

STRATEGIC FIRE PLAN

SAN DIEGO UNIT



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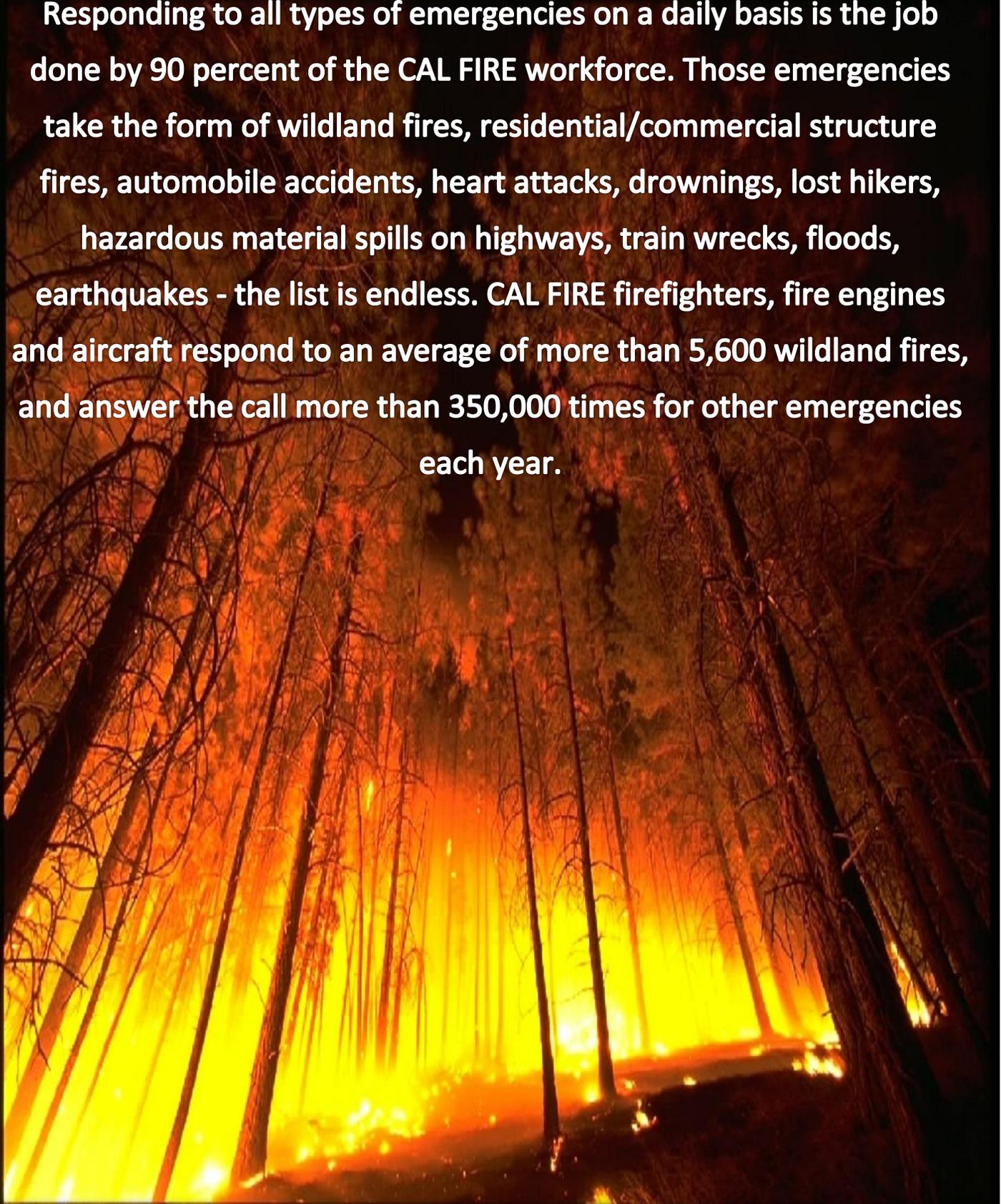
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Responding to all types of emergencies on a daily basis is the job done by 90 percent of the CAL FIRE workforce. Those emergencies take the form of wildland fires, residential/commercial structure fires, automobile accidents, heart attacks, drownings, lost hikers, hazardous material spills on highways, train wrecks, floods, earthquakes - the list is endless. CAL FIRE firefighters, fire engines and aircraft respond to an average of more than 5,600 wildland fires, and answer the call more than 350,000 times for other emergencies each year.



SIGNATURES

The San Diego Unit Strategic Fire Plan was:

- Was developed under the guidance of the San Diego Unit Core Planning Group with support of the Units Battalions and Programs.
- Consults with Federal, State, County and Local agencies and stakeholders identified throughout the plan.
- Identifies and prioritizes pre and post fire management strategies and tactics in an effort to reduce the loss of values at risk to the San Diego Unit.
- Is intended for use as a planning and assessment tool only. It is the responsibility of those implementing the projects to ensure that environmental compliance and permitting processes are complete.

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Unit Chief

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EXECUTIVE SUMMARY



The need for wildfire planning is no more evident than the devastating footprint from the 2003 and 2007 Fire Sieges in San Diego County. These fire sieges left major lingering impacts – perhaps for decades. Over half a million acres were burned, twenty-five lives were lost and many more were injured, thousands of homes and other structures were damaged or destroyed. The loss of personal property and keepsakes were un-measurable, business and traffic were significantly disrupted, historic and prehistoric cultural resources were damaged, carbon was added to the atmosphere, air and water quality was impacted for months, maybe years, wildlife habitat was altered, and forest succession was significantly setback at least 100 years. These fires not only effected San Diego, but California and the rest of the United States as well, as the cost to taxpayers reached into the hundreds of millions of dollars for fire suppression. Pre and post wildfire planning is paramount to minimize, and possibly, avoid these devastating impacts in the future.

The San Diego Unit Fire Plan (Unit Fire Plan) represents a local wildfire planning document that tiers under the [2010 California Strategic Fire Plan](#) (Strategic Fire Plan). Directed by the Public Resources Code 4114-4130, the Strategic Fire Plan was developed in partnership with the California Board of Forestry and Fire Protection (Board) and the California Department of Forestry and Fire Protection (CAL FIRE). The statewide plan outlines seven broad goals and fifty-seven objectives with the vision to create “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.” CAL FIRE Administrative Units and Contract Counties are required to develop work plans to implement the Strategic Fire Plan. Essentially, the San Diego Unit Fire Plan is the work plan on how the San Diego Unit will implement and meet the goals and objectives identified in the Strategic Fire Plan.

The San Diego Unit staff selected sixteen of the fifty-seven objectives from all seven goals and intends to implement these objectives over the course of the next eight years (2011-2018). These objectives were selected based on the knowledge that the Unit is already working towards these objectives or intends to accomplish these objectives. Moreover, these *objectives* can only be accomplished through the partnerships with local, county, and federal agencies, fire safe councils, stakeholders, and the public – and the Unit is already actively involved with these partners.

Utilizing the statewide template, the San Diego Fire Plan presents six sections:

- Section I: Provides an overview of the Unit and includes identifying the selected goals and objectives from the Strategic Fire Plan
- Section II: Describes the collaboration efforts by the Unit
- Section III: Briefly describes the priority landscapes
- Section IV: Identifies fire prevention, training, and pre-fire management activities and strategies
- Section V: Identifies the correlation of ignitions by cause and affiliated statistics
- Section VI: Provides the tactical information to be implemented by the battalions and programs

While the first three sections provide basic information describing the background work to support the implementation of the Unit’s goals and objectives, the last three sections are the key sections outlining the activities and projects. Essentially, these last three sections describe the measureable progress towards meeting the goals and objectives. Appendix A lists the Unit’s 2015/2016 completed, priority, and in progress projects. Supplement information may be added in the Addendum section.

Lastly, like the Strategic Fire Plan, the Unit Fire Plan has a planning horizon through 2018. The first operational period of the Unit Fire Plan was set as July 2012 – June 2016 and the second operational period as July 2016 – June 2018. The Unit intends to provide annual progress reports (second progress report due June 2017). Nevertheless, the Unit should review the entire document in July 2017 to ensure consistency with the Unit’s mission, vision and priorities, as well as supporting the goals and objectives of the statewide plan.

SECTION I - UNIT OVERVIEW

A: UNIT GOALS AND OBJECTIVES

Integrating local planning with statewide planning is fundamental to the determining the Units goals and objectives. After the devastating fires, several fire planning actions and activities were identified and now are in progress to minimize impacts another major wildfire occur. Notably, the Board of Supervisors for the County of San Diego directed the formation of the San Diego County Fire (SDCF) and contracted with CAL FIRE to provide the leadership and organization support for SDCF. The Forest Area Safety Taskforce became more committed to reducing impacts from wildfires. Coordinated interagency training has facilitated better trained paid and volunteer firefighters. Coordination between local, county and federal fire agencies has improved. Ignition resistance building standards have been adopted by the county. Fire prevention education has increased public awareness of the dangers from wildland fire. Moreover, in partnership with San Diego County, defensible space inspections have increased and the County abatement program enforces the defensible space law when a property owner fails to comply. And these are just a few of the key changes that were implemented.

At the statewide level, wildland fire planning is more than just a focus on treating hazardous fuels – it is about the whole system of wildland fire planning and thinking about where and how people live and co-exist within wildfire prone environments. The Strategic Fire Plan looks at wildland fire planning from an integrated approach by focusing on stakeholders, assets at risk, governmental services and jurisdiction, and as well as both the fire prevention and suppression efforts. The integrated concepts framing the goals of the Strategic Fire Plan are: 1) improve the availability and use of information on hazard and risk assessment, 2) engage in land use planning, 3) develop shared vision and planning at the local/community level, 4) improve fire resistance and survivability for the “assets at risk” – such as homes and neighborhoods, 5) develop shared vision with all levels of fire protection jurisdictions and landowners, in terms of fuels management activities and practices, 6) determine the appropriate level of fire suppression service and related services, and 7) provide for post fire recovery. Each goal is intended to build upon the previous one, yet can be implemented simultaneously or independently.

To integrate both the local and statewide level planning key chief officers were appointed to the Core Planning Group. This group consisted of chief officers who have advance knowledge of fire behavior, especially about fire behavior under adverse conditions, fire ground operations, and natural resource management. Moreover, the group understands the Departmental and Unit policies, has knowledge of local and federal government processes and policies, and knows the values of partnerships with individuals, stakeholders, and other agencies to provide the best customer service to the public. To that end, the group, after reviewing the Strategic Fire Plan’s seven goals and fifty-seven objectives, selected objectives from each of the goals that are relevant to the Unit. Nearly all the selected goals and objectives were based on the knowledge that the Unit actively supports the objectives or that progress is being made towards meeting these objectives.

In terms of initiating projects and activities, the pre-work begins at the Battalion levels. Field Battalions are the key “work unit” for coordinating and working closely with property owners, community groups, fire safe councils, and other agencies. Through this coordination process projects and activities are identified that best serve the needs of the public for wildland fire protection. Essentially, the public and stakeholders are involved at the grassroots level. Once a project has been vetted through this process, then Battalion Chiefs propose projects to the Unit. Pre-Fire/Resource Management staff assists in the planning and layout for those projects that are related to fuels treatment. Battalions typically focus on proposing fuels treatment projects in or near community areas that facilitate community protection. Environmental review is completed on all fuels treatment project through the Department’s existing Vegetation Management Program or through the departmental guidelines to comply with California Environmental Quality Act.

The following table is the list of goals and objectives the San Diego Unit intends to implement over the next 8 years:

San Diego Unit: Goals and Objectives – from the 2010 Strategic Fire Plan	
Goal I	Identify and evaluate wildland fire hazards and recognize life, 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.
Objective c:	Provide regular updates to the Department's Very High Fire Hazard Severity Zone maps.
Objective e:	Update fire history information and re-evaluate existing fire prediction models to obtain composite fire threat across all ownerships.
Objective h:	Engage and participate with local stakeholder groups (i.e., fire safe councils and others) to validate and prioritize the assets at risk.
Goal II	Articulate and promote the concept of land use planning as it relates to fire risk and individual landowner objectives and responsibilities.
Objective c:	Engage in the development, review and adoption of local land use plans to ensure compliance with fire safe regulations and current building standards.
Goal II	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.
Objective c:	Collaborate with federal and local governments, other state agencies, fire service and other organizations, to maintain and improve emergency response plans.
Goal IV	Increase awareness, knowledge and actions implemented by individuals and communities to reduce human loss and property damage from wildland fires, such as defensible space and other fuels reduction activities, fire prevention and fire safe building standards.
Objective c:	Facilitate activities with individuals and organizations, as appropriate, to assist individual property owners in complying with fire safe regulations.
Objective e:	Increase the number and effectiveness of defensible space inspections and promote an increasing level of compliance with defensible space laws and regulations through the use of CAL FIRE staffing as available, public and private organizations, and alternative inspection methods.
Objective j:	Actively investigate all wildland fires. For those resulting from negligent acts, pursue appropriate civil and/or criminal actions, including cost recovery.
Objective k:	Analyze trends in fire cause and focus prevention and education efforts to modify behavior and effect change.
Goal V	Develop a method to integrate fire and fuels management practices with landowner priorities and multiple jurisdictional efforts within local, state and federal responsibility areas.
Objective a:	Increase support of landowner-initiated hazardous fuels reduction using all available authorities, including the Vegetation Management Program.
Objective h:	Support the availability and utilization of CAL FIRE hand crews and other CAL FIRE resources, as well as public and private sector resources, for fuels management activities, including ongoing maintenance.
Goal IV	Determine the level of fire suppression resources necessary to protect the values and assets at risk identified during planning processes.
Objective g:	Ensure all firefighters are provided the appropriate training, equipment and facilities necessary to successfully and safely meet the increasingly complicated and challenging fire and emergency response environment.
Objective h:	Continue to evaluate and implement new technologies to improve firefighter safety, situational awareness and emergency response effectiveness.
Goal VII	Address post-fire responsibilities for natural resource recovery, including watershed protection, reforestation and ecosystem restoration.
Objective a:	Encourage rapid post-fire assessment, as appropriate, and project implementation to minimize flooding, protect water quality, limit sediment flows and reduce other risks on all land ownerships impacted by wildland fire.
Objective c:	Effectively utilize available resources, including CAL FIRE hand crews, to accomplish restoration and protection activities.
Objective g:	Promote the maintenance of a native species seed bank and seedling production capacity to provide the availability of appropriate tree species for reforestation within all of the state's diverse seed zones.

B: UNIT DESCRIPTION

Located in the southernmost area of the Southern Region for the California Department of Forestry and Fire Protection, the San Diego Unit (Unit) encompasses both San Diego and Imperial Counties. Bordered by Mexico to the south, the Pacific Ocean to the west, Riverside and Orange Counties to the north and the state of Arizona to the east, the San Diego Administrative Unit covers over 5.5 million acres.



State Responsibility Areas, Federal Responsibility Areas, and Direct Protection Areas

The San Diego Administrative Unit is responsible for 1.2 million acres of State Responsibility Area (SRA) for wildland fire protection, while federal agencies are responsible for 2.4 million acres of Federal Responsibility Area (FRA), and local agencies are responsible for 1.9 million acres of Local Responsibility Area (LRA). In terms of coordinated wildland fire protection services (exchanging acres) the Unit has fire suppression responsibility for 1.4 million acres of State Direct Protection Area (State-DPA), while the federal agencies have responsibilities to protect 2.2 million acres of Federal Direct Protection Area (Federal-DPA).

Imperial County is included in the San Diego Administrative Unit boundary; however, the few private land holdings are surrounded by BLM lands (1,000 and 14,000 respectively). This relatively small area is mapped as State DPA.

Population, Wildland Urban Interface and Ownership

San Diego, a world class tourist destination, is a mixture of cosmopolitan/urban/rural development within the proximity of a wildfire prone environment. While Imperial County, dominated with commercial agriculture operations, supported by the Colorado River and All-American Canal, renewable energy, solar, and geothermal energy, is a desert region that rarely experiences wildland fires. The boundary between San Diego and Imperial Counties is a transitional area of sparse chaparral and desert vegetation that occasionally supports wildfires. Moreover, the San Diego-Imperial Counties region is the third most populated areas in California, and nearly every resident in San Diego County, and portions of Imperial County, has been directly or indirectly impacted by wildfires, and more specifically, by the 2003 and 2007 Fire Sieges in San Diego County.

Although the population of San Diego and Imperial Counties exceeds 3.3 million, most of the population lives in San Diego County and resides in metropolitan areas within 20 miles of the coastline. Whereas, the population that lives in Imperial County resides primarily in small towns and agriculture communities. Nevertheless, nearly a half a million people reside in approximately 170,000 housing units in the rural or “backcountry” communities; which are

identified SRA. Nearly all of these households are in San Diego County and are considered a part of the Wildland Urban Interface (WUI).

Public agencies own over 1.6 million acres in San Diego and Imperial Counties. Nearly one third of the area in the Unit is held as public lands (city, county, state or federal governments). See table below:

San Diego Unit: San Diego and Imperial Counties -- Public Lands -- Estimated Acres -- 1,616,000 Acres							
<i>Federal</i>	<i>Acres</i>	<i>State</i>	<i>Acres</i>	<i>County</i>	<i>Acres</i>	<i>City</i>	<i>Acres</i>
Military: Pendleton, MCB, Miramar Airbase, MCB and other facilities	148,000	State Parks: Palomar, Anza-Borrego, Cuyamaca Rancho, and others	628,000	San Diego County Park & Recreation	44,000	San Diego City Parks Dept.	39,000
USFS, Cleveland NF: Descanso and Palomar Districts	366,000						
US Fish and Wildlife Service	42,000	Dept of Fish & Game: Hollenbeck Canyon, Rancho Jamul, San Felipe Valley	27,000	Imperial County Park & Recreation	10,000 (est.)	Cities Parks Imperial Co.	10,000 (est.)
Bureau of Land Management	171,000						
Tribal Lands	130,000						
<i>Federal Totals</i>	<i>857,000</i>	<i>State Totals</i>	<i>656,000</i>	<i>County Totals</i>	<i>54,000</i>	<i>City Totals</i>	<i>49,000</i>

International Border Interface

The United States–Mexico border creates another type of wildland fire interface. This type of interface results from undocumented, international travelers from Mexico entering the United States through dense, dry brush conditions. Occasionally, these international travelers set cooking, warming or warning fires that spread into wildlands. In the mid 1990's, several "Border Fires" injured or claimed the lives of many international travelers. An international council was formed, the Border Agency Fire Council, to provide fire safety information to international travelers, to guide firefighting operations, and to ensure fire fighter safety along the border. Since the inception of this council, the numbers of wildland fires, injuries and deaths along the border have dramatically declined.

