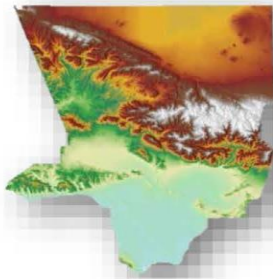
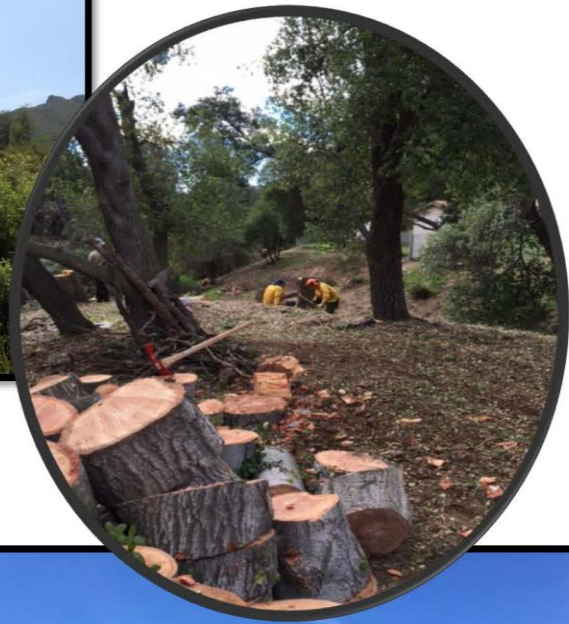


2023 Fire Plan

County of Los Angeles

Fire Department



UNIT FIRE PLAN AMENDMENTS

Date	Section Updated	Page # Updated	Description of Update	Updated By
6/27/2023	Signature Page	1	Personnel Change	Fire Plan Unit
6/27/2023	Signature Page	1	Removed "Strategic"	
6/27/2023	Section I: Unit Overview	4	Population Numbers	Fire Plan Unit
6/27/2023	Section I: Unit Overview	7	Message from Fire Chief Marrone	Fire Plan Unit
6/27/2023	Section I: Unit Overview	8	New Organizational Chart	Fire Plan Unit
6/27/2023	Section I: Unit Overview	11	RAWS Fire Weather Information	Fire Plan Unit
6/27/2023	Section I: Unit Overview	12	10-Year Fire History Map	Fire Plan Unit
6/27/2023	Section I: Unit Overview	13	Wildfire Environment	Fire Plan Unit
6/27/2023	Section I: Unit Overview	13	Fire Danger Rating Description	Fire Plan Unit
6/27/2023	Section II: Collaboration	14	Agreements/Agencies/Community Community Participation/FSC	Fire Plan Unit
6/27/2023	Section II: Collaboration	15	Updated FD Agency Chart with El Segundo	Fire Plan Unit
6/27/2023	Section II: Collaboration	16	Deleted - Fire-Adapted Communities	Fire Plan Unit
6/27/2023	Section II: Collaboration	17	Fire Safe Councils & Firewise Community Map	Fire Plan Unit
6/27/2023	Section III: Values	19	Tree Removal Statistics	Forestry Tech. Ops. Unit
6/27/2023	Section IV: Pre-Fire Management Strategies	23	Ignition Statistics Update and 2022 Graph	Mapping Unit
6/27/2023	Section IV: Pre-Fire Management Strategies	24	Update Acres Burned in LAC	Mapping Unit
6/27/2023	Section IV: Pre-Fire Management Strategies	26	Community Fire Hazard Reduction Project Support	Fire Plan Unit
6/27/2023	Section IV: Pre-Fire Management Strategies	30	Updated VMP Description	Vegetation Mgmt. Unit
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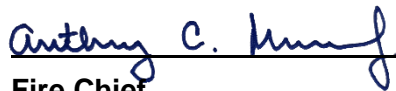
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SIGNATURE PAGE

Unit Fire Plan developed for the County of Los Angeles:

This Plan:

- Is intended for use as a planning and assessment tool only. It is the responsibility of those implementing projects to ensure that all environmental compliance and permitting processes are met.
- Was collaboratively developed. Interested parties within the unit – city, County, State, and federal agencies – 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.



Fire Chief
Anthony C. Marrone, Fire Chief
Forester and Fire Warden

6/28/23

Date



Division Chief
Ron Durbin, Chief, Forestry
Forestry Division

6/28/23

Date



Pre-Fire Engineer
Brad Weisshaupt, Deputy Forester
Forestry Division

6/28/23

Date



EXECUTIVE SUMMARY

The 2018 California Strategic Fire Plan (Plan) is the current evolution of the first Statewide fire plan developed in 2010. It was a collaborative effort between the State Board of Forestry and Fire Protection and the California Department of Forestry and Fire Protection (CAL FIRE). The Plan recognizes that wildfires will occur in California and works to answer the question, “How do we prepare and live with that risk?” The 2010 and 2018 Plans build upon this concept first developed in the 1996 California Fire Plan which led to collaborative efforts in fire prevention. A copy of the 2018 Strategic Fire Plan for California can be found at [2018 Strategic Fire Plan for California](#).

The vision of the Plan for California -- 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 Plan outlines eight goals focused on enhancing protection of lives, property, and natural resources from wildland fire, as well as improving environmental resilience to wildland fires. Each goal is meant to build upon the previous one; the eight 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 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 fuel management practices with landowner priorities and multiple jurisdictional efforts within local, State, and federal responsibility areas.
6. Determine the level of resources necessary to effectively identify, plan, and implement fire prevention using adaptive management strategies.

7. Determine the level of fire suppression resources necessary to protect the values and assets at risk identified during planning processes.
8. Address post-fire responsibilities for natural resource recovery, including watershed protection, reforestation, and ecosystem restoration.

The Los Angeles County Fire Department (Department) is one of six contract counties (Orange, Los Angeles, Kern, Ventura, Santa Barbara, and Marin), which have executed a contract with the State of California to provide wildland fire protection on State Responsibility Areas (SRA). The Department has the responsibility as a contract county to implement the Plan in Los Angeles County. As such, the Department functionally operates as a CAL FIRE unit and is responsible for all Strategic Fire Plan activities within the County. The Los Angeles County Fire Department 2023 Strategic Fire Plan replaces the previous Plan.

The most current Los Angeles County Fire Department Strategic Fire Plan can be found here: [Strategic Plan for California](#).



Brush Clearance Deadline Signage and Shaded Fuel Breaks Example

SECTION I: LOS ANGELES COUNTY UNIT OVERVIEW

LOS ANGELES COUNTY UNIT DESCRIPTION

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

In 1853, a bill was introduced dividing the eastern portion of LA County to create San Bernardino County. During subsequent years, LA County slowly reduced to its present size and the last major detachment occurred in 1889, with the creation of Orange County. LA County encompasses approximately 4,083 square miles of land, in which 1,741 square miles are flat, 1,875 square miles are mountainous, 246 square miles consist of hills, 59 square miles of mountain valleys, and 28 square miles of marshland. It also includes 131 square miles on San Clemente and Santa Catalina islands.

LA County has the largest population (10,072,629; 2023 Census Estimate) of any county in the nation and is exceeded by only ten states. Approximately 25 percent of California's residents live in LA County.

The Board of Supervisors (Board), created by the State Legislature in 1852, is the governing body within LA County consisting of five supervisors elected to four-year terms by voters within their respective supervisorial 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 elected positions.

As a subdivision of the State, LA County is charged with providing numerous services affecting the lives of its residents. Traditional mandatory services include fire protection, law enforcement, property assessment, tax collection, public health protection, public social services, relief to people experiencing homelessness, flood control, and recreational services through the Department of Parks and Recreation. Within the Department, the Forestry Division manages the Defensible Space Section containing the Defensible Space Inspection Unit (DSU) and Fuel Modification Unit (FMU); the Natural Resources Section containing the Vegetation Management Unit (VMU), Environmental Review Unit (ERU), Forestry Technical Operations Unit, Fire Plan Unit (FPU), and Grants/Interpretive Unit; and the Forestry Operations Section containing the San Dimas Unit (SDU), Lake Hughes Unit, Saugus Unit (SAU), Henninger Flats Unit, and Malibu Unit.

There are 88 cities contracting with LA County for municipal services to varying degrees. Sixty-five percent of LA County, approximately 2,653.5 square miles, is unincorporated where the County provides all municipal services. For over one million people living in unincorporated areas, the Board serves as their "City Council." LA County is the largest employer in the five-county region with just over 110,000 budgeted employees.

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

The Forest Protection Act of 1905 enabled local governments like LA County to form fire districts and “appropriate money for the purpose of forest protection, improvement, and management” (Berg and Boyarsky, 2004). Financing in those early years, like it is today, was provided by the taxpayers of LA County at the behest of the Los Angeles County Board of Supervisors. In the early years the budget was miniscule. In 1908, the records indicate that the Board spent \$710 to extinguish 21 fires. On May 8, 1911, the Board created the County of Los Angeles Board of Forestry, which later became the Los Angeles County Forestry Department. By 1912, the Forestry Department’s budget had grown to \$1.5 million. Under the direction of County Forester Stuart J. Flintham, foresters went about planting trees along major avenues and roadways around the basin.

In 1919, over 135,000 acres of wildland fires blackened LA County prompting the merging of these two departments, resulting in greater emphasis on fire suppression, 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. This became official in December 1925 when Spencer D. Turner was appointed head of all fire crews making him LA County Forester, Fish and Game Warden, and Fire Chief.

In 1956, Fire Chief Emeritus Keith E. Klinger created the visionary Lakewood Plan, allowing incorporated cities within LA County to contract with the Department for fire protection services. Today, 60 cities are served by the Department, which staffs a total of 178 engine companies, 33 truck companies, 114 Advanced Life Support (ALS) units, and numerous other specialized apparatuses.

The Department is one of the nation’s first firefighter paramedic programs, having its 50th anniversary in 2019. Throughout its history, the Department has emerged as a leader in the fire service on local, regional, and national levels. In terms of total fire stations and personnel, the Department is the nation’s third largest metropolitan Fire Department.

The Department operates 8 bureaus, 9 divisions, 22 battalions, 177 fire stations and 9 fire suppression camps and answers over 435,000 emergency calls annually. Additionally, the Department has Fire Prevention, Forestry, Air & Wildland, Lifeguard, Health & Hazardous Materials, Command & Control, Materials Management, Planning, Information Management, Financial Management, Human Resources, Employee Relation, Training Services, Wellness, Organizational Development, Risk Management, Construction & Maintenance, and Fleet Services divisions, which provide valuable services to over 4.1 million LA County residents.

The Department’s Fiscal Year 2022-2023 Final Adopted budget is approximately \$1.592 billion. The budget is primarily funded by property tax revenue, making up approximately 63.23% of the Department’s revenue. Other funding sources include fee-for-service cities and the Prop E special tax.

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.



LA Co Fire Dept. Core Values: Working Together

MESSAGE FROM FIRE CHIEF ANTHONY C. MARRONE

The Los Angeles County Fire Department (Fire Department) provides fire protection and life safety services 24/7 to 4.1 million residents within our jurisdiction of 59 cities and all unincorporated areas of Los Angeles County (County), and the City of La Habra located in Orange County. The Fire Department's service area includes suburban neighborhoods, city centers, commercial districts, sandy beaches, mountain ranges, chapparal cover hills and more.

