



# *Unit Strategic Fire Plan San Benito-Monterey*



*Last update: 25 April 2018*

## UNIT STRATEGIC FIRE PLAN AMENDMENTS

<u>Date</u>	<u>Section Updated</u>	<u>Page Numbers Updated</u>	<u>Description of Update</u>	<u>Updated By</u>
4/15/13	I - Unit Overview	4, 5	Unit resources & Aid Agreements	CST
4/15/13	III - Values	7 - 16	Replaced wording - Priority "Landscapes" with "Areas"	CST
4/15/13	Appendix A	36 - 50	Updated Battalion Projects	CST
4/15/13	Appendix C	52	Updated Ignition Data	CST
4/23/13	Exhibits: Maps	61	Fire History Map	CST
5/21/13	Appendix B	51	Deleted "Unit Goals & Objectives"	CST
5/21/13	Appendix B / C	51 - 52	Moved Ignition Data to App - B	CST
9/10/13	I - Unit Overview	5	Deleted "Carmel Fire Department"	CST
9/25/13	Information & Education	20	Updated ignition issues	CST
1/07/14	Dispatch Agreements	5	Deleted "Monterey Airport Fire District"	CST
4/26/14	Appendix A	36 - 50	Updated Battalion Projects	CST
5/9/14	Section II - Collaboration	6	Added stakeholders	CST
12/19/14	Battalion/Program Plans	29	Combined Batt 7 with Batt 5	CST
12/19/14	Appendix A	49 - 50	Combined Batt 7 with Batt 5	CST
4/1/16	Annual Accomplishments	57-58	Updated Annual Accomplishments	EPM
4/1/16	Appendix A	40 - 48	Updated Battalion Projects	EPM
4/1/16	Exhibits: Maps	50 - 58	Unit Maps and Battalion Maps	EPM
4/1/16	Figure C: Fire History Map	56	Updated Fire History Map	EPM
5/2/17	Annual Accomplishments	55-56	Updated Annual Accomplishments	EPM
5/2/17	Figure C: Fire History Map	54	Updated Fire History Map	EMP
5/2/17	Appendix A: Pre-Fire Projects	33-45	Updated Appendix A: Pre-Fire Projects	EMP
5/2/17	Appendix B: Ignition Data	46-47	Updated Appendix B: Ignition Data	EMP
4/16/18	Appendix A: Pre-Fire Projects	33-45	Updated Appendix A: Pre-Fire Projects	EMP
4/16/18	Appendix B: Ignition Data	46-47	Updated Appendix B: Ignition Data	EMP
4/16/18	Exhibits: Maps	48 - 54	Unit Maps and Battalion Maps	EMP
4/16/18	Figure C: Fire History Map	54	Updated Fire History Map	EMP
4/16/18	Annual Accomplishments	56-57	Updated Annual Accomplishments	EMP

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## SIGNATURE PAGE

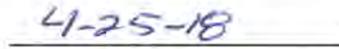
### Unit Strategic Fire Plan developed for San Benito-Monterey Unit:

This Plan:

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



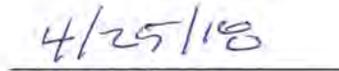
**Unit Chief**  
Brennan Blue



**Date**



**Pre-Fire Engineer**  
Elliot Maiorana



**Date**

## EXECUTIVE SUMMARY

California's Strategic Fire Plan is the state's road map for reducing the risk of wildfire. By placing the emphasis on what needs to be done long before a fire starts, the Strategic Fire Plan seeks to reduce firefighting costs and property losses, increase firefighter safety, and to contribute to ecosystem health. The San Benito – Monterey Unit, with the cooperation of key stakeholders, has designed a plan with the intention of meeting the goals set by both the stakeholders and the California Strategic Fire Plan. Pre-fire management projects are designed to reduce costs and losses, especially during periods of severe fire weather. With the use of fire resistant landscaping, mechanical fuels treatment, prescribed burns, building construction standards, infrastructure, land use planning and pre-fire safety zones and escape plans, the Unit strives to keep what would otherwise be a large, catastrophic fire, to smaller fire with less intensity, reducing suppression costs and property loss.

The San Benito-Monterey Unit management intends to support the Fire Plan and make it successful by meeting the following objectives:

- Collect, analyze and prepare data to assess communities at risk and in need of fuel reduction or other projects
- Work with grant writers and stakeholders to secure funds to implement projects.
- Utilize CAL FIRE personnel and resources in conjunction with other public and private efforts to assist with the project work on the ground.
- Educate the public on fire prevention and incorporating fire resistant landscaping and construction to their property, as well as hazardous fuel reduction to keep their lives, homes, property and natural resources safe from catastrophic wildfires.

With these goals in mind, the Unit strives to reduce fire suppression costs, property loss and damage to our environment and local ecosystems in the San Benito-Monterey Unit through our pre-fire work and by protecting life, property and the environment from destructive wildfires.

## **SECTION I: UNIT OVERVIEW**

### **UNIT DESCRIPTION**

The San Benito-Monterey Unit is located along the central coast between San Luis Obispo County to the south and Santa Cruz and Santa Clara counties to the north. The Pacific Ocean abuts the western side of the Unit and the Diablo Mountains and the San Joaquin Valley lie to the east. The Los Padres National Forest lies along the coast south of the Carmel Highlands encompassing the Ventana Wilderness and the Silver Peak Wilderness. The community of the former Ft. Ord also lies within the Unit and has largely become Bureau of Land Management (BLM) land for public recreational use. The Pinnacles National Monument is centered in the Unit in both Monterey and San Benito counties.

The Unit encompasses over 3 million acres, in which 2.1 million acres are State Responsibility Area (SRA), representing one of the largest state responsibility jurisdictions in CAL FIRE.

The topography of the unit varies from steep and rugged mountains with moderate to heavy vegetative cover to rolling hills used for livestock grazing. Plant species vary by aspect, slope, elevation, soil type, past fire history and distance from the coast. The predominant vegetation types are coastal sage, chaparral, and oak/grass woodland, with the Monterey Peninsula supporting stands of various coastal tree species.

The weather in the unit is divided into two basic patterns. The northwestern area of the unit experiences a common coastal weather pattern with low clouds and fog which by mid-day give way to temperatures in the mid 70's to 80's, recovering in the evening with the marine layer moving in. This tends to keep fires near the coast to the first burn period. The eastern and southern areas of the unit generally have less fog and temperatures commonly reach the 90 to 100 degree range with strong afternoon valley winds upwards to 10 -15 mph. Fires in the eastern and southern parts of the Unit have greater potential of going into extended attack, especially late in the fire season when heavier fuels are dry. Winters are mild with rainfall from 7 to 30+ inches. Wind speed and direction is variable, but is predominantly northwest at 7-10 MPH.

The coastal weather influence, together with periods of extreme fire weather conditions, provides a window for extreme wildland fire behavior in areas of potentially high dollar loss. These conditions combine with the expanding wildland interface and urban population to yield the potential for large, damaging and costly wildfires. These areas at risk are defined further in the "Priority Areas" section of the Strategic Fire Plan. The unit has an overall fire hazard rating of High (56% of Unit) in the State Responsibility Area (SRA), while 30% is rated Very High and 14% is in the Moderate Fire Hazard Severity Zone.

Fire history in the San Benito-Monterey Unit is collected for every fire 10 acres and larger. The majority of the fire history is in the Los Padres National Forest on the west side of the Unit, primarily due to lightning and camp fires. Fires in the foothills of the Salinas Valley in light, flashy fuels tend to be afternoon, wind driven incidents ranging from under 100 acres to over 1,000 acres, depending on temperatures, wind speed and topography.

There have been several "Priority Areas" identified in the Unit, shown in Appendix D, which are further addressed in the Battalion priorities where fuel reduction projects and public education are discussed.

Primary businesses in the Unit include farming, industry, and tourism.

## **UNIT PREPAREDNESS AND FIREFIGHTING CAPABILITIES**

The San Benito-Monterey Unit is operationally divided into three divisions and further into seven battalions offering a wide variety of programs which includes: Fire Prevention, Resource Management, Law Enforcement, Air Attack, Helitack, Conservation Camp, Emergency Command Center (communications) and Cooperative Fire Protection.

### ***FIREFIGHTING RESOURCES***

Fire Stations – CAL FIRE.....	11
Fire Stations – Cooperative Fire.....	11
Air Attack Base .....	1
Helitack Base.....	1
Conservation Camp .....	1
Volunteer Fire Stations.....	4

### ***EQUIPMENT***

Engines – CAL FIRE.....	17
Engines – Cooperative Fire.....	16
Dozers – CAL FIRE .....	3
Water Tenders – Cooperative Fire .....	2
Ladder 100’ – Cooperative Fire.....	1
Patrol – Cooperative Fire .....	2
Squad – Cooperative Fire .....	3
Com van – CAL FIRE.....	1
Air Tankers – CAL FIRE.....	2
Helicopter – CAL FIRE.....	1
Air Attack plane – CAL FIRE .....	1
Rescue Boat (IRB) - Cooperative Fire.....	2
Rescue Water Craft (RWC) – Cooperative Fire.....	1

### ***PERSONNEL***

Permanent – CAL FIRE .....	175
Seasonal – CAL FIRE .....	125
Volunteer FF .....	60
Volunteers in Prevention .....	10
Firefighters (inmate).....	131
Inmate Crews.....	6

### ***COOPERATIVE FIRE PROTECTION AGREEMENTS***

Pebble Beach Community Services District  
Cypress Fire Protection District  
Carmel Highlands Fire Protection District  
Aromas Tri-County Fire Protection District  
South Monterey County Fire Protection District  
Soledad Fire Department

## **DISPATCH AGREEMENTS**

Cachagua Volunteer Fire Department  
Mid Coast Volunteer Fire Brigade

## **MUTUAL THREAT ZONE RESPONSE AREAS**

Fort Hunter Liggett

## **AUTOMATIC / MUTUAL AID AGREEMENTS**

CAL FIRE maintains several Automatic and Mutual Aid Agreements itself and through the Cooperative Fire Protection agreements in the Unit. All agencies in Monterey County are party to a countywide mutual aid agreement. Many of our contract districts maintain automatic aid agreements with neighboring jurisdictions such as:

**Cypress Fire Protection District** has Auto Aid with:

Pebble Beach Fire Department  
Carmel Highlands Fire Protection District  
Monterey Fire Department  
Monterey County Regional Fire Protection District

**Pebble Beach Fire Department** has auto aid with:

Cypress Fire Protection District  
Monterey Fire Department

**Carmel Highlands Fire Protection District** has Auto Aid with:

Cypress Fire Protection District

**Aromas Tri-County Fire Protection District** has Auto Aid with:

North Monterey County Fire District  
Pajaro Valley Fire District  
Watsonville City Fire Department  
San Benito County Fire Department

**Soledad City Fire Department** has Auto Aid with:

Greenfield Fire Protection District  
South Monterey County Fire Protection District  
CTF Fire

**South Monterey County Fire Protection District** has Auto Aid with:

Greenfield Fire Protection District

**CAL FIRE** has local operating agreements with:

USFS-Los Padres National Forest  
Pinnacles National Park  
Clear Creek (BLM)

## SECTION II: COLLABORATION

### COMMUNITY / AGENCIES / FIRE SAFE COUNCILS

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

#### Plan Development Team:

Organization	Title
Monterey Fire Safe Council	Chairperson
San Benito Fire Safe Council	Chairperson
Monterey County Fire Chiefs Association	President
USDA Forest Service	District Ranger
Bureau of Land Management	Battalion Chief
San Benito County RCD	
RCD of Monterey County	
County of Monterey – Public Works	
Pacific Gas & Electric	
Monterey County Cattlemen’s Association	
Carmel Highlands HOA	
Palo Colorado HOA	
Carmel Views HOA	
Rancho Tierra Grande HOA	
Big Sur Community HO	
Cachagua HO	
San Juan Canyon HO	

## SECTION III: VALUES

### A: VALUES

Valued assets susceptible to fire damage are identified in the Fire Plan as air quality, rangelands, recreation, agriculture, structures, timber, water and watersheds, wildlife and habitat, and other resources (cultural, historical and scenic). The focus of this plan and relative importance of each value has been determined by reviewing input from local stakeholders and CAL FIRE managers. The San Benito-Monterey Unit Fire Plan has been engineered with these issues in mind.

