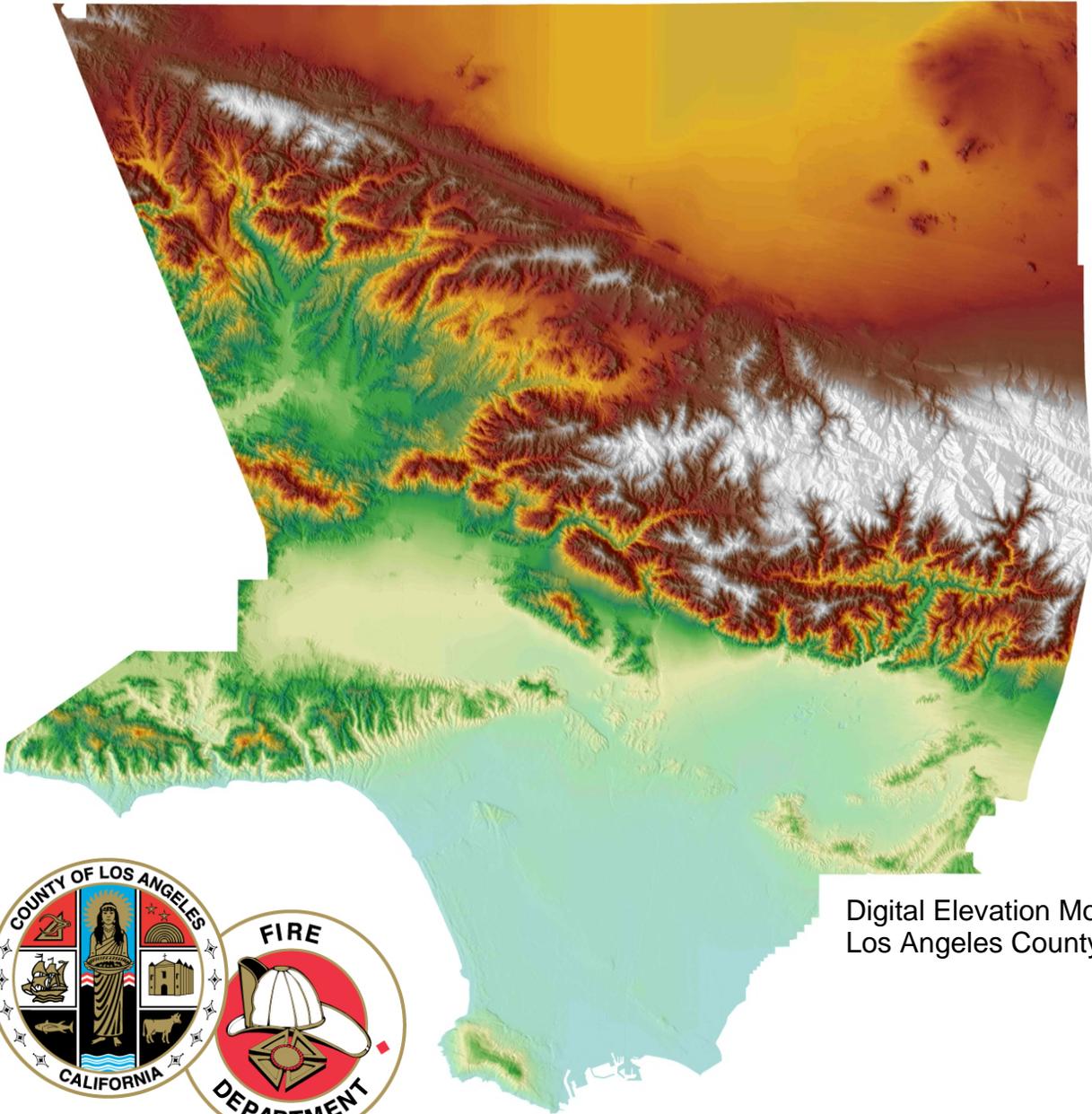


County of Los Angeles Fire Department 2014 Strategic Fire Plan



Digital Elevation Model of
Los Angeles County



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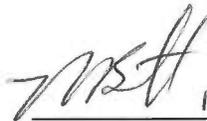
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SIGNATURE PAGE

Unit Strategic Fire Plan developed for the County of Los Angeles:

This Plan:

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

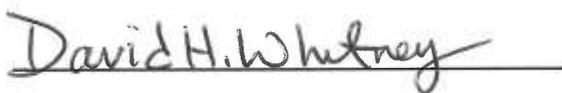
 For DLO

Unit Chief

Daryl L. Osby, Fire Chief
Forester and Fire Warden

Date

6/24/14



Pre-Fire Engineer

David H. Whitney, Deputy Forester
Forestry Division

Date

6/25/2014



EXECUTIVE SUMMARY

The 2010 Strategic Fire Plan for California is the first statewide fire plan developed through a collaborative effort between the State Board of Forestry and Fire Protection and the California Department of Forestry and Fire Protection (CAL FIRE). The Plan recognizes that fire will occur in California and works to answer the question of “how do we utilize and live with that risk of wildfire?” The 2010 Plan builds upon the concept first developed in the 1996 California Fire Plan, which led to collaborative efforts in fire prevention. A copy of the 2010 Strategic Fire Plan for California can be found at <http://cdfdata.fire.ca.gov/pub/fireplan/fpupload/fpppdf668.pdf>

The vision of the 2010 Strategic Fire Plan: A natural environment that is more resilient and man-made assets which are more resistant to the occurrence and effects of wildland fire through local, state, federal, and private partnerships.

The 2010 Strategic Fire Plan outlines seven goals focused on enhancing the protection of lives, property, and natural resources from wildland fire, as well as improving environmental resilience to wildland fire.

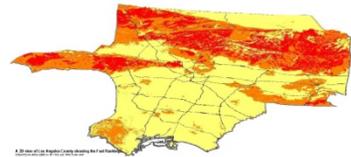
Each of the goals is meant to build upon the previous one; the seven goals are listed below:

1. 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 sharing of all analyses and data collection across all ownerships for consistency in type and kind.
2. Articulate and promote the concept of land use planning as it relates to fire risk and individual landowner objectives and responsibilities.
3. Support and participate in the collaborative development and implementation of wildland fire protection plans and other local, county and regional plans that address fire protection and landowner objectives.
4. Increase awareness, knowledge and actions implemented by individuals and communities to reduce human loss and property damage from wildland fires, such as defensible space and other fuels reduction activities, fire prevention and fire safe building standards.
5. Develop a method to integrate fire and fuels management practices with landowner priorities and multiple jurisdictional efforts within local, state and federal responsibility areas.
6. Determine the level of fire suppression resources necessary to protect the values and assets at risk identified during planning processes.
7. Address post-fire responsibilities for natural resource recovery, including watershed protection, reforestation and ecosystem restoration.

The County of Los Angeles is one of six contract counties (Los Angeles, Kern, Ventura, Orange, Santa Barbara, and Marin), which has executed a contract with the State of California to provide wildland fire protection on State Responsibility Areas (SRA). The County of Los Angeles Fire Department has the responsibility as a contract county to implement the 2010 State Strategic Fire Plan in Los Angeles County. As such this Department functionally operates as a Unit of the California Department of Forestry and Fire Protection (CAL FIRE) and is responsible for all Strategic Fire Plan activities within the County. The *County of Los Angeles Unit Fire Plan*, replaces the previous unit fire plan: *County of Los Angeles Fire Department Pre-Fire Management Plan 2013*.



COUNTY OF
LOS ANGELES
FIRE DEPARTMENT



PRE-FIRE MANAGEMENT PLAN



SECTION I: UNIT OVERVIEW

UNIT DESCRIPTION

Los Angeles County, one of California's original 27 counties, was established on February 18, 1850. Originally the County occupied a comparatively small area along the coast between Santa Barbara and San Diego, but within a year its boundaries were enlarged from 4,340 square miles to 34,520 square miles, an area sprawling east to the Colorado River.

In 1853, a bill was introduced to divide the eastern portion of Los Angeles County to then create San Bernardino County. During subsequent years, Los Angeles County slowly ebbed to its present size, the last major detachment occurring in 1889 with the creation of Orange County. Los Angeles County remains one of the nation's largest counties with 4,083 square miles, in which 1,741 square miles are flat, 1,875 square miles are mountains, 246 square miles are comprised of hills, 131 square miles of island (Santa Catalina and San Clemente), 59 square miles of mountain valleys, and 28 square miles of marshland.

Los Angeles County includes the islands of San Clemente and Santa Catalina. It is bordered by four different counties; Kern to the North, Orange and Santa Bernardino Counties to the east, 81 miles of Pacific Coastlines to the west and Ventura County to the north.

Los Angeles County has the largest population (9,818,605; 2010 Census) of any county in the nation, and is exceeded by only eight states. Approximately 25 percent of California's residents live in Los Angeles County.

The Board of Supervisors, created by the state Legislature in 1852, is the governing body. Five supervisors are elected to four-year terms by voters within their respective districts. The Board has executive, legislative and quasi-judicial roles. It appoints all department heads other than the assessor, district attorney and sheriff, which are elective positions.

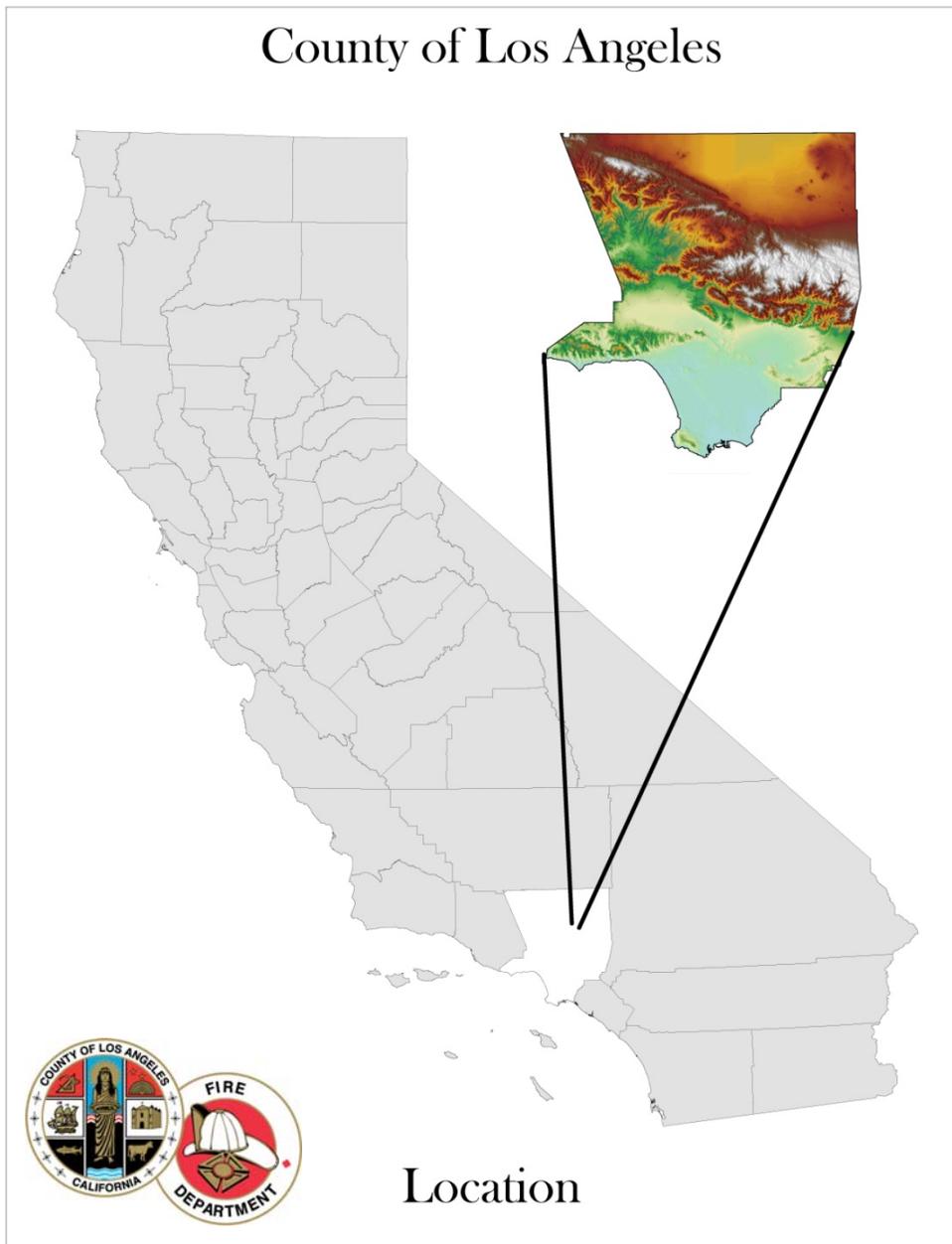
As a subdivision of the state, the County is charged with providing numerous services that affect the lives of all residents. Traditional mandatory services include fire protection, law enforcement, property assessment, tax collection, public health protection, public social services and relief to indigents. Among the specialized services are parks and recreation, lifeguard, flood control, water conservation, fire, forestry including brush clearance, fuel modification, vegetation management, environmental review, fire plan and many diversified cultural activities.

There are 88 cities within the County, and in varying degrees, contract with the County of Los Angeles to provide municipal services. Forty cities contract for nearly all of their municipal services. More than 65 percent of the County is unincorporated. For the one million people living in those areas, the Board of Supervisors is their "city council" and County departments provide the municipal services.

The County, with 103,054 budgeted employees, is the largest employer in the five-county region.

The history of the County of Los Angeles Fire Department started in the late 1800s with the formation of two separate departments. The first, the County Forester was in charge of protecting natural resources and responsible for planting and maintaining the landscape. The second, the County Fish and Game Warden, who was assigned the additional position of County Fire Warden. On May 8, 1911 the County Board of Supervisors created the County of Los Angeles Board of Forestry which later became the County of Los Angeles Forestry Department.

In 1919, over 135,000 acres of wildland fires blackened the County of Los Angeles prompting the merging of these two separate departments and resulting in a greater emphasis on fire suppression and creating the County Forester and Fire Warden. Between September 1923 and 1925, 31 separate fire districts were formed; the first two being in Signal Hill and Santa Monica Canyon.



In 1956, Fire Chief Emeritus Keith E. Klinger created the visionary Lakewood Plan, allowing incorporated cities within the County to contract with the Department for fire protection services. Today, 58 cities are served by the County of Los Angeles Fire Department which staffs a total of 163 engine companies, 32 truck companies, 101 paramedic units, and numerous other pieces of specialized apparatus.

The County of Los Angeles Fire Department is credited with the creation of the nation's first 911 emergency phone calling system and the nation's second firefighter paramedic program. Throughout its history, the Department has emerged as a leader in the fire service on local, regional and national levels, growing to become the nation's second largest fire protection agency.

The County of Los Angeles Fire Department operates 9 divisions, 22 battalions, 171 fire stations and 9 fire suppression camps answering over 321,211 emergency calls annually averaging 880 calls a day. Additionally, the Department has Planning, Information Management, Fire Prevention, Air and Wildland, Lifeguard, Forestry and Health Hazardous Materials Divisions which provide valuable services to about 4 million people.

The 2013-2014 Los Angeles County Fire Department adopted budget is approximately \$1.028 billion with the largest funding source comes from property tax which equals approximately 56%. The other funding sources include; Fund Balance, Fee-For-Service and Prop E tax monies.

MISSION STATEMENT

The mission of the Los Angeles County Fire Department is to protect lives, the environment, and property by providing prompt, skillful, and cost effective fire protection and life safety services.

CORE VALUES

Integrity – Teamwork – Caring – Courage – Commitment – Community

Fire Department VISION

The Los Angeles County Fire Department will be an exemplary organization acclaimed for our national reputation, our regional strength, and our hometown attentiveness as we provide fire protection and life safety services

Los Angeles County Fire Department Strategic Plan Engineering Our Future

On February 17, 2011, Daryl L. Osby, Chief Deputy of Business Operations, was selected by the Board of Supervisors as the ninth Fire Chief of the Department.

Fire Chief Osby quickly recognized the Department's need to embrace and introduce many technological advances, organizational culture shifts, and internal business process improvements to truly bring the organization into the 21st century. He established and began to work with the Strategic Planning Team. It became apparent that many business systems within the organization were in need of upgrading and integration with other systems. The 12 goals of the Strategic Plan includes a technology component for success, so the entire team has focused on identifying strategies and projects designed to improve business operations.

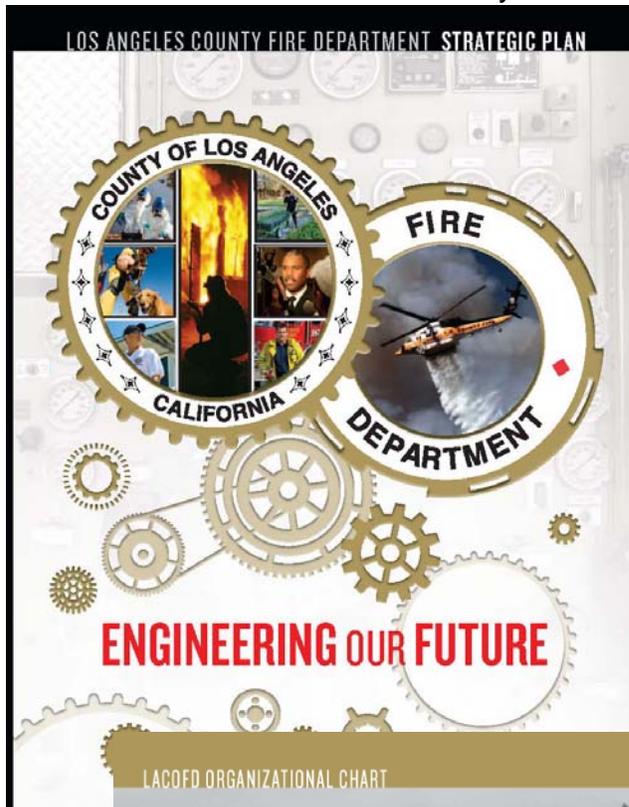
County of Los Angeles Fire Department has a cross section of society and has strived to recruit a workforce which reflects its increasingly diverse customer base. A plan was needed to not only focus on workforce excellence through training and other forms of professional development, but also a plan to train future generations of the Department's leadership. First responders and others serving the community in a direct way must continue to receive external customer service training to meet the real needs of the public it serves. Clearly, the organization has experienced a paradigm shift in the makeup of its own workforce. As members retire and new firefighters join the organization, new attitudes erase old stereotypes once associated with the Department of the 1950's and '60's.

Although the Department enjoys little negative press due to its proactive communication efforts, it must position itself to increase its sharing of key messages about its programs, services, and people through established and planned communication vehicles. One of the Strategic Plan's most important goals is "Communicating our Value," to inform and educate the public about the Department's many other services and programs to keep them safe and prepare them for every disaster scenario experienced in Southern California.

Currently, the Department communicates its programs and services through a number of traditional vehicles, including publications, the internet, public education handouts, the media, and public presentations. With millions of residents in its jurisdiction, its audience is large and diverse. Social media has emerged as another new, instantaneous way to connect the organization with those it serves. The Department needs to expand its current use of Facebook, Twitter, and YouTube to directly communicate its messages to the public.

Opportunities to involve ordinary citizens in emergency preparedness through the Department's Community Emergency Response Team (CERT) will be further developed, as well as other volunteerism opportunities to assist the Department. Marketing the Department to generate revenue to support public education and information programs also needs to be explored and developed as part of the organization's grant development program.

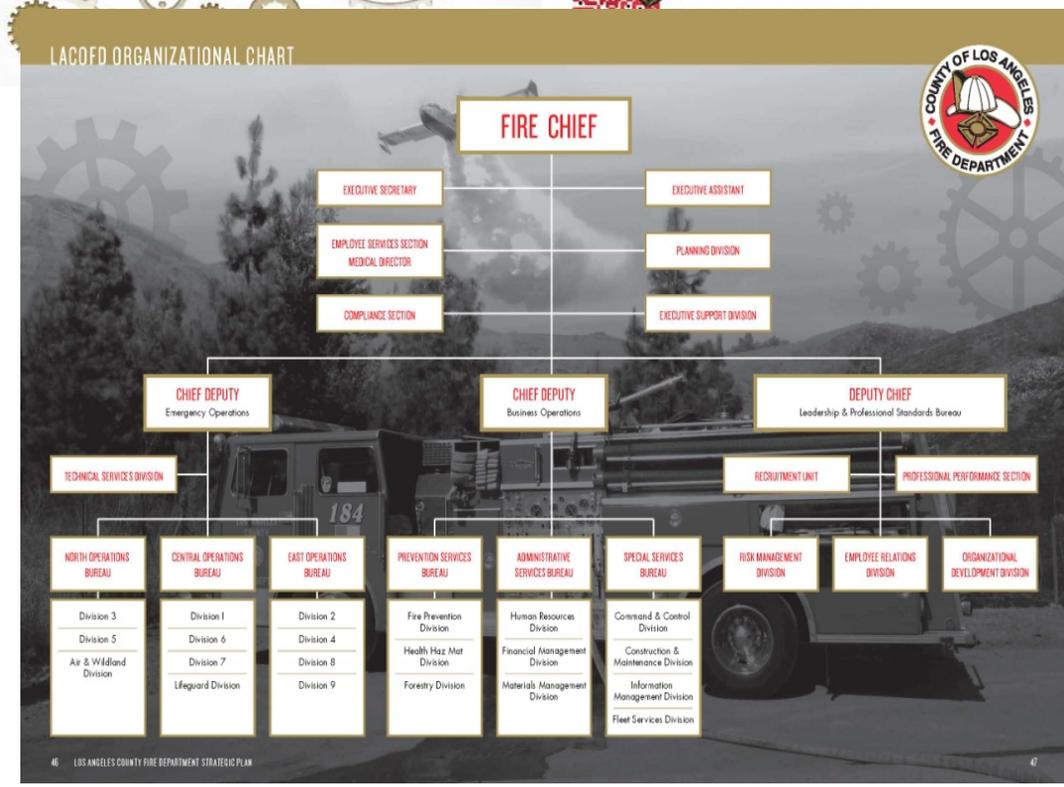
Firefighters are tasked with not only suppressing fires and saving lives and property, but educating the public about how to stay safe and prevent fires in their homes, businesses, and public areas. Fire prevention is another critical component of the mission. In addition, emerging areas of responsibility also bring an increasing level of training and support. Firefighters are being called upon to serve in many community-based activities to help raise public awareness of its services, how it is funded, and other basic information about the daily work of local fire station personnel.