Climate, Topography, and Vegetation

Like most of southern California, the San Diego Unit is located in a Mediterranean Climate; warm to hot, dry summers and mild to cool winters. Summer temperatures hover around the mid to upper ninety degrees for the center region to the low one hundred degree temperatures in the desert regions. Fog moderates the coastal temperatures for most of summer period. Occasionally, extraordinary hot, dry spells similar to desert conditions may occur near the coastline and mountainous areas, while snow is common at elevations above 3,500 feet during cold winter storms. Rainfall averages range from 12 -15 inches at the lowest elevations near the coast to over 35 inches at the highest elevations. The dry desert region commonly receives less than 4 inches of rainfall each year. Santa Ana Winds are one of the more notable weather conditions for southern California. These winds can blow any time of the year, however, these strong, dry winds typically coincide with the drier period as well, which is late summer and fall periods (September through November). These winds, which can easily exceed 40 mph, are warm and dry and can severely exacerbate brush or forest fires, especially under drought conditions.

During the early 2000's, much of southern California experienced a prolonged drought cycle. Annual rainfall totals dipped to below 10 inches of annual precipitation, which is approximately 20% below average rainfall. During this period, particularly in 2007-2009, the vegetation cured earlier and reached critical live fuel moisture conditions 35-40 days earlier as well. However, the summer 2010 was one of the coolest summers and the fall/winter season of 2010/2011 was an above average rain season.

Topographically, San Diego County is boxed by the Pacific Ocean in the west, the Palomar and the Santa Rosa Mountains to the north, the Cuyamaca and Laguna Mountains to the east and Mexico border to the south. Imperial County lies directly east of San Diego County and is framed by the Cuyamaca and Laguna Mountains in the west, the Santa Rosa Mountains and the Salton Sea and Colorado Desert to the north, the Colorado River and the state of Arizona to the east, and the Mexico border to the south. Generally, the elevation rises from sea level to nearly 6,600 feet in elevation. The terrain can be described as coastal areas, inland canyons, mesas, valleys and mountains in the eastern center region, and desert in the far eastern section. Several canyons in San Diego are

aligned in an east-west orientation, and this orientation funnels Santa Ana winds from the desert region to the coast areas.

The native vegetation complexes approximately follows the topographic transitions: coastal sage scrub/soft chaparral on the coast, to hard chaparral species in the inland canyon, mesas and upper desert regions, to oak woodlands and mix-conifer forest at the higher elevations which eventually descend into desert plants communities. Nearly all of these vegetation types are fire adaptive plants. In general, the coastal sage scrub and mixed chaparral dominant most of San Diego County's natural landscape; at least 70% of the natural landscape can be described as a chaparral type of vegetation, with most types located below the 5,000 foot elevation level.

Although conifer forest occupies less than 5% the area in San Diego County, these limited resources are primarily found above 4,500 feet in elevation in the Palomar, Santa Rosa, Cuyamaca, and the Laguna Mountains. Conifer forests are under pressure from development, insect and diseases and wildfires throughout most of California, including San Diego County as well. In early 2000's, the combination of drought, overstocked forest conditions, and a major bark beetles outbreak caused extensive tree mortality in San Diego, Riverside and San Bernardino Counties. In March 2003, Governor Schwarzenegger issued a proclamation declaring a State of Emergency to address the extreme risk to people, property and the environment caused by the significant tree mortality. The proclamation enabled landowners and public agencies to take steps to remove the dead trees and associated hazardous dead vegetation. However, in October 2003, the Cedar Fire burned a significant portion of forested lands in the Cuyamaca Mountains. Cuyamaca Rancho State Park lost nearly 95% (20,000 acres) of the forest to the Cedar Fire. More notably after the fire, there was very little natural regeneration of the forest. In October 2007, Cuyamaca Rancho State Park launched a partnership project with the CAL FIRE-San Diego Unit, the Cuyamaca Rancho State Park Reforestation Project, with the purpose to restoring and reforesting the intensely damaged conifer forest. This reforestation project is in the verification stage of being registered with the California Climate Action Registry – it's the first reforestation project to register public lands in California. To review the project go to <http://www.climateregistry.org/> and search for project name: Cuyamaca Rancho State Park (CRSP) Reforestation Project or project identification: CAR505.

Oak woodlands occupy about 10% of the natural landscape in San Diego County. Like coniferous forest, these resources are under pressures from development, insect and disease process and wildfire as well. In the Pine Valley-Descanso area of San Diego, perhaps as early as the late 1990's, red oak species were dying for unknown reasons. In 2008, the Goldspotted Oak Borer (GSOB) was identified as the likely pest causing oak mortality. Currently, this pest has spread beyond the Pine Valley-Descanso area and is associated with causing oak tree mortality to over 20,000 large, mature oak trees in the southern area of San Diego County. There are two types of concerns with this pest. The first concern is ecological impacts to the red oaks species, not only in San Diego, but for the rest of the California as well. The other matter of concern is that when wildland fire moves through areas with high oak tree mortality, especially in community areas, these dead tree trees increases the dead fuel load and increases the falling hazard risk to firefighters and the public. To address the concerns about this pest, a steering committee, an educational-outreach-science committee and lead scientists and researchers have organized to minimize the spread of the pest. For more information, go to the website: www.gsob.org.

Fire History

The 2003 and 2007 Fire Siege burned over half a million acres of coastal sage, chaparral, and forest lands. Moreover, San Diego Unit has a long history of major wind driven fire occurrence distributed throughout the county with only the lower desert and immediate coastal areas excluded. The San Diego County Fire History map shows that the county has had a significant history of major fire incidents over the last 50+ years. Almost every community in San Diego County has been threatened by wildfires that have occurred during this period. Readily available fuels, influences of topography and Santa Ana winds, present year-around fire suppression challenges for the Unit.

Typically, the average number of fires per fire season is approximately 510 fire starts over the last ten years and the average number of acres burned is about 15,000 acres a year (minus the 2003 and 2007 Fire Siege years). Generally, the leading causes for unwanted fires are debris burning, vehicles and underdetermined caused fires. Camp fires are another cause of wildfires however; these camp fires are typically related to the border region and international travelers.

Combine these factors with the populace continuing to move to the WUI area and reduced budgets, will continue to hinder efforts to stay on top of this situation. Due to the potential for extreme fire weather in the Unit, strategic solutions have been developed. During times of extreme fire weather, the Unit will staff additional fire engines (reserve and camp), additional handcrews, mobilize Santa Ana strike teams throughout the state, pre-position

additional air tankers from other bases, and inform the public, via media and other informational venues, to help prepare themselves in case of wildfires in the county. The San Diego County Office of Emergency Services (SDCOES) has developed a Community Protection and Evacuation Plan (CPEP) template to help facilitate communities in establishing local “plans.” These plans will include evacuation routes, safe zones, emergency agency response, critical infrastructure protection, and mitigation strategies. The SDCOES, in cooperation from the Forest Areas Safety Taskforce (FAST) and Fire Safe Councils, are presenting this template in town hall-style meetings throughout the county.

Fire Hazard Severity Zones

The Fire Hazard Severity Zone (FHSZ) map for San Diego County indicates that nearly all of State Responsibility Area and portions of Local Responsibility Areas are in the Very High Hazards Zones. The FHSZ maps are intended for use related to topics such as: building construction standards on building permits; natural hazard disclosure at the time of sale of real property; defensible space around buildings; property development standards such as road widths, water supply, and address signs; and for city and county to consider for their general plans.

Three large areas within the Very High rating have no recorded fire history in the last 30 years. Within these areas there has also been an increase in residential and community development during this same 30-year period. One area is located south of the Interstate 8, west of Buckman Springs Road, north of Highway 94 and east of Harbison Canyon. A second area that has not experienced fire is the area near Highway 79 and Highway 76, near the community of Warner Springs. The last area of concern is the northwest area of San Diego, which starts in the north near the Rainbow community and follows the Highway 15 corridor south to Bonsall community.

Building Standards – Title 7A, 19 and 24

San Diego County has adopted Building Code Chapter 7A standards (Material and Construction Methods for Exterior Wildfire Exposure) and Chapter 47 standards (Requirements for Wildland-Urban Interface Area). Additionally, San Diego County is certified as compliant with Title 14 - SRA Fire Safe Regulations and Public Resources Code 4290.

Vegetation Management Projects and Environmental Review

All proposed vegetation management projects (including fuels treatment activities) are subject to the California Environmental Quality Act and environmental review. The following is a brief listing of the key components related to project review:

- **Biological Resource and Multi-Species Conservation Program**

San Diego County is a “hot spot” area for unique and unusual species. With 28 species listed or proposed listed as threatened or endangered and an additional 57 species that are considered sensitive underscores the uniqueness of San Diego natural environmental. Given the richness of species, San Diego County’s Multi-Species Conservation Program (MSCP) promotes the protection of these species, while balancing the need for use and development of property. To ensure protection for these species, both the California Department of Fish and Game and the US Fish and Wildlife Service are consulted on all fuels treatment projects.

- **Archeology**

All CAL FIRE projects, such as VMP or fuels management projects, are reviewed by a qualified Department Archeologist, as required by the California Environmental Quality Act (CEQA 1970). As required, each project is evaluated to determine if the project will have any effect on a defined cultural resource. Department policy is to avoid adverse effects to significant cultural resources (prehistoric or historic resource consistent with CEQA), which is most often by avoidance. This internal practice began with the passage of the Forest Practice Act (FPA 1973). Since the passage of the FPA, archeologists regularly review projects and conduct archeological surveys. A number of other laws play a part in the protection, preservation, and management of cultural resources in California. Also, CAL FIRE State Archeologists participate in the department’s response to wildland fires. They participate in SEAT ‘s (State Emergency Assessment Teams) when called in after a major fire to scientifically evaluate “values at risk” in the affected burned area as allowed under the former Governor’s Executive Order.

- **Water Quality Boards**

To meet the requirements of the Porter-Cologne Water Quality Control Act, all projects, including vegetation management projects, are reviewed for water quality impacts. Depending on the location of the project, the Unit will consult with the San Diego Regional Water Quality Control Board or the Colorado River Regional Water Quality Control Board.

- **Region 7 -- Colorado River Regional Water Quality Control Board:** Orange, San Bernardino, Riverside, San Diego counties.
- **Region 9 -- San Diego Regional Water Quality Control Board:** San Diego, Orange, Riverside counties.

- **Greenhouse Gas Emissions and Air Quality**

All projects must consider greenhouse gas emission as part of the environmental review process. Nationally recognized protocols are used to estimate the total greenhouse gas emissions that will occur due to project activities. Unit projects are evaluated for air quality impacts and where appropriate, smoke management plans are completed, filed and approved with the San Diego County Air Pollution Control District.

- **Invasive Species**

Research has indicated some fuels treatment projects may also create opportunities for invasive species (weeds) to grow and spread. During fuels treatment planning, consideration is given to minimize invasive species from being introduced or spreading. For more information go to UC Cooperative Extension and review the Invasive Species support services at: <http://ucanr.org/sites/socalinvasives/>.

- **Tree Mortality and GSOB**

The goldspotted oak borer (GSOB) is a buprestid beetle which is native to oak forests of Southeastern Arizona, and a closely related species (*Agrilus coxalis*), almost identical in appearance, is found in Central Mexico, and Northern Guatemala. Since 2002, GSOB has contributed to the mortality of more than 80,000 trees over approximately 1,900 square miles, and this infested area continues to increase as the GSOB population grows and spreads. In its native range, GSOB is not a pest. This may be due to efficient population control by natural enemies and natural levels of resistance by oak species that have co-evolved with GSOB.

GSOB was first detected in San Diego County, California in 2004 by the California Department of Food and Agriculture during a survey for exotic woodborers. Four years later (2008), it was found attacking three species of oak in the Cleveland National Forest in San Diego county: coast live oak (*Quercus agrifolia*), canyon live oak (*Q. chrysolepis*), and California black oak (*Q. kelloggii*).

Oak trees are classified into three categories which include white oaks, red oaks and intermediate oaks. These categories characterize three evolutionary lineages in *Quercus*, and are separated by their types of leaves, acorns, bark and wood. For example, white oaks have light grey or brown bark, while red oaks have dark grey, blackish or brown bark. White oaks also have light brown or yellowish wood while red oaks have reddish wood. Intermediate oaks are typically transitional, having intermediate qualities, or those more like either the white or red oaks. GSOB seems to prefer red oaks, although it will occasionally feed on intermediate oaks, and almost never on white oaks.

Although elevated levels of oak mortality had been aerially mapped by the USDA Forest Service in the Cleveland National Forest since 2002, it was not known that GSOB was the cause of such mortality until 2008 when it was officially confirmed as the primary mortality agent. The general belief until this time was that drought was the main contributing factor to the loss of so many oaks.

Vegetation management projects are intended to minimize wildland fire impacts, especially near community areas. The cost and losses from wildland fires far exceeds the cost of the vegetation management and fuels treatment projects. Nevertheless, the environmental review process provides agencies and the public with the information regarding these projects to ensure the project complies with various environmental regulations.

C: UNIT PREPAREDNESS AND FIREFIGHTING CAPABILITIES

San Diego Unit – Monte Vista Headquarters is located at 2249 Jamacha Road in the unincorporated area of San Diego County, near the city of El Cajon. The Unit Administration Offices, Mobile Equipment Repair Shop, Service Center, Inter Agency Training Center, Inter Agency Communication Center, and the Monte Vista Fire Station #20 are located on the 14-acre headquarters facility. The following is a list of resources available for emergency response and support services:

The San Diego Unit Resources at a Glance

- 18 CAL FIRE Fire Stations
- 26 Frontline CAL FIRE Type III Fire Engines
- 4 Reserve CAL FIRE Type III Fire Engines
- 4 CAL FIRE Bulldozers
- 4 CAL FIRE / CDCR Conservation Camps
- 20 CAL FIRE Hand crews
- 4 Conservation Camp Type III Fire Engines
- 1 Air Attack Base (Ramona)
- 1 CAL FIRE OV-10 Air Attack Aircraft
- 2 CAL FIRE S-2T Air Tankers
- 1 USFS Type II Helicopter
- 2 Helitack Bases (Gillespie & Fallbrook)
- Joint operations: SD County Sheriff and CAL FIRE
- 3 Type II Helicopters
- 1 Interagency Command Center (Monte Vista)
- Joint operations: USFS and CAL FIRE
- Training, Fleet Services
- Pre-Fire/ Resource Management and IT Support Services (HQ)
- 14 Local Government (LG) Fire Stations (Sch. A)
- 12 LG Type I Medic/Fire Engines
- 2 LG Type I Fire Engines
- 0 LG Type II Fire Engine
- 4 LG Type III Fire Engine cross-staffed (Fire Season)
- 2 LG ALS Ambulance
- 3 LG Rescue Light/Air
- 20 SDCF Fire Stations
- 16 SDCF Type I Engines
- 13 SDCF Type II Engines
- 21 SDCF Type III and VI Engines
- 24 SDCF Water Tenders
- 5 SDCF Rescue Light/Air
- 450 Permanent Personnel
- 140 Seasonal Personnel
- 350 Volunteers



The protection of 1.2 million acres of SRA wildland and urban interface is provided by eighteen “Blue Book” fire stations geographically located fifteen to twenty miles apart. To manage the eighteen fire stations, the Unit is divided into seven battalions with a Battalion Chief managing two to three fire stations. Under multiple Cooperative Fire Agreements all eighteen fire stations are staffed twelve months out of the year with a three person staffing level. During “Peak Fire Season” the Unit covers twenty six frontline Type III Fire Engines at the eighteen fire stations, with a work force of 350 Permanent Firefighters and 180 Seasonal Firefighters.

The San Diego Unit currently has seven Cooperative Fire Agreements: Deer Springs Fire Protection District, Pine Valley Fire Protection District, Ramona Water District, Rural Fire Protection District, San Diego County Fire Authority, San Miguel Fire Protection District and Yuima Water District. In addition to these Cooperative Fire Agreements, the Unit has Dispatch Agreements with La Jolla Reservation Fire Department, Mercy Ambulance, Borrego Fire Department and Julian/Cuyamaca Fire Department.

San Diego Unit participates in the San Diego County Master Mutual Aid Agreement between all of the Municipal Fire Agencies along with several smaller Auto-Aid and Mutual-Aid Agreements with local fire agencies. All of the Agreements are intended to provide a higher level of fire and medical services to the public.

In addition, during Peak Fire Season, four bulldozers are staffed at the following locations: Monte Vista HQ, McCain Conservation Camp, Rainbow Conservation Camp and Puerta La Cruz Conservation Camp. By a Cooperative Agreement with the California Department of Corrections and Rehabilitation, nineteen inmate hand crews are located at four Conservation Camps. Rainbow Conservation Camp and Puerta La Cruz Conservation Camp are staffed with female inmates located in the northern portion of San Diego County. La Cima Conservation Camp and McCain Conservation Camp are staffed with male inmates in the southern part of the county.

The Ramona Air Attack Base is located in the center of San Diego County in the unincorporated area of Ramona. Ramona Air Attack Base is a multiagency base shared with the United States Forest Service. Two CAL FIRE S-2 turbo prop fixed wing air tankers and one OV10 Air Attack plane are staffed at the Ramona Air Base during Fire Season. Due to the location of the air base the fixed wing aircraft can make it to the most remote locations in the county in twenty five minutes of receiving the dispatch. The S-2 air tankers can hold twelve hundred gallons of retardant. The United States Forest Service staffs one Helitack crew on helicopter 538. Helicopter 538 is a Bell 205 Super Huey that has a fixed water tank that can hold up to 375 gallons of water. During large fires the air base can staff six retardant loading bays with a fifty two thousand gallon retardant storage tank.