The priority values in the San Benito – Monterey Unit are tourism, recreation and rangelands. The Pinnacles National Park is split on the border of Monterey and San Benito County attracting visitors all year long. The Monterey Peninsula thrives on tourism all year long as home of the Monterey Bay Aquarium, Pebble Beach's 17-Mile Drive and many world famous golf courses. The Big Sur area is another popular attraction bordering the Los Padres National Forest (LPF) that was heavily impacted during the Basin Complex Fires in 2008, the Pfeiffer Fire in December of 2013 and the Soberanes Fire 2016 where several homes were destroyed. Laguna Seca is a popular recreational facility playing host to several large events throughout the year.

Agriculture is a big industry in the Unit. Cattle ranches encompass hundreds of thousands of acres of rangelands in the Unit while most of the floor of the Salinas Valley is crops of various produce. Vineyards line the foothills of the valley while the wine industry brings tourists to wineries throughout the Salinas Valley as well as Carmel Valley and the Monterey Peninsula.

Communications such as repeater sites, cell towers, radio towers, FAA communications and the Big Sur VOR are among the highest priorities to protect from wildfires. The unit maintains access roads to all the repeater towers and removes vegetation buildup protecting these towers in the event of a fire.

#### **Priority Areas:**

Several areas have been identified as "Priority Areas" by the San Benito – Monterey Unit management team. The identification of these specific areas was based on available data from Pre-Fire Engineering assessments and stakeholder input. Additionally, local employees provided anecdotal and historical information that was considered useful in understanding local conditions. Priority Areas described in this plan are not listed in order of priority but rather as elements of the overall Unit Plan and are listed below:

- **State Highway 68 Corridor between Salinas and Monterey Peninsula / Laureles Grade**
- **Carmel Valley / Carmel Valley Village**
- **Carmel Highlands / Palo Colorado Canyon**
- **San Juan Canyon (San Benito County)**
- **Cachagua (Carmel Valley)**
- **Pine Canyon (King City)**
- **North Monterey County / Aromas**
- **Jack's Peak / Pebble Beach**

Following the assessment of each Priority Areas, a series of potential mitigation actions was identified and agreed upon by the Unit Management Team. The following describes each area's geographic location, Values, and potential mitigation actions:

### ***State Highway 68 Corridor / Laureles Grade:***

This area is located in the western portion of the unit, between Salinas and the Monterey peninsula. The area is bounded on the north and west by the former Fort Ord Army Base, on the south by Carmel Valley, and on the west by Jack's Peak.

Values include a large number of single and multi-family residences. Highway 68 is a major travel route between Salinas and the Monterey Peninsula. Several commercial / industrial parks are located along Highway 68, including the Laguna Seca Recreation Area. Large areas of BLM wildland are located along the northern border. This area contains large plots of vegetation that have not burned in several years, resulting in a build-up of decadent mature fuels.

### ***Priority Area Goals:***

- Reduction of available wildland fuels, particularly adjacent to identified Values and primary access/egress routes
- Increased public awareness and education relative to wildland fire threat and defensible space

### ***Potential Mitigating Actions:***

The following actions have been identified to achieve the Unit Fire Plan goals for this Priority Area:

- Annual inspection of all electrical transmission and distribution lines over 750 volts to ensure compliance with Public Resources Code Sections 4292-4294 for wildland fuels clearance.
- Annual inspection and enforcement of fire safety and clearance requirements of Public Resources Code Section 4291 for at least 33% of structures within this Priority Area.
- Strive to provide chipper services as available to assist property owners in meeting the wildland fire safety requirements of Public Resources Code Section 4291 and reducing the overall wildland fuels load adjacent to identified assets at risk.
- Reduction and/or removal of wildland fuels along primary access/egress routes to reduce the incidence of roadside ignitions, and to ensure safe access and egress by firefighters and residents in the event of a wildland fire emergency.
- Identify "Safe Zones" within the Priority Area to provide a safe refuge for residents in the event of a wildland fire emergency, and ensure dissemination of this information throughout the Priority Area.
- Encourage development and distribution of wildland emergency plans for specific sub-areas of the Priority Area. Such plans should identify access and evacuation routes, safe zones, water sources, helibases and helispots, command posts, staging areas, and/or any other significant element of a wildland fire strategy for the Priority Area that can be pre-planned and identified.

### ***Carmel Valley / Carmel Valley Village:***

This area is located in the western portion of the Unit on both sides of Carmel Valley Road from State Highway 1 west to the Sleepy Hollow subdivision. It is bordered by Jack's Peak and State Highway 68 on the north, Garland Ranch Regional Park on the south, City of Carmel-by-the-Sea on the west, and Cachagua Fire Protection District on the east.

Values include a large number of single and multi-family residences and other rural structures. Carmel Valley Road is a primary travel route leading to and from the Monterey Peninsula from Hwy 101 in the Salinas Valley to Hwy 1 in Carmel. Several commercial/retail centers are located along Carmel Valley Road as well as the Rancho Canada, Quail Lodge, and Carmel Valley golf courses. Several wineries are also located in the area. Large areas of National Forest wildland / wilderness are located to the south of the target area. This area contains large plots of vegetation that has not burned in several years, resulting in a build-up of decadent mature fuel.

### ***Priority Area Goals:***

- Reduction of available wildland fuels, particularly adjacent to identified Values and primary access/egress routes
- Increased public awareness and education relative to wildland fire threat and defensible space

### ***Potential Mitigating Actions:***

The following actions have been identified to achieve the Unit Fire Plan goals for this Priority Area:

- Annual inspection of all electrical transmission and distribution lines over 750 volts to ensure compliance with Public Resources Code Sections 4292-4294 for wildland fuels clearance.
- Annual inspection and enforcement of fire safety and clearance requirements of Public Resources Code Section 4291 for at least 33% of structures within the Priority Area.
- Strive to provide chipper services as available to assist property owners in meeting the wildland fire safety requirements of Public Resources Code Section 4291 and reducing the overall wildland fuels load adjacent to identified assets at risk.
- Reduction and/or removal of wildland fuels along primary access/egress routes to reduce the incidence of roadside ignitions, and to ensure safe access and egress by firefighters and residents in the event of a wildland fire emergency.
- Identify "Safe Zones" within the Priority Area to provide a safe refuge for residents in the event of a wildland fire emergency, and ensure dissemination of this information throughout the Priority Area.
- Encourage development and distribution of wildland emergency plans for specific sub-areas of the target area. Such plans should identify access and evacuation routes, safe zones, water sources, helibases and helispots, command posts, staging areas, and/or any other significant element of a wildland fire strategy for the target area that can be pre-planned and identified.
- Work closely with the Monterey Fire Safe Council and local stakeholders to identify additional mitigating actions suitable for the area.

### ***Carmel Highlands / Palo Colorado Canyon:***

This area is located in the western coastal area of the Unit, and is bordered by the City of Carmel-by-the-Sea on the north, the Los Padres National Forest on the east, Andrew Molera State Park and Big Sur on the south and the Pacific Ocean on the west.

Values include single and multi-family residences and other rural structures, many located in remote areas with limited access. The Point Lobos State Reserve, Garrapata State Beach, and the California Sea Otter Refuge are also within this Priority Area. Highway 1 is the only access/egress route for this Priority Area.

#### ***Priority Area Goals:***

- Reduction of available wildland fuels, particularly adjacent to identified values and primary access/egress routes
- Increased public awareness and education relative to wildland fire threat and defensible space

#### ***Potential Mitigating Actions:***

The following actions have been identified to achieve the Unit Fire Plan goals for this Priority Area:

- Annual inspection of all electrical transmission and distribution lines over 750 volts to ensure compliance with Public Resources Code Sections 4292-4294 for wildland fuels clearance.
- Annual inspection and enforcement of fire safety and clearance requirements of Public Resources Code Section 4291 for at least 33% of structures within Priority Area.
- Continue to provide chipper services as available to assist property owners in meeting the wildland fire safety requirements of Public Resources Code Section 4291 and reducing the overall wildland fuels load adjacent to identified assets at risk.
- Reduction and/or removal of wildland fuels along primary access/egress routes to reduce the incidence of roadside ignitions, and to ensure safe access and egress by firefighters and residents in the event of a wildland fire emergency.
- Identify "Safe Zones" within the Priority Area to provide a safe refuge for residents in the event of a wildland fire emergency, and ensure dissemination of this information throughout the Priority Area.
- Continue development and distribution of wildland emergency plans for specific sub-areas of the Priority Area. Such plans should identify access and evacuation routes, safe zones, water sources, helibases and helispots, command posts, staging areas, and/or any other significant element of a wildland fire strategy for the Priority Area that can be pre-planned and identified.

Work closely with the Monterey Fire Safe Council and local stakeholders to identify additional mitigating actions suitable for the area.

### ***San Juan Canyon:***

This area is located southwest of the community of San Juan Bautista, and is bordered by State Highway 156 on the north, Fremont Peak on the west, Hollister Hills SORV Park on the east and Wildhorse Canyon on the south.

Values include single and multi-family residential structures, many located in remote areas with limited access, and several large ranches. Access to and egress from the entire Priority Area is very limited.

