

# ***Unit Strategic Fire Plan San Bernardino Unit***

*Consistency, Continuity, Efficiency, Effectiveness, Collaboration & Cooperation*

***Working together today for a  
healthier, safer & more resilient tomorrow!***





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**SIGNATURE PAGE**

**Unit Strategic Fire Plan developed for San Bernardino Unit:**

This Plan:

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



**UNIT CHIEF**

Glenn Barley

5/2/2016

**Date**



5/2/2016

**PRE-FIRE ENGINEER**

DEBBIE CHAPMAN

**Date**

## EXECUTIVE SUMMARY

The CAL FIRE San Bernardino Unit is comprised of San Bernardino, Inyo and Mono counties where we serve and safeguard the people and protect the property and resources of these counties and the state. This is accomplished through the protection of State Responsibility Areas (SRA), cities under contract, the public and watershed in its geographical areas. In the last fifteen years the San Bernardino Unit has seen unprecedented changes in the dynamics of public safety within the Unit. Population growth has encroached into the wildland areas, prolonged drought has created poor forest health and decadent vegetation and the cooperative fire environment is always changing. To meet those challenges, the Unit continues to work within the framework of the California Fire Plan as adopted by the Board of Forestry and Fire Protection, following the Unit mission statement of "Working together today for a healthier, safer and more resilient tomorrow."

In 2015, the San Bernardino Unit Emergency Command Center (ECC) implemented Emergency Medical Dispatching (EMD) which required changes in its programs and staffing in order to better serve the communities we protect. This new program helps emergency dispatchers move smoothly through emergency calls to provide pre-arrival instructions until first responders arrive.

Since the return of additional SRA acres to the Units DPA, the San Bernardino Unit's Fire Prevention Bureau has hired an additional fire prevention specialist and the Unit is hiring one limited term Cal Card/finance position to support the added work load. Additionally, the Governor's office has authorized CAL FIRE to hire supplementary staff to augment the normal peak season staffing in response to the ongoing drought condition.

Prado Helitack made a smooth transition from an inmate-staffed helitack program with the San Bernardino County Sheriff and the California Department of Corrections and Rehabilitation, to a dedicated helitack crew with hoist capabilities designed to provide rescue capabilities for CAL FIRE personnel on Wildland fire incidents. This hoist capability is also available for mutual aid throughout the region upon request. This has resulted in an additional helicopter to the State's fleet. Additionally, the Unit is moving toward establishing an interim helibase facility at Prado Conservation Camp.

Fire Prevention Fee grants were awarded to applicants in the San Bernardino Unit to support fuel reduction and education programs in the following communities: Big Bear City, Running Springs, Crest Forest, Arrowbear, Valley of Enchantment. The grants are: Wood Shake Shingle Roof Replacement Project, Big Bear Valley Chipping Project, Mountain Rim Fire Safe Council Community Wildfire Protection Plan (CWPP), Mountain Rim Fire Safe Council Mountain Top Chipper Days Project, Mountain Rim Fire Safe Council Abatement Assistance and Advocacy Project, Mountain Rim Fire Safe Council Web Based Map Interface for CWPPs Project, Crest Forest Fire Safe Demonstration Sites Project, and the Wheeler Crest Fuels Reduction Project.

The Volunteer In Prevention (VIP) program in the San Bernardino Unit has been steadily rebuilding since July 2015. There are currently 11 VIPs and recruiting continues in an effort to further build the program, especially in the northern areas of the unit. The VIPs have a wide variety of educational backgrounds and have been extremely helpful with our ECC, public events, LE-100 program, resource management activity, clerical work and many other areas. The VIPs have logged 281 hours of volunteer time since July, 2015.

The San Bernardino Unit has provided assistance to many local government cooperators in San Bernardino, Inyo and Mono Counties. For example, the Unit provided assistance to the terrorist attack at the Inland Regional Center building in San Bernardino City, by providing station coverage behind the committed resources. The Unit also provided guidance and assistance at the Round Fire which consumed 7000 acres and destroyed 39 homes in Inyo and Mono Counties by bringing together various local entities to provide services and support to the affected communities. The North Fire consumed 4,250 acres including homes and out buildings along with seventy four vehicles on Interstate 15. Multi-Agency communication challenges were identified during the after action review process. The Unit along with our cooperators and stakeholders are continuing to collaborate in order to enable safe cohesive initial scene actions on all-risk multi-agency responses including mutual threat areas. A task force was developed to develop procedures necessary to enable multiple communication centers to promptly notify affected agencies and coordinate initial attack communications.

The San Bernardino Unit was commended by NASA for its performance in the July, 2015 Pine Fire that protected the Table Mountain Facility from damage. The Table Mountain Facility is a remote scientific research facility located in the Angeles National Forest. The equipment saved in the fire included an optical communications telescope laboratory, allowing research for future projects to continue.

Although the Unit previously started to experience a decline in tree mortality within the San Bernardino Mountains, there has been an increase in bark beetle activity and associated tree mortality due to the ongoing drought. Mortality is increasing and is expected to continue as long as drought conditions persist. The San Bernardino Unit is utilizing an application to collect spatial locations and insect/disease/drought mortality information during the field inspections using an ESRI Collector Application. This information is used to improve the efficiency of allocation of CAL FIRE hand crews for tree removal.

The San Bernardino Unit is collaboratively working with communities and stakeholder's to stop the movement of the Goldspotted Oak Borer (GSOB) through firewood transportation. In 2012, the (GSOB) was detected in the Riverside County mountain community of Idyllwild and in 2014 it was found in Orange County. In 2015 it was found in the mountain community of Green Valley in Los Angeles County. This new detection of GSOB represents a significant long-distance movement, of at least 90 miles from its closest known areas infestation in Orange and Riverside Counties. It is believed to have made the jump from these counties to the Los Angeles County through the movement of infested firewood. In addition to GSOB, the Polyphagous Shot Hole Borer (PHSB) is another introduced pest that has invaded Southern California and is now located as far east as Ontario in Southwestern San Bernardino County.

Since 2012, coast live oak trees have been observed dying in several southern California counties including Orange, Riverside and Los Angeles. Much of the coast live oak tree mortality is attributed to foamy bark canker disease which is spread by the western oak bark beetle that attacks drought stressed oaks. Most recently, it was discovered that the disease is also killing California black oaks in the San Bernardino Mountains. This new finding came from collaborative work between CAL FIRE San Bernardino and the University of California at Riverside (UCR) Cooperative Extension's Plant Pathology Department.

In early 2015 we experienced frequent interruptions of fire operations due to unauthorized drone interference at wildland fires in San Bernardino County. A unified local/state/federal interagency press conference was held and hosted by the San Bernardino Board of Supervisors consequently; we have seen a decline in drone activity during wildfires.

The San Bernardino Unit made great strides in fostering inter-agency relations, collaboration, and abiding by the goals and objectives set forth in the Strategic Fire Plan for California.

## SECTION I: UNIT OVERVIEW

### UNIT DESCRIPTION

San Bernardino Unit is spread through four counties spanning the state from central California in the eastern Sierras to the counties of Los Angeles and San Bernardino bordering the Pacific Ocean. The total Unit acreage is 1,408,000 of SRA plus 18,502 acres of wildland contracts, all of these are located within San Bernardino, Los Angeles, Inyo, and Mono counties. All of the counties have multiple public lands within their response area, they include the Bureau Of Land Management, National Forest, National Park Service, US Fish and Wildlife, California State Parks, and local county parks.

The pre-dominate fuel type is grass and sage; however there are large areas within SRA that have timber and 6'-10' coastal chaparral. The fuel conditions in San Bernardino can change rapidly due to drought or Santa Ana winds which can change fuel conditions from low burning indices to extreme indices within a few of hours.

There is no one type of general topography in the Unit, but a general description would be that the Unit has the lowest and the highest elevation in North America. The terrain varies from flat and rolling hills to the slopes of the Sierra Mountain Range.

There have been 118 fires in San Bernardino Unit since 1960 that have exceeded 2000 acres, the largest fire being the Old Fire in 2003 that exceeded 91,000 acres, destroyed over 400 homes, with 6 lives lost. There have been numerous large fires with loss of life and property in the Unit some of the worst being; 1980 Panorama Fire 23,625 acres, 1999 Turtle Fire 3,396 acres, 2006 Sawtooth fire 61,766 acres, 2008 Freeway Fire 30,305 acre and the 2015 Round Fire 7,000 acres. Most fires in the unit have the primary factors of being wind driven and heavy fuel loading to promote extreme rates of spread. Due to the growing wildland urban interfaces 95% of all fires within the unit have potential to destroy property, life, and high value watershed.

### UNIT PREPAREDNESS AND FIREFIGHTING CAPABILITIES

#### A. CAL FIRE Facilities and Initial Attack Resources

##### 1. Engine Stations

- Bishop: 1-Type 3 Engine
- Chino Hills: 1-Type3 Engine
- Devore: 1-Type 3 Engine
- Crestline: 2-Type 3 Engines
- Independence: 1-Type 3 Engine
- Lucerne Valley: 1-Type3 Engine
- Phelan: 1-Type 3 Engines
- Yucaipa: 2-Type 3 Engines
- Yucca Valley: 2-Type 3 Engine
- Big Bear Valley: 1-Type 3 Engine
- Running Springs: 1-Type 3 Engine
- Apple Valley: 1 Type 3 Engine
- Sky Valley: 1 Type 3 Engine

##### 2. Camps and Aircraft

- Fenner Canyon Conservation Camp, Valyermo, CA:
  - ◆ 6-Type1 Handcrews
- Owens Valley Conservation Camp, Bishop, CA
  - ◆ 5-Type1 Handcrews
- Pilot Rock Conservation Camp, Crestline CA:
  - ◆ 4-Type1 Handcrews

- Prado Camp Conservation, Chino CA:
  - ◆ 4-Type1 Handcrews
- Prado Helitack
  - ◆ 1-Type2 Helicopter

B. Local Fire Departments that have Mutual/Automatic Aid Agreements with CAL FIRE BDU:

1. Apple Valley Fire Department
2. San Manuel Fire Department
3. Running Springs Fire Department
4. Angeles National Forest, San Dimas CA
5. Bureau Of Land Management, Riverside CA
6. Inyo County Volunteers, Inyo County CA
7. Loma Linda Fire Department, Loma Linda CA
8. Los Angeles City Fire Department, Los Angeles City CA
9. Mono County Volunteers, Mono County CA
10. National Park Service, Barstow and Joshua Tree CA
11. Rancho Cucamonga Fire Department, Rancho Cucamonga CA
12. Redlands Fire Department, Redlands CA
13. San Bernardino County Fire Department, San Bernardino CA
14. San Bernardino National Forest, San Bernardino CA

C. Dispatch Agreements

1. Arrow Bear Fire Department, Big Bear CA
2. Morongo Valley Fire Department, Morongo CA
3. Newberry Fire Department, Newberry CA
4. Yermo-Dagget Fire Department, Yermo CA

## SECTION II: COLLABORATION

### COMMUNITY / AGENCIES / FIRE SAFE COUNCILS

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

#### Plan Development Team:

Organization	Title
San Bernardino County Fire	Division Chief
Big Bear Fire Authority	Chief
San Bernardino County Public Works	Engineer
Running Springs Fire	Chief
Southern California Edison	District Manager
ConFire Communications	GIS Analyst
San Bernardino County Sheriffs	Captain
CDCR Pilot Rock Camp	Officer
CDCR Prado Camp	Officer
CDCR Fenner Camp	Officer
CDCR Owens Valley Camp	Officer
San Bernardino County OES	Emergency Services Officer/CERT Administrator
CAL EMA	Region II South – Assistant Chief
Cal Trans	Maintenance Superintendent
San Bernardino County Fire	Public Information Officer
CHP	Sergeant
Crestline-Lake Arrowhead Water Agency	Representative
USFS San Bernardino National Forest	Deputy District Ranger
USFS San Bernardino National Forest	District Ranger
Los Angeles Dept. of Water and Power	Ranch Lands Manager
Bureau of Land Management	Division Chief
Inyo National Forest	Division Chief Bishop Area
Inyo National Forest	Division Chief Lone Pine Area
Bishop Fire Department	Chief
Mammoth Lakes Fire Department	Chief
Inyo County Sheriff	Sheriff
Mono County Sheriff	Sheriff
Bureau of Land Management	Deputy Chief
Humboldt-Toiyabe National Forest	Fire Management Officer
Lone Pine Fire Safe Council	President
Twin Lakes Fire Safe Council	President
South Fork Bishop Creek FSC	President
Inland Empire Fire Safe Alliance	President

<b>Organization</b>	<b>Title</b>
Wrightwood Fire Safe Council	President
Mill Creek Fire Safe Council	President
Mountain Rim FSC	President
Arrowhead Communities FSC	President
Rancho Cucamonga FSC	President
Oak Glen Fire Safe Council	President
Angelus Oaks FSC	FSC Member
Carbon Canyon FSC	Chino Valley Fire (FSC Liaison)

## SECTION III: VALUES

### A. VALUES

1. Air Quality:
  - Portions of the Unit reside in the South Coast Air Basin, one of the most heavily impacted air basins in the nation. The remainder of the Unit lies in the Mojave and Great Basin districts.
2. Ecosystem:
  - Multiple Rare, threatened and endangered species are found in the Unit. The California Natural Diversity Data Base maintains and updates the lists of species monthly.
3. Fire / Flood:
  - Portions of the San Bernardino Unit contain soils, topography, climate and vegetation that make it one of the most severe fire/flood cycle locations in the state. The Owens Valley is also subject to severe fires/flooding, but to a lesser extent.
4. Fish & Game:
  - Hunting and fishing is one of the biggest draws for recreation in Inyo and Mono counties. The Owens Valley and surrounding areas are known for its fishing not only for its native brown trout, but also for its rainbow and brook trout. For this reason several State and private hatcheries are located in the area. The San Bernardino Mountains also have several lakes and streams that provide good fishing opportunities.
5. Historic:
  - Multiple historic and prehistoric sites exist within the Unit. The Owens Valley is particularly rich in prehistoric sites. The Information Centers in San Bernardino and Riverside maintain the archaeological record for areas covered by the Unit.
6. Housing:
  - With increased population growth in Southern California we have seen more houses being built within the Wildland Urban Interface of San Bernardino County. We have also noticed that more of these residences are high dollar, large square foot structures, with poor access.
7. Hydroelectric:
  - The Unit has several .1 MW or above hydroelectric facilities in all three Counties, that lie within the SRA.
8. Infrastructure:
  - Within the Unit we have several major electrical transmission lines that feed into the Inland Empire and LA basins. The CAL-NEV pipe line supplies fuel oil between California and Nevada. The BNSF Transcontinental route between Chicago and Los Angeles is located within the Unit. The California Aqueduct, Interstate 15, US Highway 395, State Highways 18, 62, and 138 are major transportation corridors.
9. Range:
  - There is minimal rangeland within the Unit. Most is located in the Owens Valley Division.
10. Recreation:
  - Recreation is a large part of the Unit. With the San Bernardino Mountains and the Owens Valley providing hunting, hiking, biking, fishing, camping, skiing, hang gliding and many other outdoor activities. The desert battalion has numerous Off Highway Vehicle opportunities. In peak season the population in some of these areas can double with visitors.
11. Scenic:
  - The Unit boasts several scenic byways. From the Rim of the World Highway that runs along the south face of the San Bernardino Mountains, and thru the Big Bear Valley, to the majestic views along Highway 395 that runs through the Owens Valley and up to the Nevada border.

12. Soil:

- In San Bernardino County we have noticed areas of the mountain sloughing off top soils. We believe this is caused by the continual intense burning conditions that have caused most of these areas to type convert the fuels to annual grasses.

13. Timber:

- The majority of the timber in the Unit has little commercial value. The bulk of its value is in recreation, scenic, and ecological realm.

14. Water:

- The Unit has identified five major watershed areas that are in the Very High Fire Hazard area: Morongo basin, Mojave, Owens, Santa Ana River and Walker River. There are several other watersheds but most feed into the ones previously mentioned. Along with the watersheds the Unit has two major water transport systems; the California aqueduct and the LADWP water project in the Owens Valley. Both of these have several lakes and waterways that make up the system, with most of the water supplying the demand in the Inland Empire, and LA basins.

B. COMMUNITIES

SAN BERNARDINO COUNTY			INYO COUNTY	MONO COUNTY
Adelanto	Grand Terrace	Pioneer Town	Aberdeen	Antelope Valley - East
Angeles Oaks	Green Valley Lake	Rancho Cucamonga	Aspendell	Aspen Springs
Apple Valley	Hesperia	Redlands	Big Pine	Bridgeport
Arrowbear	Highland	Rialto	Bishop	Coleville
Baldwin Lake	Joshua Tree	Rim Forest	Cartago	Crestview
Big Bear City	Lake Arrowhead	Running Springs	Independence	Green Creek
Big Bear Lake	Loma Linda	San Antonio Heights	Lone Pine	June Lake
Big River	Los Serrano	San Bernardino	Mustang Mesa	Lee Vining
Bloomington	Lucerne Valley	Sugarloaf	Olancha	Mammoth Lakes
Blue Jay	Lytle Creek	Summit Valley	Sabrina	Mono City
Bluewater	Mentone	Twentynine Palms	Starlite	Paradise Camp
Cedar Pines Park	Montclair	Marine Corps Base	West Bishop	Pickle Meadows
Chino	Morongo Valley	Twin Peaks	Whitney Portal	Swall Meadows
Chino Hills	Mount Baldy Village	Upland		Toms Place
Colton	Mountain Home Village	Valley of Enchantment		Topaz
Crestline	Mountain View Acres	Victorville		Virginia Creek
Devore	Muscoy	West Cajon Valley		
Devore Heights	Needles	Wrightwood		
Fawnskin	Oak Glen	Yucaipa		
Fontana	Ontario	Yucca Valley		
Forest Falls	Phelan			
George Air Force Base	Pinon Hills			

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

### **A. FIRE PREVENTION**

1. Update and implement the Unit Burn Permit Administrative Plan.
2. Continue collaboration with Edison on Operation Santa Ana as a way to reduce vegetation fires that are caused when trees, grasses and power lines interact with one another.
3. Follow up on grant monies for Fire Prevention road side signs program.
4. Educate and assist all Chief Officers in the importance of documentation and overall needs to their own battalions pertaining to Fire Prevention.
5. Continue interacting with the Fire Safe Councils within the Unit and reporting back to the Fire Prevention Bureau on the programs established with the councils.
6. Continue with the MAST defensible space demonstration house program.
7. Continue working with San Bernardino County on the Juvenile Fire Setters (JFS) program, and work on establishing a JFS program within Inyo and Mono counties.
8. Evaluate and map all fire defense water tanks / cisterns, and truck trails in the Unit.
9. Utilize CalMapper for collecting data, tracking, fiscal reporting, emergency response, planning, and assessment, for fuel reduction projects in the San Bernardino Unit.

### **B. ENGINEERING & STRUCTURE IGNITABILITY**

1. Continue to oversee the application of Public Resources Code Section 4290 and Title 14 of the California Code of Regulations Section 1270 on all private lands classified as SRA.
2. In addition to the 4290 requirements, local schedule "A" contracts have established preplans for commercial occupancies as well as inspections of those occupancies.
3. Continue to work with the Cities and Agencies within the unit to enforce the California Code of Regulations (CCR), Title 24, and Part 2, known as the 2013 California Building Code (CBC). Along with maintenance and periodical updating of the Fire Hazard Severity Zones within State Responsibility Areas, any Local Agency Very-High Fire Hazard Severity Zone maps.
4. Continue an aggressive LE-100 program to advise property owners of the need for defensible space around their structures. Clearing vegetation and maintaining that clearance is required by section 4291 of the Public Resources Code. Additionally, we are working with our cooperators in sensitive areas to conduct defensible space inspections and training within their jurisdiction on SRA lands.

### **C. INFORMATION AND EDUCATION**

1. Increase efforts in educating the public regarding debris burning, campfires, and equipment use.
2. Increase PSA's and news releases regarding the laws covering campfires and debris burning along with proper equipment use in fire prone areas.
3. Continue efforts to maintain the message of child fire safety.
4. Continue public outreach at San Bernardino County Fair, Tri County Fair, Mule Days, Wrightwood Wildfire and Disaster Awareness fair and other like events.
5. Continue News media Fire Safety program.
6. Placement and upkeep of roadside Fire Prevention Signs.
7. Assist Battalions with Team Teaching Program.
8. Recruit and Maintain personnel for the VIP Program. For the purpose of assisting the Unit in a variety of Fire Prevention Activities.
9. Continue to utilize the San Bernardino Unit web page, Facebook and Twitter.

#### D. VEGETATION MANAGEMENT

1. Maintain the cooperative agreement with the Mountain ReLeaf reforestation program.
2. Maintain and train personnel on the Units Post Suppression Rehabilitation program.
3. Continue to conduct Forest Practice inspections pursuant to the Forest Practices Act. The inspections are performed to ensure fuel reduction and logging operations are conducted according to state law in a manner that protects all of the resources in a forest environment.
4. Continue to work with the Mountain Area Safety Taskforce (MAST) on the best utilization of fuel projects for community defense, along with the best use of CAL FIRE resources including hand crews and resource personnel for these projects.
5. Facilitate development of programs and projects to utilize Fire Prevention Fee dollars for fire prevention projects

## **SECTION V: PRE- FIRE MANAGEMENT TACTICS**

### **DIVISION / BATTALION / PROGRAM PLANS**

#### **BATTALION 1**

##### **OVERVIEW:**

Battalion 1 consists of two CAL FIRE stations (FFS) and three Schedule A Fire Stations. The Chino Hills FFS and Devore FFS are each one engine stations, typically open during transitional and peak staffing. The Highland, East Highland, and Sterling Fire Stations are staffed with a Type I ALS engine at each station. Each Highland engine is staffed with 3 personnel.

