Unit Strategic Fire Plan

CAL FIRE/ San Luis Obispo County Fire Department MAY 2023



UNIT STRATEGIC FIRE PLAN AMENDMENTS

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04/28/2022	Prevention Annual	60-61	Updated	J. Potts
04/28/2022	Accomplishments Law Enforcement Programs	38	AB 38 Inspections	J. Potts
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SIGNATURE PAGE

Unit Strategic Fire Plan developed for San Luis Obispo:

This Plan:

- Identifies and prioritizes pre-fire and post fire management strategies and tactics meant to reduce the loss of values at risk within the San Luis Obispo 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.

DocuSigned by:	
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EXECUTIVE SUMMARY

This CAL FIRE / San Luis Obispo County Unit (CAL FIRE/SLO) Strategic Fire Plan is developed to collaboratively address fire protection planning efforts occurring in the County, to minimize wildfire risk to our County watershed lands, communities, assets, firefighters, and the public. It is developed to work cohesively with the CAL FIRE/ San Luis Obispo County Fire Department's Service Level Analysis, and the California Fire Plan. This Plan presents the County's physical and social characteristics, identifies, and evaluates landscape-scale fire hazard variables, utilizes Priority Landscape datasets for evaluating wildfire risk, identifies measures for reducing structural ignitability, and identifies potential fuel reduction projects and techniques for minimizing wildfire risk. This Plan is a living document managed and updated routinely by the CAL FIRE / San Luis Obispo County Fire Department with community and stakeholder input and involvement.

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 of ignitions. With consistent goals of improving fire prevention and suppression efforts, reducing hazardous fuels, restoring fire-adapted ecosystems, and promoting community assistance. The goals of this 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; promoting collaboration between government agencies and a broad representation of stakeholders; improving fire suppression and prevention capabilities; promoting post-fire recovery efforts; and maintaining accountability through performance based monitoring.

The development strategies of this Plan are to create a County that is more resistant and resilient to the damaging effects of catastrophic wildfire, while recognizing fire's beneficial aspects. This 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 community evacuation plans and education.
- 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 purpose of meeting the goals set by community stakeholders and the California Fire Plan while integrating a community input-focused approach. This Plan prioritizes protection of communities, natural resources, and the lives of the public and firefighters. This priority is shared among 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:

- Identify and evaluate wildland fire hazards and recognize life, property and natural resource assets at risk, including watershed, habitat, social and other values of functioning ecosystems.
- Facilitate the collaborative development and sharing of all analyses and data collection across all ownerships for consistency in type and kind.
- Promote and support local land use planning processes as they relate to:
 - (a) protection of life, property, and natural resources from risks associated with wildland fire.
 - (b) individual landowner objectives and responsibilities.
- Support and participate in the collaborative development and implementation of local, county and regional plans that address fire protection and landowner objectives.
- Increase fire prevention awareness, knowledge and actions implemented by individuals and communities to reduce human loss, property damage and impacts to natural resources from wildland fires.
- Integrate fire and fuels management practices with landowner/land manager priorities across jurisdictions.

- Determine the level of resources necessary to effectively identify, plan and implement fire prevention using adaptive management strategies.
- Determine the level of fire suppression resources necessary to protect the values and assets at risk identified during planning processes.
- Implement post-fire assessments and programs for the protection of life, property and natural resource recovery.
- 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 inspection, 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
- Utilize fire prevention efforts to reduce ignitions within the County
- Promote public education efforts about wildland fire through the support of the San Luis Obispo County Community Fire Safe Council (SLOFSC) and Firewise community activities.

This Plan provides planning information at a County-wide scale and recognizes the variation in fuels, weather, topography, and community/agency priorities present in the County. It is intended to be a dynamic planning tool for promoting wildfire protection efforts in the County while recognizing that localized planning efforts being carried out at the City or Community level shall have priority and authority over the County-level recommendations included in this Plan. Additionally, this Plan is not intended to satisfy the California Environmental Quality Act (CEQA) or regulatory permitting requirements and any recommended projects or actions contained herein shall be subject to the appropriate permitting and environmental review for the jurisdiction in which they are proposed.

SECTION I: UNIT OVERVIEW

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



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 282,424 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 seventeen 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 (<u>USFS</u>) and Bureau of Land Management (<u>BLM</u>) lands. The Los Padres National Forest (<u>LPF</u>) covers a large land area in the central and southern portions of the County associated with the <u>La Panza</u>, <u>Garcia</u>, and <u>Santa Lucia</u> Ranges. BLM lands are concentrated primarily in the southeast portion of the County in the <u>Carrizo Plains</u> area. The current distribution of land ownership within San Luis Obispo County is presented in Table 1.

Table 1: Land Ownership Distribution in San Luis Obispo County				
Ownership Agency/Type*	Approximate Acreage	Percentage		
California Dept. of Fish and Wildlife	45,776	2.15%		
California Dept. of Parks and Recreation	19,958	0.94%		
Local Government	17,415	0.82%		
Non-Profit Conservancies and Trusts	2,653	0.12%		
Other State Lands	4,129	0.19%		
Private	1,573,020	73.93%		
U.S. Bureau of Land Management	244,530	11.49%		
U.S. Dept. of Defense	28,686	1.35%		
U.S. Fish and Wildlife Service	2,608	0.12%		
U.S. Forest Service	188,593	8.87%		
Bureau of Reclamation	460	0.02%		
*Source: Fire Resource Assessment Program (FRAP)				

POPULATION AND HOUSING

The estimated 2020 population of San Luis Obispo County is 282,424 this is a 4.5 percent increase since 2010. San Luis Obispo County has 7 incorporated cities and unincorporated County lands. The County includes approximately 123,715 housing units. The largest population center is the City of San Luis Obispo, with approximately 47,063 people, followed by the cities of Paso Robles 31,490 people and Atascadero 29,773 people. Table 2 presents the population distribution in the County within incorporated cities, unincorporated Census-designated places (CDP's), and unincorporated rural portions of the County.

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, as defined in the NWCG Glossary of Wildland Fire Terminology are "Any area wherein residences and other developments are scattered and intermingled with forest, range, or farm land and native vegetation or cultivated crops", More recently, "Wildland-Urban Intermix" is a term being used to describe WUI areas where the density of housing units and structures is relatively low and the space between consists of wildland fuels capable of propagating fire. While often used interchangeably when discussing WUI issues, the difference between the terms "interface" and "intermix" is that the boundary between rural and urban areas is typically much more distinct when referred to as an "interface". The "interface" boundary is relatively easy to decipher and map, whereas the "intermix" boundary can be several miles wide and is often difficult to map precisely.

Wildland-Urban Interface

<u>Wildland-Urban Interface</u> 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 <u>California Fire Alliance</u> 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.

Table 2: Communities and Population Distribution in San Luis
Obispo County *Source: U.S. Census Bureau 2022

Community*	Population	Percentage		
Incorporated Cities				
Arroyo Grande	18,441	6.5%		
<u>Atascadero</u>	29,773	10.5%		
Paso Robles	31,490	11.1%		
<u>Grover Beach</u>	12,701	4.5%		
Morro Bay	10,757	3.8%		
<u>Pismo Beach</u>	8,072	2.8%		
San Luis Obispo	47,063	16.7%		
Unincorporated Areas (Census-	designated Pla	aces) 2020		
Avila Beach	1,576	0.5%		
Callender	3,215	1.1%		
(includes Woodlands)				
California Polytechnic State	8,583	3.0%		
University Cambria	5,678	2.0%		
Cayucos	2,505	0.8%		
Creston	98	0.03%		
Edna (includes Los Ranchos)		0.6%		
Garden Farms	1,700 449	0.1%		
Lake Nacimiento	3272	0.1%		
(includes Oak Shores)	32/2	0.8%		
Los Berros	623	0.2%		
Los Osos (includes Baywood Park)	14,465	5.1%		
Nipomo (includes Black Lake)	19,192	6.8%		
Oceano	7,183	2.5%		
San Miguel	3,172	1.1%		
San Simeon	445	0.1%		
Santa Margarita	1,291	0.5%		
Shandon	1,168	0.4%		
Templeton	8,386	2.9%		
Whitley Gardens	325	0.1%		
Unincorporated Communities	40,801	15.4%		
(not Census-designated Places)				

The Healthy Forests Restoration Act of 2003 (HFRA) defines the term "Wildland-Urban Interface" to mean:

- An area within or adjacent to an at-risk community that is identified in recommendations to the Secretary in a community wildfire protection plan; or in the case of any area for which a community wildfire protection plan is not in effect
 - o An area extending ½-mile from the boundary of an at-risk community.
 - An area within 1½ miles of the boundary of an at-risk community, including any land that:
 - Has a sustained steep slope that creates the potential for wildfire behavior endangering the at-risk community.
 - Has a geographic feature that aids in creating an effective fire break, such as a road or ridge top;
 or
 - Is in condition class 3, as documented by the Secretary in the project-specific environmental analysis; and
 - 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 fuel reduction to provide safer evacuation from the at-risk community.

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:



Emphy of the Widshard Urban Interface boundary in Cambria

Figure 1: Wildland Urban Interface

Figure 2: Wildland Urban Intermix

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 are 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 planning areas.

Population Flux

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 daily 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. Millions of visitors from around the world are drawn to the County due to the combination of consistently mild weather and the variety of recreational opportunities provided by coastal areas and the numerous local, county, state, and federal parks. Consideration of these temporal effects is important for planning strategic fuels treatment projects intended to protect communities or resources, allocating emergency response personnel, and reducing potential ignition sources.





FIRE ENVIRONMENT

The fire environment is defined as the "surrounding conditions, influences, and modifying forces that determine fire behavior". The four components that affect fire behavior in this County are fuels, weather, topography, and human behavior. Understanding the relationship between these factors and their influence on fire behavior must be considered to plan the most effective strategies for reducing the threat of unwanted fire.

Of the factors listed above, fuels (vegetation, buildings, etc.) are the component that is targeted most often since this factor is the most easily affected. For example, vegetation can be removed or manipulated in ways that will dramatically reduce the fire risk. Homes can be "hardened", i.e. built with non-combustible or fire-resistant materials (and maintained with adequate defensible space. (Wildland-Urban Interface (WUI) Areas Standards, Regulations, and Information)

While the weather cannot be controlled, it is important to understand what types of weather can occur that increase the fire hazard and what options there are for reducing this hazard. An example of this is limiting certain activities including open burning, welding, or mowing when weather conditions are hot and dry.

As with the weather and topography, the <u>terrain</u> cannot be significantly altered to reduce the fire hazard. Terrain, however, has a strong influence within the fire environment and should be carefully assessed when designing fire hazard reduction treatments. <u>Aspect</u> has a strong bearing on the type of vegetation present and the temperature and moisture regime of the soil and vegetation. Slope steepness (<u>gradient</u>) is important since fire behavior usually increases with steepness. Slope position (ridge, valley, saddle, draw, etc.) should be considered when planning fire prevention measures. For example, additional defensible space may be warranted where slopes are steep and if positioned on a warm southerly aspect and/or within a "chimney" (draw, saddle).

"Full alignment" is a term used to describe the fire environment when all the conditions are conducive for increased fire activity. This occurs when fires burn in heavy fuels, during hot, dry weather with strong winds blowing up steep slopes or drainage. Highest priority for fire prevention measures should be focused on areas where these types of conditions are known to occur or are considered likely.

VEGETATION / FUELS

Due to the County's varied climate and geography, there is a diverse population of plants. In fact, the Central Coast Bioregion is considered one of the most biologically diverse areas in North America and many species are found nowhere else in the world. Plants are categorized as native (naturally-occurring prior to European settlement, (endemic) or non-native (introduced) which have been transported into San Luis Obispo County from other regions or ecosystems. All plants and vegetation types have a range of environmental conditions within which they can grow known as "limits of tolerance". For plants, the limiting factors that determine the range of a species or plant community are precipitation, temperature, solar radiation, soil structure, elevation, and disturbance regime.

The <u>California Wildlife Habitat Relationships System</u> (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 vegetation types identified for San Luis Obispo County and includes acreages and percentage cover for the County.