The Los Angeles County Fire Department's Forestry Division completed its Centennial celebration in May 2012. It is fitting to dedicate "Engineering our Future" to the memory of

STUART FLINTHAM

who served as the first Los Angeles County Forester and Fire Warden from 1912 until 1925. His brilliant mind planted the seeds and shaped the foundation for what would become the Los Angeles County Fire Department. Within the pages of this Strategic Plan are glimmers of his grand vision.



Vegetation of Los Angeles County

Los Angeles County has a vast range of vegetation's types that include coastal areas, Santa Monica Mountain range, desert areas, valleys and the high country where traditional timber grows.

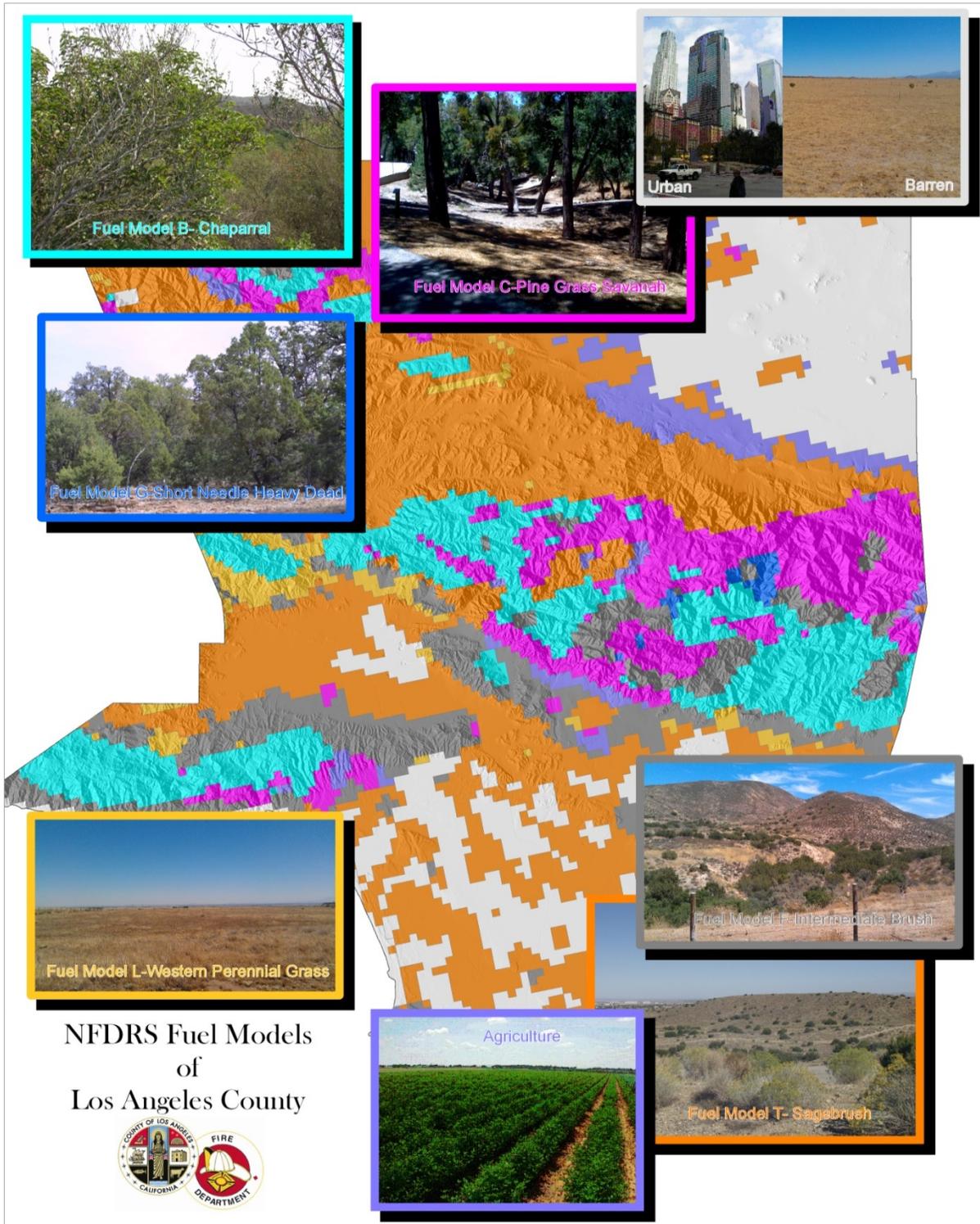
The Antelope area of the County is located on the western side of the Mojave Desert. The vegetation types there consist of California Juniper, Joshua tree, California Scrub oak, Creosote, California Poppy and many native and non-native grasses. Traveling east, the landscape is dominated by Pinyon pine woodlands and a Desert Chaparral understory. The streambeds in the area have cottonwoods, willows and other vegetation require more water.

The high country areas located east of the county involved elevations from 5,000-10,000 feet. The dominating vegetation types are conifers, hardwoods and more traditional forest vegetation types. The landscape is constructed of Coulter pine and mixed conifers on dry slopes whereas bigcone Douglas Fir and Jeffery pine are on slopes receiving more precipitation. There is a significant Oak Woodland community along shaded slopes of the canyons and the riparian community within the streambeds.

Much of the Santa Clarita Valley and the Santa Monica Mountains areas have the following vegetation types; coastal sage, riparian, oak woodlands and chaparral communities. Coastal sage communities are typical of lower elevations, dryer sites in which are on coastal south-facing slopes. The coastal sage can be referred to as soft chaparral where foliage is soft, grey-green and aromatic. Some of the plants include the Purple sage, California Sage, Coastal Buckwheat, Laurel sumac and lemonade berry. Riparian communities are woodlands with multi-layered vegetation including Arroyo willows, California Black Walnut, California Sycamore, Fremont cottonwoods, Mexican Elderberry, California Bay Laura and Mule Fat. Oak Woodlands are found on northern slopes blanketed with Coast Live Oak, Valley Oak in warmer areas, Hollyleaf cherry, California bay laurel, coffeeberry, and poison oak. Chaparral communities can be shrubby vegetation seen on both coastal and inland hillsides and separated into two types; soft chaparral (usually called coastal sage scrub) and the taller hard chaparral. Chaparral is dominated by evergreen and drought deciduous shrubs 1 to 15 feet tall. Most of these plants are recognized by their tough, leathery leaves that reduce water loss in our dry climate. Many chaparral plant species contain volatile oils which produce a strong odor and increase their flammability. Common examples include various species of Ceanothus, Manzanita, Sage, Sumac, Toyon, and Chamise.

Determining the risks of wildfire in Los Angeles County involves assessing the fire adapted ecosystems of the Chaparral vegetation, the dynamic weather of a Mediterranean climate, the values at risk, and the fire protection system's ability to deal with the occurrence of wildland fire events. A major element of the California Strategic Fire Plan is an intensive assessment process that graphically depicts fuels, weather, and assets at risk in the Geographic Information System (GIS) program. The GIS layers are continually field-validated and used to identify the areas within or adjacent to the Wildland-Urban Interface (WUI) that are most at risk.

The *California's Forests and Rangelands: 2010 Assessment* (<http://frap.cdf.ca.gov/assessment2010.html>) produced a variety of GIS data layers identifying assets, threats, and priority landscapes (combinations of assets and threats into priorities).



Topography and Weather of Los Angeles County

Los Angeles County encompasses a land area of 4,083 square miles. 47% of this area is mountainous, while the remainder consists of alluvial valleys, coastal plains, and high desert. The large mountain ranges within the County include the Santa Monica, San Gabriel, Santa Susana and Verdugo Mountains and run from east to west while the main canyon drainages flow north and south. This natural topography has created airflow patterns linking the desert area with the Pacific Ocean. The elevation of the county starts at sea level and rises to the highest point of 10,068 feet at Mount San Antonio, also known as Mt Baldy in the San Gabriel Mountains.

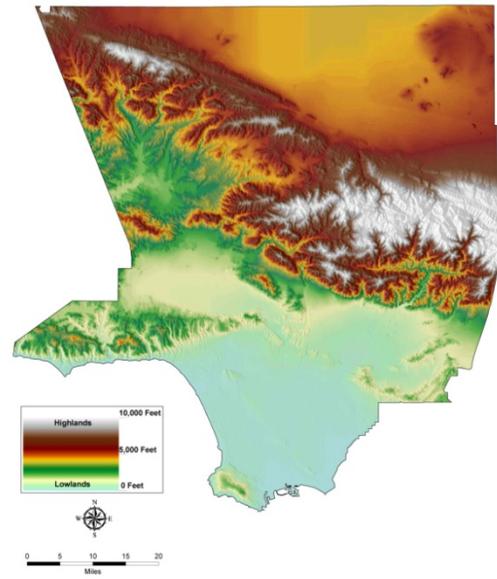
The Los Angeles basin experiences a Mediterranean climate with warm, dry summers and mild, wet winters. Due to the different landscapes of the County, the coastlines experience cooler temperatures, 40's°F to 80°F while the inland areas experience more extreme temperatures from light snow in the winter to 100°F in the summers. Precipitation occurs approximately 35 days a year averaging about 15 inches. However, the recent years without average rainfall have forced the county into a severe drought which has brought our vegetation moisture levels to a hazardous low.

During the autumn and winter months, high-pressure weather systems will originate over the Great Basin and upper Mojave Deserts which heats up the air. This system byproduct is commonly refers to as the Santa Ana winds by the National Weather Service and is described as having strong down slope winds blowing through the mountain passes of Southern California. The relative humidity of the air is further decreased as it travels from the high desert to the coast. These hot dry winds blow through the valley and canyons pre-heating and dropping the fuel moisture in all areas of Los Angeles County. This is where we experience a high frequency of wildland fires while the temperatures are high, fuel moistures are extremely low and experiencing 30-70 mile per hour winds.

Due to the vast differences in weather across the county, we have strategically placed Remote Automated Weather Stations (RAWS) to effectively and accurately collect weather data and then track our daily Fire Weather Forecasts back to our fire personnel to give current weather conditions on the ground. The data is displayed in tabular and graphic formats on various public websites. These sites also act as multi-agency data collection and distribution systems. RAWS data from CAL FIRE, Bureau of Land Management, U.S. Forest Service, National Park Service and others are collected and shared by the interested participants.

The RAWS station is solar powered and automatically detects weather conditions such as Air Temperature, Relative Humidity, Wind Speed and Direction, Fuel Moisture and Temperature, Barometric Pressure and Precipitation. RAWS transmits the information

County of Los Angeles
Elevation



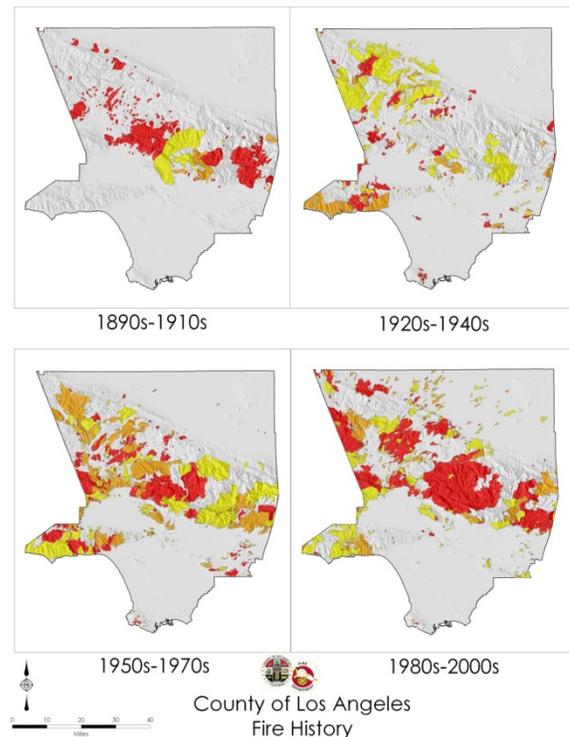
via GOES satellite every hour. The host server receives, compiles, sorts and files the data for downloading into a local agency computer. The information can be displayed on maps, charts and graphs to show the weather picture throughout the state. Historical data can also be accessed to show weather patterns for specified areas and times.

[http://fire.lacounty.gov/Forestry/PDF/internet RAWSmap_061411.pdf](http://fire.lacounty.gov/Forestry/PDF/internet_RAWSmap_061411.pdf)



Fire History of Los Angeles County

Los Angeles County has a long history with fire dating back to the Native Americans using fire to create diversity and maintenance in the landscape. Today the County experiences many large, damaging, and costly wildfires which affect the residence. The locations of the Wildland Urban Interface pose an incredible threat of property damage and a threat to human life. The County in recent years has battled large, wind driven fires that have destroyed hundreds of home and hundreds of thousands of acres of scenic landscape. The Colby fire in 2014 in Glendora destroyed nearly 2,000 acres and 5 homes. In 2009, the Station fire consumed 160,000 acres of land while in 2008 the Sayer fire engulfed more than 500 structures. Due to the continual growth and development of the open space within the County, we will continue to work with these communities to protect and prevent catastrophic fires from destroying their communities and continue to address the wildlife potential as a top priority of the County of Los Angeles Fire Department.



The Wildfire Environment

A thorough understanding of the wildfire environment is essential in understanding the fire severity potential in Los Angeles County. Determining which programs and projects are the most efficient in preventing catastrophic wildfires are major focuses of the Fire Plan Unit. Firefighters become skilled at recognizing the status of the three components that make up the wildfire environment. The nature and condition of fuels, weather, and topography helps determine the behavior of a fire once ignited.

FUEL

Wildland fuel is the vegetation that covers the topography. Fuel provides the thermal energy source upon which fire needs to spread. Fuels can also be considered as ornamental vegetation around homes and the structure themselves.

The large WUI areas within the County are where the native fuels and residential communities come together which provide a dangerous wildfire environment. These areas are one of our greatest concerns.

WEATHER

Weather is the most dynamic component of the fire environment and can change rapidly in space and time. Weather represents such elements as temperature, wind, relative humidity, cloud cover, precipitation, and atmospheric stability.

Due to the inability to change or affect the weather, Los Angeles County Fire Department needs to focus its resources in modifying the fuel to create a safe wildfire environment regardless of weather conditions.

TOPOGRAPHY

Topography includes such elements as slope, aspect, elevation or the lay of the land. These factors play an important role while fighting a wildland fire. Slope can affect the rate of spread of a fire while the aspect could also affect the intensity of the fire. Elevation changes not only affect the amount of oxygen in the air but the type of vegetation inhabiting the slopes.

Daily Fire Danger Report

The Daily Fire Weather Forecast is a tool for firefighting personnel to use in determining staffing levels, response, and control of wildland fires. The forecast and staffing levels are provided daily and transmitted to all sites and units upon receipt by the Department's Command and Control Division as an administrative message on mobile data terminals (MDT) and by e-mail. The information below explains these daily messages:

The County of Los Angeles Fire Department produces a Daily Fire Weather Forecast by processing wildland fire weather data from manual and Remote Automated Weather Stations (RAWS) that it operates, or acquires data from other agencies located in Los Angeles County. These agencies include the City of Beverly Hills, National Park

Service, and Angeles National Forest. RAWs observations and historical data can be accessed daily at <http://fire.lacounty.gov/Forestry/FireWeatherDangerRawsMap.asp>.

These observations are reported electronically to the Weather Information Management System (WIMS) in Boise, Idaho between 1300 and 1330 hours and are processed by the National Fire Danger Rating System (NFDRS). A few of the stations are seasonal and do not report during the off season. Department personnel from the Henninger Flats Forestry Unit query WIMS each afternoon at 1400 hours to adjust weather data and enter manual weather station data. <http://fire.lacounty.gov/Forestry/FireWeatherDanger.asp>

COUNTY OF LOS ANGELES FIRE DEPARTMENT
FIRE DANGER ANALYSIS



DATE FORECASTED FOR: **May 2, 2014**

THRESHOLD-105-LA Basin
THRESHOLD-94-Malibu
THRESHOLD-146-Santa Clarita
THRESHOLD-222-High Country
THRESHOLD-116-Antelope Valley

AREA (ZONE)	STATION NAME	NEARBY FS	STA. NO. MODEL	BURN. INDEX	TEMP. (F)	HUM. (%)	WIND (MPH)	FUEL SECK. (%)
LA BASIN	SANTA FE DAM	41	04537B	106	94	11	9	3
	HENNINGER FLATS	66	04539B	148	93	7	17	2
	CLAREMONT	62	04542D	134	91	7	8	2
	WHYTER	28	04546D	56	94	11	7	3
	SAN RAFAEL	19	04543B	74	92	8	7	2
TONNER CANYON	119	04543B	55	93	9	7	3	
AVERAGES				93	93	9	9	3
MALIBU	CHESEBRO	125	04531B	167	89	5	10	2
	MALIBU	70	04543B	116	86	10	7	3
	BEVERLY HILLS	7	04542D	129	99	8	10	2
	LEO CARRILLO	99	04547B	51	87	33	10	5
	MALIBU CANYON	67	04542D	70	96	8	11	3
TOPANGA	69	04546D	135	89	6	13	2	
AVERAGES				111	91	12	12	3
SANTA CLARITA VALLEY	SATGUS	131	045412F	150	90	4	17	2
	ACTON	80	04543F					
	DEL VALLE	76	045445F	116	90	5	16	2
	NEWHALL PASS	124	04545F	122	89	5	16	2
AVERAGES				129	90	5	16	2
HIGH COUNTRY	CAMP 9	123	045441B	191	79	8	19	2
	WHITAKER 1.5	149	04546B	237	77	8	21	2
AVERAGES				244	78	8	20	2
ANTELOPE VALLEY	POPPY PARK	112	045407	102	89	5	15	2
	SADDLERACK	114	045447	82	89	4	11	2
	LAKE PALMDALE	131	045497	101	89	6	15	2
AVERAGES				95	89	5	14	2

ADJECTIVE RATING FOR TODAY:	LA	MA	SC	HI	AV	TOTAL
NUMBER OF STATIONS REPORTING	6	3	2	2	3	20
PERCENTAGE REPORTING:	100%	100%	75%	100%	100%	95%

FUEL MODELS: NFDRS - B - ERUSH, F - YOUNG OPEN MIXED CHAPARRAL, AND T - SAGEBRUSH-GRASS TYPES
 RATING: fs (NFDRS output & Ignition Component) L - LOW, M - MODERATE, H - HIGH, V - VERY HIGH, E - EXTREME

UNIT PREPAREDNESS AND FIREFIGHTING CAPABILITIES

The County of Los Angeles Fire Department currently has 171 fire stations (including FS55 and FS155 on Catalina Island), 230 fire engines (including 500 series), 5 light forces, 25 quints, 94 paramedic squads, 35 patrols, 11 wildland fire suppression camps, 8 bulldozers, 7 helicopters, 3 USAR teams, 1 USAR Task Force, 97 Lifeguards vehicles and rescue boats, 23 Prevention Offices, 12 Forestry Units and numerous other response vehicles and facilities. The Department serves the unincorporated areas of the County as well as 58 incorporated cities.

The County has a contractual agreement with CAL FIRE to provide wildland fire protection on state responsibility areas (SRA). The Gray Book staffing agreement is the vehicle which identifies resource allocations that CAL FIRE considers necessary for the protection of SRA and provides funding accordingly. In the Los Angeles County the Gray Book provides for twenty three (23) stations and fire prevention staffing.