The Southern border for Battalion 1 is the Riverside County line, the Eastern border is the Yucaipa Battalion (Battalion 3), the Northern border is the San Bernardino National Forest and the Western border is the Los Angeles County Line. The Highland Battalion is comprised of the Southwestern and South-central portion of the CAL FIRE San Bernardino Unit.

The local and federal agency fire districts/departments within Battalion 1 are the San Bernardino National Forest, the San Manuel Fire Department, the San Bernardino Fire Department, the Redlands Fire Department, the Loma Linda Fire Department, the Colton Fire Department, the San Bernardino County Fire Department, Rancho Cucamonga Fire Department, Rialto Fire Department, and the CAL FIRE Riverside Unit / Riverside County Fire Department. A close working relationship is maintained with each district as well as with the United States Forest Service (USFS).

The following is a list of cooperative agreements as well as some local response agreements:

1. In Battalion 1 the City of Redlands, City of Colton, City of Loma Linda, City of Chino, and the City of Chino Hills all have a wildland fire protection agreement with CAL FIRE.
2. The City of Highland contracts with CAL FIRE for full service Fire Protection and Paramedic Services (Schedule A).
3. There have been numerous wildland fires in the south-west area of Battalion 1 that affects many of the surrounding jurisdictions. Specifically the areas within Hwy 71, Carbon Canyon, Tonner Canyon, Hwy 91, Hwy 57. This area has come to be known as the SOLAR area. The SOLAR term is derived from San Bernardino, Orange, Los Angeles, and Riverside counties. A great amount of cooperation and coordination amongst agencies with jurisdictional responsibility has been accomplished to put together a pre-plan for fire response into the areas served by the many fire departments that protect the area. This pre-plan identifies a process and pre-designates a common communication plan that all responding agencies have agreed to utilize for all initial attack wildland fire response that has a potential to go to extended attack in the SOLAR area. This has come to be known as the SOLAR Plan by those agencies. Over the past several years the departments have worked to streamline the plan and have participated in a series of wildland fire response drills to practice the applicability of the SOLAR Plan.
4. The Rancho Cucamonga Fire Department, CAL FIRE-San Bernardino Unit, San Bernardino County Fire, and the San Bernardino National Forest have a response agreement for wildland fires in the front country along the base of the San Gabriel Mountains from San Antonio Heights to the east towards Fontana. This agreement is known as the West End Operating Plan. This plan is similar to the SOLAR plan mentioned above and assists the responding agencies with common communications as well as pre-identifying a Unified Ordering Point. Annual training drills keep all involved agencies familiar with the process.

Elevations within Battalion 1 vary from 500 feet around the Prado Flood Control basin up to 3000 feet above sea level along the front country of the eastern San Gabriel Mountain Range and the San Bernardino Mountain Range. Fuel types within the Battalion are primarily grasses consistent with Fuel Model 1 and 2 and shrubs consistent with Fuel Model 5 and 6 in the SRA. The fuel model numbers are derived from Hal Anderson Aids to Determining Fuel Models guidelines.

Fire History in the Highland Battalion is very extensive. In the last fifty years there have been many large damaging fires in and surrounding the Highland Battalion:

- Panorama Fire of 1980
- Mill Creek Fire of 1993
- Old Fire of 2003
- Grand Prix of 2003
- Emerald Fire of 2006
- Slide Fire of 2007
- Freeway Fire 2008
- Florida of 2011

The protection of the watershed areas in the Highland Battalion is essential in protecting and enhancing life, property and infrastructure. On December 22, 2010, a massive mud and debris flood engulfed several neighborhoods in the City of Highland. The protection of the wildland areas is critical to reduce the flooding potential in the Highland Battalion. The urban interface areas spanning across the battalion presents a major concern and challenge to fire personnel when defending structures from wildland fire. An active program for conducting inspections by fire personnel helps the home and business owners to be in compliance with the requirements set forth in section 4291 of the Public Resources Code. Several major Freeways run through the Highland Battalion. The Inland Empire, which is the location of the Highland Battalion, has a population of approximately two million people. The heavy population increases the potential for accidental and arson caused fires.

Communities at Risk listed by the California Fire Alliance (\* see reference below) within the Highland Battalion include: City of Chino, City of Chino Hills, Devore, Devore Heights, City of Ontario, City of Montclair, City of Upland, City of Rancho Cucamonga, City of Fontana, Lytle Creek, Mt. Baldy Village, San Antonio Heights, City of Rialto, Muscoy, Bloomington, City of San Bernardino, Mentone, City of Redlands, City of Loma Linda and the City of Colton.

\* Reference [http://www.cafirealliance.org/communities\\_at\\_risk](http://www.cafirealliance.org/communities_at_risk)

#### **PRIORITIES:**

A. 4291 Public Resources Code Inspections in the SRA and City of Highland Municipal Code in the LRA:

1. Identify high risk areas based on fuel load, road access, and inspection compliance history to identify areas of focused inspections for each Battalion.
  - Conduct inspections
  - Provide educational material to stakeholders and property owners
  - Non-compliance on 3rd inspection results in legal action (citation)

This on-going project will hold stakeholders responsible for meeting the requirements of 4291 as defined in the Public Resources Code. It will also increase the chance of a favorable outcome in the event of wildfire, and provide defensible space for fire suppression personnel to work, while increasing the margin of safety for firefighters and equipment.

B. Public Education –Debris Burning:

1. Provide education material to permit holders for debris burning
2. All project areas will be pre-inspected prior to issuance of a burn permit.
3. Aggressive law enforcement (citation) for burning without a permit.
4. Aggressively seek cost recovery when fire has escaped the project area requiring fire suppression action.



## COLLABORATION

### COMMUNITY / AGENCIES / FIRE SAFE COUNCILS

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

<b>Organization</b>	<b>Title</b>
CAL FIRE City of Yucaipa	Battalion Chief
CAL FIRE RRU	Battalion Chief
City of Redlands Fire Department	Fire Chief
City of Loma Linda Fire Department	Fire Chief
United States Forest Service	Division Chief
Mountain Area Safety Task Force	MAST Member
City of Colton Fire Department	Fire Chief
CAL FIRE BDU	Battalion Chief
City of San Bernardino Fire Department	Fire Chief
Running Springs Fire Department	Fire Chief
Chino Valley Independent Fire District	Fire Chief
Ontario Fire Department	Deputy Chief
Rancho Cucamonga Fire Department	Fire Chief
Upland Fire Department	Fire Chief
Rialto Fire Department	Fire Chief
San Bernardino County Fire Department	Fire Chief
USFS San Bernardino National Forest	Forest Supervisor
Montclair Fire Department	Fire Chief
Carbon Canyon Fire Safe Council	Chino Valley Fire Department

## **BATTALION 2**

### **OVERVIEW:**

The Desert Battalion boundary starts at the San Bernardino Unit/ Riverside County line in Morongo Valley, and runs north and west to the Los Angeles County Line in Pinon Hills along east/north side of the mountain range separating the High Desert from the Inland Empire. The battalion includes State Responsibility Area land (SRA) in and around the communities of Morongo Valley, Yucca Valley, Joshua Tree, Pioneertown, Flamingo Heights, Landers, Johnson Valley, Lucerne Valley, Apple Valley, Victorville, Hesperia, Summit Valley, Wrightwood, Phelan, and Pinon Hills. The Battalion extends from Highway 18 in the north, to the San Bernardino National Forest boundary in the south. The Battalion covers an approximate area of 600 square miles. In addition to CAL FIRE resources other fire departments providing mutual aid include the San Bernardino County Fire Department, United States Forest Service from the San Bernardino and Angles National Forest, California Desert District of the Bureau of Land Management, Apple Valley Fire Protection District, National Park Service, and the Morongo Valley Community Services District Fire Department. During times of major fires in the Morongo Valley mutual aid has also been received from the 29-Palms Fire Department and the Marine Corps Air Ground Combat Center in Twenty-nine Palms.

The elevations in the battalion range from 2700 feet to 5700 feet, and is considered the "High Desert" with the presence of Joshua trees generally defining the boundaries of the Mojave Desert. Climatic temperatures range from the low teens to single digits in the winter with temperatures exceeding 105 during the summer months. Annual rainfall is less than 13 inches a year. Vegetation fuel types include annual grass, a variety of brush, juniper, joshua trees, manzanita, timber and other drought resistant vegetation with low fuel moisture content making these species highly susceptible to, and capable of carrying fire, especially when fanned by the high winds typical to the desert.

There is a common boundary between California Department of Forestry & Fire Protection, San Bernardino Unit (CAL FIRE/BDU) and Los Angeles County Fire (LAC) which has developed a LABER Operating Plan. The purpose of this LABER Operating Plan is to enhance coordination of wildland fire ground operations, pre-designate areas, create a Unified Ordering Point, and radio frequencies. This plan creates a Unified Command Structure, dependent upon DPA and greatest threat to those agencies for all fire that fall with the affected areas.

Notable fires during the last decade include two fires in June of 2005; the Pioneer fire burning 1900 acres, and the Paradise Fire burning 6000 acres. In 2006 the Sawtooth fire started July 9th and burned 61,000 acres. In October of 2003 the Grand Prix Fire burned 59,448 acres and the Old Fire burned 91,281 acres. Both the Grand Prix and Old fires started on the Inland Empire side of the mountain range separating it from the high desert, and portions of both fires burned into the desert battalion. In 2011, the Hill incident burned 1,158 acres in the Oak Hills area. In 2015, the North Fire burned 4250 acres near I-15 and south of Oak Hills.

During peak staffing levels the Desert Battalion staffs five fire engines at four fire stations spread across the battalion with locations in Yucca Valley, Lucerne Valley, Apple Valley and Phelan. The United States Forest Service also staffs one fire engine at CAL FIRE's Lucerne fire station. The total CAL FIRE personnel varies from 40 fire suppression personnel during peak staffing to 11 personnel during the low fire danger period of the winter months when typically only the Phelan fire station remains open. The urban interface areas spanning across the battalion presents a major concern and challenge to fire personnel when defending structures from wildland fire. An active program for conducting inspections by company officers helps the home and business owners to be in compliance with the requirements set forth in section 4291 of the Public Resources Code

Communities at Risk listed by the California Fire Alliance (\*see reference below) within the desert battalion include Morongo Valley, Pioneertown, Joshua Tree and Yucca Valley in the southern half of the battalion, and Pinon Hills, Phelan Wrightwood, Cajon (west Cajon Valley) and Summit Valley at the north end of the battalion.

\* Reference [http://www.cafirealliance.org/communities\\_at\\_risk](http://www.cafirealliance.org/communities_at_risk)

## **PRIORITIES:**

### **A. 4291 Public Resources Code Inspections**

1. Identify high risk areas based on fuel load, road access, and inspection compliance history to identify areas of focused inspections for each Battalion.
  - Conduct inspections
  - Provide educational material to stakeholders and property owners.
  - Non-compliance on 3rd inspection results in legal action (citation).

This on-going project will hold stakeholders responsible for meeting the requirements of 4291 as defined in the Public Resources Code. It will also increase the chance of a favorable outcome in the event of wildfire, and provide defensible space for fire suppression personnel to work, while increasing the margin of safety for firefighters and equipment.

### **B. Public Education –**

1. Debris Burning
  - Provide education material to permit holders for debris burning.
  - All project areas will be pre-inspected prior to issuance of a burn permit.
  - Aggressive law enforcement (citation) for burning without a permit.
  - Aggressively seek cost recovery when fire has escaped the project area requiring fire suppression action.
2. Use of Equipment
  - Reduce fires caused by the use of equipment.
    - 1) Provide Public Education and information.
    - 2) Aggressively seek cost recovery when fire has escaped the project area requiring fire suppression action.

Lack of knowledge of the specific laws related to open burning and Use of Equipment is often cited by violators as the reason for debris burning violations. Fire Safety and Disaster Preparedness Public Venues for educating the public will be utilized at every opportunity

3. Juvenile Fire Safety
  - Reduce fires caused by juveniles
  - Provide fire prevention educational material to school classrooms.
4. Organized Venues for Public Education within the Desert Battalion.
  - Wrightwood Wildfire and Disaster Awareness Day
  - Victorville County Fair
  - Grubstakes Day, Yucca Valley
  - Fiesta Days, Morongo Valley
  - Home Depot, Yucca Valley
  - 4th of July parades, Lucerne Valley and Phelan
  - Phelan Phamily Phun Days Parade, Phelan
  - High Desert Safety Fair, Target Shopping Center, Hesperia
  - Summit Leadership Academy – training with cadets, Hesperia

### **C. Fire Prevention Signs**

1. Increase the number of roadside fire prevention education signs.
  - The roadside fire prevention message reaches many people entering State Responsibility Lands when strategically placed along major thoroughfares.

D. Fuels Reduction

1. Reduce hazardous fuel

- Fuel reduction along the identified corridors and perimeter can help reduce the number of roadside fires started by vehicles and discarded burning materials, insures roads used for access and egress do not have fuel loads immediately adjacent to the roadway and provides defensible areas to slow or stop the rate of fire spread.
- There has been an increase in bark beetle activity and associated mortality, in the Wrightwood mountain area particularly and across the mountain areas in general. The increased activity is expected to continue as long as drought conditions persist.

2. Community Chipper program

- Develop a program for fuels reduction via chipping excess rural/residential vegetation rather than burning. This method would also reduce atmospheric carbon release and could be considered a “green” alternative to debris burning. The program can be focused in the High and Very High Fire Hazard Severity Zones within the SRA.

E. High Priority Areas:

- Wrightwood/Pinon Hills
- Oak Hills
- Morongo
- Pioneertown
- South Apple Valley
- Lucerne Valley
- Phelan/Baldy Mesa

**COLLABORATION**

**COMMUNITY / AGENCIES / FIRE SAFE COUNCILS**

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

<b>Organization</b>	<b>Title</b>
San Bernardino County Fire Desert Division	Division Chief
San Bernardino County Fire North Desert	Battalion Chief
San Bernardino County Fire South Desert	Battalion Chief
Morongo Valley CSD Fire Department	Fire Chief
29-Palms Fire Department	Fire Chief
MCAGCC Fire Department	Fire Chief
Bureau of Land Management CDD	Division Chief
United States Forest Service, San	Fire Captain
Wrightwood Fire Safe Council	Council Member
Home Depot- Yucca Valley	Public Relations
CAL TRANS	Cajon Maintenance Supervisor
Apple Valley Fire District	Fire Chief

## **BATTALION 3**

### **OVERVIEW:**

The Yucaipa Battalion boundary starts at the Southern edge of San Bernardino County along County Line Road separating the San Bernardino and Riverside Units. The battalion includes State Responsibility Area land (SRA) in and around the communities of Yucaipa, Calimesa, Oak Glen, Cherry Valley, Mentone, Redlands, San Timoteo Canyon, Live Oak Canyon, Highland, and numerous mountain communities within the San Bernardino National Forest. The battalion boundary follows the confines of San Timoteo Canyon Road and Live Oak Canyon Road on the Western edge, the cities of Redlands, Highland, and Mentone on the North following the footprint of the Santa Ana River, and within the San Bernardino National Forest boundary along the Riverside County Line on the East. The battalion covers an approximate area of 296 square miles. The Yucaipa battalion also includes an ongoing fire service contract with the City of Yucaipa to include three permanent traditionally staffed Type I Paramedic engines and one Type I Volunteer Engine in Oak Glen providing all risk emergency fire and medical service incorporating 21 square miles within the city limits. In addition to CAL FIRE resources other fire departments providing mutual aid include the San Bernardino County Fire Department, United States Forest Service from the San Bernardino National Forest, City of Redlands, and CAL FIRE Riverside Unit.

The elevations in the battalion range from 1346 feet to 9113 feet, and is considered the “Yucaipa Valley” with the presence of multiple mountain ranges bordering the north and eastern edges of the battalion to the San Bernardino National Forest. Climatic temperatures range from in the low twenties in the winter with temperatures exceeding 105 during the summer months. Annual rainfall averages 13.62 inches a year. Vegetation fuel types include annual grasses and a variety of brush with low fuel moisture content making these species highly susceptible to, and capable of carrying fire, especially when fanned by the high winds typical to the Santa Ana wind events generally starting in the last months of any given year.

Notable fires during the last decade include the 2008 Yucaipa Ridge Fire burning 260 acres, the Oak Glen Fire burning 1013 acres, the Pendleton Fire burning 860 acres, the Crafton Fire burning 100 acres, the Crafton III Fire burning 347 acres, and the Wildwood Fire burning 37 acres. In 2013 the Mill fire burned 263 acres in the Crafton Hills area. All of these extended attack fires started within Battalion 3 and involved SRA, LRA, FRA, or a combination of the three and were unified command fires involving neighboring fire departments and utilized local agreements already in place.

During peak staffing, the Yucaipa Battalion staffs two Type III fire engines at one fire station within the City of Yucaipa. That station is shared with a Type I Paramedic Engine, while two additional Type I Paramedic Engines are staffed at two separate stations for a total of 3 fire stations within the Battalion.

The urban interface areas spanning across the battalion present a major concern and challenge to fire personnel when defending structures from wildland fire. An active program for conducting inspections by company officers helps the home and business owners to be in compliance with the requirements set forth in section 4291 of the Public Resources Code.

Communities at Risk listed by the California Fire Alliance (\*see reference below) within the Yucaipa Battalion include the City of Yucaipa, Oak Glen, Mentone, Redlands and Highland, Mountain Home Village, Forest Falls, Angeles Oaks, Seven Oaks, Heartbar and numerous seasonal camp facilities.

\* Reference [http://www.cafirealliance.org/communities\\_at\\_risk](http://www.cafirealliance.org/communities_at_risk))

### **PRIORITIES:**

#### **A. 4291 Public Resources Code Inspections:**

1. Identify high risk areas based on fuel load, road access, and inspection compliance history to identify areas of focused inspections for each Battalion.
  - Conduct inspections
  - Provide educational material to stakeholders and property owners.
  - Non-compliance on 3rd inspection results in legal action (citation).

This on-going project will hold stakeholders responsible for meeting the requirements of 4291 as defined in the Public Resources Code. It will also increase the chance of a favorable outcome in the event of wildfire, and provide defensible space for fire suppression personnel to work, while increasing the margin of safety for firefighters and equipment.

B. Public Education –

1. Debris Burning

- Provide education material to permit holders for debris burning.
- All project areas will be pre-inspected prior to issuance of a burn permit.
- Aggressive law enforcement (citation) for burning without a permit.
- Aggressively seek cost recovery when fire has escaped the project area requiring fire suppression action.

2. Use of Equipment

- Reduce fires caused by the use of equipment.
  - 1) Provide Public Education and information.
  - 2) Aggressively seek cost recovery when fire has escaped the project area requiring fire suppression action.

Lack of knowledge of the specific laws related to open burning and Use of Equipment is often cited by violators as the reason for debris burning violations. Fire Safety and Disaster Preparedness Public Venues for educating the public will be utilized at every opportunity

C. Fire Prevention Signs

1. The Yucaipa Battalion currently has two fire prevention and education signs. Locations of the two signs are:
  - Oak Glen Rd. East of Pendleton Rd.
  - Oak Glen Rd. at Wildwood Canyon Rd.
2. The Yucaipa battalion also displays on Golden Spotted Oak Borer sign:
  - Oak Glen Road/ East of Pendleton Road

The roadside fire prevention message reaches many people entering State Responsibility Lands while strategically placed along major thoroughfares.

D. Fuels Reduction

1. Oak Glen area on the mile high fuel break, mechanical treatment and pile burning.
2. Yucaipa's North Bench area following the toe of the Yucaipa ridge slope, mechanical treatment and pile burning.
3. Pisgah Peak truck trail, mechanical treatment and pile burning.
4. Yucaipa Ridge through cooperation with the United States Forest Service San Bernardino National Forest, mechanical treatment and pile burning.

Fuel reduction along the identified corridors and perimeter can help reduce the number of roadside fires started by vehicles and discarded burning materials, insures roads used for access and egress do not have fuel loads immediately adjacent to the roadway, and provides defensible areas to slow or stop the rate of fire spread.

E. High Priority Areas:

- Oak Glen
- Forest Falls
- Mountain Home Village
- Crafton Hills

F. Organized Venues for Public Education within the Yucaipa Battalion

1. Station tours at all three stations.
2. School programs at multiple education levels throughout the city including the Law and Public Safety Academy at Yucaipa High School.
3. CERT program – Community Emergency Response Team
4. Annual Emergency Disaster Preparedness Expo at the Yucaipa Community Center.
5. Annual Yucaipa Bike Rodeo at the Yucaipa Community Center.
6. Yucaipa Music and Art Festival, Autumn Festival, Winter Festival, Summer Farmers Market Program.
7. Hands only CPR program at multiple events city wide.
8. Also Yucaipa General Plan revised to include multiple revisions in the safety element regarding development and fire standards, fire restrictions, etc. on the fire side.