Vegetation (or fuel) plays a major role in 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 distribution within the County is characterized by 32 different vegetation types which have been classified into 14 different fuel models. Table 4 (Surface Fuel Model Descriptions). The most abundant vegetative cover within San Luis Obispo County is herbaceous (46.9%), or annual grassland, 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 guickly 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.

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.

Vegetation Type*	Approximate Acreage	Percentag
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%

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 shrub lands with fire exclusion, is highly dependent on fire regime. Biomass and associated fuel loading will increase over time if 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 above ground 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.

Table 4: Fuel Model Types in San Luis Obispo County				
Fuel Model	Description	Approximate	Percent	
Number*		Acreage	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				



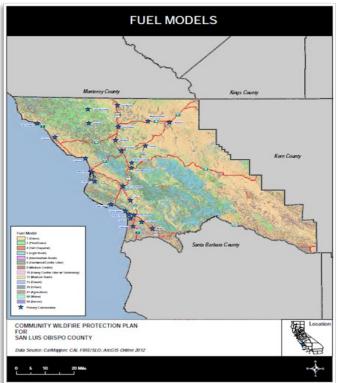


Figure 3: Fuels Distribution

Figure 4: Fuel Model

TREE MORTALITY

The dominating existing woodland habitat in Cambria Village (Planning Area 1) is classified as a Monterey Pine Forest Alliance because over 25% cover in the tree layer consists of Monterey Pine trees (*Pinus radiata*). The native pine forest of Cambria Village is one of three native pine forests left on the U.S. mainland. The Cambria area Monterey pine forest consists of Monterey pines that have either reached or are nearing their normal life span of 80 to 100 years. The Cambria stand of native Monterey Pine is on the world list of endangered forests. The highly uneven-aged stand is in very poor condition due to overcrowding conditions of the forest, drought driven bark beetle epidemic, western gall rust, dwarf mistletoe infestations, and areas of pine pitch canker infestation which only have continued to worsen with the drought.

The old growth stands of Monterey pine trees are located along hill sides and residential neighborhoods of Cambria Village. These old growth pine stands are considered extremely hazardous in the case of fire ignition, evacuation and high winds. When a tree is hazardous because of structural weakness this poses a risk to civilians and fire fighters. This structural weakness is increased by infestation of bark beetles, dwarf mistletoe, western gall rust and pine pitch canker. These conditions may result in pre-mature tree death thus posing an increased risk to the 6,000 civilians of Cambria Village that reside within the infected pine stands. In addition to risks to civilians, the tree mortality also creates an extreme wildfire hazard.

Selective removal of dead, infected, and infested trees compliant with landowner and lease easements will improve overall forest health. Monterey pine grow and reproduce well when openings in the forest canopy are provided to allow light and nutrients to become available. A small percentage of woody material will remain onsite after tree removal for natural decomposition or pile burning. Tree removal conducted on the east side of State Highway One will be conducted using commercial thinning to reduce hazardous fuel, improve forest health, and stimulate regeneration to sequester carbon. Commercial thinning performed may include a portable sawmill that accepts logs and woody debris for further treatment including milling dimensional lumber, fuel pellet production, milling and treating pine fence post, composting/mulching, and shaved wood bedding for local livestock use.

Pine Pitch Canker Primarily affecting Monterey pines (*Pinus radiata*), the disease-causing fungus (*Fusarium circinatum*) affects several other pine species in the County, including Bishop Pine (*Pinus muricata*) Grey Pine (*Pinus sabiniana*), Coulter Pine (*Pinus coulteri*) and Knobcone Pine (*Pinus attenuate*). *Pine pitch canker* is caused by a fungal infection and is characterized by resinous cankers on the trunk, branches or roots accompanied by needle wilt, limb dieback and potential tree mortality. The fungus is spread by insect vectors that transmit the pathogen into uninfested trees. These insect vectors include species of bark, twig, and cone beetles. Infested material and equipment can also spread this fungus to uninfested areas. The Pitch Canker Action Plan was approved in 1995 under the direction of the *Pitch Canker Task Force* and is intended to identify management, research and educational priorities to limit the spread of pine pitch canker in California. The short-term and long-term 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. The recently dead standing fuels contribute to increased wildfire incidence and severity and require treatment and/or removal, especially within WUI areas. Furthermore, care must be taken to avoid transportation of infested material or spreading these diseases by using or transporting infected tools, chips, and trimmings/plant material into non-infected regions.

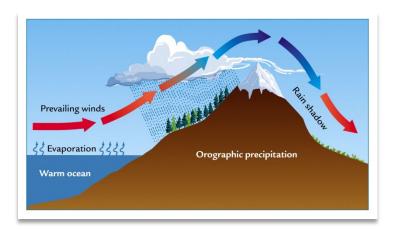
WEATHER

San Luis Obispo County is characterized by a Mediterranean climate with most 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.



Topography 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 <u>foehn wind</u> (Santa Lucia Winds) effect on the coast side of the range. The area east of Nipomo is known by firefighters as an area of sudden 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 same high pressure inland conditions with a low pressure in the pacific that produce Santa Ana winds in southern California often produce foehn winds in this County that result in northeasterly off-shore wind conditions which are usually accompanied by warm temperatures, high wind speeds, and low humidities. These periods often produce the most "fire days" along the coast when the fire risk is elevated to the highest point of the entire year.



The Garcia and Santa Lucia Ranges intercept a large portion of the rain bearing clouds moving eastward 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 5 NWS weather zones; Zone 340- Beach, Zone 341- Coast, Zone 342- Santa Lucia Mountains, Zone 343- Southern Salinas Valley, Zone 344- Interior Valley, Zone 345- Mountain. Using weather factors such as wind, humidity, and temperature, the 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 (NFMD) 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 live fuel moisture data.

Remote Automated Weather Stations

A system of Remote Automated Weather Stations (RAWS) is used 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 six stations located within San Luis Obispo County. Four of these stations are owned and maintained by CAL FIRE and two are owned and maintained by the U.S. Forest Service. These stations have been placed to provide coverage for critical fire areas in the County. Station information and real-time weather data such as the current weather summary for the Los Angeles/Oxnard CWA is available from MesoWest.

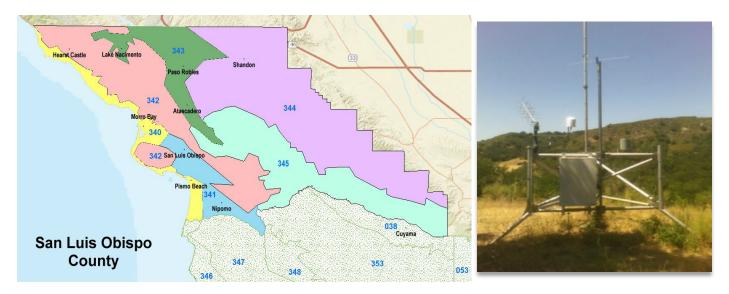


Figure 5: RAWS

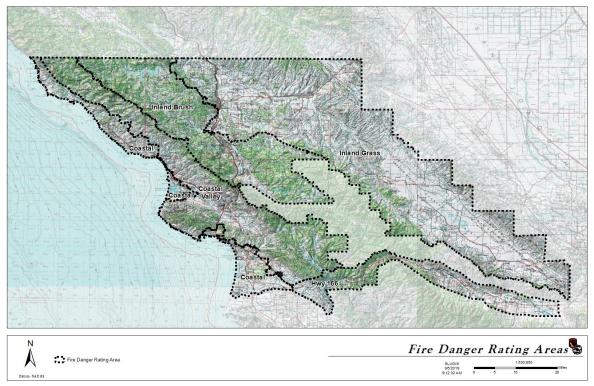


Figure 5.1: Fire Danger Rating Areas



Figure 6: Topography Example

TOPOGRAPHY

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 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 will preheat and dry 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 slope and canyon alignments are conducive to channeling, deflecting, concentrating, or dispersing winds, creating extremely erratic wildfire conditions, especially during wind-driven fire events.

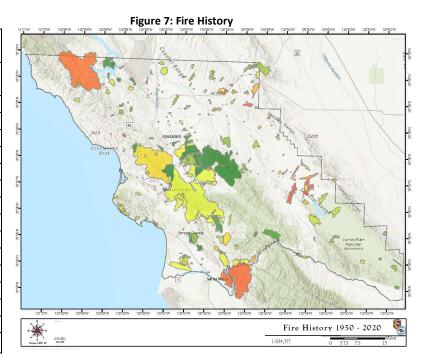
FIRE HISTORY

Fire History is an important component in understanding fire frequency, fire type, significant ignition sources, and vulnerable areas/communities. The topography, vegetation, and climatic conditions associated with San Luis Obispo County combine to create a unique situation capable of supporting wildfires. Many large, damaging wildfires have occurred in the County, notably the Chimney Fire (2016), 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 fires burned approximately 400,000 acres, destroyed numerous structures, and cost millions of dollars to suppress. The Chimney Fire was the most recent fire with significant impact on the County, which destroyed 49 residences and 21 other structures.

Based on historical fire perimeter data, repeated burning is observed within the County primarily in the Santa Lucia Range. Land ownership (federal) 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 more than 20,000 acres burning within San Luis Obispo County is 7.3 years, with intervals as short as 1 year and to 17 years.

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

(Fires Greater than 20,000 acres)				
Fire Name*	Year	Approximate		
		Acreage Burned		
Avenales Fire	1917	21,242		
Un-named Fire	1921	63,909		
Un-named Fire	1922	25,637		
Machesna 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		
Chimney Fire	2016	46,344		
*Source: FRAP				



IGNITION HISTORY

SRA Ignition data for San Luis Obispo County was analyzed for a 5-year period (2018-2022) to evaluate ignition trends and problems within the County. This dataset includes 676 ignitions and includes an identification of fire cause. Table 6 and Figure 8 present the ignition history for San Luis Obispo County between 2018 and 2022, classified by fire cause.

The 5-year ignition history for San Luis Obispo County identifies trends in ignition type, with most ignition causes classified as:

Ignition Cause*	Number	Percentage
Arson	19	2.8%
Campfire	39	5.8%
Debris Burning	55	8.2%
Powerline/Vehicle/Equipment Use	277	40.9%
Lightning	10	1.5%
Playing w/ Fire	18	2.7%
Undetermined/Misc.	245	36.2%
Smoking	13	1.9%

Table 6: SRA Ignition History for San Luis Obispo County (2018-2022)

Powerline/Vehicle/Equipment and Undetermined/Misc. also emerge as significant ignition sources in the County. Spatial analysis of ignition locations reveals a direct correlation between ignitions and roads/transportation corridors. Of the 676 ignition points containing a latitude and longitude included in the dataset, approximately 39% are located within 20 feet of any road.

The highest density of ignitions in the county occurs along Highway 101. High density ignitions are also observable within and adjacent to urban areas, with notable concentrations observed near the communities of Cambria, Lake Nacimiento, Paso Robles, Templeton, Atascadero, Los Osos, San Luis Obispo, Arroyo Grande, and in the Nipomo area. 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.

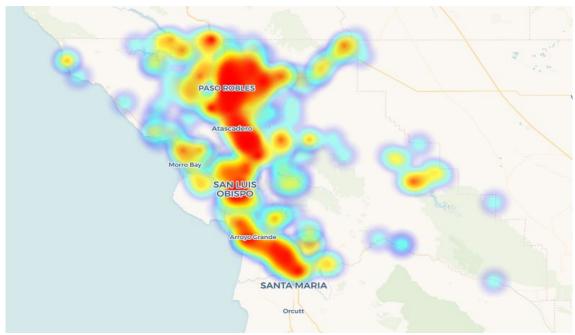


Figure 7: 5 year Ignition Density

UNIT PREPAREDNESS AND FIREFIGHTING CAPABILITIES

CAL FIRE / San Luis Obispo Unit puts tremendous effort into maintaining the highest preparedness level possible. This is a priority for each division and program, each Division works with the intent to accomplish the mission of CAL FIRE and the San Luis Obispo County Fire Department. The fire administration and fire prevention divisions are fulltime functions that assist fire operations division before, during and after an emergency event takes place. Additionally, CAL FIRE / San Luis Obispo Unit presents annual preparation events to assist in maintaining its goal of keeping wildland fires at 10 acres or less. Below is a brief outline of the preparation efforts of each division within the San Luis Obispo Unit.