### ***Priority Area Goals:***

- Reduction of available wildland fuels, particularly adjacent to identified Values and primary access/egress routes
- Increased public awareness and education relative to wildland fire threat and defensible space

### ***Potential Mitigating Actions:***

The following actions have been identified to achieve the Unit Fire Plan goals for this Priority Area:

- Annual inspection of all electrical transmission and distribution lines over 750 volts to ensure compliance with Public Resources Code Sections 4292-4294 for wildland fuels clearance.
- Annual inspection and enforcement of fire safety and clearance requirements of Public Resources Code Section 4291 for at least 33% of structures within the Priority Area.
- Continue to provide chipper services as available to assist property owners in meeting the wildland fire safety requirements of Public Resources Code Section 4291 and reducing the overall wildland fuels load adjacent to identified assets at risk.
- Reduction and/or removal of wildland fuels along primary access/egress routes to reduce the incidence of roadside ignitions, and to ensure safe access and egress by firefighters and residents in the event of a wildland fire emergency.
- Identify "Safe Zones" within the target area to provide a safe refuge for residents in the event of a wildland fire emergency, and ensure dissemination of this information throughout the Priority Area.
- Encourage development and distribution of wildland emergency plans for specific sub-areas of the target area. Such plans should identify access and evacuation routes, safe zones, water sources, helibases and helispots, command posts, staging areas, and/or any other significant element of a wildland fire strategy for the target area that can be pre-planned and identified.
- Work closely with the San Benito County Fire Safe Council and local stakeholders to identify additional mitigating actions suitable for the area.

### ***Pine Canyon: (King City)***

This area is located southwest of the community of King City in southern Monterey County. It is bordered by Hwy 101 on the north and east.

Values include single family and multi-unit residential structures. Access to the area is limited and the potential for entrapment of residents and emergency responders is extreme. This area continues to grow with the construction of new residential sub-division projects in the planning stages.

#### ***Priority Area Goals:***

Ideally, this area will benefit from a combination of fuel modification, aggressive inspection, emergency planning, and public education.

#### ***Potential Mitigating Actions:***

The following prescriptions have been identified as potential successful methods of achieving the Unit's Fire Plan goals for this Priority Area:

- Annual inspection of all electrical transmission and distribution lines over 750 volts to ensure compliance with Public Resources Code Sections 4292-4294 for wildland fuels clearance.
- Annual inspection and enforcement of fire safety and clearance requirements of Public Resources Code Section 4291 for at least 33% of structures within the Priority Area.
- Roadside fuel modification to insure egress / exit route safety and reduce the possibility of "roadside starts".
- Identify "Safety Zones" to insure that residents of the area have the ability to evacuate to a safe area during an emergency. Residents/ stakeholders will participate in the planning and placement of Safety Zones. Additionally, a "Wildland Fire / Emergency Pre-Plan" will be designed to prepare first responders and stakeholders during the initial attack of any fire. This is vital in that residents in the area are very limited when attempting to leave the area in case of an emergency.
- Work closely with the Monterey County Fire Safe Council and local fire agencies to identify additional prescriptions suitable for the area.

### ***Cachagua:***

This Priority Area is located in the western portion of the Unit, and is situated south of Carmel Valley Road and north of the Las Padres National Forest east of Carmel Valley Village. The area is served by the Cachagua Fire Protection District.

Values include single and multi-family residential structures, many which are located in remote areas with limited access, and several large ranches. Fire history in the area is minimal, leading to the overgrowth of decadent brush and light flashy fuels.

### ***Priority Area Goals:***

- Reduction of available wildland fuels, particularly adjacent to identified Values and primary access/egress routes
- Increased public awareness and education relative to wildland fire threat and defensible space

### ***Potential Mitigating Actions:***

The following actions have been identified to achieve the Unit Fire Plan goals for this Priority Area:

- Annual inspection of all electrical transmission and distribution lines over 750 volts to ensure compliance with Public Resources Code Sections 4292-4294 for wildland fuels clearance.
- Annual inspection and enforcement of fire safety and clearance requirements of Public Resources Code Section 4291 for at least 33% of structures within the Priority Area.
- Reduction and/or removal of wildland fuels along primary access/egress routes to reduce the incidence of roadside ignitions, and to ensure safe access and egress by firefighters and residents in the event of a wildland fire emergency.
- Identify “Safe Zones” within the Priority Area to provide a safe refuge for residents in the event of a wildland fire emergency, and ensure dissemination of this information throughout the Priority Area.
- Continue development and distribution of wildland emergency plans for specific sub-areas of the Priority Area. Such plans will identify access and evacuation routes, safe zones, water sources, helibases and helispots, command posts, staging areas, and/or any other significant elements of a wildland fire strategy for the Priority Area that can be pre-planned and identified.
- Work closely with the Monterey Fire Safe Council and local stakeholders to identify additional mitigating actions suitable for the area.

### **North Monterey County / Aromas:**

This area is located in the northwestern part of the Unit, situated west of State Highway 101, south of State Highway 129, north of State Highway 156, and east of the Pacific Ocean. It includes the communities of Aromas, Pajaro, Las Lomas, Prunedale, and Moss Landing.

Values include the four major highways noted above. Each of these routes is vital to vehicular traffic in the region. Although considered a “rural” region, the area contains a large amount of single-family dwellings, ranchland and commercial/retail properties. Additionally, the Moss Landing power plant and Moss Landing Harbor are located on the western edge of the Priority Area. Moss Landing and Zmudowski State beaches and the Elkhorn Slough provide scenic, recreation, and wildlife refuge. The potential for a large damaging fire in this area is increased dramatically due to the large number of eucalyptus trees throughout the area.

### **Priority Area Goals:**

- Reduction of available wildland fuels, particularly adjacent to identified values and primary access/egress routes
- Increased public awareness and education relative to wildland fire threat and defensible space

### **Potential Mitigating Actions:**

The following actions have been identified to achieve the Unit Fire Plan goals for this Priority Area:

- Annual inspection of all electrical transmission and distribution lines over 750 volts to ensure compliance with Public Resources Code Sections 4292-4294 for wildland fuels clearance.
- Annual inspection and enforcement of fire safety and clearance requirements of Public Resources Code Section 4291 for at least 33% of structures within Priority Area.
- Strive to provide chipper services as available to assist property owners in meeting the wildland fire safety requirements of Public Resources Code Section 4291 and reducing the overall wildland fuels load adjacent to identified values.
- Reduction and/or removal of wildland fuels along primary access/egress routes to reduce the incidence of roadside ignitions, and to ensure safe access and egress by firefighters and residents in the event of a wildland fire emergency.
- Identify “Safe Zones” within the Priority Area to provide a safe refuge for residents in the event of a wildland fire emergency, and ensure dissemination of this information throughout the Priority Area.
- Encourage development and distribution of wildland emergency plans for specific sub-areas of the Priority Area. Such plans should identify access and evacuation routes, safe zones, water sources, helibases and helispots, command posts, staging areas, and/or any other significant element of a wildland fire strategy for the target area that can be pre-planned and identified.
- Work closely with the Monterey Fire Safe Council and local stakeholders to identify additional mitigating actions suitable for the area.
- Implementation and completion of the Aromas Tri-County Fire Protection District / North County Fire Protection District LE-100 Inspection program.

### ***Jack's Peak / Pebble Beach:***

This area is located on the Monterey Peninsula in the western portion of the Unit, and is bordered by the Pacific Ocean on the west, the City of Monterey on the north, Carmel Valley and the Highway 68 corridor on the east, and the City of Carmel-by-the-Sea on the south. This area represents one of the most scenic and affluent communities in California.

Values for this area are varied, including single-family residences, resort areas, championship golf courses, and areas of spectacular scenic beauty. Highway 1 is the primary north-south travel route, providing access to Big Sur and other coastal areas to the south. The potential for a large damaging fire in this area is high. The vegetation lends itself to "crown" type timber fires and the roads in the area can be confusing. The entire Priority Area has limited access and egress.

### ***Priority Area Goals:***

- Reduction of available wildland fuels, particularly adjacent to identified values and primary access/egress routes
- Increased public awareness and education relative to wildland fire threat and defensible space

### ***Potential Mitigating Actions:***

The following actions have been identified to achieve the Unit Fire Plan goals for this Priority Area:

- Annual inspection of all electrical transmission and distribution lines over 750 volts to ensure compliance with Public Resources Code Sections 4292-4294 for wildland fuels clearance.
- Annual inspection and enforcement of fire safety and clearance requirements of Public Resources Code Section 4291 for at least 33% of structures within target area.
- Continue to provide chipper services as available to assist property owners in meeting the wildland fire safety requirements of Public Resources Code Section 4291 and reducing the overall wildland fuels load adjacent to identified values.
- Reduction and/or removal of wildland fuels along primary access/egress routes to reduce the incidence of roadside ignitions, and to ensure safe access and egress by firefighters and residents in the event of a wildland fire emergency.
- Identify "Safe Zones" within the Priority Area to provide a safe refuge for residents in the event of a wildland fire emergency, and ensure dissemination of this information throughout the Priority Area.
- Continue development and distribution of wildland emergency plans for specific sub-areas of the Priority Area. Such plans should identify access and evacuation routes, safe zones, water sources, helibases and helispots, command posts, staging areas, and/or any other significant element of a wildland fire strategy for the Priority Area that can be pre-planned and identified.
- Continue enforcement of the PBCSD Fire Defense Plan to ensure compliance and maintenance of emergency access routes, designated open space areas, and undeveloped parcels.
- Work closely with the Monterey Fire Safe Council and local stakeholders to identify additional mitigating actions suitable for the area.

## **B: COMMUNITIES**

### **Monterey County:**

Aromas \*  
Big Sur \*  
Bryson-Hysperia  
Cachagua  
Carmel-by-the-Sea \*  
Carmel Highlands \*  
Carmel Valley \*  
Carmel Valley Village \*  
Corral de Tierra  
Del Monte Forest \*  
Del Rey Oaks \*  
Elkhorn \*  
Fort Ord \*  
Gonzales \*  
Greenfield \*  
Jamesburg  
King City \*  
Las Lomas \*  
Lucia \*  
Marina \*  
Monterey \*  
Pacific Grove \*  
Pajaro \*  
Pinnacles National Monument \*  
Prunedale \*  
San Benancio  
Soledad \*  
Sand City \*  
Salinas \*  
Seaside \*

### **San Benito County:**

Antelope Valley  
Bitterwater  
Cienega Canyon  
Hollister \*  
Paicines  
Panoche Valley  
Ridgemark  
San Juan Bautista \*  
San Juan Canyon  
Tres Pinos

For more information on Communities at Risk and the California Fire Alliance go to

[http://osfm.fire.ca.gov/fireplan/fireplanning\\_communities\\_at\\_risk.php](http://osfm.fire.ca.gov/fireplan/fireplanning_communities_at_risk.php)

\* Communities listed as Communities at Risk on the California Fire Alliance website

## SECTION IV: PRE-FIRE MANAGEMENT STRATEGIES

### **A: FIRE PREVENTION & LAW ENFORCEMENT - Battalion 4620**

The primary goal of the San Benito - Monterey Unit Strategic Fire Plan is to prevent the ignition and spread of unwanted, human-caused fires with an emphasis on reducing losses as a result of large damaging fires. Utilizing fire history, fuels data, weather data, assets at risk, incorporating input from the Monterey County Community Wildfire Protection Plan and Federal partners, the unit has identified "Priority Areas" as indicated in this document. Proactive pre-fire suppression activities and public information and education programs are key elements of this plan.