SECTION II: COLLABORATION

COMMUNITY / AGENCIES / FIRE SAFE COUNCILS

	<u>Place Name</u>	<u>County Name</u>	<u>Federal Threat</u>	<u>Federally Regulated</u>	<u>Year</u>
1	Acton	Los Angeles	✓	✓	2001
2	Agoura	Los Angeles	✓		2001
3	Agoura Hills	Los Angeles	✓	✓	2001
4	Agua Dulce	Los Angeles	✓	✓	2001
5	Altadena	Los Angeles	✓	✓	2001
6	Arcadia	Los Angeles		✓	2001
7	Azusa	Los Angeles		✓	2001
8	Beverly Hills	Los Angeles		✓	2001
9	Big Rock Springs	Los Angeles	✓	✓	2001
10	Bradbury	Los Angeles		✓	2001
11	Burbank	Los Angeles			2001
12	Calabasas	Los Angeles	✓		2001
13	Castaic	Los Angeles			2001
14	Claremont	Los Angeles		✓	2001
15	Cornell	Los Angeles	✓		2001
16	Covina	Los Angeles			2001
17	Del Sur	Los Angeles			2001
18	Del Valle	Los Angeles			2001
19	Desert View Highlands	Los Angeles			2001
20	Diamond Bar	Los Angeles		✓	2001
21	Duarte	Los Angeles		✓	2001
22	El Nido	Los Angeles	✓		2001
23	Elizabeth Lake	Los Angeles	✓	✓	2001
24	Fernwood	Los Angeles	✓		2001
25	Glendale	Los Angeles		✓	2001
26	Glendora	Los Angeles		✓	2001
27	Glenview	Los Angeles	✓		2001
28	Gorman	Los Angeles	✓		2001
29	Green Valley	Los Angeles	✓	✓	2001
30	Hacienda Heights	Los Angeles			2001

31	Hidden Hills	Los Angeles			2001
32	Juniper Hills	Los Angeles	✓	✓	2001
33	Kagel Canyon	Los Angeles	✓	✓	2001
34	La Canada Flintridge	Los Angeles		✓	2001
35	La Crescenta-Montrose	Los Angeles	✓	✓	2001
36	La Habra Heights	Los Angeles		✓	2001
37	La Verne	Los Angeles		✓	2001
38	Lake Hughes	Los Angeles	✓	✓	2001
39	Lake Los Angeles	Los Angeles			2001
40	Lancaster	Los Angeles		✓	2001
41	Lang	Los Angeles	✓	✓	2001
42	Leona Valley	Los Angeles	✓	✓	2001
43	Littlerock	Los Angeles		✓	2001
44	Llano	Los Angeles			2001
45	Longview	Los Angeles	✓	✓	2001
46	Los Angeles	Los Angeles		✓	2001
47	Malibu	Los Angeles	✓		2001
48	Malibu Bowl	Los Angeles	✓		2001
49	Malibu Vista	Los Angeles	✓		2001
50	Mint Canyon	Los Angeles	✓	✓	2001
51	Monrovia	Los Angeles		✓	2001
52	Monte Nido	Los Angeles	✓		2001
53	Neenach	Los Angeles			2001
54	Oban	Los Angeles	✓	✓	2001
55	Olive View	Los Angeles	✓	✓	2001
56	Palmdale	Los Angeles	✓	✓	2001
57	Palmdale East	Los Angeles	✓		2001
58	Palos Verdes Estates	Los Angeles	✓		2001
59	Pasadena	Los Angeles		✓	2001
60	Pearblossom	Los Angeles			2001
61	Pico	Los Angeles	✓		2001
62	Point Dume	Los Angeles	✓	✓	2001
63	Pomona	Los Angeles	✓	✓	2001

64	Quartz Hill	Los Angeles			2001
65	Rancho Palos Verdes	Los Angeles	✓		2001
66	Ravenna	Los Angeles	✓	✓	2001
67	Rolling Hills	Los Angeles			2001
68	Rolling Hills Estates	Los Angeles			2001
69	Rowland Heights	Los Angeles	✓	✓	2001
70	San Dimas	Los Angeles		✓	2001
71	San Fernando	Los Angeles		✓	2001
72	Santa Clarita	Los Angeles		✓	2001
73	Saugus-Bouquet Canyon	Los Angeles	✓	✓	2001
74	Seminole Hot Springs	Los Angeles	✓		2001
75	Sierra Madre	Los Angeles	✓	✓	2001
76	Sleepy Valley	Los Angeles	✓	✓	2001
77	South Pasadena	Los Angeles			2001
78	Stevenson Ranch	Los Angeles	✓		2001
79	Sun Village	Los Angeles		✓	2001
80	Sylvia Park	Los Angeles	✓		2001
81	Three Points	Los Angeles	✓		2001
82	Topanga	Los Angeles	✓		2001
83	Topanga Park	Los Angeles	✓		2001
84	Val Verde	Los Angeles	✓	✓	2001
85	Valyermo	Los Angeles	✓	✓	2001
86	View Park-Windsor Hills	Los Angeles			2001
87	Vincent	Los Angeles			2001
88	Walnut	Los Angeles			2001
89	West Covina	Los Angeles			2001
90	Westlake Village	Los Angeles	✓	✓	2001
91	Whittier	Los Angeles			2001
92	Wilsona Gardens	Los Angeles	✓	✓	2001

Data source: California Fire Alliance

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

Cooperative Fire Services

In emergency services, mutual aid is an agreement among emergency responders to lend assistance across jurisdictional boundaries. This may occur due to an emergency response that exceeds local resources, such as a disaster or a multiple-alarm fire. Mutual aid may be ad hoc, requested only when such an emergency occurs. It may also be a formal standing agreement for cooperative emergency management on a continuing basis, such as ensuring that resources are dispatched from the nearest fire station, regardless of which side of the jurisdictional boundary the incident is on. Agreements that send closest resources are regularly referred to as "automatic aid agreements". Current agreements are:

- Los Angeles County Operational Area Mutual Aid Plan
- California Fire Master Mutual Aid Agreement
- California Master Cooperative Wildland Fire Management (CFMA) and Stafford Act Response Agreement
- California Fire Assistance Agreement
- Public Resources Code 4104
 - The term "uncontrolled fire," as used in this division, means any fire which threatens to destroy life, property, or resources and either: (1) is unattended by any person; (2) is attended by persons unable to prevent its unrestricted spread; or (3) is burning with such velocity or intensity that it could not be readily controlled with those ordinary tools available to private persons at the fire scene.

Additional Fire Agencies in Los Angeles County:

USDA Forest Service, Angeles National Forest
USDOJ National Park Service, Santa Monica Mountains Recreational Area

City of Alhambra	City of La Habra Heights	City of San Marino
City of Arcadia	City of La Verne	City of Santa Fe Spring
City of Avalon	City of Long Beach	City of Santa Monica
City of Beverly Hills	City of Los Angeles	City of Sierra Madre
City of Burbank	City of Manhattan Beach	City of South Pasadena
City of Compton	City of Monrovia	City of Torrance
City of Culver City	City of Montebello	City of Vernon
City of Downey	City of Monterey Park	City of West Covina
City of Glendale	City of Pasadena	
City of Hermosa Beach	City of Redondo Beach	
City of Sierra Madre	City of San Gabriel	

A stakeholder can be defined as any person, agency or organization with a particular interest, a stake in fire safety, and protection of assets from wildland fires. The stakeholders include federal, state, local, private agencies, fire safe councils or interest groups, with assets at risk from wildland fires. The County of Los Angeles Fire Department is constantly attempting to involve as many stakeholders as possible in the development of the County of Los Angeles Fire Department Fire Plan. It is the goal of the County of Los Angeles Fire Department to participate with as many stakeholders as is possible and continually update planning efforts involving stakeholder input.

Plan Development Team:

Coordinating agencies within the County of Los Angeles Fire Department

POLITICAL ENTITY	JURISDICTION
LOS ANGELES COUNTY BOARD OF SUPERVISORS	LOCAL GOVERNMENT
LOS ANGELES COUNTY SHERIFF'S DEPARTMENT	LOCAL GOVERNMENT/LAW ENFORCEMENT
ORANGE COUNTY FIRE AUTHORITY	LRA AND SRA FIRE PROTECTION
KERN COUNTY FIRE DEPARTMENT	LRA AND SRA FIRE PROTECTION
VENTURA COUNTY FIRE PROTECTION DISTRICT	LRA AND SRA FIRE PROTECTION
NATIONAL PARK SERVICE	PUBLIC LAND OWNERSHIP, DPA FIRE PROTECTION
CALIFORNIA STATE PARKS	PUBLIC LAND OWNERSHIP, SRA FIRE PROTECTION
SANTA MONICA MOUNTAINS CONSERVANCY	PUBLIC LAND OWNERSHIP, RECREATIONAL USE
LOCAL WATER COMPANIES	WATER STORAGE & TREATMENT
NON-PROFIT OPEN SPACE DISTRICTS	LOCAL GOVERNMENT
PUBLIC UTILITY COMPANIES	STATE/COUNTY
CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION	STATE/COUNTY
AIR QUALITY MANAGEMENT DISTRICT	STATE/COUNTY
CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE	STATE/COUNTY
USDA-SOILS CONSERVATION	FEDERAL GOVERNMENT
U.S FISH AND WILDLIFE SERVICE	FEDERAL GOVERNMENT
BUREAU OF RECLAMATION	FEDERAL GOVERNMENT
USDA-FOREST SERVICE	FEDERAL GOVERNMENT
USDI-NATIONAL PARK SERVICE	FEDERAL GOVERNMENT
TOPANGA COALITION FOR EMERGENCY PREPAREDNESS	HOMEOWNER'S ASSOCIATION
FIFTYEIGHT (58) CONTRACT AND SERVE CITIES	LOCAL GOVERNMENT
THIRTY (30) CITY FIRE DEPARTMENTS	LOCAL GOVERNMENT



Priority Landscapes of Los Angeles County

The recent *California's Forests and Rangelands: 2010 Assessment* prepared by the California Department of Forestry and Fire Protection Fire and Resource Assessment Program (FRAP) presents an analysis of trends, conditions, and the development of priority landscapes in California. The assessment showed that in addition to communities in the WUI being a high priority from the threat of wildfire, rangelands and protected habitats in the Los Angeles County are high priority areas as well.

The State Mandate

By state law (Public Resource Code 4789) CAL FIRE must periodically assess California's forest and rangeland resources. The last assessment was completed in 2003 (<http://frap.fire.ca.gov/assessment2003/>) by the Fire and Resource Assessment Program (FRAP), a unit within CAL FIRE whose mission is to produce these periodic forest assessments. Results are used by the State Board of Forestry and Fire Protection (BOF) to develop and update a forest policy statement for California. The last BOF statement was finished in 2007 and reflects various strategies designed to address key issues defined by the 2003 assessment (http://www.bof.fire.ca.gov/board_joint_policies/board_policies/policy_statement_and_program_of_the_board/policyprogram_050107.pdf).

The Federal Mandate

The 2008 Federal Farm Bill amended the Cooperative Forestry Assistance Act to provide for development of state forest resource assessments and related resource strategies. Among other things, the intent of the amendments is to facilitate identification of priority forest landscape areas, to underscore work needed to address issues on these landscapes, and to frame and focus related strategies and actions.

The U.S. Forest Service State and Private Forestry Program (S&PF) in 2008 "redesigned" its approach to reflect these plans and funding strategies, and Program Redesign has strongly shaped the approach CAL FIRE has taken with the California 2010 Assessment.

The 2010 effort covers two components of the Redesign approach:

- Statewide Assessment of Forest Resources – provides an analysis of forest conditions and trends in the state and delineates priority rural and urban forest landscape areas.
- Statewide Forest Resource Strategy – provides long-term strategies for investing resources to address priority landscapes identified in this assessment, focusing where federal investment can most effectively stimulate or leverage desired action and engage multiple partners.

The Redesign approach emphasizes, where possible, use of available data and of a spatial framework for analysis and to delineate priority landscapes. The focus is on incorporating existing plans and information within states. Some categories of plans are specified, such as the state wildlife plan and community wildfire protection plans. Outreach to stakeholders is encouraged,

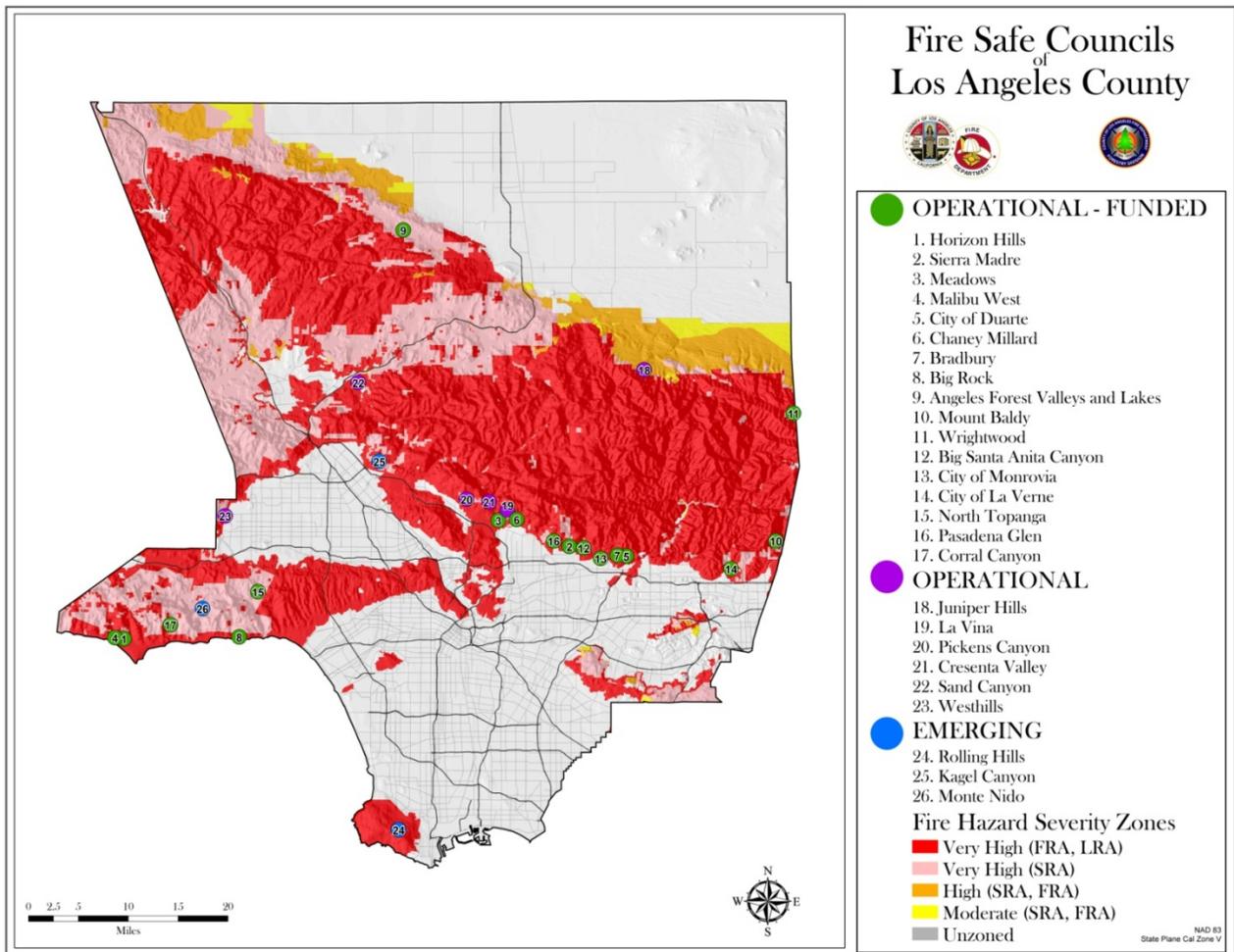


though the outreach process and extent is left to the states. However, a requirement exists to seek input from specified stakeholder categories or entities such as federal management agencies, the state wildlife agency, the urban forest council and others.

Community Participation

Fire Safe Councils (FSC) www.firesafecouncil.org

Fire safe councils are grassroots community-based organizations which share the objective of making California's communities less vulnerable to catastrophic wildfire. Fire safe councils accomplish this objective through education programs and fire hazard reduction projects such as shaded fuel breaks or home structure hardening to protect area residents against an oncoming wildfire and to provide fire fighters with a place to fight the oncoming fire. The first fire safe councils started in the early 1990s, and there are now over 200 statewide. Through the Fire Plan Unit the Department supports these community-based organization and efforts. In early 2000's, the Los Angeles County Fire Department set in motion the support mechanism to the FSC. Currently, there are more than 25 active Fire Safe Councils in Los Angeles County.



Currently there are 26 Fire Safe Councils in Los Angeles County.

Firewise Communities Program www.firewise.org

Brush, grass or forest fires don't have to be disasters. The National Fire Protection Association's (NFPA) Firewise Communities program encourages local solutions for wildfire safety by involving homeowners, community leaders, planners, developers, firefighters, and others in the effort to protect people and property from wildfire risks.



Community Emergency Response Teams (CERT)

<http://fire.lacounty.gov/programsevents/pecert.asp>

The Community Emergency Response Team (CERT) Program educates people about disaster preparedness for hazards that may impact their area and trains them in basic disaster response skills, such as fire safety, light search and rescue, team organization, and disaster medical operations. Using the training learned in the classroom and during exercises, CERT members can assist others in their neighborhood or workplace following an event when professional responders are not immediately available to help. CERT members also are encouraged to support emergency response agencies by taking a more active role in emergency preparedness projects in their community. In June 2003, the Los Angeles County Fire Department began offering the FEMA-approved 20 hour CERT training curriculum to the cities and communities we serve. The program operates from the Public Affairs Section under the direction of a fire captain who serves as the Department CERT coordinator.



Fire Adapted Communities www.fireadapted.org

A fire adapted community accepts fire as part of the natural landscape. The community understands its fire risk, and takes action *before* a wildfire to minimize harm to residents, homes, businesses, parks, utilities, and other community assets. These collective actions empower all residents to be safer in their environment. To help prepare your community, consider **your role** in making it fire adapted:



- Build homes with fire-resistant materials
- Landscape gardens using native plants
- Support land management practices in parks, forests and natural areas that reduce wildfire spread to your community
- Encourage the development and implementation of a Community Wildfire Protection Plan
- Work with neighbors to get recognized through the Firewise Communities/USA® Recognition Program
- Encourage your local fire department to participate in the Ready, Set, Go! program
- Prepare an emergency planning kit and safety plan

- Meet with your local forester to better understand your region's unique fire risks
- Locate your community's resident safety zone
- Talk to your insurance agent about your wildfire coverage and how to reduce risk
- Promote the adoption of building codes and local regulations that address structural and site vulnerabilities to wildfire
- Identify shared responsibilities with other community members and explore local tools and solutions

SECTION III: VALUES

A: VALUES

The assets addressed in the plan are citizen and firefighter safety, watersheds and water, timber, wildlife and habitat (including rare and endangered species), unique areas (scenic, cultural, and historic), recreation, range, structures, and air quality. Generalized assets at risk need to be identified within the County to indicate what areas contain highly valuable assets. The areas with the highest combined asset values and fire risk are then targeted for fire plan projects, particularly where such projects will reduce damage should a fire start in the project area during high fire hazard weather.

Potential projects are identified and then an objective analysis will determine the degree to which the projects will reduce potential suppression costs and reduce damage to valued assets within the project area. The asset framework and validation process will be refined as stakeholders are identified and are participating in the Fire Plan process. Multiple agencies have played a vital role in identifying the assets within Los Angeles County. Knowledge of the types and magnitudes of assets at risk to wildland fire, as well as their locations, are critical to fire protection planning. Given the limits on fire protection resources, they should be allocated, in part, based on the magnitude of the assets being protected.

Knowledge of assets at risk is necessary to choose those pre-fire management projects that will provide the greatest benefit for the given amount of investment. The County of Los Angeles Fire Department's primary concern is reducing the fire risk and potential loss of the various assets described herein to provide for the safety and protection of life, the environment, and property while reducing suppression costs.

Public and firefighter safety is paramount. As development continues and expands into the WUI, it becomes exceedingly more difficult to provide protection against the threat of wildland fires. The primary purpose of wildfire protection in Los Angeles County is to protect this wide range of assets.

Los Angeles County's priority Values/Assets at Risk include:

- Public and firefighter safety
- Water and watershed
- Vital infrastructure (power lines, gas lines, highways, roads, etc.)
- Structures
- Wildlife and habitat (including rare and endangered species)
- Air quality
- Soil erosion
- Recreation
- Agriculture, range
- Cultural and historic resources

B: COMMUNITIES B: COMMUNITIES

<i>ASSET AT RISK</i>	<i>PUBLIC ISSUE CATEGORY</i>	LOCATION AND RANKING METHODOLOGY
FIRE FLOOD WATERSHEDS	PUBLIC SAFETY, PUBLIC WELFARE	WATERSHED WITH A HISTORY OF PROBLEMS OR PROPER CONDITIONS FOR FUTURE PROBLEMS. RANKS ARE BASED ON AFFECTED DOWNSTREAM POPULATIONS
SOIL	ENVIRONMENT	WATERSHED RANKED BASED ON EROSION POTENTIAL
WATER SUPPLY	PUBLIC HEALTH	1) WATERSHED AREA UP TO 20 MILES FROM WATER SUPPLY FACILITY (HIGH RANK); 2) GRID CELLS CONTAINING DOMESTIC WATER DIVERSIONS, RANKED BASED ON NUMBER OF CONNECTIONS; 3) CELLS CONTAINING DITCHES THAT CONTRIBUTE TO THE WATER SUPPLY SYSTEMS (HIGH RANK)
SCENIC VALUE	PUBLIC WELFARE	FOUR MILE VIEWSHED AROUND SCENIC HIGHWAYS, RANKED BASED ON POTENTIAL IMPACT TO VEGETATION TYPES (TREE VERSUS NON-TREE TYPES)
AIR QUALITY	PUBLIC WELFARE, PUBLIC HEALTH, ENVIRONMENT	POTENTIAL DAMAGES TO HEALTH, MATERIALS, VEGETATION AND VISIBILITY; RANK BASED ON VEGETATION TYPE AND AIR BASIN
HISTORIC BUILDING	PUBLIC WELFARE	FROM STATE OFFICE OF HISTORIC PRESERVATION; RANKED BASED ON FIRE SUSCEPTABILITY
RECREATION	PUBLIC WELFARE	UNIQUE RECREATION AREAS OF AREAS WITH POTENTIAL DAMAGE TO FACILITIES, RANK BASED ON FIRE SUSCEPTABILITY
STRUCTURES	PUBLIC WELFARE, PUBLIC SAFETY	RANK BASED ON HOUSING DENSITY AND FIRE SUSCEPTABILITY
NON-GAME WILDLIFE	PUBLIC WELFARE, ENVIRONMENT	CRITICAL HABITATS AND SPECIES LOCATION BASED ON INPUT FROM CALIFORNIA DEPT. OF FISH AND GAME AND OTHER STAKEHOLDERS
GAME WILDLIFE	PUBLIC WELFARE, ENVIRONMENT	CRITICAL HABITATS AND SPECIES LOCATION BASED ON INPUT FROM CALIFORNIA DEPT. OF FISH AND GAME AND OTHER STAKEHOLDERS
INFRASTRUCTURE	PUBLIC WELFARE, PUBLIC SAFETY	INFRASTRUCTURE FOR DELIVERY OF EMERGENCY AND OTHER CRITICAL SERVICES (IE. REPEATER SITES, TRANSMISSION LINES)

California's Forests and Rangelands: 2010 Assessment identified a variety of "Priority Landscapes" that are applicable to all areas of California.

Based on the Priority Landscapes developed by the Assessment, eleven (11) landscapes are considered as immediate priorities for Los Angeles County. The following best identify Los Angeles County's current problems, problem areas, and potential strategies:

1. Community Wildfire Planning
2. Population Growth and Development Impact
3. Preventing Wildfire Threats to Maintain Ecosystem Health
4. Restoring Wildfire Impacted Areas to Maintain Ecosystem Health
5. Preventing Wildfire Threats for Community Safety
6. Water Quality
7. Water Supply
8. Conserving Green Infrastructure
9. Managing Green Infrastructure
10. Threats to Forest Carbon from Wildfire, Insects and Disease
11. Threats to Forest Carbon from Development

From the Priority Landscapes the following Assets at Risk are identified as the highest concerns and should be addressed first:

- Structures, Major Roads and Transmission Lines – as threatened from wildfire. The value of housing, as measured by density, with susceptibility to loss (exposure). Power delivery and communications sites susceptible to extended loss of service due to fire or the simple interruption of these services is a public safety as well as a public welfare issue.
- Ecosystems – as threatened by localized development and landscape level development. Based on potential ecological damage from a severe fire event, areas can diverge significantly due to the historic fire return interval and development resulting in fuel conditions that could promote ecological damage (e.g. mortality within larger tree sizes, soil impacts).
- Water Supply, Water Quality – as threatened by wildfire and the effects of wildfire on soil surfaces, threats to and from localized development, watersheds and climate changes. Watersheds can burn in the dry season and then discharge torrents of debris into downstream-populated plains during severe storms in following wet seasons. Historically, California's South Coastal Plain has suffered the worst effects of the flood-fire sequence; because it has the greatest concentration of fire prone, high debris producing watersheds that discharge into populated areas. Impacts include damage to downstream values such as homes, roads, debris basins, and other infrastructure.