Fire Administration Division

Among the many tasks that revolve around managing unit policies, budgets and logistics, administrative staff also determines and implements staffing levels to achieve the county and state fire mission. Additionally, administrative staff prepare and maintain cooperative fire service agreements and resource response plans, like the Central Coast Operating Plan (CCOP). These plans provide operations the preparedness and depth necessary for mission success.

Fire Operations Division

The operations division provides a professional level of service related to fire control and suppression, rescue, advanced life support/emergency medical assistance, and the mitigation of hazardous materials incidents. In the event of major disasters, we are trained and equipped to handle a countywide incident, including wildland and structural fires, earthquakes, tsunami, riots, hazardous material incidents, nuclear events, and other major emergencies. In addition to responding to emergency, our training, fleet management, and dispatch function serve a critical role to our efficiency and preparedness to respond.

Fire Prevention Bureau

Prevention staff spends much of their time supporting field mission preparedness and preventing fires. It is divided into four areas; Law Enforcement & Education; Planning & Engineering; Pre-fire Planning, and Resource Management. Each of these are fulltime staffed and collectively work to support the efforts of operations. Prevention preparation activities include: defensible space inspections, emergency evacuation planning, fire prevention education, incident intelligence and mapping, implementation of the State Fire Plan, and fire-related law enforcement activities such as arson investigation. Other common projects include fire break construction and fire fuel reduction activities that lessen the risk of wildfire to communities and evacuation routes.



Firefighting Capabilities

The fire service in San Luis Obispo (SLO) County is comprised of a cohesive and cooperative group of 17 agencies. Services are provided by a combination of city, special district, county, state, federal, and private agencies that operate 48 fire stations. These fire agencies have also developed an automatic mutual aid program that provides for the closest fire engine to respond to a new emergency regardless of the jurisdiction. This cooperative fire protection system gives each agency a depth and weight of response to be successful in mitigating both large scale and simultaneous emergency events within the County.

Resource	Local	State	Federal
Air Attack Coordinator	0	1	0
Air Tankers	0	2	0
Bulldozers	0	3	0
Hand Crews	0	7	1
Helicopters	0	0	1
Mobile Communication Units	0	1	0
Mobile Kitchens	0	1	0
Type 1 Engines	0	0	0
Type 2 Engines	56	0	0
Type 3 Engines	14	17	2
Type 4 Engines	0	0	0
Type 5 Engines	0	0	0
Type 6 Engines	9	0	1
Water Tenders	4	0	0

SECTION II: COLLABORATION

COMMUNITY / AGENCIES / FIRE SAFE COUNCILS

Representatives involved in the development of the Unit Strategic Fire Plan are included in the following table. Their organization and title are indicated below:

Plan Development Team:

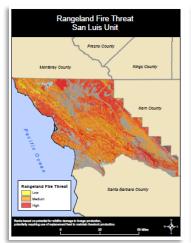
Organization	Title	
CAL FIRE / San Luis Obispo County Fire	Unit Chief	
CAL FIRE / San Luis Obispo County Fire	Unit Forester	
CAL FIRE / San Luis Obispo County Fire	Pre-Fire Engineer	
CAL FIRE / San Luis Obispo County Fire	GIS Analyst	

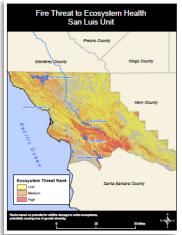
SECTION III: VALUES

VALUES

CAL FIRE's Fire and Resource Assessment Program (FRAP) prepared the document entitled California's Forest and Rangelands Assessment. This document satisfies the 2008 Federal Farm Bill provision that each state assesses 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 datasets related to fire include an evaluation of fire risk as related to 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 purposes of illustration, below are three examples, Fire Threat to Ecosystem Health, Rangeland Fire Threat, and Post Fire Erosion Threat to Community Water.





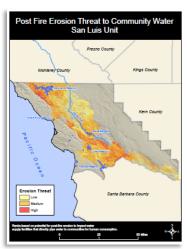


Figure 8: Rangeland Fire Threat

Figure 9: Ecosystem Threat

Figure 10: Post Fire Erosion Threat

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 City of San Luis Obispo and northeast toward the City of Atascadero.

While no large fires are included in the fire history dataset 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. Another area with similar conditions where a large fire is considered likely is the Santa Rita Road area between Highway 41 and Highway 46 due to heavy fuels, prevailing wind patterns and steep terrain.

FIRE RISK vs. FIRE HAZARD

The concept of fire risk vs. fire hazard can be confusing and these terms are often used interchangeably. The purpose of this Plan is to assist fire agencies with development of collaborative methods of reducing the fire 'risk' within their jurisdictions by using strategies and tactics that will reduce or eliminate one or more fire 'hazards'. Examples of fire hazards include dense stands of decadent brush, faulty wiring, broken vehicle exhaust systems, and homes that are not built in accordance with fire code requirements. The fire risk (vulnerability) of a given area constantly rises and falls depending on conditions within the fire environment. Successful implementation of this Plan will result in the meaningful reduction of the fire risk in strategic portions of the County through identification and abatement of important fire hazards.

PRIORITY COMMUNITIES

To evaluate Priority Communities in the State, FRAP analyzed the fire/human infrastructure Priority Landscape dataset in combination with communities that include at least 500 people or 1,000 acres. Communities ranked as medium or high 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 dataset 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 dataset 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 7. 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 needed.

Table 7: Priority Communities in San Luis Obispo County

Community*	Planning Area
Adelaida	3
Arroyo Grande	2
Atascadero	4
Avila Beach	6
Baywood Park-Los Osos	1
Cambria	1
Lake Nacimiento	3
Nipomo	2
Paso Robles	3
Pismo Beach	6
San Luis Obispo	2
San Miguel	5
Santa Margarita	4
Templeton	3

*Source: FRAP

PLANNING AREAS

For the purposes of this Plan, San Luis Obispo County has been divided into six Planning Areas to facilitate localized prefire planning efforts. The following provides a brief description of each Planning Area.

Planning Area 1 (CAL FIRE – Battalion 1)

Planning Area 1 encompasses approximately 258,399 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 the northern boundary of the City of San Luis Obispo. The City of Morro Bay and the communities of San Simeon, Cambria, and Cayucos are located along the Pacific Ocean in the western portion of the Planning Area. Large fire history in the Planning Area includes the 1960 Weferling Fire and the 1994 Highway 41 Fire, and the 2016 Chimney Fire.

Planning Area 2 (CAL FIRE – Battalion 2)

Planning Area 2 encompasses approximately 496,673 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, and is bisected by the Los Padres National Forest (LPF) in the central portion of the Planning Area. Its northern boundary runs along the boundary of the LPF, adjacent the ridge of the Garcia and Caliente Ranges and extends northward to the northern City limits of San Luis Obispo. Large fire history in the Planning Area includes the 1985 Las Pilitas Fire and the 1997 Logan Fire.

Planning Area 3 (CAL FIRE – Battalion 3)

Planning Area 3 encompasses approximately 220,357 acres and is situated along the northern edge of the County generally from the Highway 101 corridor in the east to the ridge of the Santa Lucia Range in the west. Its southern boundary extends roughly north eastward from the City of Atascadero but excludes the Santa Lucia Range. Large fire history in the Planning Area includes the 1960 Weferling Fire and 2016 Chimney Fire in the far north western portion of the Planning Area.

Planning Area 4 (CAL FIRE – Battalion 4)

Planning Area 4 encompasses approximately 702,677 acres and is situated in the central portion of the County between Planning Area 3 and 5 to the north and Planning Area 2 to the south and is bisected by the LPNF. Its eastern boundary abuts Kern County, and its western extends up to the City of Atascadero. Large fire history in the Planning Area includes an unnamed fire in 1939, the 1985 Las Pilitas Fire, the 1996 Highway 58 Fire, and the eastern portion of the 1994 Highway 41 Fire.

Planning Area 5 (CAL FIRE – Battalion 5)

Planning Area 5 encompasses approximately 415,826 acres and is the Northeast section of the county which is situated along the upper eastern edge boundary with Kern County through the Bitterwater Valley/Temblor Mountain range (San Andreas Fault line), Northeast boundary with Fresno County and the North boundary with Monterey County. The Western edge of the planning area includes: Camp Roberts, San Miguel, eastern Paso Robles, and eastern Atascadero. The Southern boundary runs along the Rocky Canyon truck trail and heads east just north of Hwy 58 until it reaches the Kern County line again at the Bitterwater Valley Road intersection. There is no extended attack/large fire history in the Planning Area because of the mostly grassland fuel type.

Planning Area 6 (CAL FIRE – Battalion 6)

Planning Area 6 encompasses approximately 30,889 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. Fire history in the Planning Area is limited primarily to a few small fires adjacent Diablo Canyon Nuclear Power Plant.

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. Table 8 presents the assets in San Luis Obispo County, by Planning Area.

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

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

COMMUNITIES

Communities at Risk (CAR) 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 near 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 historical places were excluded. 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. identifying the Planning Area, the community is within, if it is a Community at Risk (CAR) and if it is an incorporated city.

Table 9. Communities in San Luis Obispo County

9. Communities in San Luis Obispo Cou Community*	Planning Area	Community at Risk**	Incorporated City
Adelaida	3	X	No
Arroyo Grande	2	Х	Yes
Atascadero	4	Х	Yes
Avila Beach	6	Х	No
Baywood Park-Los Osos	1	Х	No
Callender	2		No
California Polytechnic State University	2		No
California Valley	4		No
Cambria	1	Х	No
Cayucos	1	X	No
Creston	5	X	No
Edna	2		No
Estrella	5		No
Garden Farms	4		No
Grover Beach	2	X	Yes
Heritage Ranch	3	X	No
Independence Ranch	5	Х	No
Lake Nacimiento	3	X	No
Los Berros	2		No
Morro Bay	1	Х	Yes
Nipomo	2	Х	No
Oak Shores	3	Х	No
Oceano	2	Х	No
Parkhill	4	X	No
Paso Robles	3	X	Yes
Pismo Beach	6	X	Yes
Pozo	4	X	No
Ranchita Estates	2		No
San Luis Obispo	2	Х	Yes
San Miguel	5	Х	No
San Simeon	1	X	No
Santa Margarita	4	Х	No
Shandon	5	Х	No
Templeton	3	Х	No
Whitley Gardens	5		No

^{*}Source: CAL FIRE Office of The State Fire Marshal

WILDLAND URBAN INTERFACE AREAS (WUI)

Pre-fire planning efforts by CAL FIRE/SLO have identified the following priority WUI areas which would also benefit from fuel reduction or other pre-fire planning efforts intended to minimize ignitions and promote public and firefighter safety. The priority WUI areas are identified by Planning Area.

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 to reduce structural ignition or otherwise affect 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.

