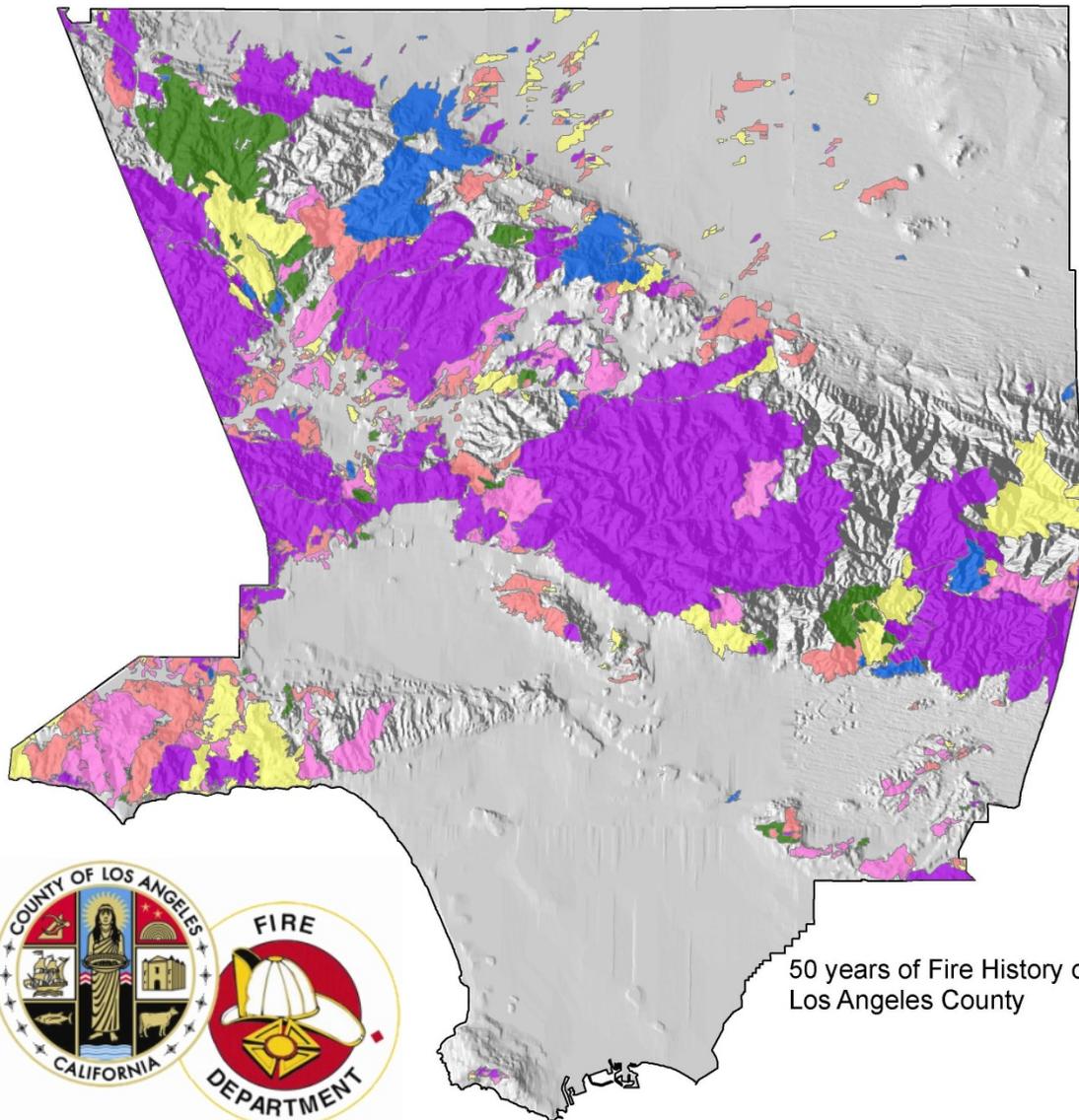


# **County of Los Angeles Fire Department 2016 Strategic Fire Plan**



*Last Update: June 1, 2016*



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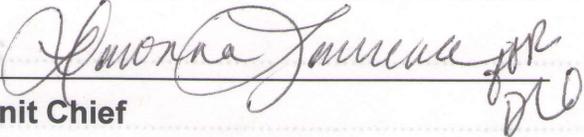
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**SIGNATURE PAGE**

**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 required.

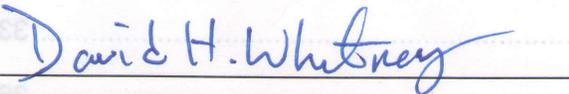
  
\_\_\_\_\_

**Unit Chief**

Daryl L. Osby, Fire Chief  
Forester and Fire Warden

5/27/14  
\_\_\_\_\_

**Date**

  
\_\_\_\_\_

**Pre-Fire Engineer**

David H. Whitney, Deputy Forester  
Forestry Division

5/26/16  
\_\_\_\_\_

**Date**



## **EXECUTIVE SUMMARY**

The 2010 Strategic Fire Plan (2010 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 2010 Plan recognizes that wildfires will occur in California and works to answer the question of “how do we prepare and live with that risk?” 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 Plan outlines seven goals focused on enhancing the protection of lives, properties, 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. Actions can include creation of defensible space and other fuel reduction activities, educating homeowners about fire prevention, and encouraging 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 (the Los Angeles County) 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 (Los Angeles County Fire Department or Department) has the responsibility as a contract county to implement the 2010 Plan in Los Angeles County. As such, the Los Angeles County Fire Department functionally operates as a Unit of the California Department of Forestry and Fire Protection (CAL FIRE) and is responsible for all Strategic Fire Plans activities within the County. The *2016 County of Los Angeles Strategic Fire Plan*, replaces the previous unit fire plan: *County of Los Angeles Fire Department 2015 Strategic Fire 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, the Los Angeles County slowly ebbed to its present size and the last major detachment occurred in 1889, with the creation of Orange County. Los Angeles County encompasses 4,083 square miles of land, in which 1,741 square miles are flat, 1,875 square miles are mountains, 246 square miles consist of hills, 59 square miles of mountain valleys, and 28 square miles of marshland. It also includes 131 square miles of islands consisting of San Clemente and Santa Catalina islands.

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 the County.

The Board of Supervisors (Board), created by the State Legislature in 1852, is the governing body within the Los Angeles County. It consists of five supervisors who are elected to four-year terms by voters within their respective districts. The Board has executive, legislative, and quasi-judicial roles, in addition to appointing all department heads other than the assessor, district attorney, and sheriff, which are elective positions.

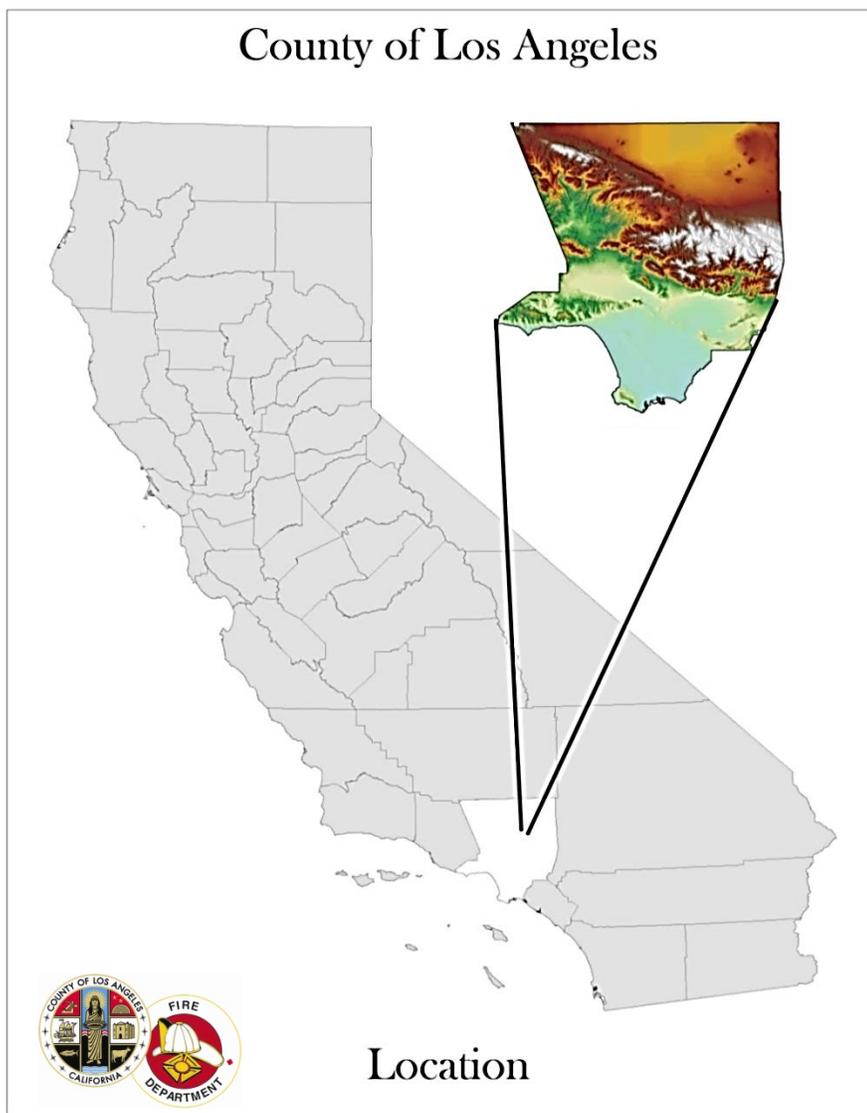
As a subdivision of the state, the Los Angeles County is charged with providing numerous services that affect the lives of all its residents. Traditional mandatory services include fire protection, law enforcement, property assessment, tax collection, public health protection, public social services, and relief to indigents. Los Angeles County also provides specialized services through the Department of Parks and Recreation, Flood Control, Fire, etc. Within the Los Angeles County Fire Department, the Forestry Division manages the Brush Clearance Inspection Program, Fuel Modification Program, Vegetation Management Program (VMP), Environmental Review, Oak Tree Ordinance implementation and Fire Plan implementation.

There are 88 cities that contract with the Los Angeles County to provide municipal services to varying degrees. The Los Angeles County also provides municipal services to more than 65 percent of unincorporated areas. For the one million people living in those areas, the Board of Supervisors serves as their "city council." The Los Angeles County is the largest employer in the five-county region with 108,093 budgeted employees.

The history of the Los Angeles County Fire Department started in the late 1800s with the formation of two separate departments. The first department, the County Forester was in charge of protecting natural resources and responsible for planting and maintaining the landscape. The second department, the County Fish and Game Warden, was then assigned the responsibility as County Fire Warden.