SECTION IV: PRE-FIRE MANAGEMENT STRATEGIES

A: FIRE PREVENTION

Prevention

The focus of fire prevention is educating the citizens in ways to reduce the risk of hazardous conditions and situations relating to fire. These programs are focused on awareness of fire causes and the potential of reduced costs due to fire damage. The Department's Fire Plan Unit coordinates the efforts and activities of these programs with the intent of creating efficient and timely Pre-Fire Management projects.

Passive Protection

Passive protection; such as defensible space, hazard fuel reduction, proper brush clearance, fire-resistive landscaping, fire-resistive construction and good housekeeping around the structure plays an important role in increasing its survivability in a wildfire. The sum effect of passive protection is a force multiplier for active firefighting resources. A single firefighting resource may protect many more structures when passive protection is properly employed. In some cases, firefighting resources may not be necessary at all thus freeing them for other uses.

Pre-Fire Management

The pre-fire engineer and unit staff work with many stakeholders and cooperators including federal, state and local government entities, Fire Safe Councils, individual citizens and other organizations to assist with the development and implementation of their Fire Plan. The program in which the pre-fire engineer works varies from unit to unit and includes the following: Prevention, VMP, Resource Management, Administration, and in some cases directly for the Unit Chief.

ENGINEERING & STRUCTURE IGNITABILITY

The Department's Prevention Services Bureau consists of three (3) Divisions: Health Hazardous Materials, Fire Prevention, and Forestry Division.

The **Fire Prevention Division** is under the leadership of the County's Fire Marshal. The Fire Prevention Division focuses on educating the community about the benefits of proper safety practices and identifying and eliminating all types of hazardous conditions, which pose a threat to life, the environment and property. Widespread and diverse activities of commercial, industrial, and residential development and operations are processed and inspected. Numerous and widespread fires must be investigated and the information entered into the system to update and improve the safety of the community and our personnel.

The **Health Hazardous Materials Division** mission is to protect the public health and the environment throughout Los Angeles County from accidental releases and improper handling, storage, transportation, and disposal of hazardous materials and wastes. In 1981, the Los Angeles County Board of Supervisors established the Hazardous Materials Control Program in the Department of Health Services for the inspection of

businesses generating hazardous waste. In 1991, the program merged into the Fire Department and it became the Health Hazardous Materials Division (HHMD). All Hazardous Material Specialists are sworn Los Angeles County Deputy Health Officers.

The **Fire Prevention Special Units Section** is comprised of the following specialized units:

Petroleum/Chemical Unit conducts fire safety inspections and issue permits for major plants manufacturing, using and storing hazardous materials and explosives.

Schools and Institutions Unit conducts annual fire/life safety inspections in all public, private, and parochial schools, private and community colleges, child day care centers, acute and convalescent care hospitals, surgery centers, outpatient dialysis clinics, residential care facilities, assisted living centers, adult day facilities, local detention facilities and jails, county detention camps, and organized church and school camps.

Fire Investigation Unit conducts investigations of major alarm fires and other fires to determine the cause or investigate suspected arson. They interview witnesses, collect evidence, write reports, and conduct training programs for Departmental personnel.

Codes & Ordinances Unit conducts research, answers requests for information and maintains the Department's legal and historic library. They propose code changes to the Uniform Fire Code and Uniform Building Code and meet with architects and other government officials.

County Facilities Unit is responsible for plan check and field inspection activity for new construction projects for many of the 36 Los Angeles County Departments. They act as the Department's liaison and/or represent county facilities outside of our jurisdiction, such as the Disney Concert Hall and the LAC-USC Medical Center reconstruction and addition

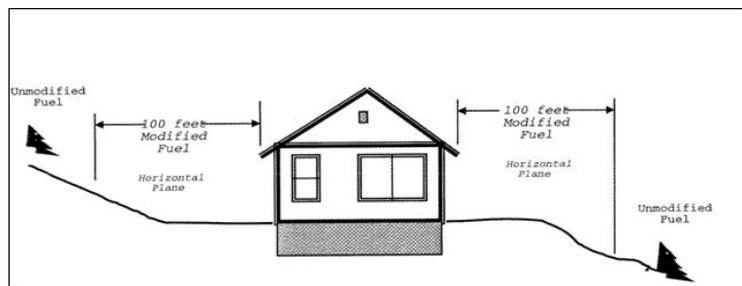
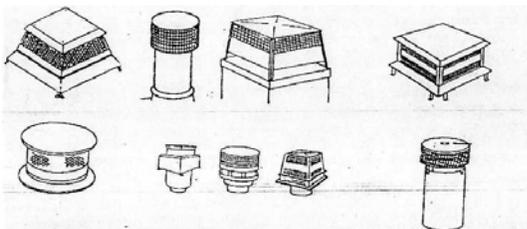
The **Fire Prevention Engineering Section** consists of the following:

Building Plan Check Unit has the responsibilities of performing nonstructural fire safety plan review and approving architectural plans for various complex occupancies.

Fire Sprinkler Plan Check Unit is responsible for providing plan review service for all structures requiring an automatic fire sprinkler system, fire pump and on-site hydrants. They also review and approve all types of fire protection systems.

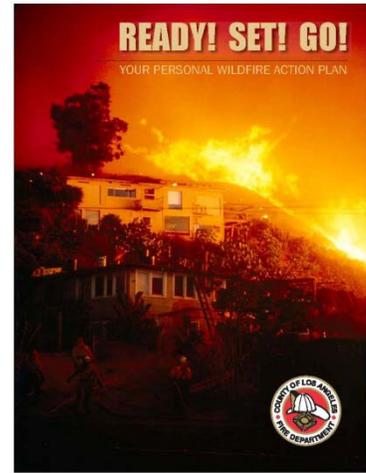
Fire Alarm Unit performs plan review services on all structures requiring a fire alarm or smoke management systems. They review and approve all types of fire alarm systems and assist with on-site inspections and testing of complex alarm and smoke management systems.

State Law requires the use of ignition resistant building methods and materials as a measure to reduce structure ignitability for new buildings located in any Fire Hazard Severity Zone (FHSZ).



INFORMATION AND EDUCATION

The Public Information Officer develops specific programs, educational materials, and public statements. Ultimately public education is the responsibility of all members of the Fire Department. Each section interacts with the public and is responsible for increasing the public's awareness of wildfire safety and preparedness. The Department uses several publications to provide safety information to the citizens of the County of Los Angeles. Among them are:



- ✓ Ready! Set! Go!:
<http://fire.lacounty.gov/SafetyPreparedness/ReadySetGo/pdf/Ready%20Set%20Go%2009.pdf>
- ✓ Arson Watch And Resident Education (A.W.A.R.E.):
<http://fire.lacounty.gov/ProgramsEvents/PDFs/A.W.A.R.E.pdf>
- ✓ Exit Drills In The Home (E.D.I.T.H.):
<http://fire.lacounty.gov/FirePrevention/PDFs/EDITH.pdf>
- ✓ Water Awareness Training for Children in the Home (W.A.T.C.H.):
<http://fire.lacounty.gov/ProgramsEvents/PDFs/W.A.T.C.H%20in%20English.pdf>
- ✓ 4th of July Safety Tips:
http://fire.lacounty.gov/PressRoom/PDFs/fw_english.pdf
- ✓ Be Flood Aware:
<http://fire.lacounty.gov/ProgramsEvents/PDFs/storm.pdf>
- ✓ Brush Clearance:
<http://fire.lacounty.gov/PressRoom/PDFs/Brush%20Clearance%20Tips.pdf>
- ✓ Community Emergency Response Team (CERT):
<http://fire.lacounty.gov/ProgramsEvents/PECERT.asp>
- ✓ County of Los Angeles Fuel Modification Guidelines:
<http://fire.lacounty.gov/Forestry/PDF/Fuel%20Modification%20Plan%20Guidelines%208-10-11.pdf>
- ✓ For a complete list of the Department's public education materials; please visit:
<http://fire.lacounty.gov/ProgramsEvents/PEPublicEducation.asp>
- ✓ For a complete list of Wildland-Urban Interface fire prevention education materials; please visit: <http://fire.lacounty.gov/Forestry/Forestry.asp>

Additional Wildland-Urban Interface information and brochures are available through the Forestry Division's Interpretive Unit at (818) 890-5723

Los Angeles County Fire Department

Website: www.fire.lacounty.gov

Facebook: www.facebook.com/LACoFD

Twitter: @LACo_FD

Wildland Fire Prevention Education Programs for Los Angeles County Residents

Southern California Regional Area Taskforce (SCRAST), Assistant Chief
J. Lopez, Chair

- 2013 Fire Summit: Water Resources and Watershed Protection Before and After Fire
<http://www.socalrast.org/news.htm>
- 2014 Fire Summit: Fire Invasive Species and Habitat Health
<http://www.socalrast.org/news.htm>

California Fire Safe Council (CFSC), Assistant Chief J. Lopez, Vice-Chair

- CFSC Board of Directors May 2014 Meeting, AQMD Headquarters
- 2014 Grant Writing Workshop, Arcadia
- 2014 Grant Award Workshop, Duarte
- Monte Nido Fire Safe Council Lecture Series

Community Fire Hazard Reduction Project Support

The Department's Fire Plan Unit under David Whitney, Deputy Forester Pre-Fire Engineer provides fire hazard reduction project design, development, planning and implementation for Communities in Los Angeles County.

2013-2014 Projects

- Corral Canyon Fire Safe Alliance Fire Safe Council Grant Completed
- North Topanga Canyon Fire Safe Council 2012 Grant Completed
- City of Monrovia Fire Safe Council Grant Completed
- City of Monrovia Fire Safe Council Grant Community Wildfire Protection Plan (CWPP) Completed
- North Topanga Canyon Fire Safe Council 2013 Grant Implemented
- Horizon Hills Fire Safe Council Grant Implemented
- Monte Nido Fire Safe Council Grant Implemented
- Meadows Fire Safe Council Grant Implemented
- Pasadena Glenn Fire Safe Council Grant Implemented
- City of Duarte Fire Safe Council Grant Implemented

B. VEGETATION MANAGEMENT



The **Forestry Division** of the County of Los Angeles Fire Department, since its inception in 1911, has been involved in the conservation and protection of natural resources through its forestry programs. The Forestry Division is comprised of three sections: Operations, Natural Resources, and Brush Clearance. The employees of the Forestry Division serve the citizens by using their knowledge to preserve and enhance the environment for the benefit of all residents of Los Angeles County. The Division is responsible for the review of environmental documents related to development and protection of oak tree resources, development of vegetation management projects, and coordination of wildland fire planning, enforcement of the Department's brush clearance program, review of fuel modification plans, support to Fire Safe Councils and implementation of the California Strategic Fire Plan.

As the population of Los Angeles County increases, further expansion of residential areas into the WUI is inevitable. Panoramic views, wildlife, fresh air, and solitude are just a few of the reasons that tempt people to locate in the brush areas of Los Angeles County. The rewards may be numerous, but the increased risk of wildland fires, flooding, and erosion poses a serious threat to life and property.

Vegetation Management

Vegetation management, as it relates to wildland fire, refers to the total or partial removal of high fire hazard grasses, shrubs, or trees. This includes thinning to reduce the amount of fuel and modification of vegetation arrangement and distribution to disrupt fire progress. In addition to fire hazard reduction, vegetation management has other benefits. These include increased water yields, improved habitat for wildlife, reduction of invasive exotic plant species, and open access for recreational purposes.

The Vegetation Management Program (VMP) is a cost-sharing program that focuses on the use of prescribed fire, mechanical, biological and chemical means, for addressing wildland fire fuel hazards and other resource management issues on State Responsibility Area (SRA) and Local Responsibility Area (LRA) lands. The use of prescribed fire mimics natural processes, restores fire to its historic role in wildland ecosystems, and provides significant fire hazard reduction benefits that enhance public and firefighter safety.

VMP allows private landowners to enter into a contract with CAL FIRE to use an integrated vegetation management plan to accomplish a combination of fire protection and resource management goals. The Forestry Division's Vegetation Management Unit and the Air and Wildland Division's Prescribed Fire Office implement the VMP projects which fit within the Department's priority areas (e.g., those identified through the fire plan) and are considered to be of most value to the County will be completed.

The Forestry Division's Environmental Review Unit works with the County of Los Angeles Department of Regional Planning in implementing existing environmental ordinances. The unit personnel review all County Oak Tree Permit applications submitted to the Department of Regional Planning and develop recommendations for implementation. Additionally, the unit personnel produce environmental documentation

The Forestry Division's **Fire Plan Unit** is in charge of implementing the California Strategic Fire Plan in Los Angeles County which addresses the primary wildland fire protection plan. The State Board of Forestry and the California Department of Forestry and Fire Protection (CAL FIRE) have drafted a comprehensive document for wildland fire protection in California. The planning process defines a level of service measurement, considers assets at risk, incorporates the cooperative inter-dependent relationships of wildland fire protection providers, provides for public stakeholder involvement, and creates a fiscal framework for policy analysis. The unit works with communities and organizations across the county to limit the risk of fire in the WUI areas.

The most effective way to limit damage and loss due to wildfire is to take preventive action with regard to the construction of homes with the most fire resistant material and layout and the modification of the vegetation around a structure to create that defensible space. The focus of the Prevention Department is on prevention through educational programs, development and enforcement of fire codes and building codes in the Fire Hazard Severity Zones, Pre-Fire Planning, Vegetation Management, Brush Clearance, Environmental Review and Fuel Modification Programs. These programs are focused on awareness and mitigation of fire causes, fire spread potential, total costs and effects of fire damage associated with the protection of life, property and the environment. The Department's Fire Plan Unit coordinates the efforts and activities of these programs with the intent of creating efficient and timely Pre-Fire Management projects.



SECTION V: PRE- FIRE MANAGEMENT TACTICS

DIVISION / BATTALION / PROGRAM PLANS

All structures within Los Angeles County High Fire Severity Zones are subjects to all of the Strategies discussed in the previous section. Tactics to combat the threat of fire destroying homes are as follows.

Engineering & Ignitability of Structure

All new construction of homes in the High Fire Severity Zone are subject to strict construction guidelines. There must be specific material over all attic vents which prevent or limit the entry of embers into the attic home. All eaves must be 'boxed in' which provides no exposed wood to catch on fire. The window are required to be one hour fire danger rated in which they can withstand 1 hour of heat from a wildfire before breaking. These are just a few of the specifics preventive methods that reduce structure damage and loss.

Vegetation Management Unit

The Vegetation Management unit works closely with the Fire Plan unit and the Air and Wildland Division's Prescribed Fire Office to implement the projects outlined in this plan. The Vegetation unit also works to provide the State and County with the appropriate paperwork for prescribed burning, mechanical, biological and chemical methods used on the areas in consideration. This unit provides the legal document for CEQA or Negative Declaration documents.

Brush Clearance Unit

All existing homes in the High Fire Severity Zone receive an annual brush clearance inspection by their local fire personnel. These inspections are performed in the spring and the goal is evaluated the property for adequate defensible space. Los Angeles County requires more than the states 100 feet of clearance and requires 200 feet depending on aspect, slope and other environmental conditions. Some of the guidelines for inspection are that the property has no vines on structure or large trees within the first 30 feet of the home. Inspectors are looking for adequate brush clearance of native vegetation that breaks the fuels continuity and density. Depending on slope direction from the structure, fire intensity will be impacted by the density and clearance of the vegetation. If a structure in non-compliant, the county has in place a procedure in which the owner is warned of the infraction and then will be fined and possibly have the vegetation removed at their cost by the County Agriculture of Weights and Measures.

Fuel Modification Unit

The Fuel Modification Unit reviews and approves landscape plans for all new construction within the High Fire Severity Zones within the County. Once homes are constructed, an inspection is performed to confirm the implementation of their approved landscape plan. At 3 year intervals, the property is again inspection to guarantee that

the plan is being implemented. If properties are in non-compliance, the home owners are charged a fine and required to amend the issues.

FIRE SUPPRESSION PHILOSOPHY

As mentioned in other areas of this document, "initial attack" is the focus of all wildfire suppression activities for the County of Los Angeles Fire Department. With so much emphasis placed on quickly extinguishing all wildfires, it might seem that all fire in the wildland is a bad thing. Quite to the contrary, fire is absolutely a necessary element in the County's ecosystem. However, since too many assets are at risk to allow the natural occurrence of wildfire, prescribed or controlled burns must take the place of naturally occurring wildfire.

The human element is always the number one priority for all fire suppression efforts. Many rules and guidelines have been developed to protect firefighter and public safety during wildfires. These rules and guidelines can be helpful for the layperson to understand why firefighters may say or do certain things related to wildfire. Some of these rules and guidelines are: "The Ten Standard Firefighting Orders," "The Eighteen Watch out Situations," "Common Denominators of Fire Behavior on Tragedy and Near-miss Forest Fires," "LCES - Lookouts, Communications, Escape Routes, Safety Zones," "Look Up, Look Down, Look Around." With all wildfires, certain strategic and tactical actions must take place. From the time of alarm to the abandonment or closure of a wildfire, one single unified entity must be in command of the incident. To accomplish this, all fire agencies in the County and in the State, for that matter, use the Incident Command System (ICS). Tactically all wildfires must be anchored, which means that a secure starting point is established from which all other strategic and tactical decision-making can build upon.

Once a wildfire grows beyond the initial attack stage where there are assets at risk, particularly in the WUI, two additional dimensions are added to the already complex nature of wildland firefighting. In addition to anchoring and flanking the fire, to narrow the flame front, firefighting resources must also be committed to protecting assets out in front of the fire and resources must be left to protect assets from residual embers and fire after the fire passes through.

THE FIRE PROTECTION SYSTEM

Although fire is a necessary component of the local ecosystem, in most cases, unchecked wildfire is no longer a viable fire/fuel management option in Los Angeles County. Mostly because of population growth, assets at risk have interfaced and intermixed with the wildlands to such an extent that uncontrolled fires must be quickly extinguished. Therefore, at the heart of the wildfire protection system in Los Angeles County is an aggressive initial attack firefighting strategy.

The County of Los Angeles Fire Department actually has a dual fire protection role. We provide structural fire protection and rescue services to the Los Angeles County unincorporated areas and contract cities.

PRIORITY AREAS

The fire plan assessment process utilizes weather, assets at risk, fuels and input from the various Regions, Bureaus, Divisions and Battalions to help target critical areas and prioritize projects. Fire plan assessments aside, it is extremely difficult if not impossible to achieve fuel reduction on the ground without community involvement and stakeholders, whether that be in the form of a community fire safe council, homeowners association or other organized forum. The Fire Plan Assessment with its science-based approach is evaluated in conjunction with other intangibles to arrive at a "reasonable" assessment of the needs and likelihood of accomplishing a project. The current assessment indicates that there is a significant need throughout the foothill communities, especially in the WUI areas such as Altadena, Pasadena, Glendora, Topanga and many more.

Each of the Department's battalions were consulted for pre-fire projects they consider important to achieving their goals of reducing the potential and impact of catastrophic fire. Projects are assigned a relative ranking by the Department's Vegetation Management Task Force. Theoretically, the project with the highest hazard would have the first priority for funding of any given project or other pre-fire program. However, there are a number of circumstances where other than the highest priority would be given preference to a project. Circumstances when this might occur include the following: the Department's current commitment to an existing pre-fire project, community participation necessary to complete a project, preparatory work and ease of instituting the project, project type and match for grant funding and simply sharing the wealth and commitment toward pre-fire projects between the Department and communities. The Fire Plan Unit function is to coordinate countywide projects, and projects occurring between battalions, and provides direction in the planning of pre-fire projects.



APPENDIX A: PRE- FIRE PROJECTS

APPENDIX A: PRE- FIRE PROJECTS

Batt.	Project Number	Project Name	Planning Area	Status	Project Type	Activity Acres	Project Acres
	3010-1971-OTH-012	Annual Road-Siding	SRA	Complete	PREV		
	3010-2008-FPL-005	Chaney Millard FSC	SRA	C	FPL		
	3010-008-FPL-009	Meadows FSC	SRA	A	PREV		137
	3010-2008-VMP-008	MRCA Brush Clearance	SRA	A	PREV		180
	3010-2008-FPL-006	Malibu West FSC	SRA	C	FPL		
	3010-2008-FPL-010	Horizon Hills FSC	SRA	A	PREV		82
	3010-2010-FPL-002	La Verne FSC	LRA	A	FPL		
	3010-2010-FPL-001	Bradbury FSC	LRA	A	FPL		
	3010-2010-VMP-003	Holiday Lake RX	SRA	C	VMP		3
	3010-2011-OTH-004	Wayside Spring Drills	SRA	O	Other		254
	3010-2011-VMP-007	MT Wilson Hazard Fuels Reduction	SRA	C	VMP		49
	3010-2012-VMP-013	Spinks Canyon	LRA	P	VMP		
	3010-2013-FPL-001	Corral Canyon	SRA	C	PREV		50
	3010-2013-CAG-016	Bradbury & Duarte	LRA	A	FPL		

Project Number: Cal MAPPER ID *Project Name:* Project Name as in Cal MAPPER

Planning Area: SRA or LRA

Status: A = Active, P = Planning, C = Completed, O = Ongoing, M = Maintenance

Project Type: VMP, CFIP, FPL = Fire Plan, PREV = Prevention, and FI = Forest Improvement, Other = identify at the bottom of the table.