Table 10: Planning Areas within San Luis Obispo County

Planning Area 1 (Corresponds with CAL FIRE Battalion 1) Cambria WUI Cayucos WUI Laguna West WUI Los Osos WUI Morro Bay WUI Morro Toro WUI Prefumo Canyon WUI Ragged Point WUI	Planning Area 4 (Corresponds with CAL FIRE Battalion 4) Black Mountain WUI Garden Farms WUI Mount Lowe WUI Parkhill WUI Pozo WUI Salinas River Drainage WUI Tassajara WUI Wilson Corner WUI	
San Simeon Acres WUI Santa Rita WUI Planning Area 2 (Corresponds with CAL FIRE Battalion 2)	Planning Area 5 (Corresponds with CAL FIRE Battalion 5)	
 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 	 Bitterwater/Cholame Valley WUI Branch/Union Road WUI Creston WUI Dresser Ranch WUI Estrella River Drainage WUI El Pomar WUI Ground Squirrel Hollow WUI Independence Ranch WUI Jardine WUI La Panza/Ryan Road WUI Ranchita Canyon WUI Shandon WUI Whitley Gardens WUI Yosemite Place WUI 	
Planning Area 3 (Corresponds with CAL FIRE Battalion 3)	Planning Area 6 (Corresponds with CAL FIRE Battalion 6)	
 Asuncion WUI Bryson\Hesperia WUI Cal Shasta Boat Club WUI Christmas Cove WUI Heritage Ranch WUI Oak Shores WUI Rancho Del largo 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 Adeladia WUI 	 Avila Beach WUI Baron Canyon WUI Davis Canyon WUI Pismo Beach WUI San Luis Obispo Bay Estates WUI See Canyon WUI Squire Canyon WUI 	

SECTION IV: PRE-FIRE MANAGEMENT STRATEGIES

FIRE PREVENTION

Pre-fire management as used in this Plan is a collective term that refers to all activities undertaken by county land managers, property owners, agencies and fire departments intended to reduce the risk of wildfire and resulting suppression costs and to minimize the resulting damage to lives, property, and the environment. This section details the objectives of pre-fire managements two main categories: Fire Prevention and Vegetation Management.

The management strategies included in this section focus on the four functions within the SLU / CAL FIRE Prevention Bureau; Fire Prevention Planning & Engineering; Fire Law Enforcement and Education, Pre-Fire Planning and Intelligence; Resource Management. The 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.

Fire Prevention Planning & Engineering

<u>Fire Prevention Planning</u> considers the best design, construction, and engineering practices for planning fire safe communities and homes. Engineering principles also apply in the safe use of industrial and recreational equipment; as well as event safety and inspections occurring in both county and state jurisdictions. The County Fire Marshal and Engineering Staff recommend and interpret laws and regulations covering wildland fire safety and assist homeowners, landowners, decision-makers, and local government planners in building and rebuilding fire safety into the communities we serve. Below is a brief rundown of the County's fire code.

County Fire Codes

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
- Fire Works Regulation
- Event Inspection and Safety

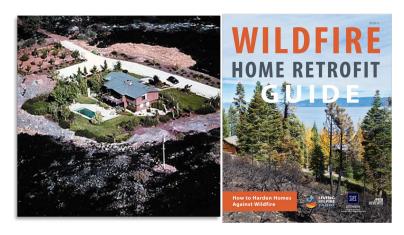
ENGINEERING & STRUCTURE IGNITABILITY

A progressive process typically occurs as a structure is exposed to a wildland fire. First, embers are cast in front of a fire by wind or convection column. In some instances, these fire brands 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 flaming 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 flaming 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 first include, 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 and radiant heat will occur, preventing flames from penetrating into the building 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. The CAL FIRE Home Hardening Program is available to assist residents with protecting their homes from damaging Wildfires.

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 regarding 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 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.



CAL FIRE / San Luis Obispo County Fire understands that to be successful at firefighting and incident management, we will need comprehensive and collaborative plans. A tremendous effort is put into these plans annually. Plans will be separated into three categories, community planning, operational planning, and pre-attack planning. By placing the emphasis on what needs to be done long before the incident starts, these plans look to reduce cost and property losses, increase public and firefighter safety, and positively contribute to ecosystem health.

Community Planning

These plans are put together as a guiding document for fuel reduction. We work in collaboration with the community stakeholders, <u>San Luis Obispo County Fire Safe Council (SLO FSC)</u> and the local fire authority to set the goals. Once the plan is completed, the community typically seeks grant funding to achieve the goals of the plan.

San Luis Obispo County Community Wildfire Protection Plan (CWPP)

2019 Multi-Jurisdictional Hazard Mitigation Plan

2019 Paso Robles CWPP

Cambria Wildfire Protection Plan (CWPP)

Operational Planning

Fire Danger Operating Plan (FDOP)

The National Fire Danger Rating System (NFDRS) is used by fire management agencies to assess the current fire danger at the local level. Using fire danger modeling applications to analyze weather data and past fire occurrences, Fire Danger Operating Plans are developed and used to set preparedness levels and assign appropriate suppression resources based on pre-determined staffing levels and response levels. The most familiar use of this tool is "Smokey Bear Signs" which display the Adjective Fire Danger Rating for the day.

San Luis Obispo County Fire Service Level Analysis

The purpose of this planning document is to serve as a guide for the Board of Supervisors and partners in the CAL FIRE/San Luis Obispo County Fire consolidated fire protection program. Paramount in this undertaking is the need to identify proper levels of service for fire protection, assess the current delivery system and forecast necessary changes to fire protection services. A goal of this plan is to provide a tool for making cost-effective decisions regarding changes in service levels. To achieve that goal, this plan describes and presents data regarding fire protection in the county by using community demographics, service levels, staffing models, governance and funding options.

Central Coast Operating Plan

This Operating Plan is required by the <u>California Master Cooperative Wildland Management and Stafford Act</u> <u>Response Agreement</u> between State and Federal Agencies. This Operating Plan <u>(CCOP)</u> provides the officers and employees guidelines and information necessary to properly execute fire suppression within the Central Coast.

Pre-attack Planning

Pre-Attack Plans

CAL FIRE / San Luis Obispo County Fire, through funding from the County Office of Emergency Services and the SLO Fire Safe Council, have been creating localized disaster pre-plans. These plans come in the form of large, printed, foldout maps, (AAA style) which are distributed to engine companies, fire stations and chief officers within the County. The maps are also available utilizing QR Code and on the CAL FIRE/ San Luis Obispo County Fire Department website. These maps were produced through a collaborative effort with communities, Fire Departments, County OES, Law Enforcement, State Parks, and the GIS Internship program. These Pre-Attack plans are divided into three categories. Wildland Fire Threat, Evacuation Planning and Tsunami.

There is currently a working group consisting of the San Luis Obispo County Fire Safe Council, San Luis Obispo County Fire Chiefs Association San Luis Obispo County Office of Emergency Services and the San Luis Obispo County Sheriff Countywide Evacuation Planning and Modeling product to enhance the coordination, Public notification for evacuation Countywide.

Building Pre-Plans

Each Fire Station is tasked to maintain pre-plans of the high target hazard buildings within their response area. These plans provide first responders with information regarding site access, building floorplan, building construction features, fire protection systems, hazardous materials storage, owner contact numbers, utility shut-off locations, and water supply information. These plans are available online where incoming units can access them and enhance fire-ground awareness prior to arrival to the incident.

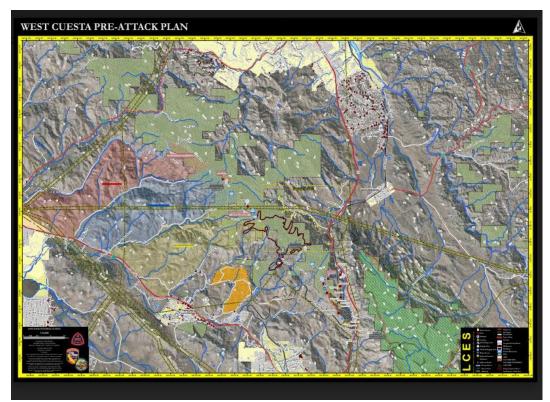


Figure 11a: Wildland Fire Pre-Attack Plan

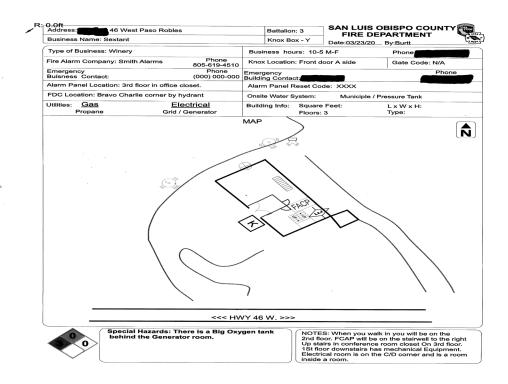


Figure 12b: Building Fire Pre-Plan

INFORMATION AND EDUCATION

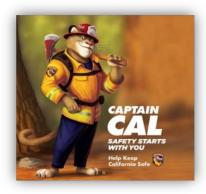
Law Enforcement

The primary emphasis of the San Luis Obispo Unit's law enforcement bureau is the enforcement of local and state fire laws as they apply to the missions of CAL FIRE, the State Fire Marshall's Office, and the San Luis Obispo County Fire Department. CAL FIRE's Law Enforcement officers are sworn State Peace Officers under PC 830.2. They are trained and certified in accordance with the California Commission on Peace Officer Standards and Training (POST). The officers are busy year-round investigating fire causes, interviewing witnesses, working with juveniles, issuing citations, and setting up surveillance operations.

Arson and negligently caused fires receive priority for law enforcement action, which typically results in criminal or civil proceedings against the responsible person(s). Such proceedings can lead to imprisonment, fines, and fire suppression cost collection. Law enforcement action is a critical fire prevention tool.

Fire Information and Education

Public outreach and education are 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. These efforts are detailed in section V and include school programs, parades, fairs, road signs, Captain Cal "Safety Starts With You" programs, and numerous events, exhibits and displays throughout the year. In recent years, the use of internet websites and social media is increasing our ability to provide fire information to a much larger audience more quickly. https://www.readyforwildfire.org/prepare-for-wildfire/ready-set-go/







Volunteers In Prevention

VIPs are trained to assist CAL FIRE's efforts during wildland fires and other emergencies by providing information to the media and public. A specialized group of volunteers (HAM radio operators and CB radio groups) provide additional communication networks for CAL FIRE during emergencies including wildland fires, earthquakes, and floods.

Juvenile Fire-Setter Program

The Juvenile Fire-Setter program is managed within the Law Enforcement and Education area. It is an education-based diversion program designed to work with juveniles and young adults who have been identified as having a fire-setting behavior pattern. It is designed to break the chain of fire-setting behaviors before a serious incident occurs. It is an alternative to the juvenile justice system but can work with the justice system.

VEGETATION MANAGEMENT

CAL FIRE / San Luis Obispo County Fire along with private landowners, cooperating agencies, and the County administer numerous programs which support the California Strategic Fire Plan. In the effort to make the vegetation management achievable this Plan has broken Vegetation Management into three strategic categories: defensible space fuel treatment, non-defensible space fuel treatment, and vegetative management prescriptions. Environmental review must be conducted for all pre-fire management activities that could cause either direct or indirect changes to the natural or human environment.

Fuels treatment efforts conducted by CAL FIRE / San Luis Obispo County Fire include the following methods and techniques. A more detailed discussion of these methods and techniques is presented in Section 5 of this Plan (Fuel Treatment Tactics).