On May 8, 1911, the 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 Los Angeles County 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 Los Angeles County to contract with the Los Angeles County Fire Department for fire protection services. Today, 58 cities are served by the Los Angeles County Fire Department, which staffs a total of 163 engine companies, 32 truck companies, 102 paramedic units, and numerous other pieces of specialized apparatus.

The Los Angeles County 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 Los Angeles County Fire 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 Los Angeles County Fire Department operates nine divisions, 22 battalions, 171 fire stations and nine fire suppression camps and answers over 380,870 emergency calls annually. Additionally, the Los Angeles County Fire Department has Planning, Information Management, Fire Prevention, Air and Wildland, Lifeguard, Forestry and Health Hazardous Materials Divisions, which provide valuable services to about four million people.

The 2015-2016 Los Angeles County Fire Department adopted budget is approximately \$1.113 billion with the largest funding source coming from property tax, which equals approximately 58%. Other funding sources include: 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

## **County of Los Angeles 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 Los Angeles County Fire Department.

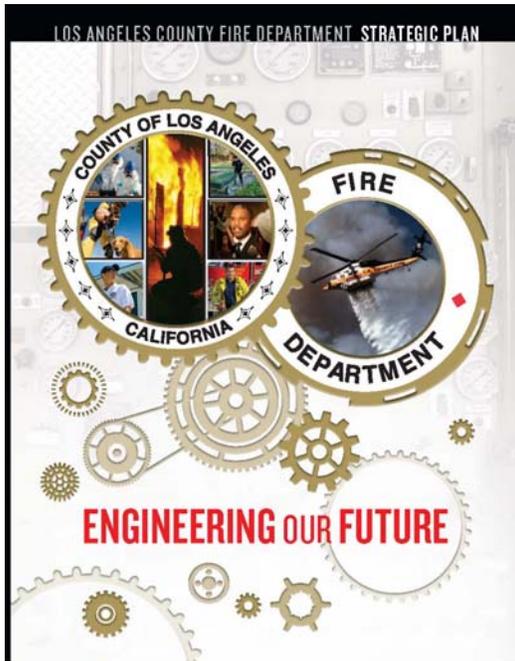
Fire Chief Osby quickly recognized the Department's need to embrace and introduce many technological advances, organizational culture shifts, and internal business process improvements to truly bring the organization into the 21<sup>st</sup> century. He established and began to work with the Strategic 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.

The Los Angeles County Fire Department has a cross section of society and strives 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.

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 is expanding its current use of Facebook, Twitter, and YouTube to directly communicate 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 volunteer 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 also 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

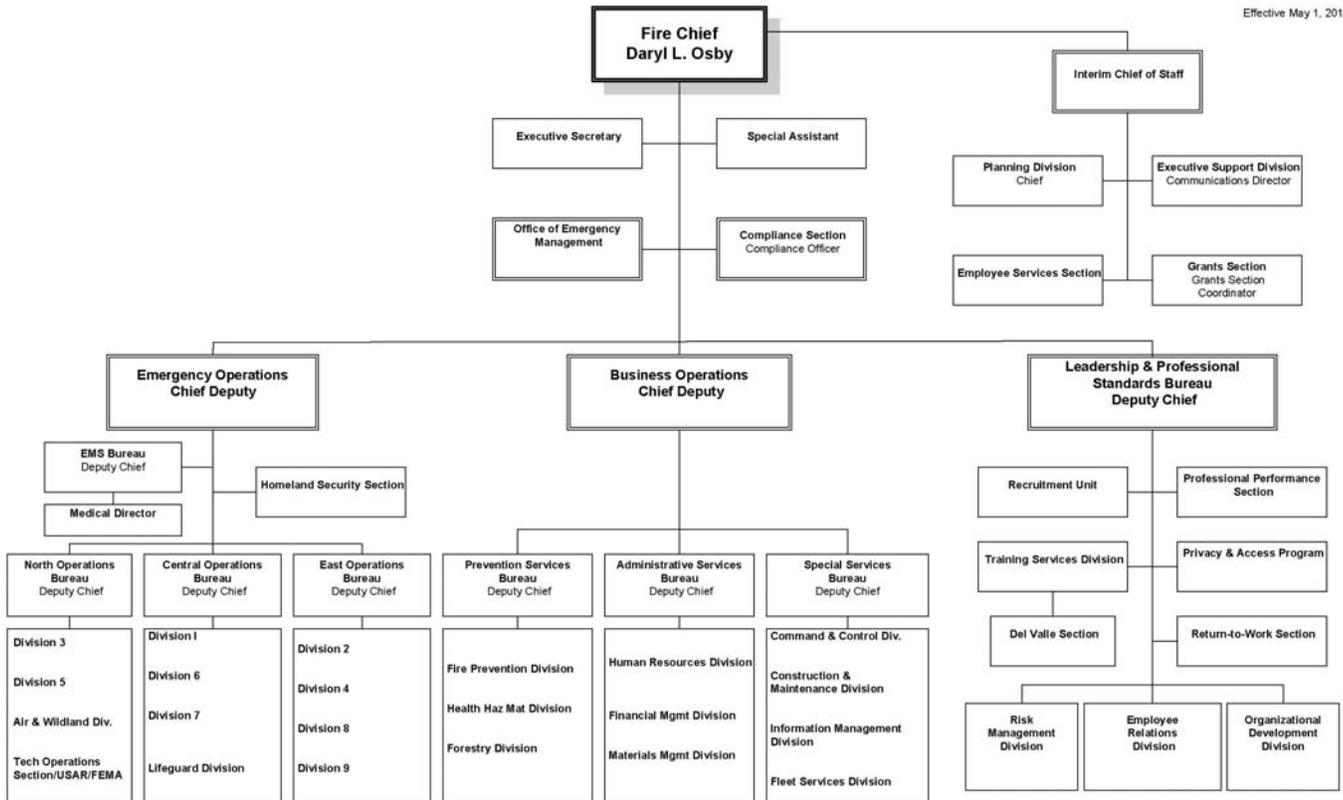
**STUART FLINTHAM**

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.



Place in your QR code with the free PaperKit, iPhone or Android app to learn more about the Los Angeles County Fire Department.

Effective May 1, 2016



## VEGETATION OF LOS ANGELES COUNTY

The Los Angeles County has a vast range of vegetation types that include coastal areas, the Santa Monica Mountain range, desert areas, valleys, and the high country.

The Antelope area of the Los Angeles 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 that require more water.

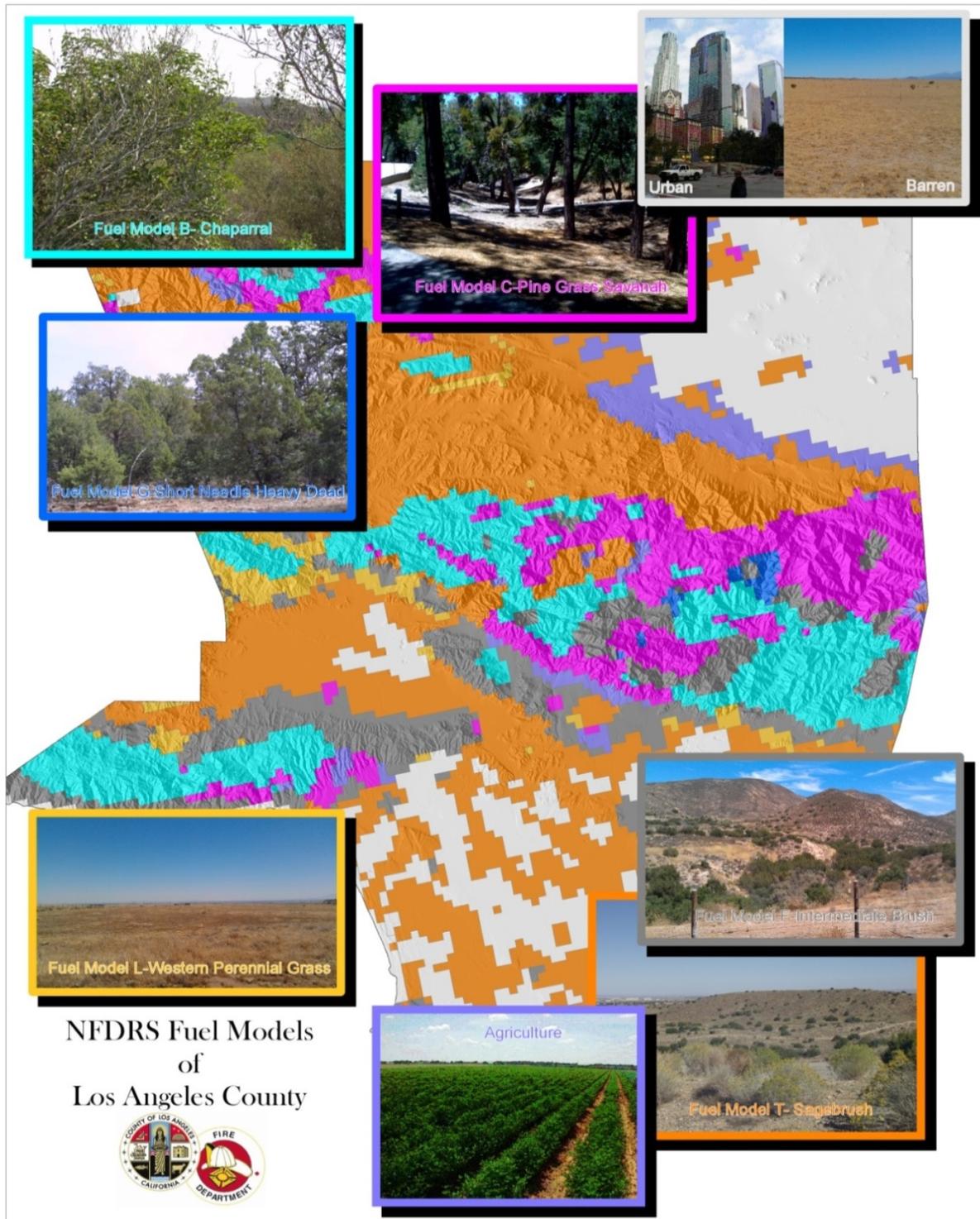
The high country areas located in the eastern portion of the Los Angeles County involve elevations from 5,000-10,000 feet. The dominating vegetation types are conifers, hardwoods, and more traditional forest vegetation types. The landscape consists of Coulter pine and mixed conifers on dry slopes whereas bigcone Douglas Fir and Jeffery pine populate slopes that receive more precipitation. There is also a significant Oak Woodland communities along shaded slopes of the canyons and 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 typically found in lower elevations, dryer sites of 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 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 Laurel, 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 respond to 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.

