

***Unit Strategic Fire Plan
and
Community Wildfire Protection Plan
for San Luis Obispo County***

DRAFT

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SIGNATURE PAGE

Unit Strategic Fire Plan and Community Wildfire Protection Plan developed for San Luis Obispo County:

This Plan:

- Was collaboratively developed. Interested parties, Federal, State, City, and County agencies within the Unit have been consulted and are listed in the plan.
- Identifies and prioritizes pre fire and post fire management strategies and tactics meant to reduce the loss of values at risk within the Unit.
- Is intended for use as a planning and assessment tool only. It is the responsibility of those implementing the projects to ensure that all environmental compliance and permitting processes are met as necessary.

Unit Chief
Robert Lewin

Date

Pre-Fire Engineer
Greg Alex

Date

Local County Government Representative

Date (Type Name)

EXECUTIVE SUMMARY

This Unit Strategic Fire Plan and Community Wildfire Protection Plan (Plan) covers San Luis Obispo County, California. This Plan serves as both the CAL FIRE Unit Strategic Fire Plan for the San Luis Obispo Unit and the Community Wildfire Protection Plan for San Luis Obispo County and was developed to collaboratively address fire protection planning efforts occurring in the County to minimize wildfire risk to communities, assets, firefighters, and the public. This Plan presents the County's physical and social characteristics, identifies and evaluates landscape-scale fire hazard variables, utilizes Priority Landscape data sets for evaluating wildfire risk, identifies measures for reducing structural ignitability, and identifies potential fuel reduction projects and techniques for minimizing wildfire risk. The goal of this Plan is to provide a planning-level framework for hazardous fuel assessment and reduction within San Luis Obispo County so that structures and assets are provided additional protection, reducing the potential for wildfire-originated ignitions. This Plan is intended to be a living document managed and updated routinely by CAL FIRE/SLO with community and stakeholder input and involvement.

As a key component of the Healthy Forest Restoration Act (HFRA) of 2003, a Community Wildfire Protection Plan (CWPP) serves as a mechanism for community input and identification of areas presenting high fire hazard risk as well as identification of potential projects intended to mitigate such risk. Further, the CWPP process is intended to provide the community a forum for identifying values at risk from wildfire, which may include people, property, natural resources, cultural values, economic interests, and infrastructure. A CWPP must be collaboratively developed with input from interested parties, local, state, and federal agencies managing land within the County, and local government representatives. It must also identify and prioritize areas for hazardous fuel reduction treatments and recommend measures to reduce the ignitability of structures within wildland urban interface areas. CWPPs are intended to better protect communities from the threat of wildfires by promoting community-level fuel reduction projects.

The CAL FIRE Unit Strategic Fire Plan is intended to support the vision, goals, and objectives of the California Fire Plan which will create a state that is more resistant and resilient to the damaging effects of catastrophic wildfire while recognizing fire's beneficial aspects. Similar to the goals of the CWPP, the Unit Strategic Fire Plan is intended to improve fire prevention and suppression efforts, reduce hazardous fuels, restore fire-adapted ecosystems, and promote community assistance. The goals of the Unit Strategic Fire Plan include: improving the availability and use of information regarding hazard and risk assessment; providing guidance for land use planning efforts; promoting a shared vision among communities and multiple fire jurisdictions; establishing fire resistance in communities; prioritizing protection of communities and other high-priority watersheds; collaborating with government agencies and a broad representation of stakeholders; improving fire suppression and prevention capabilities; promoting post-fire recovery efforts; and maintaining accountability through monitoring based on performance standards. The Unit Strategic Fire Plan utilizes the following strategies to accomplish its goals:

- Collaborate with stakeholders and multiple fire jurisdictions
- Conduct and refine risk assessments for wildland urban interface (WUI) areas
- Develop high-hazard wildfire community pre-attack plans
- Foster community involvement in pre-fire planning efforts
- Monitor the effectiveness of programs, projects and initial attack success.

This Plan, with the cooperation of key stakeholders, has been developed with the intention of meeting the goals set by community stakeholders and the California Fire Plan while integrating a community input-focused approach consistent with CWPP requirements. As a combined document, this Plan prioritizes protection of communities, natural resources, and the lives of the public and firefighters. This priority is shared among federal agencies, state and local governments, and other community stakeholders. Collaboration, priority setting, and accountability provide the framework for the guiding tactical principles of this Plan, which include:

- Increase the safety to residents and firefighters during wildland fires
- Reduce the costs and losses associated with wildland fires
- Support implementation of WUI building standards through coordination and cooperation with local government planning departments
- Support the implementation and maintenance of defensible space around structures

- Support project work and planning efforts that encourage the development and/or maintenance of safe ingress and egress routes for emergency incidents
- Promote cooperation between fire agencies in the County to minimize wildland fire damage through strategic fuel treatment projects
- Utilize fire prevention efforts to reduce ignitions within the County
- Conduct post-incident analysis to evaluate success in achieving the 95% threshold of keeping fires less than 10 acres in size
- Promote public education efforts about wildland fire through the support of the San Luis Obispo County Community FireSafe Council (SLOFSC) and Firewise community activities.

Note: All text in [BLUE](#) is hyperlinked to external websites.

SECTION I: COUNTY OVERVIEW

This Plan covers San Luis Obispo County, California. This section presents more detailed information about San Luis Obispo County, specifically a description of factors affecting wildfire risk within the County.

A. COUNTY DESCRIPTION

LOCATION

San Luis Obispo County is situated on the Central Coast of California, approximately halfway between San Francisco and Los Angeles. San Luis Obispo County is bordered by Monterey County on the north, Kern County on the east, and Santa Barbara County on the south. San Luis Obispo County encompasses approximately 3,615 square miles, supports a population of approximately 270,000, and includes seven incorporated cities. Fire protection in the County is provided by numerous agencies, including the California Department of Forestry and Fire Protection (CAL FIRE), the San Luis Obispo County Fire Department, and eighteen local fire departments/districts providing fire protection for incorporated cities, communities, and facilities.

LAND OWNERSHIP

Over 73 percent of the land within San Luis Obispo County is privately owned. Other significant ownership includes United States Forest Service (USFS) and Bureau of Land Management (BLM) lands. The Los Padres National Forest (LPNF) covers a large land area in the central and southern portions of the County associated with the La Panza, Garcia, and Santa Lucia Ranges. BLM lands are concentrated primarily in the southeast portion of the County in the Carrizo Plains area. The current distribution of land ownership within San Luis Obispo County is presented in Table 1. Figure 1 presents the distribution of land ownership in San Luis Obispo County.

Table 1. Land Ownership Distribution in San Luis Obispo County

| Ownership Agency/Type* | Approximate Acreage | Percentage |
|--|---------------------|------------|
| California Dept. of Fish and Game | 40,706 | 1.92% |
| California Dept. of Parks and Recreation | 20,085 | 0.95% |
| California State Lands Commission | 2,238 | 0.11% |
| Local Government | 22,247 | 1.05% |
| Non-Profit Conservancies and Trusts | 2,653 | 0.12% |
| Other State Lands | 4,129 | 0.19% |
| Private | 1,570,746 | 73.95% |
| U.S. Bureau of Land Management | 244,202 | 11.49% |
| U.S. Dept. of Defense | 25,643 | 1.21% |
| U.S. Fish and Wildlife Service | 2,610 | 0.12% |
| U.S. Forest Service | 189,039 | 8.89% |

*Source: CalMapper 2012

POPULATION AND HOUSING

The estimated population of San Luis Obispo County is 269,637 people within 7 incorporated cities and unincorporated County lands (US Census Bureau 2010). The County includes approximately 117,315 housing units (US Census Bureau 2010). The largest population center is the City of San Luis Obispo, with approximately 45,119 people, followed by the cities of Paso Robles (29,793 people) and Atascadero (28,310 people). Table 2 presents the population distribution in the County within incorporated cities, unincorporated Census-designated places, and unincorporated rural portions of the County.

Table 2. Communities and Population Distribution in San Luis Obispo County

| Community* | Population | Percentage |
|---|------------|------------|
| Incorporated Cities | | |
| Arroyo Grande | 17,252 | 6.40% |
| Atascadero | 28,310 | 10.50% |
| El Paso de Robles (Paso Robles) | 29,793 | 11.05% |
| Grover Beach | 13,156 | 4.88% |
| Morro Bay | 10,234 | 3.80% |
| Pismo Beach | 7,655 | 2.84% |
| San Luis Obispo | 45,119 | 16.73% |
| Unincorporated Areas (Census-designated Places) | | |
| Avila Beach | 1,627 | 0.60% |
| Callender (includes Woodlands) | 1,838 | 0.68% |
| Cambria | 6,032 | 2.24% |
| Cayucos | 2,592 | 0.96% |
| Creston | 94 | 0.03% |
| Edna (includes Los Ranchos) | 1,670 | 0.62% |
| Garden Farms | 386 | 0.14% |
| Lake Nacimiento (includes Oak Shores) | 2,748 | 1.01% |
| Los Berros | 641 | 0.24% |
| Los Osos (includes Baywood Park) | 14,276 | 5.29% |
| Nipomo (includes Blacklake) | 17,644 | 6.54% |
| Oceano | 7,286 | 2.70% |
| San Miguel | 2,336 | 0.87% |
| San Simeon | 462 | 0.17% |
| Santa Margarita | 1,259 | 0.47% |
| Shandon | 1,295 | 0.48% |
| Templeton | 7,674 | 2.85% |
| Whitley Gardens | 285 | 0.11% |
| Unincorporated Communities (not Census-designated Places) | 47,973 | 17.79% |

*Source: U.S. Census Bureau 2010

The distribution of the population in San Luis Obispo County creates several different conditions, each of which is unique to pre-fire planning. Urban areas are predominantly built-up environments with little or no exposure to wildland vegetation (fuels). The area where urban development abuts non-maintained wildland fuels is known as the Wildland Urban Interface (WUI). Rural areas are more typically characterized by a condition known as a Wildland Urban Intermix, where the density of housing units and structures is relatively low and the space between consists of wildland fuels capable of propagating fire.

Wildland Urban Interface

Wildland Urban Interface areas are those within the "vicinity" of wildland vegetation, typically with housing density exceeding 1 house per 40 acres, but with vegetation covering less than 50% of the parcel. In addition WUI areas must be within 1.5 miles of an area that has vegetative cover exceeding 75% to ensure that small urban parks are not classified as WUI. The California Fire Alliance (2001) defined "vicinity" as all areas within 1.5 miles (2.4 km) of wildland vegetation, the anticipated distance that firebrands can be carried from a wildland fire to the roof of a house. The wildland fire risk associated with WUI areas includes propagation of fire throughout WUI communities via house-to-house fire spread, landscaping-to-house fire spread, or ember intrusion. Advantages and disadvantages associated with WUI areas include:

WUI Advantages:

- WUI areas often have community water supply systems
- Many homes can be accessed by a single road
- Emergency equipment can protect multiple assets at once
- Houses usually only exposed to flammable fuels on one side

WUI Disadvantages:

- High housing density
- Roads can become congested during emergencies.
- Limited options if the community water systems fail

Wildland Urban Intermix

Wildland Urban Intermix areas are those where housing and vegetation intermingle. In the Intermix, wildland vegetation is continuous and greater than 50% of the land area is vegetated with combustible fuels. The wildland fire risk associated with Intermix areas includes vegetation-to-house fire spread or ember intrusion. Advantages and disadvantages associated with Intermix areas include:

Intermix Advantages:

- Low housing density
- Diversity in water supply systems

Intermix Disadvantages:

- Increased risk to firefighters
- Emergency equipment can only protect single assets
- Emergency equipment response times can be delayed due to:
 - Rural Roads (single lane, windy, heavy fuel loading)
 - Long Driveways
- Roads can become congested during emergencies
- Diversity in water supply systems
- Houses are surrounded by vegetation

Intermix areas identified within San Luis Obispo County include portions of Cambria, Suey Creek, West Atascadero, and Parkhill.

Another important factor in evaluating the population in San Luis Obispo County is the temporal shift in population density, which has implications for firefighter or emergency response and fire risk reduction project planning. Temporal shifts in population can occur across multiple scales, including daily, weekly, seasonally, or annually. For example, the population at California Polytechnic State University, San Luis Obispo (Cal Poly) fluctuates on a daily basis during the academic year with an increased population of students, faculty, and staff during daytime hours. Additionally, the population at Cal Poly fluctuates on an annual basis, with peak populations occurring during the academic year between September and June and reduced populations during the summer months.

Other areas of the County are subject to population fluctuations at various scales, including an influx of tourists to coastal communities during summer months, increased populations during daytime/work hours in larger urban areas, and increased human presence in wildland areas during the summer months for recreation purposes. Consideration of these temporal effects is important for planning strategic fuel treatment projects intended to protect communities or resources, allocating emergency response personnel, and reducing potential ignition sources.

Figure 2 presents the population distribution in San Luis Obispo County.

VEGETATION/FUELS

Due to the county's varied climate there is diverse population of plants. Plants are categorized as native plants (naturally-occurring prior to European settlement) or non-native plants which have been transported into San Luis Obispo County from other regions or ecosystems. All plants and vegetation types have varied limits to the environmental conditions they can grow known as "limits of tolerance". The environmental factors that affect these limits of tolerance are precipitation, temperature, solar radiation, soil structure, elevation, and disturbance regime.

The California Wildlife Habitat Relationships System (CWHR) provides a classification system of existing vegetation types important to wildlife. The CWHR system was developed to recognize and categorize major vegetation types in California at a scale sufficient to predict wildlife-habitat relationships. Table 3

presents the CWHR vegetation types identified for San Luis Obispo County and includes acreages and percentage cover for the County.

Table 3. Vegetation Types in San Luis Obispo County

| Vegetation Type* | Approximate Acreage | Percentage |
|-----------------------------|---------------------|------------|
| Agriculture | 120,908 | 5.69% |
| Alkali Desert Scrub | 32,415 | 1.53% |
| Annual Grassland | 991,331 | 46.66% |
| Barren | 6,160 | 0.29% |
| Blue Oak Woodland | 185,966 | 8.75% |
| Blue Oak-Foothill Pine | 36,302 | 1.71% |
| Chamise-Redshank Chaparral | 130,021 | 6.12% |
| Closed-Cone Pine-Cypress | 3,121 | 0.15% |
| Coastal Oak Woodland | 188,229 | 8.86% |
| Coastal Scrub | 88,528 | 4.17% |
| Desert Scrub | 670 | 0.03% |
| Desert Succulent Shrub | 245 | 0.01% |
| Desert Wash | 469 | 0.02% |
| Eucalyptus | 10 | 0.00% |
| Freshwater Emergent Wetland | 25 | 0.00% |
| Juniper | 5,538 | 0.26% |
| Lacustrine | 59 | 0.00% |
| Mixed Chaparral | 158,147 | 7.44% |
| Montane Hardwood | 28,521 | 1.34% |
| Montane Hardwood-Conifer | 12,528 | 0.59% |
| Montane Riparian | 252 | 0.01% |
| Pinyon-Juniper | 5 | 0.00% |
| Ponderosa Pine | 684 | 0.03% |
| Sagebrush | 4,747 | 0.22% |
| Saline Emergent Wetland | 294 | 0.01% |
| Unknown Conifer Type | 1,240 | 0.06% |
| Unknown Shrub Type | 44,753 | 2.11% |
| Urban | 53,659 | 2.53% |
| Valley Foothill Riparian | 3,264 | 0.15% |
| Valley Oak Woodland | 11,120 | 0.52% |
| Water | 15,170 | 0.71% |
| Wet Meadow | 17 | 0.00% |

*Source: FRAP 2012

In addition to weather and topography, vegetation (or fuel) plays a major role in affecting fire behavior and shaping fire hazard potential. Vegetation distribution throughout the County varies by location and topography, with dramatic differences observed between the eastern, agricultural and ranching portions of the County and the more mountainous central and southern regions. Current land cover/fuels distribution within the County is characterized by 32 different vegetation types which have been classified into 14 different fuel models (FRAP 2012), as presented in Table 4. Dominant vegetative cover within San Luis Obispo County is herbaceous, or annual grassland cover (46.9%), distributed primarily in the inland valley and plain areas east of the La Panza, Garcia, and Santa Lucia Ranges. While this fuel type can burn quickly under strong, dry wind patterns, it does not produce the high heat intensity and high flame lengths associated with scrub, chaparral, and forest fuel types. Other significant vegetative cover types include light brush (16.5%), pine/grass (12.1%), and hardwood/conifer litter (8.3%). These vegetation types are primarily associated with the steeper, upland areas in the La Panza, Garcia, and Santa Lucia Ranges throughout the central portion of the County. Fire behavior in brush fuel types produces higher flame lengths than that in grassland, although spread rates are typically slower. Fire behavior in forests is variable, depending on surface fuel conditions and the presence of ladder fuels. Figure 3 presents the distribution of fuels in San Luis Obispo County.

Table 4. Fuel Model Types in San Luis Obispo County

| Fuel Model Number* | Description | Approximate Acreage | Percent Cover |
|--------------------|------------------------------------|---------------------|---------------|
| 1 | Grass | 997,984 | 46.98% |
| 2 | Pine/Grass | 256,610 | 12.08% |
| 4 | Tall Chaparral | 88,290 | 4.16% |
| 5 | Light Brush | 349,780 | 16.46% |
| 6 | Intermediate Brush | 3,103 | 0.15% |
| 8 | Hardwood/Conifer Litter | 176,008 | 8.29% |
| 9 | Medium Conifer | 242 | 0.01% |
| 10 | Heavy Conifer Litter w/ Understory | 9,630 | 0.45% |
| 12 | Medium Slash | 228 | 0.01% |
| 15 | Desert | 545 | 0.03% |
| 28 | Urban | 19,687 | 0.93% |
| 97 | Agriculture | 220,097 | 10.36% |
| 98 | Water | 1,726 | 0.08% |
| 99 | Barren | 458 | 0.02% |

*Source: FRAP 2012

Variations in vegetative cover type and species composition have a direct effect on fire behavior. Some vegetation types and their associated plant species have increased flammability based on plant physiology (resin content), biological function (flowering, retention of dead plant material), physical structure (leaf size, branching patterns), and overall fuel loading. For example, the native shrub species that compose chaparral vegetation types present a high potential hazard based on such criteria.

As described, vegetation plays a significant role in fire behavior. A critical factor to consider is the dynamic nature of vegetation types. Fire presence and absence at varying cycles or regimes affects vegetation type succession. Succession of vegetation types, most notably the gradual conversion of shrublands to grasslands with high fire frequency and grasslands to shrublands with fire exclusion, is highly dependent on fire regime. Biomass and associated fuel loading will increase over time, assuming that disturbance or fuel reduction efforts are not implemented.