**COLLABORATION**

**COMMUNITY / AGENCIES / FIRE SAFE COUNCILS**

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

<b>Organization</b>	<b>Title</b>
CAL FIRE City of Highland	Battalion Chief
CAL FIRE RRU	Battalion Chief
City of Redlands Fire Department	Fire Chief
United States Forest Service	Division Chief

## **BATTALION 4**

### **OVERVIEW:**

The Owens Valley Battalion lies to the San Bernardino/Eastern Sierra Division, north of San Bernardino County along the Highway 395 corridor. The valley is surrounded by the White Mountain Range and the Inyo Mountain to the east with peaks as high as 14,286 feet and the Sierra Nevada's on the west with peaks as high as 14,375. The Owens Valley is well known for its outdoor recreation, and boasts world class fishing, snow skiing, hiking and camping which draws a crowd through the holiday season and the weekends that increases the local population by an estimated 30,000. The Battalion encompasses the counties of Inyo and Mono, which protects 540,000 acres of SRA lands in and around the communities of Bishop, Big Pine, Starlite, Rovana, 40 Acres, Mustang Mesa, Independence, Aspendell, South Fork, Lone Pine, Keeler, Cartago and Olancho in Inyo County, and Paradise, Toms Place, Swall Meadows, Benton, Chalfant, and Crowley Lake in Mono County. The Battalion also provides basic fire and rescue protection to Manzanar National Monument, located four miles south of Independence along the Highway 395 corridor.

The Owens Valley is considered a deep valley bottom, with varied deep canyon drainages extending down the mountain slopes from the Sierra Nevada Mountain Range on the west and the White and Inyo Mountain Range on the east. With an average annual rainfall of 6 to 8 inches the Owens Valley is considered by most to be rain sheltered. The fuels within the Battalion consist of timber transitioning to juniper, pine and sage bitterbrush in Mono County, to scattered sage and rabbit brush with salt grass understory and a tule base around the riparian areas in the valley floor and heavy sage with rabbit brush and bitterbrush along the western slopes in Inyo County. The local winds in the area are very susceptible to change and are influenced by terrain to such an extent that any given area can be opposite of what you might expect. Diurnal changes are extreme and strong, down slope winds can be expected, driving wildland fires rapidly downhill and across the flats. Flame lengths of 15 to 60 feet have been observed and rates of spread 10,000 feet an hour, in the sage are seen during periods of high winds, with spotting as far as 3/4 miles.

Notable fires in the area include the Onion Fire in August 1985 burning 10,000 acres, the Pole Fire in June 1995 burning 5,000 acres, the Tom Fire in September 1997 burning 3,500 acres, the Mazourka fire in December 1998 burning 1000 acres, the Division Fire in March 1999 burning 1,000 acres, the Birch Fire in July 2002 burning 2,500 acres in the community of Swall Meadows, the Airport Fire in March 2002 burning 1,280 acres, the Inyo Complex in July 2003 burning 10,000 acres, the Goodale fire in June 2006 burning 3,750 acres, the Inyo Complex in July of 2007 burning 35,176 acres the Fort Fire in February 2008 burning 1000 acres, the Oak Creek Mud Slide in July of 2008 within the community of Independence, the Bluff fire in March 2008 burning 1,000 acres, and the Forks fire in July 2009 burning 1,000 acres in the Bishop area, the Center fire burning 850 acres in and around the community of Big Pine, and the Round fire in February 2015 burning 700 acres in and around the communities of Paradise and Swall Meadows.

During peak staffing levels the Owens Valley Battalion staffs one fire engine in the Bishop area, and one engine in the community of Independence. The Battalion also has the Owens Valley Conservation Camp within the Bishop Area which has five type 1 hand crews and one dozer. The wildland urban interface area spans across the battalion and presents a major concern and challenge for fire personnel when defending structures from an encroaching wild land fire. An active program for conducting defensible space inspections by company officers helps the home and business owners to be in compliance with the requirements set forth in section 4291 of the Public Resource Code.

Communities at Risk listed by the California Fire Alliance within the Owens Valley Battalion include Olancho, Mustang Mesa, Independence, Lone Pine, Cartago, Big Pine, Starlite, Aberdeen, Bishop, West Bishop, Aspendell, Whitney Portal, Swall Meadows, Tom's Place, Mammoth Lakes, Paradise Camp, Mono City, Lee Vining, June Lake, Antelope Valley East, Bridgeport and Coleville.

## **PRIORITIES:**

### A. 4291 Public Resources Code Inspections:

1. Identify high risk areas based on fuel load, road access, and inspection compliance history to identify areas of focused inspections for each Battalion.
  - Conduct inspections
  - Provide educational material to stakeholders and property owners.
  - Non-compliance on 3rd inspection results in legal action (citation).

This on-going project will hold stakeholders responsible for meeting the requirements of 4291 as defined in the Public Resources Code. It will also increase the chance of a favorable outcome in the event of wildfire, and provide defensible space for fire suppression personnel to work, while increasing the margin of safety for firefighters and equipment.

### B. Fire Prevention Signs

1. Increase the number of Fire Prevention Signs.

### C. Fuels Reduction

1. Identify areas within the Communities at Risk to establish Shaded Fuel Reduction Zones.
2. The Wheeler Crest Fuels Reduction Project is a Fire Prevention Fee Grant funded project within the community of Swall Meadows for roadside chipping and fuelbreak construction.

### D. Vegetation Management Program

1. Continue to work with the local Fire Safe Councils, Resource Management and Los Angeles Department of Water and Power to identify areas of high risk, to reduce fuel loading within identified Communities at Risk, and enhance wetland habitat by select project burning.

#### **VMP projects include:**

- June Lake-- Fuel reduction along Hwy 158, in cooperation with the June Lake Fire Safe Counsel. The project is funded by the FPF.
- Benton Springs- Fuel reduction/Habitat improvement

### E. Public Education –

#### 1. Debris Burning

- Provide education material to permit holders for debris burning.
- All project areas will be pre-inspected prior to issuance of a burn permit.
- Aggressive law enforcement (citation) for burning without a permit.
- Aggressively seek cost recovery when fire has escaped the project area requiring fire suppression action.

#### 2. Use of Equipment

- Reduce fires caused by the use of equipment.
  - 1) Provide Public Education and information.
  - 2) Aggressively seek cost recovery when fire has escaped the project area requiring fire suppression action.

Lack of knowledge of the specific laws related to open burning and Use of Equipment is often cited by violators as the reason for debris burning violations. Fire Safety and Disaster Preparedness Public Venues for educating the public will be utilized at every opportunity

### F. Organized Fire Prevention Activities for Public Education within the Owens Valley Battalion

1. Participate in Fire Prevention Activities for Public Education.
2. Work with our cooperators to provide Public Education. (Smokey Bear program with the Inyo National Forest).

3. Work with the local communities to make available Public Education materials for Fire prevention awareness and program development.
4. Bishop Mule Days – Fire Prevention display
5. County General Plan - As one of the first Units in the state to do so, the San Bernardino Unit reviewed the Inyo County General plan as it relates to development in State Responsible Areas (SRA).

G. High Priority Areas:

**INYO COUNTY**

- Wilkerson south of Bishop
- West Bishop
- Big Pine
- Independence
- Lone Pine
- Olancha

**INDIAN LAND**

- Bishop
- Independence
- Big Pine
- Lone Pine

**MUTUAL THREAT ZONE:**

- Inyo National Forest

**MONO COUNTY:**

- Hwy 395 corridor
- Walker
- Coleville
- Bridgeport –Twin Lake
- Lee Vining
- Mono City
- June Lake
- Paradise

**SWALL MEADOWS**

- Tri-Valley Area Hwy 6 corridor
- Benton
- Hammil Valley
- Chalfant Valley

\*Any other area that pose a risk to SRA & areas identified in CWPP's in Inyo & Mono counties.

**COLLABORATION**

**COMMUNITY / AGENCIES / FIRE SAFE COUNCILS**

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

<b>Organization</b>	<b>Title</b>
Los Angeles Dept. of Water and Power	Ranch Lands Manager
Bureau of Land Management	Division Chief
Inyo National Forest	Division Chief Bishop Area
Inyo National Forest	Division Chief Lone Pine Area
Bishop Fire Department	Fire Chief
Mammoth Lakes Fire Department	Fire Chief
Lone Pine Fire Safe Council	President
Twin Lakes Fire Safe Council	President
South Fork Bishop Creek FSC	President
Inyo County Sheriff	Sheriff
Mono County Sheriff	Sheriff
Bureau of Land Management	Deputy Chief
Humboldt-Toiyabe National Forest	Fire Management Officer
Swall Meadows Fire Safe Council	Council Member

## **BATTALION 6**

### **OVERVIEW:**

As part of the collaborative California Cooperative Wildland Fire Management and Stafford Act Response Agreement (CFMA) process, the 2013 review identified that a Direct Protection (DPA) adjustment was necessary to re-align the DPA to the mission of each agency. The mission of the Federal agencies is to manage and protect national forest and public lands and to protect lands under cooperative agreement with other wildland fire agencies. The mission of CAL FIRE is to protect the state, private and federal lands under the cooperative agreement and, where appropriate, provide local government fire protection services. As a result of this review, CAL FIRE assumed DPA for 32,542 acres in the San Bernardino mountain area. This additional acreage was assumed in the San Bernardino Unit without additional budget/staffing increase. The additional acreage added 35,000 parcels that are subject to LE-100 inspections. The re-alignment of the DPA will not impact the level of response to wildland fires. The response to wildland fires will continue to be immediate, decisive and aggressive.

In 2013, CAL FIRE assumed the direct protection of areas of SRA in the San Bernardino Mountains. The Mountain Battalion 6 boundary ranges from Crestline to the Mountain Home Village, with three fire stations covering during the summer months located in Crestline, Running Springs and Baldwin Lakes. Efforts are underway for an additional engine to co-locate with USFS at their Sky Forest Station. This change has required numerous planning meetings with the USFS to insure a smooth transition. CAL FIRE has always enjoyed good relationships with community groups in the past. It is our hope to expand our relationship with additional groups in the mountain communities.

Recently, bark beetle activity and associated tree mortality, in the mountain areas of San Bernardino County, is increasing and is expected to continue as long as drought conditions persist.

The San Bernardino Mountains are a high and rugged mountain range in Southern California. Situated north and northeast of San Bernardino, the range tops out at 11,489 feet (3,502 m) at San Gorgonio Mountain (the tallest peak in all of Southern California). The San Bernardino Mountains form a significant region of wilderness and are popular for hiking and skiing.

There are several mid-sized to large towns in the mountains themselves, including Big Bear City, Crestline, Lake Arrowhead and Running Springs. Communities within the San Bernardino Mountains have a total population of approximately 44,000, with this number sometimes increasing tenfold during peak tourist season. Several regional streams and rivers also have their headwaters in the mountains, the principal being the Santa Ana River, watershed which runs westwards into the Pacific Ocean through Orange County. Other streams flowing off the mountains include the Whitewater River, flowing southeast through the Coachella Valley into the Salton Sea, and the Mojave River, which drains northwards into the Mojave Desert.

Fire History in the San Bernardino Mountains is extensive. The historic Panorama Fire in 1980, burned 23,800 acres, destroyed 280 homes, damaged 49 homes, caused 4 civilian deaths, and 77 injuries. The Old Fire in 2003, burned 91,281 acres, destroyed 993 homes and caused 6 deaths. The fire threatened San Bernardino and Highland, as well as the mountain resort communities of Cedar Glen, Crestline, Running Springs and Lake Arrowhead and forcing upwards of 80,000 residents to evacuate their homes. In 2007, the Slide Fire burned 12,759 acres, and the Grass Valley Fire burned 1,247 acres. In 2015, the Lake Fire burned 31,359 acres.

### **PRIORITIES:**

#### **A. 4291 Public Resources Code Inspections:**

1. Identify high risk areas based on fuel load, road access, and inspection compliance history to identify areas of focused inspections for each Battalion.
  - Conduct inspections LE100 for approximately 35,000 parcels
  - Provide educational material to stakeholders and property owners.
  - Non-compliance on 3rd inspection results in legal action (citation).

This on-going project will hold stakeholders responsible for meeting the requirements of 4291 as defined in the Public Resources Code. It will also increase the chance of a favorable outcome in the event of wildfire, and provide defensible space for fire suppression personnel to work, while increasing the margin of safety for firefighters and equipment.

## B. Public Education –

### 1. Debris Burning

- Provide education material to permit holders for debris burning.
- All project areas will be pre-inspected prior to issuance of a burn permit.
- Aggressive law enforcement (citation) for burning without a permit.
- Aggressively seek cost recovery when fire has escaped the project area requiring fire suppression action.

### 2. Use of Equipment

- Reduce fires caused by the use of equipment.
  - 1) Provide Public Education and information.
  - 2) Aggressively seek cost recovery when fire has escaped the project area requiring fire suppression action.

Lack of knowledge of the specific laws related to open burning and Use of Equipment is often cited by violators as the reason for debris burning violations. Fire Safety and Disaster Preparedness Public Venues for educating the public will be utilized at every opportunity

## C. Fuels Reduction and Fire Prevention

Fuel reduction projects will be identified for future planning with local Fire Safe Councils, BDU resource management, and local cooperators. Once established, the fuel reduction along identified corridors and perimeter can help reduce the number of roadside fires started by vehicles and discarded burning materials. This will help ensure roads used for ingress and egress, do not have fuel loads immediately adjacent to the roadway and provides defensible areas to slow or stop the rate of fire spread. CAL FIRE crews are taking an active role in reducing the severity and spread of the bark beetle and associated mortality by felling and then treating the downed material.

The following Fire Prevention Fee Grant projects were awarded in 2015 within the battalion:

- Big Bear, Running Springs, and Arrowbear Wood Shake Shingle Roof Replacement Project
- Big Bear Valley Chipping Project
- Mountain Rim Fire Safe Council Community Wildfire Protection Plan (CWPP)
- Mountain Rim Fire Safe Council Mountain Top Chipper Days Project
- Mountain Rim Fire Safe Council Abatement Assistance and Advocacy Project
- Mountain Rim Fire Safe Council Web Based Map Interface for CWPP's Project
- Crest Forest Fire Safe Demonstration Sites Project
- Mountain Rim Fire Safe Council Hazardous Tree Removal
- Arrowhead Community Fire Safe Council Defensible Space Fuels Treatment Project

More information about the Fire Prevention Fee Grant Program is located in the Resource Management Section.

## D. Organized Venues for Public Education

- Participate in Venues for Public Education

## E. High Priority Areas:

- Crestline
- Valley of Enchantment
- Cedar Pines Park
- Lake Arrowhead
- Running Springs
- Big Bear

## COLLABORATION

### COMMUNITY / AGENCIES / FIRE SAFE COUNCILS

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

<b>Organization</b>	<b>Title</b>
San Bernardino National Forest Association	Executive Director
Crestline Fire Safe Council	President
San Bernardino County Fire	Division Chief
U.S. Forest Service	Forest Supervisor
Cal Trans	Area Superintendent
Mojave Desert Resource Conservation District	Conservationist
Natural Resource Conservation Service	Area Forester
San Bernardino County Flood Control District	Representative
Southern California Edison	Bark Beetle Program Director
San Bernardino County Code Enforcement	Representative
Angelus Oaks Fire Safe Council	Member
Wrightwood Fire Safe Council	Member
Inland Empire Fire Safe Alliance	President

## TRAINING BUREAU

### OVERVIEW:

The Training Program in the San Bernardino Unit is responsible for meeting and maintaining all of the industry standard mandates for all personnel assigned to the Unit.

It is the San Bernardino Unit's goal to maintain highly trained personnel and reduce the frequency and severity of all workplace illnesses and injuries. The Unit Training Program supports all of the personnel that are responsible for staffing and protecting the below:

- The State Responsibility Areas in the counties of San Bernardino, Inyo and Mono that include 903,000 acres of direct protection area.
- The State Responsibility Areas in the Contract County of Los Angeles that include 505,000 acres of direct protection area.
- Full Service Fire Protection and Paramedic Services in the Cities of Yucaipa and Highland.
- Wildland Fire Protection Agreements with the Cities of Redlands, Colton, Loma Linda, Chino and Chino Hills that include 18,502 acres of protection area.
- Dispatching Contracts for six agencies.
- Prado Helitack Base.
- Four Conservation Camps and One Inmate Training Center.
- Nine State Fire Stations.
- Approximately three hundred Safety and Non-Safety Personnel.
- Work cooperatively with Crafton Hills College, Victor Valley College, The San Bernardino Public Safety Academy, and the Summit Leadership Academy to provide Fire Service education to future generations of Fire Fighters.

### PRIORITIES:

- A. Maintain currency of all mandatory certifications for Fire Control Personnel.
- B. Ensure all Fire Control Personnel successfully complete the Basic Fire Protection Skill Certification Process (Policy 4064).
- C. Ensure all Fire Control Personnel successfully complete the Unit's Fire Preparedness Exercise.
- D. Utilize the Online Target Safety Program to increase the quality of training and reduce cost.
- E. All Fire Control Personnel completed the Continued Professional Training Course.
- F. Participate in the County Wide Fire Preparedness exercise.
  1. Participate in the SOLAR Exercise for the Counties of San Bernardino, Orange, Los Angeles, and Riverside.
  2. Ensure all industry standards and policies for the aviation program are maintained.
  3. Maintain compliance with the CAL FIRE Respiratory Protection Program.

## COLLABORATION

### COMMUNITY / AGENCIES / FIRE SAFE COUNCILS

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

Organization	Title
CAL FIRE City of Yucaipa	Battalion Chief
CAL FIRE Riverside Unit	Battalion Chief
City of Redlands Fire Department	Fire Chief
City of Loma Linda Fire Department	Fire Chief
United States Forest Service, San Bernardino	Division Chief
Mountain Area Safety Task Force	MAST Member

<b>Organization</b>	<b>Title</b>
City of Colton Fire Department	Fire Chief
CAL FIRE BDU	Battalion Chief
City of San Bernardino Fire Department	Fire Chief
Crest Forest Fire Protection District	Fire Chief
Running Springs Fire Department	Fire Chief
San Manuel Fire Department	Fire Chief

## **PREVENTION BUREAU**

### **OVERVIEW:**

The Fire Prevention Bureau is involved in a variety of efforts designed to reduce the number of fire starts and limit the damages from fires that do occur. The San Bernardino Unit is unique because of the overlay of unincorporated areas and communities within State Responsibility Areas (SRA) that are protected primarily by the San Bernardino County Fire Department or independent fire districts. These local agencies have the lead in enforcing development and building codes in their jurisdiction. In Mono County, the County Government assumes that role. In both cases, CAL FIRE works cooperatively to assist local government in enforcing Title 24 and PRC 4290 in new and existing building construction.

In 2014, the San Bernardino Unit's Fire Prevention Bureau added an additional Fire Captain Specialist, bringing to the total staffing of the Bureau to one Battalion Chief and three Fire Captain Specialist. In 2015 we filled a vacant Fire Prevention Specialist position and now have someone to provide more oversight and work toward fire and life safety education as well as manage the Juvenile Fire Setters program and the Bureau's VIPs. Additionally, as a result of SB 1241 and the Fire Prevention program, the Unit was approved to hire 6 Defensible Space Inspectors (Forestry Aides). These inspectors are supervised through the Fire Prevention Bureau and will perform PRC 4291 Inspection throughout the Unit.

The Information and Education section of the Fire Prevention Bureau assists with providing fire safety and prevention to the public and other concerned stakeholders.

Utilizing a variety of methods, the Information and Education section of the Fire Prevention Bureau seeks to provide information on fire safety, PRC regulation adherence, and general safety to the public. This information is disseminated through public events and public forums as well as through the news media. At public events, the section uses a tried and true political method of personal greeting and interaction to determine if the members of the public need information and material regarding fire safety and regulations. The news media is provided information in the form of Public Service Announcements (PSA's), and news stories. The recent development of a Unit web page as well as a twitter feed now gives the Unit multiple outlets with which to inform the public and news media about important fire and life safety information

This section is also involved in fire and life safety education which is accomplished through public meetings and forums. While similar to information dissemination, education goes a step further through the direct teaching of fire and life safety to the public and other affected stakeholders. Because of the geographic organization of the San Bernardino Unit, there is little call for school programs since the bulk of the schools within the Unit are in overlapping jurisdictions. However, the firefighters in the contract cities of Highland and Yucaipa present Smokey Bear education programs to the schools in those communities on an annual basis. The Information and Education Section responds to more than two dozen requests for Smokey Bear fire education programs each year. This is supported by fire engine crews and the Unit's Fire Prevention Specialist.

### **PRIORITIES:**

- A. For the Information and Education section a major priority for the next year will be increasing our efforts in educating the public regarding debris burning, campfires, and equipment use. This will be accomplished by working in conjunction with the Station personnel to provide residents and other stakeholders the appropriate information. The section will strive to increase its output of PSA's and news releases regarding the laws regarding campfires, debris burning and proper equipment use in fire prone areas. Educational and informational efforts will also continue with a focus on reducing fires resulting from electrical causes and children playing with fire.
- B. Another priority will be the continuation of Operation Santa Ana. This program is done with the cooperation and participation of Southern California Edison. This major cooperative program has been responsible for reducing to nearly zero the number of fires caused by faulty power equipment, power lines, and improperly cleared areas around the base of power poles see PRC sections 4292 and 4293.