APPENDIX A: PRE- FIRE PROJECTS

Batt.	Project Number	Project Name	Planning Area	Status	Project Type	Activity Acres	Project Acres
	3010-2013-CAG-015	Pasadena Glen FSC	SRA	A	PREV		57
	3010-2013-CAG-018	Meadows FSC	SRA	A	PREV		137
	3010-2013-VMP-017	Horizon Hills	SRA	A			
	3010-2013-VMP-014	Lake Palmdale Rx Burn	SRA	A	VMP		
		Motorway Maintenance-Dozer	SRA	A	PREV		
		Motorway Maintenance-Handcrew	SRA	A	PREV		
		Helispot Fuel Reduction	SRA	A	PREV		
		North Topanga Canyon FSC	SRA	O	FPL		

Project Number: Cal MAPPER ID Project Name: Project Name as in Cal MAPPER

Planning Area: SRA or LRA

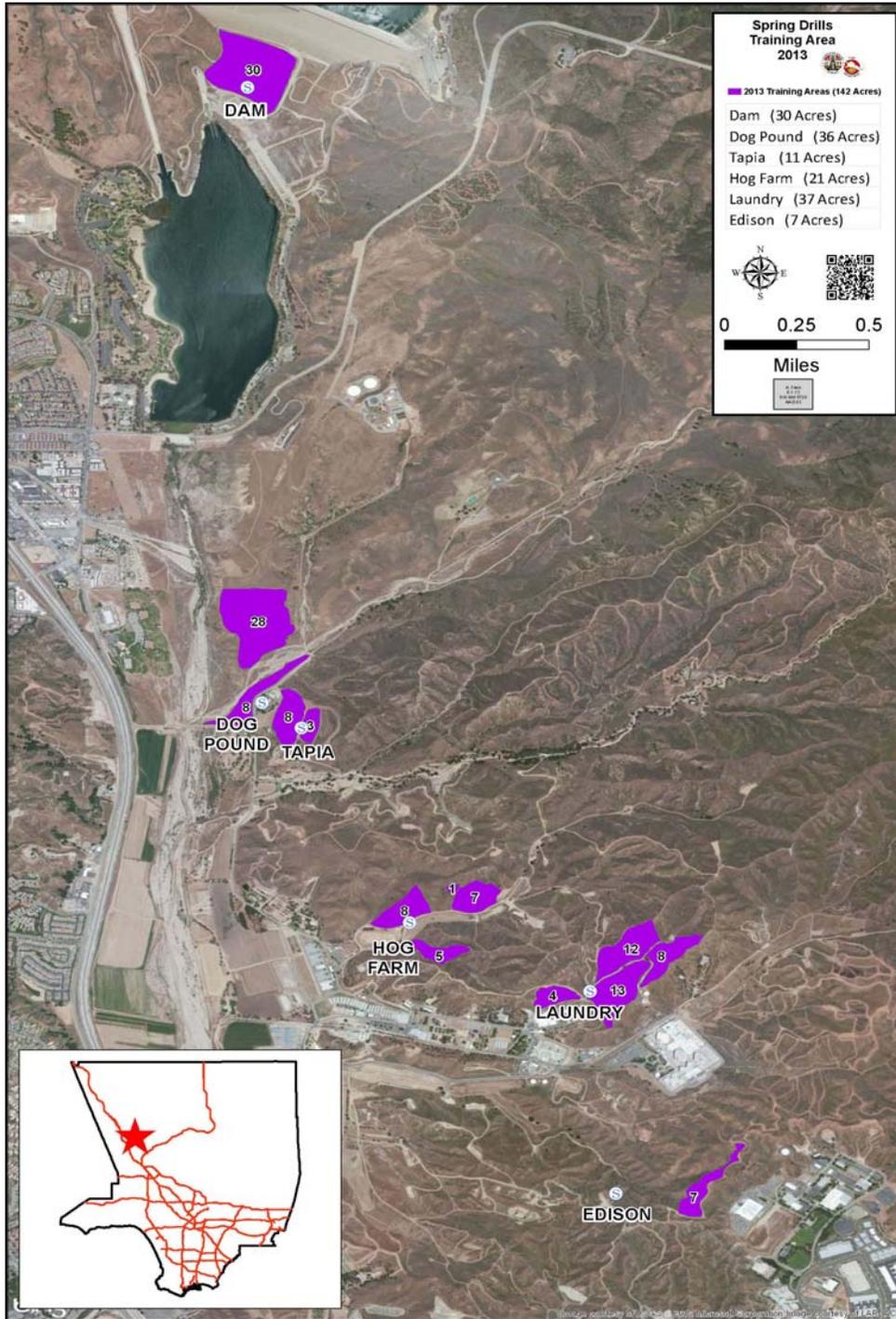
Status: A = Active, P = Planning, C = Completed, O = Ongoing, M = Maintenance

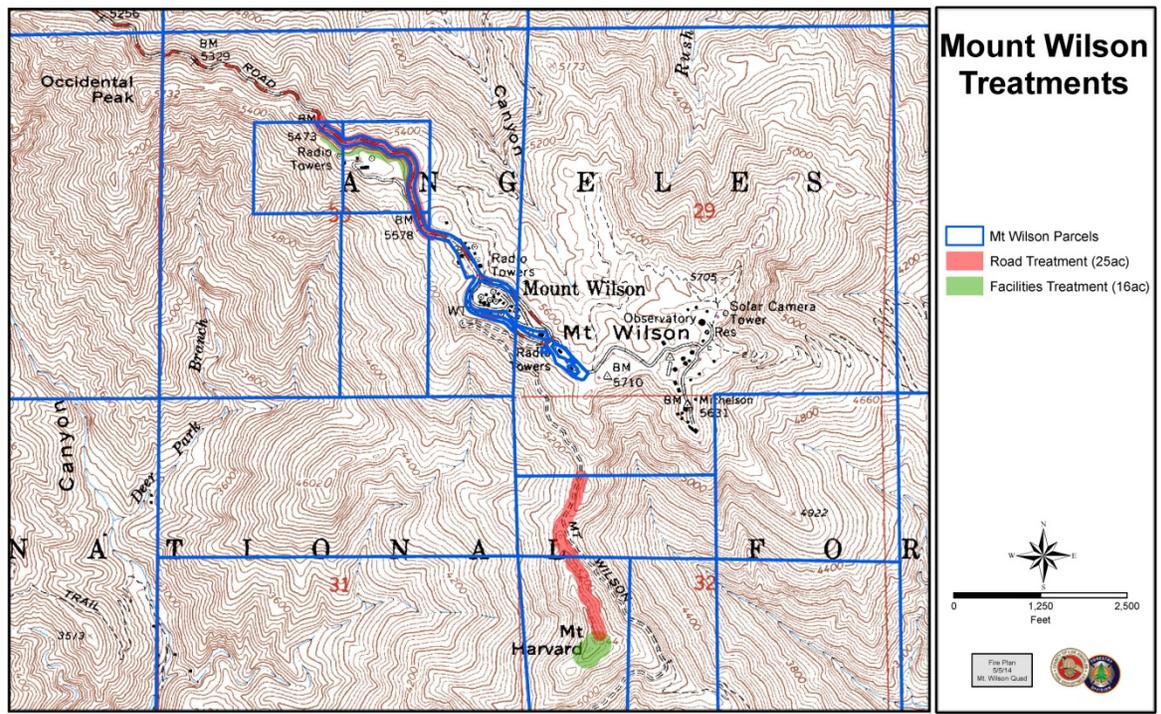
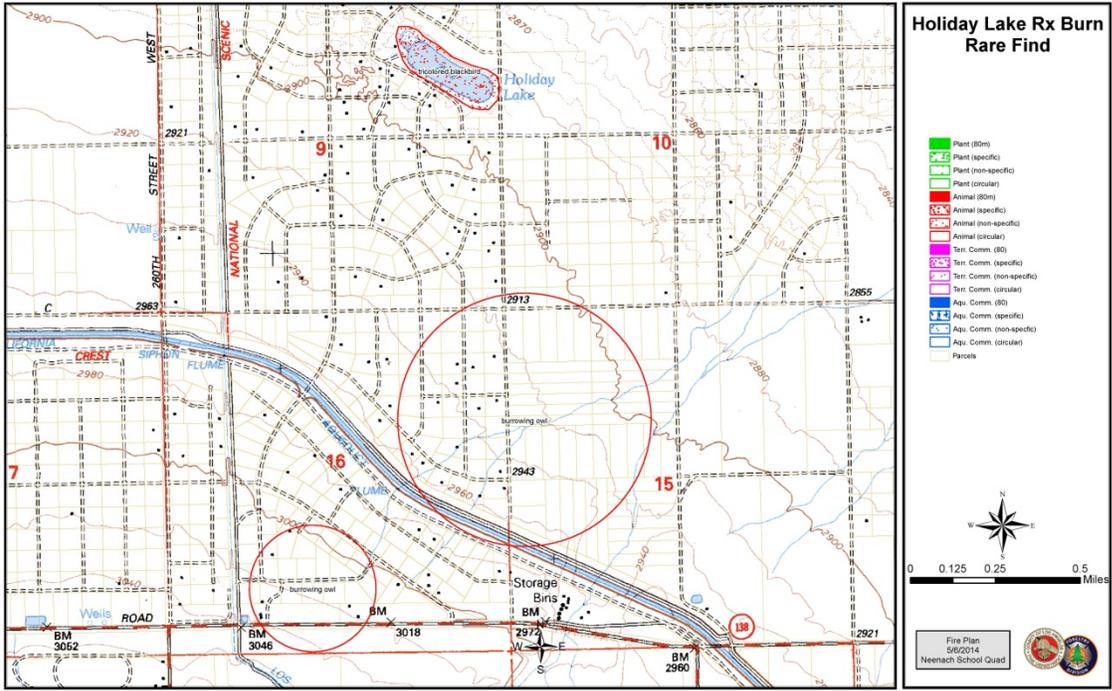
Project Type: VMP, CFIP, FPL = Fire Plan, PREV = Prevention, and FI = Forest Improvement, Other = identify at the bottom of the table.

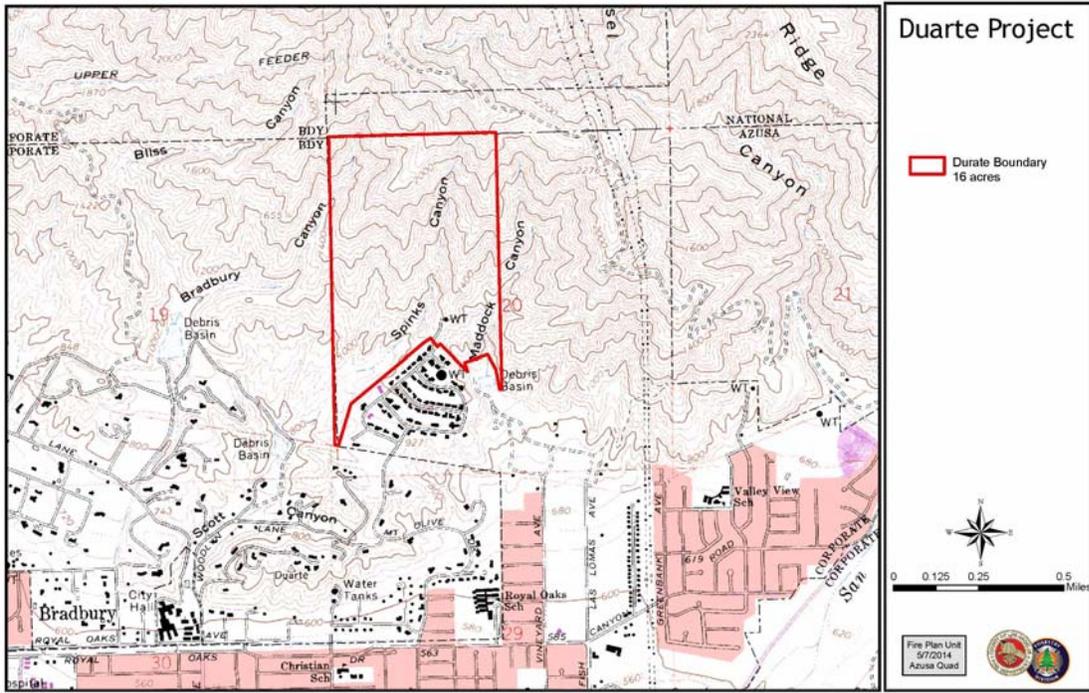


APPENDIX B: UNIT GOALS AND OBJECTIVES

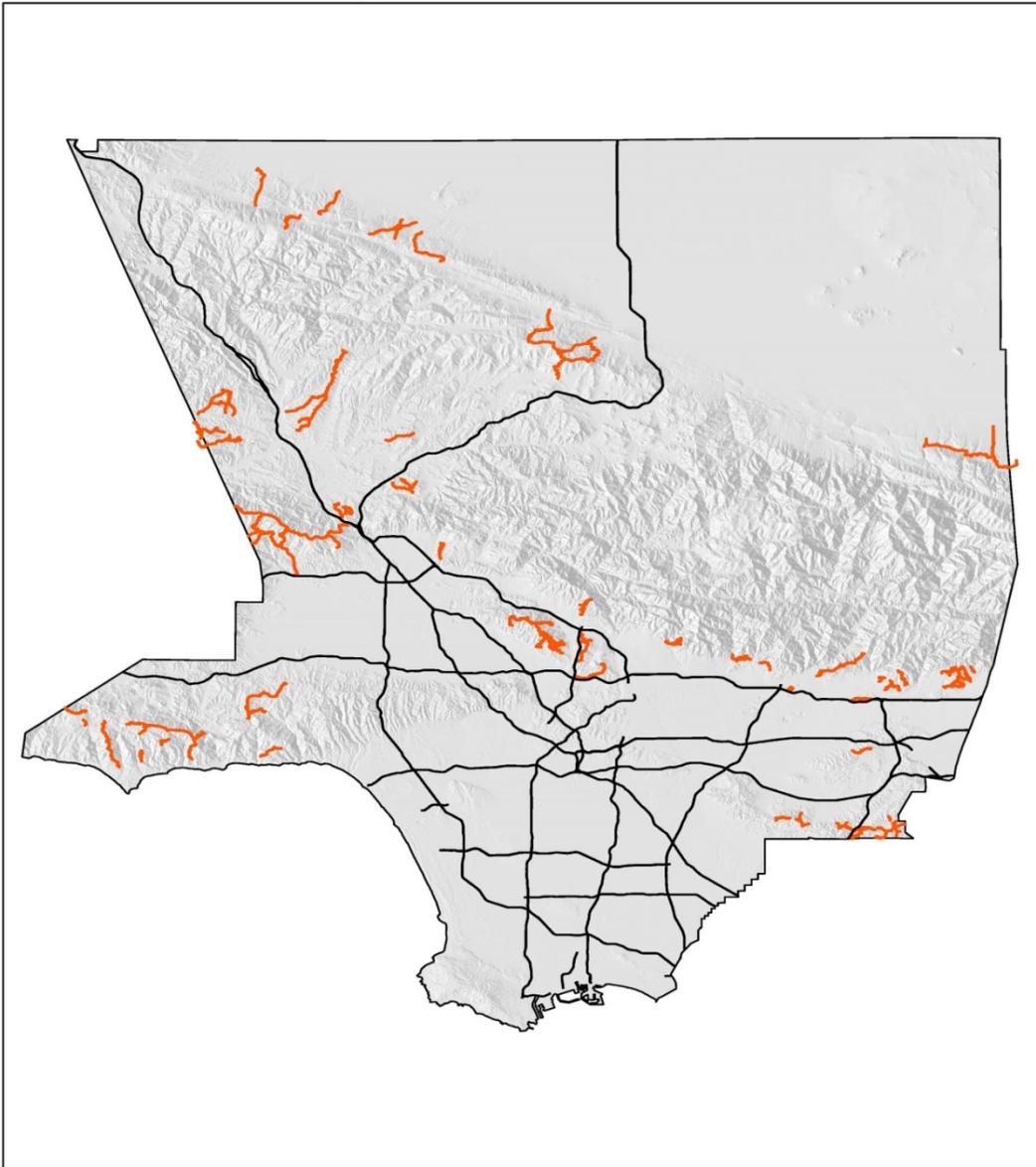
EXHIBITS: MAPS







Motorway Maintenance-Dozer



- Freeways
- Maintained Motorways-Dozer
295 Miles
- Los Angeles County

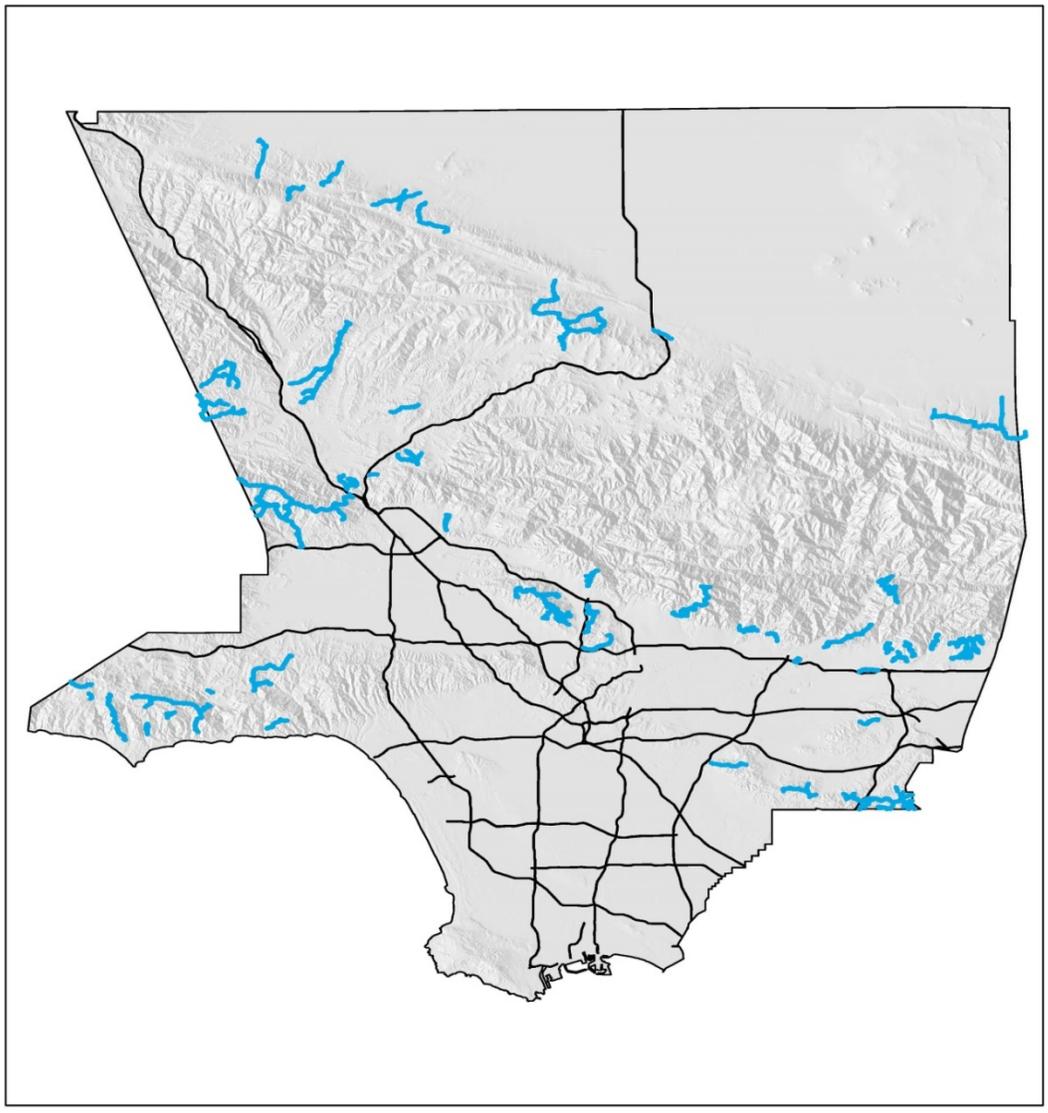


0 5 10 20
Miles

Fire Plan
5/7/2014



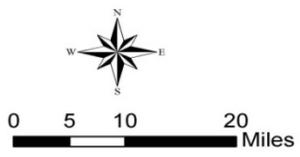
Motorway Maintenance-Hand Crews



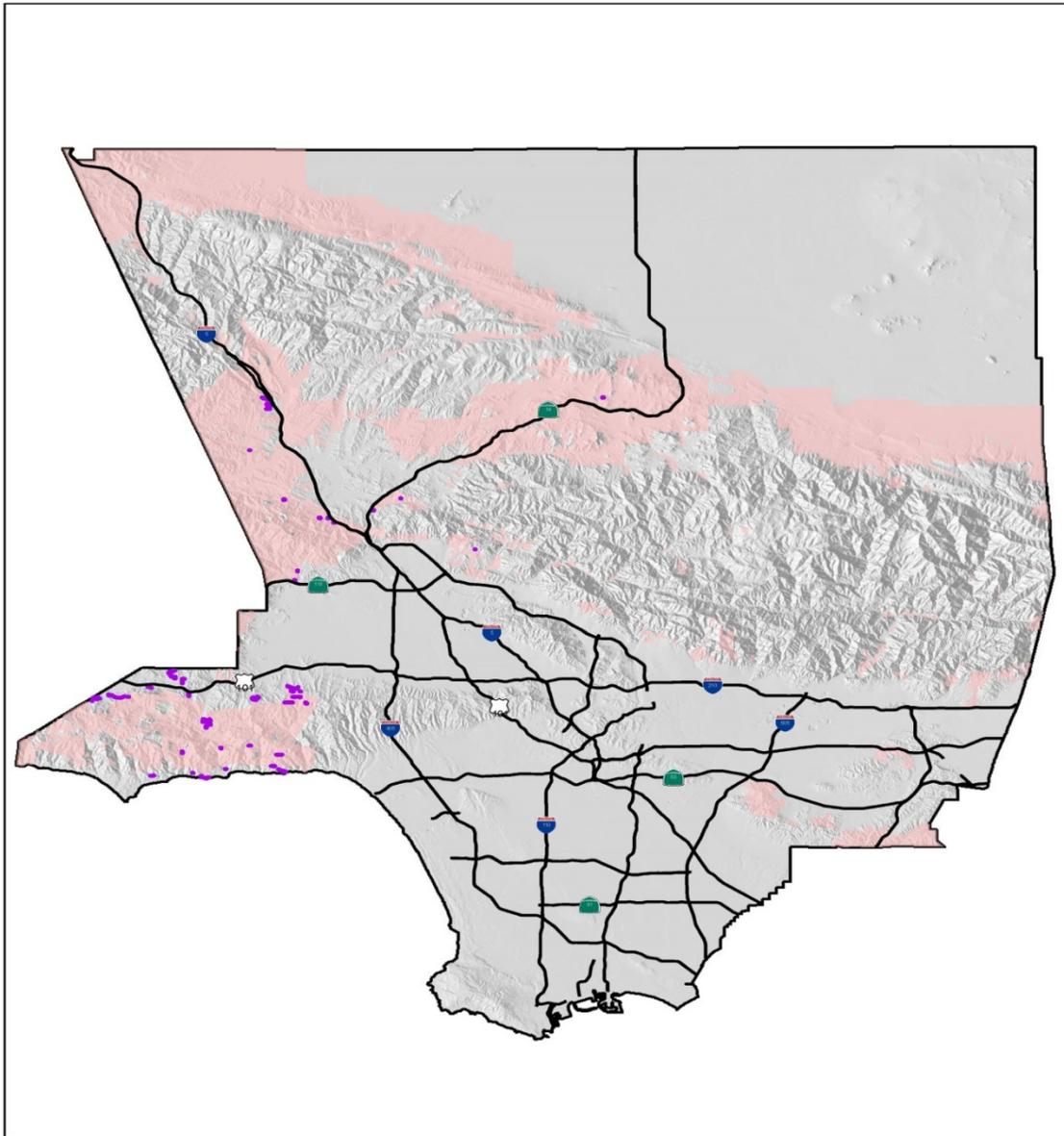
— Motorways-Hand Crews (050814)
326 Miles