Wildfire disturbances can also have dramatic impacts on plants and plant composition. Heat shock, accumulation of post-fire charred wood, and change in photoperiods due to removal of shrub canopies may all stimulate seed germination. The post-fire response for most species is vegetative reproduction and stimulation of flowering and fruiting. The combustion of aboveground biomass alters seedbeds and temporarily eliminates competition for moisture, nutrients, heat, and light. Species that can rapidly take advantage of the available resources will flourish. It is possible to alter successional pathways for different vegetation types through manual alteration. This concept is a key component in the overall establishment and maintenance of fuel reduction projects.

Sudden Oak Death

The climate in the San Luis Obispo County coastal region supports the SOD pathogen (*Phytophthora ramorum*), which affects rhododendron (*Rhododendron* spp.), redwood (*Sequoia sempervirens*), and oaks (*Quercus* spp.). The SOD pathogen requires moist environments for survival and spore dissemination. The SOD pathogen infects the water flow system of susceptible trees and shrubs, eventually blocking this flow and resulting in rapid plant/tree mortality. Precautions must be used when handling infected plant material and/or tools used in trimming/removal of infected wood. More information on SOD and specifics on susceptible plant species can be found via the website for the California Oak Mortality Task Force: <http://www.suddenoakdeath.org/index.html>.

Pine Pitch Canker

Primarily affecting Monterey pine trees (*Pinus radiata*), the disease-causing fungus (*Fusarium subglutinans* f. sp. *Pini*) affects a number of other pine species. Pine Pitch Canker occurs in response to a fungal infection and is characterized by resinous cankers on the trunk, branches or roots accompanied by needle wilt, limb dieback and eventual tree mortality. The fungus is spread through distribution of the fungal spores by contact with infected material and by insect vectors including several species of bark, twig and cone beetles. The Pitch Canker Action Plan was approved in 1995 under the direction of the Pine Pitch Canker Task Force and is intended to identify management, research and educational

priorities to limit the spread of pine pitch canker in California. More information on pine pitch canker can be found via the Pine Pitch Canker Task Force: http://frap.cdf.ca.gov/pitch_canker/.

The implication of these forest diseases and other insect infestations in relation to fire prevention and protection is the relatively rapid mortality that occurs, resulting in increased dead fuel loads. Standing dead fuels contribute to increased wildfire hazard and require treatment and/or removal, especially within wildland urban interface areas. Further, care must be taken to avoid transportation of infected tools, chips, and trimmings/plant material into non-infected regions.

TERRAIN

Topography is essentially the lay of the land and is commonly characterized by measurements of slope, elevation, and aspect. The topography of San Luis Obispo County is extremely variable and greatly affected by the La Panza, Garcia, and Santa Lucia Ranges situated in the central portion of the County and the Caliente Range in the southeastern portion of the County. Elevations in the County range from sea level along the western boundary of the County up to 5,106 feet above mean sea level (amsl) atop Caliente Peak in the Caliente Range in the southeast corner of the County. The Santa Lucia Range is a dominant topographic feature which extends almost the entire length of the western portion of the County. In the northern portion of the County, the Santa Lucia Range rises sharply up from the Pacific Ocean, while in the southern portion of the County it rises more gradually from the coastline. Another notable topographic feature is the Irish Hills, situated along the coastline between the communities of Los Osos to the north and Avila Beach to the south.

Elevation affects temperature, humidity, wind speed, and the growing season of vegetation. Aspect affects the amount of solar radiation absorbed by plants. Southern aspects normally receive maximum solar radiation while northern aspects receive the least. Soil and plant moisture contents are the primary factor influenced by solar radiation. As southern aspects receive the most solar radiation, plants on south-facing slopes tend to be more drought tolerant than those adapted to northern aspects. Slope is the steepness of the land, calculated as the product of the change in elevation (rise) divided by the horizontal distance covered (run). Slope is typically presented in units of percent or degrees. Steeper slopes can have a significant effect on fire behavior as a fire moving uphill can preheat vegetation uphill from it and accelerate the rate of fire spread. The regional topographic conditions within San Luis Obispo County can have considerable effect on wildland fire behavior, as well as on the ability of firefighters to suppress those fires. Steep slopes and canyon alignments are conducive to channeling, deflecting, concentrating, or dispersing winds, and creating extremely erratic wildfire conditions, especially during wind-driven fire events.

Figure 4 presents the topography of San Luis Obispo County.

WEATHER

San Luis Obispo County is characterized by a Mediterranean climate with the majority of annual rainfall occurring during the cooler part of the year. However, the County experiences a great diversity in weather conditions ranging from a typically cool, damp condition along the coast in the northern portion of the County to an intensely hot and arid Cuyama Valley in the southeast portion of the County. Primary factors affecting the climate for San Luis Obispo County are the Pacific Ocean along the western edge of the County and the location and alignment of the La Panza, Garcia, Santa Lucia, and Caliente Ranges situated in the central portion of the County.

Terrain contributes significantly to the weather in the County. For example, the terrain in the southern portion of the County can affect intensity of north and east wind events resulting in a light "Sundowner" (Blier 1998) effect on the coast side of the range. The area east of Nipomo is known by firefighters as an area of unpredictable wind changes, as the influence of the Pacific Ocean and the inland valleys converge. This area was the location of the tragic Spanish Ranch Fire, which killed 4 CAL FIRE firefighters in 1979, and where two near-tragedies occurred during the 1997 Logan Fire. A contributing factor on both these fires was "a sudden wind shift".

The La Panza, Garcia, Santa Lucia, and Caliente Ranges intercept a large portion of the rain bearing clouds moving westward from the Pacific Ocean and therefore have the heaviest precipitation in the County. These ranges also separate the cooler, moister marine-influenced areas from the arid inland

areas during much of the summer. Strong, onshore sea breezes are common in the western portions of the County during the summer months as marine air is drawn inland by thermal low pressure. The entire area east of these ranges can be described as arid, with the driest areas in the southeast portion of the County receiving only 5 to 8 inches of rain annually. Another locally important characteristic affecting weather in the County is the frequency of summer fog along the coast and winter fog in the inland valleys. These two fog conditions augment rainfall and provide moisture for plant growth and affect live and dead fuel moistures.

San Luis Obispo County is broken into three weather zones. Using weather factors such as wind, humidity, and temperature, the three zones are ranked by their frequency of severe fire weather. These areas are ranked as moderate (severe fire weather occurring fewer than 26 days per year), high (severe fire weather occurring between 26 and 46 days per year), and very high (severe fire weather occurring more than 46 days per year). Some areas ranked as 'very high' can experience severe fire weather up to 88 days per year. Although weather conditions can reduce the number of days that a devastating fire can occur, all areas of the County regularly are subject to days or "windows" when severe burning conditions exist.

The California National Fuel Moisture Database is a web-based query system that enables users to view sampled and measured live- and dead-fuel moisture information. The database is routinely updated by fuels specialists who monitor, sample and calculate fuel moisture data and is available at the following link:

http://72.32.186.224/nfmd/public/states_map.php?state=CA

Remote Automated Weather Stations

CAL FIRE/SLO utilizes a system of Remote Automated Weather Stations (RAWS) to acquire site specific weather data. The RAWS are self-contained weather stations which sample weather on a periodic basis and then transfer this information via satellite to a federal server. This weather data can then be used for emergency responses and project planning. There are currently five stations located within San Luis Obispo County. Three of these stations are owned and maintained by CAL FIRE/SLO and two are owned and maintained by the U.S. Forest Service. These stations have been strategically placed to provide maximum coverage for the most critical areas in the County.

RAWS weather station data is maintained on-line and is available at the following link:

http://raws.wrh.noaa.gov/cgi-bin/roman/raws_ca_monitor.cgi?state=NWCC&rawsflag=2

FIRE HISTORY

Fire history is an important component in understanding fire frequency, fire type, significant ignition sources, and vulnerable areas/communities. The topography, vegetation, and climatic condition associated with San Luis Obispo County combine to create a unique situation capable of supporting wildfires. A number of large, damaging wildfires have occurred in the County, notably the Weferling Fire (1960), the Las Pilitas Fire (1985), the Chispa Fire (1989), the Highway 41 (1994), the Highway 58 Fire (1996), and the Logan Fire (1997). The aforementioned fires burned approximately 350,000 acres, destroyed numerous structures, and cost millions of dollars to suppress. The fire with the most significant impact on the County was the Highway 41 Fire, which destroyed 42 residences, caused massive power outages, shut down two major highways for over 24 hours, and destroyed public radio and television transmissions.

Based on historical fire perimeter data (CalMapper 2012), repeated burning is observed within the County primarily in the Santa Lucia Range. Land ownership (US Forest Service) and fuel type (chaparral) appear to be significant factors affecting the geographic distribution of fires in San Luis Obispo County. Grass-dominated lands in the eastern portion of the County exhibit small, well-dispersed burn perimeters, while the heavier chaparral fuels in the central-southern portion of the County (Santa Lucia Range) exhibit a repeated burn pattern, larger fire perimeters, and a more concentrated distribution of fire perimeters. The average interval between large wildfires in excess of 20,000 acres burning within San Luis Obispo County is 7.3 years, with intervals as short as 1 year and as long as 17 years. Table 5 presents notable fires

burning over 20,000 acres in San Luis Obispo County. Figure 5 presents the fire history in San Luis Obispo County.

Table 5. Large Fire History in San Luis Obispo County (Fires Greater than 20,000 acres)

| Fire Name* | Year | Approximate Acreage Burned |
|------------------|------|----------------------------|
| Un-named Fire | 1917 | 21,242 |
| Un-named Fire | 1921 | 63,909 |
| Un-named Fire | 1922 | 25,637 |
| Un-named Fire | 1939 | 28,313 |
| Pilitas #1 Fire | 1950 | 22,844 |
| Sam Jones Fire | 1953 | 35,455 |
| Big Dalton Fire | 1953 | 67,701 |
| Weferling Fire | 1960 | 51,451 |
| Buckeye Fire | 1970 | 42,307 |
| Las Pilitas Fire | 1985 | 84,271 |
| Highway 41 Fire | 1994 | 50,729 |
| Highway 58 Fire | 1996 | 106,969 |
| Logan Fire | 1997 | 49,490 |

*Source: CalMapper 2012

IGNITION HISTORY

Ignition data for San Luis Obispo County was analyzed for a 5-year period (2005-2010) to evaluate ignition trends and problems within the County. This data set includes 1,694 ignition points and includes an identification of fire cause. Table 6 presents the ignition history for San Luis Obispo County between 2005 and 2010, classified by fire cause.

Table 6. Ignition History for San Luis Obispo County (2005-2010)

| Ignition Cause* | Number | Percentage |
|-------------------|--------|------------|
| Arson | 62 | 3.7% |
| Campfire | 11 | 0.6% |
| Debris Burning | 64 | 3.8% |
| Equipment Use | 275 | 16.2% |
| Lightning | 10 | 0.6% |
| Miscellaneous | 417 | 24.6% |
| Playing with Fire | 123 | 7.3% |
| Powerline | 38 | 2.2% |
| Railroad | 1 | 0.1% |
| Smoking | 21 | 1.2% |
| Undetermined | 229 | 13.5% |
| Unknown | 246 | 14.5% |
| Vehicle | 197 | 11.6% |

*Source: CAL FIRE/SLO 2012

The 5-year ignition history for San Luis Obispo County identifies trends in ignition type, with the majority of ignition causes classified as miscellaneous, undetermined, or unknown. Vehicle and equipment use also emerge as significant ignition sources in the County. Spatial analysis of ignition locations reveals a direct correlation between ignitions and roads/transportation corridors. Specifically, out of the 1,694 ignition points included in the data set, 761 (approximately 45%) are located within 20 feet of a road. Nearly 25% of these 761 ignitions adjacent roadways occur within 20 feet of highways in the County.

High density of ignitions is also observable within and adjacent urban areas, with notable concentrations observed near the communities of Cambria, Lake Nacimiento, Paso Robles, Atascadero, Los Osos, San Luis Obispo, Avila Beach, Arroyo Grande, and on the Nipomo mesa. This concentration of ignitions in urban areas and along transportation corridors emphasizes the importance of public education and fire prevention activities, including road-side fuel treatments and strategic management of flashy fuels (e.g. grasses) in WUI and Wildland Urban Intermix areas. Figure 6 presents the ignition history from 2005 to 2010 and the associated ignition density for San Luis Obispo County.

FIRE THREAT

As observed in the fire history data for San Luis Obispo County, land ownership and fuel type strongly influence the location and frequency of burning. The location of the Los Padres National Forest (LPNF) within the Santa Lucia Range presents a risk to adjacent communities based on its burn history and the relative lack of fuel reduction activities on the LPNF. Additionally, wildfires originating on or burning through the LPNF have posed significant risk to communities in San Luis Obispo County. For example, the 1985 Las Pilitas Fire burned from the LPNF into a portion of the City of San Luis Obispo and the 1994 Highway 41 Fire burned from the LPNF into the cities of Atascadero and San Luis Obispo.

Another dominant factor affecting wildfire risk is the prevailing wind pattern in San Luis Obispo County. Specifically, on-shore winds from the northwest routinely pick up in the late morning hours increasing the risk of pushing a fire in a southeast direction if not extinguished by late-morning (approximately 10 am). This condition is observable in the shape of large fire burn perimeters in San Luis Obispo County. For example, prevailing winds contributed significantly to the extent of the 1994 Highway 41 Fire, which originated northwest of the City of San Luis Obispo and burned southwest toward the cities of San Luis Obispo and Atascadero.

While no large fires are included in the fire history data set for the Irish Hills area in the County, the potential fire risk in this area is considered high. For example, a fire originating in the Los Osos area or at Diablo Canyon could be pushed by prevailing winds southeast toward the communities of Avila Beach and Pismo Beach.

B. REGULATORY FRAMEWORK

The following sections describe existing environmental regulations relevant to fuels management activity in San Luis Obispo County.

ENVIRONMENTAL REVIEW

Proposed fuel treatment projects on federal land will require compliance with the National Environmental Policy Act (NEPA). Projects implementing a CWPP recommendation on federal land within the WUI are afforded expedited NEPA review. NEPA review is typically conducted by the federal agency responsible for land ownership (e.g. USFS, BLM).

Proposed fuel reduction projects on non-federal lands may require compliance with the California Environmental Quality Act (CEQA) or the California Forest Practice Rules (CFPR). Private landowners conducting defensible space projects under Public Resource Code (PRC) 4291 guidelines are not subject to CEQA review requirements. Non-defensible space fuel treatment projects on non-federal lands that are discretionary and are to be carried out or approved by public agencies would be subject to CEQA review and documentation (CEQA Guidelines 21080(a)). CEQA review for non-defensible space fuel reduction projects should be instituted during the project planning process.

The California Forest Practice Rules may be applicable to fuel reduction efforts on timberlands in San Luis Obispo County. CAL FIRE is responsible for administering Timber Harvesting Regulations conducted throughout California on all non-federal timberland. This applies regardless of zoning and includes lands inside of city limits. The removal of California native "commercial" timber species from forested lots, areas of pending new construction, and from around existing structures is included under these regulations. A CAL FIRE forester should be contacted to verify if tree removal is subject to the California Forest Practice Rules. Depending on the situation and based on Title 14, California Code of Regulations and the Public Resources Code, a Timber Harvest Plan (THP), a Timberland Conversion Permit (TCP), or another type of timber harvest plan exemption or emergency document may be required.

Note: It is the responsibility of planners and those implementing projects to ensure that all environmental compliance and permitting processes are met as per the California Environmental Quality Act, PRC, § 21000 and 14 CCR §15000 (CEQA Guidelines). It is very important to work with public agencies to determine whether CWPP projects necessitate environmental review.

AGENCIES

Regulatory permits may also be required for fuel treatment actions that would adversely impact riparian areas under the jurisdiction of the U.S. Army Corps of Engineers (ACOE), the Regional Water Quality

Control Board (RWQCB), and the California Department of Fish and Game (CDFG). For fuel treatment projects, it is anticipated that the ACOE may require a fill permit under section 404 of the Clean Water Act. CDFG may require a streambed alteration agreement under Section 1602 of the California Fish and Game Code for such projects and the RWQCB may require a water quality certification under Section 401 of the Clean Water Act. Additionally, it is anticipated that the ACOE would consult with the U.S. Fish and Wildlife Service (USFWS) pursuant to Section 7 of the federal Endangered Species Act (ESA) during the 404 permitting process for potential impacts to special-status plants/wildlife and their habitats. Applications for each of these regulatory permits can be processed concurrently; however, some may take longer than others to process and obtain. Consultation with a qualified biologist and initiating any necessary seasonal surveys and early coordination with the regulatory agencies is recommended.

CALIFORNIA COASTAL COMMISSION

To be completed

Coastal Commission – County LCP

Morro Bay

Pismo Beach

Grover Beach

Sweet Springs Marsh

Otto/South Bay

SAN LUIS OBISPO COUNTY GENERAL PLAN AND ORDINANCES

The San Luis Obispo County General Plan identifies the County's land use, circulation, environmental, economic, and social goals and policies as they relate to land use and development. It provides a framework for government decision-making and guides development in the County. Several components of the General Plan relate to fire planning and vegetation management, including the Safety Element, the Conservation and Open Space Element, and the Land Use Element, amongst others. The San Luis Obispo County General Plan documents are provided [here](#).

In addition to the County General Plan, other County Ordinances, Specific Plans, Area Plans, and Design Plans may affect fire planning and vegetation management in the County. Other relevant County documents are provided [here](#).

LOCAL CITY AND DISTRICT PLANS, REGULATIONS, AND ORDINANCES

Local City and District plans, regulations, and ordinances may also affect fire planning and vegetation management activities. The following links are provided to identified documents, however, verification of regulations should be completed prior to initiation of any project.

San Luis Obispo (City) General Plan

San Luis Obispo (City) Ordinances

[More](#)

C. COUNTY FIREFIGHTING CAPABILITIES

Fire management responsibilities in San Luis Obispo County are currently distributed between the San Luis Obispo County Fire Department, CAL FIRE, [the United States Forest Service \(USFS\)](#), [the Bureau of Land Management \(BLM\)](#), and local fire departments. The following provides more detail on the responsibilities of each of the aforementioned agencies.

