensible space enforcement	5+ years
Increase structure ignitability requirements	10+ years
Powerline undergrounding	10+ years

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