- C. The San Bernardino County Fair is the largest single prevention and education event that the Unit participates in on an annual basis. For the last 15 years, this Unit has been the coordinator for the Public Service area. This area is provided by the Fair at no cost to CAL FIRE San Bernardino Unit and the other governmental and non-profit organizations that participate there. Over the years, CAL FIRE has had a vested interest in making this area an important place for the public to visit.
- D. Another major effort of the San Bernardino Unit is to provide fire safety information and education to the news media. The News Media Fire Safety program has been ongoing since its creation by the Unit in 2001. The continuing goal of this program is to educate members of the print and electronic news media not only in wildland fire safety, but wildland fire behavior as well. The Section annually provides reminders to the varied news organizations in the Los Angeles and Inland Empire areas about the continued need for this important safety education training.

**E. SPECIAL TREATMENT AREAS 9051.5**

(No. 7 September, 1991)

Risk Rating Areas (RRAs) may contain smaller geographical areas of significance that a Unit may wish to pre-designate as a special treatment area. This area may be unique in comparison to surrounding areas and requires a separate prescription either through public education, vegetation management, law enforcement, engineering activities, or even political treatment.

Special Treatment Areas should be identified and assigned a numerical value for integration into the Fire Prevention Plan and handled as a separate planning area. Where several Special Treatment Areas are present, they should be categorized based on three separate scores: the values at risk, risk of fire starts, and difficulty of control. Apply a rating of 1-3 to each category and total all three ratings. The highest score becomes the top priority Special Treatment Area. Lower scores may receive less emphasis, less resources, or will be addressed at a later time.

- F. For the Owens Valley and northern reaches of the San Bernardino Unit, the work to provide information and education will continue. These efforts include;
1. Increasing the placement of roadside Fire Prevention Signs.
  2. Increase public education regarding illegal burning and campfires.
  3. Maintain CAL FIRE's participation in Smokey Bear team teaching in local area schools, fire safety displays at the Tri County Fair Grounds during the annual Home Show and Mule Days, and Fire Prevention Week participation in the local communities of Inyo and Mono counties.

**COLLABORATION**

**COMMUNITY / AGENCIES / FIRE SAFE COUNCILS**

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

<b>Organization</b>	<b>Title</b>
San Bernardino County Fire	Public Information Officer
San Bernardino National Forest	Public Information Officer
San Bernardino Co. Sheriff's Dept.	Public Information Officer
San Bernardino Co. Fair	Public Information Officer
Southern California Edison	Public Information Officer

## RESOURCE MANAGEMENT

### OVERVIEW:

Consistent with the Department's mission, the Resource Management Division of the San Bernardino Unit is committed to serve and safeguard the people and protect the property and natural resources of California. This is accomplished using a variety of tools including manipulation of fuels, education, enforcement and fire protection. Manipulation of fuels is accomplished by reducing the density and continuity of the fuel while increasing overall health of the vegetation community. Every contact that's made with the public is an opportunity to inform them about the benefits of creating healthy, fire resistant vegetation communities in and around their neighborhoods. It's also an opportunity to assist them in that endeavor by showing them how to do it or offering technical or financial assistance to accomplish the work. Enforcement of the State's regulations, particularly in the forest practice arena, helps insure that the many natural resources in the wildland environment are protected now and into the future. As the need arises, Resource Management personnel are committed to supporting the fire protection and all risk mission of the Unit in a role commensurate to their training and experience. In 2014, the San Bernardino Unit added a new Forester I to resource management. This position is instrumental in planning and implementing fuels reduction projects, enforcing the forest practice rules and fire laws, and providing public assistance and guidance on various resource management projects.

Resource Management covers all State Responsibility Area (SRA) lands within the Unit. While some SRA lands within the Unit are not under State Direct Protection Area (DPA) for fire, Resource Management does have a responsibility to exercise its function in all SRA lands regardless of the direct protection status. Therefore Resource Management works throughout Inyo, Mono, and San Bernardino Counties.

Much of the work done by Resource Management is in the San Bernardino Mountains and the eastern end of the San Gabriel Mountains. Elevations range from approximately 1200 feet at the valley floor to over 10,000 feet. Both are transverse ranges lying north of the San Bernardino and Los Angeles basins. They are characterized by a typical Mediterranean climate which can be very dry during the summer months with the bulk of precipitation coming during the winter months. The area has been dramatically affected by four consecutive years of drought and unprecedented bark beetle outbreaks resulting in tree mortality. The drought, including droughts prior to 2011, has resulted in large wildfires such as the – Willow Fire in 1999, Old Fire in 2003, Grand Prix Fire in 2003, Grass Valley & Slide Fires in 2007, and the Lake Fire in 2015.

Communities at Risk in the mountain areas include:

Angelus Oaks	Forest Falls	Oak Glen
Arrowbear	Fawnskin	Rim Forest
Baldwin Lake	Green Valley Lake	Running Springs
Big Bear City	Lake Arrowhead	Sugar Loaf
Big Bear Lake	Lytle Creek	Twin Peaks
Blue Jay	Mount Baldy Village	Valley of Enchantment
Cedar Pines Park	Mountain Home Village	Wrightwood
Crestline		

### Resource Management Programs

In 2014 CAL FIRE introduced two new grant programs: the State Responsibility Area (SRA) Fire Prevention Fee (FPF) Fund (Drought Related) Grant and the Greenhouse Gas Reduction Fund Forest Management Grant. FPF funds were also distributed to the Unit to implement internal fire prevention projects related to fuel reduction, fire prevention education and fire prevention planning. The program is aimed at reducing the wildfire risk in communities within and near SRA. The Greenhouse Gas Reduction Grant provided funding for the Forest Legacy Program, forest pest control projects, fuels reduction projects, programmatic timberland projects, reforestation, research, and urban forestry. Both of these programs and the Unit's FPF projects began project implementation in 2015. The FPF Grant was offered again in 2015 and the Unit received additional FPF funds. Current ongoing FPF Grant Projects that CAL FIRE awarded within the Unit include:

- Big Bear, Running Springs, and Arrowbear Wood Shake Shingle Roof Replacement Project
- Big Bear Valley Chipping Project
- Mountain Rim Fire Safe Council Community Wildfire Protection Plan (CWPP)

- Mountain Rim Fire Safe Council Mountain Top Chipper Days Project
- Mountain Rim Fire Safe Council Abatement Assistance and Advocacy Project
- Mountain Rim Fire Safe Council Web Based Map Interface for CWPP's Project
- Crest Forest Fire Safe Demonstration Sites Project
- Mountain Rim Fire Safe Council Hazardous Tree Removal (Awarded 2015/2016)
- Arrowhead Community Fire Safe Council Defensible Space Fuels Treatment Project (Awarded 2015/2016)

Projects where CAL FIRE is the lead agency or partners with Fire Safe Councils or other entities to providing the technical expertise to complete the planning and environmental review, while they hire contractors or CAL FIRE inmate crews to accomplish the work on the ground include:

- Hazardous tree removal projects
- Fuel reduction projects
- Chipper projects
- Vegetation Management Projects (prescribe fires)
- Reforestation Projects

Unit Resource staff has worked cooperatively with the Mountain Communities Wildfire ReLeaf Program that administered by the Mojave Desert Resource Conservation District for 11 years reforesting burn areas or areas denuded by bark beetle infestations. Resource staff provides the technical expertise to the working group for reforestation and directs crews on the ground at the time of planting. This effort is ongoing and additional work is planned for 2016 and 2017.

The Resource Management staff implements the California Forest Improvement Program (CFIP) program. The program scope includes the improvement of all forest resources, including fish and wildlife habitat, soil, water quality, and hazardous fuels reduction. CFIP provides technical assistance to private forest landowners, contractors, and governments agencies. Cost share assistance is provided to private forest landowners, Resource Conservation Districts, and non-profit organizations with SRA within their jurisdiction. Cost-shared activities include forest management planning, tree planting site preparation, timber stand improvement, fish and wildlife habitat improvement, fuels reduction, and land conservation. Currently, the source of CFIP Fuels Reduction funds comes from the Greenhouse Gas Reduction Funds (GGRF) and the Timber Regulation and Forest Restoration Fund

The Natural Resource Conservation Service (NRCS) uses the same CFIP management plan template to meet management plan requirements for grant agreements and submits forest management plans (FMPs) to CAL FIRE for review of compliance with state laws and Forest Practice Rules. Projects where CAL FIRE has provided technical expertise and FMP review to NRCS this past year include:

- Camp Tahquitz FMP
- Cam Whittle FMP
- Myst Haven Woods FMP
- Richard FMP
- Smiley Park FMP

In the event of a wildland fire, on DPA land within the Unit, Resource Management staff is mobilized to evaluate potential damage that may result from suppression activity. Work is then performed to mitigate any short or long term harm to the environment or to man-made features. Items of concern that the Department does not have authority to address are passed on to the most appropriate local, state or federal agency for further evaluation, and or action. Items of concern on private land that cannot be addressed during suppression repair efforts and are not the jurisdiction of another governmental agency are referred back to the landowner.

The Gold Spotted Oak Borer (GSOB) is an introduced pest that was first discovered outside its native range in San Diego County in 2008. It has since been identified in Riverside and Orange Counties and most recently in Los Angeles County, and could easily appear in San Bernardino County. In addition to GSOB, the Polyphagous Shot Hole Borer PHSB is another introduced pest that has invaded Southern California and is now located as far east as Ontario in southwestern San Bernardino County.

Furthermore, California is entering its fifth consecutive year of drought which has resulted in increased bark beetle activity and associated tree mortality throughout the Unit. The Forest Service's latest (August, 2015) aerial tree mortality survey of the San Bernardino National Forest estimates there are approximately 44,500 dead/dying trees within the forest. This number has increased exponentially since 2012. Most tree mortality is occurring in the form of single dead trees or in clusters of approximately 10-15 affected trees. The largest concentration of tree mortality is north of Crestline along Highway 138. The Fire Prevention Fee is helping fund the Unit's Insect Control Program and projects such as the Mountain Rim Fire Safe Council's "Hazardous Tree Removal Assistance Project" to address tree mortality within the Unit. The Unit continues to work with Caltrans and other agencies to assist in the removal of dead trees along highways and other infrastructure. Tree mortality is expected to continue as long as drought conditions persist. As a result, additional time will be spent by Resource Management staff in public education, coordinating with other agencies, field inspection/verification and control of these pests. These efforts may occupy a considerable amount of Resource Management staff time.

Since 2012, coast live oak trees have been observed dying in several southern California counties including Orange, Riverside and Los Angeles. Much of the coast live oak tree mortality is attributed to foamy bark canker disease which is spread by the western oak bark beetle that attacks drought stressed oaks. The disease is caused by a fungal species which is spread by western oak bark beetles. Most recently, it was discovered that the disease is also killing California black oaks in the San Bernardino Mountains. This new finding came from collaborative work between CAL FIRE San Bernardino and the University of California at Riverside (UCR) Cooperative Extension's Plant Pathology Department. BDU staff will continue to educate people about the risks associated with this disease, preventative options, and treatment methods."

Resource Management staff also conducts Forest Practice inspections pursuant to the Forest Practices Act. The inspections are performed to insure fuel reduction and logging operations are conducted according to Forest Practice Rules and other environmental laws in a manner that protects all of the resources in a forest environment.

The Resource Management staff conducts the environmental reviews (California Environmental Quality Act-CEQA) for existing facilities maintenance or new construction projects within the San Bernardino Unit. Unit facilities include fire stations, conservation camps, Unit Headquarters, or other infrastructure. Projects may include, but are not limited to the replacement of generators, new gates and fences, roads and parking lots, alterations to the land, utility systems, improvements to drainage systems, or constructing new buildings. Much of the work is completed using inmate crews or contractors.

The Resource Management staff also reviews environmental documents for projects submitted by other government agencies conducting CEQA. These types of proposed projects are located within the Unit, may have an impact upon the Department's fire protection and/or natural resource protection and management responsibilities or require the Department's permits or approval. Project comments are submitted to the lead CEQA agency and the appropriate level of CAL FIRE involvement is determined.

The Resource Management staff also partakes in information and education programs throughout the Unit. School or university presentations about forestry and fire are conducted, foresters teach during the teacher's Forest Ecology Workshop in collaboration with the Mohave Environmental Education Consortium, and foresters also teach and participate in the San Bernardino Forestry Challenge among other community programs.

## **PRIORITIES:**

- A. Resource Management priorities in fuels reduction/fire prevention are as follows:
  1. Assisting community groups and private landowners in planning and implementing projects.
  2. Working with partners on addressing forest pests.
  3. Developing and implementing internal fuels and fire prevention projects described above.
  4. Continuing to perform Forest Practice inspections.
  5. Maintaining good relations with cooperators and developing new partnerships.

## COLLABORATION

### COMMUNITY / AGENCIES / FIRE SAFE COUNCILS

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

<b>Organization</b>	<b>Title</b>
Southern California Mountain Foundation	Executive Director
Lone Pine Fire Safe Council	President
Eastern Sierra Front FSC	President
Los Angeles Department of Water and Power	Representative
San Bernardino County Fire	Division Chief
U.S. Forest Service	Forest Supervisor
Cal Trans	Area Superintendent
Mojave Desert Resource Conservation District	Conservationist
Natural Resource Conservation Service	Area Forester
San Bernardino County Flood Control District	Representative
Southern California Edison	Bark Beetle Program Director
San Bernardino County Code Enforcement	Representative
Angelus Oaks Fire Safe Council	Member
Wrightwood Fire Safe Council	Member
June Lake Fire Safe Council	President
Inland Empire Fire Safe Alliance	President

## **FENNER CANYON CC**

### **OVERVIEW:**

The San Bernardino Unit's Conservation Camp Program consists of the Chino Institute for Women Fire Training Center, as well as four conservation camps: Prado, Pilot Rock, Owens Valley, and Fenner Canyon. The conservation camps are located within San Bernardino, Los Angeles and Inyo counties; providing a combined resource total of 19 fire crews, a mobile kitchen unit (MKU), mobile food dispensing unit, two insect control crews, and various in camp products.

The conservation camps within the San Bernardino Unit work with federal, state, and local government agencies on fuels modification projects, broadcast burning, pile burning, and reforestation. These agencies include: Cleveland National Forest (CNF), San Bernardino National Forest (BDF), Angeles National Forest (ANF), Inyo National Forest (INF), Bureau of Land Management (BLM), California State Parks, and Kern County.

Fenner Canyon Conservation Camp (CC) is located at 29500 Big Rock Creek Road in the community of Valyermo, within the Angeles National Forest in Los Angeles County.

Under a Cooperative Agreement with the California Department of Corrections and Rehabilitation (CDCR), there are 128 inmates housed at Fenner Canyon CC, which make up six fire crews and the support staff for the crews and camp. Staffing consists of 1 Division Chief, 12 Fire Captain B's, 1 Office Tech, 1 Heavy Equipment Mechanic, and 1 CDF Maintenance Mechanic.

CAL FIRE operates the camp under a special use permit issued by the United States Forest Service (USFS). Under the conditions of the special use permit, CAL FIRE funds a USFS Recreation Officer and provides a minimum of two crews per day for project work on the Forest. Camp facilities include: dormitories, hobby shop, gym, kitchen, automotive shop, chain saw shop, and sewing shop.

In 2009, the Station Fire burned Los Angeles County Fire Department's Mount Gleason Camp. As a result, Los Angeles County Fire has been given the authority to dispatch Fenner Canyon Crews to initial attack responses within the state responsibility area (SRA). All emergency crew transports (ECT) assigned to Fenner Canyon CC have been issued Los Angeles County Fire radios and communicate directly with their dispatch center. In 2013, the fire crews have logged a combined total of 7,551 emergency response hours.

### **RESPONSE AREA:**

Fenner Canyon CC's emergency response area includes the following:

- A. San Bernardino Unit:  
The area east of Interstate 5, west of Interstate 15, south of Highway 18, and north of the Angeles National Forest/San Bernardino National Forest boundary lines.
- B. Los Angeles County:  
The area east of 90th Street E, west of the San Bernardino County line, south of the Kern County line, and north of the Angeles National Forest boundary line.
- C. Angeles National Forest:  
The area east of the Angeles Forest Highway, west of the San Bernardino National Forest boundary line, south of the Angeles National Forest boundary line, and north of the Angeles Crest Highway.
- D. San Bernardino National Forest:  
The area east of the Angeles National Forest boundary line, west of Interstate 15, south of the San Bernardino National Forest boundary line, and north of Lytle Creek Canyon Road.
- E. Bureau of Land Management (BLM)/California Desert District (CDD):  
The area east of the Bakersfield BLM District (BBD), west of the Colorado River, south of Death Valley, and north of Highway 18.
- F. Kern County:  
The area east of the Caliente, west of the BBD boundary near the Tehachapi's, south of Kernville, and north of the Los Angeles County line.

## PROJECTS:

### A. CAL FIRE San Bernardino Unit Facilities:

San Bernardino Unit Facilities consist of a variety of project responsibilities, which include: facility and ground maintenance, light construction, carpentry, station maintenance, painting, hazard reduction of weeds, landscaping, and litter control. Crews are also assigned the task of assisting Training Staff with wildland firefighting classes that teach shelter deployment, hose lays, line construction and tool outs.

### B. California State Parks/Tehachapi District:

The Tehachapi District consists of four state parks: California State Park Fort Tejon (Lebec, Kern County), California State Park Poppy Reserve (Lancaster, Los Angeles County), California State Park Red Rock (north of Mojave, Kern County), and California State Park Saddle Back (Lake Los Angeles, Los Angeles County). Work performed at these sites include: brush and weed hazard reduction around structures and fence lines, fuel breaks, repair and maintenance of facilities and campsites, fence work, trail maintenance, and construction of a sanctuary for tortoise habitation.

### C. CALTRANS/ Victorville – Cajon Pass Station:

CALTRANS projects run along Interstate 15 from Devore to Barstow, Hwy 18 from the Los Angeles County line to Lucerne Valley, Hwy 395 from Hesperia to Kramer's Junction, Hwy 138 from the Los Angeles County line to Interstate 15, and Hwy 2 in Wrightwood. Fenner Canyon Crews commonly clear State right-of-ways of brush, tumbleweeds, trash and debris and routinely provide hazard mitigation maintenance by the use of fuel breaks along fence lines located in these areas. Fenner Canyon Crews are also responsible for the repair and cleaning of drainages, as well as maintenance for the CALTRANS Victorville and Cajon Pass Yards.

### D. Bureau of Land Management California Desert District (CDD):

Projects with the CDD include fuels management projects at the Mojave Preserve (i.e. cutting brush and preparing piles for burning). Details for broadcast burning on the Mojave Preserve are being worked out to include Fenner Canyon Crews, which would require the crews to spike out at the Mojave Preserve.

### E. Angeles National Forest (ANF):

Under the special use permit, Fenner Canyon CC provides the ANF with two crews per day. Depending on the work project and timeframe, the camp will provide additional crews as need. Fenner Canyon Crews are dedicated to reforestation efforts in the areas that were impacted by the Station Fire, which burned over 100,000 acres. Tree Release and Wrightwood Fuels Management Projects require crews to complete tasks that consist of: felling hazardous trees, campground maintenance, trail maintenance, fuels reduction projects, hazard reduction projects, snow removal, trash removal, tree plantation projects and facility maintenance at the Big Pines and Grassy Hollow Visitor Centers. Crews also work on the Santa Clara Mojave River Ranger District campgrounds and hiking trails; performing minor construction, plumbing, painting, trash pick-up, snow removal, fire hazard abatement, general clean-up of ground storage areas and restrooms, repair and replacement of roads and boundary markers, parking bumpers, water lines, picnic tables, barbeque pits, and maintenance of the Pacific Crest Trail.

### F. Wrightwood Fire Safe Council:

Fenner Canyon Crews commonly perform duties within the community of Wrightwood. The Fenner Canyon crews have recently worked in the Wrightwood community with the increasing Bark Beetle activity, and are expected to continue as long as drought conditions persist. Various hazard mitigation methods are utilized; increasing safety for the community. The Wrightwood Fire Safe Council currently has projects in which Fenner Canyon Crews are assigned: the Highway 2 Hazard Mitigation Project and the Adopt-A-Hydrant Program. Fenner Canyon Crews assigned to the Highway 2 Mitigation Project mitigate potential hazards by removing grass and brush within the CALTRANS right-of-way along Highway 2, between Highway 138 and the Los Angeles County line in Wrightwood. The Wrightwood Adopt-A-Hydrant Project utilizes Fenner Canyon Crews for

clearing vegetation around fire hydrants. The crews also perform winter snow removal around the hydrants in order to provide San Bernardino County Fire Department personnel adequate working space around hydrants during emergency situations.

**G. Lions Camp Wrightwood:**

In addition to the services provided for the community of Wrightwood, Fenner Canyon Crews also perform hazard mitigation techniques to Lions Camp Wrightwood. This project includes minor construction, plumbing, painting, trash pick-up, snow removal, sewage repair and installation, fire abatement, fuel reduction, general clean-up of grounds and buildings to include storage areas and restrooms, replace and repair road and boundary markers, parking bumpers, water lines, picnic tables, and other duties as requested.

**H. San Bernardino County Flood Control District:**

Fenner Canyon Crews provide services to the San Bernardino County Flood Control District. The Crews are assigned tasks that provide economic benefits to San Bernardino County by: reducing maintenance cost, suppression cost, flood damage, and the elimination of hazards. These goals are accomplished by reducing fuel loads and creating fire breaks, creating improved watersheds, and improving vegetation configurations, fire density, and the restoration of wildlife habitat.