SAN LUIS OBISPO COUNTY FIRE

The San Luis Obispo County Fire Department contracts with the California Department of Forestry and Fire Protection, (CAL FIRE), which protects most unincorporated areas within the County. The CAL FIRE/San Luis Obispo County Fire Department (CAL FIRE/SLO) responds to emergencies and other requests for assistance, plans for and takes action to prevent emergencies and to reduce their impact, coordinates regional emergency response efforts, and provides educational outreach for the community.

CAL FIRE

As noted, the California Department of Forestry and Fire Protection, (CAL FIRE) provides fire protection for State Responsibility Areas (SRA) and serves as the San Luis Obispo County Fire Department, protecting most unincorporated areas within the County. In addition, CAL FIRE/San Luis Obispo County Fire Department (CAL FIRE/SLO) provides fire protection under contract for the City of Pismo Beach and the communities of Los Osos and Avila Beach.

Facilities/Resources

CAL FIRE/SLO initial attack resources include approximately 180 full-time state employees, supplemented by as many as 100 state seasonal firefighters, 300 County paid-call firefighters (PCF) and reserve firefighters, and 120 state inmate firefighters. CAL FIRE/SLO facilities include 9 CAL FIRE stations (6 of which are jointly operated with San Luis Obispo County Fire), 9 San Luis Obispo County Fire Stations, 2 Pismo Beach Fire Stations (1 of which is jointly operated with San Luis Obispo County Fire), 1 South Bay (Los Osos) Fire Station, 1 CAL FIRE Air Attack Base, 1 CAL FIRE Conservation Camp, and 1 CAL FIRE Youth Conservation Camp. Additionally, fire response apparatus includes:

CAL FIRE/SLO

- 12 Engines (plus four reserve engines)
- 3 Bulldozer/transport units
- 1 Mobile Field Kitchen and Support Trailer
- 2 Air Tankers PERSONNEL
- 1 Air Attack Plan

San Luis Obispo County Fire Department

- 13 BLS Engines/2 ALS Engines (plus four reserves)
- 1 OES Engine
- 4 Water Tenders
- 2 Aircraft Crash/Rescue
- 6 Rescues (plus one reserve)
- 2 Fire Boats, 5 Rescue Boats
- 1 Patrol
- 1 Mobile Air Unit
- 1 Hazardous Materials Unit

City of Pismo Beach Fire Department

- 3 BLS Engines
- 1 BLS Rescue (plus one reserve and one Lifeguard truck)

Paso Robles Air Attack Base

Established in 1968, the Paso Robles Air Attack Base responds to an average of 350 calls per year. Staff at the base consists of one battalion chief, two fire captains, one fire apparatus engineer, and five firefighters. The complement of aircraft located at Base includes one OV-10 Bronco and two S-2T air tankers. On average, the Base pumps about 750,000 gallons of retardant a year, and with its pumps, loading pits, and equipment, the Base has a possible peak output of 300,000 gallons of retardant each day.

The Base provides initial attack for southern Monterey County, western Fresno and Kings Counties, northern Santa Barbara County and all of San Luis Obispo County: an initial attack area of approximately 6.5 million acres.

Cuesta Conservation Camp

Cuesta Conservation Camp is an inmate fire-fighting camp which was formally activated on May 1, 1962. The Camp is located approximately six miles west of San Luis Obispo on State Highway 1 on property leased from the California National Guard at Camp San Luis Obispo. Current staffing at the Camp consists of a Division Chief, twelve Fire Crew Captains, and a Heavy Equipment Mechanic. When fully staffed, the number of fire crew-eligible inmates assigned to the Camp is 100 and comprises the five fire crews (17 firefighters each). Each fire crew is trained and supervised by an experienced and competent

fire captain. Additional inmates staff in-camp positions that include a mixture of reserve firefighters and non-firefighter camp support personnel. These men work in the camp shops and/or perform maintenance, and clerical services. Additional staff at the Camp includes an office manager and two Heavy Fire Equipment Operators who staff a fire-fighting bulldozer and transport unit as well as assist with vehicle maintenance and repair.

Training

CAL FIRE/SLO maintains an active training program to be responsive to its mission, remain vigilant and flexible to change, incorporate advanced technology, and react to the external influences that challenge the human resources of the department. The backbone of the training program is its overarching coordination of many entities that deliver fire training to every type of firefighter, career or volunteer, every rank of firefighter from entry-level to certified Fire Chief, fire mechanics, and fire inspectors. Individual fire departments, community colleges, the Firefighter Joint Apprenticeship all play a vital role in developing the hands-on skills, the career foundational skills, or the management skills necessary to provide for those that provide for the public's safety.

The goal of the CAL FIRE/SLO Training Bureau is to develop and maintain a County and Unit-wide cooperative training plan that serves the needs of all agencies delivering fire, rescue, and emergency medical services within San Luis Obispo County.

U.S. FOREST SERVICE

Add, as necessary

BUREAU OF LAND MANAGEMENT

Add, as necessary

LOCAL FIRE DEPARTMENTS

Within San Luis Obispo County, there are 18 local fire departments or fire protection districts including:

[Atascadero Fire Department](#)

Atascadero State Hospital Fire Department

Avila Beach Fire Department

Camp Roberts Fire Department

Cayucos Fire Protection District

[Cambria Fire Protection District](#)

California Men's Colony Fire Department

[Five Cities Fire Authority](#) (includes the Cities of Arroyo Grande and Grover Beach and the community of Oceano)

[Guadalupe Fire Protection District](#)

Hearst Castle Fire Department

[Morro Bay Fire Department](#)

[Paso Robles Fire Department](#)

Pismo Beach Fire Department

[South Bay Fire Protection District](#)

[San Luis Obispo City Fire Department](#)

[San Miguel Fire Protection District](#)

[Santa Margarita Fire Protection District](#)

[Templeton Fire Protection District](#)

AUTOMATIC/MUTUAL AID

The location and size of San Luis Obispo County dictate that local fire resources must be used effectively since these resources are limited, and additional resources could be several hours away. The diversity of available resources and fire-related problems mandate the cooperative use of fire service resources. Add **CCOP info** Cooperative assistance is provided on reciprocal contributions without charge and may be provided in two forms:

- Automatic Aid: a predetermined immediate joint response as a means to provide effective fire protection
- Mutual Aid: responses to supplement the resources of any fire agency during a period of actual or potential need, including move-up and over assignments

Mutual Aid is dependent on recognition that equipment and resources are expected to be provided only when dispatch of the resources will not unduly jeopardize local capabilities.

This San Luis Obispo County Fire Services Mutual Aid Plan intends to provide the following:

- Upon demand, provide the cost-effective use of the emergency resources of all jurisdictions
- Achieve a balance over the long run between providing and receiving entities
- Eliminate complex financial and legal agreements
- Address all mutual aid responses and station coverage assignments required of the fire service, including but not limited to the following:
 - Fire
 - Rescue
 - Hazardous Materials
 - Earthquake
 - Natural and Human-caused Disasters
 - EMS/Mass Casualty Incidents

The following fire departments, districts, and agencies currently engage in Automatic/Mutual Aid agreements in San Luis Obispo County:

- Atascadero Fire Department
- Atascadero State Hospital Fire Department
- Avila Beach Fire Department
- CAL FIRE San Benito-Monterey Ranger Unit
- Camp Roberts Fire Department
- Cayucos Fire Protection District
- CAL FIRE
- Cambria Fire Protection District
- California Men's Colony Fire Department
- CAL FIRE Fresno-Kings Ranger Unit
- Five Cities Fire Authority
- Guadalupe Fire Protection District
- Hearst Castle Fire Department
- Morro Bay Fire Department
- Paso Robles Fire Department
- Pismo Beach Fire Department
- Santa Barbara County Fire Department
- South Bay Fire Protection District
- San Luis Obispo County Fire Department
- San Luis Obispo City Fire Department
- San Miguel Fire Protection District
- Santa Maria Fire Protection District
- Santa Margarita Fire Protection District
- Templeton Fire Protection District
- U.S. Forest Service (Los Padres National Forest)

In addition to the Automatic/Mutual Aide agreements identified above, dispatch agreements also exist between CAL FIRE/SLO, Cambria Community Services District, the Cayucos Fire Protection District, the Santa Margarita Fire Protection District, the San Miguel Community Services District, the Templeton Community Services District, and CALSTAR (private air ambulance).

SECTION II: COLLABORATION

A. COMMUNITY / AGENCIES / FIRE SAFE COUNCILS

As a key component of the Healthy Forest Restoration Act (HFRA) of 2003, a Community Wildfire Protection Plan (CWPP) serves as a mechanism for community input and identification of areas presenting high fire risk as well as identification of potential projects intended to mitigate such risk. This Plan integrates the community-focused approach of the CWPP process and is intended to provide the community a forum for identifying assets and communities at risk from wildfire, which may include people, property, natural resources, cultural values, economic interests, and infrastructure. The identification of these assets or communities by the community strongly influences the potential wildfire hazard mitigation projects identified in this Plan.

Representatives involved in the development of this Plan are included Table 7. Their organization and title are indicated below.

Table 7. Representatives Involved in Plan Development

| Organization | Title |
|----------------------------------|-------|
| CAL FIRE/SLO | |
| San Luis Obispo FireSafe Council | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

To be updated following community meetings and coordination with local FD's

1. Identify role that community played in the process
2. Identify community meetings, including dates, locations, and summary of meetings (projects, concerns, etc.)
3. Identify coordination with local FD's (meetings, concerns, input)

SECTION III: VALUES

CAL FIRE's Fire and Resource Assessment Program (FRAP) prepared the document entitled California's Forests and Rangelands: 2010 Assessment¹. This document satisfies 2008 Federal Farm Bill provision that each state conduct an assessment of forest resources, which is intended to identify key issues facing each state and requires the delineation of spatial areas called Priority Landscapes. Priority Landscapes are intended to focus investments and other programs to address issues identified in the assessment. Priority Landscape data sets related to fire include an evaluation of fire risk as related to carbon, community water, ecosystem health, forest economics, human infrastructure, range economics, recreation and open space, and wildlife.

The fire/human infrastructure Priority Landscape developed by FRAP represents the convergence of areas with high wildfire threat and human infrastructure assets. Included in this assessment are communities and assets. Community areas include incorporated city boundaries and Census Designated Places for unincorporated communities while assets include residential and commercial structures, major roads, and transmission lines. Wildfire threat is the result of an analysis of fire frequency (likelihood of a given area burning) and potential fire behavior (fire hazard).

For the purposes of this Plan, San Luis Obispo County has been divided into five Planning Areas to facilitate localized pre-fire planning efforts. The following provides a brief description of each Planning Area. Priority Landscapes and Planning Areas are also delineated in Figures 7A through 7E.

Planning Area 1

Planning Area 1 encompasses approximately 300,000 acres and is situated along the Pacific Ocean from the Monterey County Boundary in the north to approximately Point Buchon in the south. Its eastern boundary runs along the ridge of the Santa Lucia Range and extends eastward to the City limits of Atascadero and southward to encompass the City of San Luis Obispo. Planning Area 1 includes the Priority Communities of Baywod Park-Los Osos, Cambria, and San Luis Obispo. Large fire history in the Planning Area includes the 1960 Weferling Fire and the 1994 Highway 41 Fire.

Planning Area 2

Planning Area 2 encompasses approximately 459,000 acres and is situated along the southern boundary of the County, adjacent the Cuyama River. Planning Area 2 stretches the entire length of the County, from Kern County in the east to the Pacific Ocean in the west. Its northern boundary runs along the ridge of the Garcia and Caliente Ranges and extends northward to the City limits of San Luis Obispo. Planning Area 2 includes the Priority Communities of Arroyo Grande and Nipomo. Large fire history in the Planning Area includes the 1985 Las Pilitas Fire and the 1997 Logan Fire.

Planning Area 3

Planning Area 3 encompasses approximately 567,000 acres and is situated along the northern edge of the County from the Kern County Boundary in the east to the ridge of the Santa Lucia Range in the west. Its southern boundary extends roughly eastward from the City of Atascadero, but excludes the Santa Lucia Range. Planning Area 3 includes the Priority Communities of Adelaida, Atascadero, Lake Nacimiento, Paso Robles, San Miguel, and Templeton. Large fire history in the Planning Area includes the 1960 Weferling Fire in the far western portion of the Planning Area.

Planning Area 4

Planning Area 4 encompasses approximately 768,000 acres and is situated in the central portion of the County between Planning Area 3 to the north and Planning Area 2 to the south. Its eastern boundary abuts Kern County, and its western extends up to the City of Atascadero. Planning Area 4 includes the Priority Community of Santa Margarita. Large fire history in the Planning Area includes an un-named fire in 1939, the 1985 Las Pilitas Fire, and the eastern portion of the 1994 Highway 41 Fire.

¹ <http://frap.cdf.ca.gov/assessment2010.html>

Planning Area 5

Planning Area 5 encompasses approximately 30,000 acres and is situated in the Irish Hills along the coast between approximately Point Buchon in the northwest to the eastern-most portion of the City of Pismo Beach in the southeast. Planning Area 5 includes the Priority Communities of Avila Beach and Pismo Beach. Fire history in the Planning Area is limited primarily to a few small fires adjacent Diablo Canyon Nuclear Power Plant.

A. ASSETS

For the purposes of this Plan, assets are those values that may be at risk from wildfire. Assets in San Luis Obispo County include power generation and transmission facilities, emergency communication facilities, transportation infrastructure, tourist and recreation areas, environmental areas, military installations, natural resource production facilities, and commercial fishing facilities. Figures 7A through 7E present the assets identified in San Luis Obispo County and Table 8 presents the assets in San Luis Obispo County, by management zone.

Table 8. Assets in San Luis Obispo County, by Planning Area

| Asset | Planning Area |
|--|---------------|
| Trains/Rail System | All |
| Transportation Corridors (Highways 166, 101, 46, 41, and 58) | All |
| Diablo Canyon Power Lines | 1, 2, 6 |
| Communication System/Repeaters | ? |
| ConocoPhillips Oil Refinery | ? |
| Hearst Castle | 1 |
| Communication Sites | 1 |
| Los Padres FS Botanical Gardens | 1 |
| Bishop Peak Recreational Site | 1 |
| San Luis Mountain Recreational Site | 1 |
| Montana De Oro State Park Campground | 1 |
| Whale Rock Reservoir | 1 |
| San Simeon State Park | 1 |
| San Luis V.O.R. | 1 |
| Chorro Regional Park | 1 |
| Hearst Castle | 1 |
| Camp San Luis Obispo (California National Guard) | 1 |
| San Luis Obispo County Airport | 2 |
| Lopez Lake Recreational Area | 2 |
| PG&E High Power Line NW of Atascadero | 3 |
| Oak Shores Campground | 3 |
| Santa Margarita Lake Recreational Area | 4 |
| Upper Highway 229 | 4 |
| Port San Luis Obispo/Lighthouse | 5 |
| Diablo Canyon Nuclear Power Plant | 5 |
| Hartford Ocean Pier Complex | 5 |

B. COMMUNITIES

Communities at Risk from potential wildfire were identified at the federal level in the 2001 National Fire Plan (66 Fed. Reg. 753, January 4, 2001), which included only communities that were in the vicinity of federal lands. Recognizing that wildfire risk was not limited to areas near federal lands, CAL FIRE developed a more inclusive list of communities at risk for the State of California, which is managed by the California Fire Alliance. The communities identified in this Plan for San Luis Obispo County were derived from the Geographic Names Information System (GNIS) database and evaluated to ensure that all Communities at Risk were accounted for. The GNIS database of communities in the County was then consolidated to represent major communities in the County and excludes historical places. For example,

the community of Cambria includes the GNIS-identified communities of Cambria, Cambria Pines, East Village, Happy Hill, Harmony, Leimert, Lodge Hill, Marine Terrace, Park Hill, Tin City, and West Village.

The communities for San Luis Obispo County are identified in Table 9. In addition, Table 9 identifies which Planning Area the community is within, if it is a Community at Risk (CAR), and if it is an incorporated city. Figures 7A through 7E present the location of communities in San Luis Obispo County.

Table 9. Communities in San Luis Obispo County

| Community* | Planning Area | Community at Risk** | Incorporated City |
|-----------------------|---------------|---------------------|-------------------|
| Adelaida | 3 | X | No |
| Arroyo Grande | 2 | X | Yes |
| Atascadero | 3 | X | Yes |
| Avila Beach | 5 | X | No |
| Baywood Park-Los Osos | 1 | X | No |
| Callender | 2 | | No |
| Cambria | 1 | X | No |
| Cayucos | 1 | X | No |
| Creston | 4 | X | No |
| Edna | 2 | | No |
| Garden Farms | 4 | | No |
| Grover Beach | 2 | | Yes |
| Lake Nacimiento | 3 | X | No |
| Los Berros | 2 | | No |
| Morro Bay | 1 | X | Yes |
| Nipomo | 2 | X | No |
| Oceano | 2 | X | No |
| Paso Robles | 3 | X | Yes |
| Pismo Beach | 5 | X | Yes |
| San Luis Obispo | 1 | X | Yes |
| San Miguel | 3 | X | No |
| San Simeon | 1 | | No |
| Santa Margarita | 4 | X | No |
| Shandon | 3 | | No |
| Templeton | 3 | X | No |
| Whitley Gardens | 3 | | No |

*Source: CalMapper 2012

**Communities listed as Communities at Risk on the California Fire Alliance website:

http://www.cafirealliance.org/communities_at_risk/communities_at_risk_list

Priority Communities

To evaluate Priority Communities in the State, FRAP analyzed the fire/human infrastructure Priority Landscape data set in combination with communities that include at least 500 people or 1,000 acres. Communities in medium- or high-ranked Priority Landscapes (for fire/human infrastructure) constitute Priority Communities. The intent of the Priority Community identification is to provide a way of identifying possible communities for outreach and further strategy development. The Priority Communities data set was utilized as a starting point for identifying and prioritizing communities in San Luis Obispo County where efforts can be focused to reduce wildfire threat. This data set was refined based on input from community stakeholders and based on an assessment of fire history, ignition history, land ownership, vegetation/fuel, or terrain.

Priority Communities for San Luis Obispo County are identified in Table 10. Priority Communities are those in which pre-fire management activities, including hazardous fuel reduction and public education, should be focused. This list of communities is based on available fire hazard planning data from FRAP, augmented with a County-scale analysis of fire hazard variables and input from community stakeholders and should be routinely evaluated and updated, as necessary.