In a unique Cooperative Agreement with the San Diego County Sheriff’s Department, San Diego Unit personnel staff two San Diego County fire fighting helicopters twelve months out of the year. County Copter 10 and 12 are Bell 205 Super Huey helicopters that are owned and piloted by the San Diego County Sheriff Department with a fixed 375 gallon water tanks. Copter 10 and 12 are primarily based out of the Sheriff’s Special Detail facility at Gillespie Airport in the City of El Cajon. Copter 10 during Peak Fire Season is designated as the Helitack Ship with a 6-8 person Helitack crew. Copter 12 is designated as the rescue ship with rescue hoist capabilities. During Special Staffing events both helicopters can be staffed with Helitack crews and one helicopter would be repositioned to the Sheriff Helicopter base at the Fallbrook Airport in North County.



SECTION II: COLLABORATION

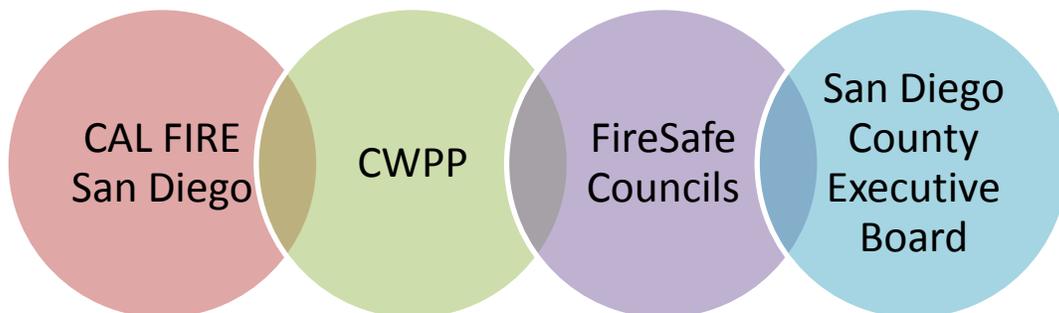
A: SAN DIEGO UNIT – CORE PLANNING GROUP

In March 2011, Unit Chief Howard Windsor appointed eight staff members (Deputy Chief Kelly Zombro, Division Chiefs Walt Holloway and Kathleen Edwards, Battalion Chiefs Dave Allen, Ernie Marugg, Randy Scales, and Mike Vogt, and Pre-Fire Captain Daryll Pina) as a “core planning group” to provide direction on how to implement the statewide fire plan at the Unit level. On March 31, 2010, the core planning group met and reviewed the statewide goals and objectives that are likely achievable by the Unit. Almost all the selected objectives were based on the knowledge that the Unit is already working towards these selected objectives or is interested in expanding the Unit’s role in other pre-fire related activities.

Additionally, the core planning group considered the requirements of Community Wildfire Protection Plan (CWPP), as per the Healthy Forest Restoration Act of 2003. However, the group opted to focus on developing and implementing the Unit Fire Plan with consistency of the statewide fire plan for the next two years. The core planning group may, at a later date, reconvene and reconsider coordinating the Fire Plan with the CWPP requirements. The key reasons cited for this decision is that with over 36 Fire Safe Councils with 20 CWPPs developed already throughout the County and highly possible that more FSC and CWPP will be developed in the future, there does not appear to be a need for the Unit Fire Plan to meet the CWPP criteria at this time. Additionally, San Diego County Fire Safe Council’s Executive Board assists and coordinates with FSC and communities on CWPP development and implementation. Moreover, the Unit Chief and staff actively support Fire Safe Councils from the Battalion/local level to the San Diego County Executive Board.

Core Planning Group:

Organization	Representative (title)
CAL FIRE	Kevin Lawson, Deputy Chief
CAL FIRE	Nick Schuler, Division Chief
CAL FIRE	Eric Just, Pre-Fire/Resource Mgt. Division Chief
CAL FIRE	Daryll Pina, Division Chief
CAL FIRE	Ernie Marugg, Battalion Chief
CAL FIRE	Randy Scales, Battalion Chief
CAL FIRE	Josh Black, Pre-Fire Engineer, Fire Captain



B: COORDINATION AND COLLABORATION

Nearly all pre-fire/fuels treatment and resource management activities and projects described in the San Diego Unit Fire Plan involve meeting and coordinating with various stakeholders and collaborators. Notably, the Unit is actively engaged with the San Diego County Board of Supervisors and county services, including San Diego County Fire (SDCF), San Diego County Sheriff's Department, and the San Diego County – Department of Land Use and Development; various local fire protection districts; Bureau of Land Management (BLM); United State Forest Service (USFS)–Cleveland National Forest; USFS-Forest Health Protection; US Fish and Wildlife Service; California Department of Corrections and Rehabilitation; California State Parks and Recreation – Anza-Borrego State Park, Palomar State Park and Cuyamaca Rancho State Park; California Department of Fish and Wildlife; and the California Department of Transportation (CAL TRANS).

Besides the coordination and collaboration with agencies, the Unit serves as an active partner in the San Diego County Fire Chiefs Association. This is organization brings together the firefighting leaders from city, county, state and federal organizations to discuss and coordinate firefighting issues of San Diego County.

The Forest Area Safety Taskforce (FAST) is a collaborative organization that focuses on coordinating forest health and hazardous fuels projects and activities. This cross-sectional organization consists of federal, state, county and city agencies, community and volunteers groups and other stakeholders. The group meets every two months to discuss and foster coordination, collaboration, and partnerships for community and resource protection. The Unit Chief serves as the FAST chair. For more information, see the FAST website: www.sandiegofast.org.

The Border Agency Fire Council is an international organization with fire agencies to address the border fire issues and to ensure safety of the firefighters, citizens and unauthorized international travelers from Mexico. This organization was brought about due to the fire fatalities along the border. Additionally, this group coordinates on a firefighting operational plan, firefighter training and a resource conservation program.

The [San Diego Fire Safe Council](#), in partnership with Resource Conservation District, is a collaborative group of county, state and federal agencies working with volunteers and community members interested in creating fire safe communities. They provide assistance with community support, coordinate with the California Fire Safe Council and provide direction on developing Community Wildfire Protection Plans.

San Diego Gas and Electric Company (SDG&E), in concert with their parent company Sempra Energy, received approval from the California Public Utilities Commission to develop and implement the Sunrise Powerlink project. One condition of the Environmental Impact Report (EIR) for this project is to establish a Defensible Space Fund and a Firefighting Mitigation Fund. To fulfill this condition, SDG&E established a working group, identified as the Sunrise Powerlink Fire Mitigation Group (SPFMG). Comprised of the affected firefighting departments/agencies, this group provides coordination and oversight of the Defensible Space Fund (\$2.8 million dollars each year for 58 years for homeowners) and the Firefighting Mitigation Fund (\$3.2 million dollars for the firefighting agencies). A Memorandum of Understanding (MOU) was signed on January 2012. The first phase of the transmission lines were energized in June 2012. In July 2012 the Defensible Space Fund was initiated and made available on line to the home owners with the targeted area.



SECTION III: PRIORITY LANDSCAPES

A: PRIORITY LANDSCAPES

ASSETS AT RISK IN CONTEXT OF POTENTIAL THREATS

In the previous fire plan, Assets at Risk were generally presented as a list of categories. These categories usually included topics such as: infrastructure and community areas; water and air quality; habitat and biological resources; recreation, forest and forest products, etc., and each category would describe the specific or local Asset at Risk. Since the previous fire plan, the [2010 Forest and Range Assessment](#) was released to the public. One of the products from this assessment provided a new web-based tool, the [Priority Landscape Mapper](#). This Geographical Information Systems (GIS) tool displays geographically – rather than listing - *Assets at Risk in context of Potential Threats* – and identifies this combined assessment as **Priorities Landscapes**. Moreover, like the Fire Hazard Severity Zone Map, Priority Landscapes provides a way to communicate to the public, in a consistent and like-way across all of California, the various components of the 2010 Forest and Range Assessment, including components related to wildland fire.

Priority Landscape Mapper is a comprehensive mapping system that provides spatial analysis for twenty-two themes. To create these maps, it is best to utilize the website for viewing and toggling the options; plus the mapping software allows the selection of one of four different base maps (satellite imagery, topographic, road and highway, or shade relief) to enhance the viewers understanding of the themes. To access the Priority Mapper, go to the website: <http://frap.cdf.ca.gov/priorityls/default.html>. Each theme relates to one of the [11 core themes](#) found in 2010 Forest and Range Assessment. To review the full document, go to the website: <http://frap.fire.ca.gov/assessment2010.html>.

The San Diego Unit staff has identified three priority landscapes that have little to no recorded fire history in the last 30 years. Within these priority landscapes there has also been an increase in residential and community development during this same 30-year period. In these areas identified the landscape has continuous vegetation, high impact to watershed value and an increase to the infrastructure that support the growing population density. The San Diego Unit staff utilized the Priority Landscape Mapper web-based mapping program and identified three areas that are ranked as ‘high threat’ from catastrophic wildfire. The primary risk factors are 25-30 year growth of continuous vegetation, topography alignment with high wind events and wildland urban interface development.

One identified priority landscape at risk is located south of the Interstate 8, west of Buckman Springs Road, north of Highway 94 and east of Harbison Canyon and Lawson Valley through a portion of the Cleveland National Forest. This area is referred to as the Laguna fire foot print that burned in 1970 at an estimated 175,000 acres. This landscape area watershed value supports Lake Morena, Barrett Reservoir and the Loveland Reservoir. Throughout this identified priority landscape are public recreational trails, camp grounds, and scenic overviews. The western edge of this priority landscape transitions from open wildland to an urban interface with a high population density. Project activities can be found in Section V, under Monte Vista, Dulzura, and Campo Battalion Plans.

The next priority landscape area at risk is located along Highway 79 and Highway 76, near the communities of Sunshine Summit, Warner Springs and Mesa Grande. This priority landscape has a rich cultural value due to the numerous Indian Reservations and historical sites. This priority landscape area watershed value supports Vail Lake and Lake Henshaw. Project activities can be found in Section V, Julian Battalion plan.

The third priority landscape area at risk is located in the north central area of San Diego County starting near the community of Rainbow and follows the Highway 15 corridor south to the community of Bonsall. Ninety thousand cars traverse this priority landscape daily. The southern portion of this priority landscape has changed over the past 25-30 years from agriculture land value to residential communities with a high wildland urban interface population density. Project activities can be found in Section V, Red Mountain Battalion.

All three priority landscapes have their own unique values at risk with a “high threat” ranking from catastrophic wildfire. Project activities in these priority landscapes areas are as diverse as the values at risk, see the list of projects and activities in Appendix A: San Diego Unit – Projects and Activities.

B: COMMUNITIES AT RISK (Fire Safe Councils & CWPPs)

The listing of Communities at Risk (CAR) is derived from the National Fire Plan. The intent of listing is to help people protect their communities and property from catastrophic wildfire by providing funding, when available, to reduce the risk from wildfires. The California Fire Alliance assists the federal agencies charged with implementing the National Fire Plan, by providing a list of these communities on the website:

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

The list below identifies Communities at Risk within the State Responsibility Areas by CAL FIRE Division and Battalion representatives. Additionally, if there is a Firesafe Council (FSC) and/or Community Wildfire Protection Plan (CWPP) associated with the community, then there is an "X" for that category.



Battalion	CAR	FSC	CWPP	Battalion	CAR	FSC	CWPP
Red Mountain Battalion	Du Luz Canyon			Julian Battalion	Mesa Grande		
	Deer Springs	X	X		Harrison Park	X	X
	Hidden Meadows	X	X		Julian	X	X
	Pala Mesa Village				Stone Ridge (Holcomb Village)	X	X
	Rainbow				Sunshine Summit		
	Twin Oaks				Warner Springs	X	X
	San Luis Rey Heights				Whispering Pines	X	X
	Fallbrook	X	X				
Monte Vista Battalion	Alpines Heights	X	X	Valley Center Battalion	Harmony Grove		
	Carveacre	X	X		Palomar Mountain Communities:	X	X
	Crest	X	X		Bailey Meadow	X	X
	Flinn Springs				Crestline	X	X
	Harbison Canyon				Birch Hill	X	X
	Sycuan Summit				Conifer Road Residential areas	X	X
Dulzura Battalion	Barrett	X	X		Rancho Santa Fe	X	X
	Dulzura	X	X		Mystery Mountain and Wilkes area	X	X
	Jamul	X	X		Valley Center Communities:	X	In Progress
	Lawson Valley				Lilac and Keys Creek	X	X
	Lyons Valley				Couser Canyon	X	X
	Potrero	X	X		Woods Valley	X	X
	Tecate				Pauma Heights	X	X
Campo Battalion	Boulevard	X	X		Ramona Battalion	Barona	
	Campo	X	In Progress	Ramona Communities			
	Descanso	X	X	Mount Woodson		X	X
	Guatay			Mussey Grade / Fernbrook		X	X
	Jacumba	X	X	Rosemont		X	X
	La Posta			San Diego Country Estates		X	X
	Lake Morena	X	In Progress				
	Pine Valley	X	X				

SECTION IV - PREFIRE MANAGEMENT STRATEGIES

A: FIRE PREVENTION BUREAU



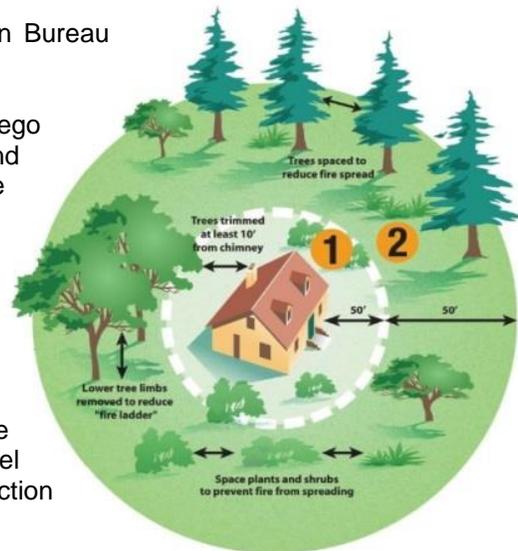
San Diego Unit 10-year average is 510 vegetation fire starts in CAL FIRE's DPA. Excluding years 2003 & 2007 San Diego Unit suffers an average of 15,000 acres burned each year by unwanted fire starts. The greatest number of unwanted fire starts is from vehicle & equipment caused fires.

Fire Prevention Bureau works to protect lives, property and natural resources from unwanted fires by proactively investigating all Wildland fires in CAL FIRE's DPA and utilizing appropriate criminal, code enforcement, civil and administrative procedures to deter activities that lead to unwanted human caused fires. The Fire Prevention Bureau also coordinates law enforcement activities with public education and information activities to educate the general public, as well as other public safety officials, of specific activities that increase fire risk and preventative measures that can be taken to eliminate or lessen the risk.

Engineering and Structure Ignitability

In terms of Engineering & Structure Ignitability, the Fire Prevention Bureau provides oversight and coordination with the following:

- Title 24 and Title 19/PRC 4290 are addressed by San Diego County (SDCo.) Department of Planning and Land Use and San Diego County Fire (SDCF) through certification of the San Diego County Consolidated Fire Code by the Board of Forestry. San Diego County Fire requested and received certification in 1992 and requested and received re-certification in 2009. Requirements are met though application of State and Local ordinances that meet or exceed Title 24 & Title 19 requirements.
- Protection Planning is accomplished during the same processes outlined above by San Diego County personnel working with Fire Marshals from the various Fire Protection Districts that have overlapping boundaries on SRA.
- Defensible Space inspection around structures in the CAL FIRE's DPA is



accomplished through application of Public Resources Code (PRC) 4291 or the San Diego County (SDCo.) Defensible Space Ordinance. CAL FIRE staff completed an average of 12,578 inspections per year since 2007. San Diego Unit's ability to conduct inspections varies greatly from year to year due to various temporary funding sources and heavy reliance on fire suppression personnel to complete inspections. Since 2014, funding from the SRA fee has provided Defensible Space Inspectors to help conduct inspections throughout the year.

- The San Diego County (SDCo.) Defensible Space Ordinance: In SRA that are not within a Fire Protection District and SRA within Fire Protection Districts that have adopted the SDCo. Defensible Space Ordinance and entered into cooperative agreements with SDCF, CAL FIRE utilizes the SDCo. Ordinance to accomplish Defensible Space around structures. CAL FIRE provides the inspection workforce (personnel) to accomplish all inspections up to compliance or referral to SD County staff for code enforcement.
- Public Resources Code 4291: In all other areas of SRA, CAL FIRE utilizes PRC 4291 and the LE-100 inspection process to accomplish defensible space requirements.
- Public Resources Code 4291: In SRA that is within a Fire Protection District that is not in a cooperative agreement with CAL FIRE or the SDCF, CAL FIRE staff may acknowledge concurrent enforcement of Local ordinances by the FPD as meeting Cal Fire's requirements under PRC 4291.
- Building inspections and Pre-Planning activities are accomplished by Fire Suppression personnel at the Battalion level. Each Battalion modifies its activities to meet the unique requirements created by specific cooperative agreements and accomplishment of the State Mission to prevent and suppress Wildland fires in the SRA.

GET READY, GET SET, GO!
Wildfire is Coming. Are You Ready?

GET PREPARED FOR WILDFIRE BEFORE IT STRIKES BY FOLLOWING THE READY, SET GO! GUIDE

BEING READY
100 FT
UP TO 1 MILE
CREATE DEFENSIBLE SPACE. THE FEET OF DEFENSIBLE SPACE IS REQUIRED AROUND YOUR HOME. LEARN HOW TO SURVIVE THE TWO TYPES OF DEFENSIBLE SPACE NEEDS.
HURDEN YOUR HOME. DEFENSIBLE SPACE CANNOT MOVE UP TO A MILE FROM WILDLAND AREAS. LEARN HOW TO PROTECT AND HURDEN YOUR HOME FROM A WILDFIRE THREAT.

GETTING SET
1. WHAT
2. HOW
3. WHO
4. WHEN
PREPARE YOUR HOME AND FAMILY FOR THE POSSIBILITY OF BEING IN EVACUATE.
CREATE A WILDFIRE ACTION PLAN.
ASSEMBLE AN EMERGENCY SUPPLY KIT.
FILE AN EARTHQUAKE COMMUNICATION PLAN.

BEING READY TO GO
GO!
PRE-EVACUATION STEPS. PREPARE BOTH THE INSIDE AND OUTSIDE OF YOUR HOUSE FOR EVACUATION. GET THE CHECKLISTS.
REVIEW YOUR EVACUATION PLAN CHECKLIST.
EVACUATION STEPS. WHEN IMMEDIATE EVACUATION IS NECESSARY, GET READY TO GO.

