# 2023/2024 STRATEGIC FIRE PLAN FOR THE SAN BERNARDINO UNIT

A VISION FOR A NATURAL ENVIROMENT THAT IS MORE FIRE RESILIENT; BUILDINGS AND INFRASTRUCCTURE THAT ARE MORE FIRE RESISTANT; AND A SOCIETY THAT IS MORE AWARE OF AND RESPONSIVE TO THE BENEFITS AND THREATS OF WILDFIRE; ALL ACHIEVED THROUGH LOCAL, STATE, FEDERAL, TRIBAL, AND PRIVATE PARTNERSHIPS.



# **UNIT STRATEGIC FIRE PLAN AMENDMENTS HISTORY**

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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.

\_\_ DATE: 05/01/2023

Unit Chief, San Bernardino-Inyo-Mono Unit

\_ DATE: 05/01/2023

Unit Forester, San Bernardino-Inyo-Mono Unit

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#### **EXECUTIVE SUMMARY**

The CAL FIRE San Bernardino Unit is comprised of San Bernardino, Inyo and Mono counties where we carry out CAL FIRE's mission to serve and safeguard the people and protect the property and resources of California. This is accomplished through the protection of State Responsibility Areas (SRA), cities under contract, and by protection of the public and the watersheds in its geographical area.

In response to the unprecedented fire activity, and changing climatic conditions, CAL FIRE is reinvigorating its fuel treatment programs, seeking to increase the pace and scale of fuels treatments and prevention activity. The San Bernardino Unit, in support of the Department wide effort, has updated the Unit Fire Plan to increase the number of acres treated, expand the type and variety of prevention activities and to accomplish that in a strategic manner, which protects the communities and the people who live there.

In addition to the fire threat, the forests and woodlands of San Bernardino County are under assault from non-native pests, including the Goldspotted Oak Borer (GSOB) which was discovered in the Oak Glen area in 2018. Polyphagous Shot Hole Borer (PHSB) and Kuroshio Shot Hole Borer (KHB) have also invaded the Southwest portion of the County killing trees in urban and wildland areas. These pests will dramatically change the wildland and urban environments in ways we don't yet know or understand. Unit personnel are working closely with community members, elected officials and cooperating agencies to mount a united fight against these very destructive invaders.

The Unit Fire Plan that follows, provides a framework for the San Bernardino Unit to take on these and other challenges to help keep the public safe, protect our communities, as well as the natural ecosystems that surround and intertwine them.

Respectfully,

Unit Chief, San Bernardino-Inyo-Mono Unit

# SECTION I: UNIT OVERVIEW UNIT DESCRIPTION

The CAL FIRE San Bernardino Unit encompasses the State Responsibility Area (SRA) portions of San Bernardino, Inyo, & Mono Counties. Additionally, the San Bernardino Unit is the Administrative Unit for Los Angeles County, a CAL FIRE Contract County. The Unit is comprised of a variety of government jurisdictions including (but not limited to) the Bureau of Land Management, US Forest Service, National Park Service, US Fish and Wildlife Service, Department of Defense, California State Parks, California Department of Fish and Wildlife, Los Angeles Department of Water and Power, and County governments. The Unit also has Wildland Protection Agreements with 7 local government agencies throughout San Bernardino County. The following tables breakdown the Responsibility Area acres in the Unit, as well as the acreages of the various WPAs:

Responsibility Area	Acres	Wildland Protection	Acres
		Agreement	
State Responsibility Area (SRA)	951,666	Chino Valley IFD	12,003
Federal Responsibility Area (FRA)	18,139,596	City of Colton	1,000
Local Responsibility Area (LRA)	2,347,044	City of Highland	1,261
TOTAL	21,438,305	City of Loma Linda	2,247
		Rancho Cucamonga FPD	5,271
		City of Redlands	5,985
		City of Yucaipa	2,002
		TOTAL	29,769

The pre-dominate fuel type in the Unit 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 131 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; the 1980 Panorama Fire (23,625 acres), the 1999 Turtle Fire (3,396 acres), the 2006 Sawtooth fire (61,766 acres), the 2008 Freeway Fire (30,305 acres), the 2015 Round Fire (7,000 acres), the 2016 Pilot and Blue Cut Fires (8,110 and 36,274 acres, respectively), and the 2020 El Dorado Fire (22,744 acres). Most fires in the unit have the primary factors of being wind driven and heavy fuel loading to promote extreme rates of spread. The growing wildland urban interfaces mean that 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
    - Apple Valley: Type 3 Engine (1)
    - Big Bear Valley: Type 3 Engine (1)
    - Bishop: Type 3 Engine (1)
    - Chino Hills: Type 3 Engine (1)
    - Crestline: Type 3 Engine (1)
    - Devore: Type 3 Engine (1)
    - Independence: Type 3 Engine (2)
    - Lucerne Valley: Type3 Engine (1)
    - Phelan: Type 3 Engine (2)
    - Running Springs: Type 3 Engine (1)
    - Sky Forest: Type 3 Engine (1)
    - Yucaipa: Type 3 Engine (2)
    - Yucca Valley: Type 3 Engine (2)
  - 2. Camps and Aircraft
    - Fenner Canyon Conservation Camp, Valyermo, CA
      - Type 1 Hand crews (6)
    - · Owens Valley Conservation Camp, Bishop, CA
      - Type 1 Hand crews (5)
    - Pilot Rock Fire Center, Crestline CA
      - Type 1 Fire Fighter I Hand crews (5)
    - Prado Conservation Camp, Chino CA
      - Type 1 Hand crews (4)
    - · Prado Helitack, Chino, CA
      - Type 2 Helicopter with Crew (1)
    - · California Institute for Women (CIW), Chino, CA
      - Female Inmate Training Center
- B. Local & Federal Fire Departments that have Mutual/Automatic Aid Agreements with CAL FIRE BDU:
  - 1. Apple Valley Fire Protection District, Apple Valley, CA
  - 2. Bureau of Land Management, San Bernardino & Inyo Counties, CA
  - 3. Inyo County Volunteers, Inyo County, CA
  - 4. Loma Linda Fire Department, Loma Linda, CA
  - 5. Los Angeles County Fire, Los Angeles City, CA
  - 6. Mono County Volunteers, Mono County CA
  - 7. National Park Service, San Bernardino, CA
  - 8. Rancho Cucamonga Fire Protection District, Rancho Cucamonga CA
  - 9. City of Redlands Fire Department, Redlands CA
  - 10. Running Springs Fire Department, Running Springs, CA
  - 11. San Bernardino County Fire Department, San Bernardino, CA

- 12. San Bernardino National Forest, San Bernardino, CA
- 13. San Manuel Fire Department, San Bernardino, CA
- 14. Bureau of Indian Affairs, Bishop, CA
- 15. Chino Valley Independent Fire District, Chino, CA
- 16. CAL FIRE Riverside/Riverside County Fire Department, Perris, CA

# C. Dispatch Agreements

- 1. Arrowbear Lake Fire Department, Arrowbear, CA
- 2. Morongo Valley Community Service District, Morongo, CA
- 3. Newberry Fire Department, Newberry, CA
- 4. Yermo/Calico Volunteer Fire Department, Yermo, CA
- 5. Daggett Community service District, Daggett, 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:

Organization	Title	
San Bernardino County Fire	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 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	
СНР	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	

Organization	Title
Twin Lakes Fire Safe Council	President
South Fork Bishop Creek FSC	President
Inland Empire Fire Safe Alliance	President
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)
Bureau of Land Management	Deputy Chief

#### **SECTION III: 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 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 Fullerton 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 0.1 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 pipeline supplies fuel oil between California and Nevada. The BNSF Transcontinental route between Chicago and Los Angeles is located within the Unit. Portions of the State Water Project and Los Angeles Aqueduct cross Inyo, Mono, and San Bernardino Counties. Interstates 10 and 15, US Highway 395, State Highways 18, 62, and 138 are major transportation corridors.

#### 9. Range:

 There is minimal rangeland within the Unit, mostly located in the Eastern Sierra 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, along with the historic Route 66.

#### 12. Soil:

Covering large geographic areas and multiple ecosystems, the San Bernardino Unit
contains a diversity of soil types and soil conditions. These range from highly
disturbed, impacted urban soils to deeper forest and shrubland soils with welldeveloped duff layers to desert sands.

#### 13. Timber:

 A wealth of timber resources can be found in all Counties of the Unit across private, state, and federal ownerships. A lack of infrastructure and harvesting contractors makes large-scale commercialization of these resources difficult. The bulk of its value is recreational, scenic, and ecological.

#### 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 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 communities.