— Freeways

□ Los Angeles County



Hazards Fuel Reduction Projects



-  Heavy Equipment Maintenance
82 Acres
-  MRCA
130 Acres
-  SRA

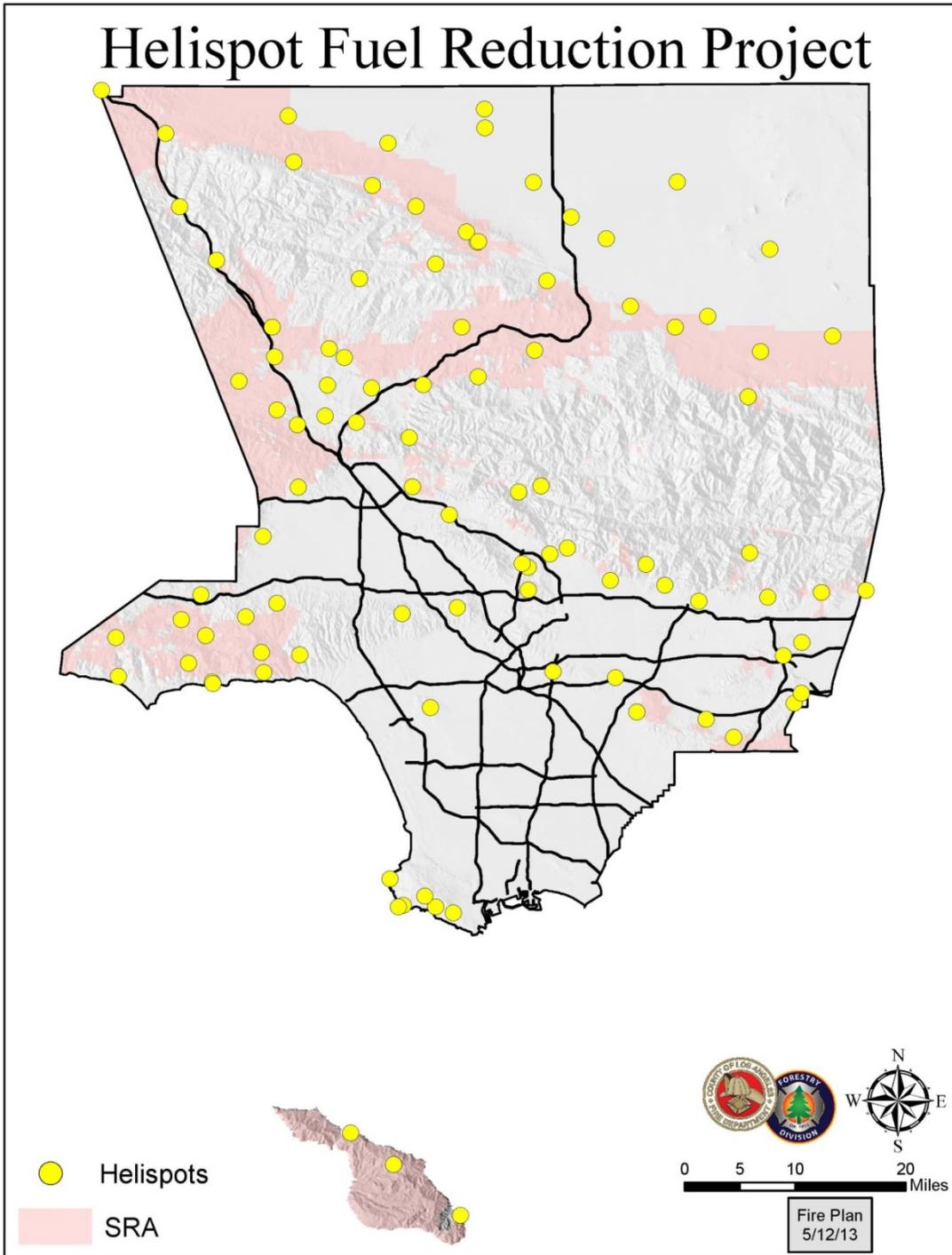


0 5 10 20 Miles

Fire Plan
04/24/14

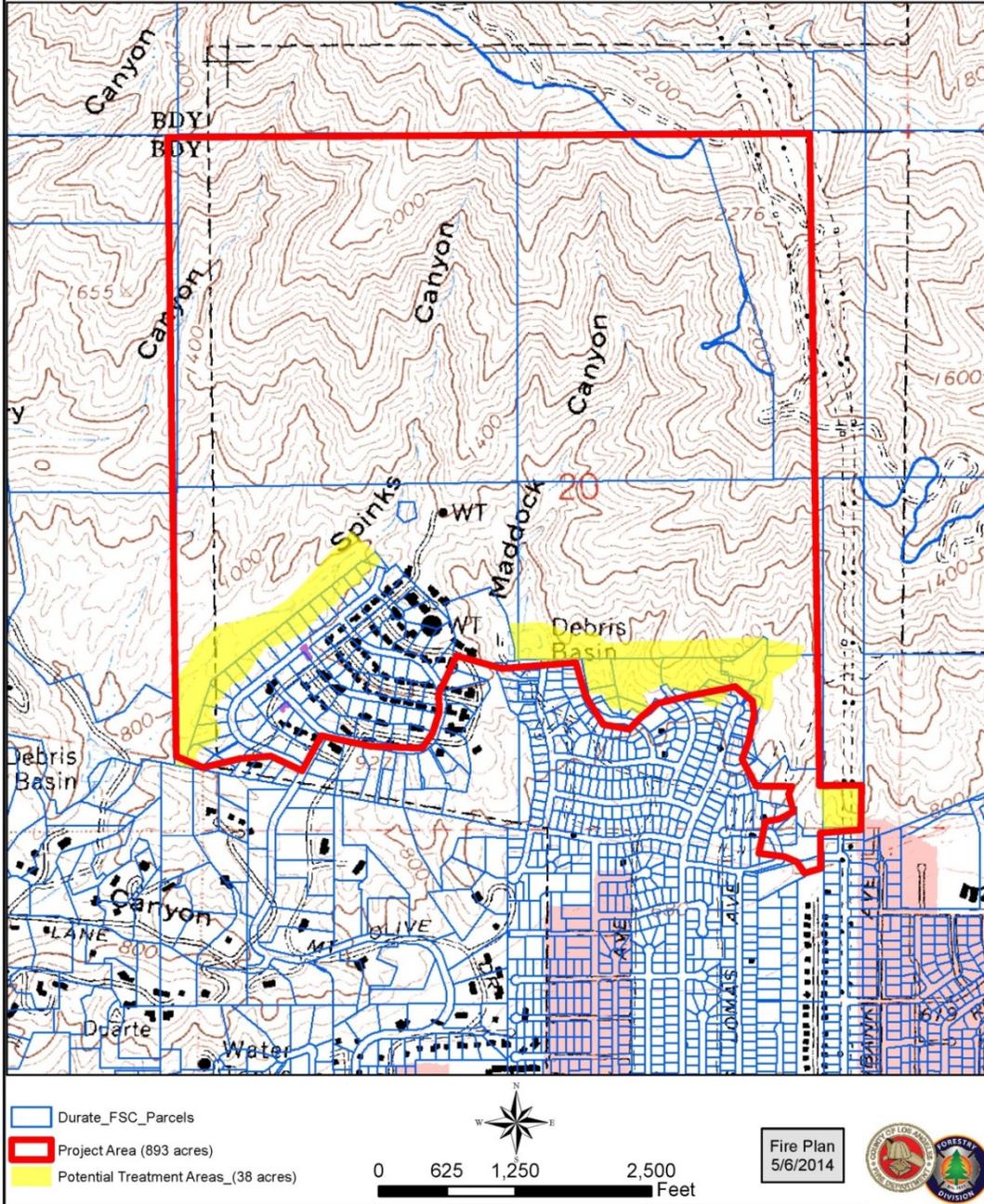


Helispot Fuel Reduction Project



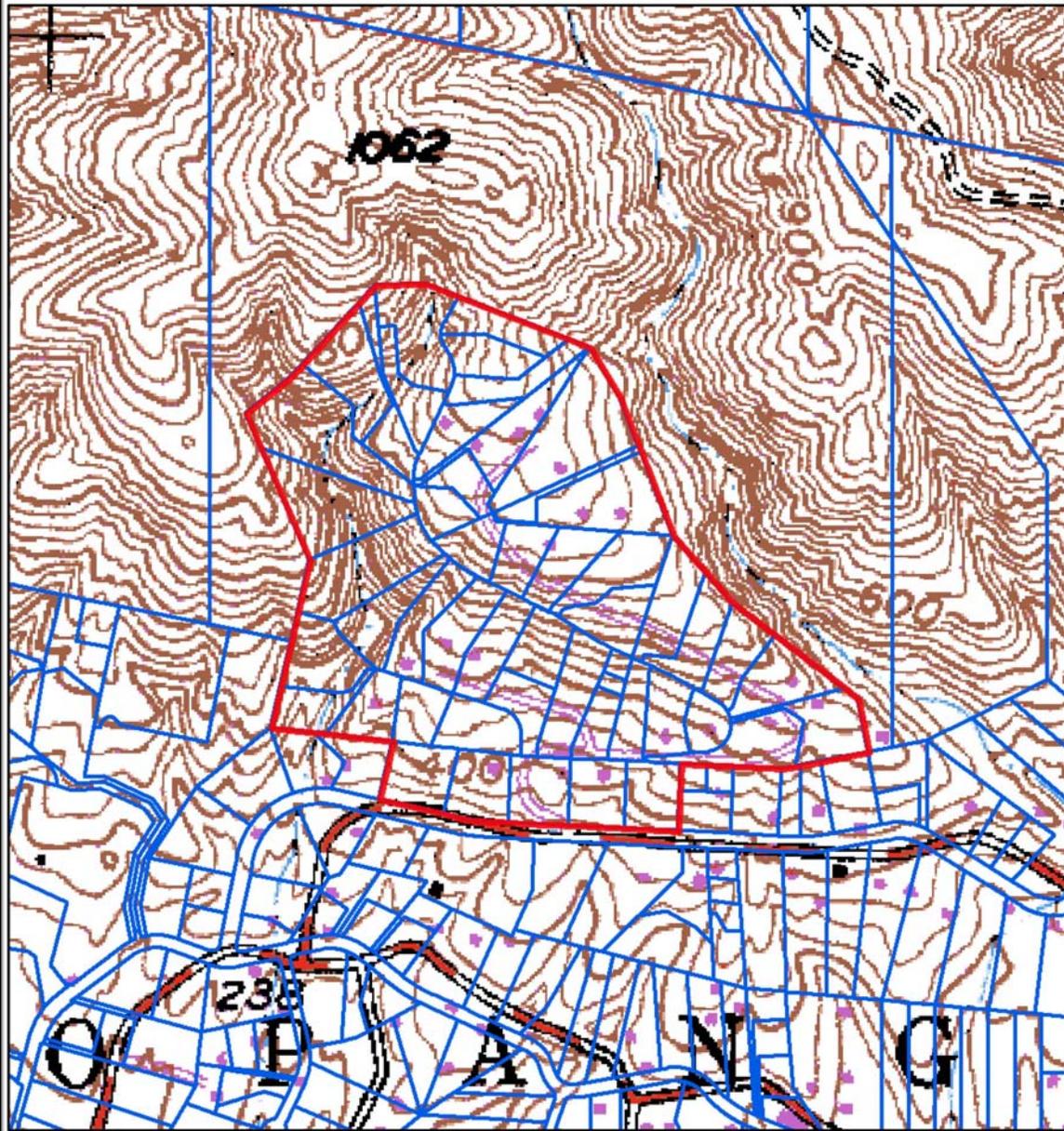
Duarte Treatment Area

Grant # 13USFS-SFA0141

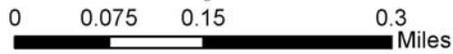


Horizon Hills FSC

Grant # 13USFS-SFAX0132

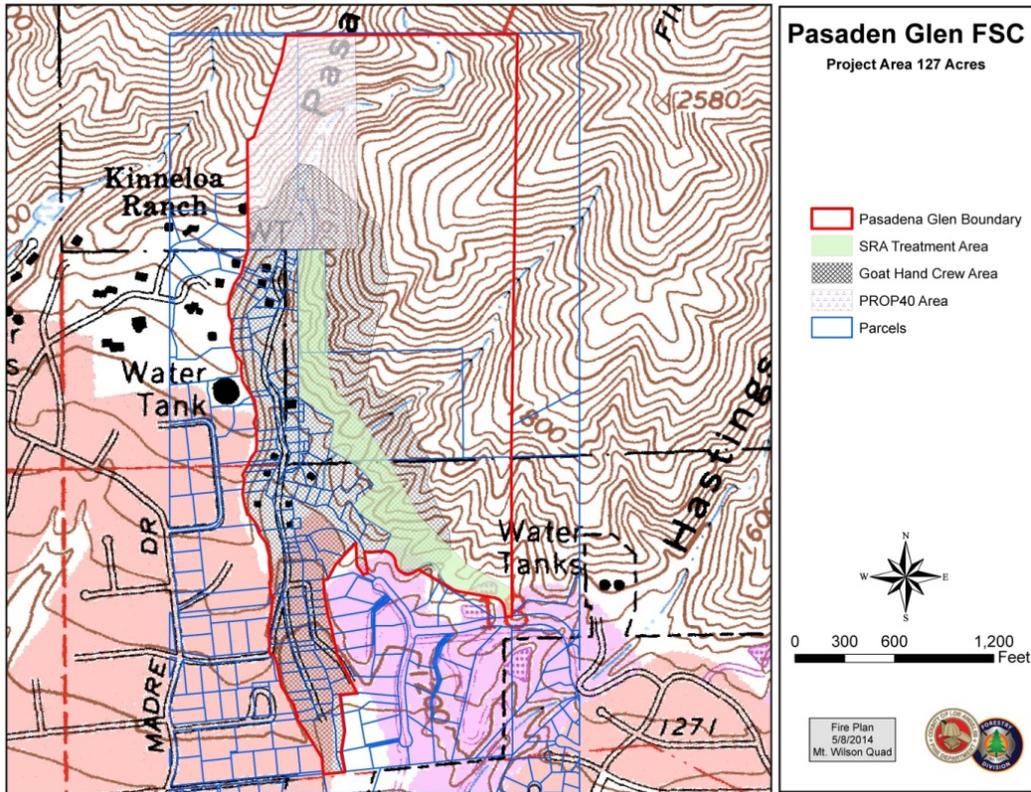
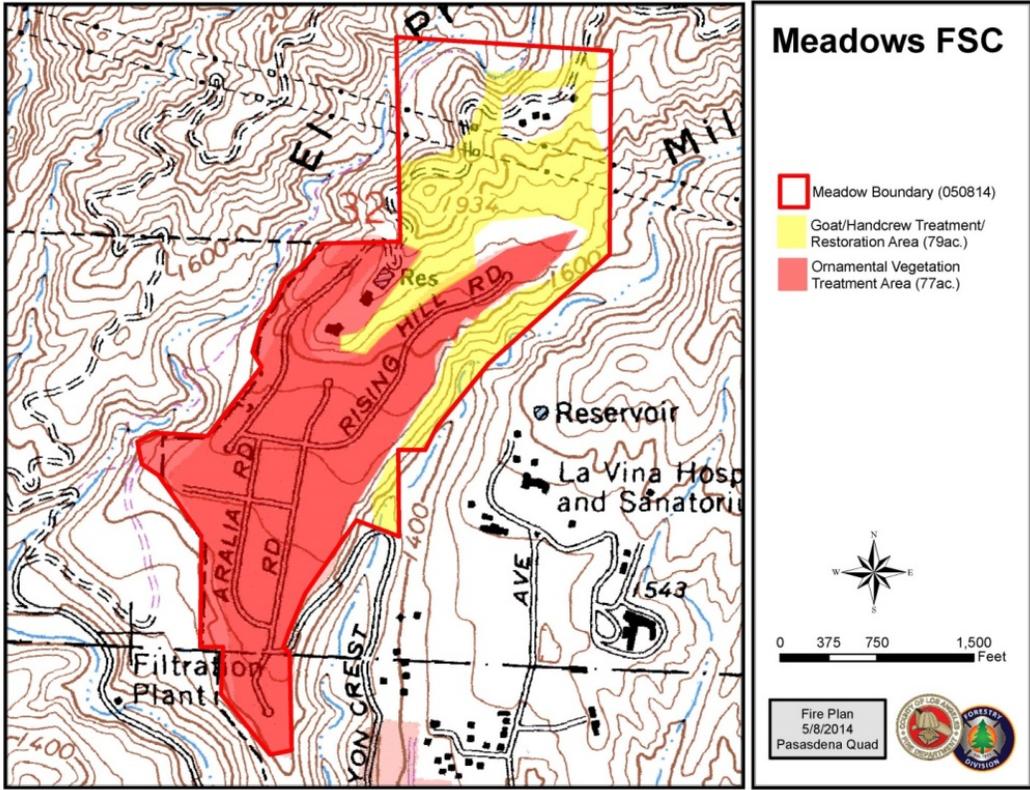