**I. City of Highland:**

The City of Highland Project provides services to General City Facilities to help reduce costly maintenance for the City of Highland. Fenner Canyon Crews perform various tasks, which include: facility, grounds and maintenance, mowing lawns, fertilizing, seeding, hazard reduction of weeds, litter control, landscaping, clean-up, carpentry and painting to maintain and enhance city facilities.

**J. Patton State Hospital:**

Patton State Hospital located at 3102 E. Highland Avenue, in Highland, California. Crews provide hazard mitigation by removing debris and dirt from flood control channels, grounds maintenance, landscaping, hazard tree removal, carpentry, and painting; enhancing the appearance of the State facility.

Fenner Canyon CC supports the community of Wrightwood with fuels projects, community programs, fire hydrant maintenance, and winter snow removal.

**COLLABORATION**

**COMMUNITY / AGENCIES / FIRE SAFE COUNCILS**

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

<b>Organization</b>	<b>Title</b>
CAL FIRE, BDU	Chief
U.S.F.S/ANF	Recreation officer
CALIF, STATE PARKS	District maintenance chief
CAL TRANS	Superintendent
CALIF, DEPT of FISH and GAME	Representative
SAN BERNARDINO CO, FLOOD CONTROL	Representative
CITY of HIGHLAND	Public Works Director
PATTON STATE HOSPITAL	Chief Plant Op's 3

## **PILOT ROCK CC**

### **OVERVIEW:**

Pilot Rock Conservation Camp (CC 15 ) is located in Miller Canyon off Hwy 138 6 miles north of Crestline in the community of Crestline near Lake Silverwood, within the San Bernardino National Forest in San Bernardino County.

Under a Cooperative Agreement with the California Department of Corrections and Rehabilitation (CDCR), there are 85 inmates housed at Pilot Rock CC which make up three fire crews, one hazard tree crew, that make up a fourth fire crew. Staffing consists of 1-Division Chief, 1-Battalion Chief, 10-Fire Captain B's, 1-Heavy Equipment Mechanic, and 1-Water/Sewer Plant Operator.

CAL FIRE operates the camp under a special use permit issued by the United States Forest Service (USFS). Camp facilities include: dormitories, hobby shop, kitchen, automotive shop, saw shop, canvas shop, waste treatment plant and lab.

### **RESPONSE AREA:**

Pilot Rock CC's emergency response area includes the following:

- A. San Bernardino Unit:
  - The area east of Interstate 15, west of twenty nine palms, North of Interstate 10 south of Apple Valley and Inyo Mono Counties
- B. Bureau of Land Management (BLM)/California Desert District (CDD):
  - The area east of the Bakersfield BLM District (BBD), west of the Colorado River, south of Death Valley, and north of Highway 18.
- C. San Bernardino National Forest:
  - Federal responsible areas within San Bernardino County

### **PROJECTS:**

- A. CAL FIRE San Bernardino Unit Facilities:
  - San Bernardino Unit Facilities consist of a variety of project responsibilities, which include: facility and ground maintenance, light construction, carpentry, station maintenance, painting, hazard reduction of weeds, landscaping, and litter control. Crews are also assigned the task of assisting Training Staff with wildland firefighting classes that teach shelter deployment, hose lays, line construction and tool outs.
- B. California State Parks Lake Silverwood
  - Work performed at these sites include: brush and weed hazard reduction around structures and fence lines, fuel breaks, repair and maintenance of facilities and campsites, fence work, trail maintenance, and hazard tree removal.
- C. San Bernardino National Forest (BDF):
  - Projects for the BDF are located throughout out San Bernardino N.F. Pilot Rock Crews work with the Forest on broadcast and pile burning by constructing fire line, performing fire attack, control, holding operations, and mop-up. Work also includes hazard mitigation projects such as fuel reduction and fuel breaks providing protection to various mountain communities located throughout the San Bernardino National Forest including roadside brush removal on various mountain truck trails, rural roads, and egress routes identified by the Mountain Area Safety Task Force.
- D. CALTRANS
  - CALTRANS projects run along mountain state highways 330, 138, and Hwy 18. Pilot Rock Crews commonly clear State right-of-ways of brush, hazardous timber and vegetation threatening ingress and egress routes throughout mountain communities. Fence line right-of-way fuel reductions projects provide roadside fuel breaks. Crews also assist in the repair and cleaning of drainages, removal of non-native plants, and debris.

E. Adopt A Highway

Pilot Rock crews are responsible for vegetation control and litter removal along Hwy 138 around Lake Silverwood. To provide aesthetic benefits of cleaner and more beautiful roadsides and prevent potential pollutants from entering our waterways.

F. San Bernardino County Flood Control District:

Pilot Rock Crews provide services to the San Bernardino County Flood Control District. The Crews are assigned tasks that provide economic benefits to San Bernardino County by: reducing maintenance cost, suppression cost, flood damage, and the elimination of hazardous timber along county roads maintaining ingress and egress routes clear and safe. Other common responsibilities include clearing flood basins of non-native vegetation and debris to maintain clear water flows at road crossings. These goals are accomplished by reducing fuel loads and creating fire breaks, creating improved watersheds, and improving vegetation configurations, fire density, and the restoration of wildlife habitat.

G. San Bernardino County Regional Parks

Lake Gregory, Mojave Forks, Glen Helen. Work performed at these sites include: brush and weed hazard reduction around structures and fence lines, fuel breaks, repair and maintenance of facilities and campsites, fence work, trail maintenance, and hazard tree removal.

H. Hesperia Parks and Recreation

Pilot Rock crew provide economic benefits to city of Hesperia by: reducing maintenance cost and the elimination of hazards by providing general park and road side upkeep and maintenance including irrigation repairs, trimming, weed abatement and general maintenance.

I. Helendale CSD

Pilot Rock crews provide maintenance of public facilities in and around the community of Helendale. Including weed abatement, minor building repairs, and vegetation reduction and irrigation system maintenance.

J. Insect Control Program (ICP)

Pilot Rock crews, along with Fenner Canyon Crews, carry out the Unit's Insect Control Program. CAL FIRE is given authority to use monies for the purpose of controlling forest insects by the Public Resources Code (Article 5, Sections 4712-4718) and by the Declaration of a "Zone of Infestation" by the State Board of Forestry. CAL FIRE has authority only to treat actively infested trees on private land within SRA with habitable structures. The purpose of the program is to assist landowners with tree cost removal in order to control the spread of bark beetles and reduce the fire risk. Ultimately it is the landowner's responsibility to remove hazardous trees.

**COLLABORATION**

**COMMUNITY / AGENCIES / FIRE SAFE COUNCILS**

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

<b>Organization</b>	<b>Title</b>
CAL FIRE, BDU	Fire Chief
C.A. State Parks	Representative
U.S.F.S/BDF	Representative
CAL TRANS	Representative
San Bernardino County Flood Control District	Representative

## **PRADO CC**

### **OVERVIEW:**

Prado Conservation Camp (CC) is located at 14467 Central Avenue in the City of Chino in San Bernardino County.

Under a Cooperative Agreement with the California Department of Corrections and Rehabilitation (CDCR), there are 92 inmates housed at Prado CC, which make up four fire crews, an MKU, and Regional Staging Area with the support staff for the crews and camp, consisting of 1 Division Chief, 8 Fire Captain B's and 1 Heavy Equipment Mechanic.

Prado Helitack successfully transitioned from an inmate-staffed helitack program with the San Bernardino County Sheriff and the California Department of Corrections and Rehabilitation, to a dedicated helitack crew with hoisting capabilities designed to assist with rescue efforts for CAL FIRE personnel and mutual aid throughout the region. This has resulted in an additional helicopter to the State's fleet. This new program is a significant accomplishment for the Department, Region and Unit. Additionally, the San Bernardino Unit is moving toward establishing an interim helibase facility at Prado Conservation Camp.

CAL FIRE operates the camp. Camp facilities include: CAL FIRE office and BOQ, CDCR office and BOQ, Helitack office, dormitories, hobby shop, apparatus bay, kitchen, automotive shop, and chain saw shop.

### **RESPONSE AREA:**

Prado CC's emergency response area includes the following:

A. San Bernardino Unit (BDU):

The area east of the San Bernardino County line, west of Interstate 15, south of the Angeles National Forest boundary line, and north of the Cleveland National Forest boundary line.

B. Los Angeles County (LAC):

The area east of Interstate 605, west of the Los Angeles County / San Bernardino County line, south of the Angeles National Forest boundary line, and north of the Orange County line.

C. Orange County (ORC):

The area east of Highway 57, west of the Cleveland National Forest boundary line, south of the Orange County / San Bernardino County line, and north of the Pacific Ocean.

D. Angeles National Forest (ANF):

The area east of the Angeles Crest Highway, west of Interstate 215, south of Kenwood and Interstate 15, and north of interstate 210.

E. San Bernardino National Forest (BDF):

The area east of the San Bernardino National Forest boundary line, west of the San Bernardino County / Riverside County line, south of the San Bernardino National Forest boundary line, and north of interstate 10.

F. Cleveland National Forest (CNF):

The area east of Highway 241, west of Interstate 15, south of Highway 91, and north of Highway 74.

### **PROJECTS:**

A. CAL FIRE San Bernardino Unit Facilities:

San Bernardino Unit Facilities consist of state fire stations and the Unit Headquarters in the San Bernardino Unit. A variety of project responsibilities are performed which include: facility and ground maintenance, light construction, carpentry, painting, hazard reduction of weeds, and landscaping.

- B. California Department of Forestry / Region Office – Special Projects/Car Wash  
Region Office Facility in Riverside consists of a variety of project responsibilities, which include: facility and ground maintenance, light construction, carpentry, painting, hazard reduction of weeds, landscaping, and litter control. Crews are also assigned the task of helping clean the shop area as well as wash all vehicles at the Regional Office.
- C. California State Parks / Chino Hills – Special Projects  
Chino Hills State Park consists of 14,000 acres ranging from the Santa Ana Mountains to the Whittier Hills and has over 65 miles of trails. The crews work throughout the park performing fuel break maintenance, vegetation management, trail maintenance, tree felling and trimming, and road/drainage repair at creek crossings.
- D. California Department of Developmental Services / Lanterman State Hospital  
Projects with the State Hospital include fire hazard fuel removal and abatement, tree felling and trimming, cleaning warehouses, moving equipment and furniture, and minor construction maintenance.
- E. Yucaipa City Fire (CAL FIRE)  
Crews work at fire stations doing general yard maintenance, hazard fuel removal, and general maintenance.
- F. California State Beaches / Orange County Coast District  
The Orange County Coast District consists of six State Beaches: California State Beach San Onofre, California State Beach San Mateo, California State Beach San Clemente, California State Beach Doheny, California State Beach Crystal Cove, and California State Beach Bolsa Chica. Work performed at these sites include: Fire hazard reduction and fuel breaks, brush and weed reduction around structures and campsites, restoration of wildlife habitat, removal of invasive species, building and maintaining trails, tree felling and chipping, landscaping, light construction, and maintenance of facilities and infrastructure.
- G. City of Corona / Corona Airport  
Removal of sapling trees and vegetation in the runway protection zone, as well as fuels reduction for flood control in the south and north areas of the airport.
- H. City of Corona / Corona Fire Department / Corona Fuel Break  
Work with prevention personnel with the Corona Fire Department to reduce fuel loading and provide fuel breaks between homes in Corona and the Prado Flood Basin.
- I. City of Corona / Parks and Recreation  
Provide hazard fuel reduction and litter removal around various city parks throughout the City of Corona.
- J. City of Corona / Public Works Department  
This project is in the Prado Flood Basin and is limited to ponds 9 and 10 in the area of Greenbriar Street. Crews remove trash and debris from both ponds and surrounding area. They also remove non-native species like Tamarisk and Castor Bean from the ponds.
- K. United States Forest Service / Cleveland National Forest  
Working with United States Forest Service resources, crews assist with prescribed and pile burning by constructing fire line, performing fire attack and control, holding operations and mopping-up.

- L. United States Forest Service / San Dimas  
Work in conjunction with the Angeles National Forest and the San Dimas Experimental Forest in fire hazard reduction, trail maintenance, debris and silt removal and minor facility maintenance at Tanbark, Rain Gauge Hill, Monroe Stream Gauge Station, Volfe Stream Gauge Station, Lysimeter, Bell canyon, West Fork Trails, Fern Rain Gauge Trail, and Wolfskill Rain Gauge Trail.
- M. San Bernardino Sherriff's Department (Aviation)  
Work is performed at the San Bernardino Sheriff facility at the Rialto Airport. Work consists of hazard fuel reduction and clean up, weed abatement, and landscaping.
- N. United States Forest Service / Fire Cache  
Work is at the South Zone Fire Cache in Ontario and consists of landscape maintenance, wildland fire tool maintenance, vehicle washing, and warehouse work.
- O. California Department of Corrections / CIM – Gun Range  
Work is performed at the California Institute for Men in the City of Chino. The firing range is utilized by California Department of Corrections and other law enforcement agencies throughout the state. Work performed is grounds maintenance, fire hazard reduction and tumbleweed pile burning, landscaping, and facility maintenance to the classroom.
- P. California Department of Corrections / CIM – Special Projects  
Work is performed at the California Institute for Men in the City of Chino. Ground maintenance and trash pickup in various parts of the facility are performed.
- Q. Chino Valley Fire Department / Carbon Canyon Rd  
In cooperation with Cal Trans and Chino Valley Fire Department crews perform removal and reduction of hazardous fuels along Highway 142.
- R. Chino Valley Fire Department / Carbon Canyon  
Through a Federal Grant, Chino Valley Fire Department is using crews to creating a shaded fuel break throughout the populated areas in the Orange, San Bernardino, and Los Angeles Counties north of Highway 142 in the Carbon Canyon area. Work consists of building a fuel break by removing the dead and downed fuels as well as breaking up the continuity of fuel loading in the project area.
- S. Inland Empire Utilities Agency / Chino Creek Park  
The Chino Creek Park Wetlands and Ecosystem Restoration project is located at the south east corner of Kimball Avenue and El Prado Road. Within the 22 acre site crews plant small trees and shrubs, install irrigation lines, remove non-native species, and pick up litter.
- T. California Department of Fish and Wildlife  
The Fish and Wildlife facility is located in the City of Chino Hills and is primarily used as a storage area. Work performed is fuels reduction and hazard abatement clearance of facilities, limb and pruning of trees, and light construction on buildings.
- U. Orange County Coastkeeper / Coastkeeper Garden  
The Orange County Coastkeeper Garden is an area where residential property owners and renters in Orange County can see examples of drought tolerant and water friendly backyards. The area set a side is part of the Santiago Canyon College and crews help construct pathways, plant trees and shrubs, remove weeds and mulch, spread decomposed granite, and place boulders.

Prado Conservation Camp supports the counties of Los Angeles, Orange, and San Bernardino. As well as the communities of Chino, Chino Hills, Corona, Diamond Bar, and City of Industry with fuels projects and community enhancement.

## COLLABORATION

### COMMUNITY / AGENCIES / FIRE SAFE COUNCILS

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

<b>Organization</b>	<b>Title</b>
California Dept. of Forestry	Fire Chief
Dept. of Parks & Recreation	Representative
California Dept. of Corrections	Representative
State of California Dept. of Developmental	Representative
California Dept. of Forestry	Fire Chief
California Dept. of Forestry	Fire Chief
State of California	Representative
City of Corona	Representative
United States Forest Service	Fire Chief
United States Forest Service	Fire Chief
Glen Avon Heritage Park	Representative
San Bernardino County Water	Representative
California Dept. of Transportation	Representative
California Dept. of Corrections	Representative
California Dept. of Corrections	Representative
Carbon Canyon Fuels Reduction	Representative
City of Corona/Corona Fire Dept.	Representative
Inland Empire Utilities Agency	Representative
California Dept. of Fish & Wildlife	Representative
City of Corona Public work Dept.	Representative
City of Corona Parks & Recreation	Representative
Inland Empire WaterKeeper	Representative
Orange County Coastkeeper	Representative
San Bernardino County Water	Representative

## **OWENS VALLEY CC**

### **OVERVIEW:**

Owens Valley Conservation Camp (CC) is located within the BDU/Eastern Sierra Division at 2781 S. Round Valley Road in the community of Bishop, in Inyo County. Under a Cooperative Agreement with the California Department of Corrections and Rehabilitation (CDCR), there are 128 inmates housed at Owens Valley CC, which make up five fire crews and the support staff for the crews and camp. Staffing consists of 1 Division Chief, 1 Battalion Chief, 10 Fire Captain B's, 1 Office Tech, 2 Heavy Equipment Operator/Mechanic, and 1 CDF Maintenance Mechanic/ WASPO.

Camp facilities include: dormitories, hobby shop, exercise yard, kitchen, automotive shop, chain saw shop, wood shop, welding shop and sewing shop.

### **RESPONSE AREA:**

Owens Valley CC's emergency response area includes the following:

A. Inyo, Mono, San Bernardino Unit:

The area west of the Nevada state line (Inyo & Mono Counties), north on Highway 395 to the Lake Topaz and north on Highway 6 to Montgomery Pass to the Nevada state line (Mono County) and Toiyabe National Forest, South on Highway 395 to Inyokern (Kern County), and East of the Eastern Sierra Mountain Range/ Inyo National Forest (INF).

B. Inyo National Forest:

The area between the White Mountains and Eastern Sierra Mountain Range.

C. Toiyabe National Forest:

The area approximately 5 miles north-west of Bridgeport to the Toiyabe National Forest Boundary line.

D. Bureau of Land Management (BLM):

1. Owens Valley District (OVD) & California Desert District
2. The area north of Coso Junction (CDD)
3. The area south of Topaz Lake on Highway 395 & south of the Nevada state line at Montgomery Pass on Highway 6. (OVD)

E. National Parks:

1. The area north west of Death Valley National Park boundary line.
2. The area east of the Yosemite National Park at Tioga Pass boundary line.

### **PROJECTS:**

A. CAL FIRE Inyo, Mono, San Bernardino Facilities:

San Bernardino Unit Facilities consist of a variety of project responsibilities, which include: facility and ground maintenance, light construction, carpentry, station maintenance, painting, hazard reduction of weeds, landscaping, and litter control. Crews are also assigned the task of assisting Training Staff with wild land firefighting classes that teach shelter deployment, hose lays, line construction and tool outs.

B. Owens Valley Shaded Fuel Breaks:

Crews creating shaded fuel breaks for fire protection in SRA lands around the communities in the Owens Valley including Bishop, Big Pine, Independence, Lone Pine, Olancho and Mono City.

C. Cal Trans/ Bishop:

CALTRANS projects run along Highway 395 Lone Pine to Mammoth, Highway 6 from the Nevada state line to Bishop, Highway 168 from the Nevada state line to Lake Sabrina. Owens Valley Crews commonly clear State right-of-ways of brush, tumbleweeds, trash and debris (Adopt a Highway) and routinely provide hazard mitigation

maintenance by the use of fuel breaks along fence lines located in these areas. Owens Valley Crews are also responsible for the repair and cleaning of drainages.

D. Department of FISH and Wildlife Fish Springs, Black Rock, Mt. Whitney, Hot Creek.

Fish and Wildlife Facilities consist of a variety of projects, which included general maintenance and clean up, including brush removal tree trimming, fire and flood hazard reduction, general maintenance and repair of facilities and grounds.

LOS ANGELES CITY/ LADWP:

E. Control Gorge:

Crews will be clearing brush and trimming trees around houses and Power Plant area to provide a defensible fire break.

F. Locust:

Crews will be clearing locust trees so they can be treated by the sponsor with herbicide. Trees shall be cut to firewood lengths or to 8ft. post length. In some areas the slash will be hauled to another site to be disposed of and some sites will be piled on site for later burning.

G. Russian olive:

Crews will be clearing and Cutting the Russian olive and Salt Cedar Trees in the Georges Creek area an important wildlife area.

H. Independence Woodlot:

Crews will need to trim out all weedy tree species, and cut saplings for replanting in the spring. Crews will harvest all dead trees and possibly harvest a couple rows of trees per the harvest plan. Crews will cut trees into firewood for dispersal to the disadvantaged communities.

I. Lone Pine VMP:

The project treatment method is a prescribed burn. Prior to the burning operations crews will put in a control line around the perimeter of the burn units. There are three separate burn units (Upper Owens, Middle Owens, and Lower Owens) for a total acreage of 258 acres.

J. Division Creek Power Plant:

Clear brush, debris, and tree limbs from around Power Plant and Intake structures to provide defensible fire break areas. Work needs to be completed to provide fire protection and to comply with CAL FIRE Defensible Area Requirements. Clear brush and debris in ditch and along ditch banks of water conveyance ditch between Scotty's Spring and Division Creek Power Plant Intake.

K. Cottonwood Power Plant:

Clear brush, debris, and tree limbs from around Power Plant and Intake structures to provide defensible fire break areas. Work needs to be completed to provide fire protection and to comply with CAL FIRE Defensible Area Requirements.

L. Big Pine Power Plant:

Clear brush, debris, and tree limbs from around Power Plant and Intake structures to provide defensible fire break areas. Work needs to be completed to provide fire protection and to comply with CAL FIRE Defensible Area Requirements.

INYO COUNTY:

M. Waste Management:

Big Pine Transfer, Independence, Lone Pine, Bishop Sunland.  
General Maintenance and clean up. Removal of wind-blown litter inside and outside fence line and at specific target areas.