SAN BERNARDINO COUNTY		INYO COUNTY	MONO COUNTY	
Adelanto	Grand Terrace	Pioneer Town	40 Acres	Antelope Valley - East
Angeles Oaks	Green Valley Lake	Rancho Cucamonga	Aberdeen	Aspen Springs
Apple Valley	Hesperia	Redlands	Alabama Hills	Benton
Arrowbear	Highland	Rialto	Aspendell	Bridgeport
Baldwin Lake	Joshua Tree	Rim Forest	Big Pine	Chalfant
Big Bear City	Lake Arrowhead	Running Springs	Bishop	Coleville
Big Bear Lake	Loma Linda	San Antonio Heights	Cartago	Crowley Lake
Big River	Los Serrano	San Bernardino	Darwin	Green Creek
Bloomington	Lucerne Valley	Sugarloaf	Fort Independence	June Lake
Blue Jay	Lytle Creek	Summit Valley	Independence	Lee Vining
Bluewater	Mentone	Twenty-Nine Palms	Keeler	Mammoth Lakes
Cedar Pines Park	Montclair	Marine Corps Base	Lone Pine	Mono City
Chino	Morongo Valley	Twin Peaks	Mustang Mesa	Paradise
Chino Hills	Mount Baldy Village	Upland	Olancha	Pickle Meadows
Colton	Mountain Home Village	Valley of Enchantment	Pearsonville	Swall Meadows
Crestline	Mountain View Acres	Victorville	Rovana	Toms Place
Devore	Muscoy	West Cajon Valley	Sabrina	Topaz
Devore Heights	Needles	Wrightwood	Shoshone	Twin Lakes
Fawnskin	Oak Glen	Yucaipa	Starlite	Virginia Lakes
Fontana	Ontario	Yucca Valley	West Bishop	Walker
Forest Falls	Phelan		Wilkerson	
George Air Force Base	Pinon Hills			

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

#### A. FIRE PREVENTION

- 1. Continue collaboration with Edison on Operation Santa Ana to reduce vegetation fires that are caused when trees, grasses and power lines interact with one another.
- 2. Educate and assist all Chief Officers in the importance of documentation and overall needs to their own battalions pertaining to Fire Prevention.
- 3. 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.
- 4. Continue working on the Juvenile Fire Setters (JFS) program, and work on establishing a JFS program within Inyo and Mono counties.
- 5. Evaluate and map all fire defense water tanks / cisterns, and truck trails in the Unit.
- 6. Continue utilization of 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 business 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 2016 California Building Code (CBC).
- 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 outreach and education regarding invasive pests and measures the public can take to minimize the spread of invasive pests.
- 3. Increase PSA's and news releases regarding the laws covering campfires and debris burning along with proper equipment use in fire prone areas.
- 4. Continue efforts to maintain the message of fire safety for children.
- 5. Continue public outreach at San Bernardino County Fair, Tri County Fair, Mule Days, Wrightwood Wildfire and Disaster Awareness and other like events.
- 6. Continue News Media Fire Safety program.
- 7. Placement and upkeep of roadside Fire Prevention signs.
- 8. Assist Battalions with Team Teaching Programs.
- 9. Recruit and maintain personnel for VIP program. A necessity to assist the Unit in a variety of Fire Prevention activities,
- 10. Continue to utilize the San Bernardino Unit webpage, Facebook, Instagram, and Twitter.

#### D. VEGETATION MANAGEMENT

- 1. Maintain the cooperative agreement with the Mountain Re-Leaf reforestation program.
- 2. Continue to conduct Forest Practice inspections pursuant to the Z'berg-Nejedly Forest Practice Act. The inspections are performed to ensure fuel reduction and logging operations are conducted per state law in a manner that protects all the resources in a forest environment.
- 3. Continue to work with Fire Safe Councils 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.
- 4. Facilitate development of programs and projects to utilize grant monies for fire prevention projects.
- 5. To contribute to achievement of the State's goals, increase the pace and scale of fuel reduction and prescribed fire treatment acreage.

#### SECTION V: PRE-FIRE MANAGEMENT TACTICS – DIVISION/BATTALION/PROGRAM PLANS

# BATTALION 1 OVERVIEW

Battalion 1 consists of three Schedule A fire stations. 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 Interstate 10/Highway 38, the Eastern border is the Yucaipa Battalion (Battalion 3), the Northern border is the San Bernardino National Forest, and the Western border is Highway 215. The Highland Battalion is comprised of the 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 Redlands Fire Department, the Loma Linda Fire Department, the Colton Fire Department, and the San Bernardino 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:

- Battalion 1 the City of Redlands, City of Colton, City of Loma Linda, and the eastern side of Highland 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 north and southeast area of Battalion 1 that affects many of the surrounding jurisdictions. 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.
- 4. CAL FIRE-San Bernardino Unit, San Bernardino County Fire, and the San Bernardino National Forest have an XBO response Plan Agreement for wildland fires in the front country along the base of the San Bernardino Mountains from San Bernardino City to the east towards Yucaipa City. This plan 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 1,869 feet around the Seven Oaks Dam Control Basin up to 3000 feet above sea level along the front country of the eastern 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.

Fire History in the Highland Battalion is very extensive. Notable fires in the last decade include the Florida Fire which burned 450 acres of brush, the Mart Fire which burned 900 acres and resulted in evacuations of approximately 200 area homes and a temporary road closure of Highway 330, and the Bridge Fire which burned 450 acres and temporarily closed Greenspot Road for ½ a mile.

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 compliant 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 within the Highland Battalion include City of Highland, City of San Bernardino, City of Redlands, and Mentone.

#### **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.
- C. Public Education Use of Equipment:

Provide Public Education and information. 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.

#### D. Fire Prevention Signs:

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.

#### E. Fuels Reduction:

There are numerous ongoing fuel reduction projects within the Highland Battalion that are being accomplished through many Fire Safe Councils and other entities that have the means to complete this type of work. Fuel reductions have proven very successful in protecting and enhancing life, property, and infrastructure.

Fuel reduction along the identified corridors and Wildland Urban Interface perimeter can help reduce the number of roadside fires started by vehicles and discarded burning materials, ensures 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. Some priority Battalion 1 project areas are identified as follows:

- Construct and improve fuel reduction programs that border East End Operational Plan Cooperators DPA.
- Construct and Improve Fuel Reduction programs that border the San Bernardino National Forest.
- Improve access roads such as power line roads, truck trails, and hiking trails.
- Undertake projects and activities that would reduce roadside starts and provide defensible space along roadways.
- Ensure a data tracking system is used and shared with all personnel down to the field level.

#### F. High Priority Areas:

- East Highland's area
- State Highway route 330 / 210 corridor
- Seven Oaks Dam / Santa Ana River Basin
- Redlands Wildland Contract areas surrounding State Responsibility Areas in San Bernardino County and Riverside County.
- State Responsibility Areas Northeast of Highland.

#### G. Public Outreach:

- 1. Organized Venues for Public Education within the Highland Battalion.
  - Station tours at all three Highland Fire Stations.
  - School programs at multiple education levels throughout the battalion.
  - Annual Citrus Harvest Festival.
  - Annual Open House at all three Fire Stations.

# **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
City of Redlands Fire Department	Fire Chief
United States Forest Service	Division Chief
CAL FIRE BDU	Battalion Chief
San Manuel Fire Department	Fire Chief
San Bernardino County Fire Department	Fire Chief
USFS San Bernardino National Forest	Forest Supervisor
Bureau of Land Management	Division Chief

# BATTALION 2 OVERVIEW

The Desert Battalion boundary starts in the Johnson 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 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. In addition to CAL FIRE resources other fire departments providing mutual aid include the San Bernardino County Fire Department, Victorville Fire Department, United States Forest Service from the San Bernardino and Angeles National Forest, California Desert District of the Bureau of Land Management, Apple Valley Fire Protection District, National Park Service. 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 the 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 the North Fire in 2015 burning 4250 acres near I-15 and south of Oak Hills. In 2016, the Pilot Fire burned 8110 acres in the Summit Valley area and the Blue Cut Fire burned 36,274 acres in the West Cajon Valley, Phelan, and Oak Hills communities.

During peak staffing levels the Desert Battalion staffs four fire engines between three fire stations spread across the battalion with locations in Lucerne Valley, Apple Valley, and Phelan. The United States Forest Service also staffs one fire engine at CAL FIRE's Lucerne fire station.

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 compliant with the requirements set forth in section 4291 of the Public Resources Code. Communities at Risk listed by the California Fire Alliance within the desert battalion include Pinon Hills, Phelan, Wrightwood, Cajon (west Cajon Valley) and Summit Valley.

#### **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 using equipment.
  - 1) Provide Public Education and information.
  - 2) Aggressively seek cost recovery when fire has escaped the project area requiring fire suppression action.
  - 3) 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
  - San Bernardino County Fair, Victorville
  - 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
  - Crafton Hills College training with cadets
  - Victor Valley College training with cadets

#### 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.



Hwy 18 – Lucerne Community

#### 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, ensures 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 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
- South Apple Valley
- Lucerne Valley

- Phelan/Baldy Mesa
- West Cajon Valley
- Summit 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:

Organization	Title
San Bernardino County Fire Desert	Division Chief
San Bernardino County Fire North Desert	Battalion Chief
San Bernardino County Fire South Desert	Battalion Chief
United States Forest Service, San	Fire Captain
Wrightwood Fire Safe Council	Council Member
CAL TRANS	Cajon Maintenance Supervisor
Apple Valley Fire District	Fire Chief
City of Victorville Fire Department	Fire Chief

# BATTALION 3 OVERVIEW

The East Valley Battalion boundary starts at the Southern edge of San Bernardino County at 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, Morongo Valley, Yucca Valley, Joshua Tree, 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, and the cites of Redlands, Loma Linda, Grand Terrace, Highland, and Mentone. The Northern edge begins at the top of Government Peak and travels northeast along the Santa Ana River through Seven Oaks and Hartbar, turning north and then east again at Granite Peak then out to the Homestead Valley. The Riverside County Line forms the southern boundary. The eastern boundary follows the towns of Flamingo Heights, Rimrock, Little Morongo Heights, Yucca Valley and the entrance to Joshua Tree National Park. The battalion covers an approximate area of 603 square miles. The East Valley battalion also includes an ongoing fire service contract with the City of Yucaipa to include three permanent traditionally staffed Type I Paramedic fire engines 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 the City of Calimesa Fire Department.

The elevations in the battalion range from 1346 feet to 9113 feet, 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 19.33 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 2013 Mill fire burning 263 acres in the Crafton Hills area. Several additional notable fires on the Yucaipa Ridge area bordering the USFS/BDF boundary have occurred throughout the past decade, most named Bryant Fires (1,2, etc.). In 2020 the El Dorado fire began in Yucaipa and burned uphill towards the mountain top communities before stopping in the Jenks Lake area and burning just over 22,000 acres. 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 East Valley battalion staffs two Type III State fire engines at both Yucaipa and Yucca Valley. The Yucaipa station is shared with a Type I Paramedic engine, while two additional Type I Paramedic engines are staffed at two separate city fire stations for a total of 4 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 compliant with the requirements set forth in section 4291 of the Public Resources Code.

Communities at Risk listed by the California Fire Alliance within the East Valley battalion include the City of Yucaipa, Oak Glen, Mentone, Redlands and Highland, Mountain Home Village, Forest Falls, Angeles Oaks, Seven Oaks, Heartbar, Pioneertown, Joshua Tree, and numerous seasonal camp facilities.