-  Project Area (66 acres)
-  Parcels

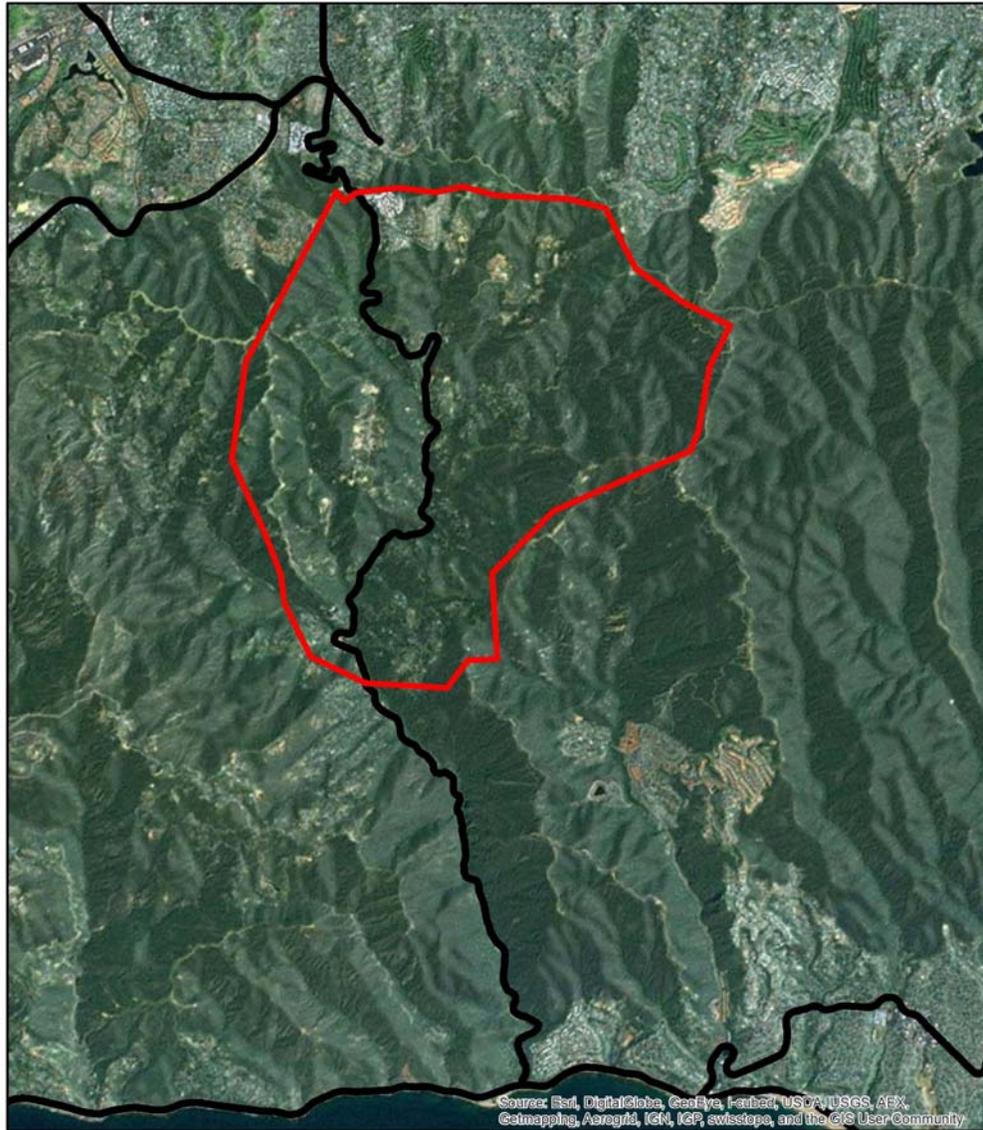


Fire Plan Unit
5/7/2014
Point Dume Quad





North Topanga Canyon Fire Safe Council



 Project Boundary



0 0.5 1 2 Miles



Fire Plan
5/12/2014

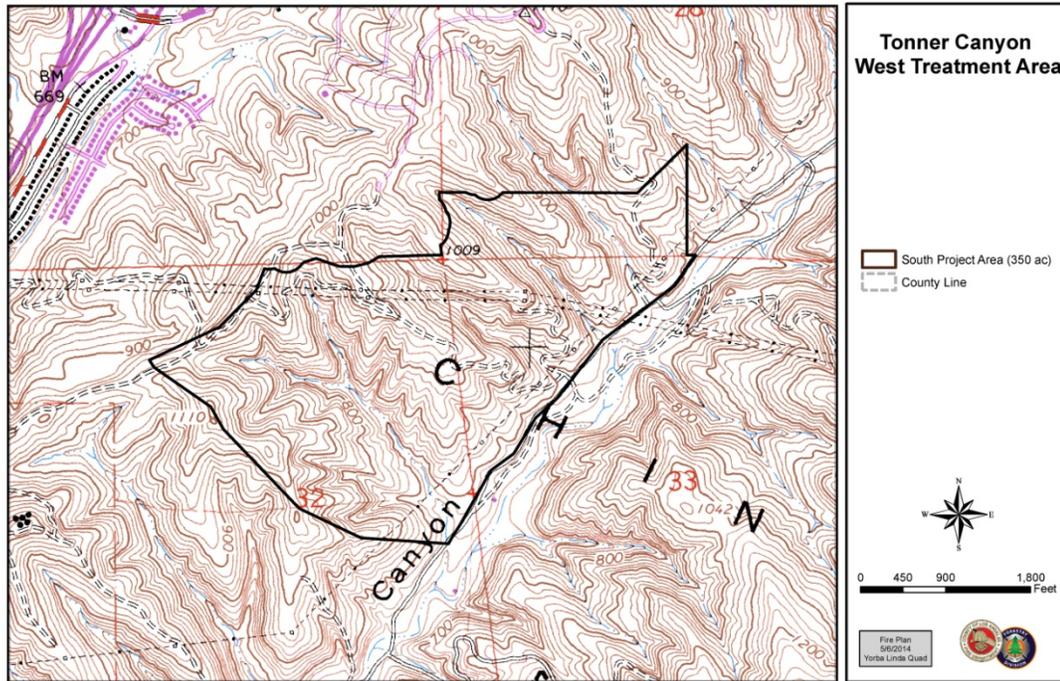
PROJECTS IN DEVELOPMENT

1. Tonner Canyon West - Vegetation Management Program

Treatment Area – 274 Acres

Treatment Methodology: Biological, Hand Crews, Mechanical, Prescribed Fire

Treatment Goal(s): Fire Hazard Reduction, Habitat Restoration

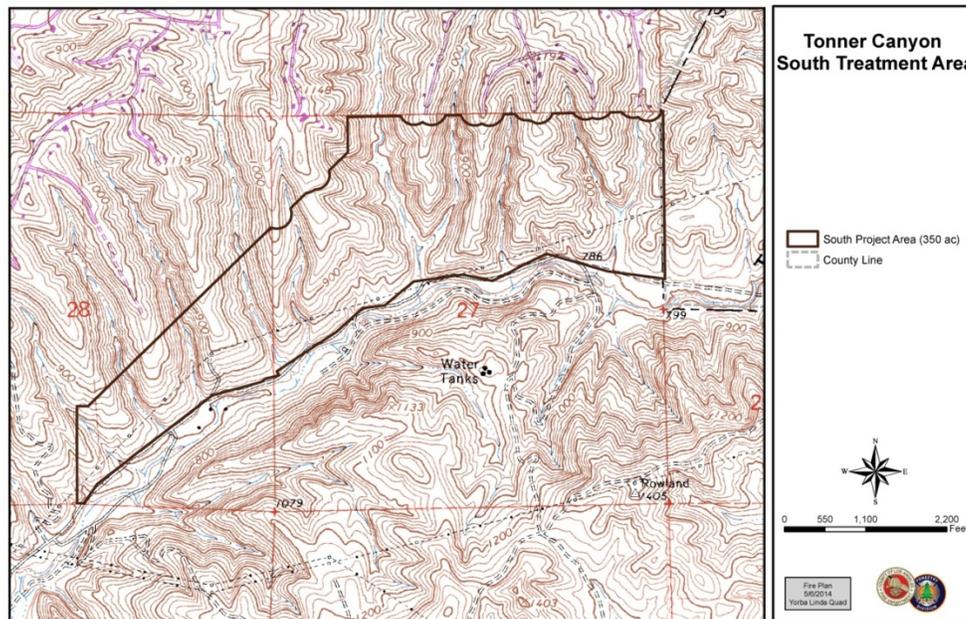


2. Tonner Canyon South - Vegetation Management Program

Treatment Area – 350 Acres

Treatment Methodology: Biological, Hand Crews, Mechanical, Prescribed Fire

Treatment Goal(s): Fire Hazard Reduction, Habitat Restoration

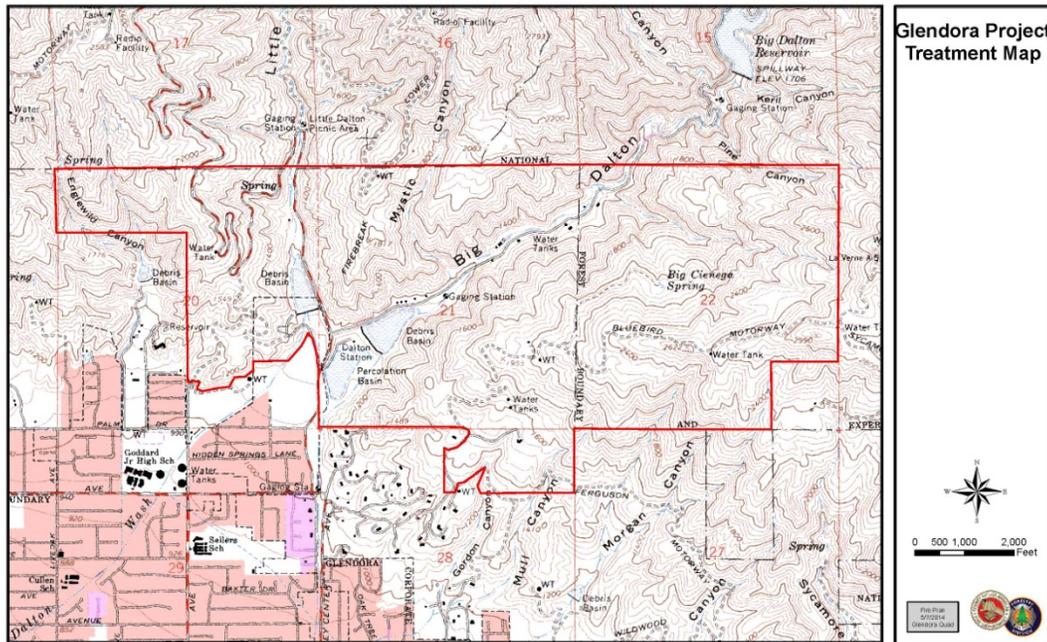


3. Glendora Vegetation - Management Program

Treatment Area – 1,640 Acres

Treatment Methodology: Biological, Hand Crews, Mechanical, Prescribed Fire

Treatment Goal(s): Fire Hazard Reduction, Habitat Restoration

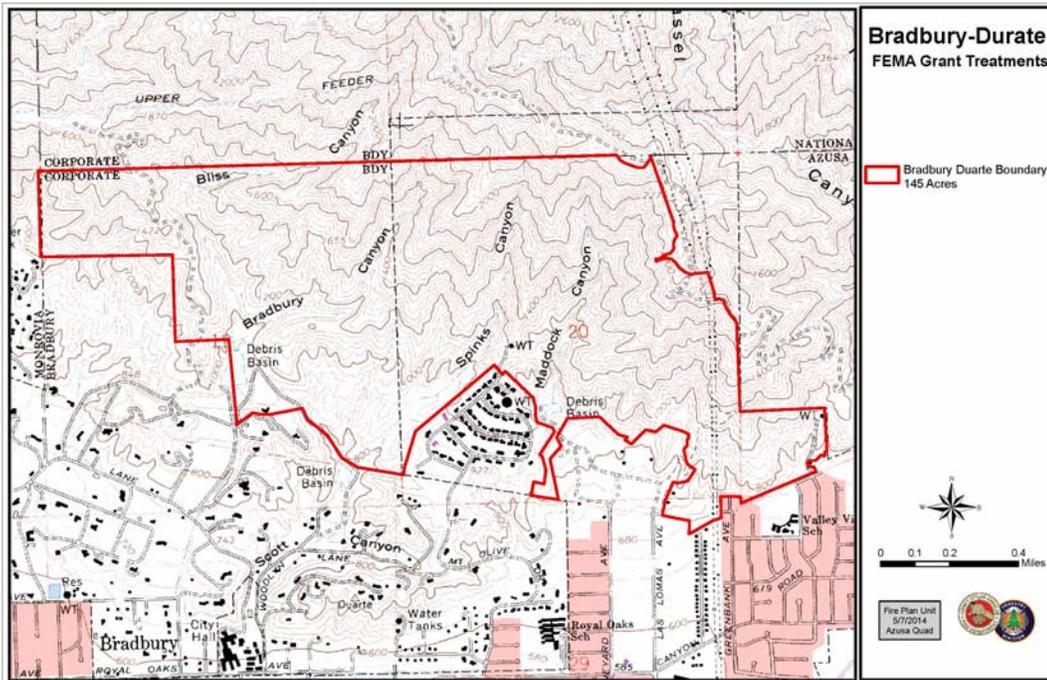


4. Bradbury-Duarte - FEMA Grant

Treatment Area – 145 Acres

Treatment Methodology: Biological, Hand Crews, Mechanical

Treatment Goal(s): Fire Hazard Reduction, Defensible Space, Habitat Restoration



PROPOSED PROJECTS

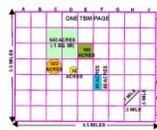
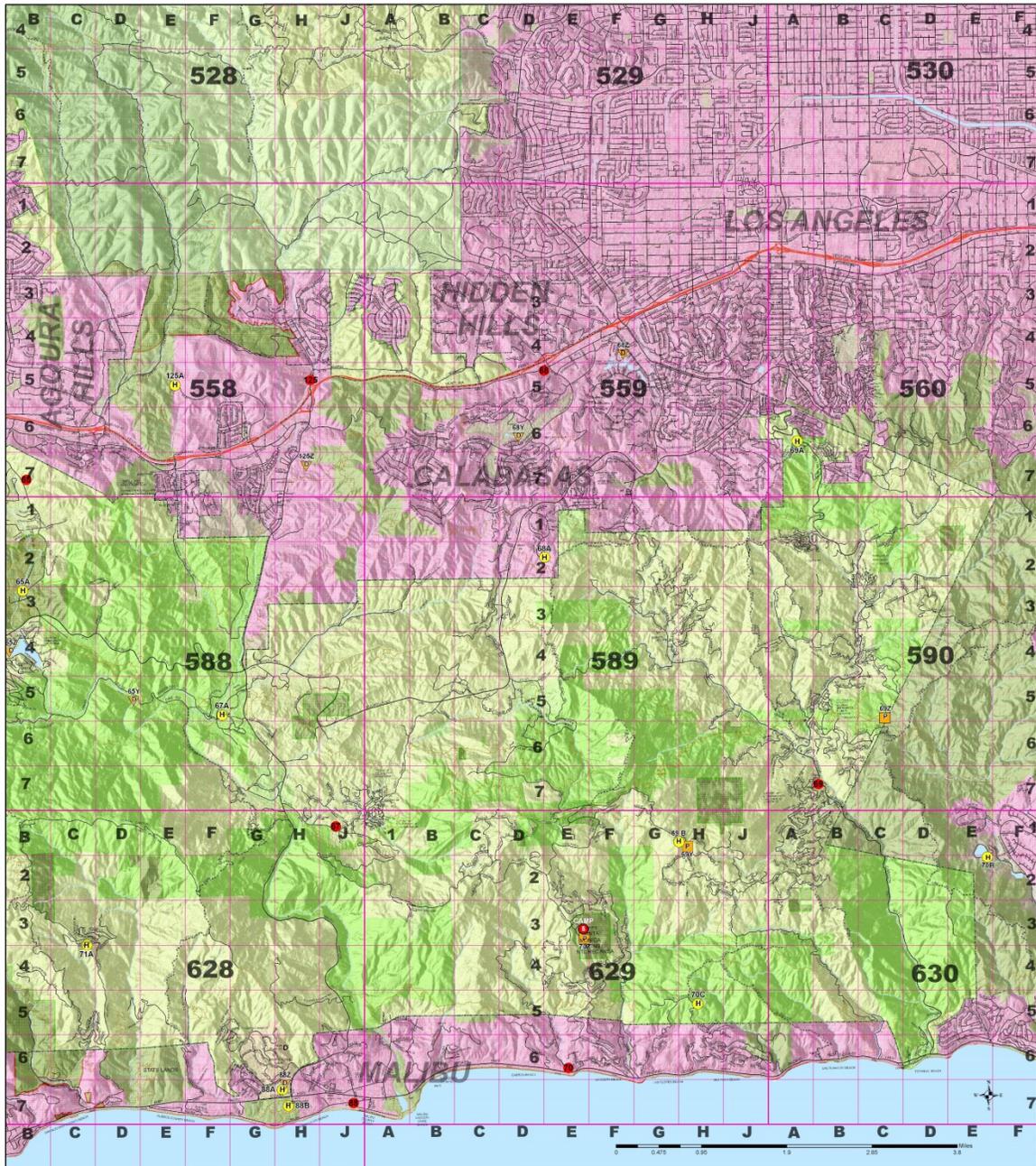
1. Newhall Ranch - Vegetation Management Program
Treatment Area – TBD Acres
Treatment Methodology: Hand Crews, Mechanical, Prescribed Fire
Treatment Goal(s): Fire Hazard Reduction, Training, Habitat Restoration

2. Stevens Ranch - Vegetation Management Program
Treatment Area – TBD Acres
Treatment Methodology: Hand Crews, Mechanical, Prescribed Fire
Treatment Goal(s): Fire Hazard Reduction, Training, Habitat Restoration

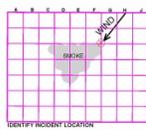
3. Bonelli Park - Vegetation Management Program
Treatment Area – TBD Acres
Treatment Methodology: Hand Crews, Mechanical, Prescribed Fire
Treatment Goal(s): Fire Hazard Reduction, Training, Habitat Restoration

4. Castaic Park - Vegetation Management Program
Treatment Area – TBD Acres
Treatment Methodology: Hand Crews, Mechanical, Prescribed Fire
Treatment Goal(s): Fire Hazard Reduction, Training, Habitat Restoration

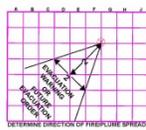
5. Tricolored Blackbird Habitat Improvement Lake Palmdale
Treatment Area – TBD Acres
Treatment Methodology: Prescribed Fire
Treatment Goal(s): Fire Hazard Reduction, Training, Habitat Restoration,
Watershed Protection



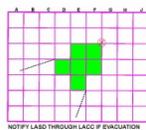
GRID (OR ALPHABETIC) LOCUS
 1. Identify the incident location by Thomas Block (TB) Grids in the same priority first quadrant as the Evacuation Center.
 2. Further refine grid (alphanumeric) locus with U, North, South, East, West, and Diagonal (NE, SE, SW, NW) for a more precise location. Example: "TB 557 F" for TB 557 Block.



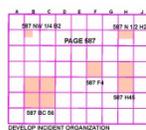
IDENTIFY INCIDENT LOCATION
 1. Identify the incident location by Thomas Block (TB) Grids in the same priority first quadrant as the Evacuation Center.
 2. Further refine grid (alphanumeric) locus with U, North, South, East, West, and Diagonal (NE, SE, SW, NW) for a more precise location. Example: "TB 557 F" for TB 557 Block.



DETERMINE DIRECTION OF FRESHWIND SPREAD
 1. Determine the direction of spread of freshwinds by observing direction of established wind entry direction.
 2. Draw line 2 boxes long in direction of wind from incident and 2 boxes wide perpendicular at the end of the line.
 3. These 2 lines will form a triangle. This area will become the first priority for an immediate Evacuation Center.
 4. A secondary priority area for Evacuation Center or Warning can be formed by extending the current lines by 2 additional boxes in direction of wind.



NOTIFY LACD THROUGH LACD IF EVACUATION ORDER OR WARNING IS NEEDED
 1. Identify all Thomas Block (TB) Grids where more than 1/4 of the grid falls within the immediate Evacuation Order or Warning area.
 2. Analyze the area where the immediate evacuation area by identifying the TB Grids closest to the incident.
 3. With a center circle in center of TB grid, the initial Evacuation Order may need to be expanded by adding additional area (TB Grids) to the location.
 4. If field reports indicate an immediate threat to lives/structures, an Evacuation Center or Warning can be reported directly using this process on the IUC.



DEVELOP INCIDENT ORGANIZATION
 1. Identify all Thomas Block (TB) Grids where more than 1/4 of the grid falls within the immediate Evacuation Order or Warning area.
 2. Analyze the area where the immediate evacuation area by identifying the TB Grids closest to the incident.
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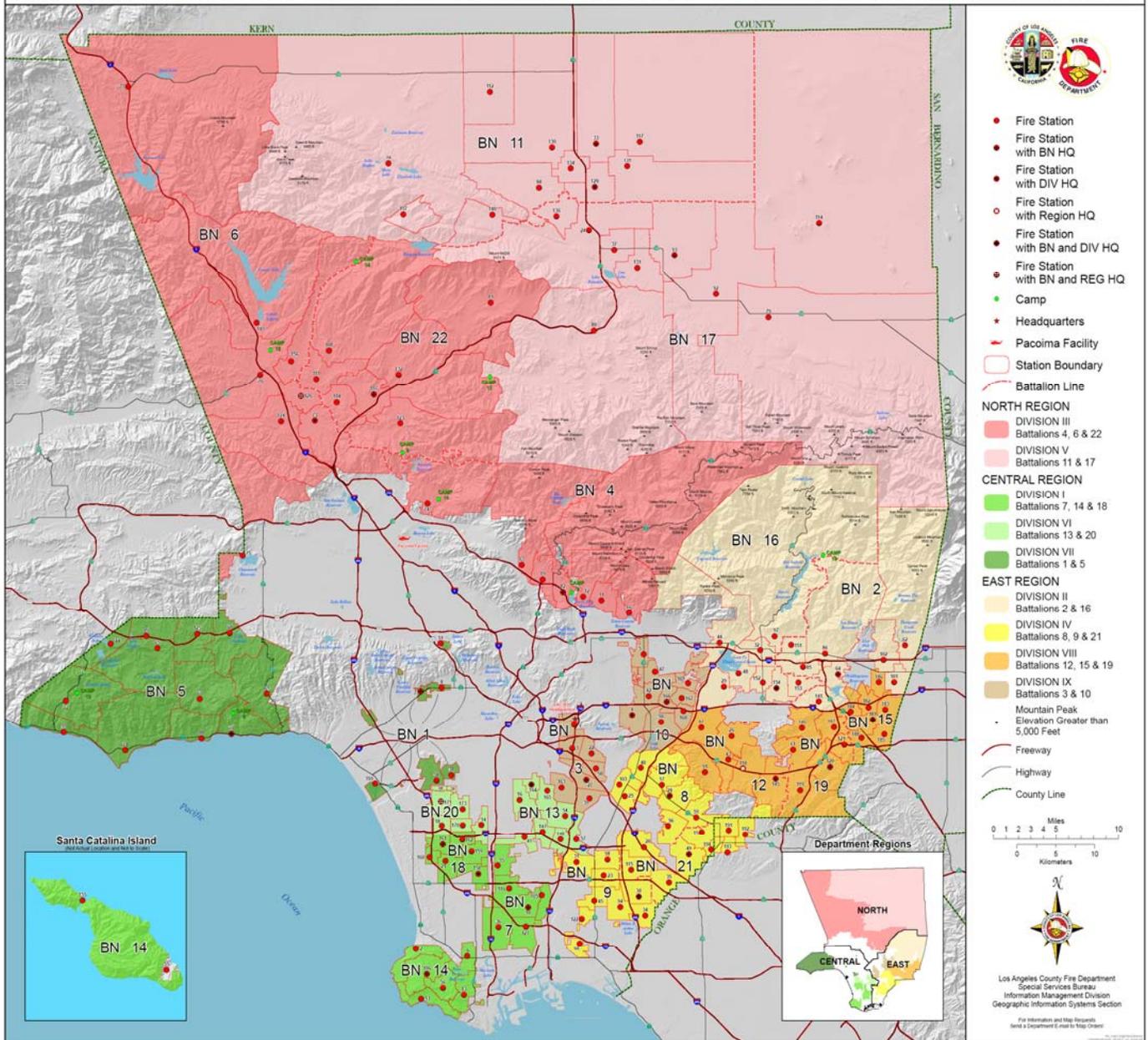
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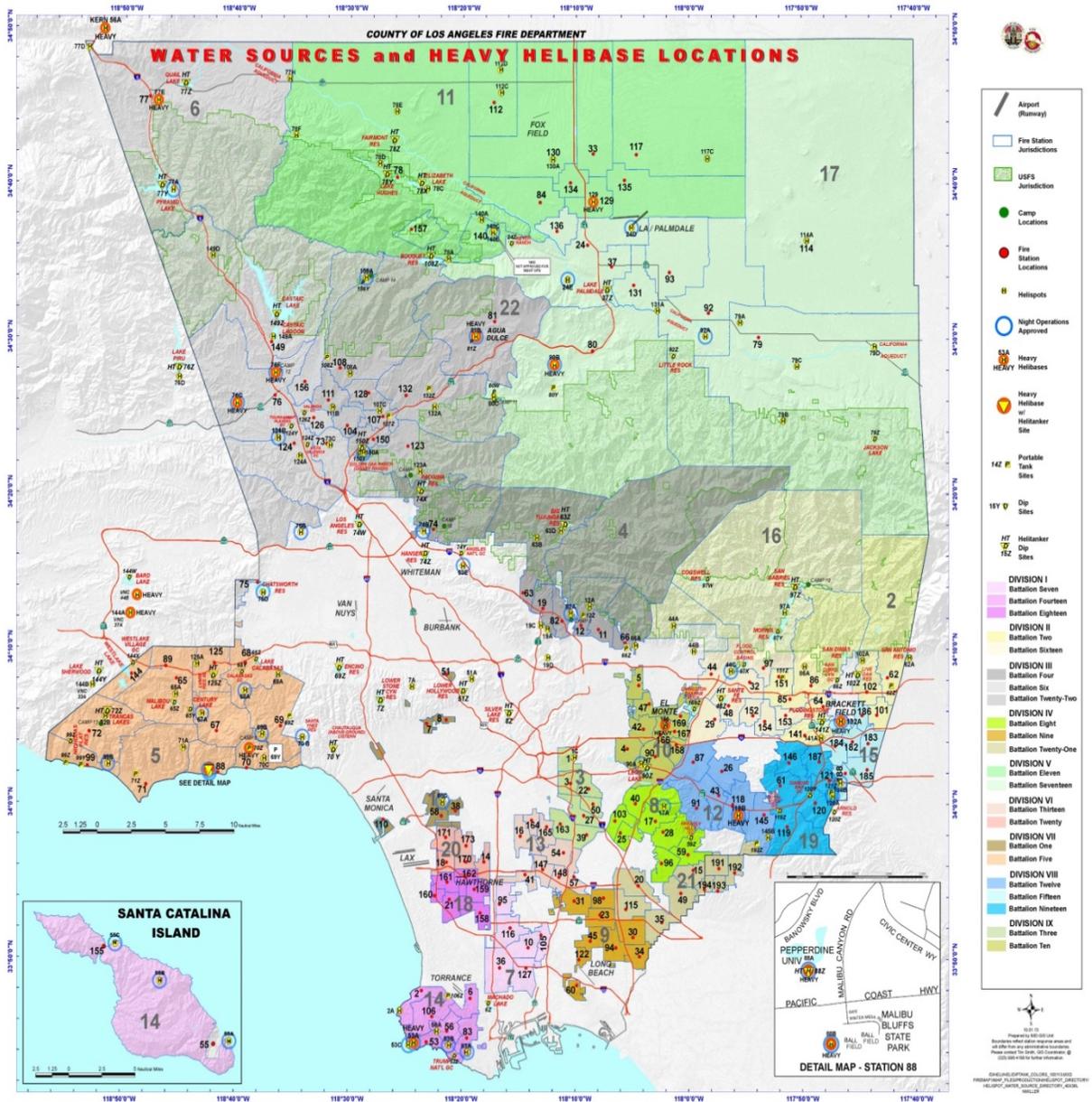
**COUNTY OF LOS ANGELES
 FIRE DEPARTMENT
 LOGISTICS MAP U**