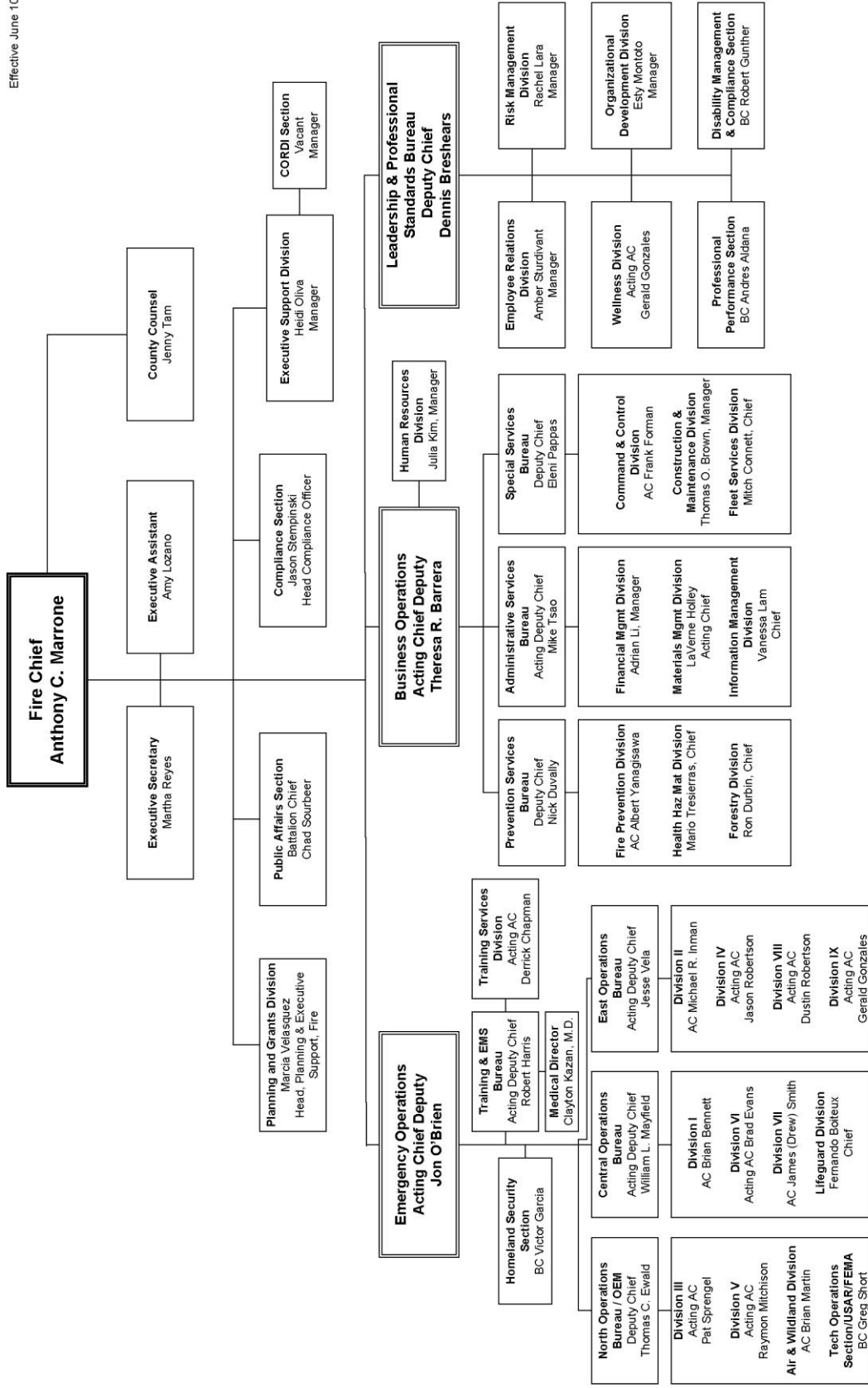
There are approximately 4,744 budgeted positions within the Department's emergency and business operations bureaus, including firefighters, dispatchers, lifeguards, nurses, and administrative support.

As the communities we serve continue to grow and diversify, our County remains committed to expanding and adjusting to the ever-changing demands and needs. Together, with the Board of Supervisors, Chief Executive Office, and other County Departments, we partner and collaborate on numerous challenges confronting our communities (e.g., health pandemic, large-scale disasters/emergencies, homelessness, mental health, etc.).

As an all-hazard Fire Department, we are focused on providing the highest quality professional emergency and medical service to residents, property owners, and visitors through accountability and transparency.

By continually evaluating our performance and accomplishments, we set goals and standards while implementing improvements in the areas of service delivery, operational effectiveness, emergency preparedness, workforce welfare, workplace inclusivity, equity, and fiscal solvency.





VEGETATION OF LOS ANGELES COUNTY

The County has a vast range of vegetation types across coastal areas, the Santa Monica Mountains, San Gabriel Mountains, valleys, and the desert. The Antelope Valley is located on the western side of the Mojave Desert. Vegetation types consist of California juniper (*Juniperus californica*), Joshua tree (*Yucca brevifolia*), California scrub oak (*Quercus berberidifolia*), creosote (*Larrea tridentata*), California poppy (*Eschscholzia californica*), and many native and non-native grasses (*Poa spp.*). Traveling east, the landscape is dominated by pinyon pine (*Pinus edulis*) woodlands and a desert chaparral understory. Streambeds have cottonwoods (*Populus spp.*), willows (*Salix spp.*), and related vegetation requiring more water.

High country areas located in the eastern portion of LA County include elevations from 5,000-10,000 feet. Dominant vegetation types are conifers, hardwoods, and more traditional forest communities. This landscape consists of Coulter pine (*Pinus coulteri*) and mixed conifers on dry slopes, whereas bigcone Douglas-fir (*Pseudotsuga macrocarpa*) and Jeffery pine (*Pinus jeffreyi*) populate slopes receiving more precipitation. There are also significant oak woodland communities along shaded canyon slopes and riparian communities within streambeds.

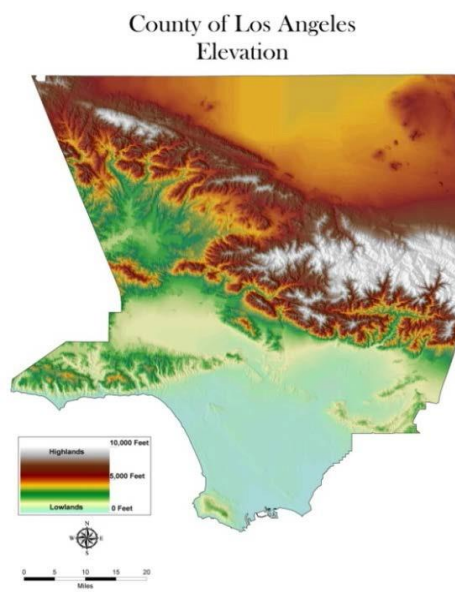
Much of the Santa Clarita Valley and the Santa Monica Mountains have the following vegetation types: coastal sage, riparian, oak woodlands, and chaparral. Coastal sage communities are typically found in lower elevations and drier sites of coastal south-facing slopes. The coastal sage community can be referred to as soft chaparral where foliage is soft, grey-green, and aromatic. Various plants include purple sage (*Salvia leucophylla*), California sagebrush (*Artemisia californica*), coast buckwheat (*Eriogonum latifolium*), laurel sumac (*Malosma laurina*), and lemonade berry (*Rhus integrifolia*). Riparian communities are woodlands with multi-layered vegetation, including Arroyo willows (*Salix lasiolepis*), California black walnut (*Juglans californica*), California sycamore (*Platanus racemosa*), Fremont cottonwood (*Populus fremontii*), Mexican elderberry (*Sambucus nigra*), California bay laurel (*Umbellularia californica*), and mule fat (*Baccharis salicifolia*). Oak woodlands are found on northern slopes blanketed with coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*) in warmer areas, hollyleaf cherry (*Prunus ilicifolia*), California bay laurel (*Umbellularia californica*), coffeeberry (*Frangula californica*), and poison oak (*Toxicodendron pubescens*).

Chaparral communities typically have shrubby vegetation seen on both coastal and inland hillsides and are separated into two types: soft chaparral (usually called coastal sage scrub) and taller, hard chaparral. Chaparral is dominated by evergreen and drought deciduous shrubs one to fifteen feet tall. Most plants are recognized by tough, leathery leaves that reduce water loss in dry climates. Many chaparral plants contain volatile oils, which produce a strong odor and increase flammability. Common examples include various species of ceanothus (*Ceanothus spp.*), manzanita (*Arctostaphylos spp.*), sage (*Salvia spp.*), sagebrush (*Artemisia spp.*), sumac (*Malosma spp.*), toyon (*Heteromeles arbutifolia*), and chamise (*Adenostoma spp.*).

Determining wildfire risks in LA County involves assessing fire-adapted chaparral ecosystems, dynamic Mediterranean weather conditions, values at risk, and the fire protection system's ability to respond. The California Strategic Fire Plan employs an intensive assessment process graphically depicting fuels, weather, and assets at risk in a Geographic Information System (GIS) program. GIS layers are field-validated and used to identify areas within or adjacent to the Wildland-Urban Interface (WUI) most at risk. *The California's Forests and Rangelands: 2017 Assessment* ([FHSZ ArcGIS Online Map](#)) 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

LA County encompasses 4,083 square miles. Forty-seven percent of this is mountainous, while the remainder consists of alluvial valleys, coastal plains, and high desert. Large mountain ranges within LA County include the Santa Monica, San Gabriel, Santa Susana, and Verdugo Mountains and run east to west, while main canyon drainages flow north and south. This natural topography creates airflow patterns linking the desert with the Pacific Ocean. LA County elevations start at sea level and rise to 10,069 feet at the Summit of Mount San Antonio, also known as Mount Baldy, in the San Gabriel Mountains.



The LA basin experiences a Mediterranean climate with warm, dry summers and mild, wet winters. Due to various micro-climates found in LA County, coastlines experience cooler temperatures of 40°F to 80°F, while inland areas experience more extreme temperatures, from light snow in winter to 100+°F in summer. Precipitation occurs approximately 35 days a year averaging about 15 inches. Although Southern California received substantial rain in 2022-23, hot, dry, and windy fall conditions can create a potential for extreme fire behavior on wildland incidents.

During the autumn and winter months, high-pressure weather systems develop over the Great Basin and upper Mojave Deserts, heating up the air. These systems often produce strong offshore winds, known locally as Santa Ana winds, with powerful down slope winds blowing through Southern California mountain passes. These hot, dry winds blow through valleys and canyons, from the high desert to the coast, pre-heating and dropping fuel moisture and relative humidity in all areas of LA County. This condition produces a high risk of wildland fires where temperatures are high, fuel moisture is low, and winds blow at 30-70 miles per hour.

Due to vast differences in weather across LA County ranging from desert to mountain to coastal and covering five different Fire Weather Forecast Zones (FWFZ) the Department has placed 22 Remote Automated Weather Stations (RAWS) throughout the County aligning with the FWFZs ([LACoFD RAWS ArcGIS Online Map](#)). Information from these stations (including temperature, relative humidity, 20-foot wind speed, 10-hour dead fuel moisture percentage) feed into the national Weather Information Management System (WIMS) and help inform a Daily Fire Weather Forecast and Fire Danger Rating for each FWFZ in the County. These products inform and influence Department staffing levels of stations, aircraft, and heavy equipment.