ONE LESS SPARK
ONE LESS WILDFIRE
FOR MORE INFORMATION VISIT: PREVENTWILDFIRE.ORG
[READYTOWILDFIRE](https://www.facebook.com/readytowildfire)

EQUIPMENT SAFETY
Practice Using Equipment Safely

LEARN HOW TO USE OUTDOOR EQUIPMENT PROPERLY TO HELP KEEP FROM SPARKING A WILDFIRE.

NOISE
HEAR TO HEAR. IF A.M., BUT NEVER WHEN IT'S WINDY OR UNEXPECTEDLY QUIET.
LOW NOISE AREAS DESIGNATED TO HORN LAUNCH AND NEEDS TO BE QUIET.
METAL BLADES, STAMPS, BLOCKS CAN CREATE SPARKS AND STAFF FIRES.

SPARK ARRESTERS
IN WILDLAND AREAS, SPARK ARRESTERS ARE REQUIRED ON ALL PORTABLE GASOLINE POWERED EQUIPMENT. THIS INCLUDES TRACTORS, HARVESTERS, CHAINSAWS, WEED EATERS AND BLOWERS.
KEEP THE EXHAUST SYSTEM, SPARK ARRESTERS AND MOWER IN PROPER WORKING ORDER AND FULL OF CLEAN BURNING FUEL.
USE THE RECOMMENDED GRADE OF FUEL AND DON'T TOP IT OFF.

EQUIPMENT USE
KEEP A SHovel AND A FIRE EXTINGUISHER READY TO USE.
DON'T DRIVE YOUR VEHICLE OVER DRY GRASS OR BRUSH. HOT EXHAUST PIPES AND SPARKS CAN START FIRES. TAKE THE WHEEL WHEN YOU SEE - UNTIL IT'S SAFE!
KEEP A CELL PHONE READY AND CALL 911 IMMEDIATELY IN CASE OF FIRE.

TURN ON
TO PROTECT WATER QUALITY, DO NOT CLEAR VEGETATION NEAR WILDLANDS TO BURN. ONLY.
VEGETATION REMOVAL CAN CAUSE SOIL EROSION, ESPECIALLY ON STEEP SLOPES.
KEEP SOIL DISTANCE TO A MINIMUM.

ONE LESS SPARK
ONE LESS WILDFIRE
FOR MORE INFORMATION VISIT: PREVENTWILDFIRE.ORG
[#PREVENTWILDFIRE #ONELESSSPARK](https://www.facebook.com/onelessspark)

LANDSCAPE DEBRIS BURNING
Proper Debris Burning Prevents Wildfire

LEARN THE HOW, WHAT AND WHEN OF PREVENTING WILDFIRES FROM IMPROPER BURNING.

HOW
DON'T BURN UNLESS WEATHER PERMISSIBLE. PARTICULARLY WINDS ARE CRITICAL TO BURNING SAFE.
KEEP A WATER SUPPLY AND SHovel CLOSE TO THE BURNING SITE.
A RESPONSIBLE BURNER IS REQUIRED BY LAW TO BE IN ATTENDANCE UNTIL THE FIRE IS OUT.

LANDSCAPE DEBRIS PILES MUST BE SMALLER THAN:
4 FT
10 FT
CLEAN ALL FLAMMABLE MATERIALS AND VEGETATION WITHIN 10 FEET OF THE OUTER EDGE OF PILE.

WHAT
NO UNWANTED TRASH OR CHANGES CAN BE BURNED. INCLUDING: WILDLANDS, WILDLANDS, WILDLANDS, WILDLANDS, WILDLANDS.
ONLY NATURAL VEGETATION, DOWN ON THE PROPERTY CAN BE BURNED. BURNING IN OPEN PLACES, UNLESS PERMITTED BY LOCAL ORDINANCES.

WHEN
DON'T BURN IF IT IS WINDY AND THE CORRESPONDING YEAR TOTAL IS HIGH.
BURNING CAN ONLY BE DONE AFTER OBTAINING NECESSARY PERMITS FOR PERMISSIBLE BURN DAYS. CHECK BURN DAYS BY CONTACTING YOUR LOCAL AND DISTRICTS.

PERMITS

ONE LESS SPARK
ONE LESS WILDFIRE
FOR MORE INFORMATION VISIT: PREVENTWILDFIRE.ORG
[#PREVENTWILDFIRE #ONELESSSPARK](https://www.facebook.com/onelessspark)

Education and Information

The CAL FIRE San Diego Unit's Information and Education program utilizes Social Media (such as Twitter, Flickr, etc.) which allows us to quickly inform, educate and update, the public on Fire Dangers and Incident Information, for CAL FIRE. CAL FIRE maintains and updates a website (www.fire.ca.gov) that posts fire information and statistics, Emergency Incidents, Public Service Announcements, News Releases, Statewide Fire Activity and links to other agencies for additional information.

In terms of fire prevention, staff conducts education programs for schools within SRA. School programs are designed to focus on each of the targeted age groups. For example: Smokey's 5 Rules of Match Safety is designed for the K-1 aged child; the Science of Fire focuses on the 2nd -3rd grader; and the Preventing Juvenile Fire setting focuses on the older child, the 4th – 7th grader. In addition the Information and Education Program also engages in activities such as:

- Strategically placing roadside signs in English and Spanish throughout the Unit to educate the public on: fire dangers, the need for burn permits, and other relevant fire prevention education topics. These signs serve as a daily reminder to be Fire Safe while driving in and around high fire danger areas.
- Has a CAL FIRE representative at 2-1-1 San Diego during major incidents of wildfire or other newsworthy situations. During a disaster, 2-1-1 works with the County of San Diego's Office of Emergency Services to provide public information to the community, rumor control and trend analysis to County officials, report community needs that are not being met, and act as the central communications point for other community agencies and non-governmental organizations. 2-1-1 serves the entire population of the County. and staffs the Joint Information Center for the Unit during emergency incidents, for CAL FIRE and USFS during major incidents of wildfire or other newsworthy situations. This Center provides accurate and timely information to the public through mass media outlets within San Diego, Riverside, Orange and Los Angeles Counties as well as national and worldwide coverage on incidents of a high profile nature.
- Delivers Information and Educational presentations to service groups (i.e. Kiwanis, Lions, and Women's Clubs etc.), and other homeowner associated or organizations for CAL FIRE on topics such as Community Risk Reduction and Fire Prevention Education . Participates in local community events within SRA and support San Diego County residents, CERT members, and Fire Safe Councils with events, fairs, parades, etc.
- Use the VIPs to conduct Red Flag Patrols during periods of high fire danger; and train the VIPs on Red Flag Patrol Procedures, Public Information, Fire Safety Education, Defensive Driving and Map Reading.
- Updates existing PowerPoint presentations to keep them current and relevant, as well as design and develop new presentations on a variety of education topics. Design and build displays, awards, and layouts. Design and construct fire prevention awareness displays for fairs and exhibits. Plan, prepare and develop new fire prevention education programs and handout materials
- Coordinates the Unit's Volunteer in Prevention (VIP) program utilizing citizen volunteers to assist with all prevention education programs and activities.
- Participates with various public service agencies within the county, to network and cooperate in meetings and committees such as the Border Agency Fire Council, Forest Area Safety Taskforce and San Diego Burn Institute



B: TRAINING BUREAU

The Unit Training Bureau maintains a highly active and dynamic program. Not only is the Training Bureau tasked with providing and delivering the departmental training program at the Unit level, but it is also tasked with training San Diego County Fire Authority firefighters as well. Overall, the Training Bureau delivers and coordinates training classes for up to 900 firefighters (over 450 CAL FIRE permanent and seasonal personnel and up to 350). To assist with delivering and tracking of certifications for CAL FIRE personnel, the Training Bureau utilizes a web-based service – Target Solutions – to deliver on-line training courses and to track certifications. Additionally, the Training Bureau coordinates and delivers the annual Wildland Fire Preparedness Exercises, the Interagency Wildland Fire Training and the Interagency Chief Officers Wildland Fire Workshop.



In terms of supporting the Unit Fire Plan, the Training Bureau provides two key functions:

- 1) Provides training to ensure all staff meet Operational Readiness, and
- 2) Provides training to support the Unit's Pre-Fire/Resource Management, Education and Prevention (PEP) programs.

In terms of meeting the Unit's Operational Readiness Standards, the Training Bureau provides basic and intermediate training courses to support the entry-level firefighter through the Chief Officer/Command Staff disciplines to ensure all firefighters. Key training classes provided by the Training Bureau include: S-190, S-290, C-234 Intermediate Firing Operations and the breadth of the CAL FIRE and NWCG Incident Command courses. Additionally, the Training Bureau coordinates with the Unit's Emergency Command Center and tracks the number and type of Incident Command System qualified and trainee positions within the Unit. To further Operational Readiness, the Training Bureau has set two goals:

- All fire suppression employees receive A-Faller* training/certification within two years of employment with the department.
- All Chief Officers and Fire Captains receive CAL FIRE(C-234) Intermediate Firing Operations training/certification*.

In terms of supporting the PEP activities, the Training Bureau provides and coordinates training that integrates departmental programs. As an example, to meet the Fire Prevention Bureau's program objectives for delivering the Defensible Space program, the Training Bureau conducts and coordinates defensible space training for the Defensible Space Inspectors. Another example, to meet the Pre-Fire/Resource Management Division program objectives for fuels treatment and acres burned under the Vegetation Management Program, the Training Bureau conducts and coordinates live fire training to include C-234 and Fire Control 7 (FSTEP program by the State Fire Marshal).

* Certain training courses require treating vegetation, such as the faller certification course and the firing operations courses. The Training Bureau coordinates with Pre-Fire/Resource Management Division to ensure a suitable location and the training site complies with the environmental regulations through the Vegetation Management Program (VMP) or through the California Environmental Quality Act (CEQA).

C: PRE-FIRE/RESOURCE MANAGEMENT DIVISION

CAL FIRE San Diego Unit's Pre-Fire/Resource Management Division focuses on delivering CAL FIRE's Pre-Fire/Resource Management programs to the interested parties and stakeholders in San Diego. The intent is to create a resilient natural environment, which can sustain impacts from natural disturbances; such as wildfire, insect and disease outbreaks, weather events, and other disturbances for the protection of people, property and the natural resources. By integrating technical forestry and resource management services with fire suppression objectives, the Pre-Fire/Resource Management Division produces high quality products and services while delivering prompt, courteous customer services. Activities and services are:



Develop and implement a clear, concise strategic plan – *San Diego Unit's Strategic Pre-Fire/Resource Management Plan* - which integrates pre-fire objectives with resource management concepts through the utilization of the State Fire Plan and Resource Management Programs.

- Support the department's fire suppression mission through preparedness, training, and communication.
- Support the department's natural resource mission to protect the people, property, and resources of the state.
- Coordinate and collaborate with other agencies, organizations and citizens groups to promote fire safety and environmental/resource awareness.
- Elevate and enhance public awareness and information on fire safety and environmental/resource protection through the application of the Unit's Strategic Pre-Fire/Resource Management Plan.
- Ensure the public that tree harvesting (logging) on private forested lands comply with the California Forest Practice Act.
- Serve as the Unit's Environmental Coordinator and ensure the compliance with the environmental regulations and the California Environmental Quality Act (CEQA).



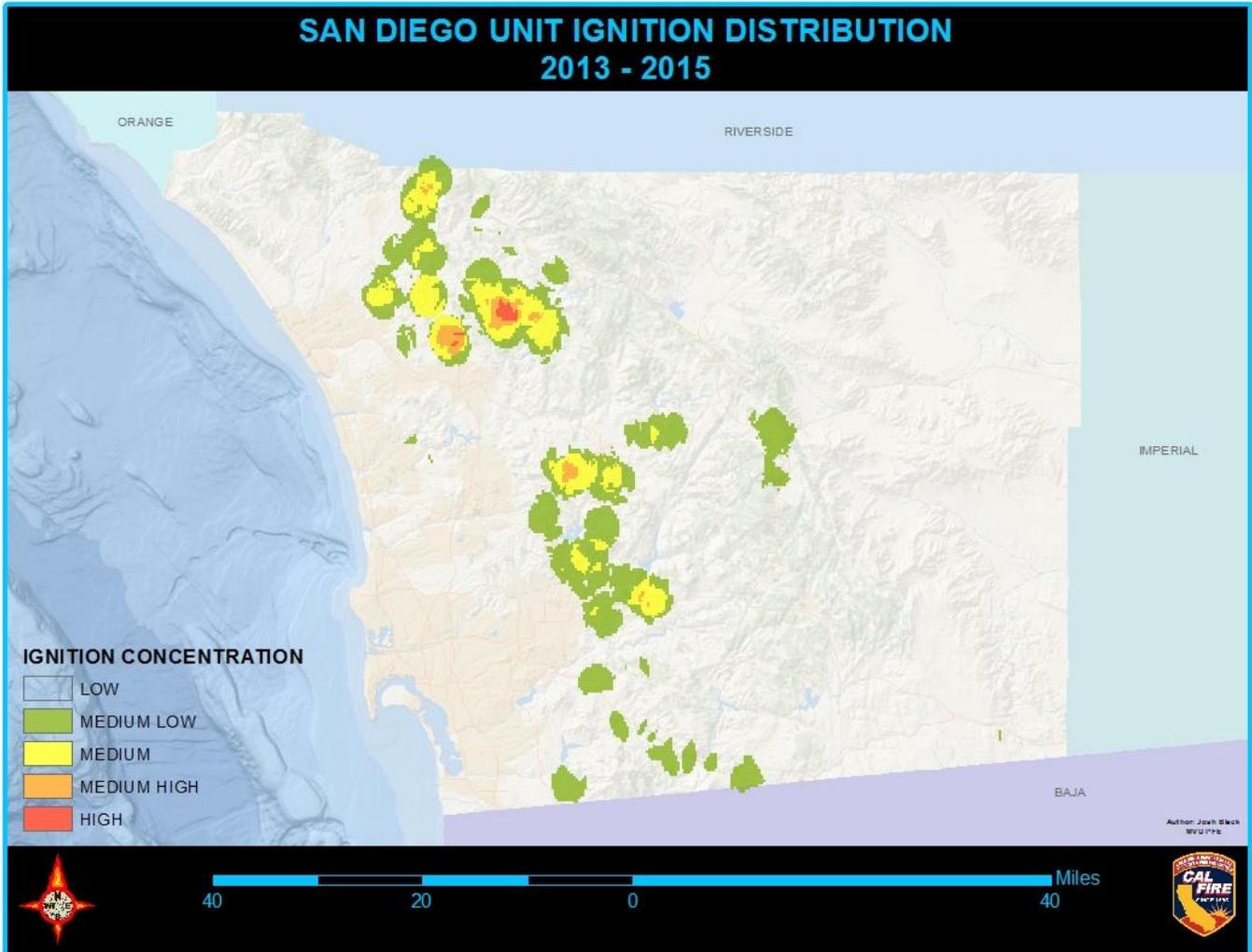
Pre-Fire/Resource Management Division is actively engaged in implementing the CAL FIRE SRA FPF projects; provides leadership in the emerging Goldspotted Oak Borer issue (see below) and coordinating with federal, state, county and city agencies; partners with the Cuyamaca Rancho State Park on a reforestation project; plans and implements the Vegetation Management Program at the Unit level; provides environmental review for all Unit projects and infrastructure maintenance program; and provides oversight for the Kuchamaa Experimental Forest (Wentz Demonstration State Area) for cultural protection. See Appendix A for the list of projects.

<ul style="list-style-type: none"> • <u>Resource Management Activities</u> 	<ul style="list-style-type: none"> • <u>Unit Activities</u>
<ul style="list-style-type: none"> ○ Forest Practice Enforcement 	<ul style="list-style-type: none"> ○ Member of the Unit's Executive Team
<ul style="list-style-type: none"> ○ Vegetation Management Program 	<ul style="list-style-type: none"> ○ Bi-national Resource Management Planning
<ul style="list-style-type: none"> ○ CFIP and related programs 	<ul style="list-style-type: none"> ○ Border Agency Fire Council Nat Res Committee
<ul style="list-style-type: none"> ○ Service Forestry 	<ul style="list-style-type: none"> ○ CAL FIRE/Mexico issues & training
<ul style="list-style-type: none"> ○ Environmental Coordinator 	<ul style="list-style-type: none"> ○ SDGE- Sunrise Powerlink Fire Mitigation Group
<ul style="list-style-type: none"> ○ Reforestation, Cone Collection and Planting 	<ul style="list-style-type: none"> ○ Outreach Services
<ul style="list-style-type: none"> ○ Pest management 	<ul style="list-style-type: none"> ○ Fire Safe Councils Support
<ul style="list-style-type: none"> ○ Forest Health/Fuels Reduction Grant 	<ul style="list-style-type: none"> ○ Firewise Community Coordination
<ul style="list-style-type: none"> ○ Emergency Watershed Protection 	<ul style="list-style-type: none"> ○ Grant Application and Administration
<ul style="list-style-type: none"> ○ State Forest Land Manager 	<ul style="list-style-type: none"> ○ FAST member and FAST Core Group
<ul style="list-style-type: none"> ○ Forest Practice Committee 	<ul style="list-style-type: none"> ○ RAST Member
<ul style="list-style-type: none"> • <u>Pre-Fire Management Activities</u> 	<ul style="list-style-type: none"> ○ So Cal Watershed Fire Council
<ul style="list-style-type: none"> ○ Unit Pre-fire Plan 	<ul style="list-style-type: none"> ○ Cuyamaca State Park's Reforestation Project
<ul style="list-style-type: none"> ○ PRC 4291 Guideline Interpretation 	<ul style="list-style-type: none"> • <u>Fire Suppression Support</u>
<ul style="list-style-type: none"> ○ Fire Defense Improvement Database Project 	<ul style="list-style-type: none"> ○ Chief Officer Coverage
<ul style="list-style-type: none"> ○ Fire Hazard, History, SRA GIS mapping 	<ul style="list-style-type: none"> ○ Incident assignments
<ul style="list-style-type: none"> ○ Review outside agencies Fire Mgt Plans 	<ul style="list-style-type: none"> • <u>Departmental Program Support</u>
<ul style="list-style-type: none"> ○ Fuel Moisture Monitoring Program 	<ul style="list-style-type: none"> ○ Coordinate with the Archaeology Program
<ul style="list-style-type: none"> ○ Micro RAWS Weather Coordinator 	<ul style="list-style-type: none"> ○ Coordinate with the Urban Forestry Program
<ul style="list-style-type: none"> ○ State Fire Assistance Grant 	<ul style="list-style-type: none"> ○ Coordinate services with area and region offices