San Benito-Monterey Unit management addresses fire prevention through the engineering, education and law enforcement programs. Their shared objective is reduced fire hazard and risk. This is more narrowly addressed in a planning process based on ignition management and loss reduction, including biomass utilization, fire resistant landscaping, mechanical fuels treatment, building construction standards, infrastructure, land use planning and pre-fire, safety zone and escape plans.

Ignitions are managed by preventing fires likely to exceed the capabilities of available suppression forces that could result in large damaging fires. Loss reduction is integral to mitigating large and damaging fires. Significant improvement can be achieved by reducing hazards (fuel buildups around structures and communities) and working with private industry to implement hazard reduction plans around residential developments in the rural-urban intermix areas. Additionally, pre-designated suppression and evacuation plans are effective tools in ensuring civilian and firefighter life safety. Successful programs permit more effective utilization of CAL FIRE's initial attack forces and enhance firefighter safety and citizen safety.

*See Appendix B for Ignition Data*



## **ENGINEERING & STRUCTURE IGNITABILITY**

While many structures in the Unit are not built to current standards, all new construction is being held to the Chapter 7 (Fire-Resistance-Rated Construction) and Chapter 7A (SFM - Materials and Construction Methods for Exterior Wildfire Exposure) building construction standards. Fire Hazard Severity Zones (FHSZ) dictate what codes have to be followed in which areas. A map showing the FHSZs in the Unit is shown in the "Maps" portion of this document.

-**Title 19, PRC 4290** - Addresses fire apparatus access and water requirements and is dealt with at the County level.

- **Protection Planning** - Fire Protection planning is reviewed at the subdivision and parcel map level and typically implemented at the development stages of a project.

- **Code enforcement** - Carmel Highlands Fire Protection District, Cypress Fire Protection District and Pebble Beach Community Services District have full time Fire Protection Planners who review all building permits. Among other codes, they enforce the current California Building Codes, which include Chapter 7 (Fire-Resistance-Rated Construction) and Chapter 7A (SFM - Materials and Construction Methods for Exterior Wildfire Exposure).

- **PRC 4291** - Addresses defensible space around structures. Each battalion has a predetermined amount of Defensible Space inspections to complete each year. Some battalions, due to housing density, have more inspections and are on a three year cycle to alternate neighborhoods. Inspections will be done on any and all structures when requested, even if it is not within the normal rotation of inspections that year.

- **Pre-Plans** - Unit personnel is constantly gathering updated data in each battalion to submit to Unit GIS personnel in efforts to produce updated battalion preplan maps. The San Benito-Monterey Unit also works with students from local colleges for pre-plan mapping of communities for emergency response. The goal of this is to increase public and emergency responder awareness of community values, hazards, evacuation routes, potential safe refuge areas, and coordinate emergency responders while students have an opportunity to engage in GIS projects and emergency planning for college credit.

- **Fire Hazard Severity Zones (FHSZ)** – In 2007, FHSZs were updated with improved accuracy and adopted throughout the Unit, not only on state responsibility lands, but also in local jurisdiction. Several cities throughout Monterey County had Very High FHSZs which required cities to either adopt or reject. All cities affected within the San Benito-Monterey Unit adopted recommended changes in the Very High FHSZs and now adhere to building code regulations contained in CBC Chapter 7A.

[http://www.fire.ca.gov/fire\\_prevention/fire\\_prevention\\_wildland.php](http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland.php)

## INFORMATION AND EDUCATION

Fire safety education is a high priority in the unit, whether it is a formal school program or advising residents on how to keep their homes safe inside and out. Unit personnel perform training at the local schools in each battalion on fire safety inside the home as well as what to do if there is a fire outside in the wildland. The crews also take advantage of their time out in the field while doing Defensible Space inspections to help educate the residents on ways to cut back brush, trim trees and mow while still keeping an attractive, natural look to the landscape.

The unit has several large fire prevention signs placed in strategic locations throughout the unit to spread the fire safety message. Several of the signs have been placed at fire stations of local fire agencies to gain high visibility of the dangers of wildfire. In the years since the signs went up, the Unit has seen a decrease in fires caused by “equipment use”.



Results of the Unit’s ignition data shows that recent vegetation fires caused by equipment use, smoking and vehicles have been reduced. Unit managers believe that our public education efforts are having a positive influence on the general public.

The San Benito and Monterey Fire Safe Councils actively seek grant funding to work with local landowners and stakeholders as well as CAL FIRE personnel to reduce roadside fuels, increase public awareness, build fuel breaks around communities and develop updated evacuation plans in the Unit. Grant funding will enable Unit personnel to purchase newspaper ads, large roadside signs, fund a Unit website and other avenues for public outreach.

The unit has made it a priority to have a public information officer available at all times during the year to notify the media of emergencies in the unit. Since a majority of fires are human caused, we believe that public awareness is key to reducing ignitions and have partnered with the California Wildland Fire Coordinating Group (CWCG) in the “One Less Spark Campaign”. The *One Less Spark—One Less Wildfire* campaign educates Californians about how to prevent wildfires inadvertently caused by sparks from sources around the home and vehicle, as well as by industrial usage.

The San Benito – Monterey Unit has been very proactive in gaining defensible space compliance by hiring Defensible Space Inspectors to conduct Defensible Space inspections in the interface areas. Public reaction has been positive as residents are educated on the various ways they can be compliant with the law and still maintain an attractive landscape that will assist fire personnel in the event of a wildfire in their neighborhood. The Unit’s ability to keep fires small with minimal damage in and around structures has proven that more residents are becoming fire safe and our education efforts are working.



## **B. VEGETATION MANAGEMENT**

The San Benito-Monterey Resource Management Program strives to enhance the county's natural resources for both present and future use. The Unit has a Registered Professional Forester on staff to provide assistance and education to landowners on forestry issues.

The Unit administers an active Vegetation Management Program (VMP). The purpose of the VMP program is to reduce flammable vegetation that may contribute to large, damaging wildfires and high fire suppression costs. The flammable vegetation on public or private lands can be reduced through prescribed burning or mechanical treatment. Vegetation management also results in benefits to grazing, wildlife, plant diversity, and water quality.

### **Overview:**

The Vegetation Management Program is a cost-sharing program that focuses on the use of prescribed fire and mechanical means for addressing wildland fire fuel hazards and other resource management issues on State Responsibility Area (SRA) lands. The use of prescribed fire mimics natural processes, restores fire to its historic role in wildland ecosystems, and provides significant fire hazard reduction benefits that enhance public and firefighter safety.

VMP allows private landowners to enter into a contract with CAL FIRE to use prescribed fire to accomplish a combination of fire protection and resource management goals. Implementation of VMP projects is by CAL FIRE Units. The projects which fit within a unit's priority areas (e.g., those identified through the Fire Plan) and are considered to be of most value to the unit are those that will be completed. The Vegetation Management Program has been in existence since 1982 and has averaged approximately 35,000 acres per year since its inception.



### **History:**

The Vegetation Management Program is a cost share program that allows public and private landowners to participate in wildland fuel reduction projects. The primary tool used is prescribed fire, although in more recent years CAL FIRE has used the program for mechanical treatments of vegetation as well.

Vegetation management, or VMP, was preceded by the Range Improvement Program that was used aggressively by CAL FIRE to remove undesired woody vegetation and increase forage production for domestic stock and wildlife. Early records indicate that range improvement burns were conducted by CAL FIRE as early as 1945, when CAL FIRE was known as the Division of Forestry under the Department of Natural Resources. Acres burned during the period of 1949-1953 averaged 141,400 acres per year, and totaled approximately 707,000 acres for the same period (T. F. Arvola Deputy State Forester, Inter Office Memo, April 5, 1954). These burns were carried out in cooperation with landowners primarily interested in improving forage for livestock.

In July of 1980 Senate Bill 1704 (Keene) created the Chaparral Management Program. This legislation provided CAL FIRE authorization to contract with private and public landowners for the purpose of fuel hazard reduction, vegetation management, and the improvement of wildlife, range, and forest resources. The program is currently known as the Vegetation Management Program; however, the objectives and authority for fuel reduction projects are still guided by the statutes created by Senate Bill 1704. VMP acres treated have declined significantly in recent years, averaging approximately 13,000 acres per year since 1999. Increasing rural populations,

air quality issues, and new CAL FIRE programs have reduced the use of prescribed fire in many areas of the state. However, VMP is a cost effective tool that is still used to treat vegetation where physical and social conditions are conducive to its use. The program has proven to be well suited for controlling invasive weeds and improving wildlife habitat under joint projects with organizations such as the Nature Conservancy. Its use to establish fuel breaks and eliminate heavy fuel accumulations in many areas of the state will continue.

**Local Program:**

Locally, the emphasis is on projects in the Wildland-Urban Interface (WUI) and the Wildland-Urban Intermix. The intention is to treat hazardous fuel accumulations near structures and infrastructure to reduce potential losses during wildfire. Other items of concern for VMP project selection are watershed protection, habitat enhancement (especially for threatened and endangered species), and property owner goals.

The unit has multiple projects in various stages of planning that are addressed in each Battalion section of this plan.

Depending upon weather conditions and resource availability, we may be able to conduct multiple prescribed burns this year on projects with an active contract. Public notification of an impending prescribed burn shall be through a press release to local media outlets and may include road signs, as well.



## **Fuels:**

Four distinct wildland fuel types dominate the San Benito-Monterey Unit.

### **Fuel Model 1 (annual grasses)**

Although inter-mixed with fuel model 4 (brush), this fuel model dominates the foothills of the eastern portion of the Unit. Extending from the Santa Clara County line southward along the foothills east of the Salinas valley, this fuel model represents more than fifty percent of the fuel types in the Unit.



### **Fuel Model 2 (oak woodland)**

This fuel model is typically located on the north and east facing slopes of the Unit. It is predominant in the northeast, southeast and southwest areas of both San Benito and Monterey counties and typically aligned with Fuel model 4 (brush), on the opposite facing slopes.



### **Fuel Model 4 (brush)**

While a substantial amount of brush is located in the foothills east of the Salinas Valley, in the area of the Pinnacles National Monument, the majority of this fuel type is found in the mountains west of the Salinas Valley throughout the coastal range. Typically, it is found on south and western facing slopes in areas not used for cattle grazing. Brush can be found measuring over five feet in height, which corresponds to over 30 years of age.



### **Fuel Model 9 (conifers)**

Conifers consisting of several species of pine and redwood are located in two distinct areas within the Unit, specifically, in the Fremont Peak area south of San Juan Bautista, and throughout the coastal mountains south of Monterey. The conifer forests extend into the Big Sur and Ventana Wilderness areas.



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

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

#### **Battalion 1**

The Carmel Battalion is located in the North West corner of the San Benito / Monterey Unit. Encompassing more than 300 square miles it contains a diverse amount of topography and vegetation. To the west the Pacific Ocean beaches rise into the steep Santa Lucia coastal mountains transitioning from Coastal Chaparral to Redwood canyons bordered on the ridges by Oak and Grass Woodlands. Inland, several east to west running valleys are bounded by the Sierra de Salinas Range to the east. The valley floors are predominantly Grass and Oak woodlands rising to thick Chaparral stands on the South facing slopes and hardwood forests on the north facing slopes. Throughout most of these valleys residential development has occurred both on the ridges and the floors creating pockets of Urban Interface. The North of the Battalion is comprised of an area of ancient sand dunes hosting the West Coast's largest Maritime Chaparral community in the former Fort Ord area. Most of that land remains in a wild state and is considered State Responsibility Areas (SRA). To the Northwest the Monterey Pine Forests of the Monterey Peninsula intermingle with a dense population of Urban Interface. And to the South, Battalion 1 borders the northern boundary of the vast Los Padres National Forest and Ventana Wilderness.