Table 10. Priority Communities in San Luis Obispo County

| Community* | Planning Area |
|-----------------------|----------------------|
| Adelaida | 3 |
| Arroyo Grande | 2 |
| Atascadero | 3 |
| Avila Beach | 5 |
| Baywood Park-Los Osos | 1 |
| Cambria | 1 |
| Lake Nacimiento | 3 |
| Nipomo | 2 |
| Paso Robles | 3 |
| Pismo Beach | 5 |
| San Luis Obispo | 1 |
| San Miguel | 3 |
| Santa Margarita | 4 |
| Templeton | 3 |

*Source: CalMapper 2012/FRAP 2012

SECTION IV: PRE-FIRE MANAGEMENT STRATEGIES

The management strategies included in this section focus on pre-fire planning, statutes and regulations, fire prevention, and public education and outreach. These strategies are intended to meet the agency and community goals identified during the development of this Plan. Agency and community goals identified during the development of this Plan include increasing firefighter and public safety, reducing wildland fire costs and losses, implementing WUI building standards, implementing and maintaining defensible space around structures, supporting pre-fire and emergency planning, promoting inter-agency cooperation, reducing ignitions in the County, and promoting public education about wildfire.

A. PRE-FIRE PLANNING

A component of pre-fire management involves pre-planning for anticipated or expected events or emergencies and may include evacuation planning, mapping and GIS data management, or incident pre-attack planning. Additionally, department master plans and strategic plans identify department needs and goals. Fire response and management agencies in the County have different levels of pre-fire planning efforts. The following summarizes pre-fire planning activities in the County and provides links to relevant agency documents/maps.

CAL FIRE/SLO routinely prepares, updates, and maintains the following types of pre-fire planning documents (click on each item to be directed to the appropriate CAL FIRE/SLO website containing pre-plan documents and maps):

- [Wildland Fire Pre-Attack Plans](#)
- [Evacuation Plans](#)
- [Tsunami Plans](#)
- [GIS Mapping](#)

Other fire management agencies in the County with pre-fire planning documents include:

- City of San Luis Obispo – [Fire Master Plan](#)
- Morro Bay Fire Department – [Strategic Plan](#)
- **Others?**

B. STATUTES AND REGULATIONS

This section identifies regulations in place at a state, county, and local level that are focused on fire prevention and other pre-fire management activities.

State Requirements

Public Resources Code 4290 – California Code of Regulations (CCR)

CCR Chapter 1, Division 1.5 of Title 14 (PRC 4290) is the statute that requires emergency access, signing and building numbering, private water supply reserves for emergency fire use, and vegetation modification in areas designated as State Responsibility Area (SRA).

Public Resources Code 4291 (PRC 4291)

The State of California Public Resource Code 4291 (PRC 4291) requires owners of property to create defensible space around structures on their property where firefighters can provide protection during a wildfire. PRC 4291 applies to areas of the state within the responsibility area of CAL FIRE (SRA) and includes:

“a building or structure in, upon, or adjoining any mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or any land that is covered with flammable material...”

The defensible space distance is measured along the grade from the perimeter or projection of the building or structure. Under PRC 4291, the defensible space distances require up to 100 feet, or to the property limit, whichever is closer; however, the amount of fuel modification necessary may extend beyond 100 feet depending on the flammability of the structure, topography, and fuels. The CAL FIRE Guidelines for Creating Defensible Space as outlined in PRC 4291 can be found here:

CAL FIRE/SLO also has an inspection process in place to assure compliance with fire and safety codes. This includes inspection of new construction and maintenance inspections of existing development. New construction inspections are done by fire prevention staff as part of the County building permit process. The maintenance inspection program for existing development includes the hazard reduction inspection program (LE-100 program) and is carried out by fire prevention staff and by fire engine companies and includes inspections of:

- Clearance around structures
- Equipment safety
- Power line right-of-way clearance
- Railroad rights-of-way clearance
- Solid waste facilities clearance and safety

The hazard reduction inspection program (LE-100) is managed by CAL FIRE/SLO Battalion Chiefs. Engine companies are responsible for performing inspections within their initial attack areas and are typically performed during spring and summer months. Engine companies are directed to leave an inspection notice at all properties to inform the homeowner there has been an inspection. Engine companies are also instructed to leave notices at residences where access is blocked. During the inspection, engine company personnel review and educate the homeowner on fire prevention requirements. If there are violations, a notice is issued and the homeowner is instructed to mitigate the violation. The engine company then returns for a re-inspection and if the violation is not mitigated, a citation may be issued and/or turned over to fire prevention staff for enforcement.

County Requirements

Fire Codes

San Luis Obispo County, as well as all other jurisdictions in the County, has adopted with amendments, the California Fire Code (CFC) and the California Building Code (CBC) into local ordinance. These regulations have many requirements for the protection of the citizens from WUI fires, including:

- Water requirements
- Minimum access road requirements
- Roofing requirements
- Construction requirements
- Hazard abatement requirements
- Turnaround requirements

County General Plan

The [San Luis Obispo County General Plan and ordinances](#) include provisions for access requirements, housing density, allowable occupancy use, community water system requirements, and property set back requirements. All development being reviewed by San Luis Obispo County Planning Staff is also reviewed by CAL FIRE/SLO to ensure the project is designed within the parameters of the County adopted General Plan. This review ensures the development has secondary access, proper water storage, defensible space around the development, and will use fire safe construction materials prior the subdivision of lands.

County Municipal Code

The San Luis Obispo County Code of Ordinances also includes requirements for fire prevention, included in Title 16. This Code section outlines burning restrictions and vegetation clearance requirements. Title 16 can be found at: <http://library.municode.com/HTML/16608/level1/TIT16FIPR.html#TOPTITLE>

Local Requirements

In addition to requirements at a State and County level, incorporated cities and other service districts in the County have fire prevention ordinances and practices in place. Direct links to local city or district fire

departments are provided in this Plan in [Section 1 C](#). These agencies should be contacted directly for further information related to their jurisdiction.

Weed Abatement Ordinances

Cities and special districts within the County that have weed abatement ordinances in place include (click on each City or CSD to link to related Ordinance):

Cities

[Arroyo Grande](#)

[Atascadero](#)

[Grover Beach](#)

[Paso Robles](#)

[Pismo Beach](#)

[San Luis Obispo](#)

Community Service Districts

[Cambria](#)

[Cayucos](#)

[Los Osos](#)

[Morro Bay](#)

[Oceano](#)

[Templeton](#)

San Luis Obispo County does not currently have a weed abatement ordinance in place, however if a structure is located within a State Responsibility Area, then PRC 4291 is enforced by CAL FIRE/SLO.

C. FIRE PREVENTION

This section summarizes the factors affecting structural ignitions in the WUI and outlines efforts for preventing such ignitions. The information presented in this section is intended to be general in nature and has not been developed for a specific project. Should projects be identified for the purpose of reducing structural ignition or otherwise affecting wildland fire risk potential, evaluation and documentation of environmental effects will be required prior to implementation, which may include CEQA review. Additionally, project-related permits may be required. This level of assessment is typically conducted in the project planning phase once the scope of a project is identified.

Reduction in Structural Ignitability

A progressive process typically occurs as a structure is exposed to a wildland fire. First, ashes are cast in front of a fire by its smoke or convection column. In some instances, these ashes retain enough heat and/or flame that secondary ignitions are possible. Following the lighter ash, heavier embers/firebrands with more surface area and mass, and consequently, more heat, are blown in front of advancing flames and often provide sources of additional ignition to structures and vegetation. Finally, intrusion of a flame front and the associated radiant heat flux can expose combustible material outside of a building and the exterior of the structure itself to various levels of radiant heat. Studies reveal that the actual exposure of a building to a typical wildland flame front by the perimeter of a fire is usually less than six minutes. However, exposure to the other forms of ignition source materials can result in proliferation of secondary ignitions of structures or adjacent vegetation and a longer exposure, depending on wind, topography and fuel conditions.

To enhance structural survivability, the primary focus must include first, providing sufficient measures to prevent the ignition of structural materials from objects (fire brands) that are cast in front of the fire and, second, reducing the likelihood that direct flame impingement will occur and preventing flames from penetrating into the building and resulting in an interior fire. There are considerable problems in achieving these objectives without the benefit of new construction subject to the latest building codes.

All forms of fire protection are classified as either active or passive. Active fire protection includes implementing specific action to control a fire in some manner. Passive fire protection uses resistance to ignition or provides some form of warning that allows other action to be taken. These two classifications of

self-defense mechanisms create different problems with regard to being accepted as alternatives for building construction. Furthermore, certain self-defense mechanisms must be incorporated during new construction, and others may only be capable of being added as a retrofit to existing structures. In the absence of ignition resistant construction, the focus for reducing structural ignitability shifts to landscaping and fuel treatment areas.

Many of the residential structures within the San Luis Obispo County are not built to current building code standards, which have been implemented statewide and are based on intelligence gained from large wildfire events that included structure loss. It is not realistic to retrofit existing homes with enhanced ignition resistant construction, although the existing code can trigger upgrades to current code requirements for certain home additions. Based on the type of development within the County and the existing fuels and terrain, structural ignition reduction will primarily be realized through implementation of fuel modification as described in this Plan. Standard fuel treatment prescriptions are presented in the following sections. As previously noted, environmental review and permitting may be required prior to project implementation. This should be completed during the project planning phase once the project scope has been identified.

VEGETATION MANAGEMENT

Defensible Space Fuel Treatment Strategies

The following descriptions of vegetation treatment/hazard reduction operations are provided to promote individual homeowner compliance with PRC 4291. The guidelines, published by CAL FIRE² should be reviewed by homeowners. Additionally, Figure 8 presents an illustrated graphic outlining the basics of defensible space creation and maintenance, as published by CAL FIRE. The following guidelines, provided by CAL FIRE, outline two distinct zones: from the structure outward to 30 feet and from 30 to 100 feet from structures (Reduced Fuel Zone):

1. Maintain a firebreak by removing and clearing away all flammable vegetation and other combustible growth within 30 feet of each building or structure, with certain exceptions pursuant to PRC §4291(a). Single specimens of trees or other vegetation may be retained provided they are well-spaced, well-pruned, and create a condition that avoids spread of fire to other vegetation or to a building or structure.
2. Dead and dying woody surface fuels and aerial fuels within the Reduced Fuel Zone shall be removed. Loose surface litter, normally consisting of fallen leaves or needles, twigs, bark, cones, and small branches, shall be permitted to a depth of 3 inches. This guideline is primarily intended to eliminate trees, bushes, shrubs and surface debris that are completely dead or with substantial amounts of dead branches or leaves/needles that would readily burn.
3. Down logs or stumps anywhere within 100 feet from the building or structure, when embedded in the soil, may be retained when isolated from other vegetation. Occasional (approximately one per acre) standing dead trees (snags) that are well-space from other vegetation and which will not fall on buildings or structures or on roadways/driveways may be retained.
4. Within the Reduced Fuel Zone, one of the following fuel treatments (4a. or 4b.) shall be implemented. Properties with greater fire hazards will require greater clearing treatments. Combinations of the methods may be acceptable under §1299(c) as long as the intent of these guidelines is met.
 - a. Reduced Fuel Zone: In conjunction with General Guidelines 1., 2., and 3., above, minimum clearance between fuels surrounding each building or structure will range from 4 feet to 40 feet in all directions, both horizontally and vertically. Clearance distances between vegetation will depend on the slope, vegetation size, vegetation type (brush, grass, trees), and other fuel characteristics (fuel compaction, chemical content etc.). Properties with greater fire hazards will require greater separation between fuels. For example, properties on steep slopes having large sized vegetation will require greater

² On-line at: http://www.fire.ca.gov/cdfbofdb/pdfs/4291finalguidelines2_23_06.pdf

spacing between individual trees and bushes (see Plant Spacing Guidelines and Case Examples below). Groups of vegetation (numerous plants growing together less than 10 feet in total foliage width) may be treated as a single plant. For example, three individual manzanita plants growing together with a total foliage width of eight feet can be “grouped” and considered as one plant and spaced according to the Plant Spacing Guidelines in this document. Grass generally should not exceed 4 inches in height. However, homeowners may keep grass and other forbs less than 18 inches in height above the ground when these grasses are isolated from other fuels or where necessary to stabilize the soil and prevent erosion. Clearance requirements include:

- i. Horizontal clearance between aerial fuels, such as the outside edge of the tree crowns or high brush. Horizontal clearance helps stop the spread of fire from one fuel to the next.
 - ii. Vertical clearance between lower limbs of aerial fuels and the nearest surface fuels and grass/weeds. Vertical clearance removes ladder fuels and helps prevent a fire from moving from the shorter fuels to the taller fuels.
- b. To achieve defensible space while retaining a stand of larger trees with a continuous tree canopy apply the following treatments:
- i. Generally, remove all surface fuels greater than 4 inches in height. Single specimens of trees or other vegetation may be retained provided they are well-spaced, well-pruned, and create a condition that avoids spread of fire to other vegetation or to a building or structure.
 - ii. Remove lower limbs of trees (“prune”) to at least 6 feet up to 15 feet (or the lower 1/3 branches for small trees). Properties with greater fire hazards, such as steeper slopes or more severe fire danger, will require pruning heights in the upper end of this range.

The intent of these descriptions is to detail vegetation treatment actions aimed at reducing fire spread rates and heat intensity, while providing defensible space for fire suppression efforts. Although these treatment descriptions are aimed at reducing current fuel volumes and creating both vertical and horizontal separation between vegetation groups, long-term maintenance of the landscape within the WUI should adhere to the vegetation spacing, fuel volume reduction, and vegetation clearance recommendations contained herein. These fuel reduction techniques should be conducted annually during the early spring and late summer in order to avoid the accumulation of hazardous fuels over time. Finally, the 4291 guidelines are specific to State Responsibility Areas (SRA), but may be applicable in Local Responsibility Areas (LRA), depending on local agency standards. Direct links to local city or district fire departments are provided in this Plan in [Section 1 C](#). These agencies should be contacted directly for further information related to their jurisdiction.

Figure 8. Defensible Space Illustration by CAL FIRE

100' DEFENSIBLE SPACE Make Your Home FIRE SAFE

Contact your local CAL FIRE office, fire department,
or Fire Safe Council for tips and assistance.
www.fire.ca.gov

Why 100 Feet?

Following these simple steps can dramatically increase the chance of your home surviving a wildfire!

A Defensible Space of 100 feet around your home is required by law.¹ The goal is to protect your home while providing a safe area for firefighters.

1 "Lean, Clean and Green Zone."

– Clearing an area of 30 feet immediately surrounding your home is critical. This area requires the greatest reduction in flammable vegetation.

2 "Reduced Fuel Zone."

– The fuel reduction zone in the remaining 70 feet (or to property line) will depend on the steepness of your property and the vegetation.

Spacing between plants improves the chance of stopping a wildfire before it destroys your home. You have two options in this area:

- a Create horizontal and vertical spacing between plants. The amount of space will depend on how steep the slope is and the size of the plants.
- b Large trees do not have to be cut and removed as long as all of the plants beneath them are removed. This eliminates a vertical "fire ladder."

When clearing vegetation, use care when operating equipment such as lawnmowers. One small spark may start a fire; a string trimmer is much safer.

Remove all build-up of needles and leaves from your roof and gutters. Keep tree limbs trimmed at least 10 feet from any chimneys and remove dead limbs that hang over your home or garage. The law also requires a screen over your chimney outlet of not more than ½ inch mesh.

1. These regulations affect most of the grass, brush, and timber-covered private lands in the State. Some fire department jurisdictions may have additional requirements. Some activities may require permits for tree removal. Also, some activities may require special procedures for, 1) threatened and endangered species, 2) avoiding erosion, and 3) protection of water quality. Check with local officials if in doubt. Current regulations allow an insurance company to require additional clearance. The area to be treated does not extend beyond your property. The State Board of Forestry and Fire Protection has approved Guidelines to assist you in complying with the new law. Contact your local CAL FIRE office for more details.



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http://www.fire.ca.gov/communications/downloads/fact_sheets/DefensibleSpaceFlyer.pdf

Non-Defensible Space Fuel Treatment Strategies

In addition to defensible space treatments required under PRC 4291, other fuel treatment projects in the County may be desirable to reduce overall wildfire threat to a community or asset. Such projects may occur on private or public land and are intended to act as a buffer between communities and/or assets and non-maintained wildland fuels. Non-defensible space treatments may include the following treatments:

- Fuel Breaks: intended to modify fire behavior and spread by altering fuel beds in a linear alignment, typically situated along ridgetops and may include retained trees (shaded fuel breaks).
- Road-side Fuel Treatments: intended to reduce the likelihood of ignition sources along roadways and maintain access/egress capabilities.
- Prescribed Burning: intended to reduce fuel loads in key locations while considering vegetation type characteristics and disturbance regimes.
- Area Treatments: intended to modify fire behavior by treating fuels over large areas in strategic locations or historic fire corridors; typically conducted on large expanses of federal or private land (e.g. Strategically Placed Area Treatments).