SECTION V: IGNITIONS MANAGEMENT

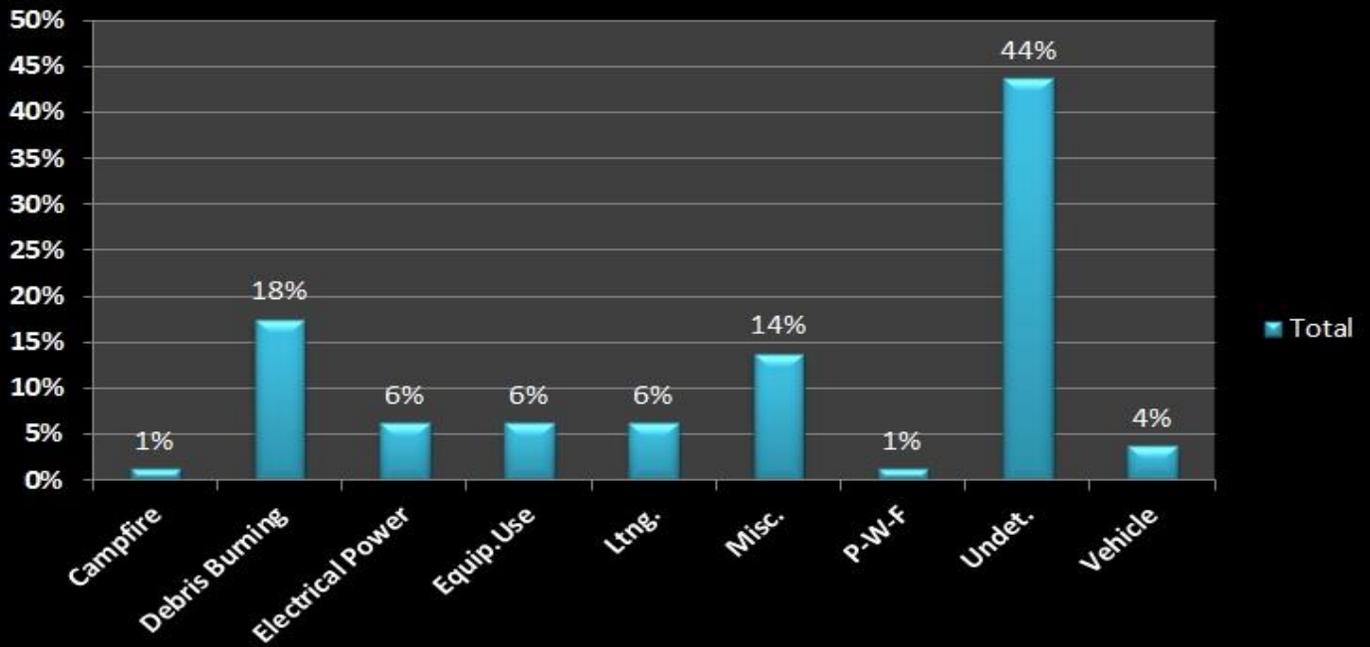
The cause of vegetation fires range from arson, campfires, debris burning, electrical power, equipment use, other/miscellaneous, playing with fire, smoking, undetermined, and vehicle. In general, debris burning caused fires tend to be associated in the northern portion of the county, although debris burning causes are noted in other areas within the county. Camp fires are another cause of vegetation fires however; these camp fires are typically related to the border region and international travelers. The map below reflects the distribution of ignitions throughout the county.



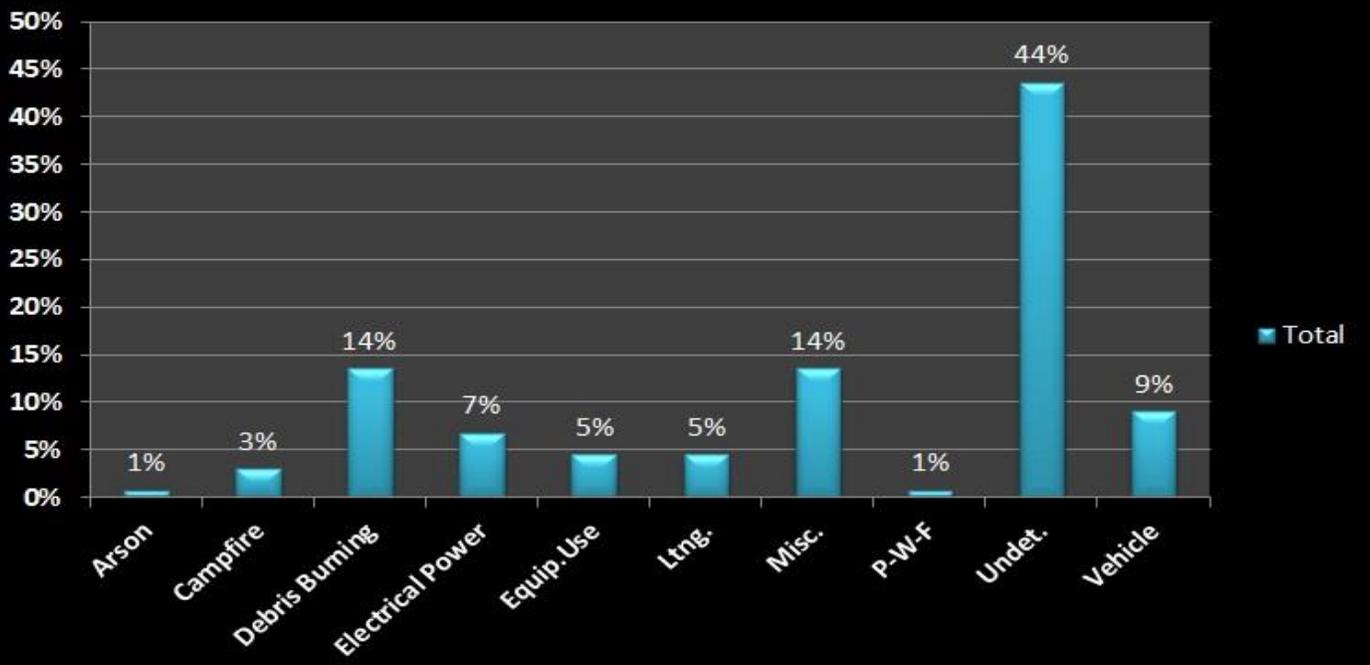
A significant number of unwanted fires are listed as undetermined or other/miscellaneous, the leading known causes for fire starts are listed as vehicle, equipment use and debris burning. Based on the recent 3-year average (2013-2015) wildland ignitions were calculated at 133 vegetation fires per year. As compared to the 10-year average number of fire starts, the average was determined at 569 vegetation fire starts. Comparing the two averages, the number of fire starts has declined. The average number of acres was not determined for this reporting cycle.

Approximately five fires per year are determined as arson caused vegetation fires. See the following charts on the distribution of ignitions regarding the annual ignitions and the 3-year averages of ignitions.

MVU Ignition Cause Percentages for 2015



MVU Ignition Cause Percentages for 2013-2015



SECTION VI - PREFIRE MANAGEMENT TACTICS

A: DIVISION and BATTALION

CAL FIRE's fire protection objective states that a system of basic fire protection will be provided so that damages to life, property and natural resources will be held at or below a level acceptable within social, political and economic constraints. Board of Forestry and Fire Protection designates in the Fire Plan (1995) that CAL FIRE will strive to contain 95% of all unwanted fires at 10 acres or less. (Fire Operations Manual, the Fire Protection Objective, Section 7001.2 (October 2002).

To meet this objective, the San Diego Unit fire operation is organized by two field Divisions (Southern Division and Northern Division) and two conservation camp Divisions (McCain and La Cima Camps Division located in the Southern Division and Puerta La Cruz and Rainbow Camps Division located in the Northern Division). The field Divisions provide firefighting leadership and coordination for seven battalions (three Battalions in the Southern Division and four Battalions in the Northern Division). The Camp Divisions provides nineteen handcrews based at four conservation camps (two camps in the Northern Division and two camps in the Southern Division). Additionally, Monte Vista Inter-agency Emergency Command Center (ECC) provides emergency services command, communication and support services for fire operations. Air Operations, based at Ramona Air Base, provides firefighting leadership and coordination of both fixed and rotary winged aircraft to support fire operations.

The following information is provided by the field Battalion Chief regarding pre-fire/resource management activities associated with the Unit Fire Plan. Field Battalion Chiefs provide the direction and leadership to propose and implement projects for life, community and natural resources protection. Field Battalion Chiefs are an integral component at community level.

Southern Division – Battalion 2 (Monte Vista)

1. OVERVIEW:

Battalion 2 (Monte Vista) is located in the southern portion of San Diego County. It is bordered by the Republic of Mexico to the south, and San Diego City to the west. The administrative boundary for Battalion 2 includes the communities of Jamul, El Cajon, Alpine, La Mesa, Lemon Grove, Santee, Lakeside, and Northern San Diego City. The Battalion is approximately 142 Square miles and 88,000 acres. Listed below are the fire agencies within the battalion.

- San Miguel Fire Protection Dist.
- Alpine Fire Protection Dist.
- Rural Fire Protection Dist.
- Sycuan Reservation Fire Dept.
- Lakeside Fire Protection Dist.
- El Cajon Fire Dept.
- La Mesa Fire Dept.
- Santee Fire Dept.
- Chula Vista Fire Dept.
- San Diego City Fire and Rescue Dept.

San Diego Rural Fire District has a cooperative agreement with CAL FIRE for fire protection services (Schedule A contract). Additionally, San Diego County Fire provides year round staffing (stipend firefighters) to staff two San Diego Rural Fire Protection District fire stations (Dehesa and Harbison Canyon Fire Stations).

The rural fire protection in Battalion 2 is described as heavily populated rural/suburban environment. The Insurance Services Office (ISO) rating for the departments within the Battalion are:

- San Miguel FPD: 4.9
- Alpine FPD: 4 – 9
- Rural FPD: 5 – 9
- Lakeside FPD: 3 – 9
- El Cajon: 2
- La Mesa FD: 2
- Santee DF: 2
- Chula Vista FD: 3
- Lemon Grove FD: 3
- San Diego City F&R: Not Required

Fuels, Weather, and Topography

The Battalion consists of mostly annual grasses, and typical Southern California Chaparral Species (fuel models 1, 2, 6, and some areas of fuel model 4). These types of fuels commonly support and promote rapid fire growth and development during peak fire season. In terms of weather conditions, the hottest month of the year is August with an average high of 92° F. Normal weather conditions for the summer months place the battalion in a high fire danger classification. The chance for Santa Ana wind conditions start around the first part of September and diminish around the end of November. In general, the terrain in the battalion is mixed with hills and gorges. The area is heavily populated with WUI communities.

2. PRIORITIES

The following reflects the pre-fire management activities and priorities for Battalion 2. The primary objective for these activities is to reduce the fuel loading to protect life, property and the environment by minimizing wildfire severity and costs.

2015 Accomplishments:

1. Defensible Space – Battalion 2 conducted 1965 defensible space inspections.
2. Completed truck trail maintenance for Crest evacuation routes.
3. Rancho Jamul VMP.

Future Projects for 2015-2016:

1. Defensible Space -- Battalion 2 hopes to exceed the number of inspections made in 2015. Emphasis is placed on making public contact and increasing public safety education.
2. Rancho Jamul VMP.
3. Crest Evacuation Plan completion and signage.

3. COLLABORATION

Battalion 2 works with the Alpine Fire Safe Council, which is organized to service the communities of Alpine, Carveacre, Dehesa, and Harbison Canyon. The Fire Safe Council work in a collaborative effort on community education, and fire defense planning, the specific groups are listed below:



Organization	Representative (title)
Alpine Fire Safe Council	Wendy Cornelius
Border Patrol	Nick Coates
USFS	TBD
BLM	Clay Howe
Sycuan Reservation Fire Dept.	Mitch Villapondo
Crest Fire Safe	Kandy Franklin

Collaborative activities

- Border Patrol – Provides maintenance of truck trails along the international border.
- BLM – Collaborates on the International Fuel break.
- SDG&E – Collaborates on fuels treatment under the major high-tension transmission lines.
- USFS – Collaborates on various fuels treatment projects near community areas.
- BIA – Collaborate on fuel breaks on Reservation land.

Southern Division – Battalion 3 (Dulzura)

1. OVERVIEW:

Battalion 3 (Dulzura) of the San Diego Unit is located in the south central portion of San Diego County, encompassing the community of Jamul on the western border, east to the community of Potrero, north to the southern border of the Cleveland National Forest, including the communities of Deerhorn Valley and Lawson Valley, south to the Mexican Border. Included in this geographical box is the Otay Mountain Wilderness area and portions of the Hauser Canyon Wilderness area as well as 2 major reservoirs that support the water delivery system of the City of San Diego. Battalion boundaries encompass approximately 570 square miles, and nearly 363,000 acres of State Responsibility Area as well as direct protection responsibility for BLM lands, and a small portion of forest lands with-in the identified area. Numerous county highways and 1 state highway traverse the battalion, serving the rural communities identified above as well as the additional communities of Dulzura, Barrett Junction, and Tecate.

Battalion 3 works with a number of cooperating fire agencies on virtually all fire incidents with-in the battalion including; San Diego County Fire, U.S. Forest Service, Bureau of Land Management, and the U.S. Fish and Wildlife Service.

Battalion 3 also includes 3 San Diego County Fire Schedule A fire stations. Through a cooperative agreement, CAL FIRE staffs 1 Advanced Life Support (ALS) engine and 1 ALS truck company at Fire Station 36 in Jamul. 1 ALS engine at Fire Station 37 in Deerhorn Valley, and 1 ALS engine and truck company in Otay Mesa. All battalion firefighting assets are integrated into a regional response system utilizing the closest resource for any emergency. This collaboration is mutually supportive for all incident types and significantly reduces response times in all communities as well as improving initial attack effectiveness. Fuels with-in battalion 3 is typical Southern California Chaparral species, (predominantly fuel models 3, 4, and 6) which readily lend themselves during seasonal norms to rapid fire spread and development. Elevations range from 700' MSL to 2900' MSL. As such, we experience an active wild land fire season typically from mid-May thru December. Weather patterns are typical for this latitude with lows during winter months in the 40's and can experience in the summer months prolonged periods above 100 degrees. Like most of Southern California, the area experiences on-shore winds in the afternoon during most of the summer months, and monsoonal thunder storm activity is typical during late July through early September. Santa Ana weather patterns usually develop in early fall.

Battalion 3 has experienced 2 major fires during Santa Ana wind events in the previous 9 years. October 24 – 27 2003; "Mine Fire" Otay Mountain Wilderness area, over 49,000 acres, and October 2007 "Harris Fire", over 94,000 acres, originating in the community of Potrero and burning west to the urban communities of Rancho San Diego, and City of Chula Vista.

Statistically, Battalion 3 has a significant amount of initial attack wild land fire activity as well as the major fire activity listed above. Of particular concern are the communities of Lawson Valley, and Lyons Valley. These communities were not impacted by the fires identified above. The last recorded fire activity in these communities was the 1970 "Laguna Fire", also a Santa Ana wind event catastrophe. Fuel age classes in these communities are over 40 years with a significant dead to live component in the decadent stands. The issue that has developed is significant residential development in these areas since the "Laguna Fire". In addition to the age class of the fuel, both communities share a significant problem with access and egress in the event of a major fire. In the case of Lawson Valley, Lawson Valley Rd. is the only means of access or egress into this community, and the only means of egress travel is to the west. Lawson Valley is essentially a cul-de-sac canyon with no eastern access or egress from the valley.

In terms of Communities at risk, the following assessment identifies each of the communities of concern:

- LAWSON VALLEY and LYONS VALLEY -- Hazard: Extreme. 40 year or older vegetation, remote limited access.
- DULZURA -- Hazard: Medium. Burned in 2007 Harris Fire. Regular wildland fire history.
- JAMUL -- Hazard: High to extreme. 40 year or older vegetation mostly north side near Rancho San Diego, Mount Miguel and up Skyline Truck Trail on the north side. Also, old fuel in the Jamul area. Regular wildland fire history.
- DEERHORN VALLEY -- Hazard: High. Remote limited access, burned in 2007 Harris Fire.
- TECATE -- Hazard: High. Burned in 2007 Harris Fire, Regular wildland fire history.
- POTRERO -- Hazard: High to extreme. Approximately 1/3 of the community was burned in 2007 Harris Fire. Community north of Potrero Park Dr. and Round Potrero Rd were not impacted by the Harris fire, and has experienced typical initial attack wild land fire activity. Age class of fuels in this area is approaching 42 years.

2. PRIORITIES:

Battalion 3 priorities focus on five key activities:

1. Initial attack readiness (Training, equipment, support).
2. Continue inter-agency dialogue and training.
3. Interaction with, and support of, community Fire Safe Councils.
4. Maintenance of existing fuel breaks.
5. Continue rehabilitation of truck trails with-in the battalion to support initial attack success.
6. Defensible Space Inspections-The Battalion expects to match or exceed the 1514 inspections.

2015 Accomplishment:

1. Battalion 3 conducted 1514 Defensible Space Inspections in 2015.

3. COLLABORATION:

Representatives involved in the development of the Unit Strategic Fire Plan within the Battalion 3 administrative area includes:

Organization	Representative (title)
Dulzura/Barrett Fire Safe Council	
Potrero/Tecate Fire Safe Council	Bob Uribe
Carveacre Fire Safe Council	Wendy Cornelius
Greater Jamul Fire Safe Council	Tom Lamb
U.S Forest Service	Brian Rhodes/ Talbot Hayes
Bureau of Land Management	Clayton Howe
U.S Fish and Wildlife Service	Larry Wade



Southern Division – Battalion 4 (Campo)

1. OVERVIEW:

Battalion 4 (Campo) is located in the extreme southeastern corner of San Diego County. It is bordered by the Republic of Mexico to the south, Imperial County to the east, and USFS land to the north. The communities of Pine Valley, Campo, Boulevard, and Jacumba fall within Battalion 4's Direct Protection Area with a size totaling approximately 300 square miles. Listed below are the fire agencies within the battalion:

. Boulevard Fire

- Bureau of Land Management
- Campo Fire
- Campo Reservation Fire
- Pine Valley Fire
- San Diego Rural Fire
- United States Forest Service

CAL FIRE has a cooperative agreement with San Diego County Fire to provide year round staffing in Campo and White Star stations as well as the cooperative agreements with Pine Valley Fire Protection District and San Diego Rural Fire District. The fire protection problem in the communities of Battalion 4 is classed rural/suburban. The Insurance Services Office (ISO) rating for most of the battalion is 9 with the town of Pine Valley rated as 4.