MOUSEMAP 10/10 - TM ALL RIGHTS RESERVED

- DIP SITE**
- HELISPOT**
- PUMP SITE**
- STATION**
- CAMPS**
- FRA**
- LRA**
- SRA**

LOS ANGELES COUNTY FIRE DEPARTMENT OPERATIONS BUREAU MAP



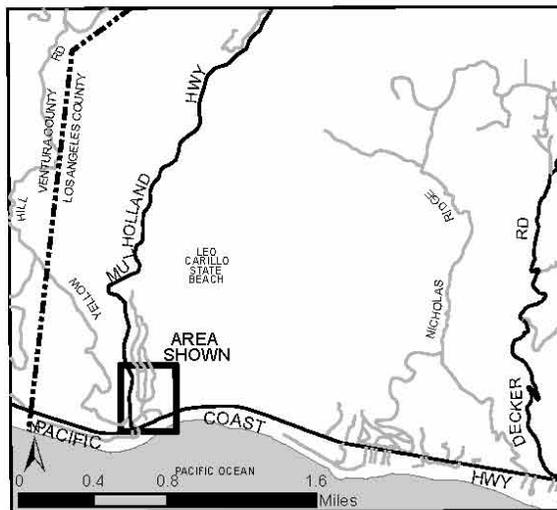
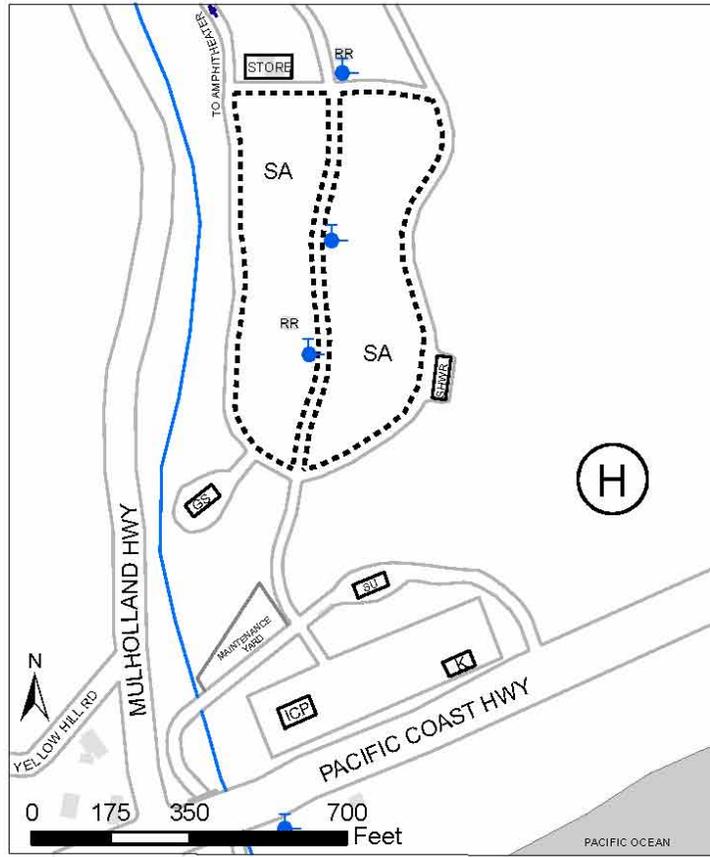


**COUNTY OF LOS ANGELES FIRE DEPARTMENT
PLANNED INCIDENT COMMAND FACILITIES #B5-4**

LEO CARRILLO STATE BEACH/CAMPGROUND, MALIBU

35000 PACIFIC COAST HWY

TBM 625 H5



Legend

ICP	Hydrant
Ground Support	Road
Supply Unit	Trail*
Kitchen	Fence*
Showers	Hellspot
Restrooms	
Sleeping Area	

* NOT LOCATED AT SITE

Prepared by Forestry Division February 2014

SUPPLEMENT: 2013

Annual Report of Unit Accomplishments

Although fire is a necessary component of the local ecosystem, in most cases, unchecked wildfire is no longer a viable fire/fuel management option in Los Angeles County. Mostly because of population growth, assets at risk have interfaced and intermixed with the wildlands to such an extent that uncontrolled fires must be quickly extinguished. Therefore, at the heart of the wildfire protection system in Los Angeles County is an aggressive initial attack firefighting strategy. In 2013, the County of Los Angeles Fire Department has sought, initiated and cultivated new and existing collaborations with Federal, State, Local agencies and with public and provide organizations meeting the goals and objectives directed by the Strategic Fire Plan for California.

In 2013, the County of Los Angeles Fire Department completed 41,000 Fire Hazard Reduction Inspections and conducted 1,406 prevention hours with 362,828 Fire Prevention public contacts. The Department conducted training drills burning 9 acres and providing wildland live-fire training for County and Mutual Aid agencies firefighters. 326 miles of motorways and fire roads were brushed and the road maintained.

The Department's Fire Plan Unit supported the fire prevention efforts of the local Fire Safe Councils assisting with project planning and implementation. Due to the geographical location and urbanization of Los Angeles County, the Fire Safe Councils concentrate their efforts on the Home-Ignition Zone and the immediate areas. Through the California Fire Safe Council Grants; 321 hazardous trees and large plants were removed or trimmed, Chaparral shaded fuel break treatment was applied to 158 acres in five (5) Fire Safe Council projects.

Cal Mapper, a new system introduced by CAL FIRE, engineered to collect, manage and distribute information systematically across its forest improvement and wildland fuels reduction programs; has been an excellent tool in collecting data, tracking, fiscal reporting, emergency response, planning, and assessment, for fuel reduction projects in Los Angeles County. A total of 15 projects, 25 treatments areas, 69 activities, 3 funding sources, 876 ownership records, and 11 stakeholder records were entered in the Cal Mapper database.



County of Los Angeles Wildland Fire Activity 2013

NAME	INC #	JURIS	DATE	SRA	AREA
MAY FIRE	CA-LAC-103948	FS 130	05/01/13	0	39.1
HIGHWAY FIRE	CA-LAC-114679	FS 149	05/13/13	8.1	49.1
LAKE FIRE	CA-LAC-118144	FS 149	05/17/13	659.5	659.5
MADISON FIRE	CA-LAC-126694	FS 76	05/27/13	5.6	5.6
MAGIC FIRE	CA-LAC-127427	FS 76	05/28/13	145.0	145.0
POWERHOUSE	CA-LAC-129377	FS 156	05/30/13	10,700.8	30,262.9
WOODS FIRE	CA-LAC-143447	FS 149	06/15/13	1.7	1.7
COLTRANE FIRE	CA-LAC-149433	FS 124	06/22/13	15.1	15.1
SHOOTING FIRE	CA-LAC-208086	FS 97	08/27/13	0	10.2
MARPLE FIRE	CA-LAC-219426	FS 149	09/08/13	6.5	6.5
CANYON FIRE	CA-LAC-223517	FS 102	09/13/13	12.7	21.9
CANYON FIRE	CA-LAC-230689	FS 76	09/21/13	21.9	21.9
MADRE FIRE	CA-LAC-232559	FS 97	09/23/13	1.5	1.5
CLARITA FIRE	CA-LAC-242641	FS 124	10/05/13	6.4	6.4
LOWRIDGE FIRE	CA-LAC-315713		12/29/13	12.8	12.8
TOTALS				11,597	31,625



2013 STATISTICAL SUMMARY

PERSONNEL			
Chief Officers	119	Administrative Support	756
Captains	679	Lifeguards	151
Fire Fighter Specialists	748	Seasonal Recurrent	630
Fire Fighter Paramedics	693	Dispatchers	93
Fire Fighters	551	Foresters	43
Call Fire Fighters	71	Health Haz Mat	84
Fire Suppression Aides (Paid)	114	TOTAL PERSONNEL	4,713
Pilots	12		



EMERGENCY OPERATIONS			
Battalions	22	Paramedic Units	
Fire Stations	171	Air Squads	3
Engine Companies		Assessment Engines	24
Type 1	163	Assessment Quints	2
Type 3 (Cal EMA)	6	Engines	5
Patrols	30	Squads	67
Reserves	60	Hazardous Materials Squads	4
Truck Companies	32	USAR Squads	2
Light Forces	5	Emergency Support Teams	4
Quints	25	Swift Water Rescue Units	4
Trucks	2	Fire Boats	2
Reserve Trucks/Quints	12	Foam Units	4
		Mobile Air/Light Units	4
		Fuel Tenders	6
		Water Tenders	12

HEALTH HAZ MAT	
Emergency Responses	1,635
Response Teams	3

AIR OPERATIONS	
Fire Responses	697
EMS Transports	1051
Facilities	4
Aircraft Mechanics	17
Hoist Rescues	90
Water/Foam Dropped	1,318,960 gal
Helicopters	
Bell 412 (10-Passenger)	6
Firehawk (14-Passenger)	3
Heli-Tenders	9



LIFEGUARD DIVISION	
Lifeguard Stations	24
Lifeguard Towers	159
Beach Patrol Vehicles	58
Rescue Boats	8
Paramedic Rescue Boats	2
Baywatch Paramedic Squads	2

WILDLAND DIVISION	
Fire Suppression Camps	
Paid	4
Correctional	5
Fire Suppression Crews	
Paid	4
Correctional	24
Dozers	10
Dozer Transport Trucks	10
Equipment	26

FORESTRY	
Forest Tree Nurseries	5
Plants Distributed	43,871



2013 STATISTICAL SUMMARY

FIRE DEPARTMENT — Three Year Data 2011 -2013

	2013	2012	2011
Acreage Burned	31,625	6599	1,857

FIRE INCIDENTS

Structures	2,188	2,090	2,149
Vehicles	1,678	1,731	1,716
Rubbish	2,203	2,047	1,958
Brush / Grass	616	666	682
Outside Storage	352	336	302
Misc. Property	871	771	742
TOTAL	7,908	7,641	7,549

EMERGENCY MEDICAL SERVICES

TOTAL	245,552	229,633	216,576
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OTHER INCIDENTS

False Alarms	32,372	34,102	34,049
Mutual Aid Provided	2,808	2,508	2,558
Haz-Mat	678	677	674
Misc. Incidents	39,801	39,947	35,898
TOTAL	75,659	77,234	73,179
TOTAL INCIDENTS	329,119	314,508	297,304

Fire Loss in Dollars 2011 -2013

	2013	2012	2011
Property or Structure	\$ 85,066,997	\$ 60,583,311	\$ 137,923,364
Vehicle Contents	\$ 18,141,526	\$ 15,234,256	\$ 19,050,472
Misc. Property	\$ 1,625,245	\$ 2,545,478	\$ 1,403,334
Total Dollar Loss	\$ 104,833,768	\$ 78,363,045	\$ 158,377,170

LIFEGUARD — Three Year Data 2011 -2013

	2013	2012	2011
Ocean Rescues	9,745	7,784	8,352
Medical Calls	16,437	16,831	15,156
Boat Rescues (Distress)	382	509	558
Missing Persons	1,280	1,478	1,191
Resuscitations	612	766	597
Drownings	3	1	1
Beach Attendance	71,367,580	76,298,601	61,542,422

4,005,526 Residents
1,231,993 Housing Units
58 District Cities and all
Unincorporated Areas
2,305 Square Miles

DIVISION I

Battalions 7, 14 & 18 – 20 Stations, 9 Cities

CARSON
 GARDENA
 HAWTHORNE
 LAWDALE
 LOMITA
 PALOS VERDES ESTATES
 RANCHO PALOS VERDES
 ROLLING HILLS
 ROLLING HILLS ESTATES

DIVISION II

Battalions 2 & 16 – 16 Stations, 9 Cities

AZUSA
 BALDWIN PARK
 BRADBURY
 CLAREMONT
 COVINA
 DUARTE
 GLENDCORA
 IRWINDALE
 SAN DIMAS

DIVISION III

Battalions 4, 6 & 22 – 22 Stations, 2 Cities

LA CANADA FLINTRIDGE SANTA CLARITA

DIVISION IV

Battalions 8, 9 & 21 – 25 Stations, 12 Cities

ARTESIA
 BELLFLOWER
 CERRITOS
 HAWAIIAN GARDENS
 LA HABRA
 LAKEWOOD
 LAMIRADA
 NORWALK
 PARAMOUNT
 PICO RIVERA
 SIGNAL HILL
 WHITTIER

DIVISION V

Battalions 11 & 17 – 20 Stations, 2 Cities

LANCASTER PALMDALE

DIVISION VI

Battalions 13 & 20 – 14 Stations, 6 Cities

CUDAHY
 HUNTINGTON PARK
 INGLEWOOD
 LYNWOOD
 MAYWOOD
 SOUTH GATE

DIVISION VII

Battalions 1 & 5 – 18 Stations, 6 Cities

AGOURA HILLS
 CALABASAS
 HIDDEN HILLS
 MALIBU
 WEST HOLLYWOOD
 WESTLAKE VILLAGE

DIVISION VIII

Battalions 12, 15 & 19 – 19 Stations, 5 Cities

DIAMOND BAR
 INDUSTRY
 LA PUENTE
 POMONA
 WALNUT

DIVISION IX

Battalions 3 & 10 – 16 Stations, 7 Cities

BELL
 BELL GARDENS
 COMMERCE
 EL MONTE
 ROSEMEAD
 SOUTH EL MONTE
 TEMPLE CITY

Glossary:

Climate Change – Any long-term significant change in the “average weather” that a given region experiences. Average weather may include average temperature, precipitation and wind patterns.

(<http://frap.cdf.ca.gov/assessment2010/definitions.html>)

Communities at Risk – Defined by the Healthy Forest Restoration Act of 2003 as - “Wildland-Urban Interface Communities within the vicinity of federal lands that are at high risk from wildfire.” CAL FIRE expanded on this definition for California including all communities (regardless of distance from federal lands) for which a significant threat to human life or property exists as a result of a wildland fire event. California uses the following three factors to determine at risk communities: 1) high fuel hazard, 2) probability of a fire, and 3) proximity of intermingled wildland fuels and urban environments that are near fire threats.

Community Wildfire Protection Plan (CWPP) – A community based collaborative plan developed by local stakeholders that identifies and prioritizes areas for hazardous fuel reduction treatments to protect communities and infrastructure from wildfire.

Stakeholders, applicable local government, local fire departments, state forestry, and federal land management agencies agree to the plans.

Cooperative Fire Protection Agreements – Agreements established between federal, state, tribal and local government entities to provide long term fire and emergency service protection.

Defensible Space – The area within the perimeter of a parcel, development, neighborhood or community where basic wildland fire protection practices and measures are implemented, providing the key point of defense from an approaching wildfire or defense against encroaching wildfires or escaping structure fires.

(http://cdfdata.fire.ca.gov/fire_er/fpp_engineering_view?guide_id=8)

Fire Hazard – A fuel complex, defined by volume, type condition, arrangement, and location, that determines the degree of ease of ignition and of resistance to control.

(<http://www.nwccg.gov/pms/pubs/glossary>)

Fire Prevention – Activities such as public education, community outreach, building code enforcement, engineering (construction standards), and reduction of fuel hazards that is intended to reduce the incidence of unwanted human-caused wildfires and the risks they pose to life, property or resources. (<http://www.nwccg.gov/pms/pubs/glossary>)

Fire Resilient – The ability of a vegetation type, ecosystem, or community to respond positively to or recover quickly from the effects of a wildfire burning within, across or adjacent to them.

Fire Resistant – The condition of an asset that resists ignition and damage from wildfire. Structures are built using ignition resistant materials such as stucco, tile roofs,

and boxed eaves with the likelihood that they will withstand most wildland fires or at least reduce damage caused by them.

Fire Risk –The chance of fire starting, as determined by the presence and activity of causative agents; a causative agent or a number related to the potential number of firebrands (embers) to which a given area will be exposed during the day. (<http://www.nwccg.gov/pms/pubs/glossary>)

Fire Safe Building Standards – Various laws and codes that apply accepted fire safety practices (as determined by scientific research panels and associations, with replicated results) into construction of assets. Examples of laws and codes include; California Fire Code Chapter 49, California Building Code Chapter 7A, Public Resource Code, §4290 and Fire Safe Regulations, §1270.

Fire Safe Councils (FSC) – A group of concerned citizens organized to educate groups on fire safe programs, projects and planning. The Councils work closely with the local fire agencies to develop and implement priorities. (<http://www.firesafecouncil.org>)

Fireshed – A contiguous area displaying similar fire history and problem fire characteristics (i.e., intensity, resistance to control) and requiring similar suppression response strategies.

Fire Suppression Resources – State, federal, tribal, local and private, equipment and resources, gathered to extinguish and mitigate wildland fires.

FIREWISE – A national program designed to reach beyond the fire service by involving homeowners, community leaders, planners, developers, and others in the effort to protect people, property, and natural resources from the risk of wildland fire before a fire starts. The Firewise program is community driven.

Fire Hazard Severity Zones – Areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. These zones, then define the application of various mitigation strategies to reduce risk associated with wildland fires.

Forest and Rangeland Health – An expression of the prevalent ecological conditions on a landscape as compared to benchmark conditions yielding maximum benefit to multiple resource values - ecological, economic, and social/political.

Fuels Treatment – The manipulation or removal of fuels to reduce the likelihood of igniting and to reduce fire intensity (e.g., lopping, chipping, crushing, piling and burning).

Fuels Reduction Projects – The modification of vegetation in order to reduce potential fire threat. These projects often result in improved wildlife habitat capability, timber growth, and/or forage production.

GIS – Geographic Information Systems is a configuration of computer hardware and software that stores, displays, and analyzes geographic data spatially or through attribute features.

Hand Crews – A number of individuals organized, trained and supervised principally for fire suppression or fuel reduction projects.

Ignition Density – The number of fire ignitions that occur in a specific unit of area, over a specified period of time; often used as a measure of initial attack workload.

Initial Attack – A planned response to a wildfire given the wildfire's potential fire behavior. The objective of initial attack is to stop the fire and put it out in a manner consistent with firefighter and public safety and values to be protected. (<http://www.nwccg.gov/pms/pubs/glossary>)

Land Use Planning – A comprehensive assessment leading to a set of decisions that guide use of land within an identified area.

Mutual Aid – An agreement in which two or more parties agree to furnish resources and facilities and to render services to each and every other party of the agreement to prevent and combat any type of disaster or emergency.

Native Species Seed Bank – A storage area for seed that is collected from a species which is a part of the original vegetation of the area in question.

Prescribed Fire – A planned wildland fire designed to meet specific management objectives.

Reforestation –The establishment of forests on land that had recent (less than 10 years) tree cover. (<http://frap.cdf.ca.gov/assessment2010/definitions.html>)

Salvage – The harvesting of dead, dying and damaged trees to recover their economic values that would otherwise be lost to deterioration.

Situational Awareness –The application of the human senses to current and predicted weather, fire or other emergency conditions to plan and execute actions that provide for the safety of all personnel and equipment engaged in an emergency; includes development of alternative strategies of fire suppression and the net effect of each.

Total Force – Bringing to bear the application of the totality of the CAL FIRE employee team who provide all functional service aspects of the Department that enables it to effectively mitigate emergencies and protect resources in areas protected by CAL FIRE.

Type Conversion – The replacement of native vegetation (e.g., from native chaparral to non-native grassland) with non-native vegetation or the maintenance of an ecosystem in a pioneer state which prohibits the maturing of the native vegetation.

Unit Fire Plan – Plans developed by individual CAL FIRE Units to address wildfire protection areas, initial attack success, assets and infrastructure at risk, pre-fire management strategies, and accountability within their geographical boundaries.

Values and Assets at Risk – Accepted principals or standards, and any constructed or landscape attribute that has value and contributes to community or individual wellbeing

and quality of life. Examples include property, structures, physical improvements, natural and cultural resources, community infrastructure, commercial standing timber, ecosystem health and production of water.

Wildland –Those unincorporated areas covered wholly or in part by trees, brush, grass, or other flammable vegetation.

Wildfire – An unplanned ignition; unwanted wildland fire including unauthorized human-caused fires, escaped wildland fire use events, escaped prescribed fire projects, and all other wildland fires where the objective is to put the fire out.

Wildland Fire – Fire that occurs in the wildland as the result of an unplanned ignition.

Wildland-Urban Interface (WUI) –The line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels. (<http://www.nwccg.gov/pms/pubs/glossary>)





***County of Los Angeles
Fire Department
Strategic Fire Plan***