N. Park and Recreation:

Baker Creek Camp Ground, Diaz Lake, Izaak Walton Park, Mendenhall Park, Millpond Park, Pleasant Valley Camp Ground. General Maintenance and clean up. Including brush removal, tree trimming, and hazard reduction in the various parks and camp grounds.

O. Road Department:

Crews will clean tree limbs and tumble weeds out of the Bishop By-Pass channel to allow for uninterrupted spring runoff flows; this is needed in order to keep the waterways clear that go under the roadways, if waterways clog up with debris the water will create damage to the road.

P. Mosquito Abatement:

Crews will cut willows that impede access to and treatment of developing Mosquito population.

Q. Airports:

Bishop, Independence, Lone Pine: General Maintenance and clean-up of Inyo County Facilities, grounds and runways, including brush removal and hazard reduction.

R. City of Bishop:

Projects with the city of Bishop include working with the Chamber of Commerce assisting them with setting up and disassembling equipment for special events being held at the city park. Also taking crews out to the Pleasant Valley Reservoir and cleaning the area of litter and debris before and after and setting up tents, tables and displays for the Fishing tournament, Brush clearance and cleanup along creek within the vicinity of the Bishop Senior Recreation Center.

S. Bishop Paiute Indian Reservation:

Projects consist of removing hazardous Fuels reduction for the Bishop Paiute Tribe and create a defensible space for tribal structures.

T. State Fair/ Tri County Fair Grounds:

General maintenance and repair of facilities and fairground, set up for events and teardown after events. Tri County holds numerous events (Eastern Sierra Fair, Mule Days, California high School Rodeo Association Finals, Choo Choo swap meet, Fall Colors car show).

U. Lone Pine Fire Safe Council:

Owens Valley Crews commonly perform duties within the community of Lone Pine. Various hazard mitigation methods are utilized; increasing safety for the community. The Lone Pine Fire Safe Council currently has the Airport VMP Burn project in which Owens Valley Crews are assigned to.

V. Independence Fire Safe Council:

Owens Valley Crews commonly perform duties within the community of Independence. Various hazard mitigation methods are utilized; increasing safety for the community.

W. Big Pine Fire Safe Council:

Owens Valley Crews commonly perform duties within the community of Big Pine. Various hazard mitigation methods are utilized; increasing safety for the community.

X. Eastern Sierra Regional Fire Safe Council:

Owens Valley Crews commonly perform duties within the community of South Fork Bishop Creek. Owens Valley crews will cut a fire defensible space around the building in the community for public, reduction of hazards, and establish a shaded fuel break and fuel reduction.

Y. Big Pine School Dist.:

General Maintenance, clean up and repair of buildings and grounds.

Z. Bernasconi Center:

The crews will create brush clearances for defensible space for buildings on the school grounds. Improve and restore water flows for firefighting by cleaning out the ditches and ponds.

AA. Round Valley School District:

General Maintenance, clean up and repair of buildings and grounds.

BB. Jill Kinmont School:

General Maintenance, clean up and repair of buildings and grounds.

CC. Owens Valley School District:

General Maintenance, clean up and repair of buildings and grounds.

DD. Friends of Eastern Sierra California Museum:

General Maintenance of facilities, grounds, and exhibits to promote public safety and preserve the history of the Owens Valley.

EE. Friends of Mt. Whitney Fish Hatchery:

Owens Valley Crews will assist with ground maintenance, tree trimming. Removal of residual brush piles, clean ponds, and raceways that was filled with debris from the 2007 flood.

FF. Eastern Sierra Dog Rescue:

Owens Valley Crews will assist with Ground Maintenance, Fencing, and Landscaping within the Inyo Animal Shelter.

GG. Laws Railroad Museum:

The crews will perform general maintenance of fence lines, building and grounds within and around the Historical Museum

HH. Woodman Cemetery:

The crews assist with the removal of weeds from woodman cemetery inside and outside of fence line.

MONO COUNTY:

II. Waste Management:

General Maintenance and clean up. Removal of wind-blown litter inside and outside fence line and at specific target areas.

JJ. Mammoth Lakes Fire Department:

The crews perform winter snow removal around the hydrants in order to provide Mammoth Lakes Fire Department personnel adequate working space around hydrants during emergency situations. Also the crews help with Fuels Management Projects which require crews to complete tasks that consist of: felling hazardous trees, trail maintenance, fuels reduction projects, hazard reduction, litter removal in the Shady Rest area in town.

KK. June Lake FD:

Snow removal from fire hydrants and community buildings. General hazard removal and clean up around fire stations.

LL. Edna Beaman School:

General Maintenance, clean up and repair of buildings and grounds.

MM. Chalfant VFD:

General hazard removal and clean up around fire stations.

NN. Lee Vining VFD:

General hazard removal and clean up around fire stations.

OO. Long Valley VFD:

General hazard removal and clean up around fire stations.

PP. Paradise VFD:

General hazard removal and clean up around fire stations.

QQ. Wheeler Crest VFD:

Weeding and grounds maintenance, washing equipment, building maintenance. Prep and paint exterior of building.

RR. Bodie State Park:

The crews will perform general maintenance of fence lines, water systems building and grounds within and around the park boundaries.

SS. Hilton Creek:

Clear sewer district property of weeds and sage brush for fire defensible space, and for inspection of equipment from sewer plant personal.

TT. Owens Valley Radio Observatory:

The crews will create brush clearances for defensible space for buildings on the OVRO facility, as well as along east-west Road corridor between site buildings.

UU. University of California Santa Barbara:

Snarl: Owens Valley crews will cut, remove, and pile brush for hazard reduction, control of invasive species, and access to experimental stream system. While this is City of Los Angeles lands, as lessee, they have the authority to conduct this project. This project was done once before (2002) with Conservation Camp crews and was very successful.

VV. Valentine Reserve:

The crews will fall, limb, and remove marked standing and down timber and slash. Haul timber for disposal by sponsor. Haul slash to central location and chip in sponsor's chipper or pile for burning. All trees marked by sponsor; all work supervised by sponsor.

WW. Swall Meadows Fire Safe Council:

Crews will perform hazardous fuels reduction along travel corridors accessing the community of Swall Meadows in order to increase safety for citizens during emergency incidents and reduce potential for fire spread.

We are committed to our local and federal cooperators and communities to reduce fire hazards and to provide fire prevention education to enhance our integrated and cooperative fire protection within the Owens Valley.

## COLLABORATION

### COMMUNITY / AGENCIES / FIRE SAFE COUNCILS

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

<b>Organization</b>	<b>Title</b>
Los Angeles Dept. of Water and Power	Ranch Lands Manager
Bureau of Land Management	Division Chief
Inyo National Forest	Division Chief Bishop Area
Inyo National Forest	Division Chief Lone Pine Area
Bishop Fire Department	Fire Chief
Mammoth Lakes Fire Department	Fire Chief
Lone Pine Fire Safe Council	President
Twin Lakes Fire Safe Council	President
South Fork Bishop Creek FSC	President
Inyo County Sheriff	Sheriff
Mono County Sheriff	Sheriff
Bureau of Land Management	Deputy Chief
Humboldt-Toiyabe National Forest	Fire Management Officer
Antelope Valley Fire Department	Fire Chief
Aspendell Valley Fire Department	Fire Chief
Big Pine Fire Department	Fire Chief
Bridgeport Fire Department	Fire Chief
Chalfant Valley Fire Department	Fire Chief
Independence Fire Department	Fire Chief
June Lake Fire Department	Fire Chief
Lee Vining Fire Department	Fire Chief
Long Valley Fire Department	Fire Chief
Mono City Fire Department	Fire Chief
Olancha Fire Department	Fire Chief
Paradise Fire Department	Fire Chief
Southern Inyo Fire Department	Fire Chief
Wheeler Crest Fire Department	Fire Chief
White Mountain Fire Department	Fire Chief

## **CALIFORNIA INSTITUTION FOR WOMEN (CIW) Training Facility**

### **OVERVIEW:**

During the summer of 1983, a pilot program was developed at CIW to determine the viability of using female inmates for fire suppression, and fire prevention. Once the pilot program was considered achievable, the go ahead was issued and the program was relocated to Rainbow Fire Camp in October 1983. This was the first all-female inmate firefighting camp in the state. Both CDC and CDF saw a need to expand the program to allow more females to participate in fire suppression, while addressing overcrowding issues at CIW.

The female Camp program expanded by two additional camps; Puerta La Cruz, (located near Warner Springs in San Diego County), and Malibu (located in Los Angeles County). June 1985 CIW training center was established at 16756 Chino-Corona Rd, in the city of Chino. This is the only training, and development center for female inmate firefighters in the State of California.

The operation of the Forestry Training Program (FTP) is a joint effort between CDCR, and CAL FIRE. CDCR screens and classifies inmates assigned to CIW. Inmates, who meet the requirements for the Forestry program, are placed into the Pre Forestry Training program (PFT). The PFT is 12 weeks of rigorous physical conditioning intended to transition inmates, into physically fit inmate Firefighters. CDCR sets the standards and monitors the progress of inmates, until they're able to pass the physical requirements.

After completion of PFT, the inmate is assigned to the 32-hour classroom course training. This course was developed by the CAL FIRE Academy, and is presented to the inmates by CAL FIRE Captains. The course material covers, wildland fire safety awareness, S-190, teaching skills with enhancing the survivability and prevention of injuries in the hostile work environment found with fighting wildland fires. Inmates also receive training with the proper use of firefighting hand-tools, and equipment used to suppress wildland fires.

Once an inmate completes the classroom they're assigned to 40 hours field training, this training is taught by CAL FIRE Captains. Hiking techniques, proper and safe use of fire tools, fire shelter training, and the principles of teamwork to construct fire line are taught. During the field training Inmates are expected to complete all required hikes within the allotted timeframes given. Upon completion of the field training, inmates are relocated to the various fire camps within the state.

The three camps supported by CIW training center have a total of 330 beds available. In order to keep the camps near capacity, CIW needs to graduate 25-30 fully trained firefighters each month. The assignment and movement of inmates through the Training Center are dependent upon individual needs per fire camp.

### **PRIORITIES:**

- A. Provide sufficient Fire Crew Captains to instruct, train and supervise camp endorsed inmates in order to maintain camp populations.
- B. Provide all training materials, tools, aids and curriculum developed or approved by the CAL FIRE Academy.
- C. Provide training sites for the field crew.
- D. Provide all personal protective equipment, and other equipment, tools and supplies routinely associated with training for the inmates and staff assigned to Forestry Training Program.

CIW supports both Los Angeles County Fire Department and CAL FIRE with qualified female inmate firefighter personnel

## COLLABORATION

### COMMUNITY / AGENCIES / FIRE SAFE COUNCILS

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

<b>Organization</b>	<b>Title</b>
BDU	Battalion Chief
CDCR	Captain
MVU	Assistant Chief
LAC	Captain

## IGNITION MANAGEMENT PLAN:

# ***CAL FIRE***



*FIRE PREVENTION BUREAU*

*CAL FIRE  
SAN BERNARDINO-INYO-MONO UNIT (BDU)  
2014 IGNITION MANAGEMENT PLAN*

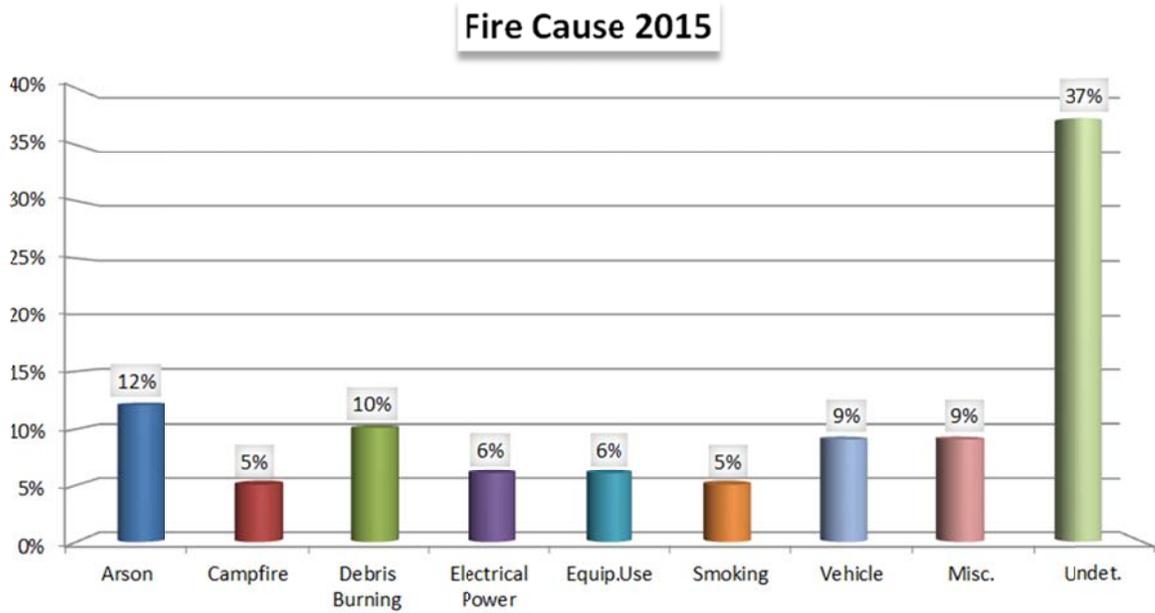
*Battalion Chief Jack Markle*

### 2015 Fire Season Ignition Statistics

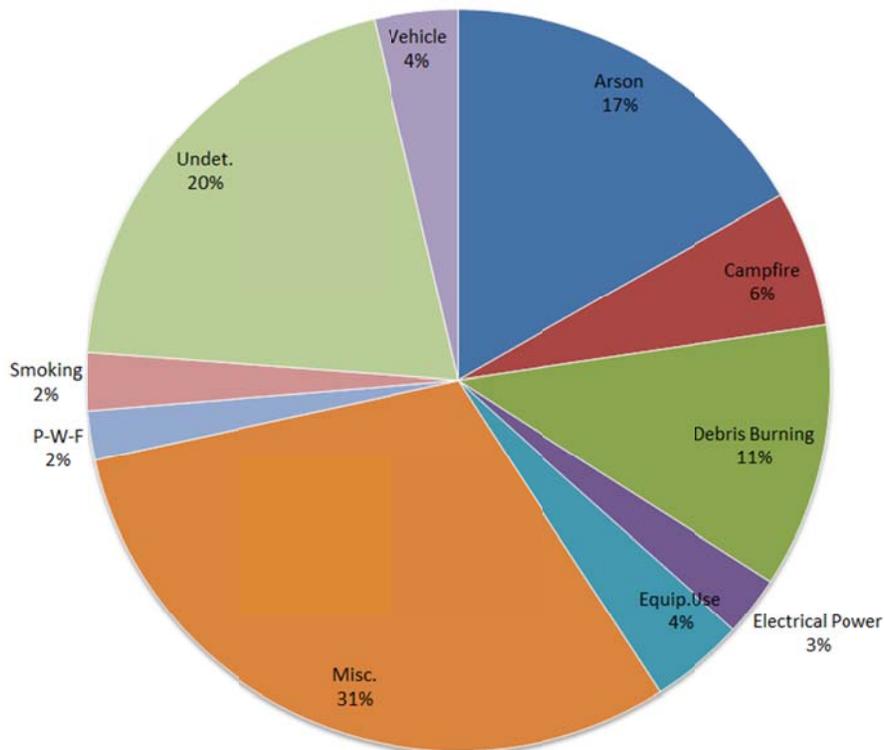
Wildland fire ignition statistics were collected for 2015. The largest fires on State Responsibility Areas (SRA) in the Unit for 2015 were:

- Round Fire – 7,000 acres
- Mill 2 Fire – 54 acres

**FIRE CAUSES:**



### Cause Totals: 2011 to 2015



## EDUCATION AND (VOLUNTEER IN PREVENTION)/VIP

The BDU VIP Program assists the Unit in a variety of Fire Prevention Activities. The Unit currently utilizes the VIP's to help support community outreach events and educational events. The VIP's assist in our Emergency Command Center (ECC), Public Information, and other activities as needed.

The Fire Prevention Public Information Office actively works with the media in order to keep the public informed on fire safety and wildfire awareness. Numerous press releases are issued throughout the year to remind residents of such items as: defensible space requirements, burn permit requirements, burn permit restrictions, ready-set-go campaign information, fire prevention grant opportunities, and wildland fire incident information. Prevention personnel, along with fire engine personnel, participate in fairs, school activities, and community programs.

## UNIT BURN PERMIT ADMINISTRATIVE PLAN

The Unit Burn Permit Administrative Plan (BPAP) has been recently updated. The guidelines and restrictions remain largely unchanged through-out the San Bernardino Unit. Due to the geographical area covered by the Unit, the BPAP must adhere to the laws and regulations of three Air Pollution Control Districts (APCD's); South Coast in southern San Bernardino County, Mojave in northern San Bernardino County and Great Basin in both Inyo and Mono Counties. While the APCD is primarily concerned with air quality, CAL FIRE is primarily concerned with fire and public safety. This plan must be reviewed, updated, and implemented to reduce any issues of illegal burning or escaped burns. This will also assist Unit Company and Chief Officers with the information needed to follow the parameters set forth in CAL FIRE policy and the Public Resources Code.

## Youth Fire Setters

The San Bernardino Unit has recently developed a Youth Fire Setter Intervention Program (YFSP) which is now being implemented. The Unit will implement this program in the SRA and both contract cities. Our current response to the Youth Fire Setter program is to contact San Bernardino County Fire for assistance. In the Inyo and Mono Counties has a YFSP coordinator, there is no active participation or program with any of the local fire districts which are mostly volunteer companies. CAL FIRE would be the lead department due to geographical commitment for this program.

The program will consist of the Youth and parents/caregivers assessment utilizing the "FEMA YFSP" assessment program. Following the assessment, a determination will be made as to the most appropriate type of intervention services. If further assistance is needed, the referrals would be processed through the juvenile justice system.

Assessments are done in cooperation with the Fire Prevention Bureau and local field personnel. The objectives of the YFSP are:

- Identify youth fire-setters
- Assess the juvenile fire-setters needs
- Provide life skill training and education
- Provide referrals to family counseling
- Evaluate fire-setters and program progress

In 1986, the California Board of Forestry and Fire Protection, supported by CAL FIRE, introduced legislation (Senate Bill 1075, Rogers) to develop minimum statewide standards for defensible space in State Responsibility Areas (SRA). This legislation was motivated by local government's general lack of response to wildland fire prevention and protection problems over the previous 20 years. This comprehensive wildland fire safety legislation was passed by the Legislature and signed by the Governor in 1987. SB1075 required the California Board of Forestry and Fire Protection to establish minimum fire safety requirements that applied to SRA.

Regulation development began in early in 1988, and final implementation of the state and local regulation packages occurred on January 1, 1992 via PRC 4290. PRC 4290 requirements address emergency access and water supplies, addressing and street signing, and fuel modification relating to new construction and development. The implementation of these regulations occurs through the local

government building permit and subdivision map approval process. Local government is still the approving authority for development.

PRC 4290 regulations are triggered by the application for a building permit for purposes other than limited remodels, including but not limited to submittal of a subdivision map, application for a use permit, placement of a mobile or manufactured home, or constructing a road. These regulations do not supersede existing local regulations that are equal to or more stringent than the state regulations.

The San Bernardino-Inyo-Mono Unit Fire Prevention Bureau oversees the application of Public Resources Code Section 4290 and Title 14 of the California Code of Regulations Section 1270 on all private lands classified as SRA within the Unit. These regulations are best known as the "SRA Fire Safe Regulations," and constitute the basic wildland fire protection standards of the California Board of Forestry and Fire Protection. CAL FIRE has been given the role of wildland fire protection expert and is provided the opportunity to review and comment on all proposed construction and development within the SRA. In cooperation with Inyo County Planning, Mono County Planning and San Bernardino County Planning when requested, CAL FIRE has oversight responsibility and reviews Land Division Applications for compliance with PRC 4290. CAL FIRE forwards recommendations to the appropriate Planning Department specifying the minimum requirements necessary to meet state law.

#### ACCESS

Access is a major fire prevention and protection need, whether wildland or structural. Failure to provide reasonable access for emergency equipment and evacuation exits for civilians can result in major loss of life, property and natural resources. Fire apparatus sitting at an intersection, waiting for civilians to exit on a narrow road, cannot provide the necessary fire suppression action. Safe access requires street and road networks that limit dead-end roads and provide reasonable widths, grades and curves on all roads and driveways.

#### ADDRESSING AND STREET SIGNING

The difficulty of locating an unnamed or poorly signed road during an emergency, especially under smoky conditions, is a major problem to wildland and structural firefighters. Beyond this, many jurisdictions have allowed duplicate numbering and naming for roads and access, further compounding the location problem. The potential losses of life, property and resources are greater without an adequately visible and consistent addressing and numbering system.

#### WATER SUPPLIES

The application of water and the construction of a fire line are the primary tools used by wildland firefighters to contain and control a wildfire. The location and availability of sufficient quantities of water are essential to fire suppression and firefighter safety. While a single system of water delivery and/or storage is adequate, the effectiveness of any suppression system increases with diversity. Emergency water supplies are necessary to provide readily available, and accessible, emergency water for structural and wildland fire protection.