FUELS, WEATHER and TOPOGRAPHY

The Battalion consists of mostly annual grasses, and typical Southern California Chaparral Species (fuel models 1, 2, 6 and pockets of fuel model 4). These fuels promote rapid fire growth and development. The eastern part of the Battalion turns into desert. For the last two years Battalion 4 received 2 inches above normal in rainfall, stopping a several year drought cycle. The hottest month of the year is August with an average high of 96° F. In the summer months the battalion receives monsoonal moisture which brings lightning activity. Strong east winds are experienced throughout the battalion during Santa Ana wind events. Normal weather conditions for the summer months place the battalion in a high fire danger classification. The battalion is mixed topography with hills and gorges. The elevation is 3,500' to 4,500' before dropping into the Anza Borrego desert to the east. The north end of the battalion butts up against the Laguna Mountains which top out at 6,000'.

2. PRIORITIES:

Projects for 2015-2016:

1. Defensible Space Inspections - The Battalion expects to match or exceed the 2015 inspections.
2. Corte Madera VMP – Plan to renew the previous VMP and continue work on treating the 1178 remaining acres of overall 1846 acre project.
3. Maintenance of the Camp Locket Fuel Break protecting the community of Campo.
4. Proposed new fuel break in the community of Boulevard, Tierra Del Sol area.
5. Continuing maintenance for the Cameron Extension Fuel Break in Lake Morena.
6. Assist in reviewing of area Fire Safe Councils Community Wildfire Protection Plans.
7. Continuing maintenance of the Lake Morena fuel break.
8. McCain Valley VMP project of 245 acres.

2015 Accomplishments:

1. Defensible Space inspections - The Battalion conducted 1682 defensible space inspections in 2015.
2. Campo Hills Fuel break – Southern portion completed.
3. Fire Safe Council Chipping Projects for the communities of Pine Valley, Descanso, and Boulevard.
4. Lake Morena Fuel Break in cooperation with Cleveland National Forest- completed.
5. Assist local Fire Safe Councils to obtain grant funding for dead and hazard tree removal.

3. COLLABORATION:

Representatives involved in the development of the Unit Strategic Fire Plan within the Battalion 4 administrative area includes:

Organization	Representative (title)
Pine Valley Fire Safe Council	Dick Dupree
Descanso Fire Safe Council	David Somes
Real East County Fire Safe Council	Ken Daulbach
Campo-Lake Morena Fire Safe Council	Larry Johnson
Bureau of Land Management	Clayton Howe
Border Patrol	Nick Coates
SDG&E	Hal Mortier

Collaborative activities

- Border Patrol – Provides maintenance of truck trails along the international border.
- BLM – Collaborates on the International Fuelbreak.
- SDG&E – Collaborates on fuels treatment under the major high-tension transmission lines.
- USFS – Collaborates on various fuels treatment projects near community areas.



Southern Division – Battalion 6 (San Miguel)

1. OVERVIEW:

Battalion 6 (San Miguel) is a newly formed Battalion mainly comprised of the San Miguel Fire Protection District, The battalion is located in the southwest corner of San Diego County. It is bordered by Chula Vista to the south, San Diego to the west and Bonita-Sunnyside to the west-southwest. The administrative boundary for Battalion 6 includes the communities of San Miguel Fire Protection District, Otay, Chula Vista and Southern San Diego City; and the Battalion is approximately 55 Square miles and 19,000 acres. Listed below are the fire agencies within the battalion.

- San Miguel Fire Protection Dist.
- Bonita-Sunnyside FPD.
- Chula Vista Fire Dept.
- San Diego City Fire and Rescue Dept.
- Lemon Grove Fire Dept.

Fuels, Weather, and Topography

The Battalion consists of mostly annual grasses, and typical Southern California Chaparral Species (fuel models 1, 2, 6, and some areas of fuel model 4). These types of fuels commonly support and promote rapid fire growth and development during peak fire season. In terms of weather conditions, the hottest month of the year is August with an average high of 92° F. Normal weather conditions for the summer months place the battalion in a high fire danger classification. The chance for Santa Ana wind conditions start around the first part of September and diminish around the end of November. In general, the terrain in the battalion is mixed with hills and gorges. The area is heavily populated with WUI communities.

2. PRIORITIES

The following reflects the pre-fire management activities and priorities for Battalion 6. The primary objective for these activities is to reduce the fuel loading to protect life, property and the environment by minimizing wildfire severity and costs.

Future Projects for 2016-2017

1. Defensible Space – Inspections, with emphasis being placed on making public contact and increasing public safety education.
2. Assessment of current defensible space of residences in the Dictionary Hill and Pointe Parkway areas. Consider future VMP projects to enhance defensible space.

3. COLLABORATION

Battalion 6 works the Alpine Fire Safe Council, which is organized to service the communities of Alpine, Carveacre, Dehesa, and Harbison Canyon. The Fire Safe Council work in a collaborative effort on community education, and fire defense planning, the specific groups are listed below:

Organization	Representative (title)
Alpine Fire Safe Council	Wendy Cornelius
Border Patrol	Nick Coates
USFS	TBD
BLM	Clay Howe
Sycuan Reservation Fire Dept.	TBD

Collaborative activities

- SDG&E – Collaborates on fuels treatment under the major high-tension transmission lines.
- USFS – Collaborates on various fuels treatment projects near community areas.
- BIA – Collaborate on fuel breaks on Reservation Land.

Northern Division – Battalion 1 (Red Mountain)

1. OVERVIEW:

Battalion 1 is located in the North West corner of San Diego County and consists of 3 State funded fire stations, 1 County funded volunteer fire station, and 3 District funded fire stations. Rainbow Conservation Camp is also located within Battalion 1. The battalion is bordered by Fallbrook, Vista, San Marcos and Camp Pendleton Marine Corps Base to the West, Riverside County to the North, Pala Indian Reservation, Valley Center and the Cleveland National Forest (Palomar District) to the East, and the City of Escondido to the South. The Battalion is a classic example of wildland urban interface (WUI) where vegetation fires routinely threaten structures and infrastructure.

Staff works with a variety of local government, Federal and Reservation Fire Departments throughout the battalion including North County Fire Protection District, San Diego County Fire, Vista Fire Department, Escondido Fire Department, San Marcos Fire Department, Pala Reservation Fire Department, Cleveland National Forest, Bureau of Land Management (BLM) Deer Springs Fire Protection District (Schedule A), and the Valley Center Fire Protection District.

North County Fire Protection District utilizes Red Mountain Station 10 as part of the Districts standard response plan under the county's Master Mutual Aid Agreement. Additionally, both North County Fire Protection District and Deer Springs Fire Protection District utilize Miller Station 15 as part of their standard response plans. CAL FIRE and the Pala Reservation Fire Department have an automatic aid agreement. CAL FIRE also provides direct protection to Pala Reservation 16,000 acres for wildland fires. CAL FIRE and the Bureau of Land Management (BLM) have an agreement where CAL FIRE provides direct protection for approximately 1,000 acres on BLM land in Battalion 1. CAL FIRE and San Diego County Fire have automatic aid agreements specific to the DeLuz area.

Battalion 1 has had limited significant fire activity/history in the past thirty years with the exception of two fires. The Rice fire started on October 22, 2007 and burn 9,472 acres and destroyed 248 structures. The Gavilan Fire started on February 10, 2002 burning 5,763 acres and destroying 43 structures. Since these fires the County has experienced significant precipitation and the vegetation has re-grown. **Interstate 15:** Approximately ninety thousand cars traverse I-15 through Battalion 1 daily. The continuous vegetation along Interstate 15 is of significant concern to several communities including Fallbrook, Rainbow, Deer Springs, Vista and San Marcos. **Highway 76:** Has a large amount of unburned vegetation between the communities of Valley Center, Pala Indian Reservation and the Riverside County Border. **DeLuz:** A main drainage traverses the Santa Margarita River through the community of DeLuz and the Northern portion of Fallbrook, and is home to the Wisegarber fuel break on Camp Pendleton's Eastern border.

The Deer Springs Fire Protection District works closely with the Deer Springs Fire Safe Council on issues of wildland/urban interface fire threats, defensible space, community outreach, and information distribution in times of heightened fire risk. The Fire Safe Council is a nonprofit community service organization, and as such has been able to secure grants for the advancement of fire safety goals within the district boundaries. Most notably, the Fire Safe Council obtained a grant through the US Forest Service to provide a Fuel reduction zone on the Moosa Canyon Rim surrounding the community of Hidden Meadows. Additionally, the Deer Springs Fire Safe Council manages a successful community chipping program, which removed over 51,000 cubic feet of potential wildfire spreading fuels in 2015. Other grants have helped fund various other fuel reduction programs as well as the Community Emergency Response Team (CERT). The Fire Safe Council also operates an informational notification system on a subscription basis that is similar to a reverse 911 system. This system is utilized to provide information during times of crisis or possible heightened fire risk.

2. PRIORITIES:

1. Moosa Canyon Rim.
2. Rainbow Truck Trail
3. Tenaja Truck Trail.
4. Roblar Truck Trail.
5. Red Mountain Lookout.

Accomplishments in 2015

1. Proactive maintenance and inspections of Red Mountain Lookout, Tenaja, Roblar, Rainbow and Santa Margarita Truck Trails.
2. In 2015, Battalion 1 conducted 1399 defensible space inspections.

3. COLLABORATION:

A: COMMUNITY / AGENCIES / FIRE SAFE COUNCILS

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

Organization	Representative (title)
Deer Springs Fire Safe Council	Craig Cook (President)
Deer Springs CERT Team	Marc Wiseman (President)

Central Division – Battalion 5 (Julian)

1. OVERVIEW:

Through cooperation with San Diego County Fire (SDCF) and CAL FIRE (CF) Battalion 5 is responsible for three State Fire station facilities and staffs two County fire station facilities with CAL FIRE Staff. In addition to the state mission, Battalion 5 personnel work closely with the SDCF, the USFS, State Parks, BLM, BIA and several volunteer agencies in order to provide the most effective fire protection to the citizens we serve.

Operational Summary

Battalion 5 is the largest single battalion in San Diego County consisting of approximately 176 squares miles and 860,000 acres that border Imperial County to the east and Riverside County to the North. It also contains a unique landscape ranging from deserts in the far eastern portion to mountains in the central. The fuel models range from type 1 grasses in the desert at elevations near sea level to type 10 hardwood timber at elevations above 6000 feet. Temperatures range from mid-teens in the winter with snow in the higher elevations to 120 degrees in the desert portions during the summer.

Battalion 5 has two CAL FIRE inmate conservation camps providing a valuable resource for project work and fire suppression. Battalion 5 has experienced significant fire history over the past 10 years that encompassed a large portion of Battalion 5. Two of the largest fires in California’s history, Cedar and Witch Fires, have burned in portions of Battalion 5. In 2002 the Pines fire burned most of the central portion of the battalion on the Volcan Mountain and Banner Grade side burning 60,500 acres. In 2003, the Cedar fire started near the southern edge of the battalion and eventually consumed a large portion of the eastern and southern side including all of Cuyamaca and the area east of Santa Isabel resulting in numerous structure losses. In 2005, the Volcan fire burned 625 acres on Volcan Mountain on the west side near the town of Julian. In September of 2007 the Angle fire burned 875 acres on the East side of Julian threatening the small rural mountain town. In 2007, the Witch fire burned all of the area south of Santa Isabel and West into the City of Escondido and San Diego. The areas south west of the town of Julian and most of the Warner Springs area on the north side of Hwy 79 to the county line have not had a major fire in the past 20 years. These areas have the most chance of a destructive fire and a significant life and property threat.

2. PRIORITIES:

Establishing defensible space around homes in the battalion is a priority and defensible space inspections take place year round. During these inspections crews educated citizens to the process of defensible space and the benefits it provides. We also educated citizens through our community outreach presentations of, “Ready, Set, Go”, defensible space, and “Before, During, and After a Wildfire”. These sessions cover not only defensible space, but also building standards and materials, fire safe landscaping, and evacuation concerns. With our assistance Fire Safe Councils have been formed in the Sunshine Summit and Warner Springs communities.

The following is a list of projects targeted to protect communities within Battalion 5:

1. Paso Picacho VMP within Cuyamaca State Park – 60 acres.
2. Continue with San Felipe VMP Project – 1000 acres.
3. Defensible space Inspections - The Battalion expects to match the 2015 inspections.
4. Develop a VMP Project on the Moretti Ranch

2015 Accomplishment:

1. Defensible Space - The Battalion conducted 3060 defensible space inspections in 2015.

Vegetation Management

In cooperation with CAL FIRE Pre-Fire/Resource Management, La Cima and Puerta La Cruz Conservation Camps, Battalion 5 personnel have been working on vegetation management programs to reduce the possibility of another destructive fire in Battalion 5. A 51 acre VMP burn on Middle Peak in the Cuyamaca area was completed in 2012. Through the cooperation with our resource management department and the State parks an effort to replant the once pristine forest lands that were devastated during the Cedar fire of 2003 and the Witch fire of 2007 is under way. Several other VMP burns are scheduled for 2016 in San Felipe Valley and pile burning along the Sunrise Highway Fuel Break. The community continues to assist with defensible space clearance, pile burning by way of issuance of burn permits and LE-7 burns when possible. Several community fuel breaks have been placed in and around the communities of Julian, Cuyamaca and Warner Springs to increase the defensible space around the hundreds of homes that are located in the rural mountain area. These forest management efforts play a key role in improving public and firefighter safety.

3. COLLABORATION:

The battalion works with a wide variety of agencies and participates in Fire Safe Councils, and CERT programs in the communities of Julian and Warner Springs. In addition a good working relationship has been formed with Julian/Cuyamaca Volunteer Fire Department, Intermountain Volunteer Fire and Rescue, Sunshine Summit Volunteer Fire Department, State Parks and the USFS for mutual aid response. Staying active helps to increase relations and keep all informed of our efforts to continually enhance fire protection within the battalion.

Battalion 5 has cooperative agreements with SDCF:

Warner Springs Fire Station

- Staffed with CAL FIRE personnel min. of 3.0.
- Staffed with SDCF stipend personnel min of 2.0.
- Works with local reserve fire dept. in providing training, operations and admin.

Ocotillo Wells Fire Station

- Staffed with CAL FIRE personnel min of 3.0.
- Staffed with SDCF stipend personnel min 2.0.
- Works with local reserve fire dept. in providing training, operations and admin.
- Develop IAP for desert region off-roading and communities fire protection and EMS
- Added logistical support for influx of staff related to call load (sleeping trailers, com unit, SDSO Search and Rescue).
- Establish an Auto Aid Agreement with Imperial County.

In addition to providing staffing, CAL FIRE personnel coordinate stipend and volunteer staffing, vehicle maintenance and training for the SDCF program in the North East portion of San Diego county.

Northern Division – Battalion 7 (Valley Center)

1. OVERVIEW

Battalion 7 (Valley Center) is located in north central San Diego County. It is bordered to the north by Riverside County and the Cleveland National Forest (Palomar District), to the east by CAL FIRE Julian Battalion, to the west by CAL FIRE Red Mountain Battalion and the Deer Springs Fire Protection District, and to the south by the cities of Escondido and San Marcos. The Valley Center Battalion is unique in its orientation (SW to NE); this orientation lines up with northeast wind events (Santa Ana) which presents the potential for large fast moving fires.

CAL FIRE is partnered either through local agreements or contracts with the following agencies:

- Pala Reservation Fire Department.
- Pauma Reservation Fire Department.
- La Jolla Reservation Fire Department.
- Rincon Reservation Fire Department.
- San Diego County Fire- Palomar Mountain.
- Yuima Municipal Water District (Amador Agreement for one Fire Station).



Valley Center Battalion has topography features as varying as its fuel types. The southwest corner includes the rolling hills of the Pacific Coastal Plains; flat plateaus, rolling hills and deep canyons/drainages in the heart of the community; and steep mountainous terrain in the north and northeast corner. Weather can vary widely depending on where you are in the Battalion. Local temperature, relative humidity and dew points change quickly over relatively short distances. Most of the Valley Center Battalion is comprised of contiguous State Responsibility Area (SRA) ranging from grass lands, medium brush, various hardwood trees, and conifer forests. With the formation of cities and tribal reservations, several islands and pockets of SRA have been created within the battalion. While Battalion 7 has normal initial attack fire activity, it has been subjected to large fires in the past. Of the large fires in the past the most notable in recent years are:

- 2003 Paradise Fire; burned 56,700 acres and destroyed 221 residences, 192 outbuildings, 2 commercial properties, and 75 vehicles. In addition, 10 residences and 5 outbuildings were damaged. 2 civilian fatalities and 24 injuries.
- 2007 Poomacha Fire; burned 49,410 acres and destroyed 138 residences, 1 commercial property, 78 outbuildings and caused an estimated 15 injuries costing \$20.6 million dollars to suppress. The Poomacha eventually joined with the Witch fire to the south.

After the events of 2003 and 2007, the State of California and County of San Diego enacted laws requiring increased clearance and fuel reductions around structures or other improvements abutting SRA lands. The County of San Diego also formed a County Fire Authority post 2007 which included fire prevention inspection and mitigation departments. Valley Center Fire Protection District and Yuima Municipal Water District have adopted the County Ordinance for fuel abatement.

In past years, a downturn in the economy had slowed housing development in Battalion 7. Today, the Battalion is starting to see a resurgence of urban interface development in the community of Harmony Grove within SRA lands.

Besides the “Communities at Risk” identified in the Section III- B Communities at Risk section, the following areas are of concern as well:

- Valley Center.
- Pala Indian Reservation.
- Pauma Indian Reservation.
- Pauma Valley.
- Rincon Indian Reservation.
- La Jolla Indian Reservation.
- San Pasqual Indian Reservation.

- Palomar Mountain.

INFRASTRUCTURE

- Boucher communication facilities and towers.

WATERSHED

- Lake Wohlford.
- Lake Dixon.
- Lake Hodges.