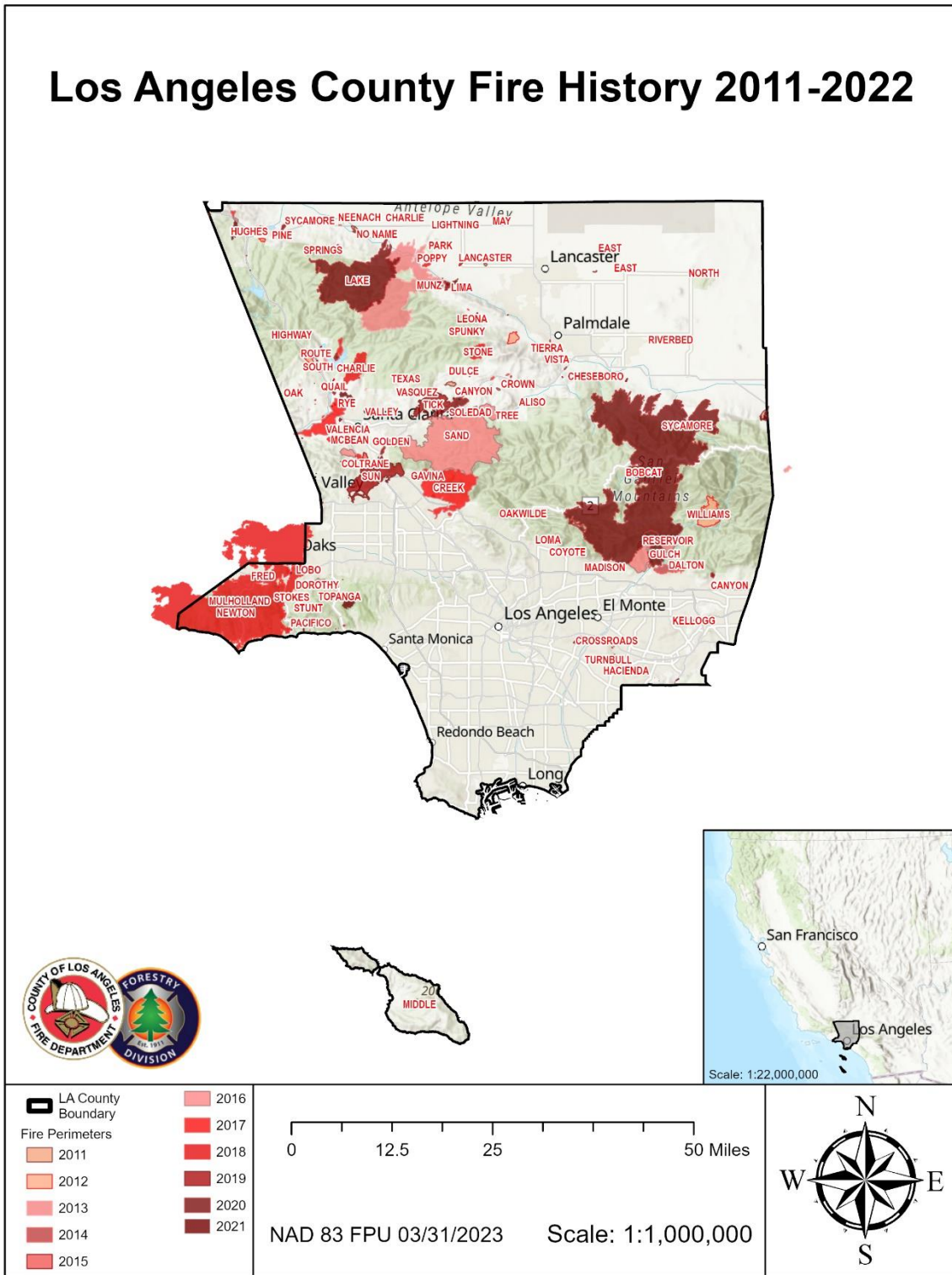


FIRE HISTORY

The County has a long history with fire dating back to Native Americans using fire to create biological diversity and maintain landscapes. Today, LA County experiences large, damaging, and costly wildfires which affect a significant number of residents. In recent years, LA County battled large, wind-driven fires destroying hundreds of homes and hundreds of thousands of acres of scenic landscape. The 2020 Lake Fire consumed 31,089 acres with 33 structures destroyed and 6 structures damaged. The 2020 Bobcat Fire burned 115,796 acres with 171 structures destroyed and 47 other structures damaged. The 2019 Santa Ana wind-driven Tick Fire scorched 4,615 acres. The 2018 Woolsey Fire consumed nearly 97,000 acres and destroyed over 1,600 structures and claimed three lives. The 2016 Sand Fire burned 41,432 acres consuming one home, a movie ranch, and claimed one life. Due to ongoing growth and development within LA County, the Department continues working to protect and prevent catastrophic fires from destroying vulnerable communities; addressing wildfire potential continues to be a top priority.

Fire History Map

Los Angeles County Fire History 2011-2022



THE WILDFIRE ENVIRONMENT

A thorough wildfire environment evaluation is essential in understanding fire severity potential in LA County. With greatly varying fuel types, weather, and topography, recognizing each component is vital to firefighter safety and determining which projects and programs are most efficient in preventing catastrophic wildfires; this is a major focus of the Department's FPU.

Fuel

Wildland fuel is vegetation covering the landscape. Fuel provides the thermal energy source that fire needs to spread. Ornamental vegetation around homes and structures is also considered fuel. Large WUI areas of great concern within LA County are where native fuels and residential communities come together and provide a dangerous wildfire environment.

Weather

Weather can change rapidly, making it the most dynamic component of the fire environment. It is comprised of temperature, wind, relative humidity, cloud cover, precipitation, and atmospheric stability.

Topography

Topography includes slope, aspect, and elevation. These factors play an important role while fighting wildland fires. Slope affects the rate of spread, while aspect may affect fire intensity. Elevation changes impact the amount of oxygen in the air and vegetation types.

FIRE DANGER RATING SYSTEM

As part of the National Fire Danger Rating System, the Department has 22 RAWs in five Fire Weather Forecast Zones across the County. The 1500-hour outputs from these stations (temperature, relative humidity, 20 feet wind speed, 10-hour dead fuel moisture percentage) are plugged into the WIMS system to produce a Burn Index (BI) for each RAW location. Station Burn indices are averaged per Fire Weather Forecast Zone to develop an adjective rating (Smokey Bear's arm) for that zone. When used in conjunction with the current Live Fuel Moisture (LFM) for that zone, a Fire Danger Rating Forecast is developed. This forecast and the BIs inform departmental preparedness for high fire danger days, including red flag and Santa Ana wind events.

In 2022, the Department transitioned to the 2016 NFDRS Fuel Models which, in turn, created new BI threshold numbers for the 90th and 97th percentiles for Very High and Extreme Fire Danger Days.

The daily outputs can be found at [LACoFD Fire Weather Danger & LFM](#).

UNIT PREPAREDNESS AND FIREFIGHTING CAPABILITIES

The Department currently has over approximately 4,744 budgeted positions, a total of 179 fire stations (including FS55 and FS155 on Catalina Island), 228 fire engines (including reserve engines), 3 light forces, 30 quints, 75 paramedic squads, 9 fire suppression camps, 10 bulldozers, 10 helicopters, 2 Urban Search and Rescue (USAR) squads, 1 USAR Task Force, 3 Hazardous Material (HAZMAT) squads, 6 swift water rescue squads, 58 lifeguard vehicles and 8 rescue boats, 23 Prevention offices, 12 Forestry units, and numerous other response vehicles and facilities as listed in Appendix "C." The Department serves unincorporated areas of LA County as well as 60 incorporated cities.

The Department has a contractual agreement with CAL FIRE to provide wildland fire protection for SRA. The Gray Book staffing agreement identifies resource allocations CAL FIRE considers necessary for protection of SRA and provides funding accordingly. In LA County, the Gray Book provides funding for 23 stations and fire prevention activities.

SECTION II: COLLABORATION

AGREEMENTS / AGENCIES / COMMUNITY

Cooperative Fire Service Agreements

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 exceeding the capability of local resources, such as a disaster or a multiple alarm fire. Mutual aid may be requested only when such an emergency occurs or may be a formal standing agreement for cooperative emergency management on a continuing basis, such as ensuring resources are dispatched from the nearest fire station, regardless of the incident's jurisdictional boundary. Agreements sending the closest resources are regularly referred to as "automatic aid agreements." Current agreements include:

- Los Angeles County Operational Area Mutual Aid Plan
- California Fire Master Mutual Aid Agreement
- California Master Cooperative Wildland Fire Management and Stafford Act Response Agreement
- California Fire Assistance Agreement

Additional Fire Agencies in Los Angeles County:

US Forest Service, Angeles National Forest
 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 West Covina
 City of El Segundo City of Pasadena
 City of Glendale City of Redondo Beach

Agencies coordinating with 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	FEDERAL GOVERNMENT
CALIFORNIA STATE PARKS	STATE
SANTA MONICA MOUNTAINS CONSERVANCY	PUBLIC LAND OWNERSHIP, RECREATIONAL USE
MOUNTAINS RECREATION AND CONSERVATION AUTHORITY	STATE
LOCAL WATER COMPANIES	PUBLIC & PRIVATE, WATER STORAGE & TREATMENT
PUBLIC UTILITY COMPANIES	PRIVATE
CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION	STATE
AIR QUALITY MANAGEMENT DISTRICT	STATE/COUNTY
CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE	STATE
UNITED STATES DEPARTMENT OF AGRICULTURE (USDA) - SOILS CONSERVATION	FEDERAL GOVERNMENT
UNITED STATES FISH AND WILDLIFE SERVICE	FEDERAL GOVERNMENT
BUREAU OF RECLAMATION	FEDERAL GOVERNMENT
UNITED STATES DEPARTMENT OF AGRICULTURE FOREST SERVICE (USFS)	FEDERAL GOVERNMENT
NATIONAL PARK SERVICE	FEDERAL GOVERNMENT
TOPANGA COALITION FOR EMERGENCY PREPAREDNESS	HOMEOWNER'S ASSOCIATION
SIXTY (60) CONTRACT AND FEE FOR SERVICE CITIES	LOCAL GOVERNMENT
TWENTY-EIGHT (28) INDEPENDENT CITY FIRE DEPARTMENTS	LOCAL GOVERNMENT
BUREAU OF LAND MANAGEMENT	FEDERAL GOVERNMENT

Community Participation

Fire Safe Councils (FSCs) – [California Fire Safe Council](#)

FSCs are grassroots community-driven organizations whose objective is making California's communities less vulnerable to catastrophic wildfire. FSCs protect residents and provide firefighters a safe place to fight the oncoming wildfire through education programs and fire hazard reduction projects such as shaded fuel breaks or home hardening. FSCs started in the early 1990s; there are now over 200 statewide. Through the FPU, the Department supports these community-based organizations and efforts. In the early 2000s, the Department developed support mechanisms for the 20 active FSCs in LA County.



Firewise Communities Program – [NFPA Firewise USA®](#)

Brush, grass, or forest fires do not have to be disasters. The National Fire Protection Association 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.

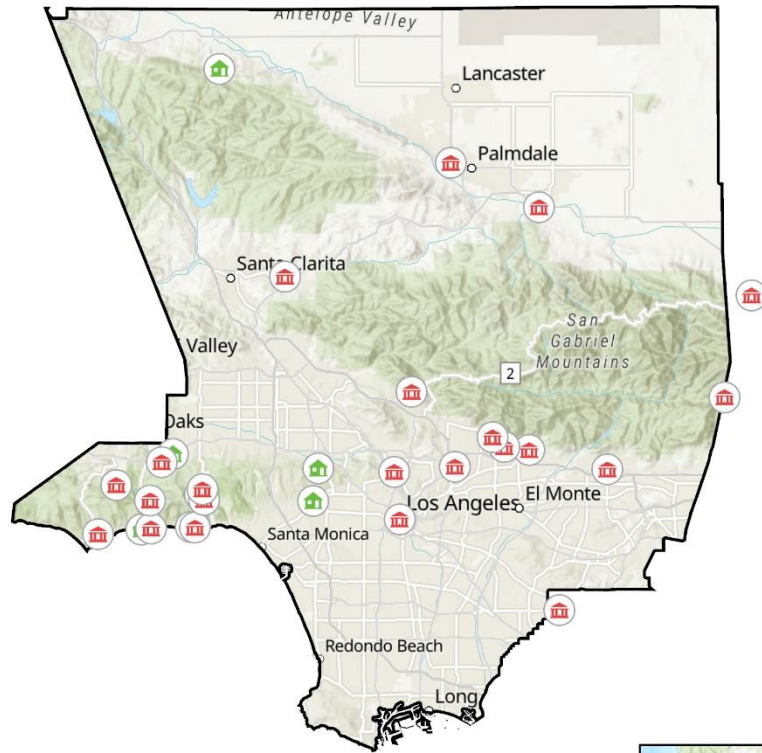






Community Emergency Response Team (CERT) – [LACoFD CERT](#)

The CERT program educates and trains people in disaster preparedness for hazards impacting their community, providing basic disaster response skills, such as fire-safety, light search and rescue, team organization, and disaster medical operations. Using training learned in classrooms and exercises, CERT members can assist neighborhoods or workplaces when professional responders are not immediately available. CERT members are encouraged to support emergency response agencies by taking active roles in emergency preparedness projects in their community. In June 2003, the Department began offering the Federal Emergency Management Agency-approved 20-hour CERT training curriculum to cities and communities we serve.