Fuel Treatment Prescription Strategies

The following fuel treatment prescription strategies are provided as potential options for reducing vegetative fuel hazards in defensible and non-defensible space fuel treatment areas:

- Vegetation Thinning. Thinning of vegetation involves an overall reduction of woody biomass to break up the horizontal and vertical continuity of fuels. In defensible space areas, thinning efforts should adhere to the minimum distances in PRC 4291. Site specific conditions should dictate thinning percentages in relation to structures and will be heavily dependent on topography, vegetation type, and building construction characteristics. In cases where shrubs and/or trees require removal, root systems should be left intact where needed to maintain slope stability. In such cases, annual treatment of stump growth or re-sprouting may be needed to maintain reduced fuel load volumes.
- Tree Removal. Removal of trees within the WUI should focus primarily on removing dead and dying trees, however live tree removal may be necessary to improve vegetation spacing and reduce overall fuel continuity. All fuel treatment operations should comply with the criteria set forth in the California Public Resource Code 4291. Tree removal may require oversight by a Registered Professional Forester (RPF).
- Dead/Dying Plant Removal. Removal of dead and dying plant material from the WUI will help reduce low fuel moisture biomass. This practice should also be conducted in combination with vegetation thinning efforts and may help reach or completely satisfy thinning objectives in some areas. Within the WUI, the goal is to reduce flame length to less than 4 feet.
- Exotic/Invasive Plant Removal. Removal of non-native and invasive plants from the WUI defensible space zone will help reduce the presence of undesirable species and enhance thinning efforts aimed at reducing overall biomass levels. The San Luis Obispo County [Weed Management Area](#) (WMA) is focused on limiting the negative effects of invasive plants in the County and maintains a list of exotic and invasive species³. Exotic and invasive species in San Luis Obispo County include, but are not limited to:
 - Giant reed (*Arundo donax*)
 - Jubata grass (*Cortaderis jubata*)
 - Veldt grass (*Ehrharta calycina*)
 - Yellow starthistle (*Centaurea solstitialis*)
 - Artichoke thistle (*Cynara cardunculus*)
 - Barb goatgrass (*Aegilops triuncialis*)

³ http://www.slocounty.ca.gov/agcomm/Weed_Control/SLO_County_s_Weed_Management_Area.htm

- Cape ivy (*Delairea odorata*)
 - French broom (*Genista monspessulana*)
 - Hoary cress (*Cardaria* spp.)
 - Medusahead (*Taeniatherum caput-medusae*)
 - Oblong spurge (*Euphorbia oblongata*)
 - Pampas grass (*Cortaderia selloana*)
 - Perennial pepperweed (*Lepidium latifolium*)
 - Purple starthistle (*Centaurea calcitrapa*)
 - French broom (*Genista monspessulana*)
 - Spanish broom (*Spartium junceum*)
 - Tree-of-heaven (*Ailanthus altissima*)
 - Woolly distaff thistle (*Carthamus lanatus*)
 - Bull thistle (*Cirsium vulgare*)
 - Castor bean (*Ricinus communis*)
 - European beachgrass (*Ammophila arenaria*)
 - Ice plant (*Carpobrotus edulis*)
 - Italian thistle (*Carduus pycnocephalus*)
 - Periwinkle (*Vinca major*)
 - Poison hemlock (*Conium maculatum*)
 - Puncture vine (*Tribulus terrestris*)
 - Russian knapweed (*Acroptilon repens*)
 - Russian thistle (*Salsola tragus*)
 - Saltcedar/Tamarisk (*Tamarix* spp.)
 - Skeleton weed (*Chondrilla juncea*)
 - Tocalote (*Centaurea melitensis*)
 - Wild fennel (*Foeniculum vulgare*)
 - White horenettle/Silverleaf nightshade (*Solanum elaeagnifolium*)
 - Palm trees (various species)
 - Eucalyptus trees (*Eucalyptus* spp.)
 - Pepper trees (*Schinus* spp.)
 - Fennel (*Foeniculum vulgare*)
 - Mustard (*Brassica* spp.)
- Tree and Shrub Pruning. Trees or large tree-form shrubs (reaching 4 feet or taller at maturity) that are to be retained in the WUI defensible space zone should be trimmed or pruned to reduce both vertical and horizontal fuel continuity:
 - Vertical Separation. Pruning of vegetation off the ground should provide vertical clearance that measures 3 times the height of the understory vegetation or 10 feet, whichever is higher. Vertical separation serves to minimize the potential for a ground fire to transition to a crown fire. This process will remove ladder fuels and reduce the potential for fire spread from lower shrubs to higher trees and structures.
 - Horizontal Separation. Pruning of vegetation shall result in horizontal clearance that measures three times the height of the plant material height or 20 feet, whichever is greater. Horizontal separation serves to minimize fire spread from plant to plant and from plant to structure.
 - Vegetation Grouping. Maintaining groups of shrubs is recommended to provide a mosaic pattern in the landscape. However, shrub groups should be separated from other shrub groups according to the horizontal separation criteria discussed above.
 - Mowing. Mowing of native, non-native grasses and exotic weeds should be conducted to maintain grass heights at 4 inches or lower. Focus should be primarily on invasive weed prevention, suppression and monitoring; and properly timed and implemented grassland management (e.g. mowing, grazing) that promotes the establishment of less volatile native perennial grasses. Mowing should take place before 10 a.m. to reduce the risk of wildfire resulting from mowing activities.

- Chipping. Chipping and spreading of existing dead biomass or that resulting from fuel reduction efforts within the WUI is an effective method for weed suppression. However, chip or mulch depth should not exceed 6 inches.
- Grazing. Livestock (including goats) have proven to be an effective method for reducing fuel volumes in wildland-urban interface areas. Management, maintenance, public safety, and environmental permitting issues should be considered prior to use.
- Mastication: Mastication is the operation of reducing vegetation volume by grinding, shredding or chopping material. This treatment can lower fuel bed depth, raise crown base height, increase fuel-ground contact to promote decomposition, and generate more fine materials.
- Vegetation Clearance from Structures. All vegetation should be trimmed such that a minimum clearance of 10 feet exists between structures and exposed wildland vegetation. In cases where vegetation is planted within 10 feet of a structure (vines, shrubs), such vegetation should be maintained free of dead material and shall be pruned and maintained to reduce overall fuel volume. In cases where tree canopies extend over roof tops, 10 feet of clearance should be maintained between the roof and the lowest tree branch extending over the structure. Any tree adjacent to or overhanging a structure should be maintained free of dead or dying wood (PRC 4291 (d)). Firewood or other combustible material should not be stored within 15 feet of existing structures. All combustible material, including tree leaves, pine needles, branches, and twigs should be removed from roofs and rain gutters (PRC 4291 (e)). All vegetation should be trimmed such that a clearance of 10 feet exists in all directions between landscape vegetation and the outlet of a chimney or stovepipe (PRC 4291 (c)). All vegetation should be trimmed such that a 10 foot wide clearance exists along both sides of a structure, from the street to the rear of the property to promote firefighter access/egress. In cases where property setback widths are less than 10 feet, the entire width should be maintained free of obstructing vegetation.
- Prescribed Burning. This management technique is currently employed by CAL FIRE by trained professionals. Prescribed burning may be conducted by private landowners under permit from CAL FIRE, or under contract with CAL FIRE under the statewide Vegetation Management Program (VMP). More information about the statewide VMP is available at: http://www.fire.ca.gov/resource_mgt/resource_mgt_vegetation.php.

D. INFORMATION AND EDUCATION

Public outreach and education is an important component in community wildfire hazard reduction efforts and is a key component in reducing overall costs and losses attributed to wildland fires. Fire prevention education efforts being implemented by fire agencies in the County are intended to provide the public with fire safety education material so that the community can take an active role in fire prevention efforts. Notable groups in the County with the mission of educating the public on the importance of fire prevention include the County Fire Prevention Association and [the San Luis Obispo County Community FireSafe Council](#) (SLOFSC). Fire agency involvement in the aforementioned associations is important in maintaining community relationships to further the goals of this Plan.

SECTION V: PRE- FIRE MANAGEMENT TACTICS

This section focuses on tactics to be employed to meet the pre-fire management strategies identified for San Luis Obispo County.

A. PRE-FIRE PLANNING

The following pre-fire planning tactics have been developed based on stakeholder input and are intended to facilitate data sharing for informed planning efforts:

- Continue to maintain and update County-wide GIS data sets relevant to pre-fire planning
- Coordinate with local fire agencies to integrate GIS fire-related data sets
- Develop an accessible database and/or GIS mapping interface to store and share multi-agency maps, data, plans, and pre-fire projects
- Routinely update pre-fire and emergency plans, maps, and documents
- Identify funding sources and opportunities for implementation of pre-fire planning efforts
- Identify operational/response planning needs (e.g. wildfire response plans, evacuation areas, evacuation routes, shelter locations, fire equipment staging areas, control objectives, significant environmental areas, etc.)
- Others?

B. STATUTES AND REGULATIONS

The following tactics have been developed based on stakeholder input and are intended to inform the regulation creation process and facilitate implementation/enforcement of existing regulations:

- Standardize fuel reduction and weed abatement ordinances in the County to reduce confusion and streamline enforcement
- Identify alternative inspection approaches to increase the quantity of properties inspected each year
- Coordinate with County and local government staff to integrate Firewise approaches into planning documents and ordinances
- Continue to support community chipper programs to encourage property-owner compliance with vegetation management requirements
- Identify funding sources and opportunities for enforcement of regulations
- Others?

C. FIRE PREVENTION

Fire prevention tactics will focus on creating or maintaining defensible space or implementing and maintaining other fuel treatment projects intended to minimize wildfire risk to communities and assets. This section identifies priority WUI areas, by Planning Area, which would benefit from fuel reduction, public education, or other pre-fire management projects. In addition to identifying priority WUI areas, fire prevention tactics should also include the following:

- Implement and maintain vegetation management projects along highly-traveled roadways in the County to minimize ignitions
- Identify funding sources and opportunities for enforcement of regulations
- Identify acceptable metrics of performance related to :
 - Quantity of homes in the WUI with need for roof and/or window retrofits
 - Quantity of defensible space inspections to be performed annually
 - Quantity of tons/area of material chipped annually
 - Quantity of citizens participating in the planning process
- Implement vegetation management projects and ignition reduction projects in priority WUI areas in the County
- Identify likely ignition areas, even if outside the WUI, where fuel treatment or other efforts (e.g. roadside ignition mats, replacement of flashy fuels with woody vegetation) can be employed to minimize ignition potential
- Others?

Planning Area 1

The identified priority WUI areas for Planning Area 1 include:

- Cambria WUI
- Cayucos WUI
- Laguna West WUI
- Los Osos WUI
- Morro Bay WUI
- Morro Toro WUI
- Perfumo Canyon WUI
- Ragged Point WUI
- San Simeon Acres WUI
- Santa Rita WUI

Planning Area 2

The identified priority WUI areas for Planning Area 2 include:

- Blue Fox WUI
- East Arroyo Grande WUI
- Edna Valley Foothills WUI
- Huasna WUI
- Nipomo Hills WUI
- Nipomo Mesa/Dale WUI
- Ranchita Estates WUI
- Reservoir Canyon WUI
- Suey Creek WUI
- Upper Lopez Canyon WUI
- Varian Ranch WUI

Planning Area 3

The identified priority WUI areas for Planning Area 3 include:

- Asuncion WUI
- Bryson\Hesperia WUI
- Cal Shasta Boat Club WUI
- Christmas Cove WUI
- Heritage Ranch WUI
- Oak Shores WUI
- Rancho Delargo WUI
- Running Deer Ranch WUI
- Rural West Paso Robles WUI
- South Shore Village
- South Templeton/Santa Rita WUI
- Tri Counties Boat Club WUI
- West Atascadero WUI

Planning Area 4

The identified priority WUI areas for Planning Area 4 include:

- Black Mountain WUI
- Garden Farms WUI
- Mount Lowe WUI
- Parkhill WUI

- Pozo WUI
- Salinas River Drainage WUI
- Tassajara WUI
- Wilson Corner WUI

Planning Area 5

The identified priority WUI areas for Planning Area 5 include:

- Avila Beach WUI
- Baron Canyon WUI
- Davis Canyon WUI
- Pismo Beach WUI
- San Luis Obispo Bay Estates WUI
- See Canyon WUI
- Squire Canyon WUI

Active and proposed pre-fire projects are identified in Appendix A and are classified by Planning Area. Figures 7A through 7E present the location of each Planning Area in San Luis Obispo County.

D. INFORMATION AND EDUCATION

The following strategies are identified to further public education and outreach goals:

- Continue agency coordination with the SLOFSC to maintain a community presence and provide a resource for distributing public information regarding fuel reduction efforts throughout the County
- Provide a public copy of this Plan on-line and post information about future updates to solicit public input into the planning process
- Make specific pre-fire project descriptions available to the public
- Provide and maintain an on-line list of local fuel reduction contractors and consultants
- Develop printed educational materials for distribution
- Conduct public outreach/education in communities where fuel reduction projects are proposed prior to initiation of work
- Develop strategic partnerships and funding opportunities with local industry to support fuel reduction projects
- Others?

SECTION VI: PLAN MANAGEMENT

Fire and land management agencies and private landowners responsible for managing the vegetation in and surrounding the Priority Communities within San Luis Obispo County are encouraged to submit projects that provide for wildfire protection and reduce wildfire risk. The Pre-Fire Projects identified in Appendix A presents a current list of projects, as of the date of this Plan. CAL FIRE/SLO, along with local agency and community input, shall assess project progress annually and invite agencies, landowners, and involved citizens to submit projects that provide for community protection from wildfire. Project identification and implementation is an on-going process and additional projects will be presented annually in a supplement to be prepared by CAL FIRE/SLO.

This Plan is intended to be a living document and has been created to allow for ongoing management, updates, and community input intended for reducing the risk associated with wildland fires in San Luis Obispo. The following sections discuss long-term management objectives intended to promote Firewise communities in the County.

This Plan should be updated by CAL FIRE/SLO, with input from the community and local fire and land management agencies, at least every 5 years, or more frequently, as necessary. Annual updates should be completed via a supplement. The supplement shall summarize changes in the County that affect pre-fire planning and shall provide an updated pre-fire project list (Appendix A) identifying projects completed, in-process project status, and newly-identified or planned projects.

Plan updates shall be conducted following update meetings which will be open to the public and all local fire and land management agencies. Meetings will include a discussion of the following: priorities, budgets, action items and necessary Plan modifications. Participating agencies will report on their respective projects, as necessary. Maintenance of the Plan will be described in detail during these meetings. Additionally, Plan updates shall also include updates to GIS data and mapping and a re-valuation of the County risk assessment and project priorities.

SECTION VII: REFERENCES

APPENDIX A: PRE- FIRE PROJECTS

Projects identified in this table may require compliance with the California Environmental Quality Act (CEQA). Additionally, regulatory agency review and permitting may be necessary. Agency and CEQA review shall take place during the project planning phase and prior to implementation.

| Planning Area | Project Number | Project Name | Status | Estimated Completion Year | Project Type | Net Acres |
|---------------|----------------|--|--------|---------------------------|--------------|-----------|
| 1 | 121 | Bridge Street Shaded FuelBreak | P | | Fuel Break | 48 |
| 1 | 121 | Hearst Ranch | P | | | 80,859 |
| 1 | 112 | West Atascadero Fuel Break | A | | Fuel Break | 61 |
| 1 | | East Parkhill Fuel Reduction Project | A | | | |
| 1 | | Cambria WUI | A | | | |
| 1 | | Cambria Rodeo Fuel Reduction | A | | | |
| 1 | | Toro Creek Safety Zone Project | M | | | |
| 2 | | Nipomo Chipping Event | A | | | |
| 2 | | Suey Creek Chipping Event | A | | | |
| 2 | | Edna Valley Chipping Event | A | | | |
| 2 | | Upper Lopez Safety Zone Project | P | | | |
| 2 | | Ranchita Estates Fuel Treatment Plan | A | | | |
| 2 | 109 | Alamo | P | | | 1,503 |
| 2 | 119 | Long Canyon | P | | | 522 |
| 2 | 120 | Long Canyon | P | | | 1,664 |
| 3 | | Meridian/Whitley Gardens Chipping Event | A | | | |
| 3 | | Shandon Chipping Event | A | | | |
| 3 | | Heritage Ranch Chipping Event | P | | | |
| 3 | | West Atascadero Fuel Break | A | | | |
| 3 | 121 | Bonnheim VMP | P | | VMP | 864 |
| 4 | 123 | Parkhill Chipping | P | | Chipping | 27,535 |
| 4 | | Parkhill Chipping Event | A | | | |
| 4 | | Creston Chipping Event | A | | | |
| 4 | | Tassajara Creek Road Fuel Reduction Project | A | | | |
| 4 | | Calf Canyon and Behlman Truck Trails | P | | | |
| 5 | 118 | See Canyon #2 | P | | | 126 |
| 5 | | Avila Valley Hazard Tree Removal | P | | | |
| 5 | | Squire/Barron Canyon Fuel Reduction Projects | P | | | |
| 5 | | James Way Fuel Reduction Project | A | | | |

Status Guide: A = Active, P = Planning, M = Maintenance.

APPENDIX B: GLOSSARY

Authority Having Jurisdiction (AHJ) – The organization, office, or individual responsible for approving equipment, materials, an installation, or a procedure (NFPA, *NFPA 1144*, 2002, p. 4).

Aspect – Compass direction toward which a slope faces (NFPA, *NFPA 1144*, 2002, p. 4).

Building – Any structure used or intended for supporting or sheltering any use or occupancy (NFPA, *NFPA 1144*, 2002, p. 4).

Combustible – Any material that, in the form in which it is used and under the conditions anticipated will ignite and burn or will add appreciable heat to an ambient fire (NFPA, *NFPA 1144*, 2002, p. 5).

Community Wildfire Protection Plan (CWPP) – Address issues such as wildfire response, hazard mitigation, community preparedness, or structure protection. The process of developing a CWPP can help communities clarify and refine their priorities for the protection of life, property, and critical infrastructure in the wildland-urban interface (Source: *Preparing a Community Wildfire Protection Plan*, March, 2004).

Condition Class – Describes fire-related risk to ecosystems and relates current expected wildfires to their historic frequency and effects. Condition class ranks are defined as the relative risk of losing key components that define an ecosystem. Higher ranked areas present greater risk to ecosystem health. Condition class is a measure of the expected response of ecosystems to fire given current vegetation type and structure that often is far different from that historically present.

| Class | Departure from natural regimes | Vegetation composition, structure, fuels | Fire behavior, severity, pattern | Disturbance agents, native species, hydrologic functions | Increased smoke production |
|-------------------------------|--------------------------------|--|----------------------------------|--|----------------------------|
| Low Condition Class 1 | None, minimal | Similar | Similar | Within natural range of variation | Low |
| Moderate Condition Class 2 | Moderate | Moderately Altered | Uncharacteristic | Outside historical range of variation | Moderate |
| High Condition Class 3 | High | Significantly different | Highly uncharacteristic | Substantially outside historical range of variation | High |

(Source: *CDF FRAP 2003 Forest and Range Assessment*, p. 98)

Defensible Space – An area as defined by the AHJ (typically a width of 30 feet or more) between an improved property and a potential wildland fire where combustible materials and vegetation have been removed or modified to reduce the potential for fire on improved property spreading to wildland fuels or to provide a safe working area for fire fighters protecting life and improved property from wildland fire (NFPA, *NFPA 1144*, 2002, p. 5), or as defined by PRC 4291.

Disaster – Disaster is characterized by the scope of an emergency. An emergency becomes a disaster when it exceeds the capability of the local resources to manage it. Disasters often result in great damage, loss, or destruction (Greene, R.W., *Confronting Catastrophe*, ESRI Press, 2002, p. 110).

Dry Hydrant – An arrangement of pipe permanently connected to a water source other than a piped, pressurized water supply system that provides a ready means of water supply for fire-fighting purposes and that utilizes the drafting (suction) capability of fire department pumpers (NFPA, *NFPA 1144*, 2002, p. 5).

Dwelling – One or more living units, each providing complete and independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking, and sanitation (NFPA, *NFPA 1144*, 2002, p. 4).