Methods:

- Defensible Space Treatment
- Non Defensible Space Treatment
 - Fuel Breaks
 - Fire Breaks
 - Prescribed Burning
- Hazard Reduction
- Range Improvement
- Training Burns
- Invasive Weed Control
- Ingress/Egress Enhancement
- Roads
- Truck Trails

Techniques:

- Mechanical
 - Mowing
 - Mastication
 - Piling/Crushing
 - Plowing/Disking/Harrowing
- Manual/Hand Work
 - Cut/Lop/Scatter
 - Cut/Pile/Burn
 - Cut/Chip
 - Pruning
 - Weedeating
- Prescribed Burning
 - Aerial
 - Ground-based
- Prescribed Herbivory
 - Cattle
 - Goats
- Chemical Applications

ENVIROMENTAL REVIEW

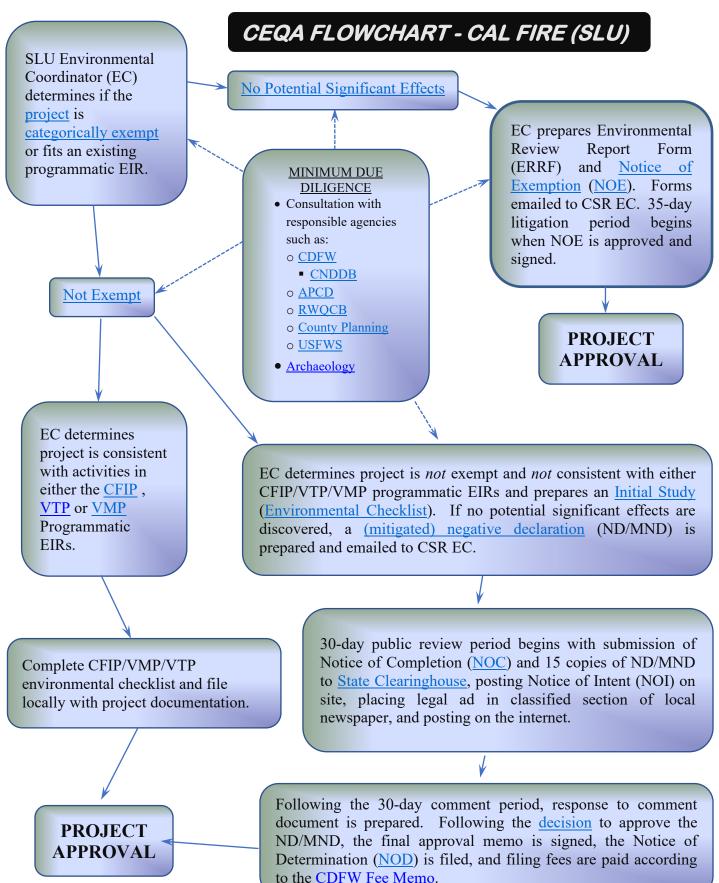
Such projects carried out by or in association with CAL FIRE must be conducted in accordance with policies and procedures established by the CAL FIRE <u>Environmental Protection Program</u>. Environmental review will be conducted per all applicable laws and regulations for all projects proposed under this Plan prior to commencement of any activities that have potential to cause adverse environmental impacts. Environmental review is the responsibility of the Unit Environmental Coordinator

CEQA Review

The California Environmental Quality Act (CEQA) is a statute that requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible. The statute (Public Resources Code Sections §21000–21177) and guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections §15000–15387) are available from the California Law Website. The 2020 CEQA Handbook, is a useful reference for those performing CEQA review to ensure that all work is in accordance with the statute.

Locally, CAL FIRE has developed a [CEQA flowchart] used for projects where CAL FIRE is the Lead Agency. (Fig. 14)

Figure 13: CEQA Flowchart



Programmatic Environmental Impact Reports (PEIR)

As shown in the CEQA flowchart, existing PEIRs can be used to fulfill the required environmental checklist component for projects where the proposed activities are consistent with the environmental analysis performed for the respective PEIR. These environmental checklists may be used as stand-alone support for certain projects; however, this method for conducting environmental review is most commonly used for projects carried out under Resource Protection & Improvement Program including the California Forest Improvement Program (CFIP), the Vegetation Management Program (VMP), and the California Vegetation Treatment Program (CalVTP).

Categorical Exemptions

Categorical exemptions can be used to exempt particular projects from CEQA review. CAL FIRE most frequently uses the Class 4 exemption, Minor Alterations to Land. This exemption "consists of minor public or private alterations in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees except for forestry and agricultural purposes." (Cal. Code Regs. § 15304.) When CAL FIRE determines that a project is exempt from CEQA there must be substantial evidence in the record to support that determination. In addition, the evidence in the record must also support the finding that no exception to the exemption applies (Cal. Code Regs. § 15300.2). If a project fits in an exempt class and no exception applies, then by statute, no further environmental analysis is required. However, CAL FIRE must conduct its own due diligence to determine that the exempt class applies and that no exception exists. This may require a bit of project scoping and on-the ground analysis including various agency involvement. CAL FIRE uses the Environmental Review Report Form (ERRF) to document a limited environmental impact analysis supporting the filing of a Notice of Exemption document for a proposed CAL FIRE project. This report presents CAL FIRE's review for possible exceptions that would preclude finding the project to be categorically exempt as discussed in CEQA.

Archaeological Procedures

Assembly Bill 52 amended CEQA to require specific consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of a proposed project. The consultation is required when the lead agency prepares a negative declaration, mitigated negative declaration or environmental impact report. CAL FIRE's archaeological procedures require the project manager to initiate (in consultation with a state archaeologist) a preliminary cultural survey to determine if the project's activities could affect cultural resources. CAL FIRE project managers are required to send written notification of the proposed project to the appropriate California Native American tribes listed on the most current version of the Native American Heritage Commission's list, requesting comments on the project.

Agency Involvement

Certain types of activities may require involvement with other local, state, and/or federal agencies. Depending on the location, nature and timing of the proposed project, this can include formal or informal consultation, site visits, and permitting. This most often occurs as part of the CEQA review process. The agencies most frequently involved with pre-fire projects, particularly fuels treatment, are discussed below.

San Luis Obispo County Air Pollution Control District (APCD) - The San Luis Obispo APCD is one of 35 air districts located throughout California responsible for controlling air pollution at the local level. APCD enforces all <u>local rules and regulations</u> and is the primary agency responsible for achieving clean air standards established by the <u>California Air Resources Board</u> (CARB) and the <u>U.S. Environmental Protection Agency</u>. Pre-fire projects proposing to use burning will require issuance of a burn permit from APCD. Larger burns, including prescribed burns, are addressed through the <u>Smoke Management Program</u> which requires preparation of a Smoke Management Plan (SMP) or submission of an application through the Prescribed Fire Information Reporting System (<u>PFIRS</u>). <u>Burn permits</u> are available to download online or the local APCD Office.

- San Luis Obispo County Planning & Building Department Pre-fire projects that meet certain criteria may require permit processing through the Planning Department. Most types of land use permits are only required in association with construction; however, permits may be required for tree removal, removal of state/federal listed species, or removal of major vegetation within designated environmentally sensitive habitat areas (ESHA) or the Coastal Zone. Early in the planning phase, project proponents are encouraged to consult with staff to determine permitting requirements. In addition, County Planning provides helpful information including GIS maps, biological resources, geology, erosion control, archaeology, invasive plant species, ordinances, CEQA and a variety of other information.
- California Department of Fish & Wildlife (CDFW) San Luis Obispo County is within CDFW Central Region #4. To determine CDFW's role in CEQA, any type of activity that proposes ground or vegetation disturbance should be discussed early in the CEQA review process with the local CDFW biologist or environmental scientist to determine if CDFW's Environmental Review and Permitting Program is necessary to facilitate completion of the project. Early consultation with the proper CDFW contact and use of CDFW data and maps will help ensure that projects are conducted in the most environmentally responsible manner. Once CEQA review is completed, certain documents require payment of CEQA filing fees. Following informal consultation, the two most common situations requiring formal CDFW involvement are:
 - Projects that propose disturbance to plant and/or animal species protected under the California Threatened and Endangered Species Act (<u>CESA</u>). Projects where impacts to State-listed species cannot be avoided may require initiation of the Incidental Take Permit Process.
 - Fish and Wildlife Code (Section 1602) requires an entity to notify CDFW of any proposed activity that may substantially modify a river, stream, or lake. Where necessary, a permit may be issued according to <u>CDFW's Lake</u> or <u>Streambed Alteration Program</u>.
- Regional Water Quality Control Board (RWQCB) Central Coast Region #3 Large scale projects or those that
 could potentially impact the waters of the State should be reviewed by local RWQCB staff (<u>Water Board contacts</u>) to
 determine if the proposed project should be modified to prevent impacts to water quality. The <u>Water Boards</u> are
 responsible to protect California's waters and staff will provide input, usually through informal consultation, to ensure
 that projects do not impact water quality and are in accordance with laws and regulations such as the <u>Porter Cologne</u>
 <u>Water Quality Control Act</u> and the <u>Federal Clean Water Act</u>.
- California Coastal Commission (CCC) The California Coastal Act (CCA) serves as a comprehensive planning and regulatory program to manage conservation and development within the California coastal zone. California's coastal management program is carried out through a partnership between state and local governments. Implementation of Coastal Act policies is accomplished primarily through the preparation of local coastal programs (LCPs) that are required to be completed by each of the 15 counties and 60 cities located in whole or in part in the coastal zone. San Luis Obispo County and the cities of Morro Bay, Pismo Beach, and Grover Beach each have certified Local Coastal Programs (LCP) within the central coast area.

Pre-fire projects within the coastal zone that propose "development" as defined by PRC \ssaltan10106 or occur within an ESHA (<a href="PRC \ssaltan10105] PRC \ssaltan10106 may require issuance of a coastal development permit (CDP) through the LCP having jurisdiction. The coastal planner for each LCP will help determine the appropriate permitting process that must be followed. Typically, the CDP process is initiated near the end or immediately following completion of the CEQA review process.

• California Department of Transportation (Caltrans) – Pre-fire projects such as brush removal proposed within the designated right-of-way of a State highway may require the project proponent to obtain an Encroachment Permit from the District 5 Encroachment Permit Branch. Information on this process is provided in the Encroachment Permits Manual.

- U.S. Fish & Wildlife Service (USFWS) San Luis Obispo County is within the <u>area of responsibility</u> of the <u>Ventura F&W Office</u>. Pre-fire projects, particularly those funded by federal agencies involving federally listed plant or animal species or designated <u>critical habitat</u> may require <u>consultations with federal agencies</u> to ensure compliance with the <u>Endangered Species Act</u> (ESA). Consultations most often occur as provided in <u>ESA section 7</u>. For non-federal activities where federally listed species occur, <u>permits under ESA section 10</u> may be necessary such as an Incidental Take Permit for areas covered by an approved <u>Habitat Conservation Plan</u> (HCP).
- Native American Heritage Commission (NAHC) The NAHC identifies, catalogs, and protects Native American
 cultural resources -- ancient places of special religious or social significance to Native Americans and known ancient
 graves and cemeteries of Native Americans on private and public lands in California. Cal Fire must notify NAHC and
 the appropriate California Native American tribes listed on the most current NAHC list of any pre-fire projects, to inform
 them of the proposed project, invite comments, provide information and to notify tribes that they may request
 consultation regarding the project.

Professional Forester's Law (PFL)

In California, PRC §750-783 requires that a Registered Professional Forester, commonly known as an RPF and licensed according to RPF regulations, be in charge of all pre-fire projects or activities defined as "forestry" (§753). Per §757, landowners are not subject to the PFL when working on their own property. Forestry, as used here, refers to pre-fire projects that occur on "forested landscapes" (§754) which is generally considered to be those areas where the canopies of native tree species occupy at least 10% of the landscape. To help determine the role of the RPF for a project, the Board of Forestry & Fire Protection (BOF) established the Professional Foresters Registration office to oversee policy statements and maintain the RPF roster.

<u>Guidance on the Certified Rangeland Manager (CRM) Program</u> describes the types of rangeland management projects that may require the use of a person possessing this specialty certificate. A specialist from the CRM roster may be able to provide expertise and required oversight on projects in "forested landscapes" where the proposed activities focus specifically on rangeland management objectives.

POST-FIRE

Whenever the Unit experiences significant wildfire events it will require extensive suppression repair activities. The Unit Registered Professional Foresters are trained and experienced in suppression repair. Our Unit forester will work with other state agencies, large landowners, and the community to complete suppression repair efficiently. Additionally, suppression repair activities are completed with future fire prevention in mind.

The Unit has a responsibility to reduce and repair damage incurred to the landscape during suppression activities. Unless all fuels are consumed, there is typically fuel loading found adjacent to roads, bulldozer trails, and structures where fire crews or equipment have modified the landscape for fire suppression. Following control of the fire, the areas of increased fuel loading need to be addressed.