#### **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 using 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. Fire Prevention Signs

• The East Valley Battalion currently has two fire prevention and education signs. Locations of the two signs are:

- 1) Oak Glen Rd. East of Pendleton Rd.
- 2) Oak Glen Rd. at Wildwood Canyon Rd.
- 4. The Yucaipa battalion also displays two Gold Spotted Oak Borer (GSOB) signs:
  - Oak Glen Road, East of Pendleton Road
  - Wildwood Canyon Rd, East of Morningside Dr.

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

#### C. Fuels Reduction

- 1. Removal and appropriate mitigation measures for infested GSOB oak trees.
- 2. Yucaipa's North Bench area following the toe of the Yucaipa Ridge slope, mechanical treatment and pile burning.
- 3. Hazard Tree Removal in the North Bench area with reforestation efforts taking place afterwards.
- 4. Crafton Hills area along the Crafton Hills Truck Trail from Yucaipa Regional Park to Crafton Hills College.
- 5. Pisgah Peak truck trail, mechanical treatment and pile burning.
- 6. Wildwood Canyon Hazard Fuels Reduction through manual, mechanical, and burning treatments
- 7. Type converting mitigation measures through fuel reductio throughout the battalion.

Fuels reduction along the identified corridors and perimeter will help reduce the number of roadside fires started by vehicles and discarded burning materials, ensures 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 forward fire spread.

#### D. High Priority Areas:

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

- Wildwood Canyon
- Morongo Valley watershed
- Joshua Tree
- E. Organized Venues for Public Education within the East Valley Battalion
  - 1. Station tours at all four stations.
  - 2. School programs at multiple education levels throughout, 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 Arts Festival, Autumn Festival, Winter Festival, Summer Farmers Market Program.
  - 7. Hands only CPR program at multiple events in the City of Yucaipa.

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:

Organization	Title
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
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
Home Depot- Yucca Valley	Public Relations

# BATTALION 4 OVERVIEW

The Owens Valley Battalion lies in 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 boast's 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 Olancha 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 the 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 per hour in the sage have been observed during periods of high winds with spotting as far as 3/4 miles.

Notable recent fires in the area include the Birch Fire in July 2002 burning 2,500 acres in the community of Swall Meadows, 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 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 7,000 acres in and around the communities of Paradise and Swall Meadows, the Pleasant Fire in February 2018 burning 2,200 acres in the Bishop area, the 2019 Taboose fire burning 10,296 acres just southwest of Big Pine, and the Airport fire of 2022 which burned 4,136 acres in February from Bishop Airport south along the Owens River to Hwy 168 east burning 14.25 miles in 18 hours.

During peak staffing levels the Owens Valley Battalion staffs one type III fire engine in the Bishop area, and two type III engines in the community of Independence. One of the engines at the Independence Station is staffed year-round with firefighter II's. 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 wildland fire. An active program for conducting defensible space inspections by company officers helps the home and business owners to be compliant 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 Olancha, 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.
- 2. Replace existing signs with new signs and new prevention messages.

#### 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 fuel break construction.
- 3. Lee Vining Fuels reductions surrounding the community.
- 4. Wilkerson Fuel break is reducing fuels surround the community of Wilkerson utilizing cutting and chipping.

#### D. Vegetation Management Program

- 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. These VMP projects will include:
  - June Lake- Fuel reduction along Hwy 158, in cooperation with the June Lake Fire Safe Counsel. The project is funded by the FPF.
  - Dearborn Springs/Owens Lake, Fuels Reduction east of 395- 6 Acres
  - Salt Cedar Pile Burn Project, Inyo Co., North and West of Independence.

- Center Burn Project- Reduce fuel loads between Big Pine and Bishop along the western flank of the Owens River riparian corridor-290 Acres.
- Onion Valley Fuels Reduction Project, Independence-10 Acres
- Calvert Burn Project- Reduce fuel loading along the western flank of the Owens River riparian corridor-40 Acres.
- Artesian VMP- 1400 Acres just outside of Independence.
- PENDING-Numu Tuna'e VMP Mono Co. 5 acres

#### 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 using 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:

- Big Pine
- Bishop
- Inyo National Forest
- Independence
- Olancha
- Hammil Valley
- HWY 395 Corridor
- Walker

- Coleville
- Swall Meadows
- Lee Vining
- Mono City
- June Lake
- Tri-Valley Area
- Hwy 6 Corridor
- Wilkerson South of Bishop

# **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
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 5 OVERVIEW

Battalion 5 is in the West Valley Division of CAL FIRE San Bernardino Unit. It consists of:

CAL FIRE Chino Hills and Devore (FFS) stations. Both stations are staffed with one engine during transitional and peak fire seasons.

Prado Conservation Camp #28 has four Type I fire crews and the Mobile Kitchen Unit (MKU).

Prado Helitack has a Type I Fire Hawk (s70i) and is staffed for initial attack wildland response and air rescue.

Chino Institute for Women (CIW) is a training facility for incarcerated female firefighters.

The West Valley Division Boarders Riverside County to the south, San Bernardino National Forest on the northern end, and Los Angeles County to the west.

The local government fire agencies and federal agency fire districts/departments within the West Valley Division are LA County FD, Chino Valley FPD, Chino City FD, Ontario FD, Rancho Cucamonga FPD, Rialto FD, San Bernardino County FPD, and Colton FD.

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

#### Wildland Protection Agreements:

• The City of Colton (1000 acres), City of Rancho Cucamonga (5271 acres) and the City of Chino Hills (12003 acres).

#### SOLAR:

• There have been numerous wildland fires in the south-west area of Battalion 5 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.

Elevations within Battalion 5 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 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 compliant with the requirements set forth in section 4291 of the Public Resources Code. Several major Freeways run through the Battalion.

Communities at Risk listed by the California Fire Alliance within Battalion 5 include: 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, Unincorporated areas within San Bernardino County, and the City of Colton.

#### **PRIORITIES**

- A. 4291 Public Resources Code Inspections in the SRA:
  - 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.
- C. Public Education Use of Equipment:

Provide Public Education and information. 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.

#### D. Fire Prevention Signs:

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.

#### E. Fuels Reduction:

There are numerous ongoing fuel reduction projects within Battalion 5 that are being accomplished through many Fire Safe Councils and other entities that have the means to complete this type of work. Fuel reductions have proven very successful in protecting and enhancing life, property, and infrastructure.

Fuel reduction along the identified corridors and Wildland Urban Interface perimeter can help reduce the number of roadside fires started by vehicles and discarded burning materials, ensures 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. Some priority Battalion 5 project areas are identified as follows:

- Construct and Improve Fuel Reduction programs that border SOLAR response area.
- Construct and Improve Fuel Reduction programs that border the San Bernardino National Forest.
- Improve access roads such as power line roads, truck trails, and hiking trails.
- Undertake projects and activities that would reduce roadside starts and provide defensible space along roadways.
- Ensure a data tracking system is used and shared with all personnel down to the field level.

#### F. High Priority Areas:

- Devore Heights
  - o BDF Forest RPT- Tone 2
- San Antonio Heights
  - o ANF Forest RPT- Tone 9, 13, and 2
- Chino Hills
  - o BDU Local RPT- Tone 2
  - o Command 1,2, and 3
- Chino Wildland Contract areas surrounding State Responsibility Areas in Orange, Los Angeles, and Riverside counties.
  - o Solar Communication Plan
- State Responsibility Areas north of Rancho Cucamonga
  - o BDU Local RPT- Tone 2

#### G. Public Outreach:

- 1. Organized Venues for Public Education within the Battalion.
  - Station tours at Devore, Chino Hills, Prado Helitack.
  - Safety Fairs in Carbon Canyon.
  - Actively engage in Fire Safe Council Meetings.

#### **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 RRU	Unit Chief
City of Loma Linda Fire Department	Fire Chief
United States Forest Service	Division Chief
City of Colton Fire Department	Fire Chief
CAL FIRE BDU	Battalion Chief
Chino Valley Independent Fire District	Fire Chief
Ontario Fire Department	Deputy Chief
Rancho Cucamonga 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

Fire Safe Councils:

Rancho Cucamonga Fire Safe Council Carbon Canyon (Solar) Fire Safe Council

# BATTALION 6 OVERVIEW

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 Angelus Oaks, with four fire stations covered during the summer months located in Crestline, Sky Forest, Running Springs, and Baldwin Lakes with a type III engine at each station. CAL FIRE assumed DPA for 32,542 acres in the San Bernardino mountain area, which added 35,000 parcels that are subject to LE-100 inspections.

Recently, bark beetle activity and associated tree mortality, in the mountain areas of San Bernardino County, is increasing and is expected to continue 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 Southern California). The San Bernardino Mountains form a significant region of wilderness and wooded areas. This making the area popular for many types of outdoor recreation and host to numerous scout camps, church camps and conference centers. Many of these residing directly within SRA.

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. The mountain top watershed feeds into several lakes including Silverwood Lake, Lake Gregory, Grass Valley Lake, Lake Arrowhead, Green Valley Lake, Arrow Bear Lake, and Big Bear Lake. These are vital natural resources within the region and provide significant economic benefit to the surrounding communities. 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 forced 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. In 2020 the El Dorado fire began in Yucaipa and burned uphill towards the mountain top communities before stopping in the Jenks Lake area and burning just over 22,000 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
    - 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. Illegal Burning:
  - Provide education material to permit holders for burning (cooking and warming fires).

# 2. Use of Equipment:

- Reduce fires caused by use of equipment.
  - 1) Provide Public Education and information.
  - Reach out to cooperating agencies who routinely use equipment and perform hot work in the SRA. (Cal Trans, County Roads, and water districts.)
  - 3) Properly permit all hot work (Welding, Cutting and Grinding) within the SRA.
  - 4) Aggressively seek cost recovery when fire has escaped the project area requiring fire suppression action.
  - 5) Provide Public Education and information. 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 takes an active role in reducing the severity and spread of the bark beetle and associated mortality by felling and then treating the downed material.