Los Angeles County Fire Safe Councils & Firewise Communities



<ul style="list-style-type: none">  Fire Safe Council  NFPA Firewise Community  LA County Boundary 	<p style="text-align: center;">0 12.5 25 50 Miles</p> <p style="text-align: center;">NAD 83 FPU 03/31/2023 Scale: 1:1,000,000</p>	
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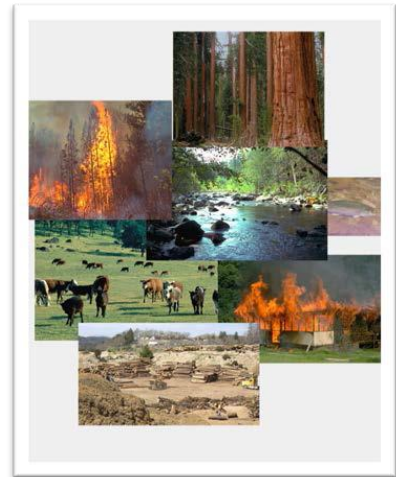
Map by H. Hammoud, 2023

20 Active 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 featuring assets, such as water supply, urban population, and ecosystems 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 FRAP assessment, communities in the WUI, rangelands, and protected habitats in LA County are considered high priority landscapes.



The Federal Mandate

In response to the 2008 Farm Bill, the 2010 FRAP Assessment shifted focus to a format developed by the USDA Forest Service for State forestry assessments. Each chapter included analyses of threats and assets to generate “Priority Landscapes,” to more efficiently target potential areas for investment and treatment.

The 2017 Assessment was developed in cooperation with our federal partners, including the Forest Service. However, the focus has changed to an indicator-based approach for tracking the State’s progress towards sustainability.

The State Mandate

By State law (PRC 4789), CAL FIRE must periodically assess California’s forest and rangeland resources. The previous effort was California’s Forests and Rangelands: 2010 Assessment. Assessment results are used by the State Board of Forestry and Fire Protection to develop and update a forest policy statement for California. In 2010, the strategy report, produced by FRAP as part of the Assessment process, served as the policy statement.

The 2017 Assessment considers various existing planning efforts; these range from local plans such as Community Wildfire Protection Plans to Statewide Plans, like the State Wildlife Action Plan, the State Water Plan, and the Forest Carbon Plan. The Assessment also integrates research related to renewable energy and climate change from the California Energy Commission, the Air Resources Board, California Department of Fish and Wildlife, and various academic institutions. Many reports and data sources were used in preparation of this Assessment, including extensive use of forest inventory data from the Forest Service’s Forest Inventory and Analysis program.

TREE MORTALITY IN LOS ANGELES COUNTY

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

Currently, the Department, the Los Angeles County Department of Agricultural Commissioner/Weights and Measures (ACWM), the Los Angeles County Department of Public Works, the USFS and the local FSCs 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. A \$200K Fire Prevention grant was completed in February 2019, removing 143 infested trees. In February 2019, the Department received a \$3M Forest Health Grant to remove approximately 1,500 infested oaks. This grant was set to run through March of 2023, but due to COVID-19 restrictions, work slowed, and CAL FIRE granted an extension into 2025. By removing infested trees and controlling GSOB spread, approximately 12,000 healthy trees will be preserved, a primary grant goal to reducing greenhouse gas. Furthermore, over 6,000 oak seedlings are being grown for reforestation and age-class diversity. As of March 2023, LACoFD contract vendors have removed 1148 dead or infested trees. The grant was also successfully amended to include basal injections as another tool to preserve existing oak woodlands, decrease fire hazard, and increase defensible space.

Forestry Division projects include spatial and quantitative data collection on vegetative mortality issues throughout LA County. The focus of this intensive forest inventory is being directed to 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 is ongoing on private and public lands. Efforts monitoring spread of insect-related mortality as well as ongoing hazard mitigations in the region are increasing workloads for Division Personnel. Some of this work builds on existing CAL FIRE programs; however, challenges arise when projects overlap into private property.

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



Goldspotted Oak Borer Beetle



Camp Crews Chipping Infested Wood

VALUES

Generalized assets at risk must be identified within LA County to show areas containing high value assets. Areas with the highest combined asset values and fire risk are targeted for fire plan projects, particularly where such projects reduce damage if a fire starts in the project area during high fire hazard weather.

In LA 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 an objective analysis determines the degree projects will reduce potential suppression costs and damage to valued assets within the project area. The asset framework and validation process are refined as stakeholders are identified and participate in the Fire Plan process. Multiple agencies have played a vital role in identifying assets within LA County. Identifying locations of assets at risk is critical to fire protection planning. Fire protection resources should be allocated, in part, based on assets being protected. Considering resource limitations, a thorough understanding of assets at risk is necessary to determine pre-fire management projects providing the greatest benefit. The Department's primary concern is reducing fire risk and potential loss of assets, 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.

ASSETS AT RISK	PUBLIC ISSUE CATEGORY	LOCATION AND RANKING METHODOLOGY
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 2) GRID CELLS CONTAINING DOMESTIC WATER DIVERSIONS, RANKED BASED ON NUMBER OF CONNECTIONS; 3) CELLS CONTAINING DITCHES THAT CONTRIBUTE TO THE WATER SUPPLY SYSTEMS
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
HISTORIC BUILDINGS	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 (I.E., REPEATER SITES, TRANSMISSION LINES)

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

Based on the Priority Landscapes developed by the Assessment, 11 landscapes are considered immediate priorities for LA County. The following best identifies LA County's current issues, 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, measured by density, with susceptibility to loss (exposure). Fire access road vegetation clearance for ingress/egress. Power delivery and communication sites susceptible to extended loss of service due to fire or the simple interruption of these services is a public safety and 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 large tree diameters, soil impacts, and type conversions).
- **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 change. Watersheds can burn in the dry season and then discharge torrents of debris into downstream-populated plains during subsequent severe, wet-season storms.

SECTION IV: PRE-FIRE MANAGEMENT STRATEGIES

FIRE PREVENTION

In 2022, the County recorded 10,181 ignitions (fire starts). Due to the large number of ignitions, the FPU evaluated and analyzed their cause to find methods in preventing fires from developing.

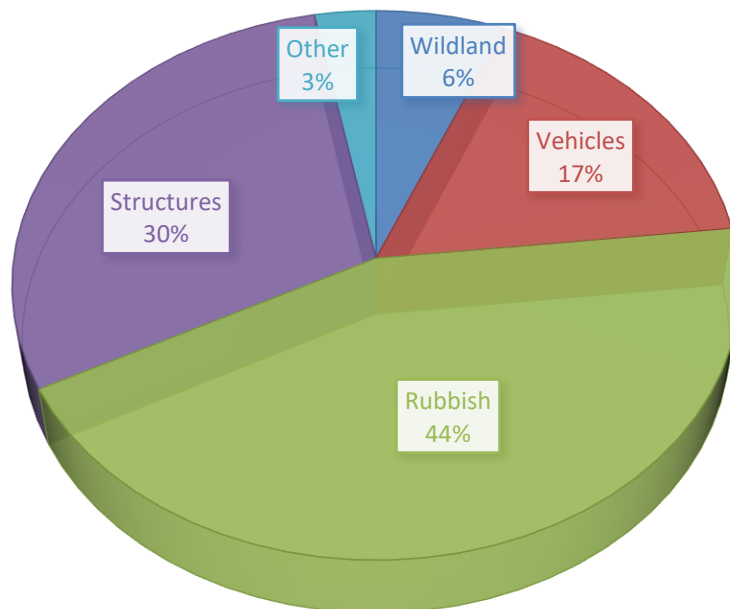
Ignition Starts

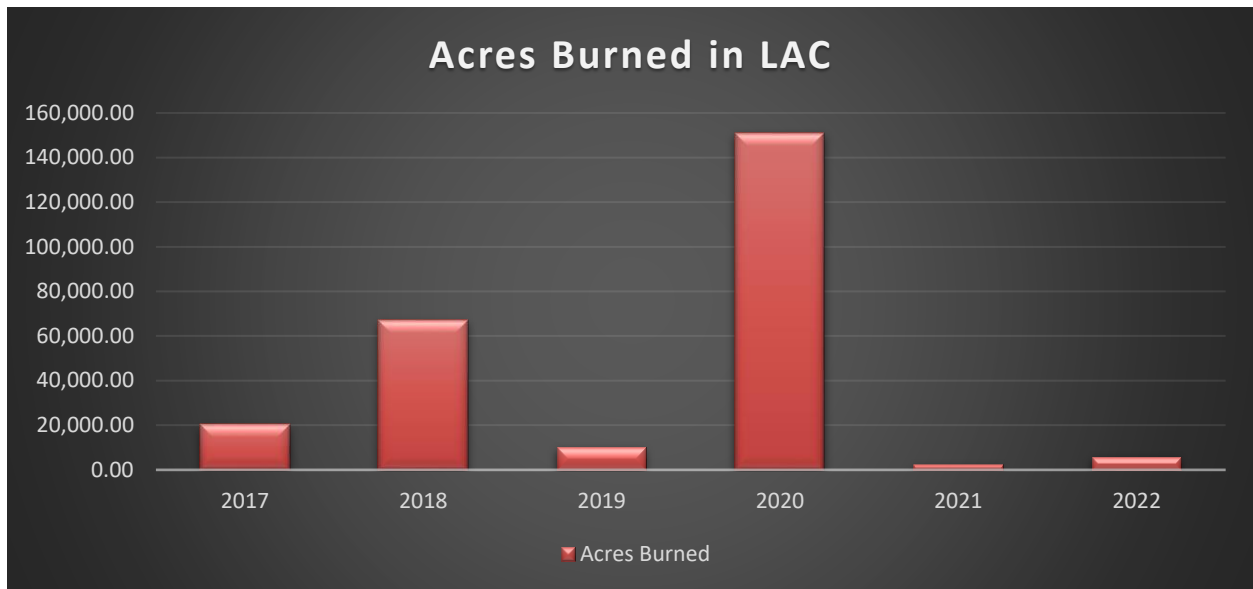
The largest number of fires are caused by outside rubbish fires at 4,005. The National Fire Incident Reporting System reference guide describes outside rubbish fires as trash, waste fires, garbage dump or sanitary landfill fires, construction or demolition landfill fires, dumpsters, or other outside trash receptacle fires and outside stationary compactor, or compacted trash fires. Known sites can implement fire prevention practices, such as misters and defensible space implementation.

Structure fires are the next largest ignition category threatening LA County at 2,684. Fire prevention and public education programs can increase awareness and minimize structure loss.