2012 Creek Fire, 6 months Re-growth

SECTION V: PRE-FIRE MANAGEMENT TACTICS

DIVISION / BATTALION / PROGRAM PLANS

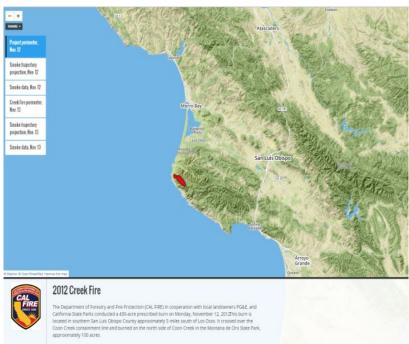
The following pre-fire management tactics are employed by CAL FIRE/San Luis Obispo through multiple programs that are available to each planning area. These programs can be tailored to meet the needs at a countywide or community level. These programs are also scalable to meet the needs of the county and communities we serve. Prevention programs are divided into 4 categories: Prevention Planning & Engineering, Law Enforcement & Education, Pre-Fire Planning and Intelligence, and Resource Management

PRE-FIRE PLANNING & INTELLIGENCE PROGRAMS

Geographical Information Systems (GIS)

Providing the responding resources and fire officers real-time and accurate fire intelligence is a priority in the CAL FIRE / San Luis Obispo Unit. With the implementation of mobile data computers (MDC) in responding units, preattack planning maps of residences and priority WUI areas of the County are available on-scene. These products are increasing our firefighting performance. These are a product of the Geographical Information Systems (GIS) and the efforts of the Pre-Fire Engineer, the County Funded Research Data Analyst II, Research Data Analyst I, County Fire Department, and the GIS Intern Program.

The primary tactic of providing fire intelligence involves pre-planning for anticipated or expected events or emergencies, and includes evacuation planning, mapping, GIS data management and incident pre-attack planning. GIS also give us opportunities to assist firefighters and planners through accurate data that is specific to the fire environment. Water sources, terrain, structures, boundaries, and vegetation landscapes are a few of the priority datasets managed on a countywide scale. When added to live data-products created by the Pre-Fire Planning program increase citizen and firefighter safety, while reducing firefighting suppression costs.



SCOUT Incident Dashboard

PREVENTION PLANNING & ENGINEERING

County General Plan

The <u>San Luis Obispo County General Plan and ordinances</u> 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/San Luis Obispo County Fire 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. <u>Title 16</u>

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 <u>4290</u> & <u>4291</u> is enforced by CAL FIRE/San Luis Obispo County Fire - Law Enforcement division.

Building Plans Reviews and Inspection Program

The CAL FIRE /San Luis Obispo County Fire Marshal's provides plan review and inspection services to all unincorporated areas of San Luis Obispo County to implement the fire and life safety regulations and building standards established and adopted by the State Fire Marshal and County Board of Supervisors. In addition, the department performs fire and life safety clearance inspections in State Licensed facilities and is charged with annual inspections of schools, motel/hotels, and apartment buildings as well as regular inspections of public assembly buildings and facilities using or storing acutely hazardous materials. The Fire Marshal also serves as the appointed "County Fire Warden" and is responsible for ensuring that the regulations stipulated in the California Public Resources Code 4290 are applied to new developments and structures in the State Responsibility Areas of San Luis Obispo County.



LAW ENFORCEMENT PROGRAMS

Peace officers from the San Luis Obispo Unit are routinely called upon to conduct arson and fire investigations, work with juvenile fire-starters, perform security functions for special operations and emergency incidents, conduct fireworks enforcement, conduct fire extinguisher investigations, as well as disposal of seized illegal fireworks. Our Investigators also assist other fire and law enforcement agencies with incident investigations. These peace officers are subject to call statewide.

Due to the complexities of the emergency incidents, the unit's law enforcement component maintains close working relationships with the district attorney's office, law enforcement agencies of all venues, and working task groups such as; gang, juvenile, and narcotics task forces. Additionally, the unit's peace officers can be called upon to perform general law enforcement duties statewide during times of disaster and major emergencies.

The CAL FIRE Arson Hotline is maintained by the Department's Sacramento Law Enforcement section, which also processes requests for payment of arson rewards. Rewards of up to \$10,000 are available for information regarding wildland fires within State jurisdiction. Depending on the magnitude of the fire, enhanced rewards of up to \$25,000 or higher may be available.

Cost Recovery Program

Since the Civil Cost Recovery Program began, the state has recovered more than \$93 million statewide from folks whose wayward fires required suppression, investigation, and follow-up by CAL FIRE Law Enforcement.

Burn Permits Program

Where alternative means of vegetation disposal are not feasible, CAL FIRE encourages the safe and prudent use of burning during certain times of the year. Residential debris burning, hazard reduction burning, agricultural burning, development burning, and range improvement burning are commonly used methods that can be effective for removing excess vegetation and reducing the fire hazard.

Burn permits are also required for the following:

- · Public or industrial firefighting training.
- Prevention of a fire hazard that cannot be abated by any other means.
- The disposal of agricultural waste as specified by Rule 502. The agricultural waste must be produced and burned on site.
- Levee, ditch and reservoir maintenance, or right-of-way clearing by a public entity or utility.
- Developmental burning when there are no technically feasible alternatives.
- Prescribed burning

All burning permits listed above are issued by the Air Pollution Control District (APCD). The California Department of Forestry and Fire Prevention (CAL FIRE) also requires a <u>permit</u> for all types of burning during the fire hazard season.

Inspection Program (LE100/ AB 38)

The hazard reduction inspection program (LE-100) is managed by the Law Enforcement Bureau Chief. Engine companies and Defensible Space Inspectors (DSI) are responsible for performing inspections within their initial attack areas and are typically performed during spring and summer months. Inspectors are directed to leave an inspection notice at all properties to inform the homeowner there has been an inspection Inspectors are also instructed to leave notices at residences where access is blocked. During the inspection, Inspectors 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 Inspectors 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. The target goal is to complete 8,000 inspections per year, depending on staffing and resources available to complete the Inspections.

State Requirements (SRA Lands)

Public Resources Code 4290 (PRC 4290)

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 a minimum of 100 feet, or to the property line, 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.

These fuel reduction techniques should be conducted annually during the late spring and early summer to avoid the accumulation of hazardous fuels over time. Finally, the 4291 guidelines are specific to State Responsibility Areas (SRA) and may be applicable in Local Responsibility Areas (LRA), depending on local agency standards.

AB 38 Defensible Space Inspection

California Civil Code Section 1102.19 requires a seller of real property located in a High or Very High Fire Hazard Severity Zone (FHSZ) within the State Responsibility Area (SRA) or Local Responsibility Area (LRA), to provide the buyer with documentation stating the property is in compliance with the requirements of Public Resources Code (PRC) Section 4291 for properties within the SRA or local vegetation management ordinances for properties within jurisdictions (SRA or LRA) that have enacted an ordinance requiring an owner to achieve compliance with PRC 4291 or Government Code 51182. The law also requires that if documentation demonstrating compliance cannot be obtained by the close of escrow, a written agreement showing that the buyer agrees to obtain documentation of compliance to either PRC 4291 for properties within the SRA, or a local ordinance for properties within jurisdictions that have enacted an ordinance, within one year of the close of escrow.

Defensible Space Fuel Treatment Tactics

Vegetation treatment/hazard reduction operations are provided to promote individual homeowner compliance with PRC 4291. The <u>guidelines</u>, published by CAL FIRE 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):



Figure 14: Defensible Space Illustration

FIRE INFORMATION & EDUCATION PROGRAMS

Volunteer in Prevention Program

The objectives of the VIP Program are to involve and utilize citizens and public service groups in non-salaried positions to reduce human-caused fires. Each year our SLU / CAL FIRE VIP's play a vital role to staff public events and assist emergency mitigation efforts. Each year VIP's assist by participating in public education events discussing with homeowners, ways to make their homes fire safe. These one-on-one contacts are an increasingly important education tool as the population in California's wildlands continues to grow.

Internet Resources

CAL FIRE / San Luis Obispo County has experienced great success with providing public fire information and education messages using its website and social media outlets.

The website CALFIRESLO.ORG provides a medium in which to provide immediate emergency press releases as well as providing a place for the public to find information. It also provides the public and employees with information regarding our building and planning standards, upcoming training opportunities, job postings, and what to do to prepare for an emergency event. This site has increased in visits every year since inception.

Media Outreach

Providing the public with information that is accurate and up to date is a great tactic to provide department information as well as fire prevention messages intended to educate the public. The Unit is committed to issuing press releases to San Luis Obispo County media outlets on a regular basis. These releases are typically accompanied by television interviews. They are also published on the CALFIRESLO.ORG website. www.readyforwildfire.org



Facebook @calfiresanluisobispo V Twitter @calfire_slo Instagram @calfiresanluisobispo





School Programs (K-12th)

Prevention staff, as well as engine companies participate in school programs throughout the year providing life safety, fire prevention, and natural resource protection education. Through the use of Smokey and Friends, and Educator Tools, we are able to provide an age appropriate, standardized safety message countywide.

Public and Special Events Program

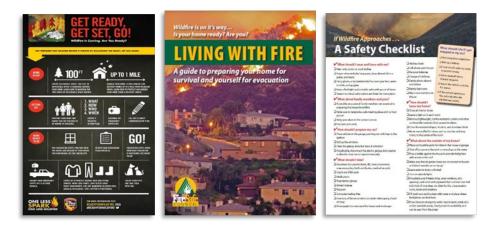
The Unit participates in numerous events through the year. Ensuring public and firefighter safety at these events requires inspections and at times staffing. At each of these events our prevention staff, Engine Companies, and Volunteers in Prevention (VIP) speak to thousands of people sharing the message of fire prevention. The Mid-State Fair, Earth Day, and the San Luis Obispo Farmers Market are just a few of the many public events the Unit participates in annually. We encourage local agencies to participate with us to provide a broader message promoting fire safety.

Smartphone Applications

- San Luis Obispo County has implemented the use of the Pulse Point Phone App to notify the public of Incident location and information at time of dispatch. Pulse Point displays selected incident information from the CAL FIRE/San Luis Obispo County Fire Department Dispatch CAD system for CAL FIRE/San Luis Obispo County Fire Department and contracted Cities and CSDs as well as Cambria Fire Department, Camp Roberts Fire Department, Five Cities Fire Authority, Morro Bay Fire Department, San Miguel Fire Department, Santa Margarita Fire Department, and Templeton Fire Department.
- CAL FIRE has created a Ready for Wildfire App which provides information on Defensible space, family evacuation planning, and emergency preparedness.

Printed Material Program

Printed educational materials are available to the public at every fire station and online. Through funding from the SLO Fire Safe council we can distribute the "Living with Fire" brochure that gives citizens the information on home preparation, Evacuation Plans that illustrate where evacuation routes are and where pre-determined safety areas exist along that route. While "Ready, Set, Go!" brochures assist residents with evacuation planning.



Billboard Sign Program

A system of thirty billboard 4'x8' signs that are strategically placed at ingress and egress points throughout San Luis Obispo County. These signs target community fire educations topics of creating defensible space, home preparations and the newly created 'Ready, Set, Go!' program. Sign topics are created using the ten-year Unit ignition history and then placed in "at risk" communities within CAL FIRE's jurisdiction.



HAZARDOUS FUEL REDUCTION

The following fuel treatment prescription tactics 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 stated 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 species¹.

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.

Fuel Treatment

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. Treatments other than defensible space may include the following:

- Fuel Breaks: intended to modify fire behavior and spread by altering fuel beds in a linear alignment, typically situated along ridge tops and may include retained trees (shaded fuel breaks).
 - Fire Break: Is any non-combustible fire barriers either natural or manmade. (e.g. lake, game trail, road).
- Road-side Fuel Treatments: intended to reduce the likelihood of ignition sources along County Roadways, State Highways and Forest roads. The roadside treatments also maintain access/egress capabilities for Wildfire Incidents.
- Fuel Reduction: 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 activities

- 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 reduce 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 per 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 wildlandurban 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 Program: 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.