Accomplishments: Battalion 7 conducted 1128 defensible space inspections.

2. PRIORITIES

The following is a list of projects targeted to protect communities within Battalion 7:

1. Short Term and continually ongoing- Defensible Space inspections.
2. Creation of Fire Safe Council-Pauma Valley (Completed).
3. Truck Trail Maintenance/Fuelbreak (1-2 year Plan):
 - La Jolla Truck Trail - maintenance.
 - Guejito Truck Trail – maintenance.
 - Bear Ridge Truck Trail – maintenance.
 - Von Sangren Truck Trail – maintenance.
 - Wohlford Truck Trail – maintenance.
 - Lusardi Truck Trail - environmental review completed; project to be completed in 2016.
 - Palomar Divide Truck Trail - environmental review completed; project to be completed 2016.

3. COLLABORATION

Representatives involved in the development of the Unit Strategic Fire Plan within the Battalion 7 administrative area includes:

Organization	Representative (title)
Fire Safe Council-Valley Center	Jim Courter, President
CERT-Valley Center	Jim Courter, President
Fire Safe Council-Pauma Valley	Craig Childs, President
CERT- Palomar Mountain	James Ewing, President

Northern Division – Battalion 8 (Ramona)

1. OVERVIEW:

Battalion 8 is in the center of San Diego County. Battalion 8 is bordered by Julian and the Cuyamaca mountains to the east, The Barona Reservation, and Lakeside to the south, Escondido, San Diego, and Poway to the west, and the Cleveland National Forest (Henshaw District) to the north. The eastern boundary of Battalion 8 is Highway 78 x Hwy 79 crossing in Santa Isabel. The southern boundary is in Lakeside at Slaughterhouse Canyon Rd X Hwy 67. To the west, is the San Pasqual area near the San Diego Wild Animal Park X Hwy 78.

Battalion 8 enjoys cooperative working relationships with all of the neighboring departments and has automatic and mutual aid agreements with many of them. We coordinate with:

- i. Barona Reservation Fire Department and Lakeside FPD to the south.
- ii. San Diego County Fire San Pasqual Station, San Diego City and Poway to the west
- iii. Rural Fire Protection District, and Julian / Cuyamaca Fire Protection district to the east
- iv. US Forest Service and San Diego County Fire Intermountain Station to the north.

The fuel models in Battalion 8 generally are fuel models 1, 4, or 5. At 1,450 ft. above sea level, Battalions 8's average temperatures are High: 94.4 Low: 53.3 in the summer and High: 67.8 Low: 35.4 in the winter. Average Humidity is 30% in the summer and 70% in the winter. Battalion 8 was ground zero for the Cedar Fire in 2003, and the south and eastern borders of the community of Ramona were severely impacted. Most of the vegetation re-growth is now 8 years old. The Witch Fire in 2007 again severely impacted. The north and west boundaries of the battalion have 4 year old vegetation re-growth.

We have re-established the Foster Truck Trail as a fire road. Through the Local Fire Safe Council secured funds to create the West End Fuel Break and the Snuz Mountain fuel break, these fuel breaks isolate and protect the only area of Ramona not impacted by the Cedar and Witch fire. This is the southwest area between Mussey Grade and Rock House Rd. The USFS has established the San Vicente Fuel Break in the north eastern area of Ramona known as the Ramona Country Estates.

Besides the "Communities at Risk" identified in the Section III- B. Communities at Risk section, the following area are of concern as well:

INFRASTRUCTURE & WATERSHED

- Mount Woodson Peak communication facilities and towers.
- SDG&E main lines coming into Ramona at Creelman as well a high tension power lines that cross Highway 67 near Foster Truck Trail.
- Ramona Reservoir.
- Lake Sutherland.

2. PRIORITIES:

1. Continue to conduct defensible space inspections of properties in the Wildland Urban interface, by maximizing the use of Schedule A resources with a particular focus on the Mussey Grade / Fern Brook area and the Barona Mesa area of the Ramona County Estates.
2. Continue to create fuel breaks in the eastern area of the battalion around the Barona Mesa area of the Rural Fire Protection District, and the Ramona County Estates.
3. Work with the USFS on the Cleveland National Forest to identify areas of the FRA SRA boundary that will create a barrier to fire spread from the east to the west and further protect the community of Ramona, like reestablishing the Kimbal / Barona Fuel break.
4. Continue to work with the West End Fire Safe Council to maintain the fuel breaks in the Rosemont area near Rock House Road.
5. Continue to work with Ramona Municipal Water District to identify and create fuel modifications for the purpose of protection of water infrastructure, such as water tanks, reservoirs, and access roadways
6. Maintain the Foster Truck Trail on the south end of Battalion 8.
7. Continue to work with the City of San Diego to modify the vegetation on the top of Mt Woodson to protect critical communications infrastructure.

8. Continue to work with State and County Road officials to treat the vegetation on the local highways and roads that are designated as evacuation routes per the Ramona CPEP.

2015 Accomplishments:

1. Mt. Gower Country Estates Fuel Break
2. Defensible Space - The Battalion conducted 3306 defensible space inspections in 2014.

3. COLLABORATION:

Representatives involved in the development of the Unit Strategic Fire Plan within the Battalion 8 administrative area includes:

Organization	Representative (title)
West End Fire Safe Council	Kristi Mansolf
USFS	John Forrester Battalion Chief
Ramona Fire Department	Steve Foster Battalion Chief
Intermountain Fire Department	Randy Scales Battalion Chief
Barona Fire Department	Ken Kremensky Chief
Fish and Game	Jason Price
SD County Parks	Jennifer Price



B: EMERGENCY COMMAND CENTER

The Monte Vista Inter-Agency Emergency Command Center (ECC) is a Command Center (a dispatch office supervised by seasoned fire suppression professionals) staffed in partnership with the United States Forest Service (USFS) Cleveland National Forest. The Monte Vista ECC provides dispatch, communications and support service for emergency operations within the CAL FIRE San Diego Unit and Cleveland National Forest. The ECC provides, by contractual agreement, command-communication center services to more than 21 fire departments and districts and ambulance providers. The ECC received over 32,000 9-1-1 calls and dispatched over 25,820 emergency incidents in 2015. More than 18,000 responses were requested for emergency medical care. Additionally the ECC staff provided Emergency Medical Dispatch “pre-arrival” care instructions to the caller when necessary. The remaining incidents included structure fires, hazardous materials incidents, helicopter assisted rescue operations, and nearly 500 vegetation fires. In order to coordinate and dispatch the closest resources to all incidents the ECC continuously monitors the location and status of more than 200 fire and medical resources and several hundred personnel. Recently, the ECC participated in the development of additional VHF radio repeater sites allowing greater VHF radio coverage for emergency response personnel and acquired additional 800 MHz radio channels to meet an increasing operational communications need.

The ECC supports “prescribed burning” operations for brush clearing and vegetation fire fuel reduction projects. They coordinate the processing of the Live Fire Use – Approval/Notification Form (FC-400) between the Incident Commander, Unit Duty Chief, Region Duty Chief and the Region Operations Center.

The ECC employs several evolving technologies to enhance the flow of information with emergency response personnel including; Automatic Vehicle Locators (AVL), Mobile Data Computers (MDC’s), and connectivity between the CAL FIRE Computer Aided Dispatch computer system (CAD) and allied agency CAD systems using the Regional CAD Interoperability Project (RCIP). This interface includes the Dynamic (progressive) routing of multi-agency resources by the ECC which also allows us to track and coordinate emergency apparatus in order to dispatch the closest resource to an emergency, regardless of agency affiliation or jurisdiction.

The ECC, in coordination with field staff use the Next-Generation Incident Command System (NICS, soon to be called SCOUT and managed by Cal OES starting midsummer 2016). NICS was developed by the Massachusetts Institute of Technology (MIT) Lincoln Laboratory in partnership with CAL FIRE and sponsored by the U.S. Department of Homeland Security (DHS) Science and Technology Directorate. is designed to improve first-responder situational awareness and collaboration, as well as interagency interoperability in disaster response. For more information, go to these websites: [NICS](#), [SCOUT](#)

The remaining technology system is the High Performance Wireless Research and Educational Network (HPWREN) project which uses a strategically placed high speed camera network throughout San Diego County that allows the ECC staff to visually confirm the existence and intensity of a fire from the detection of a “new fire” to the progression and monitoring of an existing fire.

C: AIR OPERATIONS

The San Diego Unit operates one of the most comprehensive firefighting aviation programs in the Nation. The Unit operates two aviation programs; a fixed wing and a rotary wing program. The fixed wing program operates out of the Ramona Air Attack Base. It consists of one OV-10 Air Attack aircraft and two S-2T type III air tankers. The rotary wing program operates out of Gillespie airport. This is a unique program that combines San Diego County Sheriff pilots with CAL FIRE Helitack crews. This Interagency program operates three type II Bell Super 205 helicopters, one of these is utilized as a maintenance spare/surge capacity to ensure there always two helicopters operational. The Sheriff department has additional auxiliary aircraft that are utilized for special missions when applicable. The aviation program also enhances the Units Pre-Fire/Resource Management Division. Some of them are as follows:

Rotary Wing Program

- Helitack Fuels Crew. Helitack Firefighter positions have been funded through May 30, 2016. This crew will aid in VMP burns and projects.
- Unit vegetation assessments. Aerial reconnaissance flights.
- Aerial Ignition. Future equipment will include aerial capabilities to assist in VMP burns.

Fixed Wing Program

- Air Attack 330 has a unique Infrared/Video camera system that is capable of down-linking to vehicles. This data is recorded onto an onboard hard drive or to the Chief's vehicles hard drive. This camera system assists the pre-fire program by:
 - Unit wide fuel assessments.
 - IR/Video data collection of incident.
 - IR/Video data collection of vegetation health state. Including GSOB mortality.



D: CAMP PROGRAM

The Conservation Camp Program, in partnership with the Department of Corrections and Rehabilitation, provides nineteen hand crews to support fire operations, pre-fire/resource management activities and projects, and other public agencies and approved non-profit organization for public services. Four conservation camps are located in the San Diego Unit, two are located in the Southern Division -- McCain Valley and La Cima Conservation Camps are staffed with male inmates. Two are located in the Northern Division -- Puerta La Cruz and Rainbow Conservation Camps and are staffed with female inmates.

When the hand crews are not assigned to emergency incidents, they serve as the key workforce for implementing pre-fire/resource management activities and projects. Typically, the camps provide at least two hundred crew days per camp per year toward pre-fire/resource management activities and projects. Nearly all the fuel reduction projects listed in Appendix A are implemented by using conservation camp crews.

In terms of funding support for camp crews, the Hazardous Fuels Treatment Grant provides reimbursement funds to offset operational cost to support grant funded fuels treatment projects. Fire safe councils may utilize camp crews for community fuels treatment projects – especially for those projects identified in their Community Wildfire Protection Plans.



APPENDIX A:
SAN DIEGO UNIT- 2015 PROJECTS and ACTIVITIES

The Unit's Pre-Fire/Resource Management Projects and Activities are directly linked to specific Unit Goal and Objectives. These projects and activities are related to fuel modification, community outreach and education programs, etc.

Project Name	Battalion	Status	Type	Length (miles)	Project Total Acreage	Acres Treated	Deliverables	Year
One Less Spark Media Campaign	Unit-Wide	Complete	Media Outreach/PSA				180 Broadcasts	
San Diego County Community Defense Zone	8	Complete	Fuel Reduction		95	95		2014
Mt. Woodson Road / Repeater Fuel Reduction	8	Complete	Fuel Reduction		9	9		2015
Warner Springs Estates Fuel break	5	Complete	Fuel break	2	26	26		2015
Campo/Camp Locket Fuelbreak	4	Complete	Fuel break	2	24	24		2015
Cameron Extension Fuelbreak	4	Complete	Fuel break	2	11	11		2015
Rancho Jamul VMP	3	Active	Rx Burn		60	60		2015
Cuyamaca State Park Lookout Road	5	Complete	Fuel Reduction		20	20		2014
William Hiese/Volcan Mt. Preserve	5	Active	Fuel Reduction		33	33		2014
Campo Hills Fuel Break	4	Complete	Fuel break	3	7	7		2015
Rancho Corte Madera VMP	4	Active	Rx Burn		1846	90		2016
Sunrise Fuel Break	5	Active	Fuel break	9	276	15		2016
Lake Morena Fuel break	4	Complete	Fuel break	2	35	35		2016
Remote Watertank Maintenance Project	4, 5	Complete	Water tank Maintenance		25	25	Serviced 22 Water tanks	2016
SRA - Woods Valley / Paradise Mountain Fuel break	7	Planned	Fuel break	7	32			2016
SRA Cuyamaca State Park Fuel Reduction Phase I	5	Complete	Fuel Reduction		8	8		2015
SRA Cuyamaca State Park Fuel Reduction Phase II	5	Complete	Fuel Reduction		10	10		2016
SRA Harrison Park Fuel Reduction	5	Complete	Fuel Reduction		12	12		2015
SRA Cuyamaca Woods Fuel Reduction	5	Complete	Fuel Reduction		10	10		2016

SRA Ramona West End Fuel Reduction	8	Complete	Fuel Reduction		6	6		2016
International Fuel break	4, 3, 6	Active	Fuel break	35	1272			
Lake Morena VMP	4	Planned	Rx Burn		62			
San Felipe VMP	5	Planned	Rx Burn		6783			
Moretti Ranch VMP	8	Planned	Rx Burn		284			
SRA - Palomar Divide Fuel break	7	Planned	Fue lbreak	2	36			
GSA of San Diego Camp Winacka	5	Active	Fuel Reduction		87	42		2016
SRA - Ramona Community DDD Tree Removal Project	8	Planned	Fuel Reduction				50 DDD Trees	
SRA - Cuyamaca Woods Roadside Hazardous Fuel Reduction	5	Planned	Fuel Reduction		585			
SRA - San Diego Backcountry Fuel Reduction	6	Planned	Fuel Reduction		39			
BLM Watertank Maintenance Project	5	Active	Water tank Maintenance		6	6	Serviced 4 Water tanks	2016
Cuyamaca State Park Prescribed Burn Support	5	Complete	Rx Burn		384	101		2015
SRA - SRA Greater Valley Center Community Chipping Days	7	Active	Fuel Reduction				Chipping Services	2016
SRA - Greater Valley Center Evacuation Route	7	Active	Fuel Reduction	1	36			2015
SRA - Deer Springs Community Fuels Reduction	1	Active	Fuel Reduction		1000			2015
SRA - DDD County Tree Removal	4	Complete	Fuel Reduction		3190	3190	DDD Tree Removal	2016
SRA - Palomar Mountain Community Chipping Days	7	Active	Fuel Reduction				Chipping Services	2016
Truck Trails								
Wisecarver	3	Complete	Fuel Reduction	1		4		2015
Daley	3	Planned	Fuel Reduction	5		21		
Honey Springs	3	Planned	Fuel Reduction	4		17		
Foster	8	Active	Fuel Reduction	4		17		2016

Sycuan	2	Active	Fuel Reduction	3		13		2016
Lyons-Lawson	3	Complete	Fuel Reduction	2		9		2015
Guejito	7	Planned	Fuel Reduction	3		13		
La Jolla	7	Planned	Fuel Reduction	4		17		
Tenaja	1	Complete	Fuel Reduction	3		13		2015
Barrett	3	Complete	Fuel Reduction	9		38		2015
Valley View	2	Complete	Fuel Reduction	5		21		2015
Roblar	1	Complete	Fuel Reduction	2		9		2016
Rainbow	1	Complete	Fuel Reduction	2		9		2015
Mason Valley	5	Planned	Fuel Reduction	9		38		
Von Sagren	7	Complete	Fuel Reduction	3		13		2015
Ridge Ranch	7	Complete	Fuel Reduction	2		9		2015
Suncrest	2	Planned	Fuel Reduction	1		4		
Skeleton Flats	2	Planned	Fuel Reduction	2		9		
Orosco	7	Active	Fuel Reduction	3		13		2016
Lusardi	7	Active	Fuel Reduction	4		17		2016

EXHIBITS: MAPS

The following list of maps provides the background information regarding the geographical layout of the San Diego Unit:

MAP 1: San Diego Unit Map

MAP 2: San Diego Battalion Map

MAP 3: San Diego County DPA Map

MAP 4: Imperial County DPA Map

MAP 5: San Diego County Fire Hazard Severity Zone (SRA) Map

MAP 6: San Diego County Fire Hazard Severity Zone (LRA) Map

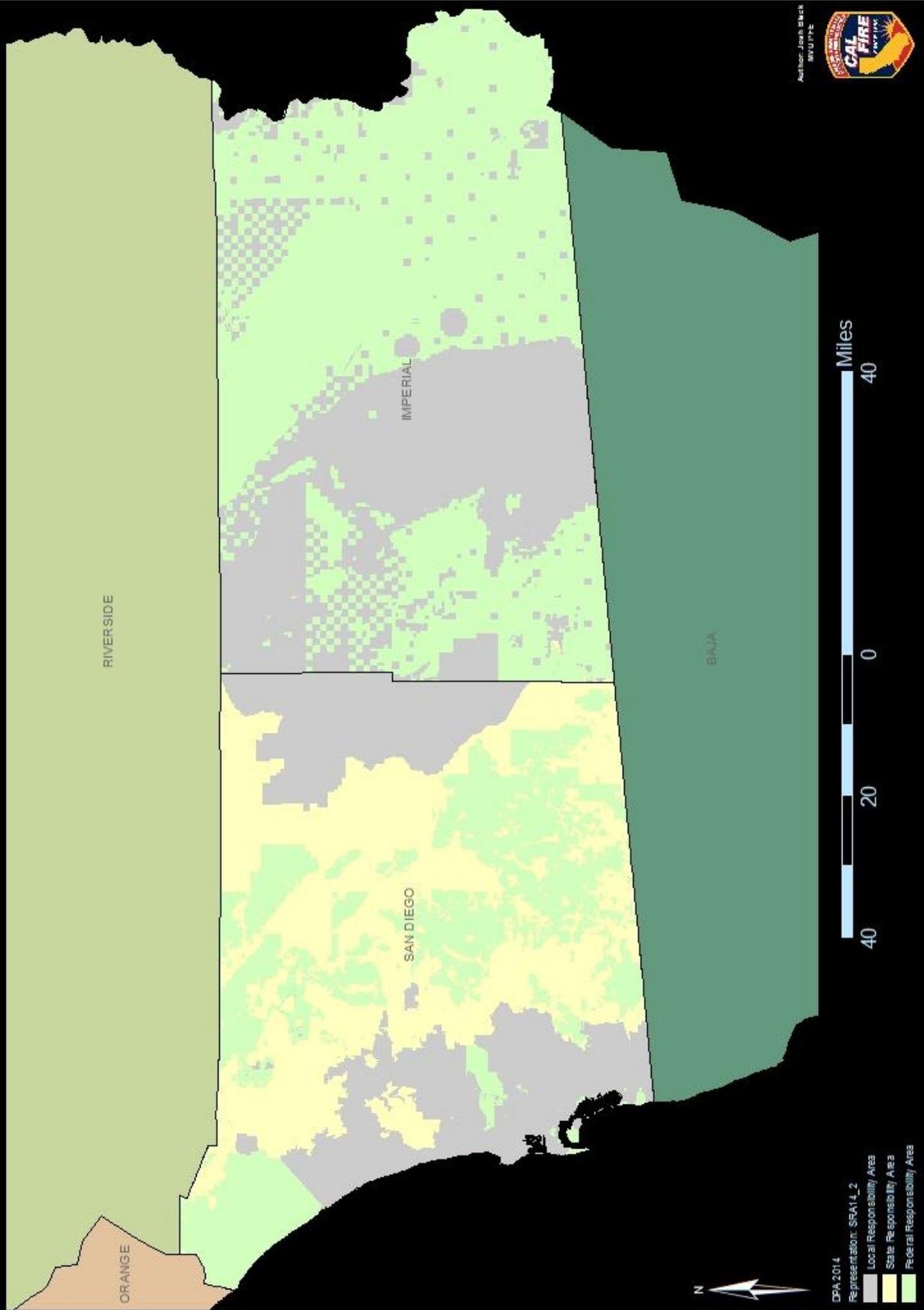
MAP 7: Imperial County Fire Hazard Severity Zone (SRA) Map