Vehicle fires are the third largest ignition source at 1,533. Roadway maintenance is an effective mitigation method for vehicle ignitions. There were 571 wildland ignitions along major and minor WUI access roads in 2022. Brush clearance must be completed for 10 feet on both sides of fire access roads.

2022 IGNITION TYPE





2017-2022 Acres Burned

Prevention

Fire prevention’s focus is educating citizens in reducing the risk from hazardous conditions through programs such as Ready-Set-Go, home hardening inspections, and working with stakeholders to apply for wildfire education grants. These programs focus on awareness of fire causes and reducing fire damage costs. The Department’s FPU coordinates programs and activities to create efficient and timely Pre-Fire Management projects.

Passive Protection

Passive protection such as defensible space, hazard fuel reduction, proper defensible space maintenance, fire-resistive landscaping, fire-resistive construction, and good housekeeping around structures plays a critical role in increasing wildfire survivability. 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 firefighters for additional assignments.

Pre-Fire Management

The pre-fire engineer and unit staff work with a myriad stakeholders and cooperators including federal, State, and local government entities, FSCs, individual citizens, and organizations to assist with the development and implementation of their fire plan. Pre-fire engineer programming includes the following: fire prevention, vegetation management, administration, and working for the Forestry Division Chief.

Fire Prevention Engineering

The Fire Prevention Division is under the leadership of the Department's Fire Marshal. This Division focuses on educating communities on the benefits of proper safety practices and identifying and eliminating all types of hazardous conditions posing a threat to life, property, and the environment. Safety inspections are consistently conducted in commercial, industrial, and residential developments. Numerous fires are investigated and tracked. Acquired information is used to update fire codes and fire prevention best management practices.

Arson/Fire Investigation Unit: Conducts cause investigations of major alarm fires, wildland fires, suspected arson, and other fires. This Unit interviews witnesses, collects evidence, writes reports, and conducts training programs for department personnel.

Codes and Ordinances Unit: Conducts research, answers requests for information, and maintains the Department's legal and historic library. This Unit proposes code changes to the California Fire Code and California Building Code groups and coordinates the fire code adoption process with all contract cities.

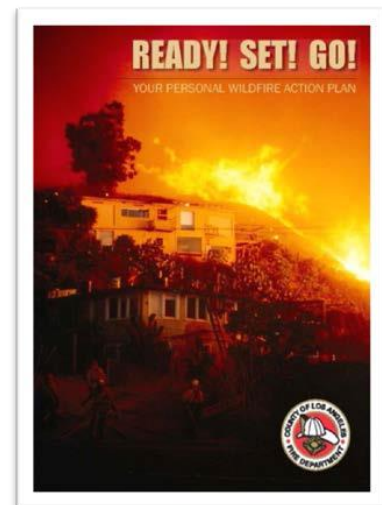
Land Development Unit: Reviews firefighting water requirements and Fire Department access for projects prior to a public hearing.

Building Plan Check Unit: Performs nonstructural fire safety plan review and approves architectural plans for various occupancies.

Information and Education: The Public Information Officer (while not under Fire Prevention) works closely with prevention personnel to develop specific programs, educational materials and public statements. Ultimately, public education is the responsibility of all members of the Department. Each section interacts with the public and is responsible for increasing the public's awareness of wildfire safety and preparedness. The Department uses several publications to provide safety information to citizens of LA County.

Among them are:

- ✓ Ready! Set! Go! – [LACoFD Ready! Set! Go!](#)
- ✓ Community Emergency Response Team (CERT) [LACoFD CERT](#)
- ✓ County of Los Angeles Fuel Modification Guidelines [LACoFD Forestry Fuel Modification](#)
- ✓ For a complete list of WUI fire prevention education materials; please visit: [LACoFD 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/
 Facebook: 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 LA County.

2022-2024 Grant and Fire Plan Projects

Potential Projects		
Organization	Description	Location
City of Calabasas	City of Calabasas Community Wildfire Protection Plan	City of Calabasas
Operation Flame	Hazardous Fuels Reduction	Malibu Creek State Park
City of Santa Clarita	City of Santa Clarita Vegetation Management Project	City of Santa Clarita
Emergency Preparedness In Calabasas (EPIC) Fire Safe Council	Community Wildfire Mitigation	City of Calabasas
ArtCenter College of Design	ArtCenter Hazard Fuel Reduction Project	Pasadena
Puente Hills Habitat Preservation Authority	Puente Hills Fuels Reduction Project II	Puente Hills
Los Angeles County Agricultural Commissioner / Weights and Measures	ISHB and GSOB High Risk Tree Removal Project	LA County
AYF Camp of California	AYF Camp Wildfire Prevention	Angeles National Forest
Mountains Recreation and Conservation Authority	2023 MRCA Hazardous Fuels Reduction	LA County
Catalina Island Conservancy	Hazardous Fuel Burn on Santa Catalina Island Conservancy	Santa Catalina Island
SoCal Society of American Foresters	Forestry Institute for Teachers (wildfire prevention education)	NorCal Education
U.S. Green Building Council Los Angeles	Wildfire Defense Education & Tours	Various-Educational
City of Monrovia	Grow Monrovia - Fire Prevention Workshops and Community Training	City of Monrovia
City of Palos Verdes Estates	Fire Safety Weed Abatement	City of Palos Verdes Estates
Emergency Preparedness In Calabasas (EPIC)	CPHOA Dead Tree Removal	Calabasas Park HOA
McKinley Children's Center	McKinley Wildfire Prevention Project	San Dimas
Westlake Village	Westlake Village Home-Hardening & Evacuation Education Campaign	Westlake Village
LA County Fire Dept.	Defensible Space and Zone Zero Outreach	LA County

Current Projects		
Organization	Description	Location
Claremont Hills Wilderness Park	Hazard Fuel Reduction	Claremont
Catalina Island Conservancy	Hazard Fuel Reduction	Santa Catalina Island
Puente Hills Habitat Preservation Authority	Puente Hills Fuels Reduction Project	Puente Hills
San Gabriel Valley Conservation Corps (SGVCC)	SGVCC Forest Resiliency and Youth Engagement (FRYE) Program	San Gabriel Valley
Social and Environmental Entrepreneurs Conservation Concierges	Conservation Concierges Project Sponsored by SEE	Chatsworth Manor
Catalina Island Conservancy	Vegetation Management to Reduce Hazardous Fuel Loads on Santa Catalina Island	Santa Catalina Island
City of Sierra Madre Fire Dept.	Sierra Madre Fire Department Fire Hazard and Fuel Reduction Program	Sierra Madre
California Society of American Foresters	Forestry Institute for Teachers	Various Locations
ArtCenter College of Design	California Wildfire Prevention Camping	Pasadena
City of Hidden Hills	City of Hidden Hills Hazardous Fuel Reduction 2022	City of Hidden Hills
City of Malibu	Malibu Wildfire Prevention Education	City of Malibu
Resource Conservation District of the Santa Monica Mountains	Defensible Space Virtual Learning Center	Santa Monica Mountains
City of La Habra Heights	City of La Habra Heights - Evacuation Route Risk Mitigation Program	City of La Habra Heights
Los Angeles Emergency Preparedness Foundation	Home Ignition Zone Safety Certification	City of Malibu
Calabasas FSC	Home Hardening /Inspections	City of Calabasas
SGVCOG CWPP	Planning	San Gabriel Valley
SGVCOG Prevention Outreach	Prevention Outreach	San Gabriel Valley
City of Hidden Hills	Multi-Phase Fuels Treatment & Reduction	City of Hidden Hills
County of Los Angeles Fire Department	Excavator Purchase for Fuels Reduction	LA County
Lopez Canyon	Hazardous Fuel Reduction	Lopez Canyon
Boy Scouts of America - Camp Josepho	Defensible Space Fuels Reduction	Pacific Palisades
City of Montebello Fire Dept	Wildfire Fuels Reduction and Public Education	City of Montebello
Mount Saint Mary's University	Wildfire Prevention/Fuels Reduction	Los Angeles City
Rolling Hills Estates	Hawthorne Blvd Fuels Reduction Project	Rolling Hills Estates
Resource Conservation District of the Santa Monica Mountains	HIZEP Home Ignitions Zone Program	Santa Monica Mountains
Glendale Fire Dept	Fire Reduction/Brush Abatement	City of Glendale
LA County Fire Dept.	Golden Spotted Oak Borer Forest Health Grant	Green Valley
City of Bradbury	Creation of CWPP	City of Bradbury
LA County Fire Dept.	VMP Fuels Reduction Project	Tonner Canyon-Diamond Bar
LA County Fire Dept.	Annual Motorway Maintenance	LA County

Engineering and Structure Ignitability

All newly constructed homes in the Fire Hazard Severity Zone (FHSZ) are subject to strict construction guidelines. Metal mesh with openings no greater than one-eighth inch is required over all attic vents to prevent or limit ember intrusions. All eaves must be “boxed in,” limiting susceptible exposed wood. Windows must be one-hour fire-rated, which means they can withstand one hour of heat from a wildfire before breaking. These are just a few specific preventive methods reducing structure damage and loss that are contained in the LA County Building Code.

FORESTRY DIVISION



Since its inception in 1911, the Department’s Forestry Division has been involved in conservation and natural resource protection through its forestry programs. The Division is comprised of three sections: Operations, Natural Resources, and Defensible Space. Forestry Division employees serve citizens by using acquired knowledge to preserve and enhance the environment for the benefit of all residents of LA County. The Division is responsible for reviewing environmental documents related to development and protection of Oak tree resources, development of vegetation management projects, coordination of wildland fire planning, enforcement of the Department’s Defensible Space Program, fuel modification plan review, FSC support, and California Strategic Fire Plan implementation.

As LA County’s population increases, further expansion of residential areas into the WUI is inevitable. Panoramic views, wildlife, fresh air, and solitude are just a few reasons people choose to live in wildland areas of LA County. Rewards may be numerous, but the increased risk of wildland fires, subsequent flooding and erosion pose a serious threat to life and property.

NATURAL RESOURCES SECTION

Fire Plan Unit

The Forestry Division’s FPU is in charge of implementing the California Strategic Fire Plan (drafted by the CAL FIRE and the Board of Forestry) and the Los Angeles County Strategic Fire Plan in LA County. The planning process defines a level of service, 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 FPU works with communities and organizations across LA County to limit fire risk in WUI areas. The FPU focuses on educational programs, development, and enforcement of LA County fire code in the FHSZ, as well as pre-fire planning, vegetation management, defensible space, environmental review, and fuel modification programs. These programs concentrate on awareness and mitigation of fire causes, fire spread potential,

and the total costs and effects of fire damage associated with protection of life, property, and the environment. The FPU coordinates programs and activities with the intent of creating efficient and timely pre-fire management projects.

Vegetation Management Program

The Vegetation Management Unit (VMU) assists with planning and implementing projects using the Board of Forestry California Vegetation Treatment Program and CAL FIRE Vegetation Management Program. This unit helps the Pre-Fire Engineer plan vegetation treatments to reduce wildfire risk while ensuring compliance with the California Environmental Quality Act (CEQA).

The VMU works closely with the Air and Wildland Division's Prescribed Fire Office to implement projects outlined in this fire plan (aligning with the Department's priority areas) to reduce hazardous vegetation around WUI communities, to construct fuel breaks, and to restore healthy ecological fire regimes.

Environmental Review Unit

The Forestry Division's Environmental Review Unit (ERU) collaborates with the Los Angeles County Department of Regional Planning (DRP) in implementing environmental ordinances. ERU personnel review all County Oak tree permit applications submitted through the DRP and they will develop implementation recommendations. Additionally, unit personnel produce environmental documentation and recommendations, such as, non-significant impact documents, negative declarations, and mitigation measures consistent with CEQA mandates for construction developments and projects. The ERU ensures the Department's Forestry Division statutory responsibilities are addressed in the project planning phase.