APPENDIX A: PRE-FIRE PROJECTS



PRE-FIRE PROJECTS San Luis Obispo Unit (SLU)

San Luis Obispo Unit (SLU)					
PROGRAM	PROJECT NAME	Project Status F	Treatment Footprint Acres	<u>Treatment</u> Footprint Miles	
Fire Plan	2019 SLO Countywide Hazard Fuel Reduction	Active	5,202.16	r ootprint miles	SLU
Fire Plan	5GA20115- 2021 SLO COUNTY HFR	Active	29,494.26		SLU
Fire Plan	5GA20116 SLO COUNTY FOREST HEALTH HFF	R Active	4,558.56		SLU
Fire Plan	Cayucos-Dunn Fuel Reduction	Active	65.46		SLU
Cal VTP	COVELL RANCH VTP	Active	3.01		SLU
VMP	East Lopez VMP	Planned			SLU
Fire Plan	Fern Canyon Fuel Reduction	Complete in Maintenan	ce 5.75		SLU
VMP	Lighthouse VMP	Active	247.98		SLU
VMP	Long Canyon Huasna VMP	Active	1,041.10		SLU
VMP	Nacimento VMP	Active	592.85		SLU
VMP	Pismo VMP	Active			SLU
Fire Plan	Rocky Butte Fuel Break	Complete in Maintenan	ce 113.38		SLU
Fire Plan	SLO Coast State Parks Fuel Reduction	Active	351.93		SLU
Fire Plan	SLO County CWPPs-Arroyo Grande & Salinas §	RiverActive			SLU
Fire Plan	SLO County Evacuation Planning	Active			SLU
Fire Plan	SLO County HFR FY 19/20	Active	22.54		SLU
Fire Plan	SLO Range Improvement Projects	Active	148.13		SLU
Fire Plan	SLOSA Range Burn	Active	694.09		SLU
Fire Plan	SLU Camp Roberts Training Area	Active	6,697.02		SLU
Fire Plan	SLU Communication Sites	Active	17.04		SLU
Fire Plan	SLU CREW TRAINING HFR	Active	114.27		SLU
Fire Plan	SLU Fuels Reduction Projects	Active	30.71		SLU
Fire Plan	SLU Los Robles	Active	20.21		SLU
Fire Plan	SLU Parkhill Projects	Active	562.21		SLU
Fire Plan	SLU Project Maintenance	Active	187.80		SLU
VMP	SLU Spooner 2 VMP	Active	343.09		SLU
Fire Plan	SLU Truck Trail Maintenance	Active	1,563.91	85.63	SLU
Fire Plan	SLU-Camp SLO	Active	865.31		SLU
VMP	Temettate VMP	Active	138.43		SLU
Fire Plan	West Nacimiento Fuel Reduction Early Action	Active			SLU
VMP	Yaro VMP	Active	12.07		SLU
		Totals	53,093.27	85.63	

APPENDIX B: UNIT GOALS AND OBJECTIVES

The following recommendations have been developed based on stakeholder input and are intended to facilitate multiagency cooperation for fire protection planning efforts in San Luis Obispo County:

PRE-FIRE PLANNING

- Continue to create, maintain, and update Countywide GIS datasets relevant to pre-fire planning.
- Maintain and strengthen coordination between fire agencies in the County to integrate GIS fire-related datasets.
- Routinely update pre-fire and emergency plans, maps, and documents.
- Identify operational/response planning needs (e.g. wildfire response plans, evacuation areas, evacuation routes, fire equipment staging areas, control objectives, significant environmental areas, etc.).
- The cumulative effects of large scale special events and increased commercial operations within county and state
 jurisdictions place challenges upon CAL FIRE/County Fire's ability to provide emergency services within rural
 areas. Increasing winter staffing would assist to provide the needed protection.
- Maintenance of water purveyors in the county to determine which are available to provide water for firefighting operations.
- Installation and maintenance of additional weather monitoring and observation devices.
- Foster relationships with Stakeholders/Groups to reduce the threat of large and damaging wildfires.

STATUTES AND 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 or properties inspected each year.
- Coordinate with County and local government staff to integrate fire-wise approaches into planning documents and ordinances.
- Continue to support community prevention programs that encourage property owner compliance with vegetation management requirements.
- Identify funding sources and opportunities for enforcement of regulations.

FIRE PREVENTION

- Implement and maintain vegetation management projects along highly traveled roadways throughout the County to minimize ignitions.
- Conduct 500 acres of fuel reduction and 2,000 acres of Rx burn
- 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
 - o Quantity of tons/area of fuel reduction treatments annually
 - Quantity of citizens participating in the planning process
- Continue implementation of vegetation management treatments and ignition reduction projects in priority WUI
 areas in the County.
- Continued identification of 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.
- Implement a B Occupancy Inspection Program
- Implement a unit wide standardized Target Hazard Pre-Plan program.

INFORMATION AND EDUCATION

- Continue inter-agency coordination with the <u>SLOFSC</u> 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 online and post information.
- Make specific pre-fire project descriptions available to the public.
- Develop printed educational materials for distribution.
- Conduct public outreach/education in communities where fuel reduction projects are proposed prior to initiation of work

LAW ENFORCEMENT

- Seek funding sources for required personal protection equipment replacement, vehicle upgrades, and law enforcement equipment.
- Develop and improve our partnerships with other law enforcement agencies to provide additional training opportunities.
- Develop new partnerships to provide permanent funding for the County's Fourth of July fireworks enforcement operation to remove some of the financial burden from the state.
- Work with the District Attorney's office and the courts to ensure fireworks violators pay the costs of the disposal of sized illegal fireworks.
- Seek community partnerships and funding sources to develop and deliver CAL FIRE's fire safe message to all schools in the county.
- Develop strategic partnerships and funding opportunities with local industry to support the overall fire safety message.
- Conduct public outreach/education in communities where fire violations are frequent.
- Seek opportunities for additional training in working with Juvenile fire-starters.
- Complete over 8500 PRC 4291 Inspection

APPENDIX C-F:

APPENDIX C:

SAN LUIS OBISPO COUNTY (CWPP)

This Community Wildfire Protection Plan (CWPP) covers San Luis Obispo County, California 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 datasets 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 the San Luis Obispo County Fire Department with community and stakeholder input and involvement.

Development of this Plan was also intended to support the vision, goals, and objectives of the California Fire Plan, thereby creating a cohesive document which integrates the community focused nature of a CWPP while simultaneously functioning as the CAL FIRE Unit Strategic Fire Plan, which also seeks to create a state that is more resistant and resilient to the damaging effects of catastrophic wildfire while recognizing fire's beneficial aspects. With consistent goals of improving fire prevention and suppression efforts, reducing hazardous fuels, restoring fire-adapted ecosystems, and promoting community assistance, integrating these two plans was a logical step for fire planning efforts in San Luis Obispo County. The goals of this 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; promoting collaboration between government agencies and a broad representation of stakeholders; improving fire suppression and prevention capabilities; promoting post-fire recovery efforts; and maintaining accountability through performance-based monitoring. This 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.

APPENDIX D:

FIRE DANGER OPERATING PLAN (FDOP)

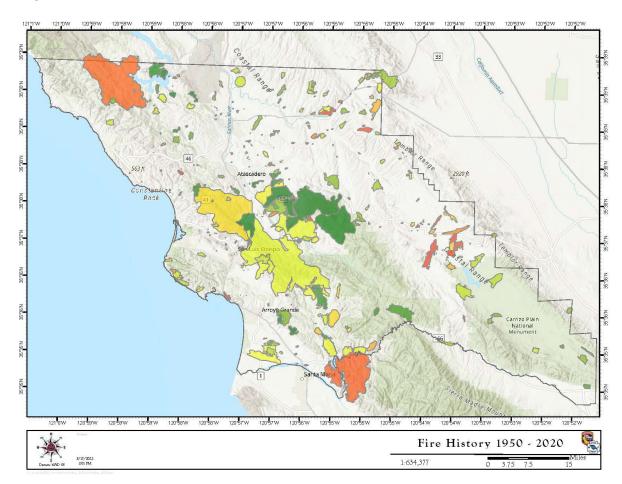
This plan is designed to help guide the application of the National Fire Danger Rating System (NFDRS) at the unit level. It will provide a framework for consistent thought process to apply the FDOP for San Luis Obispo County for agency administrators, fire managers, dispatchers, agency coordinators, and firefighters using accurate and effective scientific methods and historical fire and weather data. Management decisions dealing with dispatch levels and staffing levels will be assessed based on vegetation, climate, and topography in conjunction with NFDRS modeling.

This operating plan is for San Luis Obispo County, which encompasses five fire danger rating areas including the Coastal FDRA and the Inland FDRA. These five geographic regions are our focus of analysis because each is composed of a unique combination of fuels, climate, and topography.

This plan offers decision support and helps in quantifying elements that establish agency planning and response levels. Additionally, procedures for developing seasonal risk analysis and fire severity trigger points are outlined with the implementation and analysis process of this plan.

APPENDIX E:

FIRE HISTORY MAP



APPENDIX F:

2022 All Wildland Fires and Ignitions Map

97 Ignitions722 Acres Burned

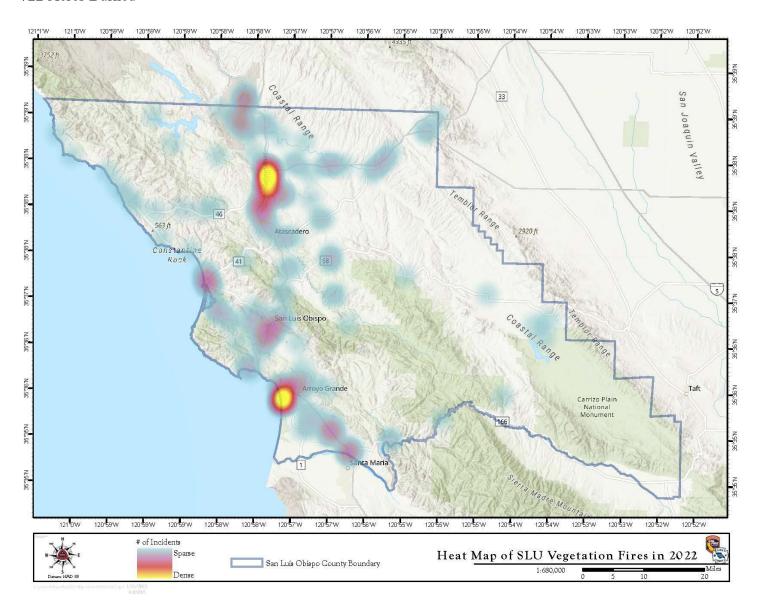
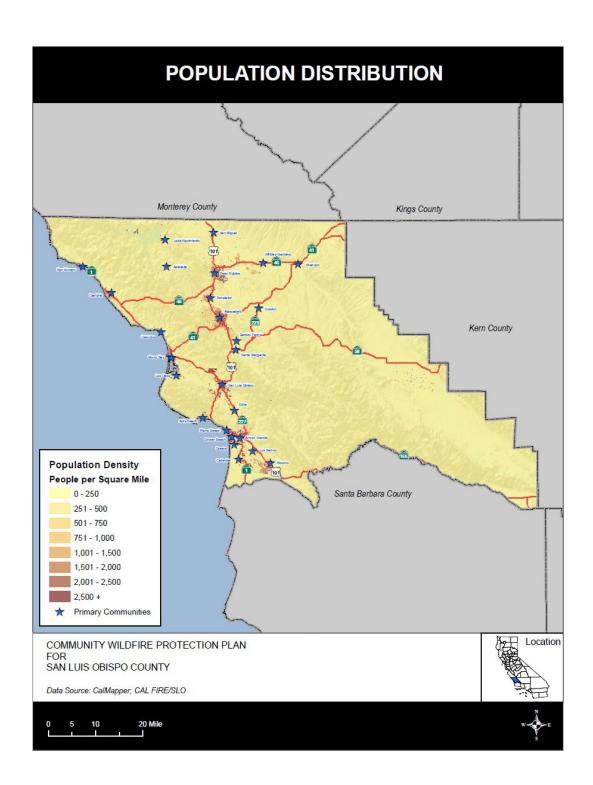
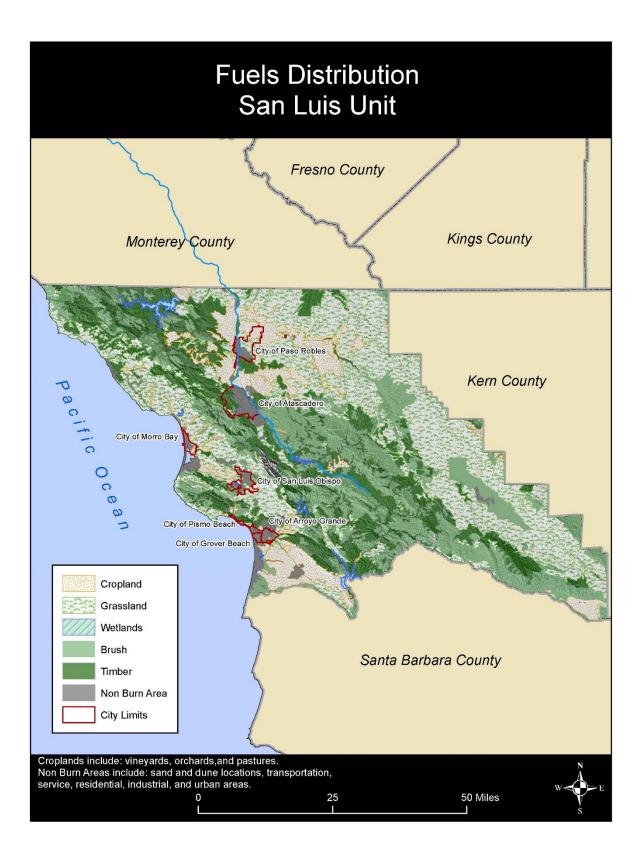