#### Ongoing and future projects:

- 1) "Hubert Eaton Scout Ranch" in Cedar Glen, 2,431 acres:
  - Project includes reforestation, hand treatment, chipping, mastication, and pile burning.
  - Treatment has been completed by CAL FIRE, California Conservation Corps (CCC crews), and CAL FIRE contractors.
- 2) "Sawmill" in Twin Peaks, 120 acres:
  - Project includes hand treatment, chipping, mastication, and pile burning.
  - Treatment has been completed by CAL FIRE, California Conservation Corps (CCC crews) and CAL FIRE contractors.

- 3) "Upper Little Bear" (ULB) in Blue Jay, 40 acres:
  - Project includes hand treatment, chipping, and pile burning.
  - Treatment has been completed by CAL FIRE and California Conservation Corps (CCC crews).
- 4) "Camp Whittle" in Fawnskin, 144 acres:
  - Project includes reforestation, hand treatment, chipping, mastication, and pile burning.
  - Treatment has been completed by CAL FIRE and California Conservation Corps (CCC crews).
- 5) "Valley of Enchantment" (V.O.E) in Crestline, approximately 80 acres:
  - Pending joint project between the CAL FIRE San Bernardino Unit (BDU) and the United States Forest Service, San Bernardino National Forest, (BDF).
  - Project to include hand treatment and pile burning with the intent to broadcast burn.
  - Improves forest health and provides added protection to the local community and CAL FIRE infrastructure.
- 6) Communication Site fuels reduction:
  - A joint project between the United States Forest Service, San Bernardino National Forest (BDF) and the CAL FIRE San Bernardino Unit (BDU) to maintain clearance around the many repeater sites throughout the Battalion.
- 7) CAL FIRE San Bernardino Unit (BDU) will continue to actively seek out and engage land holders in the SRA with the goal of creating new VMP projects and reducing the overall fuel load within the SRA.
- 8) Continual hazard tree removal due to drought and bark beetle mortality.

# **COLLABORATION**

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

Organization	Title
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	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
Inland Empire Fire Safe Alliance	President
Mountain Rim Fire Safe Council	Member

# PRADO HELITACK OVERVIEW

Prado Helitack was established in 1990 as a CWN Helitack Program. A UH-1H Huey Helicopter was secured through the Federal Excess Program. CAL FIRE established a cooperative agreement with San Bernardino Co. Sheriff's. The Sheriff's provided Deputy Pilot's and CAL FIRE provided Helitack Fire Captains and trained Inmate Helitack Firefighters.

In 2014 CAL FIRE dissolved the cooperative agreement and established a permanent Helitack Crew with paid Firefighter I's and CAL FIRE Pilot's and CAL FIRE Helitack Fire Captains. The Air Rescue element was added to the initial attack program utilizing the permanently attached Helitack Crew.

In 2022 Prado Helitack transitioned from the UH-1H Huey Helicopter to the specifically designed for CAL FIRE S-70i Firehawk. The Firehawk capabilities include 1000-gallon fixed tank, Permanently attached hoist system, larger capacity to haul more passengers and cargo, and can reach up to 140 knots fully loaded with passengers. In the future the Firehawk will have a NVG capability.

The Firehawk will significantly increase our capability and our focus on keeping SRA wildland fire 10 acres or less 95% of the time.

# 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 2021, the San Bernardino Unit's Fire Prevention Bureau added an additional Fire Captain Specialist, bringing to the total staffing of the Law Enforcement Bureau to one Battalion Chief and four Fire Captain Specialists. The Battalion Chief and Fire Captain Specialists are fully sworn Peace Officers under California Penal Code Section 830.2(g). Their primary role is enforcing forestry and fire laws, as well as conducting other criminal investigations as needed. The Fire Prevention Bureau also has a Fire Prevention Specialist II position which provides more oversight and work toward fire and life safety education as well as manage the Youth Fire Setter Intervention and Prevention program, and the Bureau's VIPs. Additionally, because of SB 1241 and the Fire Prevention program, the Unit has 6 Defensible Space Inspectors (Forestry Aides). These inspectors are supervised through the Fire Prevention Bureau and will perform PRC 4291 Inspections throughout the Unit. In 2021, Assembly Bill 38 was enacted, requiring a defensible space inspection for home sales. These inspections are required for homes that lie within SRA, High or Very High Fire severity Zones. To accomplish these added inspections, the Unit was allotted a full-time Forestry Technician. In 2022, an additional limited-term Forestry Technician was added to the Unit's staffing.

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 social media platforms, 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 Captain Cal/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 Captain Cal/Smokey Bear fire education programs each year. This is supported by fire engine crews and the Unit's Fire

#### **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 youth involved fires.
- 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 predesignate 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.
  - 4. Establish a partnership and participate in the Los Angeles County Fair to provide CAL FIRE's mission of fire prevention through information and education.

# **COLLABORATION:**

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

Organization	Title
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 (BDU) is committed to serving and safeguarding the people and protecting the property and resources of California. This is accomplished using a variety of tools including manipulation of fuels, resource protection, education, enforcement, and fire protection. Manipulation of fuels is accomplished by reducing the density and continuity of fuels while increasing overall health of the vegetation community. Supporting healthy vegetation communities must also address impacts associated with pests, diseases, and mortality. Resource protection provides this support through identification of vegetation pest and disease issues, implementation of pest and disease control efforts, and reforestation activities. Every contact that is 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 so, or by offering technical or financial assistant to accomplish the work. Enforcement of State regulations, particularly in the forest practice arena, helps ensure 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 Department in a role commensurate with their training and experience.

The BDU Resource Management Division is comprised of a Forester II (Assistant Chief rank equivalent), a Forester I (Battalion Chief rank equivalent), an Environmental Scientist, and a Pre-Fire Engineer (Captain rank). Resource Management covers all State Responsibility Area (SRA) lands within San Bernardino, Inyo, and Mono counties. 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.

Much of the work done by Resource Management is in the San Bernardino mountains, the eastern end of the San Gabriel mountains, and the Owens Valley. Elevations range from approximately 1200 feet at the San Bernardino valley floor to over 10,000 feet. Owens Valley is in east -central California, between the Sierra Nevada Mountains on the west and the White & Inyo Mountains on the east, and includes the area drained by the Owens River and its tributaries. The Owens Valley bottom comprises the bulk of the SRA land in Inyo County, with an average elevation of 3,700 feet. The San Bernardino and San Gabriel Mountains 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.

Southern California's Mediterranean climate makes it chronically susceptible to drought conditions. The drought experienced from 2014 - 2018, as well as droughts prior to 2011, played a significant role in the large wildfires that occurred in the San Bernardino mountains over the past 20+ years – the Willow Fire in 1999, Old Fire in 2003, Grand Prix Fire in 2003, Grass Valley &

Slide Fires in 2007, Lake Fire in 2015, Pilot and Blue Cut Fires in 2016, and the El Dorado fire in 2020.

#### **GRANTS**

In 2014 CAL FIRE introduced two new grant funding sources: State Responsibility Area (SRA) Fire Prevention Fee (FPF) Fund and the Greenhouse Gas Reduction Fund. In fiscal year 2017 -2018, the Fire Prevention Fee was suspended until 2030 and the FPF Grant Program ended. The Greenhouse Gas Reduction Fund, now known as California Climate Investments (CCI), provides funding for the following CAL FIRE grant programs: Fire Prevention, Forest Health, Wildfire Resilience, Forest Legacy, California Forest Improvement (CFIP), Business and Workforce Development, and Urban Forestry. Ongoing CAL FIRE awarded grant projects within the Unit include:

# 1. **2016 – 2017 Forest Legacy Grants**:

San Bernardino Mountains Land Trust – Arrowhead Ridge

# 2. 2019 - 2020 Fire Prevention Grants (expiring in 03/2024:

- Mountain Rim Fire Safe Council Abatement Assistance 2020
- Wheeler Crest Fire Protection District Swall Meadows Fuel Reduction

# 3. 2020 – 2021 Grants (expiring in 03/2025)

#### Fire Prevention:

- Mountain Rim Fire Safe Council Community Chipping 2021
- Mountain Rim Fire Safe Council Hazardous Dead Trees 2021
- Whitebark Institute of Interdisciplinary Environmental Sciences Forty Acres Community Fuel Reduction
- Whitebark Institute of Interdisciplinary Environmental Sciences –
   Enhancing Community Wildfire Protection Planning in Inyo County

# Forest Health:

- National Forest Foundation San Bernardino National Forest Post-Fire Restoration & Forest Health Project
- Inyo National Forest Eastern Sierra Climate and Communities Resilience Project
- National Forest Foundation Landscape Scale Management to Combat Goldspotted Oak Borer in Southern California

# 4. 2021 – 2022 Grants (expiring in 03/2026)

<u>Southern Region Community Wildfire Prevention and Mitigation Program Direct Award:</u>

- Mountain Rim Fire Safe Council Regional Fire Safe Project
- San Bernardino County Fire Protection District SBCFPD Lake Arrowhead/Crestline Area Fuel Mitigation Project
- Whitebark Institute of Interdisciplinary Environmental Sciences Planning for Fuels Treatment on Tribal Lands in Inyo County

# Reforestation & Nursery Development:

 San Bernardino Mountains Land Trust – San Bernardino Mountains Land Trust Tree Nursery

# **Fire Prevention:**

- De Benneville Pines Inc. Fire Prevention at De Benneville Pines
- San Bernardino County Fire Protection District SBCFPD Fuel Mitigation
   & Plan Update Project
- Breathe Southern California Fontana Fire Prevention Education Project
- Mountain Rim Fire Safe Council Critical Infrastructure Fuel Reduction
- Whitebark Institute of Interdisciplinary Environmental Sciences Wildfire Prevention in the Eastern Sierra Visitor Education & Outreach
- Mammoth Lakes Fire Protection District Defensible Space and Home Hardening
- Bishop Paiute Tribe Bishop Paiute Tribe Fire Prevention

#### **PROJECTS**

Funding for Unit implemented fuel reduction, forest health, reforestation, and education projects also come from CCI. Current Unit projects include:

- Artesian VMP
- Calvert VMP
- Center VMP
- Dearborn Springs VMP
- Forestry Road Fuel Reduction Project
- Grass Valley Fuel Reduction (assisting USFS)
- High Desert Chipping Project
- Hubert Eaton Scout Reservation Fuel Reduction Project
- Insect Control Program (dead tree removal)
- Lone Pine Fuel Reduction Project
- Numu Tuna'e Prescribed Fire Project
- Onion Valley Fuel Break
- Saltcedar Burn Pile Project
- Sawmill Fuels Reduction Project (2021 Governor's Early Action Project)
- Upper Little Bear Fuel Reduction Project

Since 2007 Unit Resource Management staff has worked cooperatively with the Mountain Communities Wildfire Re-Leaf Program, administered by the Mojave Desert Resource Conservation District, reforesting burn areas or areas denuded by bark beetle infestations. Resource staff provides technical expertise to the working group for reforestation and directs crews on the ground at the time of planting. Approximately 12,000 trees were planted in the spring of 2022 at Hubert Eaton Scout Reservation by CCC Inland Empire Center crews. No planting will be done in 2023.