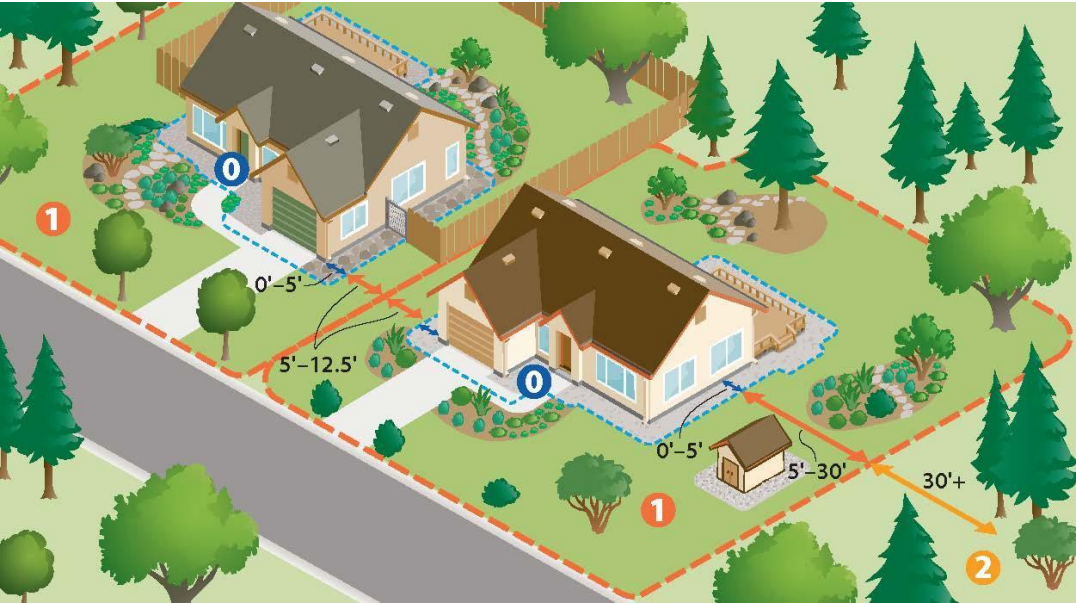
DEFENSIBLE SPACE SECTION

Defensible Space Program

The Defensible Space Program is a joint effort between the Department and the ACWM Weed Abatement Division. This unified enforcement legally declares improved and unimproved properties a public nuisance, and where necessary, requires the clearance of hazardous vegetation. These measures create "Defensible Space" for effective fire protection of life, the environment, and property. The Department's DSU enforces the Fire Code regarding clearance on improved parcels, coordinates inspections and compliance efforts with fire station personnel, and provides annual defensible space training to station personnel. The DSU collaborated with CAL FIRE database developers to ensure consistent reporting.

Existing homes in the FHSZ are inspected annually by fire personnel. These inspections are performed in the spring and summer to evaluate properties for adequate defensible space. LA County requires more than the State's 100 feet of clearance and may extend fire hazard reduction up to 200 feet depending on aspect, slope, and other environmental conditions. Some inspection guidelines require no vines on structures or large trees

within the first 30 feet of the home. Inspectors look for adequate vegetation removal and breaks in fuel continuity and density. Depending on slope direction from the structure, fire intensity can be mitigated by decreasing density and clearing vegetation. If a property is found to be non-compliant, LA County has a process to inspect property and may impose fines and fees for inadequate fire hazard reduction. A non-compliant property requiring clearance by Los Angeles County Department of Agricultural Commissioner/Weights and Measures (ACWM) will be charged an administrative fine and assessed an abatement enforcement fee.



Fuel Modification Unit

The Forestry Division’s FMU objective is to create defensible space necessary for effective fire protection in newly constructed (or remodeled 50% or greater) homes within the Department’s FHSZ. The FMU provides guidelines and reviews landscape plans for approval before construction or additions to a structure. Fuel modification reduces radiant and convective heat and provides valuable defensible space for firefighters to make an effective stand against an approaching fire front. A fuel modification plan identifies specific zones subject to fuel modification within a property. Once homes are constructed, an inspection is performed confirming implementation of the approved landscape plan. After the occupancy inspection fuel modification parcels are moved into the Defensible Space Inspection Program.



Zone Zero Landscapes

A fuel modification zone is a restricted or limited planting area around a structure where vegetation (ornamental and/or native) has been modified and/or partially or totally replaced with drought-tolerant, low-fuel-volume plants. Zones may extend to 200 feet from structures. Fuel Modification Guidelines can be found at:

[LACoFD Forestry Fuel Modification](#).



Fuel Modification Example Landscapes

FIRE SUPPRESSION PHILOSOPHY

Life safety is the number one priority for fire suppression efforts: during a WUI fire, protection of firefighters and civilians is paramount followed by values at risk and natural resources. Rules and guidelines have been developed protecting firefighters and the public. These guidelines can help the public understand why firefighters perform specific tactics during wildfires.

Some of these guidelines are: *The Ten Standard Firefighting Orders, the Eighteen Watch-Out Situations, the Risk Management Process, Primary, Alternate, Contingent, Emergency, and the WUI Guidelines*. In extreme wildfire conditions, such as a Santa Ana wind event, it can be extremely unsafe and unrealistic for firefighters to make an effective defensive stand on ALL values at risk in the WUI area.

With all wildfires, specific strategic and tactical actions must take place. From initial dispatch to containment of a wildfire unified command has become best practice. To accomplish this, all fire agencies in LA County and the State use the National Incident Management System.

When a wildfire grows beyond initial attack, particularly in the WUI, two primary focuses are perimeter control and structure defense. These are identified by the Incident Commanders and developed in the Incident Action Plan. In addition, firefighting resources are assigned in the Operational area for tactical patrol to monitor values at risk after the fire front has passed.

THE FIRE PROTECTION SYSTEM

Although fire is a necessary component of local ecosystems, in most cases, unchecked wildfire is no longer a viable fire/fuel management option in LA County. This is due to population growth and assets at risk having interfaced and intermixed with wildlands to an extent that uncontrolled fires must be quickly extinguished. Therefore, the main emphasis of wildfire protection in LA County is an aggressive initial response firefighting strategy.

DIVISION/BATTALION/PROGRAM PLANS

The FPU assessment process utilizes weather, assets at risk, fuels and input from various regions, bureaus, divisions, and battalions to determine priority areas and prioritize hazard fuel reduction projects. 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 there is a significant need for fuels reduction work throughout foothill communities, especially in WUI areas adjacent to local mountain ranges, such as, the Santa Monica Mountains, the Angeles National Forest, Verdugo, and San Rafael Mountains.

Each battalion was consulted to determine pre-fire management projects considered important in reducing wildfire potential and impacts. Projects are assigned a relative ranking by the Vegetation Management Unit. Theoretically, a project with the highest hazard would have the first priority.

Nonetheless, there are a number of circumstances where projects less than the highest priority are given preference. Some of these circumstances include the following: the Department's current commitment to an existing pre-fire project, community participation necessary to complete a project, the preparatory work and ease of instituting the project, the project type, a required match for grant-funded projects and the established commitment between the Department, Fire Safe Councils, and communities. The FPU's primary function is to identify, propose, and support Countywide fire hazard reduction projects.