MAP 8: San Diego County Fire History Map 1950 - 2014

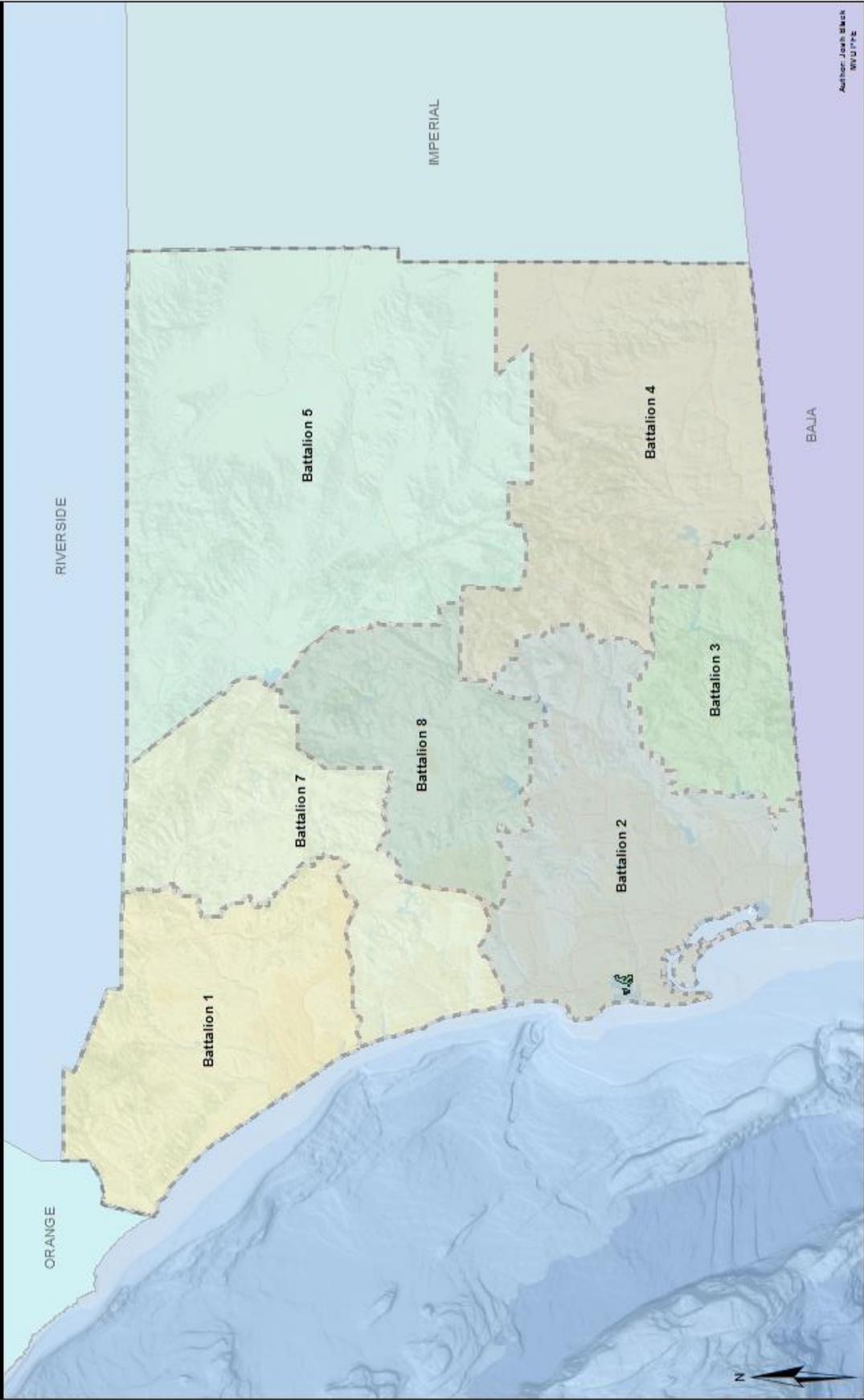
MAP 9: San Diego County CWPP Map

MAP 10: San Diego County Fire Safe Council Boundary Map

SAN DIEGO UNIT OVERVIEW MAP



SAN DIEGO UNIT ADMINISTRATIVE BATTALIONS

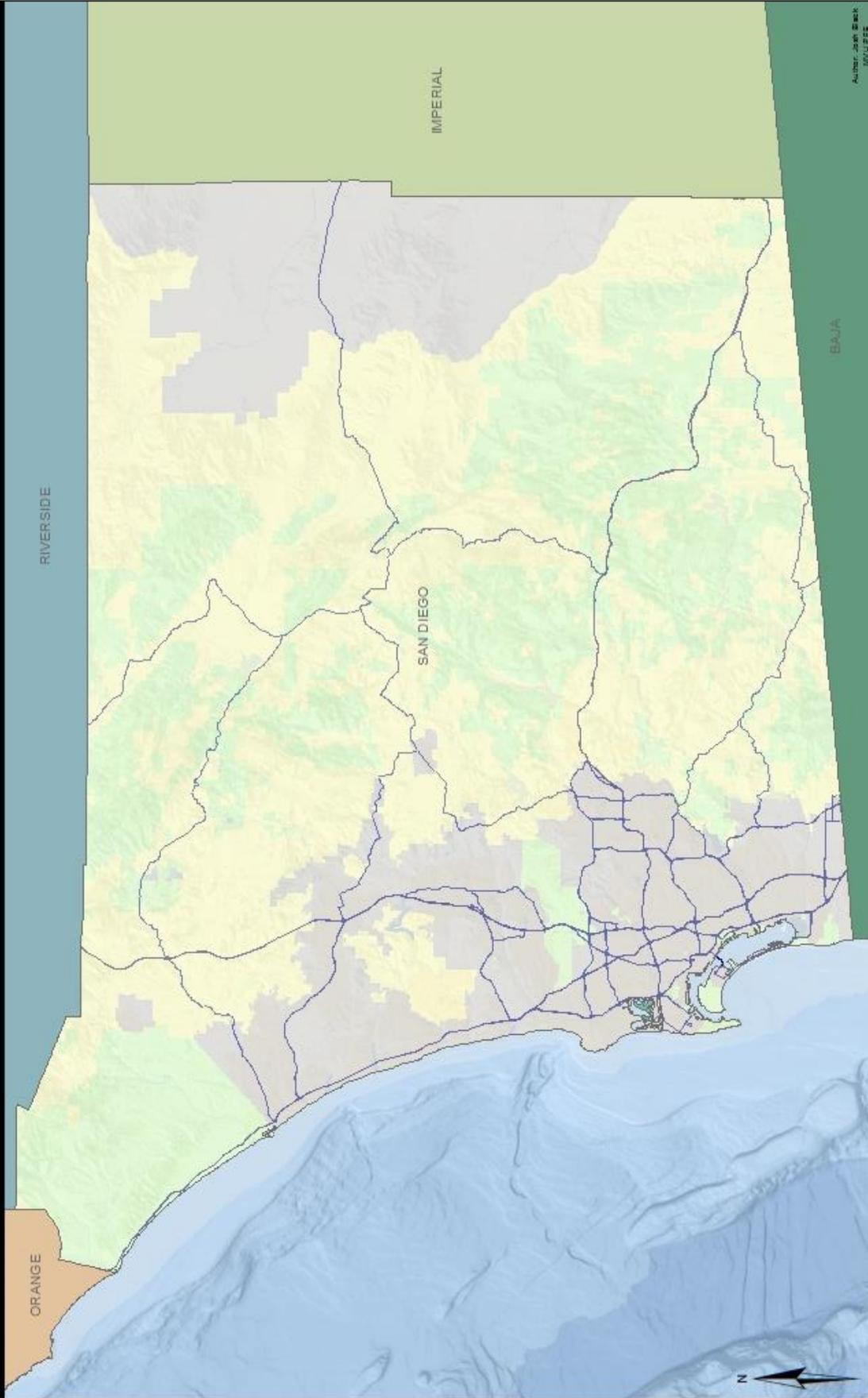


Author: Josh Black
WU 1112



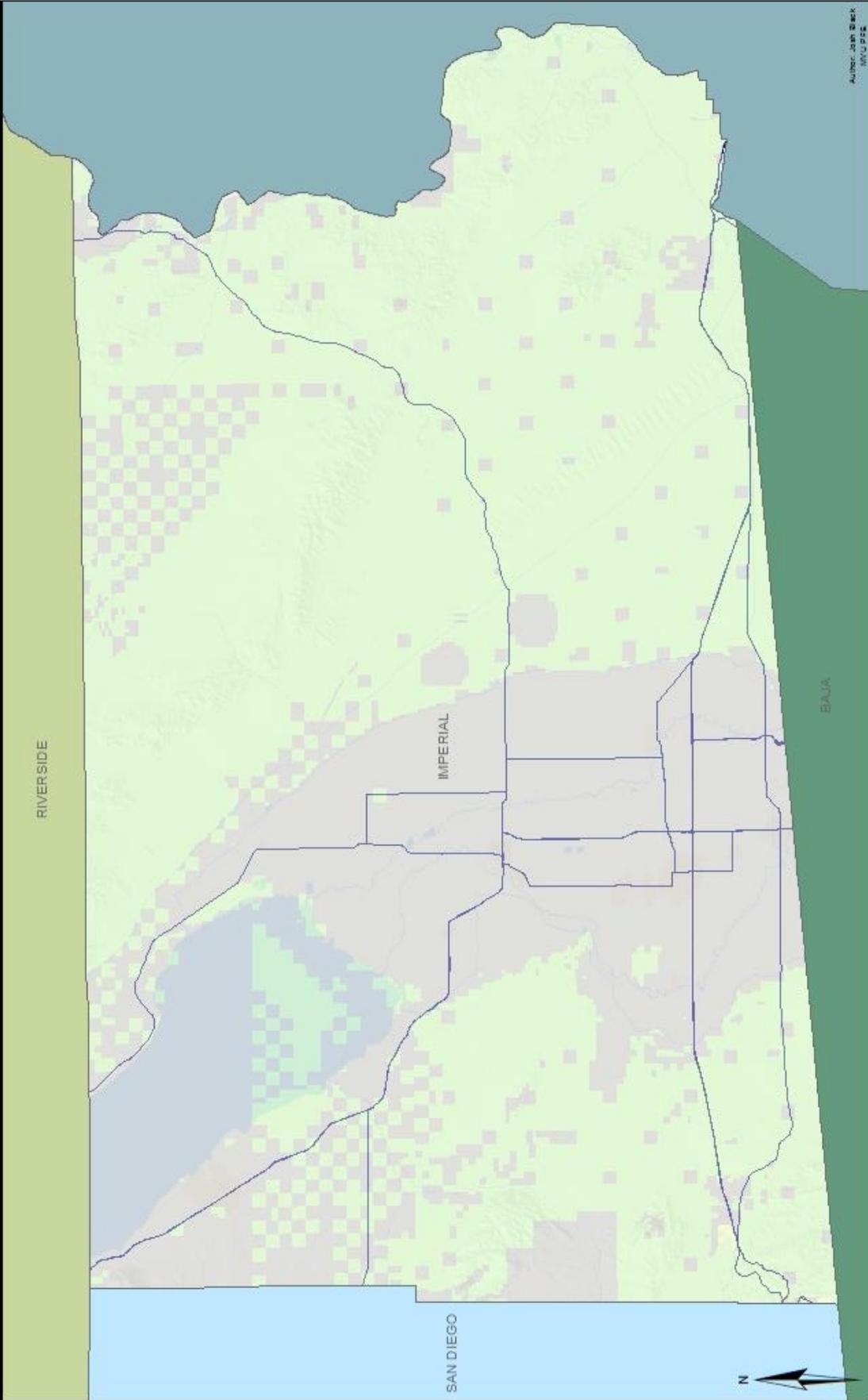
- 2015_Administrative_Battalions
- Battalion 1
 - Battalion 2
 - Battalion 3
 - Battalion 4
 - Battalion 5
 - Battalion 7
 - Battalion 8

SAN DIEGO UNIT DPA MAP



DPA 2014
Representation: SRA14_2
Local Responsibility Area
State Responsibility Area
Federal Responsibility Area

IMPERIAL COUNTY DPA MAP

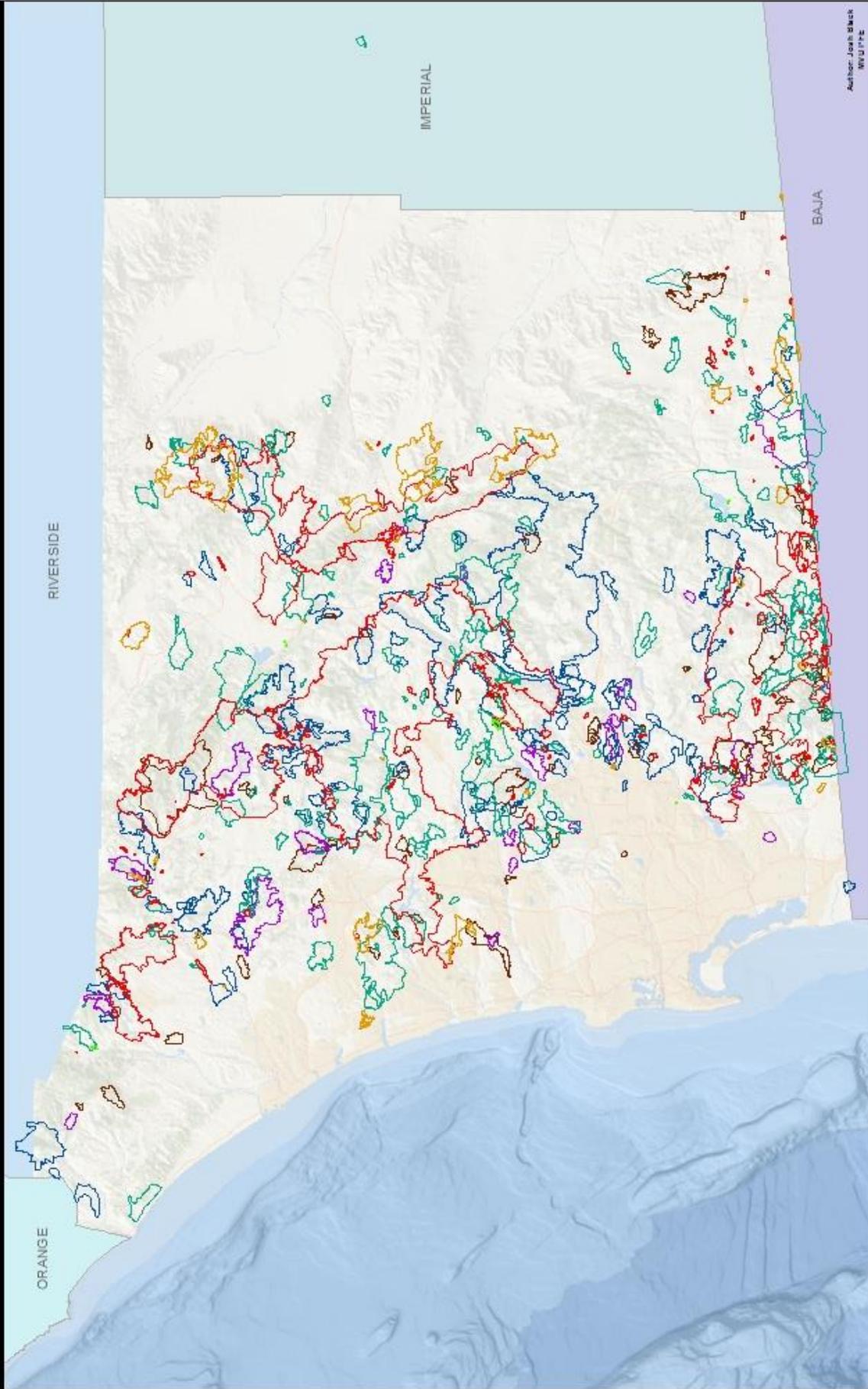


Author: John B. Wick
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- DPA 2014
Representation: SRA14_2
- Local Responsibility Area
 - State Responsibility Area
 - Federal Responsibility Area

SAN DIEGO UNIT FIRE PERIMITERS 1950 - 2015



Author: John Black
WU FPE



- CF_Perimeters_2015
- CF_Perimeters_2010_2014
- CF_Perimeters_2000_2009
- CF_Perimeters_1990_1999
- CF_Perimeters_1980_1989
- CF_Perimeters_1970_1979
- CF_Perimeters_1960_1969
- CF_Perimeters_1950_1959