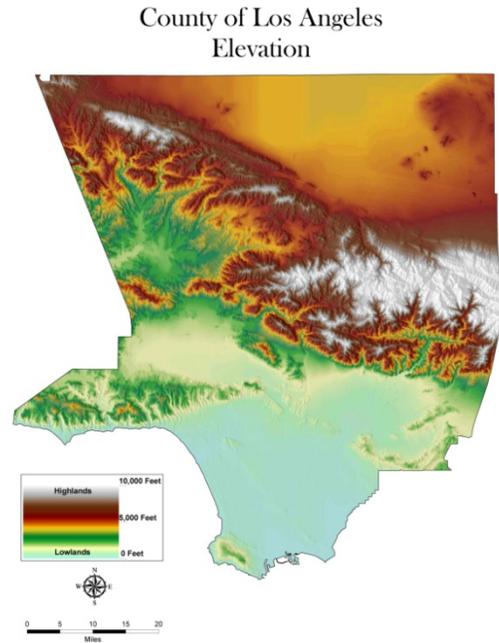
The California's Forests and Rangelands: 2010 Assessment

(<http://frap.cdf.ca.gov/assessment/2010/document.php>) 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. Forty-seven percent of this area is mountainous, while the remainder consists of alluvial valleys, coastal plains, and high desert. The large mountain ranges within the Los Angeles 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 Los Angeles County starts at sea level and rises to the highest point of 10,069 feet at Mount San Antonio, also known as Mount 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 Los Angeles County, the coastlines experience cooler temperatures of 40°F to 80°F, while the inland areas experience more extreme temperatures from light snow in the winter to 100+°F in the summer. Precipitation occurs approximately 35 days a year averaging about 15 inches. A lack of average rainfall for the past several years has created drought conditions and caused our vegetation moisture levels to drop to critical levels.

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 referred 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 where the temperatures are high, while fuel moistures are extremely low, and winds are blowing at 30-70 miles per hour.

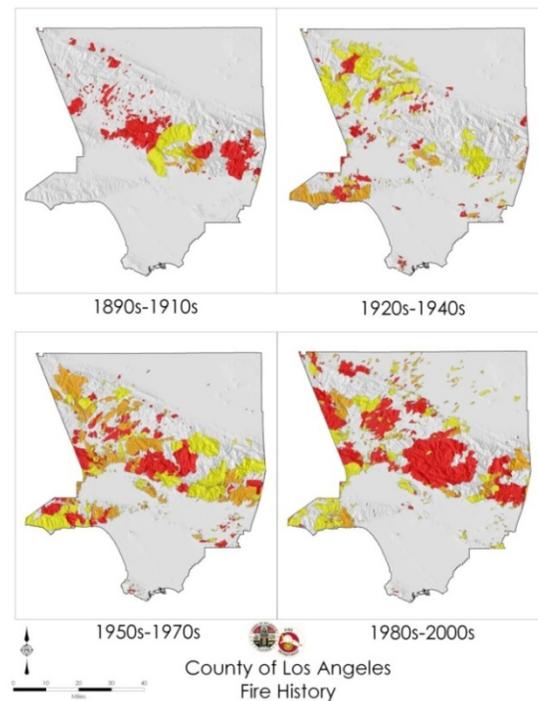
Due to the vast differences in weather across the Los Angeles County, we have strategically placed Remote Automated Weather Stations (RAWS) to effectively and accurately collect weather data and then track daily Fire Weather Forecasts back to our fire personnel to give current weather conditions on the 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 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 via the Geostationary Operational Environmental Satellite system (GOES) 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.



## 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 Los Angeles County experiences many large, damaging, and costly wildfires which affect the population. The Los Angeles County in recent years has battled large, wind driven fires that have destroyed hundreds of homes and hundreds of thousands of acres of scenic landscape. The 2014 Colby fire in Glendora destroyed over 2,000 acres and five homes. In 2009, the Station Fire consumed 160,000 acres of land and in 2008 the Sayre Fire engulfed more than 500 structures. Due to the continual growth and development of the open space within the Los Angeles County, the Los Angeles Fire Department will continue to work with these areas to protect and prevent catastrophic fires from destroying their communities. Addressing the wildfire potential continues to be a top priority of the Los Angeles County 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 landscape. Fuel provides the thermal energy source which fire needs to spread. Ornamental vegetation around homes and the structure can also be considered fuel. The large WUI areas within the Los Angeles County are where the native fuels and residential communities come together and 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.

### **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 affect the amount of oxygen in the air and the vegetation type.

## **DAILY FIRE DANGER REPORT**

The Daily Fire Weather Forecast is a tool for firefighting personnel to use in determining staffing levels, response, and ability to control 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 computer and by e-mail. The information below explains these daily messages:

The Los Angeles County Fire Department produces a Daily Fire Weather Forecast by processing wildland fire weather data from manual weather stations and RAWS that it operates, or acquires data from other agencies located in Los Angeles County. These agencies include the City of Beverly Hills, the National Park Service, and the Angeles National Forest. RAWS observations and historical data can be accessed daily at <http://www.fire.lacounty.gov/forestry-division/fire-weather-report/>.

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.

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://www.fire.lacounty.gov/fireweatherdoc/FireWeatherDanger.pdf>)

## **UNIT PREPAREDNESS AND FIREFIGHTING CAPABILITIES**

The Los Angeles County Fire Department currently has 4,654 personal on staff. A total of 171 fire stations (including FS55 and FS155 on Catalina Island), 231 fire engines (including 500 series), five light forces, 25 quints, 102 paramedic squads, 34 patrols, ten wildland fire suppression camps, 10 bulldozers, eight helicopters, two USAR teams, one USAR Task Force, 70 Lifeguards vehicles and 12 rescue boats, 23 Prevention Offices, 12 Forestry Units, and numerous other response vehicles and facilities as listed in Appendix "C." The Department serves the unincorporated areas of Los Angeles County as well as 58 incorporated cities.

The Los Angeles County has a contractual agreement with CAL FIRE to provide wildland fire protection on state responsibility areas (SRA). The Gray Book staffing agreement 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 funding for 23 stations and fire prevention activities.

## **SECTION II: COLLABORATION**

### **COMMUNITY / AGENCIES / FIRE SAFE COUNCILS**

#### **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 the abilities of 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 the 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

## Additional Fire Agencies in Los Angeles County:

USDA Forest Service, Angeles National Forest  
 USDO National Park Service, Santa Monica Mountains Recreational Area  
 City of Alhambra City of La Habra Heights City of San Gabriel  
 City of Arcadia City of La Verne City of San Marino  
 City of Avalon City of Long Beach City of Santa Fe Springs  
 City of Beverly Hills City of Los Angeles City of Santa Monica  
 City of Burbank City of Manhattan Beach City of Sierra Madre  
 City of Compton City of Monrovia City of South Pasadena  
 City of Culver City City of Montebello City of Torrance  
 City of Downey City of Monterey Park City of Vernon  
 City of Glendale City of Pasadena City of West Covina  
 City of Hermosa Beach City of Redondo Beach

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 interested groups with assets at risk from wildland fires. The Los Angeles County Fire Department's goal is to involve as many stakeholders as possible in the development of the Fire Plan and continually update planning efforts involving stakeholder input.



## Plan Development Team:

Coordinating agencies within the Los Angeles County 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
FIFTY-EIGHT (58) CONTRACT AND FEE FOR SERVICE CITIES	LOCAL GOVERNMENT
THIRTY (30) CITY FIRE DEPARTMENTS	LOCAL GOVERNMENT

## Community Participation

Fire Safe Council (FSC) - [www.cafiresafecouncil.org](http://www.cafiresafecouncil.org)

FSC are grassroots community-driven organizations who share the objective of making California's communities less vulnerable to catastrophic wildfire. The FSC 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 FSC started in the early 1990s; there are now over 200 statewide. Through the Fire Plan Unit the Department supports these community-based organizations and efforts. In the early 2000s, the Los Angeles County Fire Department set in motion the support mechanism for the FSC. Currently, there are 26 active FSC in Los Angeles County.



Firewise Communities Program - [www.firewise.org](http://www.firewise.org)

Brush, grass or forest fires do not 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://www.fire.lacounty.gov/lacofd-cert-program/>

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.



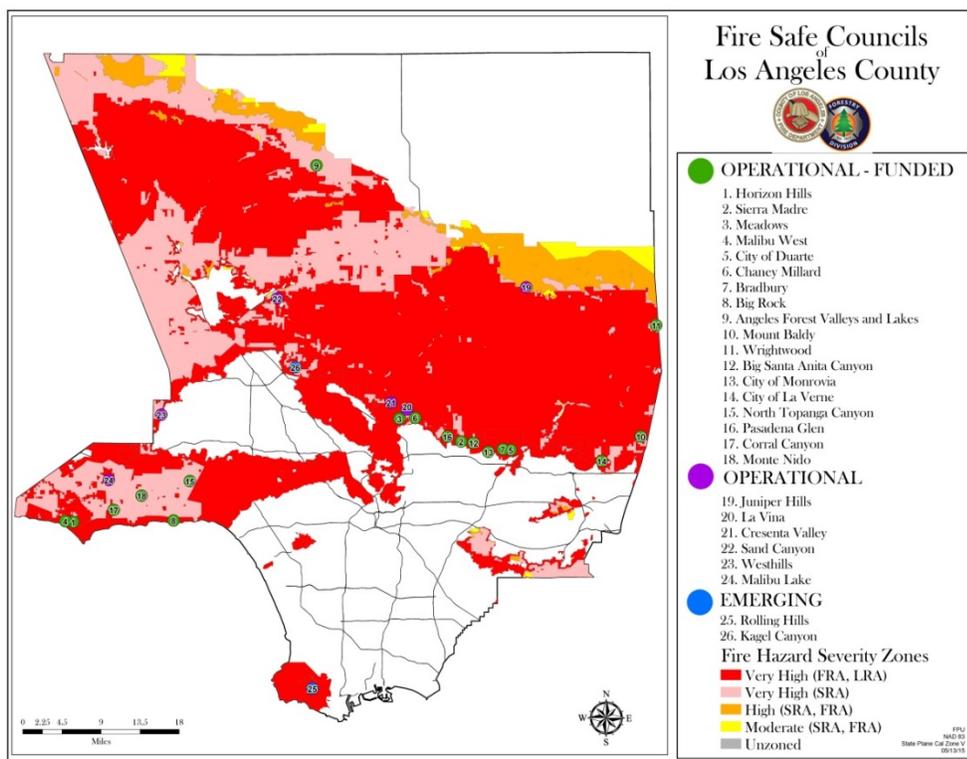
Fire Adapted Communities - [www.fireadapted.org](http://www.fireadapted.org)

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.