#### FOREST PRACTICE & ENVIRONMENTAL COMPLIANCE

Resource Management staff conducts Forest Practice inspections pursuant to the California Forest Practice Act. The inspections are performed to ensure the Forest Practice Rules (FPRs) are implemented to protect all natural and cultural resources in a forest environment. Most Forest Practice related work is in the form of Less Than Three Acre Conversion Exemptions and Timber Harvest Plan exemptions.

Resource Management staff conducts 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. The Resource Management staff also reviews CEQA related environmental documents for projects submitted by other government agencies. These types of proposed projects are located within the Unit, may have an impact upon the Department's fire and/or natural resource protection and management responsibilities, or require the Department's permits or approval.

#### **OUREACH & EDUCATION**

A priority for Resource Management is participation in information and education programs throughout the Unit. Resource Management staff participate in school or university presentations about forestry and fire, attend community meetings hosted by a variety of organizations, and teach and participate in the San Bernardino Forestry Challenge. The Unit Forester is a Qualified Inspector with the American Tree Farm System (ATFS), and the Unit promotes and encourages landowner participation in the ATFS.

#### SAWMILL DEMONSTRATION STATE FOREST

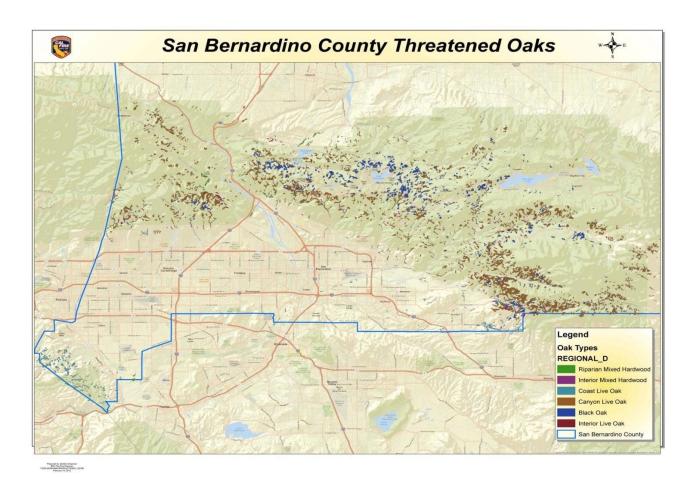
In 2018, Resource Management staff began discussions with the California Department of Fish (CDFW) and Wildlife regarding transferring jurisdiction of the Sawmill property in Twin Peaks from CDFW to CAL FIRE. In 2022, the transfer process was completed, and the Sawmill property became Sawmill Demonstration State Forest, part of CAL FIRE's Demonstration State Forest (DSF) system. The DSFs provide research and demonstration opportunities for a variety of natural resource management objectives including sustainable timber production, public recreation, fish and wildlife habitat, and watershed protection. BDU will continue management of Sawmill to achieve the goals of the DSFs in conjunction with the original acquisition purpose of the property as a wildlife corridor, and research and study opportunities for CDFW.

# **FOREST HEALTH**

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, Orange, and Los Angeles Counties. In 2017, Los Angeles County Fire Department received a Forest Health grant to remove GSOB infested trees in the SRA community of Green Valley. GSOB was found in Oak Glen in San Bernardino County in 2018 and in Big Bear and Wrightwood in San

Bernardino County in 2019. Infested trees were identified in Forest Falls in 2020. It is believed to have been transported into and throughout southern California via movement of infested firewood. Several agencies have received state grant funds to help address the GSOB issue in southern California including the Inland Empire Resource Conservation District and the National Forest Foundation. 2022 BDU GSOB activities included coordinating and participating in public education activities, assisting partners with grant execution, and surveying of submission of suspect trees by the public.

Other forest health issues in the Unit include the Invasive Shothole Borer, foamy bark canker, and native bark beetles. ISHB in the Unit has so far been limited to isolated pockets, primarily in urban areas in the western part of the County. Foamy bark canker is a fungal pathogen transmitted by the native western oak bark beetle. In 2021 a small number (~5-10) of trees infected with foamy bark canker were brought to the attention of Resource Management by members of the public, primarily in the Lake Arrowhead and Arrowbear areas. Because this disease is transmitted by a native beetle and infections are isolated, it is currently of a low priority. Pockets of conifer mortality continue to occur throughout the mountains due to native bark beetles. Tree mortality due to native forest pests like the western pine, Jeffrey pine, and fir engraver beetles will continue to fluctuate as forest health and environmental conditions impact pest populations. Unit Resource Management will continue to identify, implement, and support multi-agency efforts to address impacts associated with these pests.



#### **PRIORITIES**

Resource Management priorities in fuels reduction/fire prevention are as follows:

- 1. Develop and implement internal fuels and fire prevention projects.
- 2. Assist community groups and private landowners in planning and implementing fuel reduction and vegetation management projects.
- 3. Work with partners to address forest pest and forest health issues.
- 4. Continue to enforce and ensure compliance with the Forest Practice Rules.
- 5. Actively engage in forestry, fire, and vegetation management public education.
- 6. Maintain good relations with cooperators and develop new partnerships.

#### **COLLABORATION**

# **COMMUNITIES/AGENCIES/FIRE SAFE COUNCILS**

Partners with whom the Resource Management Division regularly collaborate are included in the following table. Their organization and title are indicated below:

Organization Title		
U.S. Forest Service	Entomologist	
Mountain Rim Fire Safe Council	President	
Inland Empire Resource Conservation District	Program Manager	
Los Angeles Department of Water and Power	Representative	
San Bernardino County Fire	Division Chief, Deputy Fire Marshal	
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	Area Vegetation Manager	
San Bernardino County Code Enforcement	Representative	
Angelus Oaks Fire Safe Council	Member	
Wrightwood Fire Safe Council	Member	
Wheeler Crest Fire Safe Council	President	
Inland Empire Fire Safe Alliance	President	
Carbon Canyon Fire Safe Council	Member	
40 Acres Fire Safe Council	President	
Independence Fire Safe Council	President	
Devore Rural Communities Fire Safe Council	Member	
Mt. Baldy Fire Safe Council	Member	

#### TRAINING BUREAU

#### **OVERVIEW**

The Training Program in the San Bernardino Unit is responsible for meeting and maintaining all 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 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, and Rancho Cucamonga that include 22,756 acres of protection area.
- Dispatching Contracts for six agencies.
- · Prado Helitack Base.
- Fire Center staffed with 5 Firefighter I Handcrews, three Conservation Camps, and one Inmate Training Center.
- Thirteen State Fire Stations.
- Approximately 408 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 Solutions 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**

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
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
San Manuel 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 6 weeks of rigorous physical conditioning intended to transition inmates, into physically fit inmate Firefighters. CDCR Office of Correctional Education has statewide standardized "fitness components" that the inmates can challenge each week, during the 6-week period. After passing all the components, they must pass the adopted "Pack Test" which is a 3-mile walk, on level ground, with a 45-pound weighted vest. Inmates must complete this Pack Test in 45 minutes or less, to graduate PFT, and be reassigned to FFT.

Once assigned to FFT, the inmates will complete a minimum of 58-hours of training, which is designed to train Entry Level Inmate Crew Fire fighters to basic standards. This course was developed by the CAL FIRE Academy, was revised in 2019, and is presented to the inmates by CAL FIRE Captains. The first portion is a minimum of 32 hours of classroom instruction. The course material covers, Wildland Fire Safety and Survival, S-190 Wildland Fire Behavior, Basic First Aid, CPR/AED, Fire Control Strategy and Tactics, Personal Protective Equipment, Hand Tools, Chainsaw Safety, Hydration and Heat Injuries, Aircraft and Bulldozer Safety, etc. A cumulative minimum of 80% is required to pass the classroom portion and move onto the field training.

The minimum 26-hour field portion is led by a CAL FIRE Fire Captain and takes place outside of the prison. This training consists of daily hikes, tool out procedures, fire shelter deployments, line construction, hose drills, tool sharpening, and a final 1-hour test hike with full PPE that they must pass to graduate the Forestry Training Program. Once FFT is complete, these Inmate Fire Fighters will continue to either Puerta La Cruz (CAL FIRE) or Malibu (LA County) Fire Camp. There are 300 beds available between these 2 fire camps, to accommodate these female Inmate Fire Fighters, where they will complete their incarceration terms, while also serving their communities. CIW has the capacity to train 30 new inmates per month.

#### **PRIORITIES**

- A. Provide sufficient Fire Crew Captains to instruct, train and supervise camp endorsed inmates 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 (Malibu CC) and CAL FIRE (Puerta La Cruz CC) with qualified female inmate firefighter personnel.