Defensible Space Before Mitigation

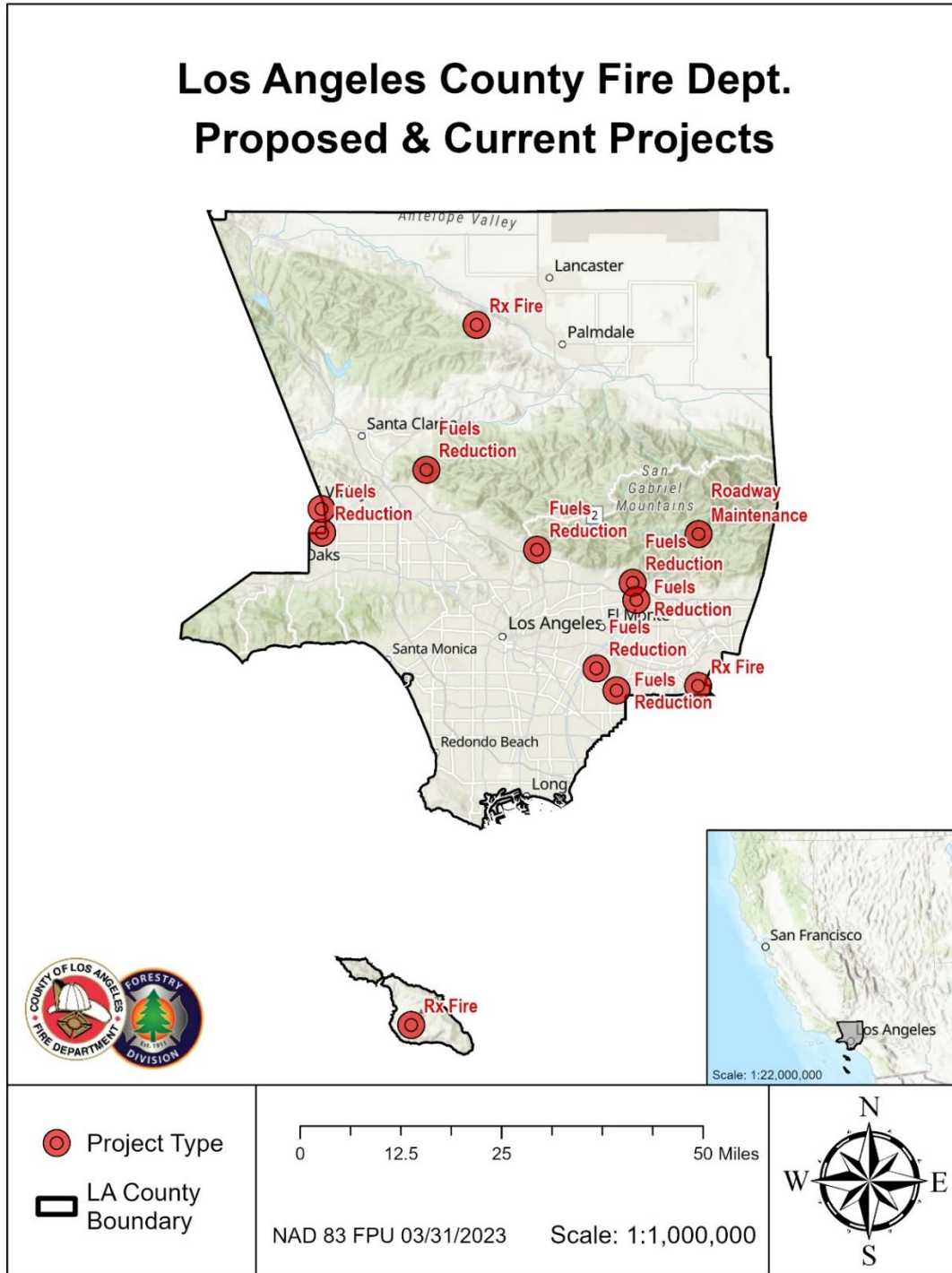


Defensible Space After Mitigation

APPENDIX A: PRE-FIRE PROJECTS

Program	Project Name	Project Status	Treatment Footprint Acres	Treatment Footprint Miles
Fire Plan	2021/22 Storm Hazard Tree Removal	Active		
Fire Plan	Bradbury-Duarte Hazardous Fuels Reduction Project	Active	53.19	
Fire Plan	California Wildfire Prevention Campaign	Active		
Fire Plan	Catalina Fuel Break	Planned		
Fire Plan	Catalina Hazardous Fuel Reduction Project	Active	201.44	
Fire Plan	Catalina Motorway System	Active	36.33	23.69
Fire Plan	Chilao RX Burn-USFS	Active	15.50	
Fire Plan	City of Hidden Hills Hazardous Fuel Reduction 2022	Active	52.99	
Fire Plan	City of La Habra Heights - Evacuation Route Risk Mitigation Program – Roadside Clearance	Active	180.70	
Fire Plan	Claremont Hills Wilderness Park & Community Wildfire Protection Plan	Active	1,490.44	
Fire Plan	Conservation Concierges Project Chatsworth	Active	1,859.10	
Fire Plan	Defensible Space Virtual Learning Center	Active		
Fire Plan	Del Valle Live Fire Training	Active	2.02	
Fire Plan	East End Motorway System	Active	206.99	85.56
Fire Plan	Forestry Institute for Teachers	Active		
Forest Health	Goldspotted Oak Borer Monitoring and Mitigation Program	Active	1,267.85	
Fire Plan	Guidance for Sustainable Defensible Space Landscaping in the SMMNRA and Southern California	Active		
Fire Plan	Helispot Fuel Break	Active	11.59	
Fire Plan	High Country Motorway System	Active	335.65	70.85
Fire Plan	Home Ignition Zone Safety Certification	Active		
Fire Plan	LAC Hazardous Fuel Reduction BN5 and Recovery Within Woolsey Burn Scar	Cancelled	19.62	
Fire Plan	Malibu Lake FSC Projects	Complete		
Fire Plan	Malibu Motorway System	Active	81.51	33.60
Fire Plan	Malibu Wildfire Prevention Education	Active		
Fire Plan	North Topanga FSC Projects	Complete		
Fire Plan	Pitchfork Ranch RX	Active		
Fire Plan	Public Education - Malibu Unit Hardened Structure: Interpretive Landscape Installation	Planned		
Fire Plan	Puente Hills Fuels Reduction Project	Active	120.68	
Fire Plan	SGVCC Forest Resiliency and Youth Engagement (FRYE) Program	Active	99.18	
Fire Plan	Santa Clarita Motorway System	Active	163.88	68.06
Fire Plan	Sierra Madre Fire Department Fire Hazard and Fuel Reduction Program	Active		
VMP	Tonner Canyon South VMP	Active	44.37	
Fire Plan	USFS ANF Agency Assist with RX burn on ANF	Active	104.73	
Fire Plan	Vegetation Management to Reduce Hazardous Fuel Loads on Catalina Island	Active	1,639.43	
Fire Plan	JPL HQ Fuel Reductions & Defensible Space Project	Planned	50	
Totals:			8,037.19	281.76

Fuel Reduction Projects in Los Angeles County:



Map by H. Hammoud, 2023

11 Identified & Mapped Active and Proposed Wildfire Prevention Projects within LA County

APPENDIX B: DEPARTMENT GOALS AND OBJECTIVES

The Department's mission statement is to protect lives, property, and the environment 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, the Department will continue to support and align with the intent of the 2010 California Strategic Fire Plan by addressing identified objectives. The goals of the Department's 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.
- Develop battalion specific maps identifying prioritized values and assets and at-risk communities.
- Develop battalion specific strategies and tactics within the Department's Strategic Fire Plan.
- Determine large scale fire prevention strategies which parallel the County's land use planning strategies.
- Continue to reach out and assist 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: 2022 STATISTICAL SUMMARY



County of Los Angeles
Fire Department
 Fire Chief Anthony C. Marrone

2022 STATISTICAL SUMMARY

FIRE DEPARTMENT — Three Year Data 2020-2022

	2022	2021	2020
Acreage Burned	4,946	2,261	61,850

FIRE INCIDENTS			
Structures	2,722	2,943	2,430
Vehicles	1,544	1,646	1,789
Rubbish	4,015	4,482	3,379
Brush / Grass	593	753	803
Outside Storage	276	330	345
Misc. Property	1,125	1,219	1,067
TOTAL	10,275	11,373	9,813

EMERGENCY MEDICAL RESPONSES			
TOTAL	332,531	312,550	307,025

OTHER INCIDENTS			
False Alarms	10,326	13,478	20,237
Mutual Aid Provided	2,260	2,144	2,066
Haz-Mat	3,128	677	629
Misc. Incidents	77,093	63,702	39,747
TOTAL	92,807	80,001	62,679
TOTAL INCIDENTS	435,613	403,924	379,517

Fire Loss in Dollars 2020-2022

	2022	2021	2020
Property or Structure	95,444,395	\$ 110,734,401	\$ 148,147,736
Vehicle Contents	19,238,401	\$ 17,518,706	\$ 19,566,959
Misc. Property	1,436,421	\$ 1,759,367	\$ 5,527,018
Total Dollar Loss	116,119,217	\$ 130,012,474	\$ 173,241,713

LIFEGUARD - Three Year Data 2020-2022

	2022	2021	2020
Ocean Rescues	10,714	9,286	9,666
Medical Calls	14,066	13,303	15,134
Boat Rescues (Distress)	438	435	523
Missing Persons	631	634	685
O2 Therapy	121	112	92
Drownings	3	3	3
Beach Attendance	76,533,245	51,869,968	62,963,309

4,038,776 Residents
 1,258,640 Housing Units
 60 District Cities and all
 Unincorporated Communities
 2,311 Square Miles

DIVISION I

Battalions 7, 14 & 18 – 10 Cities
 CARSON GARDENA HAWTHORNE HERMOSA BEACH LAWDALE LOMITA PALOS VERDES ESTATES RANCHO PALOS VERDES ROLLING HILLS ROLLING HILLS ESTATES

DIVISION II

Battalions 2 & 16 – 9 Cities
 AZUSA BALDWIN PARK BRADBURY CLAREMONT COVINA DUARTE GLENORA IRVINDALE SAN DIMAS

DIVISION III

Battalions 4, 6 & 22 – 2 Cities
 LA CAÑADA FLINTRIDGE SANTA CLARITA

DIVISION IV

Battalions 8, 9 & 21 – 12 Cities
 ARTESIA BELLFLOWER CERRITOS HAWAIIAN GARDENS LA HABRA LAKEWOOD LA MIRADA NORWALK PARAMOUNT PICO RIVERA SIGNAL HILL WHITTIER

DIVISION V

Battalions 11 & 17 – 2 Cities
 LANCASTER PALMDALE

DIVISION VI

Battalions 13 & 20 – 7 Cities
 CUDAHY HUNTINGTON PARK INGLEWOOD LYNWOOD MAYWOOD SOUTH GATE VERNON

DIVISION VII

Battalions 1 & 5 – 6 Cities
 AGOURA HILLS CALABASAS HIDDEN HILLS MALIBU WEST HOLLYWOOD WESTLAKE VILLAGE

DIVISION VIII

Battalions 12, 15 & 19 – 5 Cities
 DIAMOND BAR INDUSTRY LAPUENTE POMONA WALNUT

DIVISION IX

Battalions 3 & 10 – 7 Cities
 BELL BELL GARDENS COMMERCE EL MONTE ROSEMEAD SOUTH EL MONTE TEMPLE CITY



2022 STATISTICAL SUMMARY

PERSONNEL

Chief Officers	122	Pilots	9
Captains	717	Administrative Professionals	763
Firefighter Specialists	763	Lifeguards	177
Firefighter Paramedics	747	Seasonal Recurrent	561
Firefighters	649	Dispatchers	91
Firefighter Trainees	54	Foresters	32
Call Firefighters	48	Haz Mat Specialists	87
Fire Suppression Aides (Paid)	139	TOTAL PERSONNEL	4,959



AIR & WILDLAND DIV.

Air Operations

Brush Fire Responses	244
EMS Helicopter Transports	1081
Facilities	5
Aircraft Mechanics	18
Hoist Rescues	93
Gallons Dropped	384,265

Helicopters	10
Bell 412	5
Firehawk	5

Fire Suppression Camps	9
Paid	4
Correctional	5

Fire Suppression Crews	16
Paid	7
Correctional	9

Heavy Equipment	49
Dozers	10
Dozer Transport Trucks	10

Fuel-Tender	1
Heli-Tenders	9
Excavator	1
Heavy Dump Truck	1
Track Loader	3
Rubber Tire Loader	3
Other	11

EMERGENCY OPERATIONS

Battalions	22	Hazardous Materials Squads	4
Fire Stations	177	USAR Squads	2
Engine Companies	228	Emergency Support Teams	1
Type I	175	Swift Water Rescue Units	6
Type III	11	Fire Boats	2
Type VI	42	Foam Units	3
Truck Companies	34	Mobile Air/Light Units	3
Light Forces	3	Water Tenders	10
Quints	31		

Paramedic Units	112	RESERVE EQUIPMENT	
Paramedic Air Squads	3	Engines	61
Assessment Engines	28	Trucks/Quints	12
Assessment Quint/Light Force	1	Squads	36
Paramedic Engines	5	Battalion Command Vehicles	21
Paramedic Squads	75		

RESERVE EQUIPMENT

Engines	61
Trucks/Quints	12
Squads	36
Battalion Command Vehicles	21

LIFEGUARD DIVISION

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

HEALTH HAZ MAT DIV.