Emergency – A deviation from planned or expected behavior or course of events that endangers or adversely affects people, property, or the environment (Greene, R.W., *Confronting Catastrophe*, ESRI Press, 2002, p. 110).

Evacuation/Escape Route – A route away from dangerous areas on a fire; should be preplanned (FIREWISE Communities, 2009, http://www.firewisewiki.org/main/index.php/Escape_Route)

Fire Behavior – The manner in which a fire reacts to the influences of fuel, weather, and topography (FIREWISE Communities, 2009, http://www.firewisewiki.org/main/index.php/Fire_behavior).

Fire Frequency – A broad measure of the rate of fire occurrence in a particular area. For historical analyses, fire frequency is often expressed using the fire return interval calculation. For modern-era analyses, where data on timing and size of fires are recorded, fire frequency is often best expressed using fire rotation (*CDF FRAP 2003 Forest and Range Assessment*, p. A-12).

Fire Hazard – A fuel complex, defined by volume, type condition, arrangement, and location that determine the degree of ease of ignition and of resistance to control (FIREWISE Communities, 2009, http://www.firewisewiki.org/main/index.php/Fire_hazard).

Fire Hydrant – A valved connection on a water supply system having one or more outlets and that is used to supply hose and fire department pumpers with water (NFPA, *NFPA 1144*, 2002, p. 5).

Fire Lane – A means of access or other passageway designated and identified to provide access for emergency apparatus where parking is not allowed (NFPA, *NFPA 1141*, 1998, p. 4).

Fire Protection – All measures taken to reduce the burden of fire on the quality of life. Fire protection includes measures such as fire prevention, fire suppression, built-in **fire protection systems**, and planning and building codes (NFPA, *NFPA 1141*, 1998, p. 4).

Fire Protection System – Any fire alarm device or system or fire extinguishing device or system, or their combination, that is designed and installed for detecting, controlling, or extinguishing a fire or otherwise alerting occupants, or the fire department, or both, that a fire has occurred (NFPA, *NFPA 1141*, 1998, p. 4).

Fire Threat – The combination of two factors: 1) fire frequency, or the likelihood of a given area burning, and 2) potential fire behavior (hazard). Components include surface fuels, topography, fire history, and weather conditions (Source: CDF FRAP, <http://frap.cdf.ca.gov/frapgisdata/output/fthrt.txt>, *CDF FRAP 2003 Forest and Range Assessment*, p. A-12, <http://frap.cdf.ca.gov/assessment2003/>).

Fire Regime – A measure of the general pattern of fire frequency and severity typical to a particular area or type of landscape: The regime can include other metrics of the fire, including seasonality and typical fire size, as well as a measure of the pattern of variability in characteristics (*CDF FRAP 2003 Forest and Range Assessment*, p. A-12).

Fire Rotation – An area-based average estimate of fire frequency, calculated as the length of time necessary for an area equal to the total area of interest to burn. Fire rotation is often applied to regionally stratified land groupings where individual fire-return interval across the variability of the strata (i.e., the fine scale pattern of variation in timing of fires) is unknown, but detailed information on fire size is known. Hence, fire rotation is a common estimate of fire frequency during periods of recorded fire sizes (*CDF FRAP 2003 Forest and Range Assessment*, p. A-12).

Fire Weather – Weather conditions that influence fire starts, fire behavior or fire suppression (FIREWISE Communities, 2009, http://www.firewisewiki.org/main/index.php/Fire_weather).

Firebreak – A natural or constructed barrier used to stop or check fires that may occur, or to provide a control line from which to work (FIREWISE Communities, 2009, <http://www.firewisewiki.org/main/index.php/Firebreak>).

Fuelbreak – An area, strategically located for fighting anticipated fires, where the native vegetation has been permanently modified or replaced so that fires burning into it can be more easily controlled. Fuel breaks divide fire-prone areas into smaller areas for easier fire control and to provide access for firefighting (FIREWISE Communities, 2009, <http://www.firewisewiki.org/main/index.php/Fuelbreak>).

Fuels – All combustible material within the wildland/urban interface or intermix, including vegetation and structures (FIREWISE Communities, 2009, <http://www.firewisewiki.org/main/index.php/Fuels>).

Fuel Loading – The volume of fuel in a given area generally expressed in tons per acre (FIREWISE Communities, 2009, http://www.firewisewiki.org/main/index.php/Fuel_loading).

Fuel Models – Description of the types of vegetative combustible material:

Light Fuels – grasses, forbs

Medium Fuels – short light brush and small trees

Heavy Fuels – tall dense brush, timber and hardwoods

Slash Fuels – logs, chunks, bark, branches, stumps, and broken understory trees and brush.

Fuel Modification – Any manipulation or removal of fuels to reduce the likelihood of ignition or the resistance to fire control (FIREWISE Communities, 2009, http://www.firewisewiki.org/main/index.php/Fuel_modification).

GIS - See **Geographic Information Systems**

Geographic Information Systems – The combination of skilled persons, spatial and descriptive data, analytic methods, and computer software and hardware – all organized to automate, manage, and deliver information through geographic presentation (i.e., maps) (Zeiler, M., *Modeling Our World*, ESRI Press, 1999, p. 46).

Ground Fuels – All combustible materials such as grass, duff, loose surface litter, tree or shrub roots, rotting wood, leaves, peat or sawdust that typically support combustion (FIREWISE Communities, 2009, http://www.firewisewiki.org/main/index.php/Ground_fuels).

Hazard – Refers generally to physical characteristics that may cause an emergency. Earthquake faults, flood zones, and highly flammable brush fields are all examples of hazards (Greene, R.W., *Confronting Catastrophe*, ESRI Press, 2002, p. 110). Also see **Fire Hazard**.

Healthy Forests Restoration Act (HFRA), 2003 – Gives incentives for communities to engage in comprehensive forest planning and prioritization. This legislation includes statutory incentives for the US Forest Service (USFS) and the Bureau of Land Management (BLM) to give consideration to the priorities of local communities as they develop and implement forest management and hazardous fuel reduction priorities. The Act emphasizes the need for federal agencies to work collaboratively with communities in developing hazardous fuel reduction projects, and it places priority on treatment areas identified by communities themselves in a CWPP (Source: *Preparing a Community Wildfire Protection Plan*, March, 2004).

Improved Property – A piece of land or real estate upon which a structure has been placed, a marketable crop is growing (including timber), or other property improvement has been made (NFPA, *NFPA 1144*, 2002, p. 5).

Intermix – An area where improved property and wildland fuels meet with no clearly defined boundary (NFPA, *NFPA 1144*, 2002, p. 5).

Ladder Fuels – Fuels that provide vertical continuity allowing fire to carry from surface fuels in the crowns of trees or shrubs with relative ease (FIREWISE Communities, 2009, http://www.firewisewiki.org/main/index.php/Ladder_fuels).

Mitigation – Action that moderates the severity of a fire or risk (NFPA, *NFPA 1144*, 2002, p. 5).

National Fire Protection Association (NFPA) – An international nonprofit organization, established in 1896, to reduce the worldwide burden of fire and other hazards on the quality of life by providing and advocating consensus codes and standards, research, training, and education (NFPA, 2009, <http://www.nfpa.org/categoryList.asp?categoryID=143&URL=About%20Us>).

NFPA-1144 Standard for Protection of life and Property from Wildfire – Standard developed by the NFPA to be used to provide minimum planning, construction, maintenance, education, and management elements for the protection of life, property, and other values that could be threatened by wildland fire. The standard shall be used to provide minimum requirements to parties responsible for fire protection, land use planning, property development, property maintenance, and others responsible for or interested in improving fire and life safety in areas where wildland fire could threaten lives, property, and other values (NFPA, *NFPA 1144*, 2002, p. 4).

Noncombustible – Any material that, in the form in which it is used and under the conditions anticipated will not ignite and burn nor will add appreciable heat to an ambient fire (NFPA, *NFPA 1144*, 2002, p. 5).

Overstory – That portion of the trees in a forest that forms the upper or uppermost layer (FIREWISE Communities, 2009, <http://www.firewisewiki.org/main/index.php/Overstory>).

Risk – The potential or likelihood of an emergency to occur. For example, the risk of damage to a structure from wildfire is high if it is built upon, or adjacent to, a highly flammable brush field or other area deemed to have a high **Fire Threat** (Greene, R.W., *Confronting Catastrophe*, ESRI Press, 2002, p. 110).

Safe Zone – An area cleared of flammable materials used for escape in the event the line is outflanked or in case a spot fire causes fuels outside the control line to render the line unsafe. In firing operations, crews progress so as to maintain a safety zone close at hand allowing the fuels inside the control line to be consumed before going ahead. Safety zones may also be constructed as integral parts of fuelbreaks; they are greatly enlarged areas which can be used with relative safety by firefighters and their equipment in the event of blowup in the vicinity (National Wildfire Coordinating Group, 2009, <http://www.nwcg.gov/pms/pubs/glossary/s.htm>).

Slope – The variation of terrain from the horizontal; the number of feet rise or fall per 100 feet measured horizontally, expressed as a percentage (FIREWISE Communities, 2009, <http://www.firewisewiki.org/main/index.php/Slope>). Upward or downward incline or slant (NFPA, *NFPA 1144*, 2002, p. 5).

Turnaround – A portion of a roadway, unobstructed by parking, that allows for a safe reversal of direction for emergency equipment (NFPA, *NFPA 1144*, 2002, p. 5).

Turnouts – A widening in a travelway of sufficient length and width to allow vehicles to pass one another (NFPA, *NFPA 1144*, 2002, p. 5).

Understory – Low-growing vegetation (herbaceous, brush or reproduction) growing under a stand of trees. Also, that portion of trees in a forest stand below the **Overstory** (FIREWISE Communities, 2009, <http://www.firewisewiki.org/main/index.php/Understory>).

Water Supply – A source of water for fire-fighting activities (NFPA, *NFPA 1144*, 2002, p. 5).

Wildfire – Any fire occurring on undeveloped land; the term specifies a fire occurring on a wildland area that does not meet management objectives and thus requires a suppression response. Wildland fire protection agencies use this term generally to indicate a vegetation fire. Wildfire often replaces such terms as forest fire, brush fire, range fire, and grass fire (*CDF FRAP 2003 Forest and Range Assessment*, p. A-17).

Wildland – A region with minimal development as evidenced by few structures; transportation networks may traverse region. Region typically contains natural vegetation and may be used for recreational or agricultural purposes (*CDF FRAP 2003 Forest and Range Assessment*, p. A-17).

Wildland-Urban Interface (WUI) – Commonly described as the zone where structures and other human development meet and intermingle with undeveloped wildland or vegetative fuels. In the absence of a CWPP, Section 101 (16) of the HFRA defines WUI as “ (I) an area extending ½ mile from the boundary of an at-risk community; (II) an area within 1 ½ miles of the boundary of an at-risk community, including any land that (1) has a sustained steep slope that creates the potential for wildfire behavior endangering the at-risk community; (2) has a geographic feature that aids in creating an effective fire break, such as a road or ridge top; or (3) is in condition class 3, as documented by the Secretary in the project-specific environmental analysis; (III) an area that is adjacent to an evacuation route for an at-risk community that the Secretary determines, in cooperation with the at-risk community, requires hazardous fuels reduction to provide safer evacuation from the at-risk community.” A CWPP offers the opportunity to establish a localized definition and boundary for the wildland-urban interface (Source: *Preparing a Community Wildfire Protection Plan*. March, 2004).

EXHIBITS: MAPS

Figure 1. Land Ownership Distribution for San Luis Obispo County

Figure 2. Population Distribution for San Luis Obispo County

Figure 3. Fuels Distribution for San Luis Obispo County

Figure 4. Topography for San Luis Obispo County

Figure 5. Fire History for San Luis Obispo County

Figure 6. Ignition History for San Luis Obispo County

Figure 7. Priority Landscapes, Key Map

Figure 7A. Priority Landscapes in Planning Area 1

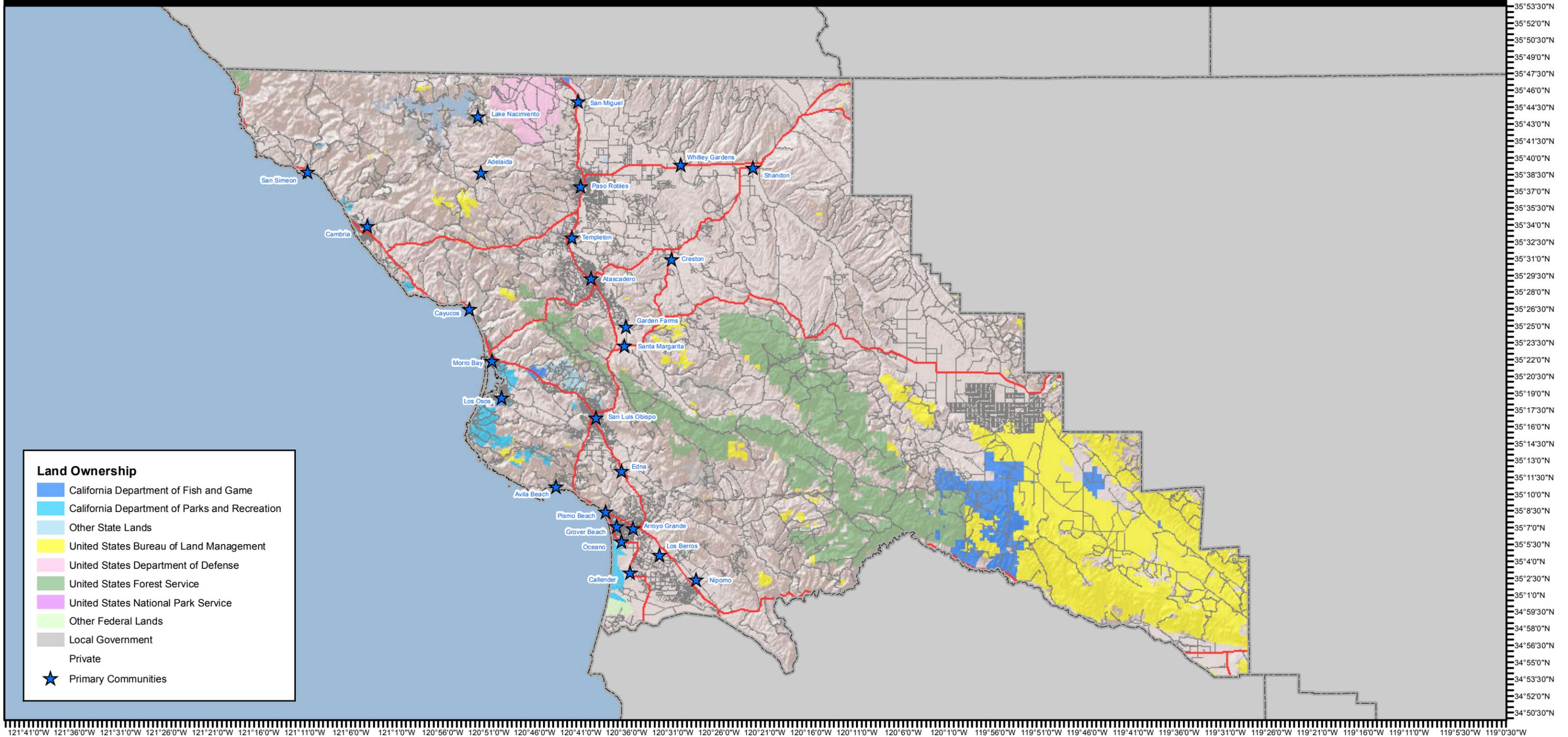
Figure 7B. Priority Landscapes in Planning Area 2

Figure 7C. Priority Landscapes in Planning Area 3

Figure 7D. Priority Landscapes in Planning Area 4

Figure 7E. Priority Landscapes in Planning Area 5

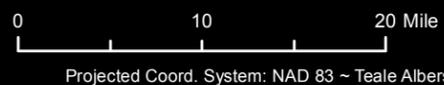
LAND OWNERSHIP



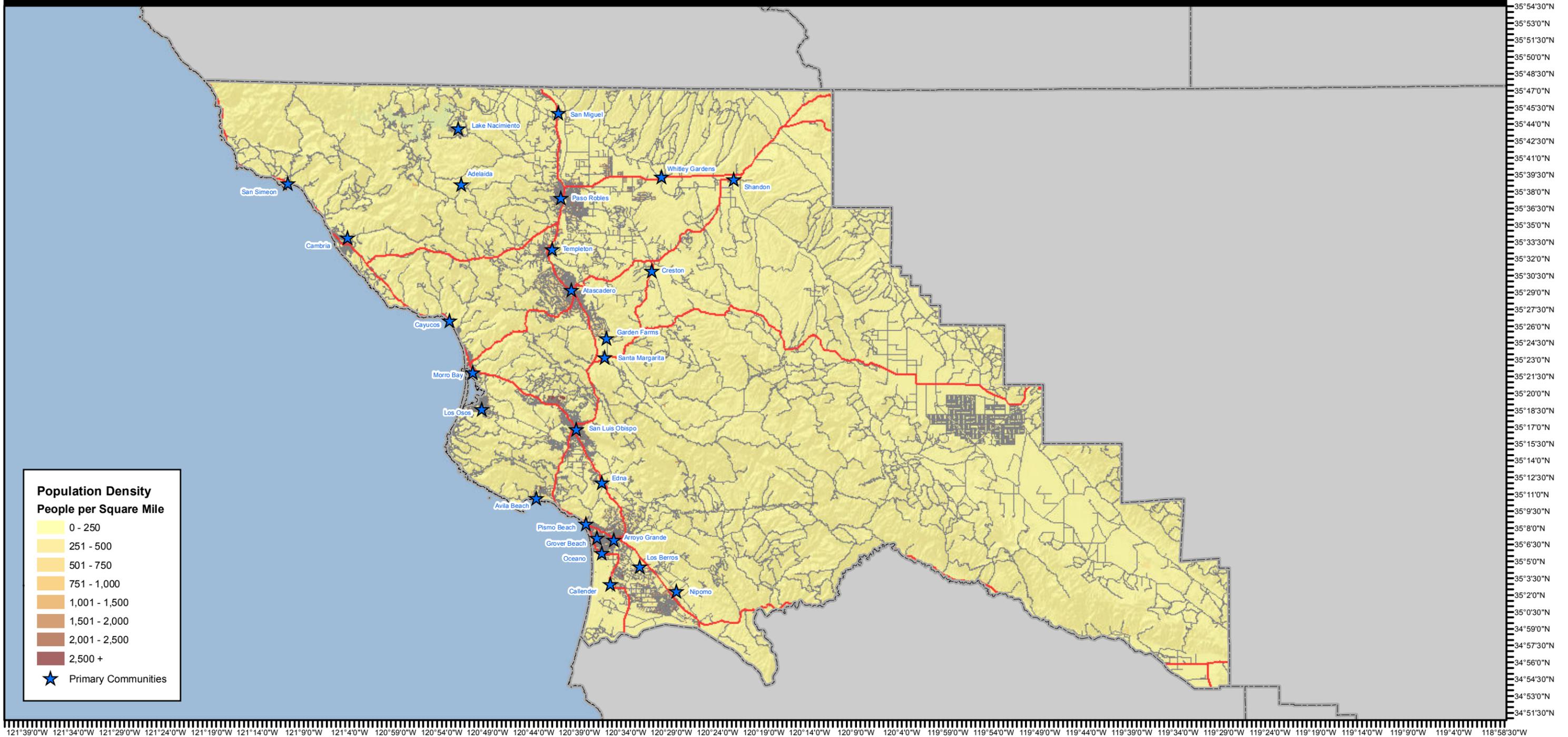
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COMMUNITY WILDFIRE PROTECTION PLAN