26 Fire Safe Councils in Los Angeles County

## **SECTION III: VALUES**

### **PRIORITY LANDSCAPES OF LOS ANGELES COUNTY**

Priority Landscapes as defined by *California's Forests and Rangelands: 2010 Assessment*, prepared by the California Department of Forestry and Fire Protection Fire and Resource Assessment Program (FRAP), are landscapes that feature assets, such as water supply, urban population, and ecosystems that are threatened by any form of damage (i.e. fire, pollution, pest damage, etc.). It also presents an analysis of trends, conditions, and the development of priority landscapes throughout California.



Based on the assessment, communities in the WUI, rangelands and protected habitats in the Los Angeles County, are considered high priority landscapes.

#### **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 2010 by FRAP, a unit within CAL FIRE, whose mission is to produce these periodic forest assessments. The 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.

#### **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.

In 2008, the U.S. Forest Service State and Private Forestry Program (S&PF) "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. It also focuses where federal investment can most effectively stimulate or leverage desired action and engage multiple partners.

The redesign approach emphasizes the use of available data and spatial framework for analysis to delineate priority landscapes, where possible. The focus is on incorporating existing plans and information within states. Some categories of plans are specified, such as the state wildlife action plan and community wildfire protection plans. Outreach to stakeholders is encouraged, though the outreach process and extent is left to the lead agency or group. 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.

## **TREE MORTALITY IN LOS ANGELES COUNTY**

Approximately one million acres of forest within and directly adjacent to the San Bernardino, Cleveland, and Angeles National Forests have experienced severe tree mortality due to a drought-induced insect caused pine bark beetle epidemic, the Polyphagous Shot Hole Borer (PSHB), and the Goldspotted Oak Borer (GSOB). These forests are directly adjacent to major metropolitan areas in Los Angeles County; however, tree mortality is widely spread within the WUI and urban areas. The risks from fire and falling trees pose a major threat to public safety, private property, and ecosystem health.

Currently, the Los Angeles County Fire Department, County of Los Angeles Department of Agricultural Commissioner/Weights & Measures (ACWM), County of Los Angeles Department of Public Works, the U.S. Forest Service, and local Fire Safe Councils are actively involved in GSOB and PSHB containment and eradication projects.

On January 27, 2016, the California Board of Forestry and Fire Protection declared the community of Green Valley a GSOB Zone of Infestation. Emergency hazard mitigation efforts are being implemented in Green Valley for GSOB infestation as well as long term planning for forest recovery and rehabilitation caused by this Oak Borer.

The Forestry Division's projects include; spatial and quantitative data collection on vegetative mortality issues throughout the Los Angeles County. The focus of this intensive forest inventory is being directed to the hot spots (areas of most concern) which are showing the highest appearance of tree mortality and declining vegetation conditions. An assessment of viable treatment options and effective treatment activities are ongoing both on private and public lands. Efforts to monitor the spread of insect related mortality as well as the ongoing hazard mitigations in the region are increasing the work load for both the Prevention Services and Regional Operations Bureaus. Some of this work builds on existing CAL FIRE programs; however, challenges arise when projects cross over into private property.

Forest health, resilient landscapes, fire adapted, and Firewise communities are the main focus of land management planning and activities. The current work of the Los Angeles County Fire Department is supported by both the National Fire Plan and California Fire Plan by developing short-term and long-term vegetation management and fire protection strategies.



## **A: VALUES**

Generalized assets at risk need to be identified within the Los Angeles 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.

In the Los Angeles County the following are priority values and assets at risk:

- 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

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 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 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 Los Angeles County Fire Department's primary concern is reducing fire risk and potential loss of the various assets described herein, providing safety and protection of life, property and the environment, 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.

<b>ASSET AT RISK</b>	<b>PUBLIC ISSUE CATEGORY</b>	<b>LOCATION AND RANKING METHODOLOGY</b>
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 VS. 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 OR 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.

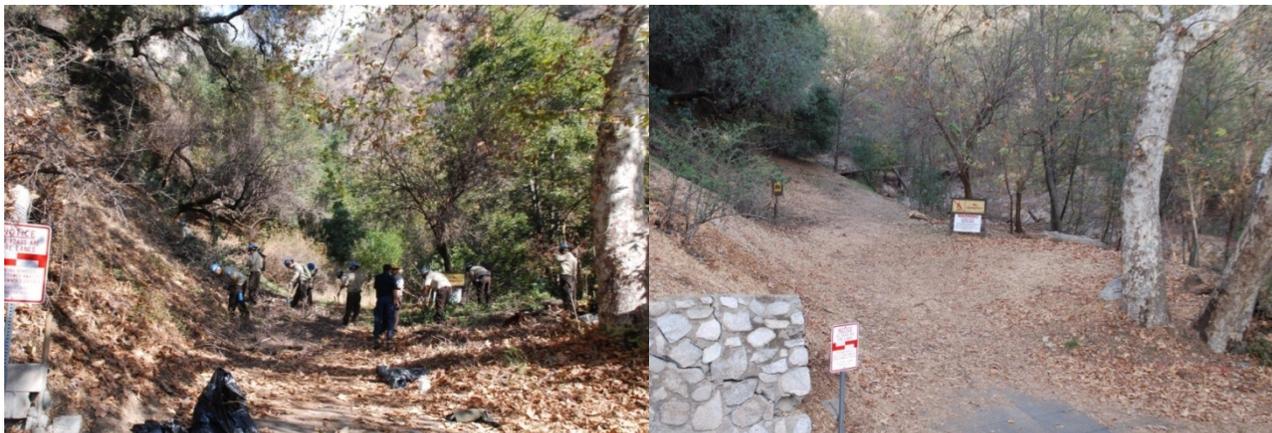
## B: COMMUNITIES

	Communities at Risk in Los Angeles	Battalion	Division	Incorporated City
1	Acton	17	V	N
2	Agoura	5	VII	N
3	Agoura Hills	5	VII	Y
4	Agua Dulce	22	III	N
5	Altadena	4	III	N
6	Arcadia	N/A	N/A	Y
7	Azusa	16 & 2	II	Y
8	Beverly Hills	N/A	N/A	Y
9	Big Rock Springs	17	V	N
10	Bradbury	16	II	Y
11	Burbank	N/A	N/A	Y
12	Calabasas	5	VII	Y
13	Castaic	6	III	N
14	Claremont	2	II	Y
15	Cornell	5	VII	N
16	Covina	16	II	Y
17	Del Sur	11	V	N
18	Del Valle	6	III	N
19	Desert View Highlands	17	V	N
20	Diamond Bar	19 & 15	VIII	Y
21	Duarte	16 & 10	II & IX	Y
22	El Nido	5	VII	N
23	Elizabeth Lake	11	V	N

24	Fernwood	5	VII	N
25	Glendale	N/A	N/A	Y
26	Glendora	2	II	Y
27	Glenview	5	VII	N
28	Gorman	6	III	N
29	Green Valley	11	V	N
30	Hacienda Heights	12	VIII	N
31	Hidden Hills	5	VII	Y
32	Juniper Hills	17	V	N
33	Kagel Canyon	4	III	N
34	La Canada Flintridge	4	III	Y
35	La Crescenta-Montrose	4	III	N
36	La Habra Heights	N/A	N/A	N
37	La Verne	N/A	N/A	Y
38	Lake Hughes	11	V	N
39	Lake Los Angeles	11	V	N
40	Lancaster	11	V	Y
41	Lang	22	III	N
42	Leona Valley	11 & 17	V	N
43	Littlerock	17	V	N
44	Llano	17	V	N
45	Longview	17	V	N
46	Los Angeles	N/A	N/A	Y
47	Malibu	5	VII	Y
48	Malibu Bowl	5	VII	N

49	Malibu Vista	5	VII	N
50	Mint Canyon	22	III	N
51	Monrovia	N/A	N/A	Y
52	Monte Nido	5	VII	N
53	Neenach	6 & 11	III & V	N
54	Oban	11	V	N
55	Olive View	N/A	N/A	N
56	Palmdale	11 & 17	V	Y
57	Palmdale East	11 & 17	V	N
58	Palos Verdes Estates	14	I	Y
59	Pasadena	N/A	N/A	Y
60	Pearblossom	17	V	N
61	Pico Rivera	8 & 10	IV & IX	Y
62	Point Dume	5	VII	N
63	Pomona	15 , 19 & 2	VIII & II	Y
64	Quartz Hill	11	V	N
65	Rancho Palos Verdes	14	I	Y
66	Ravenna	17	V	N
67	Rolling Hills	14	I	Y
68	Rolling Hills Estates	14	I	Y
69	Rowland Heights	12	VIII	N
70	San Dimas	2 & 16	II	Y
71	San Fernando	N/A	N/A	Y
72	Santa Clarita	6 & 22	III	Y
73	Saugus-Bouquet Canyon	22	III	N

74	Seminole Hot Springs	5	VII	N
75	Sierra Madre	N/A	N/A	Y
76	Sleepy Valley	22	III	N
77	South Pasadena	N/A	N/A	Y
78	Stevenson Ranch	6	III	N
79	Sun Village	17	V	N
80	Sylvia Park	5	VII	N
81	Three Points	6	III	N
82	Topanga	5	VII	N
83	Topanga Park	5	VII	N
84	Val Verde	6	III	N
85	Valyermo	17	V	N
86	View Park-Windsor Hills	1	VII	N
87	Vincent	17	V	N
88	Walnut	19	VIII	Y
89	West Covina	N/A	N/A	Y
90	Westlake Village	5	VII	Y
91	Whittier	8	IV	Y
92	Wilsona Gardens	11	V	N