#### FUEL MODIFICATION CONSIDERATIONS

The establishment of physical barriers between a structure and the wildland is recognized as a major deterrent and loss reduction measure. Such barriers should be considered key to individual and community defensible space. While fuel breaks have strategic application over large geographical areas, they are expensive to construct and maintain. Other measures, such as the strategic placement of roads, recreational parks, irrigated landscaping, setback from property lines and fuel modification around structures are more suitable around homes and subdivisions.

#### TREATMENT OF STRUCTURE IGNITABILITY

The San Bernardino, Inyo, Mono Unit contains many communities that are threatened with potential loss of life and property due to wildfires. These and many other communities in California are subject to threats from wildfire, yet thousands of homes continue to be constructed every year that are not safe for fire prone areas. Due to major wildfires that have occurred in California, various statutes and regulations have been enacted to combat the ever-increasing threats to lives and property due to wildfire. Laws have been enacted to govern fire safety in regards to vegetation management, land use and more. However, aside from fire retardant roofing requirements, little had been accomplished at the state in regards to adoption of "Fire Safe" building standards for homes and other structures. With passing of Assembly Bill 1216 in January 2005, the California State Fire Marshall (SFM) was given statutory authority to expand fire safety building standards in areas with high fire risk to include components such as: roofs, exterior

walls, attic eave vents, windows and structure projections including porches, decks, balconies, and eaves.

The law requires that homeowners do fuel modification to 100 feet (or the property line) around their buildings to create a defensible space for firefighters and to protect their homes from wildfires. New building codes will protect buildings from being ignited by flying embers which can travel as much as a mile away from the wildfire.

In addition to the 4290 requirements our local schedule "A" contracts have established preplans for commercial occupancies as well as inspections of those occupancies. However, too many of the preplans for commercial occupancies are out dated and in the process of being updated to meet the current occupancy load and information. These updates will provide current information of occupancy and fuel load to ensure the public and firefighters safety. This will also prepare for quick and efficient fire suppression activity.

#### PUBLIC RESOURCES CODE 4291:

Managing and reducing the flammable vegetation around structures will also reduce the number of structure ignitions from wildland fires. Clearing vegetation and maintaining that clearance is required by section 4291 of the Public Resources Code (PRC 4291). In 2005 PRC 4291 was amended to increase the minimum vegetation clearance requirement from 30 feet to 100 feet around structures. Although this law requires it, many landowners fail to maintain adequate clearance around their structures. CAL-FIRE's fire safe inspection program is used to enforce compliance with PRC 4291. Additionally, the fuel reduction projects within BDU are aimed at reducing wildland fuels and educating the public on what they can do for themselves to protect their homes from wildfires and reducing structure ignitability.

Additionally we are working with our cooperators in sensitive areas to conduct defensible space inspections and training within their jurisdiction on SRA lands. With these inspections and training they are encouraged to report them on our state forms with monthly reporting back to the Unit Fire Prevention Bureau.

#### PUBLIC RESOURCES CODE(S) 4292 AND 4293:

PRC 4292 calls for a ground clearance of ten feet around the base and eight feet above the ground of power poles that contain equipment that could result in sparking if it failed. PRC 4293 says that vegetation needs to be a minimum of four feet away from high voltage lines.

San Bernardino, Inyo, Mono Unit and Southern California Edison have worked together in a program to reduce the threat of wildland fires caused by power line and power pole failures. This program is known as Operation Santa Ana. Operation Santa Ana began in 2000 as a way to reduce vegetation fires that were caused when trees, grasses and power lines interacted with one another. These fires were caused by winds blowing tree limbs into the power lines, equipment failures that discharged with sparks igniting dry vegetation nearby, or faulty equipment that needed to be repaired or replaced.

Every year, San Bernardino, Inyo, Mono Unit performs visual inspections thousands of power poles in San Bernardino County. The inspectors are checking to see that the clearance mandates of the Public Resources Code, sections 4292 and 4293 are in their annual compliance.

#### FIRE PREVENTION SIGNS:

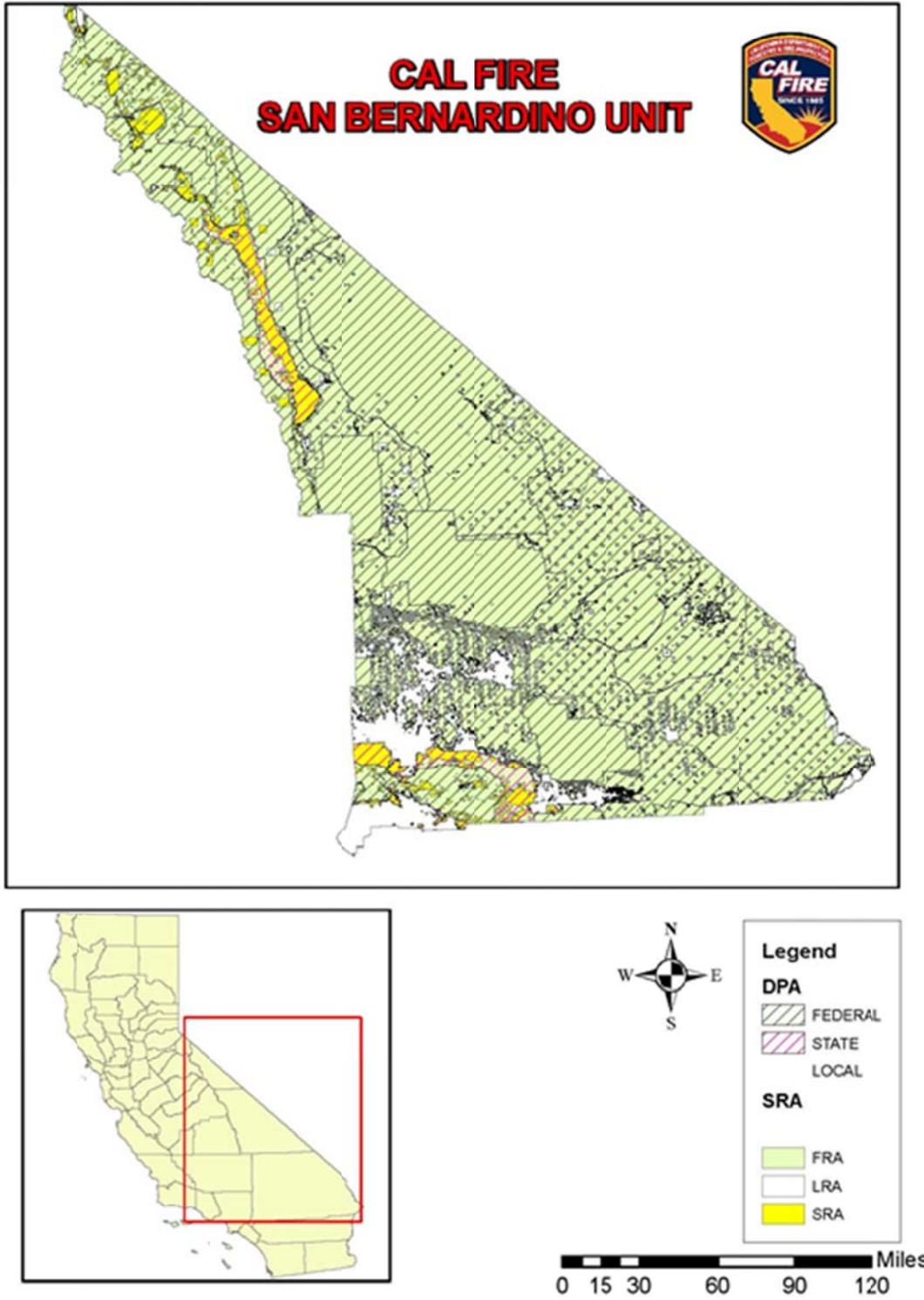
The Unit has numerous Fire Prevention Signs and has strategically placed within the Unit. These signs have not been maintained or accounted for within the Unit or Battalions for many years. The signs in place in the battalions identify defensible space requirements and fire specific issues from careless acts to arson. The signs within certain battalions have been abandon and left for the Fire Safe Council to maintain or replace on SRA or LRA within our sphere of influence under contract. We were awarded 14 signs in addition to what was in place for the Unit and we targeted the northern part of the Unit in the Inyo and Mono county areas. The signs in the Inyo and Mono county areas have locations identified but yet to have been put into place.

**The Fire Prevention Bureau's Primary targets for the Burn Plan are as follows:**

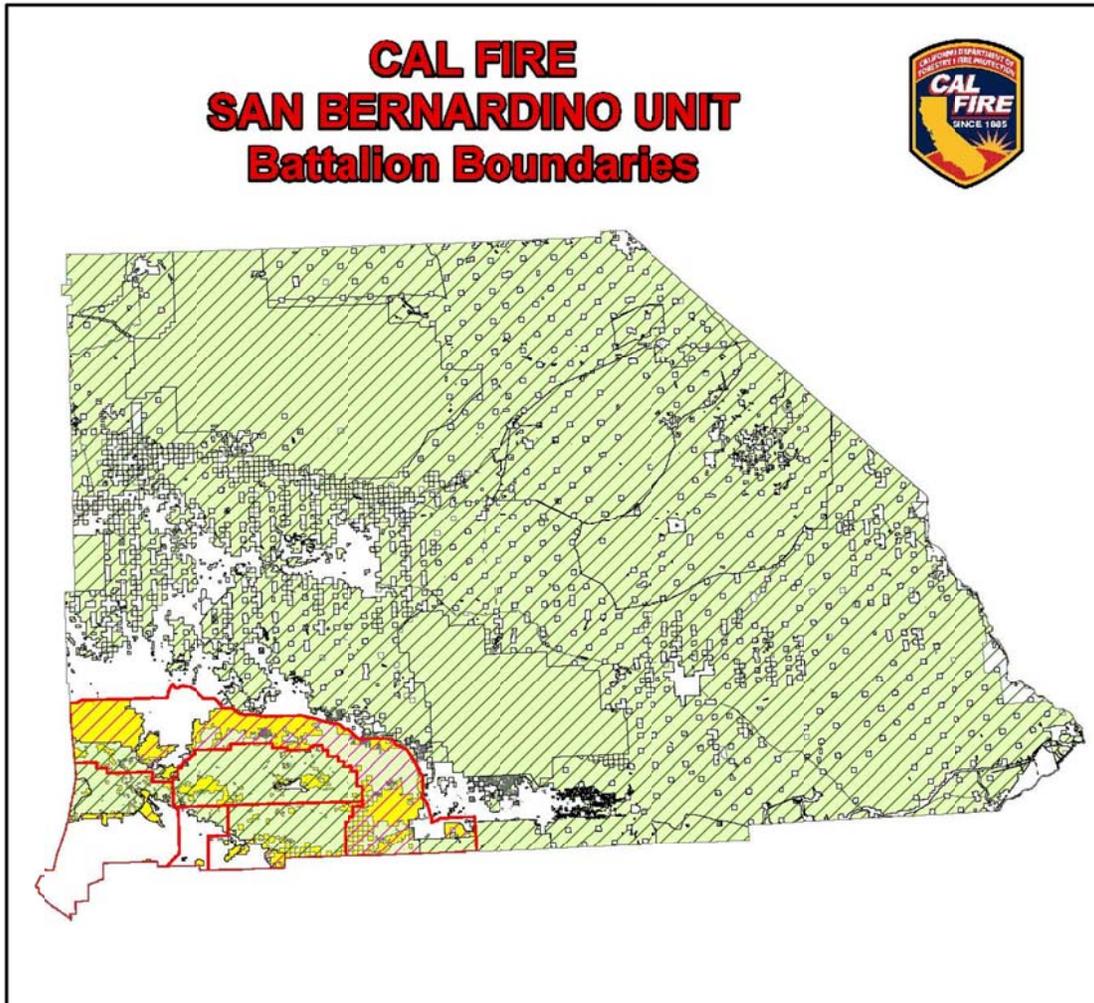
- A. Educate and assist the Chief Officers in the importance of documentation and overall needs to their own battalions pertaining to Fire Prevention.
- B. Defensible Space awareness and public education.
- C. Fire Prevention Signs accountability and maintenance.
- D. Inter acting with the Fire Safe Councils within the Unit and reporting back to the Fire Prevention Bureau of the programs established with the councils.
- E. Identifying and training VIPS for the Fire Prevention Bureau as outlined in policy to reduce liability and assist in the fore mentioned programs. This will enhance the overall goal to accomplish tasks in the Fire Prevention component within the Unit.
- F. Recruitment of VIP's throughout the Unit.
- G. Establish the Unit Fire Permit Administrative Burn Plan.

EXHIBITS: MAPS

Exhibit A: Unit Map



# Exhibit B: Battalion Boundaries



**Legend**

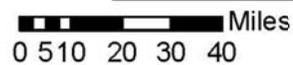
- MasksbdnoCo
- 2011 Battalion Boundaries

**DPA**

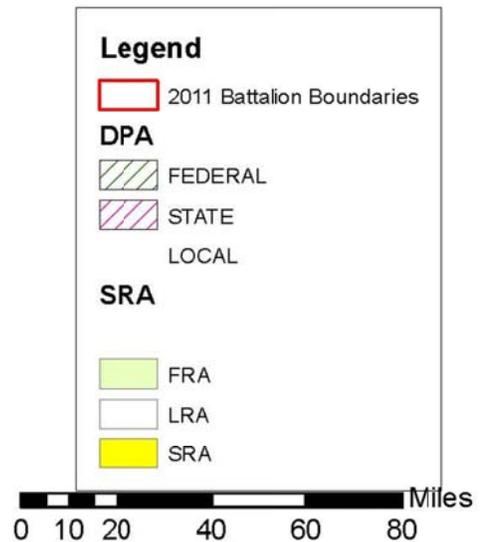
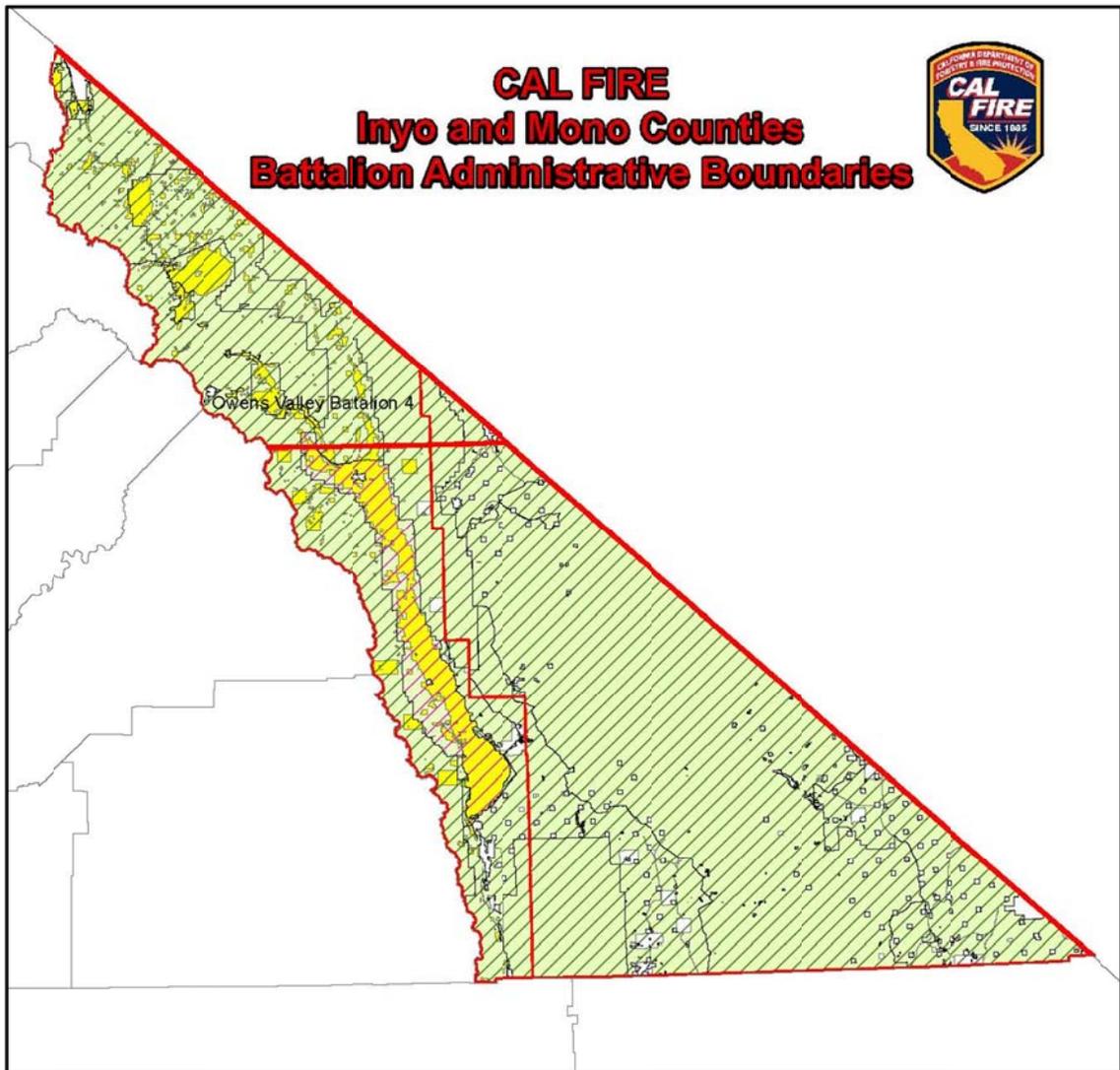
- FEDERAL
- STATE
- LOCAL