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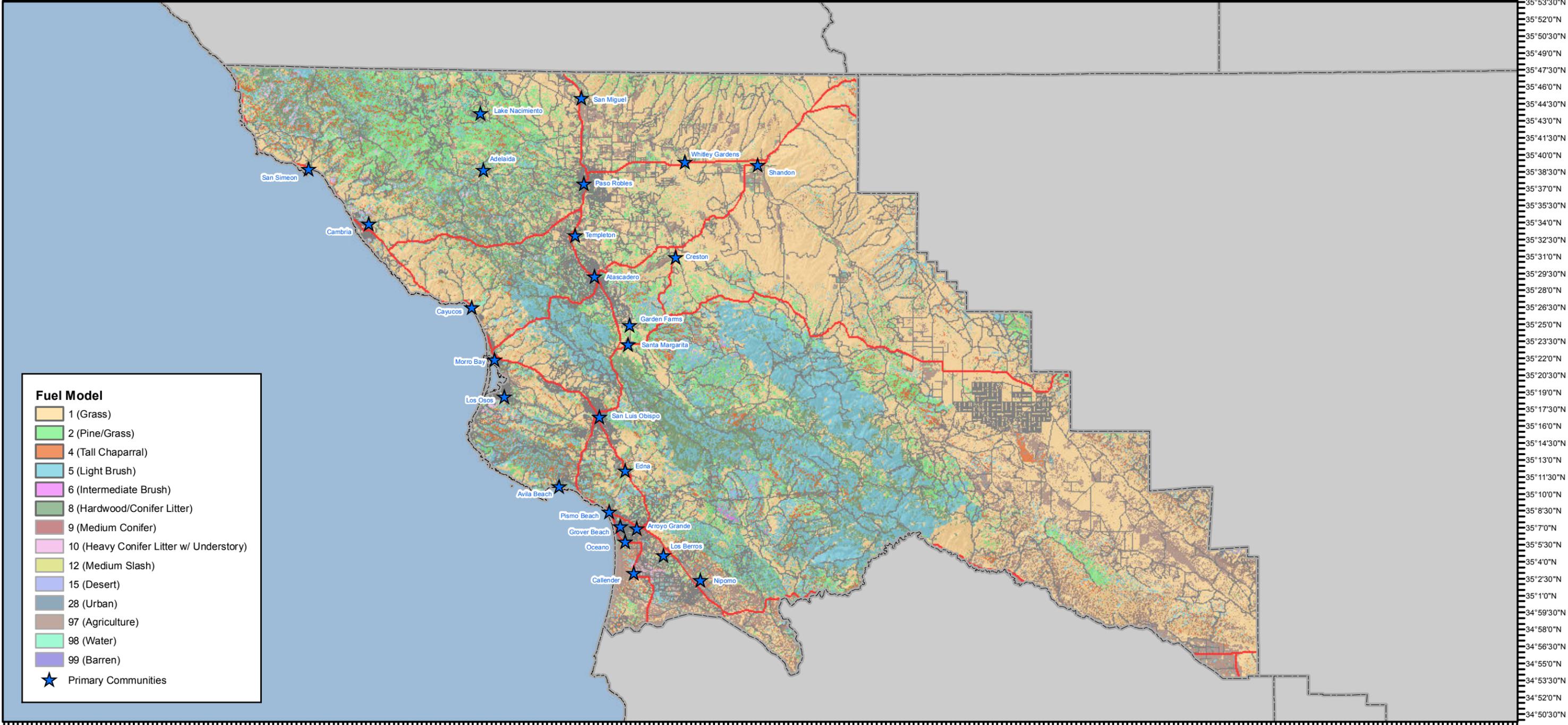
Location



Projected Coord. System: NAD 83 ~ Teale Albers



FUEL MODELS



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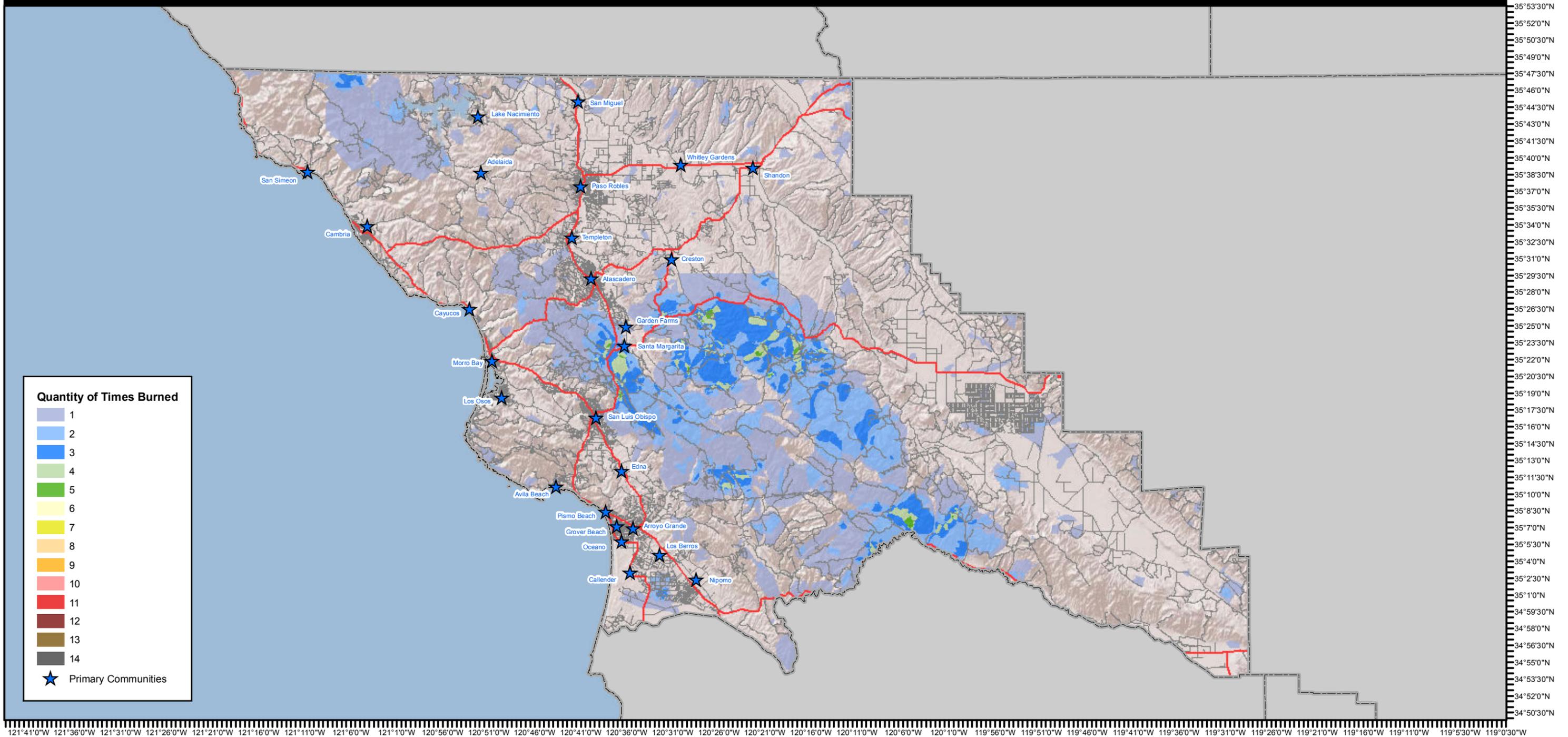
Location



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FIRE HISTORY



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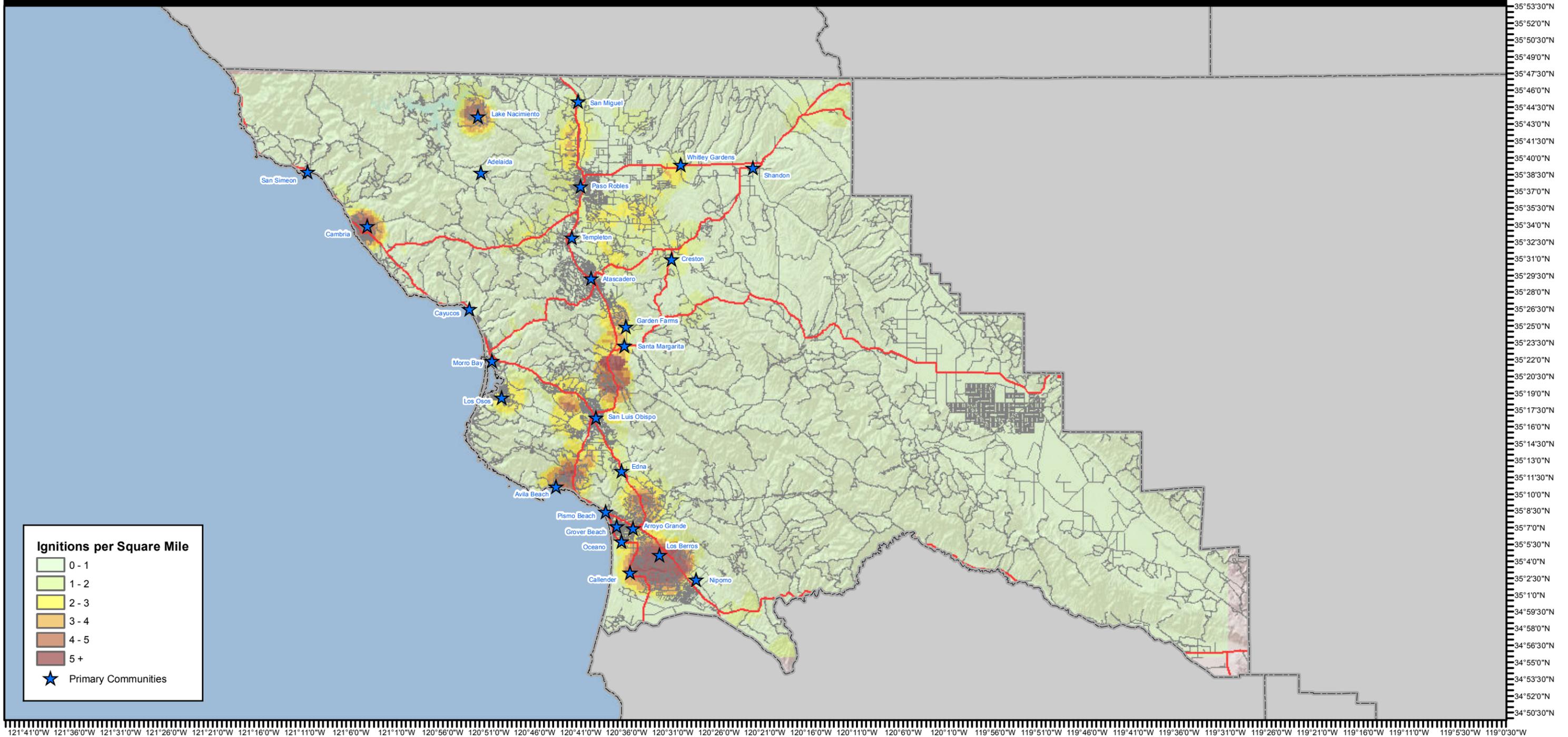
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IGNITION HISTORY



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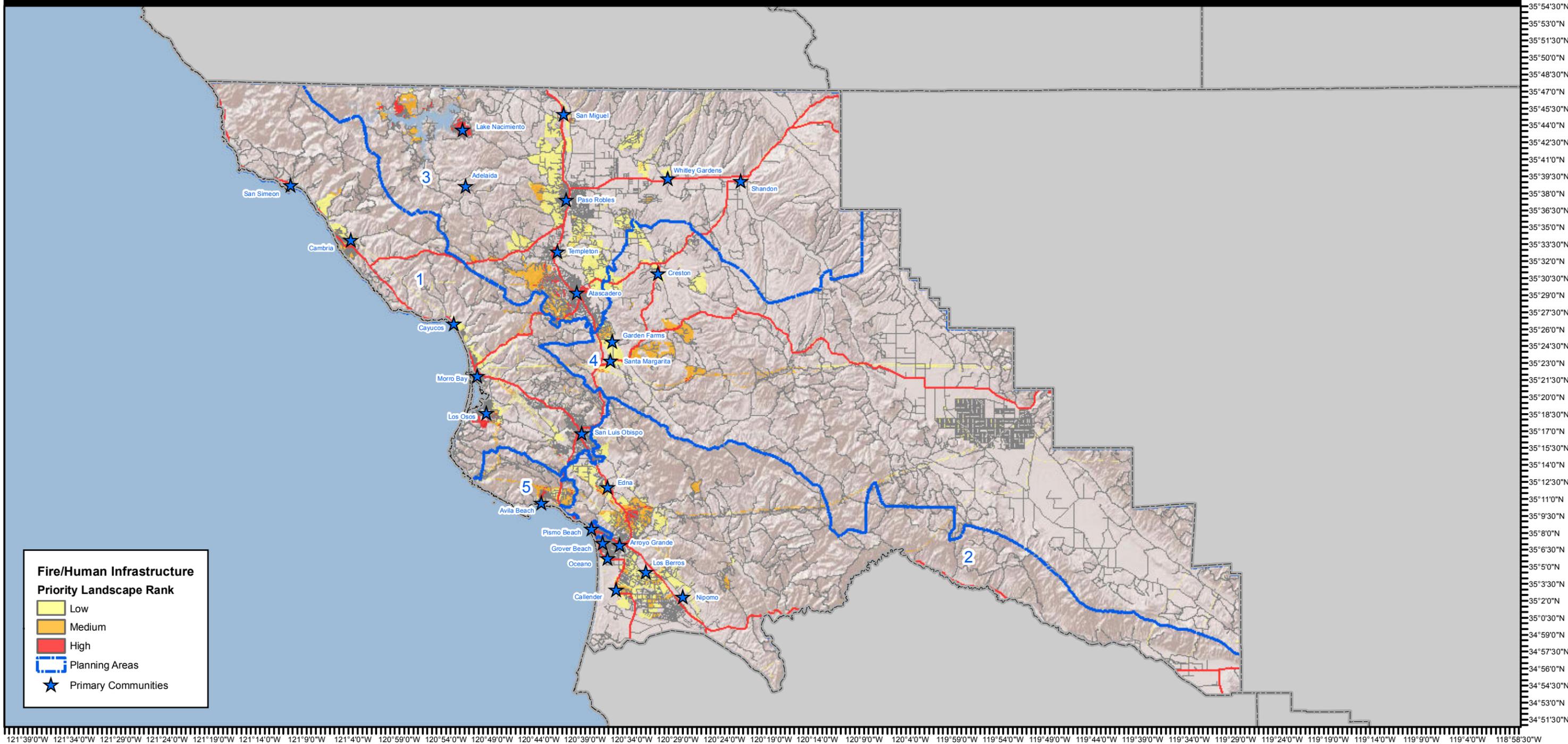
Location



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PRIORITY LANDSCAPES



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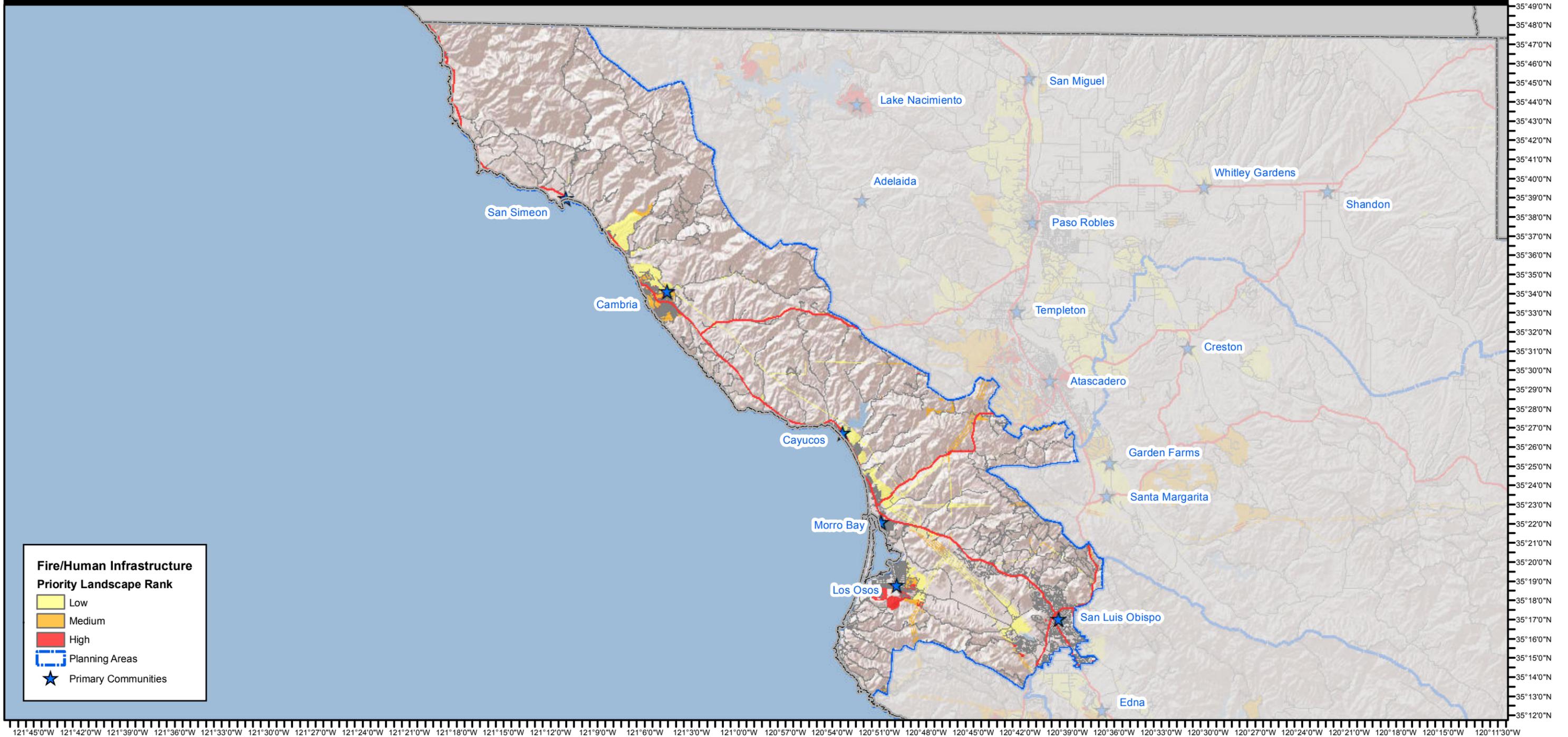
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PRIORITY LANDSCAPES - PLANNING AREA 1