## **SECTION IV: PRE-FIRE MANAGEMENT STRATEGIES**

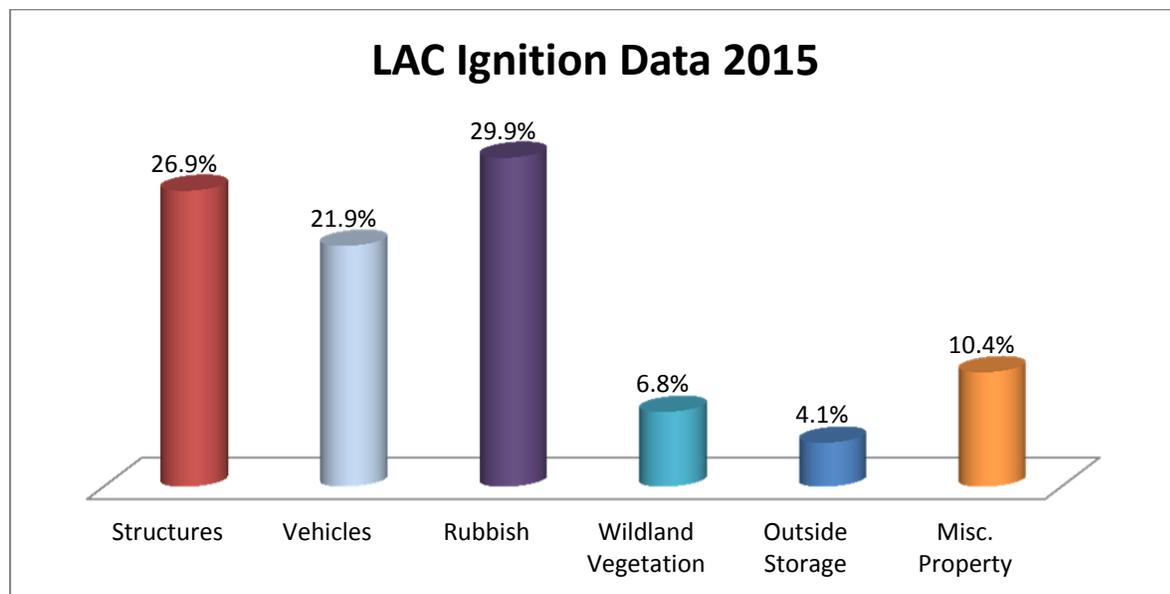
### **A: FIRE PREVENTION**

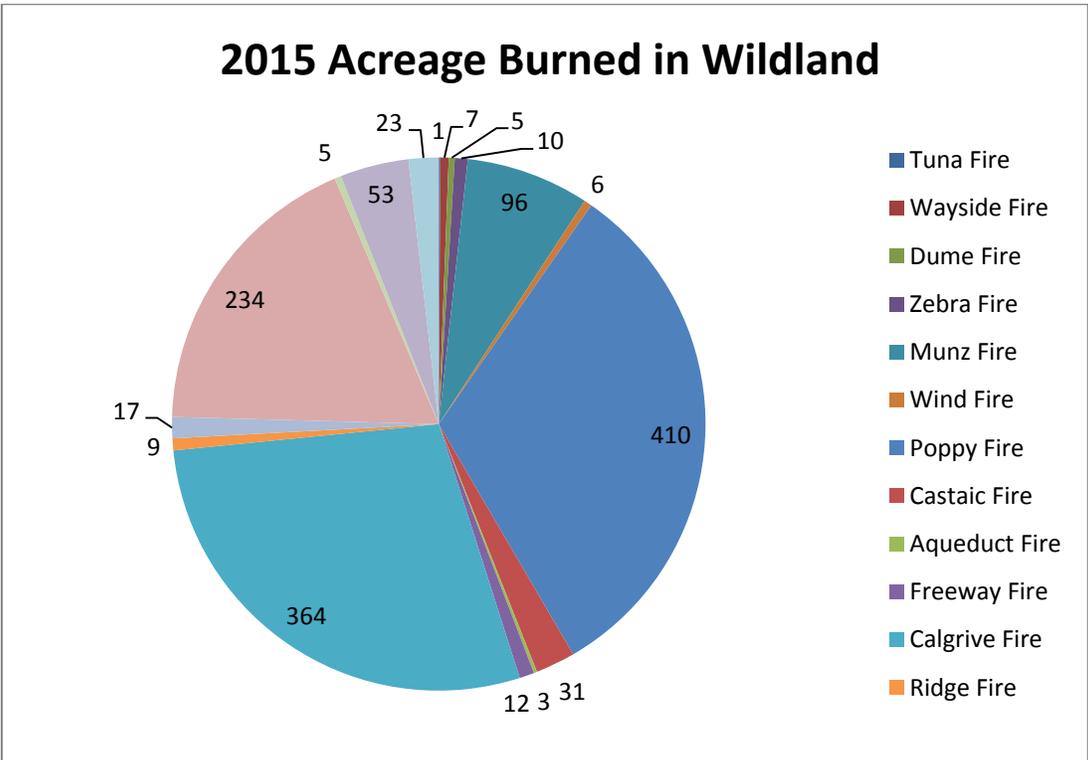
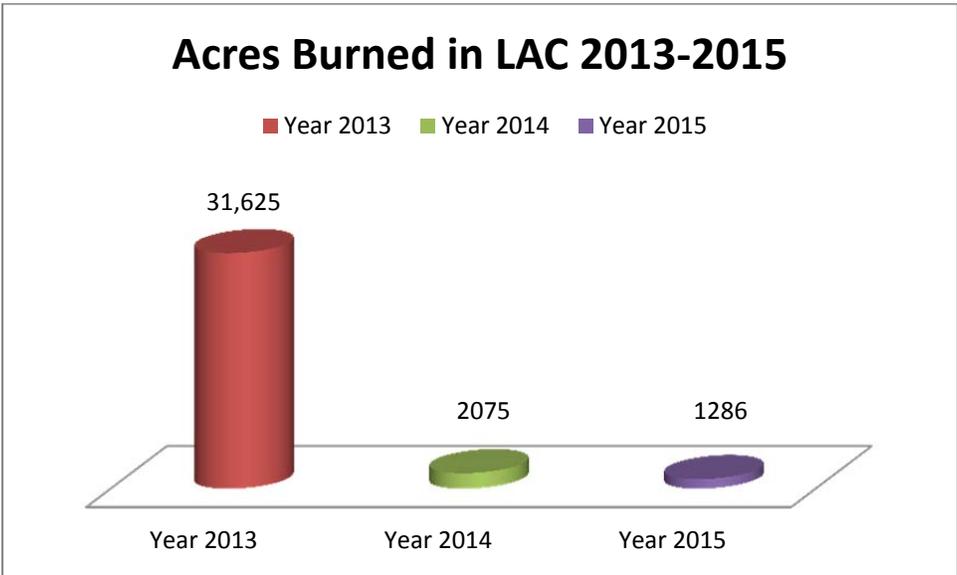
In 2015, Los Angeles County recorded fewer than 8,000 ignition starts. Nearly 47,000 ignition starts took place over the 2011-2015 timeframe. Due to the large number of ignition starts, the Fire Plan Unit has evaluated and analyzed the cause of these starts to find methods in preventing fires from developing.

The largest number of ignition starts is caused by outside rubbish fires. The National Fire Incident Reporting System reference guide describes outside rubbish fires as trash, waste fires, garbage dump or sanitary landfill fires, construction or demolition landfill fires, dumpsters, or other outside trash receptacle fire and outside stationary compactor or compacted trash fire. The second largest source of ignition was structure fires.

The next largest category of ignitions that threatens Los Angeles County is vehicle fires. Due to the Los Angeles County's large population, the number of vehicle ignitions corresponds respectfully. The concentration of ignition starts occurs within the major freeway thoroughfares.

An effective mitigation method for vehicle ignition starts is the timely completion of the annual roadside brush clearance on all major and minor roads within the WUI. Brush clearance should be completed for ten feet on both sides of the roadway. Please refer to the following for ignition causes and acres burned.





**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, FSCs, 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 and Structure Ignitability**

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, property, and the environment. Safety inspections are consistently conducted in commercial, industrial, and residential developments and business operations. Numerous fires are investigated and tracked. The acquired information is used to update the fire codes and fire prevention best management practices.

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.

**Arson/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.

The Fire Prevention Central Region Section includes the following:

**Codes and 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 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.

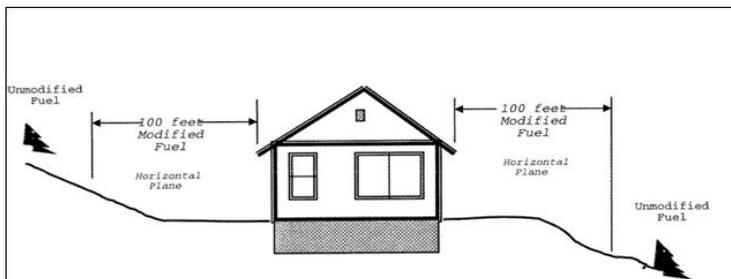
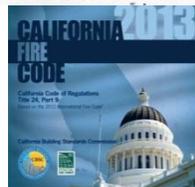
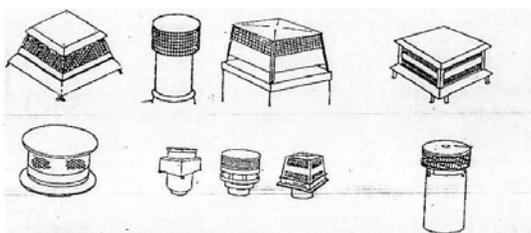
The Fire Prevention Engineering Section consists of the following:

**Building Plan Check Unit:** is responsible for 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 Plan Check Unit:** is responsible for 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).



**FIRE PREVENTION**

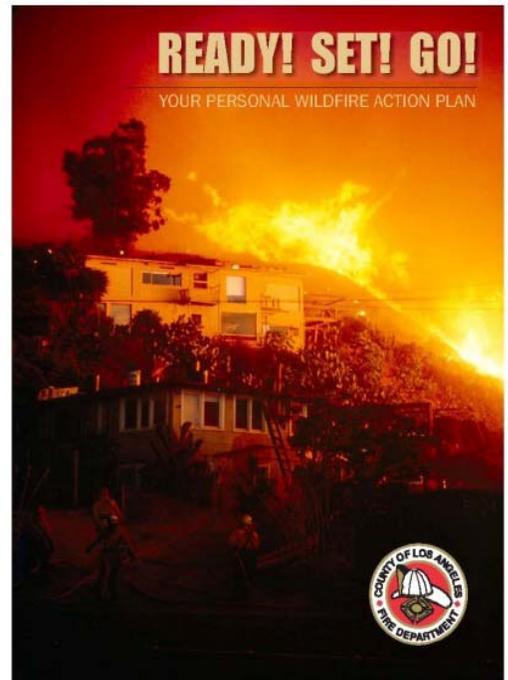
In 1981, the Los Angeles County Board of Supervisors established the Hazardous Materials Control Program in the Department of Health Services for the inspection of businesses generating hazardous waste. In 1991, the program merged into the Department and became the Health Hazardous Materials Division (HHMD). The Health Hazardous Materials Division's 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. All Hazardous Material Specialists are sworn Los Angeles County Deputy Health Officers.