#### **CAL FIRE CIW STAFFING**

- Battalion Chief (1)
- Training Fire Captains (4)

# **COLLABORATION**

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

Organization	Title
BDU	Battalion Chief
CDCR	Captain
MVU	Assistant Chief
LAC	Captain

# FENNER CANYON CONSERVATION CAMP OVERVIEW

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 type I 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 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. Thus, Los Angeles County Fire has been given the authority to dispatch Fenner Canyon Crews to initial attack responses within the state responsibility area (SRA) that are protected, under contract, by the Los Angeles County Fire Department. 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 2017, the fire crews have logged a combined total of 6,274 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. Angeles National Forest (ANF):

• Under the special use permit, Fenner Canyon CC provides the ANF with two crews per day. 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.

# C. 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 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 to provide San Bernardino County Fire Department personnel adequate working space around hydrants during emergency situations.

# D. 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.

# E. California Department of Water Resources:

• Fenner Canyon Crews provide weed abatement along the California aqueduct and around various water treatment facilities in San Bernardino, Los Angeles, and Kern Counties as well as performing litter pick up and invasive species removal.

# **COLLABORATION**

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

Organization	Title	
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	
CITY of HIGHLAND	Public Works Director	
PATTON STATE HOSPITAL	Chief Plant Op's 3	
CALIFORNIA DEPT OF WATER RESOURCES	Representative	

#### PILOT ROCK FIRE CENTER

#### OVERVIEW

Pilot Rock Fire Center is 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.

Pilot Rock Fire Center is staffed with one 16-person hazard tree removal module, and 4 additional fire crew modules each staffed with 16 firefighters, a Fire Apparatus Engineer, and a Fire Captain. Staffing for Pilot Rock Fire Center consists of 1-Division Chief, 1-Battalion Chief, 6-Fire Captain B's, 6-Fire Apparatus Engineers, 80 Fire Fighter I's, 1- Heavy Equipment Mechanic, 1 Staff Services Analyst, 2 Cook Specialist I's, 2 Cook Specialist II's 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, kitchen, automotive shop, saw shop, waste treatment plant and lab.

#### **RESPONSE AREA**

Pilot Rock Fire Center'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 and 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. 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.
- B. 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.

# C. Caltrans

 CALTRANS projects run along mountain state highways 330, 138, and Hwy 18. Pilot Rock Crews commonly clear State rights-of-way 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 nonnative plants, and debris.
- 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.

# D. 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.

# E. 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.

# F. 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.

# G. Insect Control Program (ICP):

Pilot Rock crews carry out the Unit's Insect Control Program. CAL FIRE is given
authority to use monies for 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 removal cost to control the spread of bark
beetles and reduce the fire risk. Ultimately it is the landowner's responsibility to
remove hazardous trees.

# H. 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.

# **COLLABORATION**

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

Organization	Title
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 CONSERVATION CAMP OVERVIEW

Prado Conservation Camp 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 currently 91 inmates housed at Prado CC, which make up four type I fire crews, Mobile Kitchen Unit, Food Dispensing Unit and Regional Staging Area. In July 2021 a new Mobile Kitchen Unit was placed in service and can feed from 500 to 5000 people. The Food Dispensing Unit was placed into service in 2022 and can feed up to 300 people. Regional Staging area is used to support the movement and organization of resources from numerous departments from Ca. or from out of state to be appropriately assigned to emergency incidents in the state. The support staff for the crews and camp, consists 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 CAL FIRE paid Helitack program with hoisting capabilities designed to assist with rescue efforts 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 has completed 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, 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, but are not limited to 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, such
as 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 diligently
throughout the park, performing fuel break maintenance, vegetation management,
trail maintenance, tree felling and trimming, and road/drainage repair at creek
crossings.

# D. Yucaipa City Fire (CAL FIRE)

• Crews work at fire stations doing general yard maintenance, hazard fuel removal, and general maintenance.

# E. 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.
- The Orange County Coast Keeper 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.

# F. 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.

# G. 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.

# H. City of Corona / Public Works Department

 This project is in the Prado Flood Basin and is limited to ponds 9 and 10 near Greenbriar Street. Crews remove trash and debris from both ponds and the surrounding areas. They also remove nonnative plant species, like Tamarisk and Castor Bean, from the ponds, and provide hazard fuel reduction and litter removal around various city parks throughout the City of Corona.

# I. United States Forest Service / San Dimas

 Prado CC works 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.

# J. San Bernardino County Floods Control District

 Work is performed at the various flood control areas within San Bernardino County consist of vegetation removal, weed abatement, fuels reductions, fuel breaks, and facility/grounds maintenance.

# K. 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.

# L. 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.

# M. Chino Valley Fire Department / Carbon Canyon

 Through a Federal Grant, Chino Valley Fire Department is using crews to create 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.

# N. 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.

# O. California Department of Fish and Wildlife

- The Fish and Wildlife facility, located the City of Chino Hills, is primarily used as a storage area. Work performed includes fuels reduction, hazard abatement and clearance of facilities, limb and pruning of trees, and light construction on buildings.
- 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 vital fuels projects and community enhancements.

# P. CALTRANS DOT (Inland Empire Division)

 Work in conjunction with CALTRANS personnel to complete roadside cleanup on HWY 71 from Riverside County line to LA County line and from the 60 Fwy and 10 Fwy from Riverside County line and LA County line. Annual HWY 142 fuels reduction form Orange County line to San Bernardino County line consist of 10ft highway brush clearance and reduction of fuels along escape routes in the Carbon Canyon area.

# Q. Chino Water Basin District

- Work is performed at the various flood control areas within San Bernardino County and consist of vegetation removal, weed abatement, fuels reductions, fuel breaks, facility/grounds maintenance and trash removal.
- R. Highland City Fire (CAL FIRE)
  - Crews work at fire stations doing general yard maintenance, hazard fuel removal, and general maintenance.

# **COLLABORATION**

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

Organization	Title
California Dept. of Forestry	TRAVIS THOGMARTIN
Chino Hills State Park	BEN SPIVA
San Bernardino County Floods	CHRIS SCHIERHOLD
Corona Airport	CURTIS SHOWALTER
California Dept. of Transportation	JESSE POLOMINO
City of Corona/Corona Fire Dept	XANTE BAKER
California Dept. of Corrections (CIM)	ARMANDO ESPINOZA
Inland Empire Utilities Agency	HARLAN DELZER
California Dept. of Fish & Wildlife	DANIELLE STEWART
City of Corona Parks & Recreation	MOSES CORTEZ
City of Corona Public Work Dept.	MOSES CORTEZ
United States Forest Service	DAVE GLABADON
City of Highland	SEAN LANDAVAZO
City of Yucaipa	GRANT MALINOWSKI
CALFIRE South Ops (CSR)	FERNANDO HERNANDEZ
Inland Empire Utilities Agency	HARLAN DELZER
California Dept. of Fish & Wildlife	DANIELLE STEWART

# OWENS VALLEY CONSERVATION CAMP 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 type I fire crews and the support staff for the crews and camp. Staffing consists of 1 Division Chief, 2 Battalion Chief, 10 Fire Captain B's, 1 Office Tech, 2 Heavy Equipment Operator/ Mechanic, and 1 Waste and Sewer Plant Operator.

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):
  - Owens Valley District (OVD) & California Desert District
  - The area north of Coso Junction (CDD)
  - 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:
  - The area northwest of Death Valley National Park boundary line.
  - 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, Olancha, Mono City, Wilkerson, and Swall Meadows.

- C. 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.

# USFS/BLM

# A. Swall Meadows:

• Fire Crews utilized to thin dead trees in forest areas affected by the Round Fire in and around the community of Swall Meadows. This will create a shaded fuel break to protect against future fire activity.

# B. Mammoth Lakes:

 Fuels reduction will be managed through brush clearing, tree liming and felling, and preparing fuels for chipping and burning. This will occur within the town and surrounding USFS Lands, including Reds Meadow and Devils Postpile.

# C. BLM Campgrounds:

• General maintenance and clean up in the following Campgrounds: Tuttle Creek, Goodale Creek, Horton Creek, and Crowley Lake. Crews to remove overgrown brush and mitigate hazardous trees. This will improve public safety and risk of fire.

# LOS ANGELES CITY/LADWP

# A. Control Gorge:

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

#### B. Russian olive:

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

#### C. Independence Woodlot:

• Crews will need to trim out all weedy tree species and cut saplings for replanting in the spring.

# D. Division Creek Power Plant:

• Clear brush, debris, and tree limbs from around Power Plant and Intake structures to provide defensible fire break areas.

#### INYO COUNTY:

# A. 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.

# B. Park and Recreation:

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

# C. 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 to keep the waterways

clear that go under the roadways, if waterways clog up with debris the water will create damage to the road.

# D. Airports:

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

# E. 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.

# F. Bishop Paiute Indian Reservation:

 Projects consist of removing hazardous Fuels reduction for the Bishop Paiute Tribe and create a defensible space for tribal structures. Maintain multiple waterways by cleaning overgrown brush and fallen trees.

# G. 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 swap meet, Fall Colors car show).

# H. 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.

# I. Round Valley School District:

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

# J. 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.

# K. Laws Railroad Museum:

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

# L. National Park Service – Manzanar Historical Site

• Clear brush, debris, and tree limbs from around Manzanar and fences property line to provide defensible fire break areas.

# MONO COUNTY:

# A. Waste Management: Benton Crossing Landfill

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

# B. Mammoth Lakes Fire Department:

 The crews perform winter snow removal around the hydrants 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.

#### C. Town of Mammoth Lakes:

• The crews will help thin trees in forested areas to provide fire breaks and improve overall health of the forest. In addition to vegetation management in populated areas, crews will assist the trails crews in creating new hiking and mountain biking trails around the outskirts of town, while maintaining existing trails.