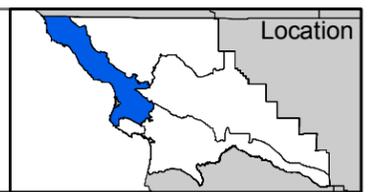
**Fire/Human Infrastructure
Priority Landscape Rank**

- Low
- Medium
- High
- Planning Areas
- Primary Communities

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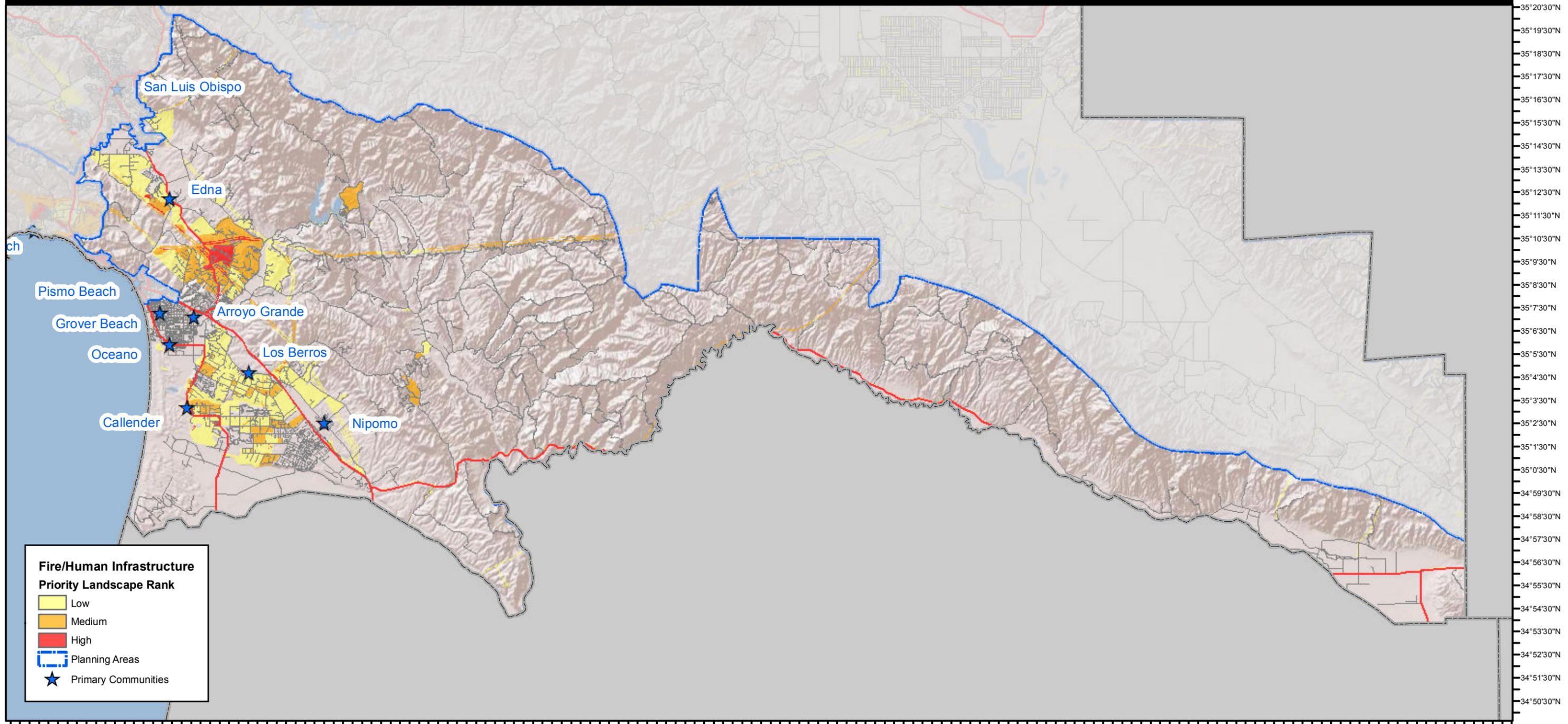
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PRIORITY LANDSCAPES - PLANNING AREA 2



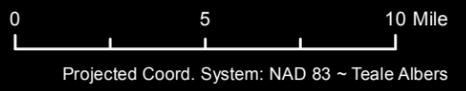
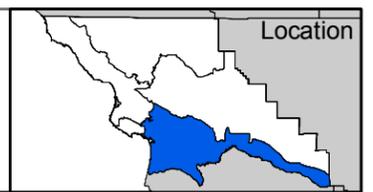
**Fire/Human Infrastructure
Priority Landscape Rank**

- Low
- Medium
- High
- Planning Areas
- ★ Primary Communities

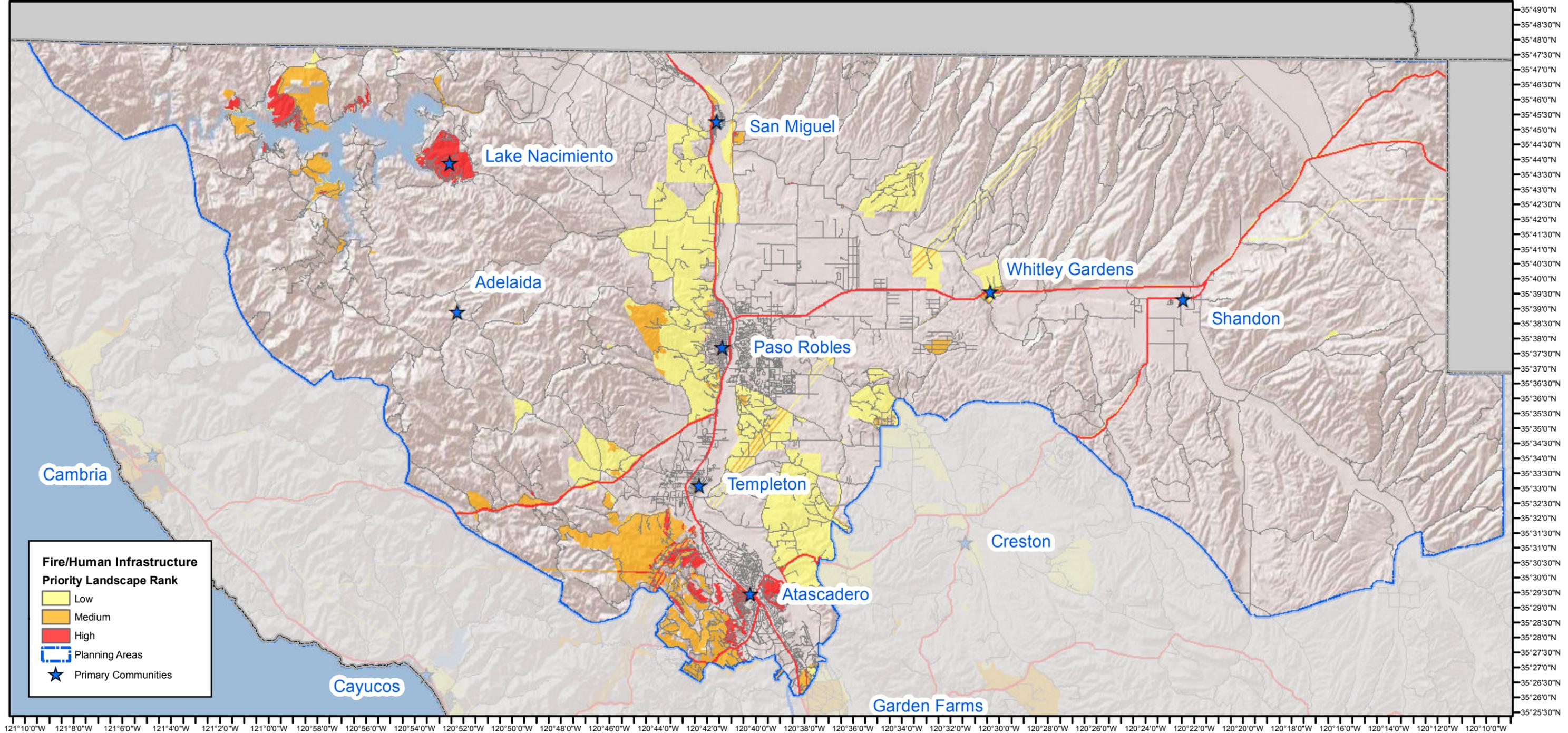
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PRIORITY LANDSCAPES - PLANNING AREA 3



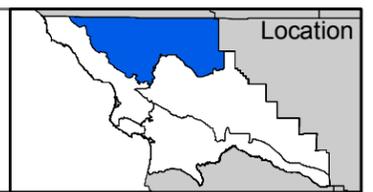
**Fire/Human Infrastructure
Priority Landscape Rank**

- Low
- Medium
- High
- Planning Areas
- Primary Communities

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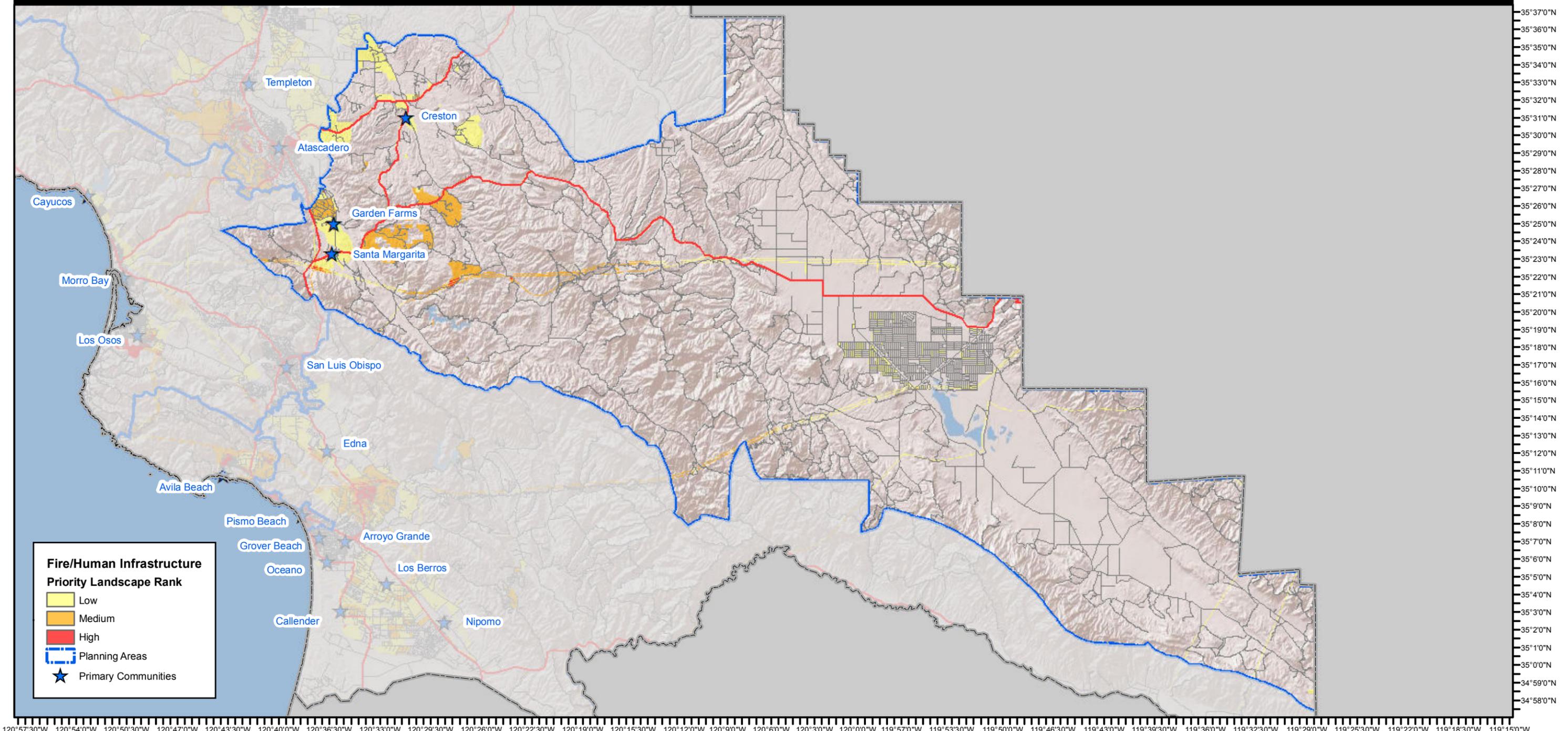
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PRIORITY LANDSCAPES - PLANNING AREA 4



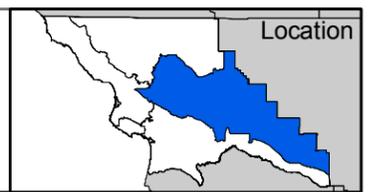
**Fire/Human Infrastructure
Priority Landscape Rank**

- Low
- Medium
- High
- Planning Areas
- Primary Communities

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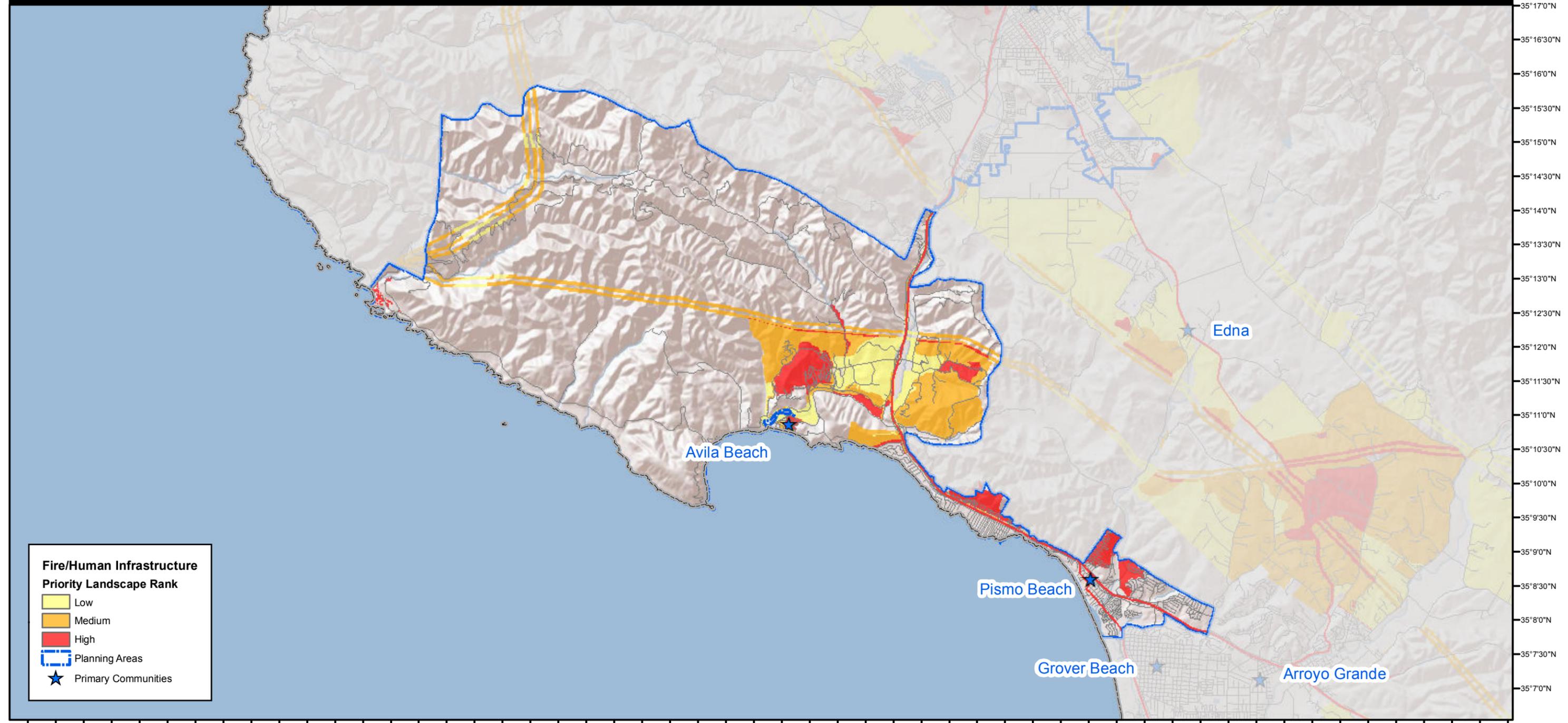
Data Source: CalMapper; CAL FIRE/SLO;
ArcGIS Online 2012; FRAP 2012



Projected Coord. System: NAD 83 ~ Teale Albers



PRIORITY LANDSCAPES - PLANNING AREA 5



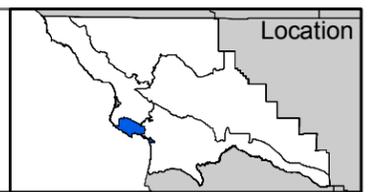
Fire/Human Infrastructure Priority Landscape Rank

- Low
- Medium
- High
- Planning Areas
- Primary Communities

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Data Source: CalMapper; CAL FIRE/SLO; ArcGIS Online 2012; FRAP 2012



Projected Coord. System: NAD 83 ~ Teale Albers



SUPPLEMENT: 2012

Annual Report of Unit Accomplishments