## 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 Los Angeles County Fire Department. Each section interacts with the public and is responsible for increasing the public's awareness of wildfire safety and preparedness. The Los Angeles County Fire Department uses several publications to provide safety information to the citizens of Los Angeles County. Among them are:

- ✓ Ready! Set! Go!  
<http://www.fire.lacounty.gov/wp-content/uploads/2014/02/RSG-Booklet.pdf>
- ✓ Community Emergency Response Team (CERT):  
<http://www.fire.lacounty.gov/lacofd-cert-program/>
- ✓ County of Los Angeles Fuel Modification Guidelines: <http://www.fire.lacounty.gov/wp-content/uploads/2014/02/Fuel-Modification-Plan-Guidelines-8-10-11.pdf>
- ✓ For a complete list of WUI fire prevention education materials; please visit:  
<http://www.fire.lacounty.gov/forestry-division/fire-hazard-reduction-programs/>

Additional WUI 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](http://www.fire.lacounty.gov)

Facebook: [www.facebook.com/LACoFD](https://www.facebook.com/LACoFD)

Twitter: @LACo\_FD

## Community Fire Hazard Reduction Project Support

The Department's Fire Plan Unit provides fire hazard reduction project design, development, planning and implementation for communities in Los Angeles County.

### 2015-2016 Projects

- Corral Canyon Fire Safe Alliance Fire Safe Council Grant Completed
- North Topanga Canyon Fire Safe Council 2013 Grant Completed
- North Topanga Canyon Fire Safe Council 2014 Grant Implemented
- Horizon Hills Fire Safe Council Grant Implemented
- Monte Nido Fire Safe Council Grant Implemented
- Meadows Fire Safe Council Grant Implemented
- Pasadena Glen Fire Safe Council Grant Implemented
- City of Duarte Fire Safe Council Grant Implemented

## B. VEGETATION MANAGEMENT



The Forestry Division of the Los Angeles County 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 FSCs, and implementation of the California Strategic Fire Plan.

As the population of the 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 people choose to live in the wildland areas of Los Angeles County. The rewards may be numerous, but the increased risk of wildland fires, flooding, and erosion pose a serious threat to life and property.

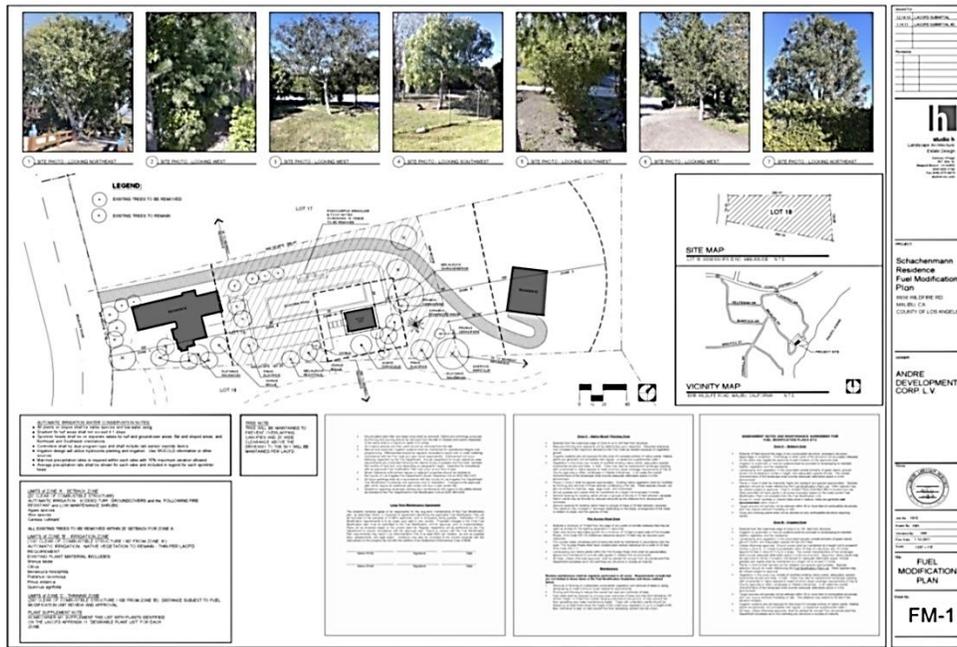
Vegetation management, as it relates to wildland fire, refers to the total or partial removal of high fire hazard grasses, shrubs, or trees. This includes thinning to reduce the amount of fuel and modification of vegetation arrangement and distribution to disrupt fire progress. In addition to fire hazard 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 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 defined 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.

The 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 beneficial.

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





The Forestry Division's Fire Plan Unit is in charge of implementing the California Strategic Fire Plan and the County of Los Angeles Strategic Fire Plan in Los Angeles County. 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 Los Angeles County to limit the risk of fire in the WUI areas.

The most effective method to limit damage and loss due to wildfire is to mitigate the fire exposure. This requires the construction of homes with fire resistant materials and reviewing the vegetation around a structure to create adequate defensible space. The focus of the Department's Fire Prevention program is on educational programs, development and enforcement of fire codes and building codes in the FHSZ: 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, and the 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**

#### **Engineering and Ignitability of Structure**

All newly constructed homes in the FHSZ 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 windows are required to be one hour fire danger rated which means that they can withstand one 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 Management Unit provides the state and county with the appropriate paperwork for prescribed burning, mechanical, biological and chemical treatment methods that will be used in project areas. The unit also provides the legally document for CEQA or Negative Declaration documents.

#### **Brush Clearance Unit**

Existing homes in the FHSZ are inspected annually by their local fire personnel. These inspections are performed in the spring and the goal is to evaluate the property for adequate defensible space. Los Angeles County requires more than the State's 100 feet of clearance and may extend the fire hazard reduction up to 200 feet depending on aspect, slope, and other environmental conditions. Some of the guidelines for inspection are that the property has no vines on structures or large trees within the first 30 feet of the home. Inspectors are looking for adequate removal of vegetation that breaks the fuels continuity and density. Depending on slope direction from the structure, fire intensity can be mitigated by the proper density and clearance of the vegetation. If a property is found to be non-compliant, the Los Angeles County has procedures in place that warns the property owner and allows for infractions for inadequate fire hazard reduction. A non-compliant property might be fined and the fire hazard reduction work will be completed by the ACWM contracted personnel.

#### **Fuel Modification Unit**

The Fuel Modification Unit reviews and approves landscape plans for all new construction within the (FHSZ) within the Los Angeles County. Once homes are constructed, an inspection is performed to confirm the implementation of their approved landscape plan. At three-year intervals, the property is again inspected to guarantee that the plan is being implemented. If properties are non-compliant, the homeowners can be charged a fine and are required to correct the issues.

## **FIRE SUPPRESSION PHILOSOPHY**

The human element is always the number one priority for all fire suppression efforts. Many rules and guidelines have been developed to protect firefighters 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, LACES - Lookouts, Communications, Escape Routes, Safety Zones, and 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 Los Angeles 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 in areas with 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, firefighting resources must also be committed to protecting assets situated 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 Los Angeles County Fire Department provides structural fire protection and rescue services for 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 and stakeholder involvement, 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 adjacent to wildland areas of the Santa Monica Mountains, the Angeles National Forest, Verdugo, San Rafael Mountains, etc. Each of the Department's battalions was consulted to determine pre-fire management projects they consider important to reduce the potential and impact of a wildfire. 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. Nonetheless, there are a number of circumstances where other than the highest priority would be given preference to a project. Some of these circumstances might 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, required match for grant funded project and established commitment between the Department, Fire Safe Councils and communities. The Fire Plan Unit function is to identify, propose and support countywide fire hazard reduction projects.



## APPENDIX A: PRE-FIRE PROJECTS

Project Number	Project Name	Planning Area	Status	Project Type	Project Acres
3010-2016-FRP-001	Angeles Forest Valley & Lakes FSC-Tree Mortality	SRA	P	FPL	1351
3020-1971-OTH-012	Annual Road-Siding	SRA	CM	PREV	NA
TBD	Bonelli Park VMP	SRA/LRA	P	VMP	TBD
3010-2016-FRP-003	Bradbury - Duarte FEMA Grant	LRA	A	FPL	830
3010-2010-FPL-001	Bradbury FSC	LRA	A	FPL	209
3010-2015-FRP-006	Bradbury FSC Phase 1	LRA	C	FPL	842
3010-2015-FRP-006	Bradbury FSC Phase 2	LRA	A	FPL	842
TBD	Castaic Park VMP	TBD	P	VMP	TBD
3010-2015-FRP-003	Catalina Island	SRA	P	FPL	TBD
3015-2008-FPL-005	Chaney Millard FSC	SRA	C	FPL	469
3010-2015-FRP-005	Claremont Hills Wilderness Park VMP	LRA/SRA	P	FPL	2190
3010-2013-FPL-016	City of Duarte FSC	LRA	CM	PREV	38
3010-2013-FPL-001	Corral Canyon	SRA	C	PREV	1078
3010-2015-FRP-001	Crescenta Valley FSC	LRA	A	PREV	533
3010-2013-PRE-002	Fuel Reduction	SRA	CM	FPL	NA
TBD	Glendora VMP	LRA/SRA	P	PREV	1640
3010-2016-FRP-002	Green Valley SRA FPF - Tree Mortality	SRA	P	FPL	1351
3010-2014-PRE-001	Helispot Fuel Reduction	SRA	CM	PREV	NA
3010-2010-VMP-003	Holiday Lake Rx Burn Phase 1	SRA/LRA	C	PREV	3
3010-2010-VMP-003	Holiday Lake Rx Burn Phase 2	SRA/LRA	A	PREV	3
3010-2008-FPL-010	Horizon Hills FSC	SRA	C	PREV	82
9550-2016-VMP-001	La Crescenta HFR Phase 1	SRA	A	VMP	728
9550-2016-VMP-001	La Crescenta HFR Phase 2	SRA	A	VMP	728
3010-2010-FPL-002	La Verne FSC	LRA	C	FPL	946
3010-2013-VMP-014	Lake Palmdale RX Burn	SRA/LRA	P	PREV	14
3020-2016-FRP-005	Malibu Lake FSC	SRA	A	FPL	368
3010-2008-FPL-006	Malibu West FSC	SRA	C	FPL	134
3020-2008-FPL-009	Meadows FSC	SRA	C	PREV	137
3010-2013-CAG-018	Meadows FSC	SRA	A	PREV	137
3010-2014-PRE-002	Motorway Maintenance-Dozer	SRA	CM	PREV	NA
3010-2014-PRE-003	Motorway Maintenance-Handcrew	SRA	CM	PREV	NA
3010-2008-VMP-008	MRCA Brush Clearance	SRA	CM	PREV	180
3010-2011-VMP-007	MT Wilson Hazard Fuels Reduction	SRA	C	PREV	49
TBD	Newhall Ranch VMP	TBD	P	VMP	TBD
3010-2014-FRP-004	North Topanga Canyon FSC	SRA	A	FPL	6097
3010-2013-CAG-015	Pasadena Glen FSC	SRA	A	PREV	57
3010-2012-VMP-013	Spinks Canyon	LRA	A	PREV	36
TBD	Stevenson Ranch VMP	TBD	P	VMP	TBD
3010-2015-FRP-006	Tonner Canyon VMP South	SRA	P	VMP	350
3010-2016-FRP-004	Tonner Canyon VMP West	SRA	P	VMP	274
3010-2011-OTH-004	Annual Live Fire Safety Preparedness Training	SRA	C	Other	254