# D. 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.

# E. 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 or pile for burning.

# F. Swall Meadows Fire Safe Council:

 Crews will perform hazardous fuels reduction along travel corridors accessing the community of Swall Meadows 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**

Organization	Title
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

Organization	Title
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



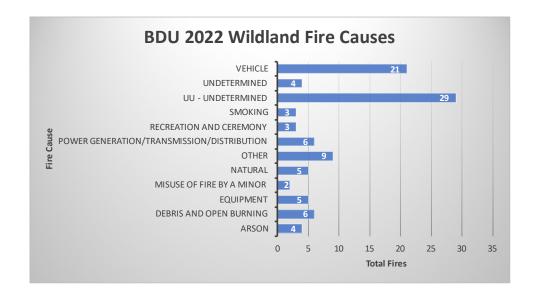


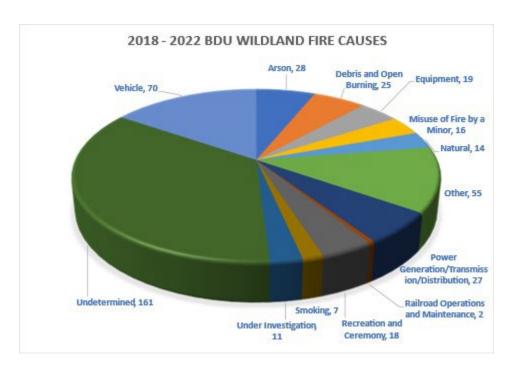
# FIRE PREVENTION BUREAU CAL FIRE SAN BERNARDINO-INYO-MONO UNIT (BDU) 2022 IGNITION MANAGEMENT PLAN

**Battalion Chief Matt Kirkhart** 

2022 Ignition Statistics

#### **FIRE CAUSES**





#### **INFORMATION and EDUCATION**

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

# **VOLUNTEERS IN PREVENTION (VIP)**

The BDU VIP Program assists the Unit in a variety of Fire Prevention Activities. The Unit currently utilizes the VIPs 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.

#### **PUBLIC INFORMATION**

The Fire Prevention Public Information Office actively works with the media 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. All burn permits are issued through the online process developed by the Department.

# **YOUTH FIRE SETTER**

The San Bernardino Unit has recently developed a Youth Fire Setter Intervention and Prevention program. The Unit has implemented this program in the SRA and both contract cities. The program will consist of the youth and parents/caregiver's 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 public health or juvenile justice system.

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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 youth fire-setter's needs
- Provide life skill training and education
- Provide referrals to family counseling or behavioral health if necessary
- Evaluate fire-setters and program progress

#### **DEFENSIBLE SPACE PROGRAM**

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 statues 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 regarding vegetation management, land use and more. However, aside from fire retardant roofing requirements, little had been accomplished at the state regarding 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 outdated 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 of power poles that contain equipment that that contain non-exempt equipment. PRC 4293 states 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 to reduce vegetation fires that were caused when trees, grasses and power lines interacted with one another.

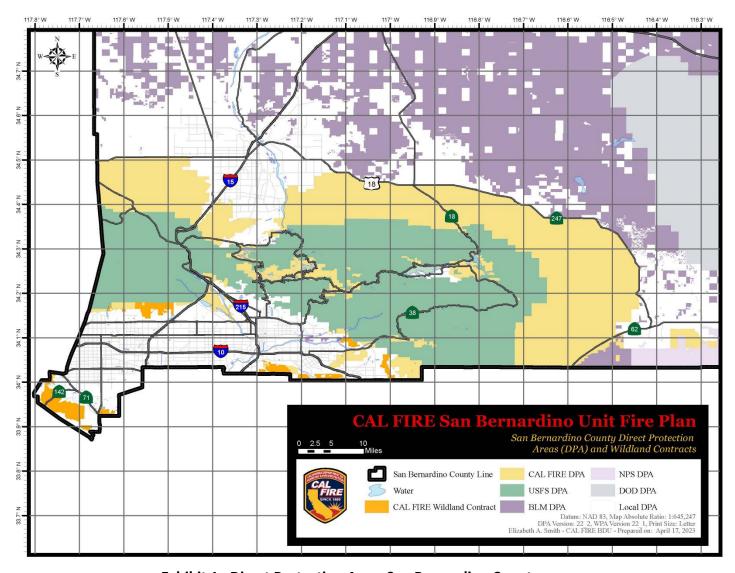
Every year, San Bernardino, Inyo, Mono Unit performs inspections on thousands of power poles within San Bernardino County. The inspectors are checking to see that the clearance mandates of the Public Resources Code, sections 4292 and 4293 are in their annual compliance.

#### FIRE PREVENTION SIGNS

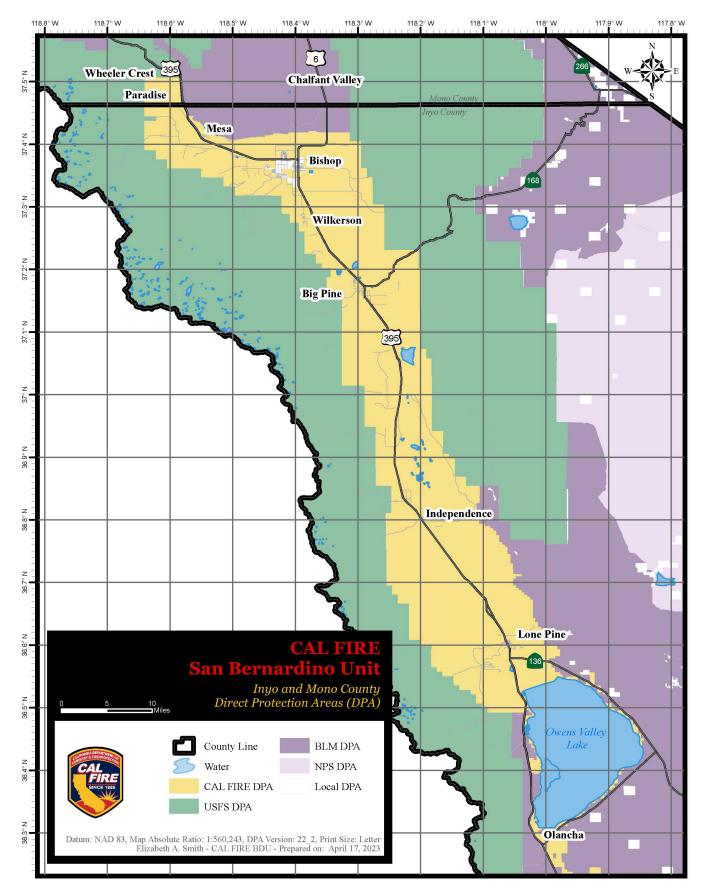
The Unit has numerous Fire Prevention Signs and has strategically placed within the Unit. These signs have not been maintained or accounted for within the Unit or Battalions for many years. The signs in place in the battalions identify defensible space requirements and fire specific issues from careless 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 Fire Prevention Bureau's Primary targets for the Burn Plan are as follows:

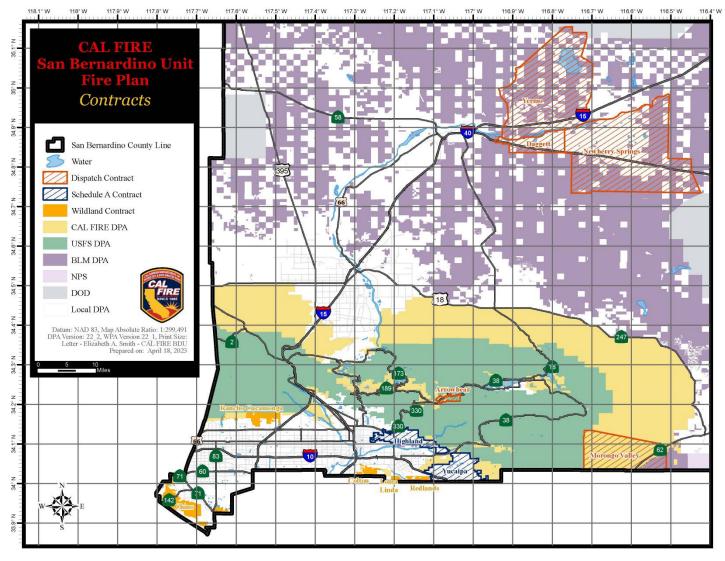
- A. Educate and assist the Chief Officers in the importance of documentation and overall needs to their own battalions pertaining to Fire Prevention.
- B. Defensible Space awareness and public education.
- C. Fire Prevention Signs accountability and maintenance.
- D. Interacting with the Fire Safe Councils 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 VIPs throughout the Unit.
- G. Establish the Unit Fire Permit Administrative Burn Plan



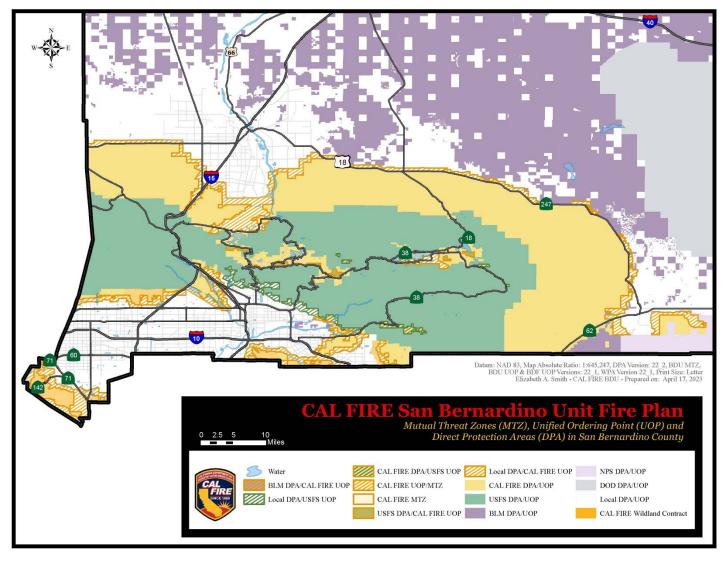
**Exhibit 1. Direct Protection Area: San Bernardino County** 