Emergency Responses	893
Response Teams	3

FORESTRY DIVISION

Fuel Modification Plans Reviewed	3,888
Brush Clearance Inspections	51,000



LOS ANGELES COUNTY FIRE DEPARTMENT BRUSH FIRE LOG 2022

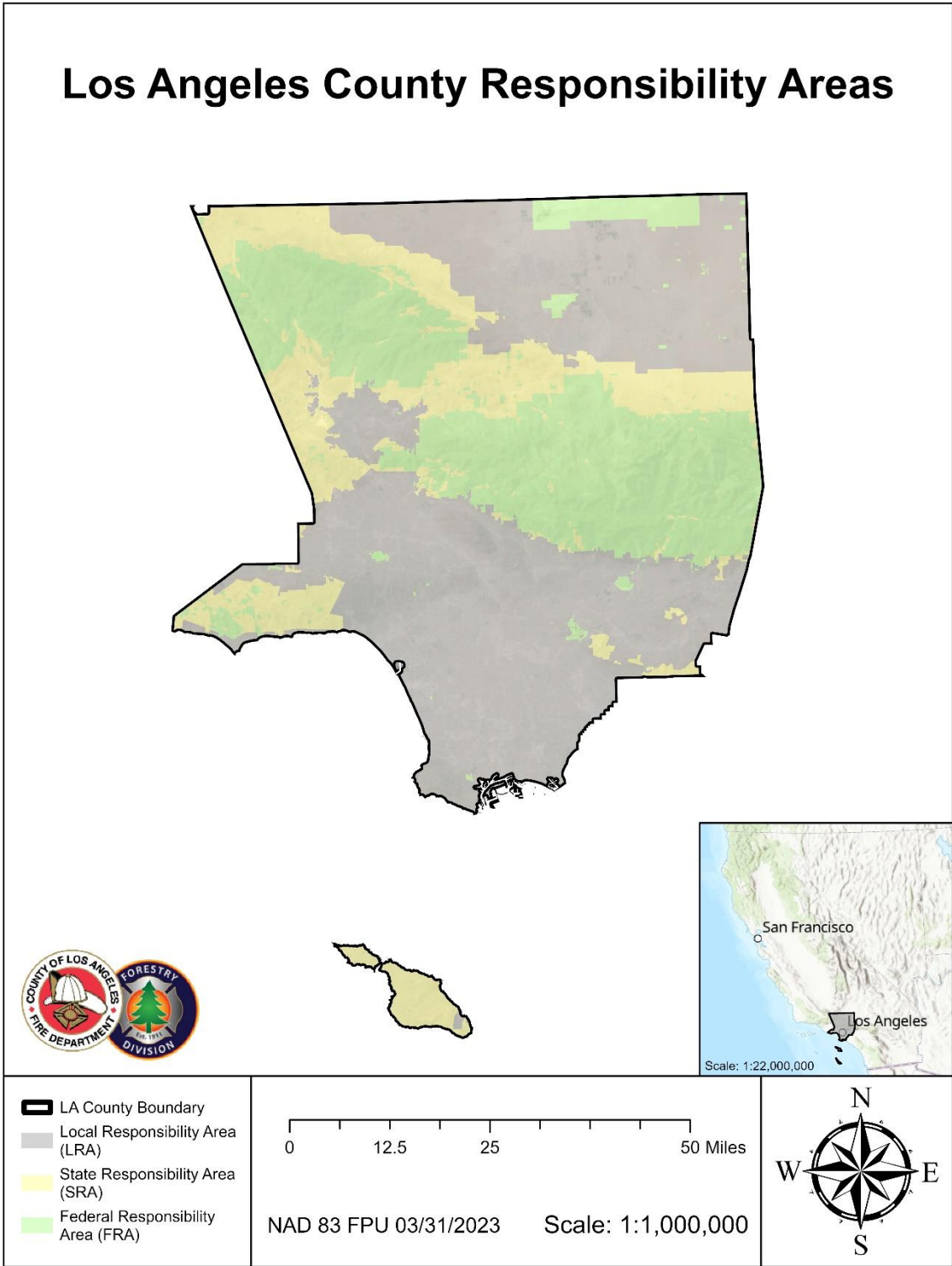
NO.	NAME	INC. #	JURIS.	DATE	S.R.A. *	S.R.A. BUF. **	C.F.P.D. ***
1	SYCAMORE FIRE	051618	FS 40	02/10/22	0.0	3.7	3.7
2	CANYON FIRE	115026	FS 75	04/06/22	2.6	0.0	2.6
3	TURNBULL FIRE	159045	FS 91	05/13/22	0.1	0.0	0.1
4	STUNT FIRE	164526	FS 67	05/17/22	0.1	0.0	0.1
5	BARREL FIRE	216308	FS 24	06/29/22	0	7.6	7.6
6	BIG FIRE	222988	FS 67	07/04/22	0.3	0.0	0.3
7	CUT OFF FIRE	230119	FS 119	07/10/22	0.0	2.5	2.5
8	FRED FIRE	236352	FS 65	07/15/22	0.0	0.3	0.3
9	HUGHES FIRE	263997	FS 77	08/06/22	7.9	0.0	7.9
10	SAM FIRE	269184	FS 77	08/10/22	125.3	0.0	125.3
11	QUAIL FIRE	278058	FS 149	08/17/22	60.4	0.0	60.4
12	TIERRA FIRE	222780	FS 24	08/17/22	2.1	0.0	2.1
13	RIDGE FIRE	280336	FS 97	08/18/22	0.0	4.8	4.8
14	GULCH FIRE	292411	FS 97	08/29/22	28.5	86.2	114.7
15	ROUTE FIRE	294803	FS 149	08/31/22	4,710.5	516.6	5,227.1
16	CHESEBORO FIRE	304524	VARIOUS	09/07/22	1.1	0.0	1.1
17	MUNZ FIRE	313159	FS 79	09/13/22	1.8	0.0	1.8
18	LOBO FIRE	326174	FS 68	09/24/22	0.0	10.8	10.8
19	OAKWILDE FIRE	334495	FS 82	10/01/22	0.0	2.1	2.1
20	PYRAMID FIRE	358988	FS 77	10/21/22	5.7	1.0	5.1
				TOTAL	4,946.4	635.6	5,580.4

*TOTAL AREA IN ACRES WITHIN THE STATE RESPONSIBILITY AREAS (S.R.A.).

**TOTAL AREA IN ACRES WITHIN A HALF-MILE BUFFER OF THE STATE RESPONSIBILITY AREA (S.R.A. BUF.).

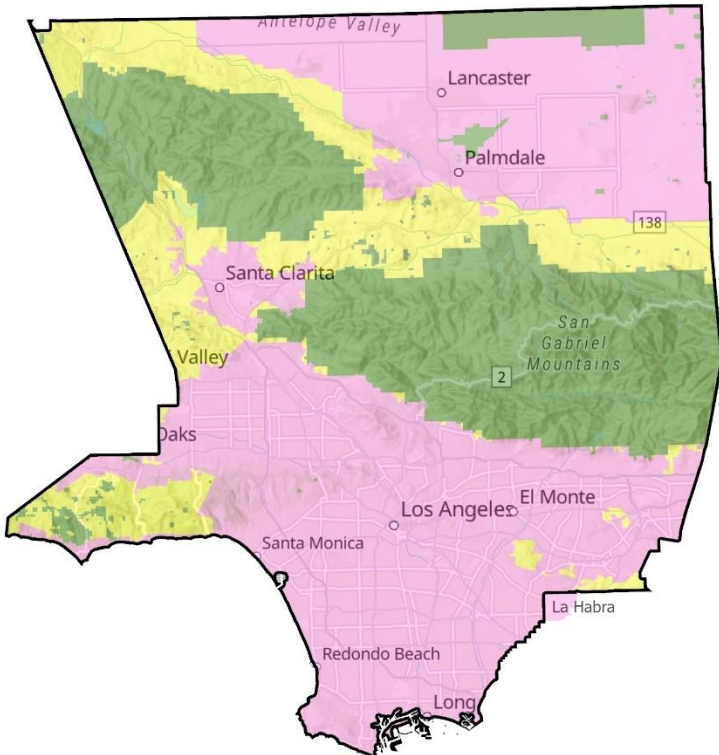
***TOTAL AREA IN ACRES WITHIN THE CONSOLIDATED FIRE PROTECTION DISTRICT (C.F.P.D.).

EXHIBITS: MAPS



Map by H. Hammoud, 2023

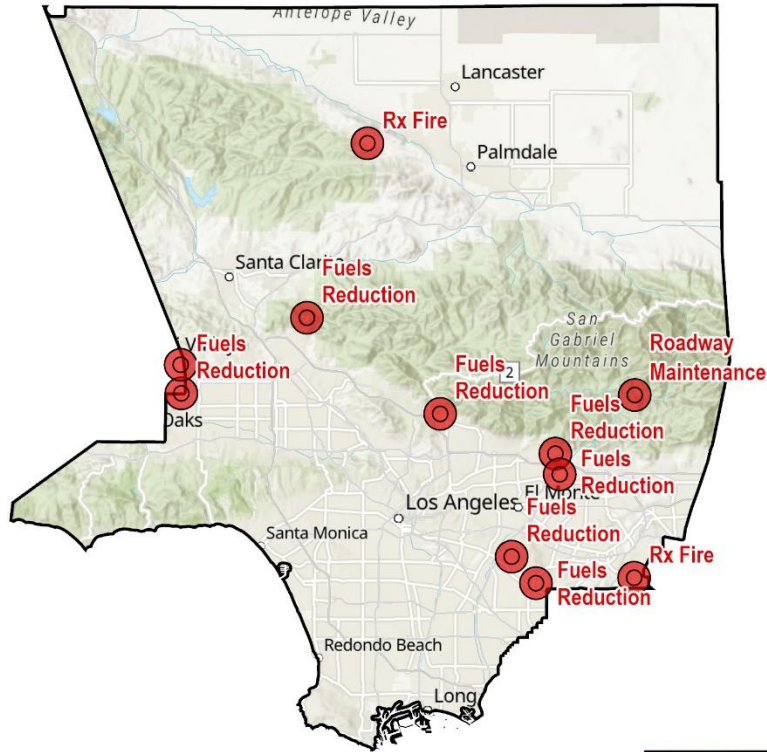
Los Angeles County Direct Protection Areas





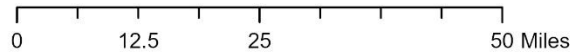
<p> LA County Boundary</p> <p>DPA Class</p> <ul style="list-style-type: none"> Federal State Local 	<p>NAD 83 FPU 03/31/2023 Scale: 1:1,000,000</p>	
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Map by H. Hammoud, 2023

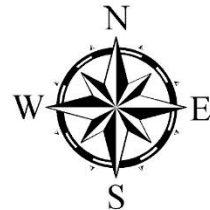
Los Angeles County Fire Dept. Proposed & Current Projects



-  Project Type
-  LA County Boundary



NAD 83 FPU 03/31/2023 Scale: 1:1,000,000



Map by H. Hammoud, 2023

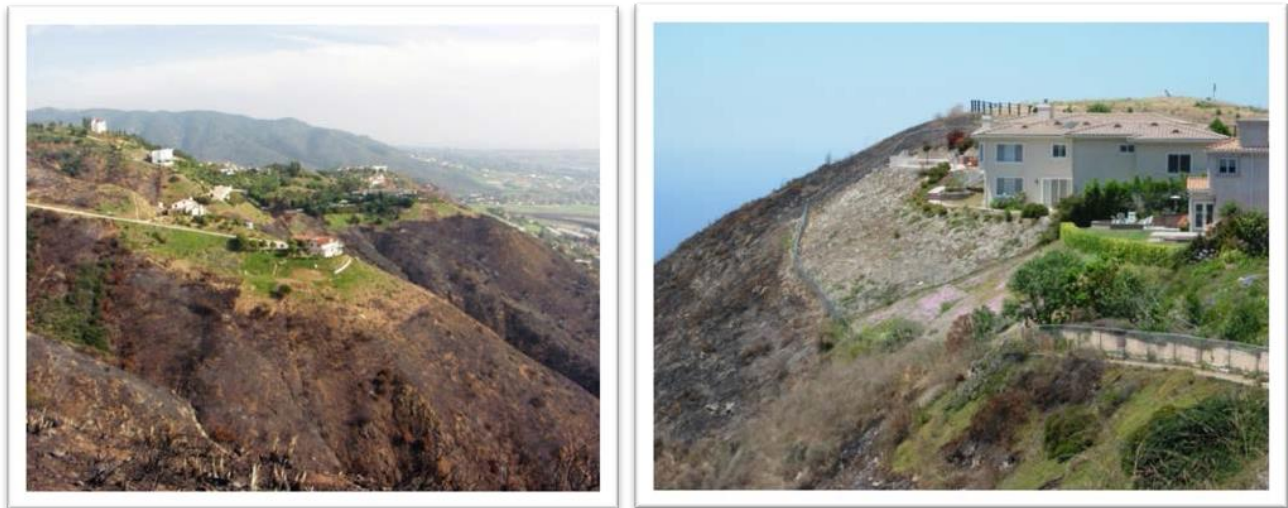
2022 ACCOMPLISHMENTS

ANNUAL REPORT OF UNIT ACCOMPLISHMENTS

In 2022, the Department completed 58,123 Defensible Space Inspections and issued 964 Official Inspection Reports for non-compliant parcels. There were 908 violations cleared by homeowners upon the second inspection by fire station personnel. The rest were forwarded to the Forestry Division DSU for non-compliance follow-up. The DSU consulted with the property owners and 56 non-compliance letters were sent. Forty-three properties were cleared by owners, 12 structures were cleared by the ACWM, Weed Abatement Division.

The Department's Fuel Modification Unit reviewed 1,857 Fuel Modification Plans and performed over 1,052 occupancy inspections on previously approved Fuel Modification Plans.

The Department's Air and Wildland Division brushed and maintained roughly 75 miles of motorways and fire roads with the assistance of the Heavy Equipment Section. The Fire Suppression camps, both paid and correctional, treated 241 acres, which protected 425,123 structures, 99 communities, and involved approximately 4,204 crew and personnel hours.



Defensible Space Protection from Wildfire