## **APPENDIX B: UNIT GOALS AND OBJECTIVES**

The mission statement of the Los Angeles Fire County Department is to protect lives, the environment, and property by providing prompt, skillful, and cost effective fire protection and life safety services. This mission compliments the goal of the 2010 California Strategic Fire Plan. Therefore, our Department will continue to support and align with the intent of the 2010 California Strategic Fire Plan by addressing our objectives. The goals of the Los Angeles County Fire Department Strategic Fire plan are as follows:

- Analyze the potential of wildfire threats to communities at the battalion level within and adjacent to the WUI.
- Prioritize within each battalion where hazardous fuel reduction projects can make the largest impact to protection of life, property, and natural resources.
- Identify, categorize, and prioritize through a detailed assessment the values and assets at risk at the battalion level.
- Establish and prioritize which battalions have the highest wildfire threat potential in regards to values and assets.
- Develop battalion specific maps identifying prioritized values and assets and at risk communities.
- Develop battalion specific strategies and tactics within our own strategic fire plan.
- Determine large scale fire prevention strategies which parallel the county's land use planning strategies.
- Continue to reach out and assist with communities at risk to establish local FSCs and establish appropriate defensible space.
- Continue to work with communities at risk to develop Community Wildfire Protection Plans.

# APPENDIX C: 2015 STATISTICAL SUMMARY



County of Los Angeles  
**Fire Department**  
 Fire Chief Daryl L. Osby

## 2015 STATISTICAL SUMMARY

### FIRE DEPARTMENT — Three Year Data 2013 -2015

	2015	2014	2013
Acreage Burned	1,286	2,075	31,625

### FIRE INCIDENTS

Structures	2,272	2,157	2,188
Vehicles	1,853	1,766	1,678
Rubbish	2,527	2,342	2,203
Brush / Grass	578	453	616
Outside Storage	339	370	352
Misc. Property	874	992	871
<b>TOTAL</b>	<b>8,443</b>	<b>8,080</b>	<b>7,908</b>

### EMERGENCY MEDICAL SERVICES

<b>TOTAL</b>	<b>303,151</b>	<b>277,122</b>	<b>245,552</b>
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### OTHER INCIDENTS

False Alarms	26,196	24,688	32,372
Mutual Aid Provided	2,983	3,057	2,808
Haz-Mat	770	785	678
Misc. Incidents	47,770	44,503	39,801
<b>TOTAL</b>	<b>77,719</b>	<b>73,033</b>	<b>75,659</b>
<b>TOTAL INCIDENTS</b>	<b>380,870</b>	<b>358,235</b>	<b>329,119</b>

### Fire Loss in Dollars 2013 -2015

	2015	2014	2013
Property or Structure	\$ 135,265,071	\$ 74,956,844	\$ 85,066,997
Vehicle Contents	\$ 17,518,076	\$ 49,591,279	\$ 18,141,526
Misc. Property	\$ 1,377,011	\$ 1,738,412	\$ 1,625,245
<b>Total Dollar Loss</b>	<b>\$ 154,161,158</b>	<b>\$ 126,286,535</b>	<b>\$ 104,833,768</b>

### LIFEGUARD — Three Year Data 2013 -2015

	2015	2014	2013
Ocean Rescues	15,917	15,851	9,745
Medical Calls	18,610	19,133	16,437
Boat Rescues (Distress)	434	444	382
Missing Persons	1,756	1,673	1,280
Resuscitations	468	559	612
Drownings	5	2	3
<b>Beach Attendance</b>	<b>72,556,890</b>	<b>73,882,107</b>	<b>71,367,580</b>

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  
 GLENORA  
 IRVINDALE  
 SAN DIMAS

### DIVISION III

Battalions 4, 6 & 22 – 24 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  
 LA MIRADA  
 NORWALK  
 PARAMOUNT  
 PICO RIVERA  
 SIGNAL HILL  
 WHITTIER

### DIVISION V

Battalions 11 & 17 – 20 Stations, 2 Cities

LANCASTER  
 PALMDALE

### DIVISION VI

Battalions 13 & 20 – 13 Stations, 6 Cities

CLUDAHY  
 HUNTINGTON PARK  
 INGLEWOOD  
 LYNWOOD  
 MAYWOOD  
 SOUTH GATE

### DIVISION VII

Battalions 1 & 5 – 18 Stations, 6 Cities

AGOURA HILLS  
 CALABASAS  
 HIDDEN HILLS  
 MALBU  
 WEST HOLLYWOOD  
 WESTLAKE VILLAGE

### DIVISION VIII

Battalions 12, 15 & 19 – 18 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



# 2015 STATISTICAL SUMMARY

## CURRENT PERSONNEL

Chief Officers	122	Administrative Support	787
Captains	646	Lifeguards	161
Firefighter Specialists	747	Seasonal Recurrent	636
Firefighter Paramedics	671	Dispatchers	97
Firefighters	493	Foresters	40
Call Firefighters	57	Haz Mat Specialists	81
Fire Suppression Aides (Paid)	105	<b>TOTAL PERSONNEL</b>	<b>4,654</b>
Pilots	11		



## 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)	7	Engines	5
Patrols	34	Squads	68
Reserves	61	Hazardous Materials Squads	4
Truck Companies	32	USAR Squads	2
Light Forces	5	Emergency Support Teams	4
Quints	25	Swift Water Rescue Units	5
Trucks	2	Fire Boats	2
Reserve Trucks/Quints	12	Foam Units	4
		Mobile Air/Light Units	4
		Fuel Tenders	8
		Water Tenders	12



## HEALTH HAZ MAT

Emergency Responses	2,071
Response Teams	3

## AIR OPERATIONS

Fire Responses	283
EMS Transports	1,072
Facilities	4
Aircraft Mechanics	17
Hoist Rescues	95
Water/Foam Dropped(gallons)	729,760
Helicopters	
Bell 412 (10-Passenger)	5
Firehawk (13-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

## FORESTRY

Forest Tree Nurseries	5
Plants Distributed	26,492

## WILDLAND DIVISION

Fire Suppression Camps	
Paid	4
Correctional	6
Fire Suppression Crews	
Paid	4
Correctional	24
Dozers	10
Dozer Transport Trucks	10
Equipment	26

L. A. COUNTY FIRE DEPARTMENT  
YEAR 2015 BRUSH FIRE LOG

NO.	NAME	INC #	JURIS	DATE	SRA*	AREA*
1	TUNA FIRE	071109	FS 70	03/13/15	1.2	1.2
2	WAYSIDE FIRE	091465	FS 76	04/02/15	5.6	6.5
3	DUME FIRE	106393	FS 71	04/17/15	4.6	4.6
4	ZEBRA FIRE	122453	FS 78	05/03/15	10.1	10.1
5	MUNZ FIRE	143984	FS 78	05/26/15	0	96.1
6	WIND FIRE	146978	FS 149	05/29/15	6.1	6.1
7	POPPY FIRE	154023	FS 78	06/05/15	401.1	410.6
8	CASTAIC FIRE	162050	FS 149	06/13/15	31.0	31.0
9	AQUEDUCT FIRE	165432	FS 86	06/16/15	1.6	2.5
10	FREEWAY FIRE	172608	FS 149	06/23/15	11.5	11.5
11	CALGROVE FIRE	173220	FS 73	06/24/15	135.4	364.3
12	RIDGE FIRE	178457	FS 149	06/29/15	9.3	9.3
13	REMSEN FIRE	171987	FS 73	07/12/15	0	16.5
14	LINCOLN FIRE	227348	FS 90	08/16/15	0	234.1
15	SPUNKY FIRE	240921	FS 84	08/29/15	3.2	5.2
16	JOHNSON FIRE	247713	FS 78	09/05/15	53.4	53.4
17	LAKE COMPLEX	252223	FS 149	09/09/15	19.1	23.4
				<b>Totals</b>	<b>693.2</b>	<b>1,286.4</b>



## **APPENDIX D: 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/assessment/2010/definitions.php#C>)

**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.

**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](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.nwcg.gov/glossary/a-z#letter\\_f](http://www.nwcg.gov/glossary/a-z#letter_f))

**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.nwcg.gov/glossary/a-z#letter\\_f](http://www.nwcg.gov/glossary/a-z#letter_f))

**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.nwcg.gov/glossary/a-z#letter\\_f](http://www.nwcg.gov/glossary/a-z#letter_f))

**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.cafiresafecouncil.org/>)

**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 (FHSZ)** – 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.

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

**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.nwcg.gov/glossary/a-z#letter\\_f](http://www.nwcg.gov/glossary/a-z#letter_f))

**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.

**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/assessment/2010/definitions.php#R>)

**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 well-being 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 or an unwanted wildland fire, including unauthorized human-caused fires, escaped wildland fire use projects, escaped prescribed fire projects, and all other wildland fires where the objective is to put the fire out.