**Exhibit 2. Direct Protection Areas: Inyo and Mono Counties** 



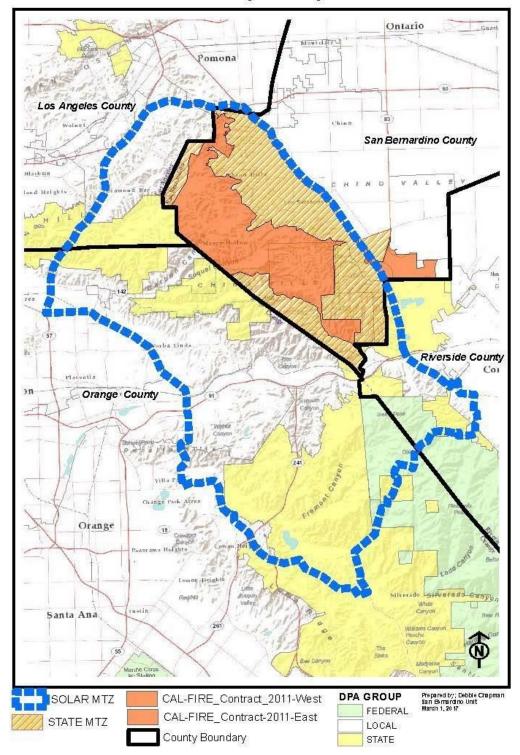
**Exhibit 3. CAL FIRE Wildland Contracts and City Contracts** 



**Exhibit 4. Mutual Threat Zone: San Bernardino County** 

# SOLAR Mutual Threat Zone (MTZ)

San Bernardino - Orange - Los Angeles - Riverside



**Exhibit 5. SOLAR Mutual Threat Zone (MTZ)** 



# PRE-FIRE PROJECTS

# San Bernardino Unit (BDU)

01/01/2022 thru 04/15/2023

01/01/2022 thru 04/15/2023 Treatment   Tre				
PROGRAM	PROJECT NAME	Project Status	Footprint Acres	Treatment Footprint Miles
Fire Plan	2018 Community Hazardous Fuels Reduction Projects	Active		
Fire Plan	Abatement Assistance 2020	Active		
Fire Plan	Adopt-a-Hwy: Pilot Rock	Complete in Maintenance	54.21	
VMP	Artesian	Active	1,402.72	
Fire Plan	BIG BEAR BDF	Active	100.37	
Fire Plan	Big Bear Hazardous Tree Mitigation Program	Active		
Fire Plan	Big Pines-Ball Flat Area	Complete	26.57	
Fire Plan	Cajon Pass Fuels/Ignition Reduction	Complete		12.73
VMP	Calvert	Active	250.89	
Fire Plan	Camp Whittle Fuels Reduction Project	Complete in Maintenance	120.49	
Fire Plan	CDFW Swall Meadow	Active	11.72	
VMP	Center	Active	291.24	
Fire Plan	CHINO HILLS BALDY	Active	8.33	
Fire Plan	CHINO HILLS BANE	Active	83.38	
Fire Plan	CHINO HILLS OLINDA	Active	8.13	
Fire Plan	Community Chipping 2021	Active	*****	
Fire Plan	Community Defense Program	Cancelled		
Fire Plan	CORONA AIRPORT	Active	32.03	
Fire Plan	Crafton Hills College- Fuels Reduction	Complete in Maintenance	17.72	
Fire Plan	Crafton Hills Truck Trail	Active	5.27	
Fire Plan	Crestline Station Fuels Reduction	Planned	78.58	
VMP	Dearborn	Active	4.75	
Fire Plan	DESERT FRONTAGE	Complete in Maintenance	80.06	
CFIP	Emery CFIP 2020	Active	196.19	
Fire Plan	Enhancing Community Wildfire Protection Planning in Inyo County	Active	100.10	
Forest Health	ESCCRP Phase I Implementation	Active	2,985.35	
Fire Plan	Fire Prevention Materials	Complete		
Fire Plan	Forty Acres Community Fuel Reduction	Active	33.55	
Fire Plan	Hazardous Dead Trees 2021	Active		
Fire Plan	Hazardous Tree Removal-Insect Control Program	Active		
Fire Plan	HIGH DESERT TRAIL HTR	Active	191.23	
Fire Plan	Hubert Eaton Boy Scout Reservation	Active	415.82	
Fire Plan	HWY 142 EVACUATION ROUTE	Active	44.76	
Fire Plan	LADWP INDEPENDENCE PILES	Active	86.51	
Forest Health	Landscape Scale Management to Combat Goldspotted Oak Borer in Southern California	Active	1,394.28	
Fire Plan	MANZANAR	Active	38.03	
Fire Plan	Mountain Rim FSC Community Chipping	Complete		
Fire Plan	Mountain Rim FSC Hazardous Tree Removal	Active		

	Totals		13,061.01	14.51
Fire Plan	Wildfire Prevention in the Eastern Sierra: Visitor Education and Outreach	Active		
Fire Plan	USFS Grass Valley	Active	78.52	
Fire Plan	Upper Little Bear	Complete in Maintenance	54.52	
Fire Plan	Swall Meadows Fuel Reduction	Active		
Fire Plan	Strawberry Peak	Complete in Maintenance	11.59	
Fire Plan	SRA Hazardous Tree Mitigation Program	Complete	7.64	
Fire Plan	Smokey Bear Park	Active		
Fire Plan	Silverwood Lake- Fuels Reduction	Complete in Maintenance	40.71	
Fire Plan	SBCo Special Districts- Fuels Reduction	Complete	122.42	
Fire Plan	SBCo Parks and Recreation- Fuels Reduction	Complete in Maintenance	91.53	
Fire Plan	SBCo Flood Control	Complete	146.47	
Fire Plan	Sawmill Fuels Reduction Project	Active	350.66	
Fire Plan	Sawmill Fuel Reduction Project (EA)	Active	118.01	
Forest Health	San Bernerdino National Forest Post-Fire Restoration and Forest Health Project	Active	3,629.24	
Fire Plan	Salt Cedar LADWP	Active	300.70	
Fire Plan	Pilot Rock	Active	85.93	
Fire Plan	Phelan Chipping Days	Active		
Fire Plan	Pendleton-Yucaipa	Active	6.84	
Fire Plan	Owens Valley Camp Fuel Break	Complete in Maintenance		1.78
Fire Plan	ORISKANY UNIT 42	Active	49.04	
Fire Plan	Onion Valley	Active	5.01	
Fire Plan	MOUNTAIN TOP CHIPPING	Active		
Fire Plan	Mountain Rim FSC Living w/ Wildfire 2019	Active		

# **APPENDIX B: ANNUAL ACCOMPLISHMENTS REPORTING (2022)**

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 2022, the San Bernardino Unit continued to make great strides in fostering inter-agency relations, collaboration, and abiding by the goals and objectives set forth in the Strategic Fire Plan for California.

In 2022, the San Bernardino Unit staffed 5 full time Firefighter I hand crews out of the Pilot Rock Fire Center, available for emergency response as well as fuel reduction work. Additionally, a full time CCC hand crew from the Pomona Center was based out of Unit Headquarters in San Bernardino.

2021-2022 Fire Prevention grants were awarded in March 2022 to the Mountain Rim Fire Safe Council, San Bernardino County Fire Protection District, Whitebark Institute of Interdisciplinary Environmental Sciences, De Benneville Pines, Breathe Southern California, Mammoth Lakes Fire Department, and the Bishop Paiute Tribe. 2020 and 2021 Fire Prevention grant projects continued with implementation, supporting fuel reduction and education programs in Big Bear City, Running Springs, Crest Forest, Arrowbear, Crestline, Valley of Enchantment, Twin Peaks, Green Valley Lake, Lake Arrowhead communities, and Mammoth. (see Appendix A for a complete list of projects).

Unit personnel continued work on fuel reduction projects in the San Bernardino Mountains including the Hubert Eaton Scout Reservation fuel reduction project in Cedar Glen, the Upper Little Bear fuel reduction project in Blue Jay and assisting the USFS with implementation of their Grass Valley fuel reduction project. Additionally, the San Bernardino Unit, San Bernardino County Fire, and the USFS worked collaboratively to reduce fuels around communications infrastructure utilized by all emergency response agencies in San Bernardino County. The Insect Control Program based out of Pilot Rock Fire Center focused efforts on removing and treating trees actively infested by native and invasive pests.

After several years, Unit and California Department of Fish and Wildlife (CDFW) personnel completed the Transfer of Jurisdiction for the Sawmill property, creating the Sawmill Demonstration State Forest (DSF). Sawmill DSF is 120-acres of mixed conifer forest and is now the southernmost DSF in the State. Unit personnel began development of a CalVTP project for the property. BDU will continue management of Sawmill to achieve the goals of the Demonstration State Forest System in conjunction with the original acquisition purpose of the property as a wildlife corridor, and research and study opportunities for CDFW.

Unit personnel continued work on fuel reduction projects in the Eastern Sierra Division as well including the Dearborn Springs VMP, Onion Valley Fuel Break, and Saltcedar Burn Pile project. There are several other approved fuel reduction and prescribed fire projects in the Eastern Sierra Division where crews will begin work as other projects are completed.

The San Bernardino Unit is collaborating with communities and stakeholders to limit the movement of Goldspotted Oak Borer (GSOB). GSOB was found in Oak Glen in San Bernardino County in 2018 and in Big Bear and Wrightwood in San Bernardino County in 2019. An additional infestation was identified in Forest Falls in 2020. Infested trees in Oak Glen were removed and treated in 2022 through a partnership with the Inland Empire RCD. Stakeholders representing local, state, and federal governments, non-profits, academia, and the public continued to meet to develop a GSOB response plan focusing on surveying, monitoring, outreach, and education. The group continues to meet to address the evolving GSOB situation in San Bernardino County.

For the past 22 years, the CAL FIRE San Bernardino Unit and Southern California Edison participate in Operation Santa Ana. Operation Santa Ana was initiated in 2000 as a response to many 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 (PIO) actively works with the media to keep the public informed on fire safety, wildfire awareness, and resource management issues. Public Information Officers utilized social media and press releases throughout the year to remind residents of items such as: defensible space requirements, burn permit requirements, burn permit restrictions, ready-set-go campaign information, wildland fire incident information, tree mortality and bark beetle issues, and fire prevention fee grant opportunities.

The San Bernardino Unit is actively 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."

DATE: 05/01/2023

Unit Chief, San Bernardino-Inyo-Mono Unit