The weather patterns in Battalion 1 during the summer may range from cool and foggy 60s near the coast to 100s in the upper reaches of the inland valleys. The normal summer northwest air flow generally carries the cool moist marine air inland by evening, somewhat moderating the fire risk at night in the valleys. A summer inversion often keeps the upper elevations warm and dry throughout the 24 hour cycle.

Fire history in Battalion 1 is varied. Many wildland fires have been started by lightning in inaccessible areas. Some of these have started on Federal lands and burned into State Responsibility Areas (SRA). Unattended controlled burns or campfires have historically contributed to damaging fires. Power line failures are also a common cause of fires due to the corrosive effects of the marine air on the lines.

Interspersed throughout the varied topography and vegetation one, will find the Battalion 1 assets at risk. They include; large cattle ranches, exclusive gated communities, Federal, State and Local forests, parks and recreation areas, commercial / industrial developments, vineyards, and many urban interface communities.

To address the threat of fire in Battalion 1 and protect the assets at risk, several approaches have been taken. Through the issuing of burning permits for campfires, agricultural and backyard burning, CAL FIRE personnel have been able to educate the public in the safe use of fire. Inspection of high voltage power lines is intended to mitigate their threats. The LE100 Defensible Space inspection program conducted by CAL FIRE and our local government cooperators has targeted more than 300 homes each year and helped to educate residents to help themselves by properly clearing around their homes. The application of the Monterey County Fire Codes to new construction in Battalion 1 directs homeowners in the safest ways to build their homes. Fuel reduction programs involving mechanical means as well as controlled burns are being used to reduce fuel loads and create strategic fuel breaks to protect communities and maintain safe egress in case of fire. Preplans of hazardous areas have been prepared to facilitate the safest means to combat wildland fires.

The devastating Soberanes Fire burned 132,127 acres in 2016 allowed the construction of miles of control lines that have reduced the fuel loads on many strategic ridges south of the Carmel Valley. CAL FIRE is maintaining these strategic fuel breaks, such as the Palo Corona-White Rock Ridge Fuel Break and Truck Trail, Chamisal Ridge-San Clemente Fuel Break, and the Hennicksons Ridge Fuel Break. The strategic fuel break system also includes areas from Carmel Highlands through Palo Colorado and into Big Sur, such as Palo Corona-Corona-Red Wolf-Mal Paso area of Carmel Highlands, Long Ridge-Green Ridge-Mescal Ridge area of Palo Colorado, and the Coast Ridge and Partington Ridge area of Big Sur, including working with our cooperators on the Pico Blanco-Mt. Manuel-North Coast Ridge Road area.

Personnel in Battalion 1 work closely with the following organizations and agencies: Monterey County Fire Safe Council (FSC), Pebble Beach Company (PBCo), Monterey County Fire Protection Authority (MCF), Cachagua Fire Protection District (CFPD), Cypress Fire Protection District (CYP), Carmel Highlands Fire Protection District (CHP), Del Monte Forest Conservancy (DMFC) Pebble Beach Community Services District (PBCSD), Mid Coast Fire Brigade (MCFB), Big Sur Fire Brigade (BSVFB), California Dept. of Fish and Wildlife (DFW), California State Parks, Monterey Peninsula Community Park District (MPCPD), United States Forest Service (USFS), Bureau of Land Management (BLM), Santa Lucia Preserve (SLP), Big Sur Land Trust (BSLT), Monterey County (MoCo) and Hastings Preserve, Boy Scouts of America (BSA)



***Battalion 2: Peninsula Battalion (Schedule A – Contract Districts) –***

*Battalion 4612 – Cypress FPD & Carmel Highlands FPD*

*Battalion 4618 – Pebble Beach CSD*

*Battalion 4605 – Prevention & Planning*

Battalion 2 is comprised of three local government cooperative agreements or “Schedule A” contracts made up of Pebble Beach Community Services District (PBCSD), Cypress Fire Protection District and Carmel Highlands Fire Protection District.

The Pebble Beach area is entirely State Responsibility Area. Also referred to as the Del Monte Forest, this area has a closed-cone coniferous forest with areas of chaparral and coastal scrub, as well as small remnants of coastal prairie in the common areas. There are homes all throughout the forested areas, as well as many homes along all of the golf courses in the forest. The forest has a lot of small fires within the common forested areas near homes that pose a major threat to many high dollar homes. The Morse Fire in 1987, started by an illegal campfire, burned 190 acres and destroyed 31 structures causing an estimated damage of approximately \$18,000,000. Fire road signage, mapping and maintenance are a high priority in the district due to recreation and fire occurrences in the open spaces within the forest.

The Cypress FPD borders the southern end of Pebble Beach and wraps around the city of Carmel-by-the-Sea on the north, east and south, stretching from the beaches to approximately two miles east from the mouth of Carmel Valley and bordering Carmel Highlands FPD to the south. The lower part of the district to the east covers Hwy 68, Josselyn Canyon and the homes surrounding the Del Monte Golf Course. Cypress FPD is in both SRA and LRA with housing developments surrounded by wooded areas.

The Carmel Highlands FPD is the southern-most district in Battalion 2, with the northern border just south of the Carmel River, down to Mal Paso Creek, encompassing the wildland urban interface on the west facing slope. The district has many large homes under a tall canopy of closed-cone coniferous forest with areas of chaparral and coastal scrub, as well as small remnants of coastal prairie in the common areas. Most of the district both SRA and LRA is rated as Very High Fire Hazard Severity Zones.

The three fire districts maintain good working relationships to collaborate on fuel reductions projects with several different agencies such as; Monterey Peninsula Regional Parks District, Pebble Beach Company, Cal Trans, PG&E, homeowner associations and private homeowners.

Defensible space remains a very high priority in Battalion 2 due to the housing density within the wildland urban interface. The battalion has an aggressive LE-100 program employing Retired Annuitant Fire Captains to educate homeowners and to ensure compliance throughout the districts. The Fuel Management Officer/Fire Captain has been working on fuel reduction projects in all three Districts of Battalions 2 to increase fire fuel reduction and defensible space efforts. The Fuel Management Officer works with the Fire Protection and Planning Battalion (FPP) staff.

### ***Battalion 3: King City Battalion - Battalion 4613***

The King City Battalion starts from the Chualar area and encompasses both sides of the Salinas Valley down to San Ardo, ridge top to ridge top. This area includes the west entrance to the Pinnacles National Park, Arroyo Seco, and many vineyards and cattle ranches, to name of few values at risk.

The weather patterns in Battalion 3 during the summer months range from the 70s and into the low 100 degree mark. The valley winds ranging from 10-25 mph, usually begin early afternoon and subside around sunset when the marine layer occasionally blows in to cool the valley temperatures.

The strong winds affect the early season fires, pushing grass fires from a few hundred acres and into the thousands in the cattle grazing pastures of the eastern foothills. The steep terrain of Arroyo Seco and southern end of Carmel Valley has driven some large wildland fires in the late summer/fall crossing borders into the LPF where access for firefighting equipment becomes very challenging.

Fire History shows that equipment use is a leading cause of ignitions and has resulted in a number of the large, damaging fires in Battalion 3. With this knowledge, the Unit has made educating ranchers and homeowners on the importance of spark arresters and mowing in cooler weather conditions a high priority. Large billboard signs are posted in the battalion stating to "mow before 10 a.m." before the heat of the day. Statistics show that these efforts have been successful and ignitions have decreased. Debris burning and powerline caused fires are also among the frequent ignitions in Battalion 3. Prevention staff has been working with the utility company to upgrade powerline equipment to reduce the number of fires in the Unit. Battalion personnel continue to educate homeowners on laws of debris burning and how to safely burn brush piles in the non-peak fire season to reduce the amount of control burn escapes in the Unit.



#### ***Battalion 4: Bradley Battalion – Battalion 4614***

The Bradley Battalion starts south of San Ardo and continues south to the San Luis Obispo County line. This area includes Bryson-Hysperia, with many homes in the wildland ranking this Battalion 4's top value at risk. Battalion 4 also encompasses the San Antonio Reservoir, a popular recreational area; the community of Parkfield; and the Ft. Hunter Liggett Army Training Facility, among many vineyards and cattle and hunting ranches.

Much like Battalion 3, the weather patterns in Battalion 4 during the summer months range from the 70s and into the low 100 degree mark. The valley winds in Bradley range from 10-25 mph and usually begin mid-afternoon and subside well after dark. In the Lockwood and Parkfield areas, the temperatures are very similar but get much less wind due to the topographical features. The terrain is predominately rolling hills with some areas of brush-covered, steep slopes.

Similar to Battalion 3, fire history shows that equipment use is the leading cause of ignitions and has resulted in a number of the large, damaging fires in Battalion 4. By educating ranchers and homeowners on the importance of spark arresters and mowing in cooler weather conditions along with the large billboard signs, the Unit has seen a decrease in our ignitions.

The main Values in Battalion 4 are recreational areas, vineyards and rangelands.



## ***Battalion 5: Hollister Battalion – Battalion 4615***

The Hollister Battalion is located at the North East corner of the Unit in San Benito County, following the county line on both the East and the West down to the end of Cienega Road and East to South of Panoche and Antelope Valley. The West side (Gabilan Mountain Range) of the battalion is comprised steep terrain and heavy fuels up in the Fremont Peak area. The east side (Diablo Mountain Range) is predominately grasslands, home to many large cattle ranches, and quickly transitions into steep rugged terrain. The fuels commonly encountered in Battalion 5 are grass, oak woodland, chamise and gray pine, with the Aromas area encompassing some heavily wooded areas of eucalyptus groves.

The Aromas area, at the north end of the Unit, encompasses portions of Monterey, San Benito and Santa Cruz Counties. The Aromas initial attack area runs from the northern unit boundary over to Fremont Peak and down the Salinas Valley to just north of Chualar. The Aromas Tri-County Fire Protection District is 60 square miles of primarily residential structures with light commercial and agricultural occupancies and areas of wildland urban interface. In addition to the local population of approximately 6,000, the district experiences a constant increase to values at risk due to the major highways that traverse the district increasing the active population by hundreds of thousands per day. This exacerbates the issue of High and Very High Fire Hazard Severity Zones throughout most of the district and the interface threats to local residents.

Hollister Hills Recreational Area is near the Fremont Peak area and is frequented by off-road vehicles on California State Parks lands and is one of the values at risk. Other values include the wildland urban interface areas in San Juan Canyon, Cienega Road and Paicines as well as the infrastructure at Fremont Peak State Park and Mission San Juan Bautista.