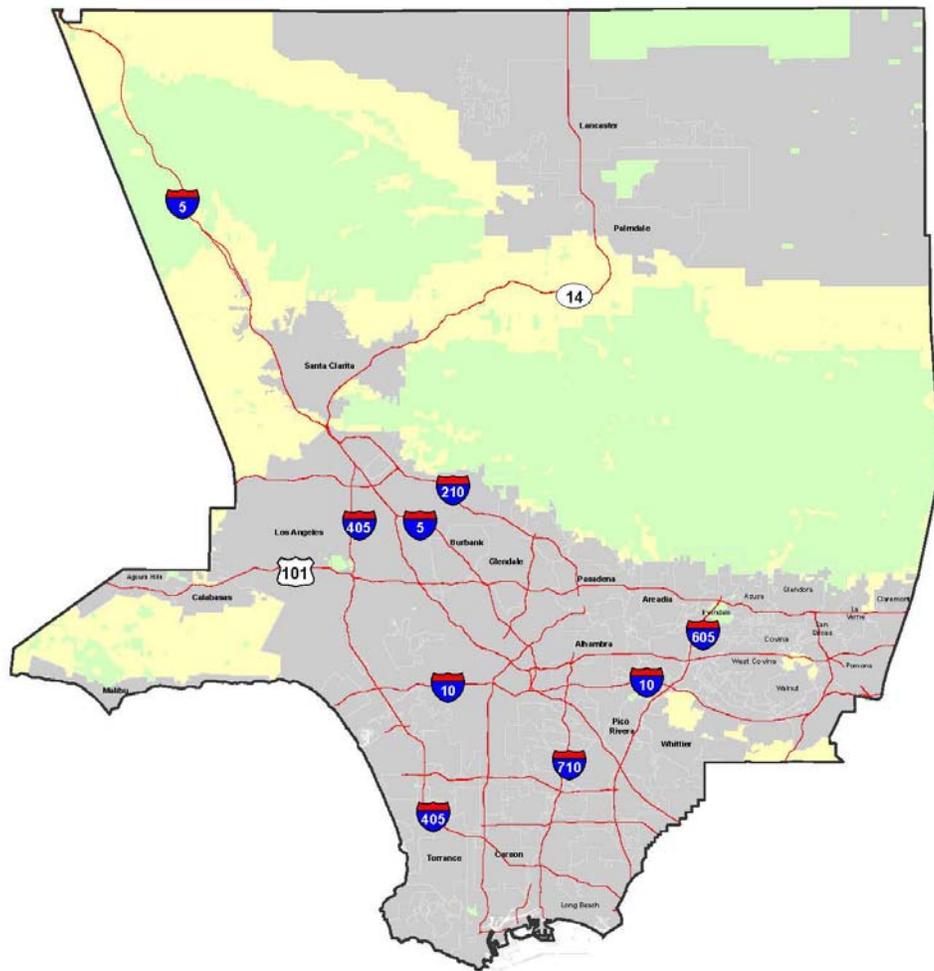
**Wildland Fire** – Fire that occurs in the wildland as the result of an unplanned ignition.

**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.nwcg.gov/glossary/a-z#letter\\_f](http://www.nwcg.gov/glossary/a-z#letter_f))



**EXHIBITS: MAPS**

# County of Los Angeles Unit Boundary Map

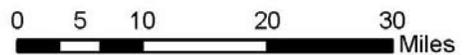
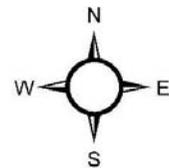


**Legend**

- Major Highways
- Unit Boundary

**State Responsibility Area (SRA14\_2)**

- FRA
- LRA
- SRA

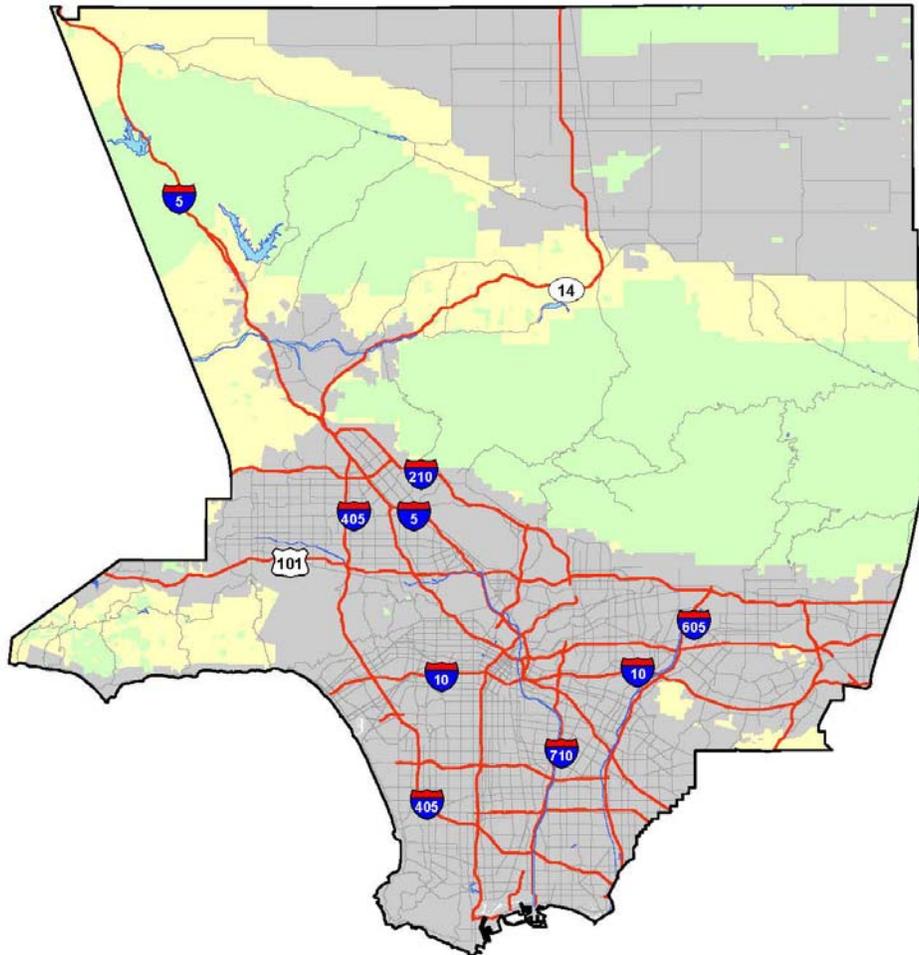


FPU  
01/15/16  
NAD 83



# County of Los Angeles

## Direct Protection Areas Map



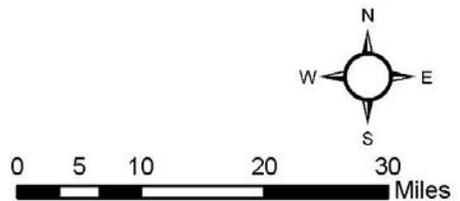
### Legend

-  County Boundary
-  Lakes and Rivers
-  Major Highways
-  Major Roads



### Direct Protected Areas (DPA13\_3)

-  FEDERAL
-  LOCAL
-  STATE

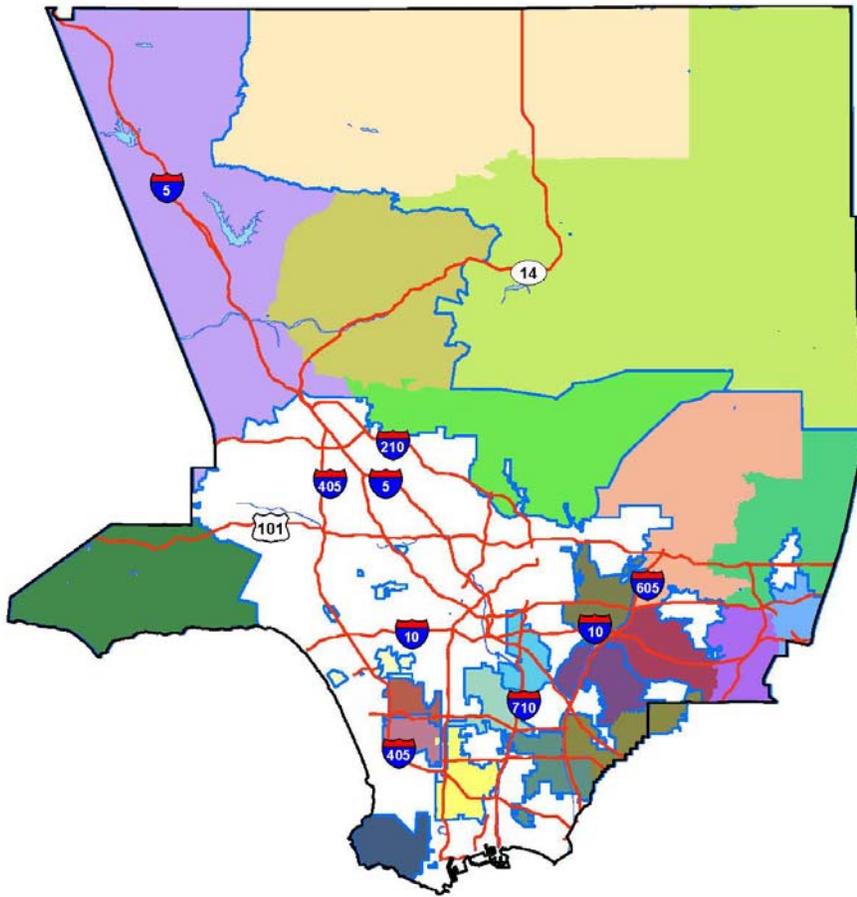


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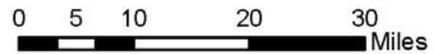
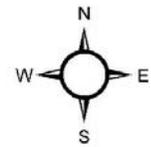
# County of Los Angeles

## Battalion Boundary Map



### Legend

- County Boundary
- Major Highways
- Division Boundary
- Lakes and Rivers



FPU  
01/15/16  
NAD 83



### Battalions

- |  |   |  |   |  |   |  |   |  |    |  |    |  |    |  |    |  |    |  |    |  |    |
|--|---|--|---|--|---|--|---|--|----|--|----|--|----|--|----|--|----|--|----|--|----|
|  | 1 |  | 3 |  | 5 |  | 7 |  | 9  |  | 11 |  | 13 |  | 15 |  | 17 |  | 19 |  | 21 |
|  | 2 |  | 4 |  | 6 |  | 8 |  | 10 |  | 12 |  | 14 |  | 16 |  | 18 |  | 20 |  | 22 |

## **SUPPLEMENT: 2015**

### **ANNUAL REPORT OF UNIT ACCOMPLISHMENTS**

In 2015, the Los Angeles County Fire Department completed 40,964 Fire Hazard Reduction Inspections and issued 2,291 Official Inspection Reports for non-compliant parcels. There were 2,815 citations written by fire station personnel of which 296 were forwarded to the Forestry Division Brush Clearance Unit (BCU) for non-compliance follow-up. The BCU consulted with the property owners and 296 non-compliance letters were sent. Subsequently, 57 structures were cleared by the County of Los Angeles Department of Agricultural Commissioner/Weights and Measures, Weed Hazard and Integrated Pest Management Bureau.

The County's Fuel Modification Unit reviewed over 2,189 Fuel Modification Plans and performed over 499 follow-up inspections on previously approved Fuel Modification Plans.

The Los Angeles County Fire Department Department's Air and Wildland Division brushed and maintained roughly 250 miles of motorways and fire roads with the assistance of our Heavy Equipment Section. The Fire Suppression Camps, both paid and correctional, treated some 800 acres which protected 425,123 structures, 99 communities, and involved approximately 4,765 crew and personnel hours.

The Los Angeles County Fire Department Fire Plan Unit supported the fire prevention efforts of local Fire Safe Councils by assisting with project planning, development, and implementation. The Fire Plan Unit, with the assistance from Fire Suppression camps, contributed 358 hours to the Bradbury Fire Safe Council Grant, an in-kind match of \$31,280.



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