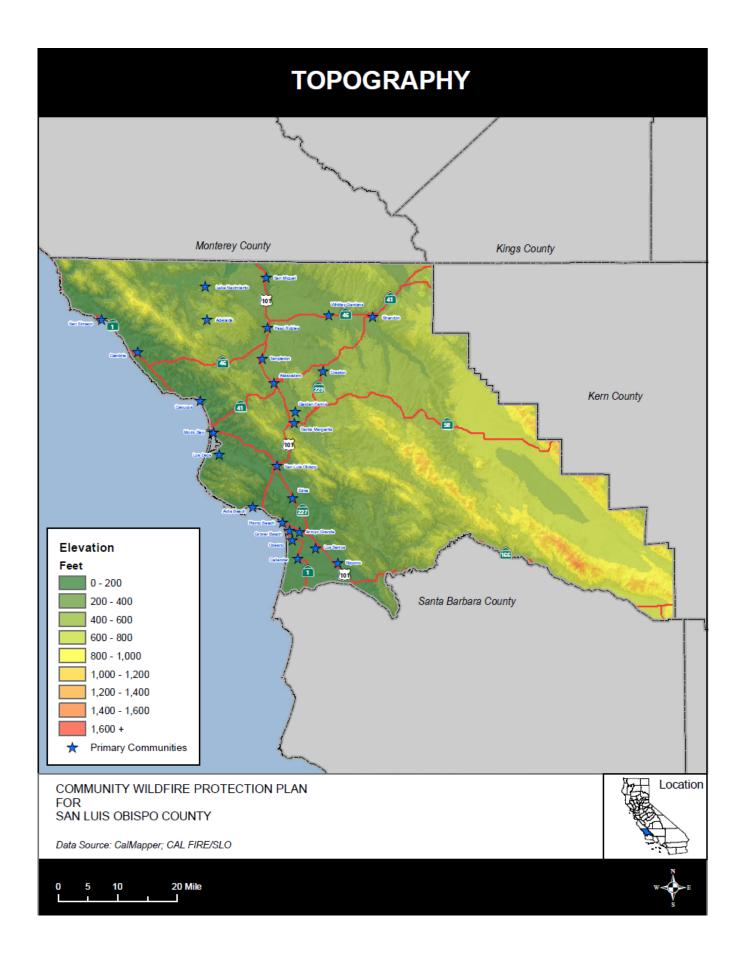
Figure A: Unit Map

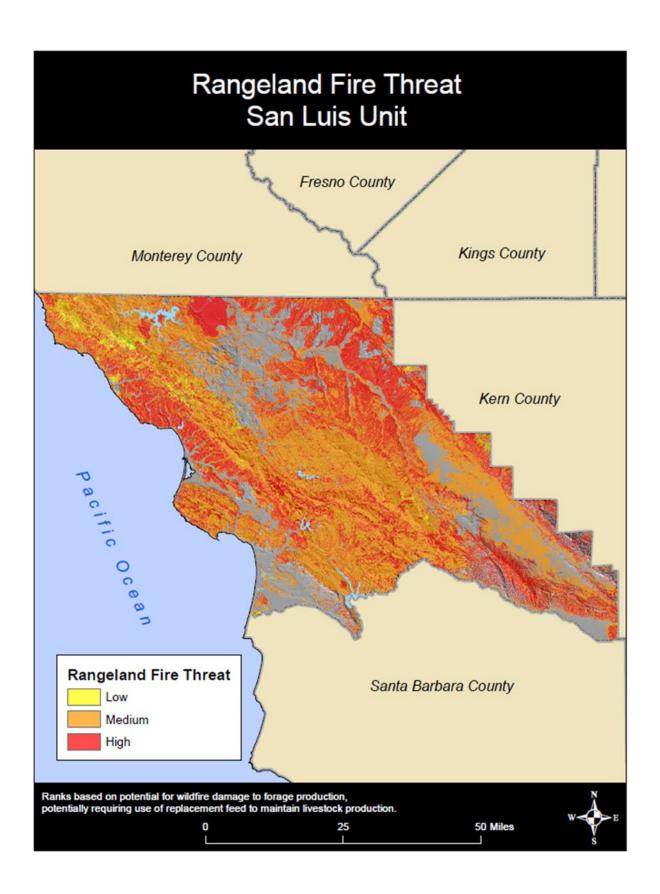


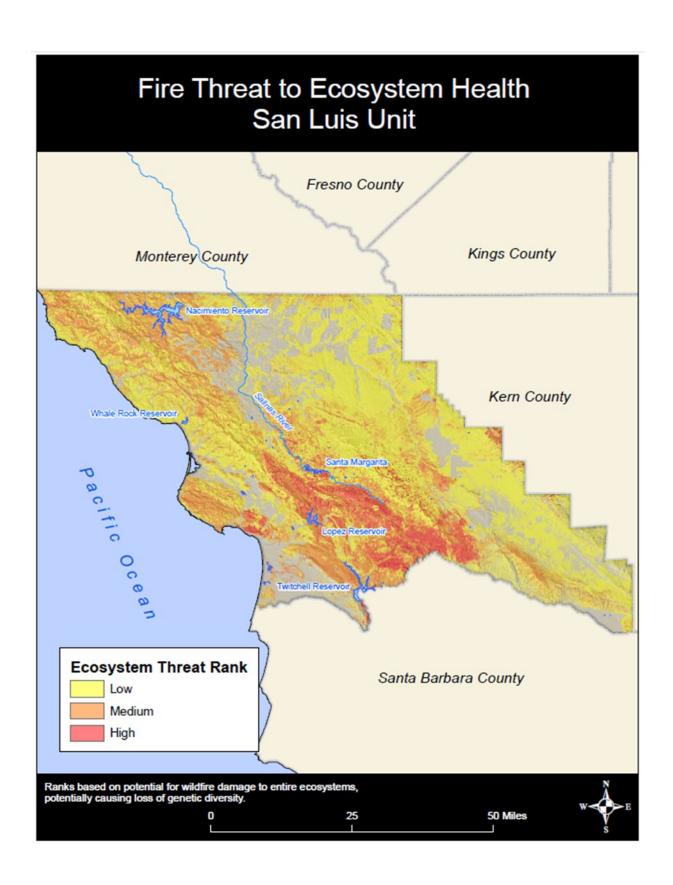
Figure B: Maps

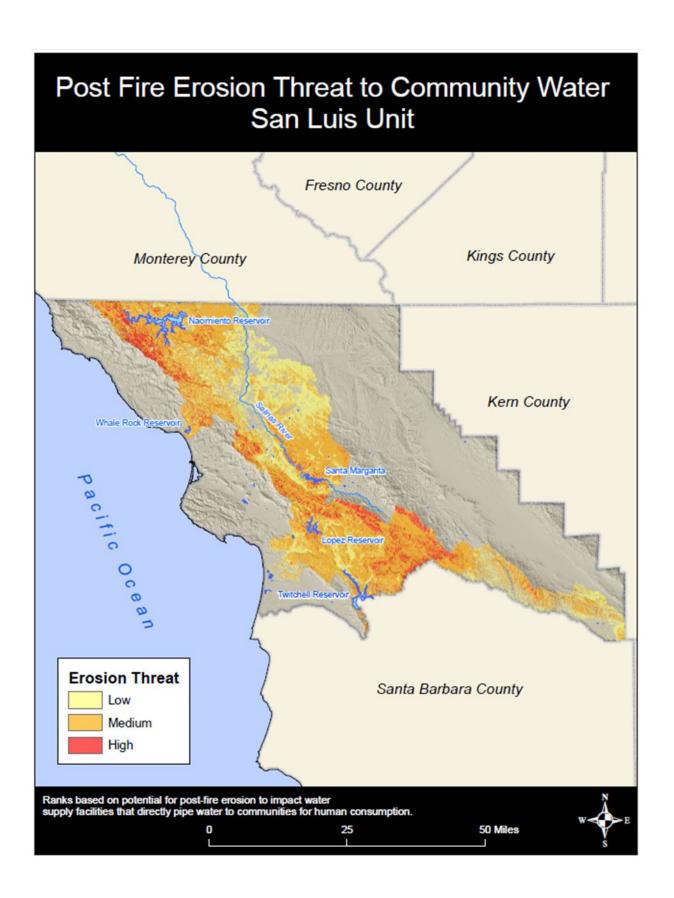












ANNUAL ACCOMPLISHMENTS REPORTING (2022)

Pre-Fire Planning:

- Continued to maintain and update Countywide GIS datasets relevant to pre-fire planning.
- Routinely update pre-fire and emergency plans, maps, and documents.
- Continued to 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.).
- Continued updates of County-Wide Pre-Attack maps.
- Maintenance of Pre-Attack Topo Quads for the Unit.
- Continued creation of City/LRA Pre-Attack maps.
- County-Wide MDC/Pre-Attack Map addition and update.
- Completion of Special Districts Fire Protection Study.

Fire Hazard Severity Mapping and Mitigation:

- Countywide reduction of hazardous fuels with cooperation of San Luis Obispo County Fire Safe Council.
- Continued CAL MAPPER training and validation of projects.
- Fire Danger Operating Plan Training and Update.
- Unit wide Evacuation Planning Map.
- Hosted public comment period for proposed Fire Hazard Severity Zone Maps.

Investigations and Enforcement:

- Investigated 102 wildland fires.
- Four arson fires, 4 criminal charges filed, 42 fires sent to Region for review and/or cost recovery.
- Processed 125 public records requests.
- Continued training with local law enforcement agencies and assisted them in contentious situations.
- Working with APCD to curtail unpermitted backyard burning.

Education and Information:

- Public contact hours 442
- Fire Prevention education hours –430
- Social Media expansion:
- Twitter Followers 26,900
- Instagram Followers 4,632

Planning and Engineering:

- Prepared amendments for Title 16 adoption of the San Luis Obispo County Code due to the California Building Standards Commission updating Part 9 of the California Building and Standards Code, also known as the 2022 California Fire Code.
- Mandated inspections for SB1205 166 schools and hotels/apartment complexes, 100% completion.
- Building Plan Reviews 1,384
- Inspections for Building Permit final approval 582
- Special Event Permits issued 19

Vegetation Management:

- Collaboration with State, Federal, County and Local Cooperators to enhance the Hazard Fuels reduction goals of the San Luis Obispo Unit Fire Plan.
- Multiple prescribed burning projects utilizing the Unit Fuels Crews, California National Guard Crews and Unit Resources to accomplish fuel reduction goals.
- 755 acres of broadcast burning
- 308 acres of fuel reduction treatment
- 341 Hazard Trees Felled
- 9.716 Personnel hours directed toward fuel reduction.
- 5,772 Equipment hours directed toward fuel reduction.