The weather patterns in Battalion 5 during the summer months range from the high 70s and into the low 100 degree mark with the marine layer moving in most evenings and burning off mid-morning. The winds in the Hollister area range from 5-15 mph. The terrain is predominately rolling hills with some areas of brush-covered, steep slopes.

Similar to Battalions 3 and 4, fire history shows that equipment use is the leading cause of ignitions, and has resulted in a number of the large, damaging fires in Battalion 5. By educating ranchers and homeowners on the importance of spark arresters and mowing in cooler weather conditions along with the large billboard signs, the Unit has seen a decrease in ignitions. Debris burning also ranks among the highest sources of ignition of fires in Battalion 5. Fire department personnel make a concerted effort, while writing burn permits and while out in the public, to educate residents on the laws of burn piles, what materials they can burn, and safe ways to conduct their burn to not let it escape their control. Other leading causes of fires in Aromas are roadside fires caused by exhaust carbon, blown tires, and vehicles due to the heavy traffic on these highways.

The main Values in Battalion 5 are residential structures, recreational areas, agriculture, watershed and infrastructure.

The main priorities in Battalion 5 are to educate the public that live in the wild land urban interface on how to be fire safe and to maintain fire roads that serve a crucial role in means of ingress and egress for both the public and fire equipment during a wildland fire.

Personnel in Battalion 5 work closely with members from the following organizations or agencies: the San Benito Fire Safe Council, BLM, California State Parks, and local ranchers.

## ***Battalion 6: Bear Valley Battalion – Battalion 4616***

The Bear Valley Battalion is located on the east side of the Unit in San Benito County, following the county line on the west and bordering the Fresno County line to the east extending to Priest Valley in the south. Clear Creek Recreational Area is also in the southern portion of Battalion 6. The west side (east side of Gabilan Mountain Range) of the battalion is comprised steep terrain and heavy fuels up near the Pinnacles National Park area. The east side (Diablo Mountain Range) is predominately grasslands, home to many large cattle ranches, and quickly transitions into steep rugged terrain. The fuels commonly encountered in Battalion 6 are grass, oak woodland, chamise and gray pine.

The weather patterns in Battalion 6 during the summer months range from the high 70s and into the low 100 degree mark with little recovery overnight. The winds in the area range from 5-10 mph. The terrain varies from rolling hills transitioning into brush covered, steep slopes.

Similar to other battalions, fire history shows that equipment use is the leading cause of ignitions in Battalion 6. By educating ranchers and homeowners on the importance of spark arresters and mowing in cooler weather conditions along with the large billboard signs, the Unit has seen a decrease in ignitions. Debris burning also ranks among the highest sources of ignition of fires in Battalion 6. Fire department personnel make a concerted effort, while writing burn permits and while out in the public, to educate residents on the laws of burn piles, what materials they can burn, and safe ways to conduct their burn to not let it escape their control.

The main Values in Battalion 6 are the Pinnacles National Park, Clear Creek Recreational Area, agriculture and large cattle ranches. Priorities are public education, hazard assessment, and fuel reduction.

Battalion 6 maintains a close working relationship with the Pinnacles National Park, The Bay Area Network Fire, BLM, and the local ranchers.



## **TRAINING DIVISION: Battalion 4607**

The Unit Training Division maintains a highly active and dynamic program. Not only is the Training Division tasked with providing and delivering the departmental training program at the Unit level, it also delivers and coordinates training classes for over 275 CAL FIRE permanent and seasonal personnel, and up to 60 volunteers. Delivering and tracking of certifications for CAL FIRE personnel, the Training Division utilizes a web-based service – Target Solutions – to deliver on-line training courses and to track certifications. Additionally, the Training Division coordinates and delivers the annual Wildland Fire Preparedness Exercises.

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

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

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

- 1) All fire suppression employees receive A-Faller training/certification within two years of employment with the department. Selected personnel will be chosen to attend Class "B" or "C" faller training.
- 2) All Chief Officers and Fire Captains receive CAL FIRE(C-234) Intermediate Firing Operations training/certification.

The Training Division provides and coordinates training that integrates departmental programs. As an example, all BEU Fire control personnel assigned to Helitack or Hollister air attack base attend the following training where applicable: RT-372 Helicopter Manager Refresher Training, RT 378 Air Attack Group Supervisor, Basic Helicopter Safety - Short Haul, and Air Base Safety Training. As another example, to meet the Pre-Fire/Resource Management Division program objectives for fuels treatment and acres burned under the Vegetation Management Program, the Training Division conducts and coordinates live fire training under the C-234 and the Fire Control 7 (FSTEP program by the State Fire Marshal).



**GABILAN CONSERVATION CAMP:** Administered by Division 4603



Gabilan Conservation Camp (CC #38) is centrally located in Monterey County and the only camp servicing the CALFIRE San Benito Monterey Unit. The facility is situated in the front of Soledad State Correctional Facility and the Salinas Valley State Prison on Hwy 101 between the cities of Soledad and Gonzales. The camp houses approximately 100 to 132 low-risk inmates under the direction of the California Department of Corrections and Rehabilitation (CDCR) and CAL FIRE. CALFIRE operates 6 Type one Fire Crews and a Mobile Kitchen Unit (MKU) from Gabilan Camp. The crews are available to respond year round to “all risk” emergencies throughout the state such as wildland fires, floods, rescues and other disasters.

In preparation of emergency response, Gabilan Camp conducts an annual fire crew preparedness training exercise, which evaluates each inmate fire crew’s performance through arduous evolutions for the upcoming fire season.

In addition to emergency responses, Gabilan Camp is actively engaged in pre-fire management. Gabilan fire crews perform community service and hazard fuel reduction projects with the local governments, state and federal agencies within Santa Clara, Monterey, San Benito and San Luis Obispo counties.

Sponsors during the last years include (but are not limited to): Hollister Hills State Park; State Parks and Recreation; Monterey County Parks; Laguna Seca Raceway; City of Monterey; City of Del Rey Oaks; City of Soledad; Camp Roberts National Guard Base; Monterey Peninsula Regional Park District; Salinas Valley Fairgrounds; Salinas Airshow; San Benito County Park; San Benito County Historical Park; Monterey Peninsula College; Gonzales Unified School District; Washington Union School; National Park Service; Bureau of Land Management; and San Benito-Monterey and Santa Clara CALFIRE facilities. Numerous federal hazardous fuel reduction grant projects were also completed.

Since the opening in 1986, Gabilan Conservation Camp has continued to be a valuable resource for the State of California and the citizens of San Benito and Monterey Counties through conservation and the protection of life, property and natural resources.



**AIR ATTACK PROGRAM:** Hollister Air Attack - Battalion 4608

The Hollister Air Attack Base, established in 1962, is located along the central coast of California, 30 miles south of San Jose in the CAL FIRE San Benito-Monterey Unit. Hollister responds to an average of 350 calls per year. Staff at the base consists of one Battalion Chief, two Fire Captains, one Fire Apparatus Engineer, and seven Firefighters. The complement of aircraft located at Hollister includes one OV-10 Bronco and two S-2T air tankers. On average, the base pumps about 300,000 gallons of retardant a year. With the base's pumps, three loading pits and equipment, Hollister has a possible peak output of 60,000 gallons of retardant each day. The base provides initial attack for 3.1 million acres encompassing 11 counties, an area spanning north to Mt. Diablo, south to King City, east to Interstate 5 and west to the Pacific Ocean. This area includes the Los Padres National Forest.



## **HELITACK PROGRAM: Bear Valley Helitack**

The Bear Valley Helitack Base was established in 1987 and was located in the San Benito-Monterey Unit on Airline Highway in Bitterwater Road area. The base was originally named Bitterwater Helitack Base and kept this name until 1992 when it was moved to the Bear Valley Fire Station in Paicines, changing the name to Bear Valley Helitack. Bear Valley responds to an average of 150 calls per year ranging from fires to Hoist rescues. In addition to responding to emergencies, the helicopter conducts control burns and recon flights necessary to the state mission. On a daily basis, the crew of the Helitack Base consists of one pilot, two Fire Captains, five to six Firefighters and an Engineer. In addition to the helitack crew, there are two fire engines staffed at Bear Valley station. Bear Valley Helitack operates a UH-1H Super Huey helicopter. It is one of four state helicopters that have a fixed tank rather than a bucket. The fixed tank can hold 325 gallons of water. The state has 12 helicopters with 10 helicopter bases; 2 helicopters are used as spares when maintenance is needed.



Also operated out of Bear Valley is the helitender, which serves as a support vehicle for the copter. The helitender contains 1,000 gallons of fuel, along with foam, backup tools, out-of-county bags, Meals Ready-to-Eat (MREs) and many other items that are necessary to support the crew. Bear Valley provides coverage and protection from southwest Santa Clara to Interstate-5 in the Fresno-Kings Unit, down to Northern San Luis Obispo and all the way to the Pacific Ocean. As a state resource, Bear Valley is also able to respond anywhere in the state.

CAL FIRE helitack crews consist of highly trained and experienced firefighters who are assigned to and respond to wildland fires and rescues aboard CAL FIRE helicopters. Once arriving on a fire incident, the crew, typically 5 to 6 Firefighters along with a Fire Captain, are let off with firefighting hand tools and initiate fire suppression actions as the helicopter supports the helitack crew with water drops. Helitack crews also perform other helicopter support operations when not assigned to direct fire line operations, such as establishing and staffing helibases, conducting necessary operations, and support.