**SRA**

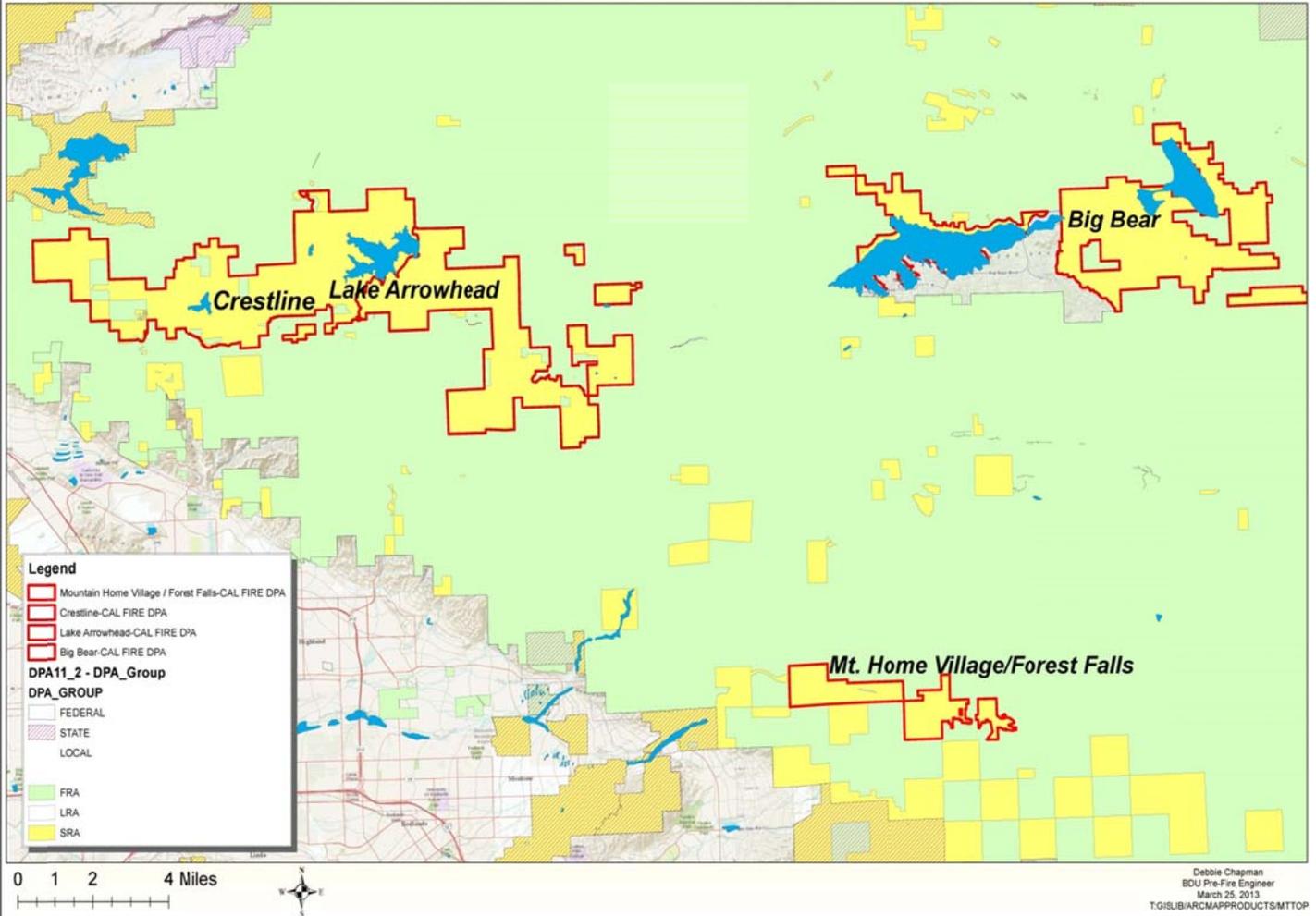
- FRA
- LRA
- SRA



# Exhibit B: Battalion Boundaries

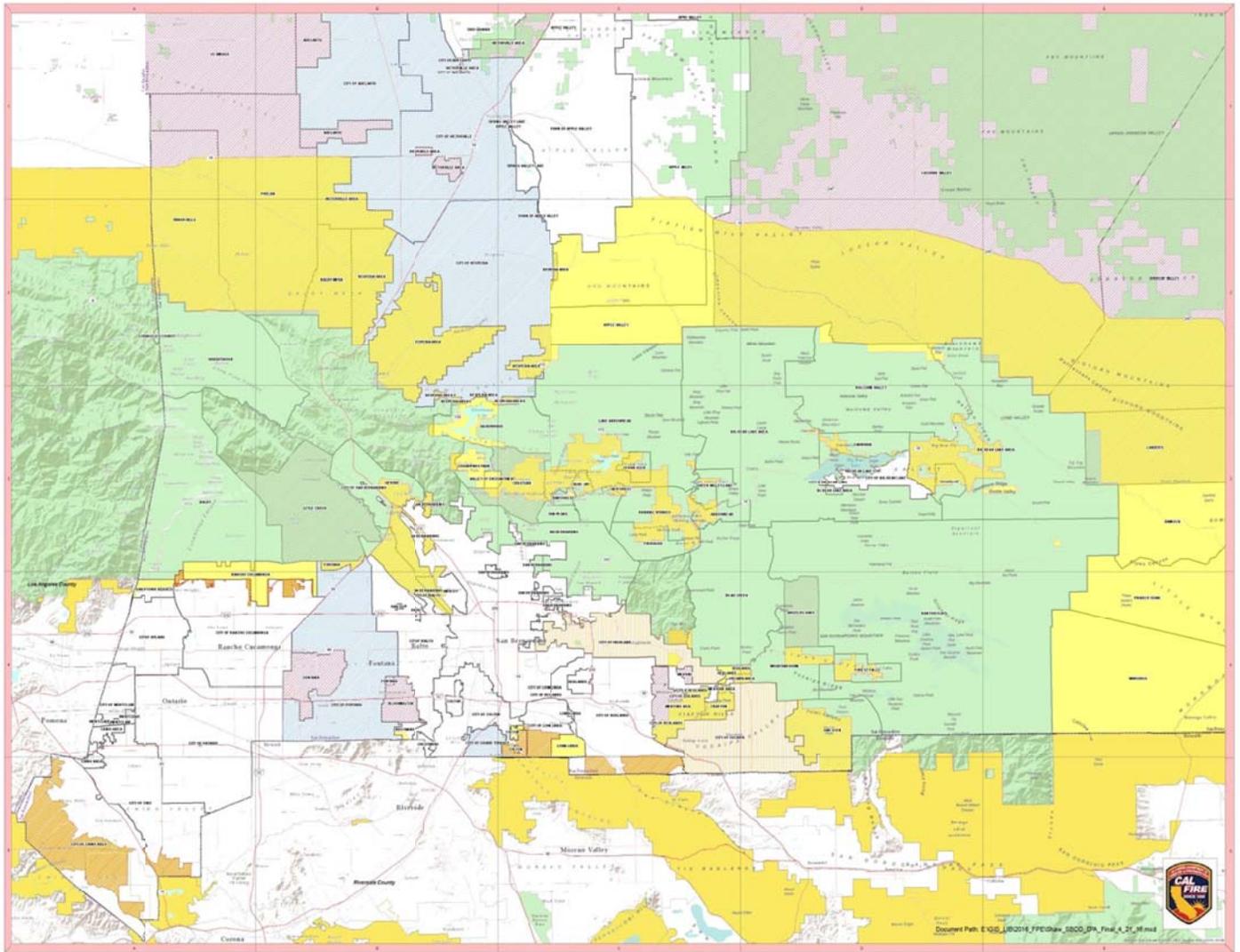


# Mountain Battalion 6



# Direction Protection Areas:

## San Bernardino County



DPA GROUP	
Blue	SBCO Contract Cities
Green	FEDERAL
Purple	Unincorporated
White	LOCAL
Yellow	STATE
Light Orange	CAL FIRE Contract: City of Highland
Dark Orange	CAL FIRE Contract: City of Yucaipa
Dark Yellow	CAL FIRE Wildland Contract



## APPENDIX A: PRE- FIRE PROJECTS

Batt Planning area	Project Number	Project Name	Planning Area	Status	Project Type	Activity Acres	Project Acres
3	3500-2008-FPL-209	Oak Glen/Yucaipa Fuel Break		C	FPL	578	6271
6	3500-2010-FPL-010	Public Lands		C	FPL	87	5531
6	3500-2012-FPL-021	School District Fuel Treatment		C	FPL	84	2839
4	3500-2010-FPL-002	Lone Pine Airport		C	FPL	114	1232
6	3500-2011-FPL-015	Forest Lawn V Mastication		C	FPL	156	1045
6	3500-2011-FPL-009	LACSD		C	FPL	15	998
6	3500-2011-FPL-014	Forest Lawn IV Herbicide Treatment		C	FPL	20	738
6	3500-2010-FPL-007	HWY 18 2010		C	FPL	18	509
4	3500-2009-FPL-001	Lone Pine North 2010		C	FPL	268	476
2	3500-2009-FPL-213	Hwy 2 Project		C	FPL	285	305
6	3500-2009-FPL-219	Camp Osito		C	FPL	55	198
6	3500-2011-FPL-003	Sawmill 2010 (Fish and Game)		C	FPL	105	121
4	3500-2009-FPL-004	Mammoth Bluffs		C	FPL	0	99
6	3500-2010-FPL-008	South Lake		C	FPL	0	95
6	3500-2010-FPL-221	Hwy 18/Hwy 138		C	FPL	4	53
6	3500-2009-FPL-218	Camp Helendale		C	FPL	35	42
6	3500-2011-FPL-222	Laurel Pines		C	FPL	44	30
6	3500-2011-FPL-016	Green Valley Lake		C	FPL	72	29
6	3500-2008-FPL-216	Hwy 38 Angelus Oaks		C	FPL	108	19
6	3500-2012-FPL-022	Cardinal Fuel Break		C	FPL	33	17
6	3500-2010-FPL-220	Running Springs Water District		C	FPL	1	1
3	3500-2014-FPL-007	Oak Glen Road		P	FPL		545
3	3500-2014-FPL-004	Potato Canyon		P	FPL		443
4	3500-2014-FPL-014	Independence		P	FPL		439
4	3500-2014-FPL-017	Brockman Corner 2		P	FPL		330
4	3500-2014-FPL-015	Big Pine		P	FPL		309
6	3500-2014-FPL-008	Mile High Road		P	FPL		260
2	3500-2014-FPL-011	Baldy Mesa East		P	FPL		236
4	3500-2014-FPL-016	Brockman		P	FPL		231
1	3500-2014-FPL-018	Devore Ht.		P	FPL		207
2	3500-2014-FPL-012	Baldy Mesa West		P	FPL		168
2	3500-2014-FPL-010	Summit Valley East		P	FPL		168
3	3500-2014-FPL-003	Pendleton West		P	FPL		134
4	3500-2014-FPL-013	Lone Pine		P	FPL		67
3	3500-2014-FPL-001	Crafton Hills 1		P	FPL		18
2	3500-2014-FPL-009	Forest Route 3N66		P	FPL		8
2	3500-2014-FPL-019	Desert Front (Lovitt Truck Trail)		P	FPL		120
3	3500-2014-FPL-019	Pisgah Peak Truck Trail 1		P	FPL		20
3	3500-2014-FPL-020	Pisgah Peak Truck Trail 2		P	FPL		174
3	3500-2014-FPL-021	Pisgah Peak Truck Trail 3		P	FPL		385

Batt Planning area	Project Number	Project Name	Planning Area	Status	Project Type	Activity Acres	Project Acres
3	3500-2014-FPL-022	Crafton Hills Truck Trail 1		P	FPL		58
3	3500-2014-FPL-023	Crafton Hills Truck Trail 2		P	FPL		211
	3500-2014-FPL-024	Beetle Kill Information Education Outreach		P	FPL		0
6/3	3500-2014-FPL-026	Chipper Program BDU Mountains		P	FPL		0
4	3500-2014-FPL-027	June Lake Corridor		P	FPL		599
	3500-2014-FPL-028	Fire Prevention Material		P	FPL		0
6	3500-2014-FPL-029	CA Fish and Wildlife 2014		P	FPL		118
6	3500-2014-FPL-030	Communication Strawberry Peak		P	FPL		8
6	3500-2014-FPL-031	Keller Peak		P	FPL		3
6/3	3500-2014-FPL-025	Beetle Kill		P	FPL		0
6/3	3500-2014-FPL-032	Transportation Route Maintenance		P	FPL		0
Unit	3500-2014-FPL-024	Public Radio Broadcast		P	FPL		0
Unit	3500-2015-PRV-004	Fire Prevention Signs			PRV		0
6	3500-2015-FPL-006	Defensible Space Fuel Treatment		P	FPL		
6	3500-2015-FPL-005	Hazard Tree Removal Assistance		P	FPL		
Unit	3500-2015-FPL-001	Emergency Water Supply Cistern Rehabilitation		P	FPL		0
Unit	3500-2015-PRV-001	Fire Prevention Canopies		P	FPL		0
4	3500-2015-VMP-003	Benton Prescribed Burn		P	VMP		
6	3500-2015-PRV-003	Big Bear Wood Roof Replacement		P	PRV		
6	3500-2015-PRV-005	Crest Forest Fire Safe Demo Sites		P	PRV		
6	3500-2015-PRV-001	Big Bear Valley Chipping Grant		P	PRV		
Unit	3500-2014-PRV-002	Fire Prevention (Mastbooks)		C	PRV		0
Unit	3500-2014-PRV-003	Fire Prevention Kiosk		P	PRV		0

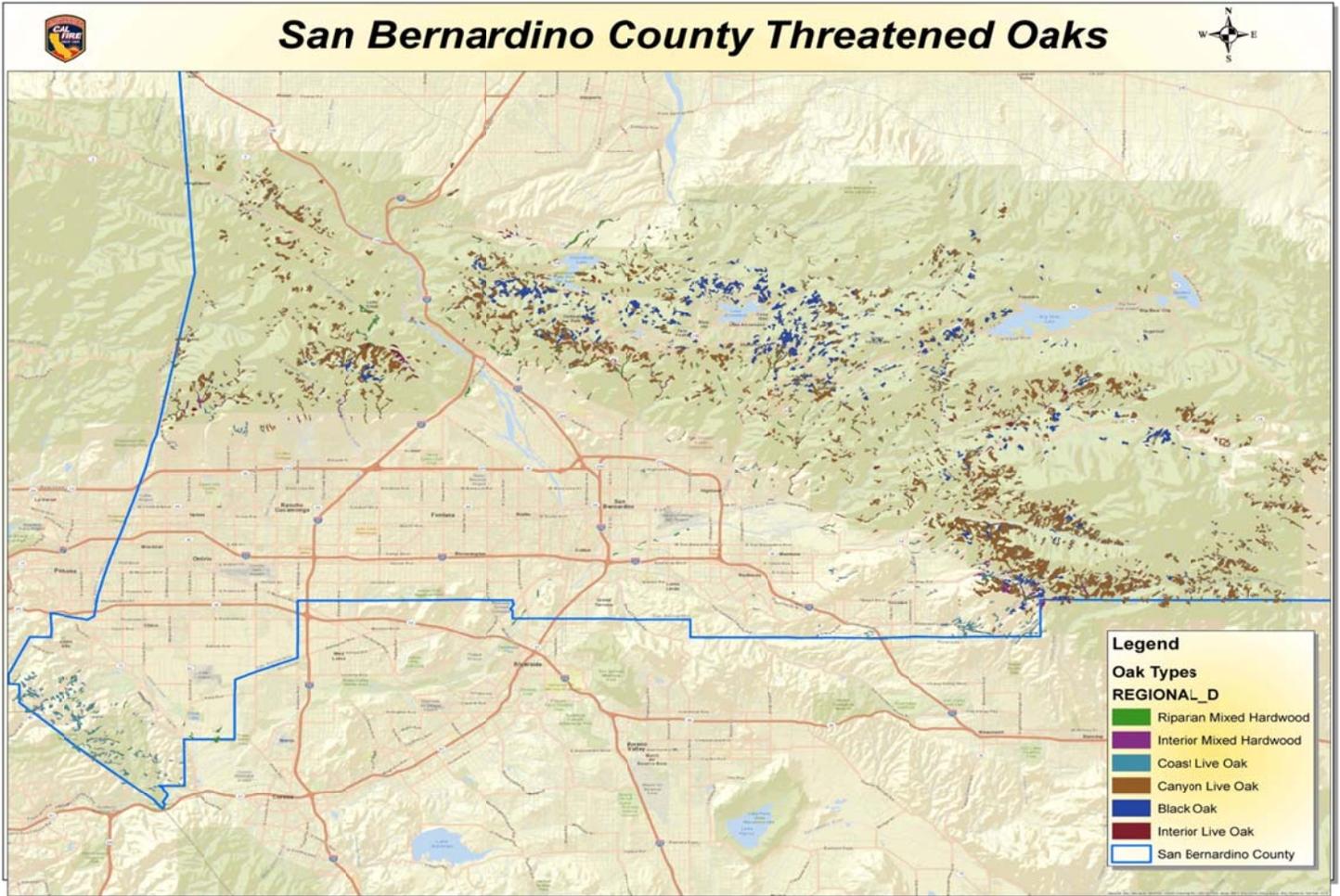
Project Number: Cal MAPPER ID    Project Name: Project Name as in Cal MAPPER

Planning Area: SRA or LRA

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

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

**APPENDIX B: SAN BERNARDINO UNIT: THREATENED OAKS**



Prepared by: [illegible]  
[illegible]  
[illegible]

## **APPENDIX C: ANNUAL ACCOMPLISHMENTS REPORTING (2015)**

The San Bernardino Unit Strategic Fire Plan sets forth a vision to identify and evaluate wildland fire hazards and recognize life, property and natural resources at risk including watersheds – and wildlife habitats, social impacts and other values of functioning ecosystems. In 2015, the San Bernardino Unit made great strides in fostering inter-agency relations, collaboration, and abiding by the goals and objectives set forth in the Strategic Fire Plan for California. Additionally, the San Bernardino Unit had the privilege and opportunity to play an integral part in several vital operations that restore community infrastructure and ties.

In 2015, the San Bernardino Unit Emergency Command Center (ECC) implemented Emergency Medical Dispatching (EMD) which required changes in its programs and staffing in order to better serve the communities we protect. This new program helps emergency dispatchers move smoothly through emergency calls to provide pre-arrival instructions until first responders arrive.

The San Bernardino Unit has provided assistance to many local government cooperators in San Bernardino, Inyo and Mono Counties. For example, the Unit provided assistance to the terrorist attack at the Inland Regional Center building in San Bernardino City, by providing station coverage behind the committed resources. The Unit also provided guidance and assistance at the Round Fire which consumed 7000 acres and destroyed 39 homes in Inyo and Mono Counties by bringing together various local entities to provide services and support to the affected communities. The San Bernardino Unit has provided assistance to many local government cooperators in San Bernardino, Inyo and Mono Counties. For example, the Unit provided assistance to the terrorist attack at the Inland Regional Center building in San Bernardino City, by providing station coverage behind the committed resources. The Unit also provided guidance and assistance at the Round Fire which consumed 7000 acres and destroyed 39 homes in Inyo and Mono Counties by bringing together various local entities to provide services and support to the affected communities. The North Fire consumed 4,250 acres including homes and out buildings along with seventy four vehicles on Interstate 15. Multi-Agency communication challenges were identified during the after action review process. The Unit along with our cooperators and stakeholders are continuing to collaborate in order to enable safe cohesive initial scene actions on all-risk multi-agency responses including mutual threat areas. A task force was developed to develop procedures necessary to enable multiple communication centers to promptly notify affected agencies and coordinate initial attack communications.

The San Bernardino Unit was commended by NASA for its performance in the July 2015 Pine Fire that protected the Table Mountain Facility from damage. The Table Mountain Facility is a remote scientific research facility located in the Los Angeles National Forest. The equipment saved in the fire included an optical communications telescope laboratory, allowing research for future projects to continue.

Since the return of additional SRA acres to the Units DPA, the San Bernardino Unit's Fire Prevention Bureau has hired an additional fire prevention specialist and the Unit is hiring one limited term Cal Card/finance position to support the added work load. Additionally, the Governor's office has authorized CAL FIRE to hire supplementary staff to augment the normal peak season staffing in response to the ongoing drought condition.

Prado Helitack made a smooth transition from an inmate-staffed helitack program with the San Bernardino County Sheriff and the California Department of Corrections and Rehabilitation, to a dedicated helitack crew with hoist capabilities designed to provide rescue capabilities for CAL FIRE personnel on Wildland fire incidents. This hoist capability is also available for mutual aid throughout the region upon request. This has resulted in an additional helicopter to the State's fleet. Additionally, the Unit is moving toward establishing an interim helibase facility at Prado Conservation Camp.

The Conservation Camps successfully completed approximately 450 projects in the Unit. CIW successfully trained 5639 women.

The San Bernardino Unit was awarded Fire Prevention Fee grants to support fuel reduction and education programs in the following communities: Big Bear, Running Springs, Crest Forest, Arrowbear, Valley of Enchantment, Crestline, Twin Peaks, Green Valley Lake and Swall Meadows. The grants are: Wood Shake Shingle Roof Replacement Project, Big Bear Valley Chipping Project, Mountain Rim Fire Safe Council Community Wildfire Protection Plan (CWPP), Mountain Rim Fire Safe Council Mountain Top Chipper Days Project, Mountain Rim Fire Safe Council Abatement Assistance and Advocacy Project,

Mountain Rim Fire Safe Council Web Based Map Interface for CWPPs Project and Crest Forest Fire Safe Demonstration Sites Project, and the Wheeler Crest Fuels Reduction Project.

The CAL FIRE San Bernardino Unit and Southern California Edison completed the 13th year in Operation Santa Ana. Operation Santa Ana was initiated in 2000 as a response to a number of fires caused by power poles, powerlines, and equipment. Prior to the beginning of Operation Santa Ana approximately 50% of the large and damaging wildfires in Southern California were due to powerlines and equipment issues. There has not been a major wildland fire caused by Edison pole or powerlines in the San Bernardino County areas where CAL FIRE is responsible for protection since the program began.

The Fire Prevention Public Information Office actively works with the media in order to keep the public informed on fire safety, wildfire awareness, and resource management. Numerous press releases are issued throughout the year to remind residents of items as: defensible space requirements, burn permit requirements, burn permit restrictions, ready-set-go campaign information, wildland fire incident information, tree mortality and bark beetles issues, and fire prevention fee grant opportunities.

In early 2015, we experienced frequent interruptions of fire operations due to unauthorized drone interference at wildland fires in San Bernardino County. A unified local/state/federal interagency press conference was hosted by the San Bernardino Board of Supervisors. Consequently, we have seen a decline in drone activity.

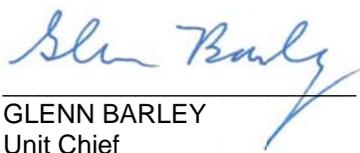
The Volunteer In Prevention (VIP) program in the San Bernardino Unit has been steadily rebuilding since July 2015. We currently have 11 VIPs and are continuing to recruit, especially in the northern areas of the unit. The VIPs have a wide variety of educational backgrounds and have been extremely helpful with our ECC, public events, LE-100 program, and resource management department, clerical work and many other items. The VIPs have logged 281 hours of volunteer time since July, 2015.

Although the Unit previously started to experience a decline in tree mortality within the San Bernardino Mountains, there has been an increase in bark beetle activity and associated tree mortality due to the ongoing drought. Mortality is increasing and is expected to continue as long as drought conditions persist. The San Bernardino Unit is utilizing an application to collect spatial locations and insect/disease/drought mortality information during the field inspections using an ESRI Collector Application. This information is used to improve the efficiency of allocation of CAL FIRE hand crews for tree removal.

The San Bernardino Unit is collaboratively working with communities and stakeholder's to stop the movement of the Goldspotted Oak Borer (GSOB) through firewood transportation. In 2012, the (GSOB) was detected in the Riverside County mountain community of Idyllwild and in 2014 it was found in Orange County. In 2015 it was found in the mountain community of Green Valley in Los Angeles County. This new detection of GSOB represents a significant long-distance movement, of at least 90 miles from its closest known areas infestation in Orange and Riverside Counties. It is believed to have made the jump from these counties to the Los Angeles County through the movement of infested firewood. In addition to GSOB, the Polyphagous Shot Hole Borer (PHSB) is another introduced pest that has invaded Southern California and is now located as far east as Ontario in Southwestern San Bernardino County.

Since 2012, coast live oak trees have been observed dying in several southern California counties including Orange, Riverside and Los Angeles. Much of the coast live oak tree mortality is attributed to foamy bark canker disease which is spread by the western oak bark beetle that attacks drought stressed oaks. Most recently, it was discovered that the disease is also killing California black oaks in the San Bernardino Mountains. This new finding came from collaborative work between CAL FIRE San Bernardino and the University of California at Riverside (UCR) Cooperative Extension's Plant Pathology Department.

The San Bernardino Unit is an active participant in the Mountain Area Safety Taskforce (MAST) and working with local, state, and federal agencies to help prevent catastrophic wildfires through projects related to public safety, fuel reduction, and education. The mission of the San Bernardino Unit is "work together today for a healthier, safer, and more resilient tomorrow."

  
GLENN BARLEY  
Unit Chief