## APPENDIX A: PRE-FIRE PROJECTS



### PRE-FIRE PROJECTS For San Benito – Monterey Unit (BEU)

<u>PROJECT NAME</u>	<u>PROJECT STATUS</u>	<u>TYPE</u>	<u>ACREAGE</u>
Aguajito Residential Chipping	Active	FPL	2,362.93
Aromas/North Chipping Program	Active	FPL	7,404.87
BEU Community Preplanning	Planned	FPL	0.00
BEU Fire Plan Data Collection	Active	FPL	0.00
Bryson-Hesperia Fuel Break	Active	FPL	0.00
Calandra Fire Road	Active	FPL	0.00
Call Mountain Fire Road	Active	FPL	6.00
Carmel Highlands Chipping Program	Active	FPL	3,393.32
Carmel Highlands Community Fuelbreak	Active	FPL	60.71
Carmel Highlands Western WUI Project	Complete	FPL	544.97
Carmel Views Fuel Reduction	Active	FPL	55.00
Cypress Chipping Program	Active	FPL	7317.13
Del Mesa Carmel Fuel Reduction	Active	FPL	168.00
Palo Corona Park Fire Access Road	Active	FPL	49.00
Garlinger VMP	Complete	VMP	180.85
Green/Mescal Ridge Shaded Fuel Break	Complete	FPL	553.04
Hatton Canyon Fuel Break	Active	FPL	39.00
Haul Road	Active	FPL	24.82
Hwy 68 Residential Chipping	Complete	FPL	0.00
Indian Springs Fuel Reduction	Complete	FPL	41.58
Jacks Peak Access Road	Active	FPL	15.66
Los Compadres Fire Road	Active	FPL	10.00
Mercurio HOA Wildfire Fuel Reduction	Planned	FPL	0.00
Molera State Park VMP	Active	VMP	193.00
Monterey County Regional FPD Chipping	Complete	FPL	1,431.69
Outlook Fuel Break	Active	FPL	0.00
Pacific Meadows Fuel Reduction	Active	FPL	404.62
Palo Colorado Community Fuelbreak	Complete	FPL	49.42
Palo Colorado Wildland Pre-Attack Plans	Active	FPL	9,582.69
Pebble Beach Fuel Reduction	Active	FPL	206.00
Pine Canyon Wildland Fire Pre-Attack Plans	Active	FPL	0.00
Point Lobos VMP	Complete	VMP	10.45
Public Education Signs 2014	Complete	FPL	2.73
Rabbit VMP	Complete	VMP	850.97
Rancho Tierra Grande Chipping Program	Active	FPL	559.86
Rock Springs VMP	Active	VMP	9,143.00
San Juan Canyon Shaded Fuel Break	Active	FPL	59.87
Santa Lucia / Palo Corona Park Fire Access Road	Planned	FPL	0.00
Sky Ranch Egress / Fire Road	Active	FPL	0.00
Smith Mt. Fire Road	Active	FPL	15.00
Tassajara Rd / Cachagua Road Fuel Break	Active	FPL	0.00
Thompson Valley VMP	Active	VMP	4791.00
Garlinger VMP	Complete	VMP	181.00
Sierra de Salinas VMP	Planned	VMP	16,675.00
Williams Canyon SOD Project	Complete	FPL	107.25
White Rock Ridge Fuelbreak	Complete	FPL	11.30

**Planned**

## **Battalion 1 Projects:**

### **Project #1**

Project Name: Palo Colorado Wildland Fire Pre-Attack Plans  
Description: Preplan community with updated maps and tactical planning in preparation for wildland fires in their area.  
Community: Palo Colorado - south of Carmel  
Project Collaborators: Mid Coast Fire Brigade / Monterey FSC

### **Project #2**

Project Name: Cachagua Wildland Fire Pre-Attack Plans  
Description: Preplan community with updated maps and tactical planning in preparation for wildland fires in their area.  
Community: Cachagua – east of Carmel Valley  
Project Collaborators: Cachagua FPD / Monterey FSC

### **Project #3**

Project Name: Hatton Canyon Fuel Break Maintenance  
Description: Maintain current fuel break in canyon between subdivisions.  
Community: Carmel at the mouth of Carmel Valley  
Project Collaborators: State Parks / Cypress FPD

### **Project #4**

Project Name: Outlook to Outlook Fuel Break Maintenance  
Description: Maintain current fuel break in canyon between subdivisions.  
Community: Carmel at the mouth of Carmel Valley  
Project Collaborators: Monterey County Public Works / Private / Cypress FPD

### **Project #5**

Project Name: Cachagua Road / Tassajara Road Fuel Break  
Description: Establish a fuel break along Cachagua and Tassajara Roads around community.  
Community: Cachagua - east of Carmel Valley  
Project Collaborators: Monterey County / Monterey FSC / Private

### **Project #6**

Project Name: Carmel Valley Regional Fuel Break  
Description: Establish a fire road for emergency egress.  
Community: Carmel Valley area  
Project Collaborators: Cachagua FPD / Private Owners / Monterey FSC

## **Project #7**

Project Name: Robinson Canyon Road Fuel Break

Description: Establish a fuel break along Robinson Canyon Road.

Community: Santa Lucia Preserve – Carmel Valley

Project Collaborators: Santa Lucia Preserve / White Rock / Monterey County

## **Project #8**

Project Name: Palo Corona Park to White Rock Fire Road

Description: Maintain the clearance on the existing roadway.

Communities: Benefits: Carmel Highlands, Carmel Valley, White Rock, Palo Colorado areas

Project Collaborators: MPRPD, DF&W, White Rock Community

## **Project #9**

Project Name: Residential Chipping Program

Description: Treatment and disposal of vegetative material created during defensible space maintenance by the property owner.

Community: Cachagua, White Rock areas

Project Collaborators: CAL FIRE / Private landowners

## **Battalion 2 Projects:**

### **Cypress FPD**

#### **Project #1**

Project Name: Aguajito/Jacks Peak Fuel Reduction

Description: Maintain the clearance on the existing roadway. Utilize crews to perform clearance along target roadways in SRA. Equipment utilized for masticating, weed eating, cutting/removing materials, mowing, chipping

Community: Gentry Hill, Olmstead Road, Loma Alta, Aguajito areas

Project Collaborators: Cypress FPD, CAL FIRE, HOA, Fire Safe Council For Monterey County, Monterey Co Regional Parks, PG&E, Monterey County Public Works.

#### **Project #2**

Project Name: Del Mesa Carmel / Pacific Meadows Fuel Reduction

Description: Maintain the clearance on the existing roadway. Utilize crews to perform clearance along target roadways in SRA. Equipment utilized for masticating, weed eating, cutting/removing materials, mowing, chipping.

Community: Del Mesa Carmel, Pacific Meadows areas

Project Collaborators: Cypress FPD, CAL FIRE, HOA, Monterey County Public Works.

### **Project #3**

Project Name: Hatton Canyon Fuel Break Maintenance

Description: Maintain current fuel break in canyon between subdivisions. Equipment utilized for weed eating, cutting/removing materials, mowing, and chipping.

Community: Carmel at the mouth of Carmel Valley

Project Collaborators: State Parks, Cypress FPD, CAL FIRE

### **Project #4**

Project Name: Carmel Views/Carmel Knolls Fuel Reduction

Description: Maintain the clearance on the existing roadway. Utilize crews to perform clearance along target roadways in SRA. Equipment utilized for masticating, weed eating, cutting/removing materials, mowing, chipping.

Community: Carmel Views, Carmel Knolls area

Project Collaborators: Cypress FPD, Fire Safe Council for Monterey County, CAL FIRE, HOA, PG&E, Monterey County Public Works.

### **Project #5**

Project Name: Quail Meadows Fuel Reduction

Description: Maintain the clearance on the existing roadway. Utilize crews to perform clearance along target roadways in SRA. Equipment utilized for weed eating, cutting/removing materials, mowing.

Community: Carmel Views, Carmel Knolls areas

Project Collaborators: Cypress FPD, Fire Safe Council For Monterey County, CAL FIRE, HOA, PG&E, Monterey County Public Works.

### **Project #6**

Project Name: High Meadows Fuel Reduction

Description: Maintain the clearance on the existing roadway. Utilize crews to perform clearance along target roadways in SRA. Equipment utilized for weed eating, cutting/removing materials, mowing.

Community: Via Mar Monte, Carmel Hills Dr, High Meadows area

Project Collaborators: Cypress FPD, CAL FIRE, HOA, Monterey Co Regional Parks, State Parks, PG&E, Monterey County Public Works, CalTrans

### **Project #7**

Project Name: Residential Chipping Program

Description: Treatment and disposal of vegetative material created during defensible space maintenance by the property owner.

Community: Carmel Views, Carmel Knolls, Outlook, Aguajito area

Project Collaborators: CAL FIRE / Private landowners

## **Carmel Highlands FPD**

### **Project #1**

Project Name: San Jose Creek Fuel reduction

Description: Maintain the clearance on the existing roadway for ingress and egress. Equipment utilized for weed eating, cutting/removing materials, mowing, chipping.

Community: Red Wolf, Carmel Highlands area

Project Collaborators: State Parks, Carmel Highlands FPD

### **Project #2**

Project Name: Ribera Road (Carmel River State Park) Fuel Reduction

Description: Maintain the clearance on the existing roadway for ingress and egress. Equipment utilized for weed eating, cutting/removing materials, mowing, chipping.

Community: Ribera Road area

Project Collaborators: State Parks Carmel Highlands FPD

### **Project #3**

Project Name: Carmel Highlands Fuel Reduction

Description: Maintain the clearance on the existing roadway. Utilize crews to perform clearance along target roadways in SRA. Equipment utilized for masticating, weed eating, cutting/removing materials, mowing, and chipping.

Community: Carmel Highlands area

Project Collaborators: Carmel Highlands FPD, CAL FIRE, Private HOA, Fire Safe Council for Monterey County, Monterey County Regional Parks, PG&E, Monterey County Public Works, Caltrans

### **Project #4**

Project Name: Victorine Ranch Fuel Reduction

Description: Maintain the clearance on the existing roadway. Equipment utilized for mowing, weed eating, cutting/removing materials.

Community: Victorine Ranch area

Project Collaborators: Carmel Highlands FPD, Carmel Lahaina Water Co. Private HOA

### **Project #5**

Project Name: Residential Chipping Program

Description: Treatment and disposal of vegetative material created during defensible space creation and maintenance by the property owner.

Community: Carmel Highlands area

Project Collaborators: CAL FIRE / Private landowners

## **Project #6**

Project Name: Corona Road Fuel Reduction

Description: Maintain the clearance on existing roadway.

Equipment utilized for masticating, weed eating, cutting/removing materials, mowing, cutting trees and chipping.

Community: Corona Rd area

Project Collaborators: Carmel Highlands FPD, Corona Road Maintenance Asso., Private HOA

## **Project #7**

Project Name: Mal Paso Creek Fuel Reduction

Description: Maintain the clearance on the existing roadway and fuel break. Utilize crews to perform clearance along target roadways in SRA. Equipment utilized for masticating, weed eating, cutting/removing materials, mowing, and chipping.

Community: Mal Paso Creek area

Project Collaborators: Carmel Highlands FPD, Carmel Riviera Water Management District, Mal Paso Creek Property Owners

## **Pebble Beach CSD**

### **Project #1**

Project Name: Sunridge Pines common area fuel reduction

Description: Maintain the clearance on the existing roadway. Utilize crews to perform clearance along target roadways in SRA. Equipment utilized for masticating, weed eating, cutting/removing materials, mowing, and chipping.

Community: Sunridge Pines common area, Pebble Beach areas

Project Collaborators: Pebble Beach FPD, CAL FIRE, Private HOA, Pebble Beach Community Service District, PG&E

### **Project #2**

Project Name: Huckleberry Hill fuel reduction

Description: Maintain the clearance on the existing roadway, fire roads and fuel brakes. Utilize crews to perform clearance along target roadways in SRA. Equipment utilized for masticating, weed eating, cutting/removing materials, mowing, and chipping.

Community: Sunridge Pines common area, Pebble Beach areas

Project Collaborators: Pebble Beach FPD, CAL FIRE, Pebble Beach Community Service District, Del Monte Forest Conservancy PG&E

### **Project #3**

Project Name: Shepherd's Knoll fuel reduction

Description: Maintain the clearance on the existing roadway. Equipment utilized for weed eating, cutting/removing materials, mowing.

Community: Shepherds Knoll, Sunridge, 17 Mile Dr, Pebble Beach areas

Project Collaborators: Pebble Beach FPD, CAL FIRE, Private HOA, Private contractor

#### **Project #4**

Project Name: Navajo Tracts (Area B and Area C) fuel reduction

Description: Maintain the clearance on the existing roadway, fire roads and fuel breaks.

Equipment utilized for weed eating, cutting/removing materials, mowing.

Community: Forest Lodge, Majella, Pebble Beach areas

Project Collaborators: Pebble Beach FPD, Del Monte Forest Conservancy

#### **Project #5**

Project Name: Forest Lake fuel reduction

Description: Maintain the clearance on the existing roadway, fire roads and fuel breaks

Equipment utilized for weed eating, cutting/removing materials, mowing.

Community: Lopez, Congress, Pebble Beach areas

Project Collaborators: Pebble Beach FPD, Pebble Beach Community Service District, CAL AM

#### **Project #6**

Project Name: Indian Village (Indian Village Annex) fuel reduction

Description: Maintain the clearance on the existing roadway, fire roads and fuel breaks. Utilize crews to perform clearance in target areas in SRA. Equipment utilized for masticating, weed eating, cutting/removing materials, mowing, and chipping.

Community: Spyglass Hill, Stevenson, Pebble Beach areas

Project Collaborators: Pebble Beach FPD, CAL FIRE, Pebble Beach Community Service District, Del Monte Forest Conservancy

#### **Project #7**

Project Name: Crocker Grove / SFB Morse Memorial fuel reduction

Description: Maintain the clearance on the existing roadway fire roads and fuel breaks. Utilize crews to perform clearance in target areas in SRA. Equipment utilized for weed eating, cutting/removing materials, mowing, and chipping.

Community: Cypress Point, Portola, Pebble Beach areas

Project Collaborators: Pebble Beach FPD, Del Monte Forest Conservancy

#### **Project #8**

Project Name: Pescadero Canyon fuel reduction

Description: Maintain the clearance on the existing roadway, fire roads and fuel breaks.

Equipment utilized for masticating, weed eating, cutting/removing materials, chipping, and mowing. Livestock utilized in steep canyons and areas in accessible for equipment or crews.

Community: Carmel Woods, Carmel Way, Pebble Beach areas

Project Collaborators: Pebble Beach FPD, CAL FIRE, Pebble Beach Community Service District, Del Monte Forest Conservancy, PG&E

## **Battalion 3 Projects:**

### **Project #1**

Project Name: La Macchia North VMP  
Description: Fuel Modification with Fire Use.  
Community: La Gloria Rd (Training site) Gonzales areas  
Project Collaborators: La Macchia Ranch, CAL FIRE, BLM, MBARD

### **Project #2**

Project Name: Sierra de Salinas VMP  
Description: Fuel Modification with Fire Use.  
Community: Greenfield, Soledad, Paraiso Springs areas  
Project Collaborators: BLM, Private Ranches, CAL FIRE, MBARD

### **Project #3**

Project Name: Santa Lucia School Program  
Description: Public Education on Fire Safety Awareness to 5<sup>th</sup> grade students.  
Community: King City  
Project Collaborators: Santa Lucia Teachers, CAL FIRE

### **Project #4**

Project Name: Arroyo Seco Home Owners Association  
Description: Public education on fire awareness and preparation for wildland fires in their area.  
Community: Arroyo Seco Area  
Project Collaborators: Arroyo Seco HOA, CAL FIRE, SoMoCo, Monterey County SO

### **Project #5**

Project Name: Deer Creek Home Owners Association  
Description: Public education on fire awareness and preparation for wildland fires in their area.  
Community: Deer Creek Subdivision, Pine Canyon Road (Middle Canyon) King City  
Project Collaborators: Deer Creek HOA, CAL FIRE, SoMoCo, Monterey County SO

### **Project #6**

Project Name: Highland Hills Home Owners Association  
Description: Public education on fire awareness and preparation for wildland fires in their area.  
Community: Highland Hills Subdivision, Pine Canyon Road (Middle Canyon) King City  
Project Collaborators: Highland Hills HOA, CAL FIRE, SoMoCo, Monterey County SO

## **Project #7**

Project Name: Via Canada Home Owners Association

Description: Public education on fire awareness and preparation for wildland fires in their area

Community: Via Canada Subdivision, Via Canada Rd (lower Pine Canyon) King City

Project Collaborators: Via Canada HOA, CAL FIRE, SoMoCo, Monterey County SO

## **Project #8**

Project Name: Pine Canyon Wildland Fire Pre-Attack Plans

Description: Identify predetermined evacuation areas, values at risk, control lines and objectives, create preplan maps for responders

Community: Pine Canyon area

Project Collaborators: CAL FIRE, SoMoCo

## **Project #9**

Project Name: Arroyo Seco Wildland Fire Pre-Attack Plans

Description: Identify predetermined evacuation areas, values at risk, control lines and objectives, create preplan maps for responders

Community: Arroyo area

Project Collaborators: CAL FIRE, SoMoCo

## **Project #10**

Project Name: Residential Chipping Program

Description: Treatment and disposal of vegetative material created during defensible space maintenance by the property owner

Community: Pine Canyon area

Project Collaborators: CAL FIRE / Private landowners

## **Battalion 4 Projects:**

### **Project #1**

Project Name: Bryson-Hesperia Wildland Fire Preplan

Description: Identify predetermined evacuation areas, values at risk, control lines and objectives, create preplan maps for responders

Community: Bryson-Hesperia area

Project Collaborators: Bryson-Hesperia CERT group, CAL FIRE, SoMoCo

## **Project #2**

Project Name: CAL FIRE / Fort Hunter Liggett Southern Boundary Fuel Break  
Description: Establish a fuel break along the entire length of the Ft. Hunter Liggett (FHL) and CAL FIRE southern boundary in the Copper Head / Bryson Hesperia area  
Community: Ft. Hunter Liggett Military Base  
Project Collaborators: CAL FIRE, FHL

## **Project #3**

Project Name: Bryson-Hesperia CERT Group  
Description: Form an emergency response team of community members that live in the Bryson-Hesperia area  
Community: Bryson-Hesperia (BH) community  
Project Collaborators: Monterey County OES, CAL FIRE

## **Project #4**

Project Name: Residential Chipping Program  
Description: Treatment and disposal of vegetative material created during defensible space maintenance by the property owner  
Community: Bryson-Hesperia, Bradley, Ranchita Canyon, Parkfield area  
Project Collaborators: CAL FIRE / Private landowners

## **Project #5**

Project Name: Parkfield Wildland Fire Preplan  
Description: Identify predetermined evacuation areas, values at risk, control lines and objectives, create preplan maps for responders  
Community: Bryson-Hesperia area  
Project Collaborators: CAL FIRE, SoMoCo

## **Project #6**

Project Name: Ranchita Canyon Truck Trail  
Description: This project is in the initial planning phase  
Community: South Monterey, Ranchita Canyon, Parkfield area  
Project Collaborators: CAL FIRE / Private landowners

## **Project #7**

Project Name: Indian Valley Cattle Company VMP  
Description: This project is in the initial planning phase  
Community: South Monterey, Indian Valley area  
Project Collaborators: CAL FIRE / Private landowners

## **Project #8**

Project Name: Worke VMP

Description: This project is in the initial planning phase

Community: South Monterey, Ranchita Canyon, Parkfield area

Project Collaborators: CAL FIRE / Private landowners

## **Project #9**

Project Name: Sky Rose VMP

Description: This project is in the initial planning phase

Community: South Monterey, Vineyard Canyon, Portuguese Canyon area

Project Collaborators: CAL FIRE / Private landowners

## **Battalion 5 Projects:**

### **Project #1**

Project Name: San Juan Canyon Wildland Fire Pre-Attack Plans

Description: Gather hazard assessment data. Develop updated preplans and tactical/strategic planning

Community: San Juan Canyon area

Project Collaborators: CAL FIRE, San Benito County Fire Safe Council, San Benito County Fire

### **Project #2**

Project Name: Thompson Truck Trail Improvement

Description: This road stretches from Limekiln Road to the Fremont Peak area. At one time, this road was maintained annually by CAL FIRE and is a main access road to areas in that part of the county. The trail can also be used for evacuation of citizens from the San Juan Canyon area. Collaboration with the various property owners and gaining their trust and permission to allow CAL FIRE to once again maintain the road is crucial to the success of this project. Brushing of the roads, utilizing crews, and grading and installing water bars are some of the items that would need to be addressed.

Community: Thompson Truck Trail runs from Cienega Road to San Juan Canyon Road on the West side of San Benito County

Project Collaborators: Various land owners, San Benito Fire Safe Council (pending grant approval), Gabilan camp crews.

### **Project #3**

Project Name: Public Education

Description: Increase public awareness on defensible space throughout San Benito County, with emphasis in the south county area and the Panoche Valley. Personnel will utilize public events such as the San Benito County Fair and work closely with the San Benito Fire Safe Council for high visibility and spread the fire safety message

Community: San Benito County

Project Collaborators: San Benito County Fire Department, San Benito Fire Safe Council

### **Project #4**

Project Name: Thompson Valley VMP

Description: Burn approximately 1000 acres of brush/grass. This project is in the active stages

Community: South San Benito County

Project Collaborators: Wilbur Ranch, Enz Ranch

### **Project #5**

Project Name: Willow Springs Wildland Fire Pre-Attack Plans

Description: Gather hazard assessment data. Develop updated preplans and tactical/strategic Planning.

Community: Willow Springs area

Project Collaborators: CAL FIRE

### **Project #6**

Project Name: Battalion 5 Hazard Assessment

Description: Use gathered hazard assessment data to begin updated preplans and tactical/strategic planning.

Community: Aromas – northern Monterey County

Project Collaborators: CAL FIRE

### **Project #7**

Project Name: Gabilan Ranch VMP Prescribed Burn Project

Description: This project is in the initial planning phase

Community: South San Benito County

Project Collaborators: CAL FIRE / Private landowners

### **Project #8**

Project Name: Range Improvement burns

Description: Multiple Ranchers - Taylors RI, Silacci RI, Gabilan Ranch RI, Bengard RI

Community: Eastern foothills of Salinas Valley

Project Collaborators: CAL FIRE / Private landowners

## **Project #9**

Project Name: Residential Chipping Program

Description: Treatment and disposal of vegetative material created during defensible space maintenance by the property owner.

Community: Aromas/ North Monterey County area

Project Collaborators: CAL FIRE, Aromas Water District, Private landowners

## **Battalion 6 Projects:**

### **Project #1**

Project Name: Rock Springs Ranch VMP

Description: The site is the second of three separate burn projects located all on the Rock Springs Ranch, approximately 8,000 acres in total. This project is in the planning phase.

Community: Private ranch located in San Benito County southeast of the Pinnacles National Park between Highway 25 and Fresno County line

Project Collaborators: CAL FIRE / Private landowners

### **Project #2**

Project Name: Public Education

Description: Increase public awareness on defensible space throughout the south county area of San Benito County utilizing public events such as Neighborhood Prevention Gathering and San Benito County Fair.

Community: County of San Benito

Project Collaborators: CAL FIRE, San Benito Fire Safe Council

### **Project #3**

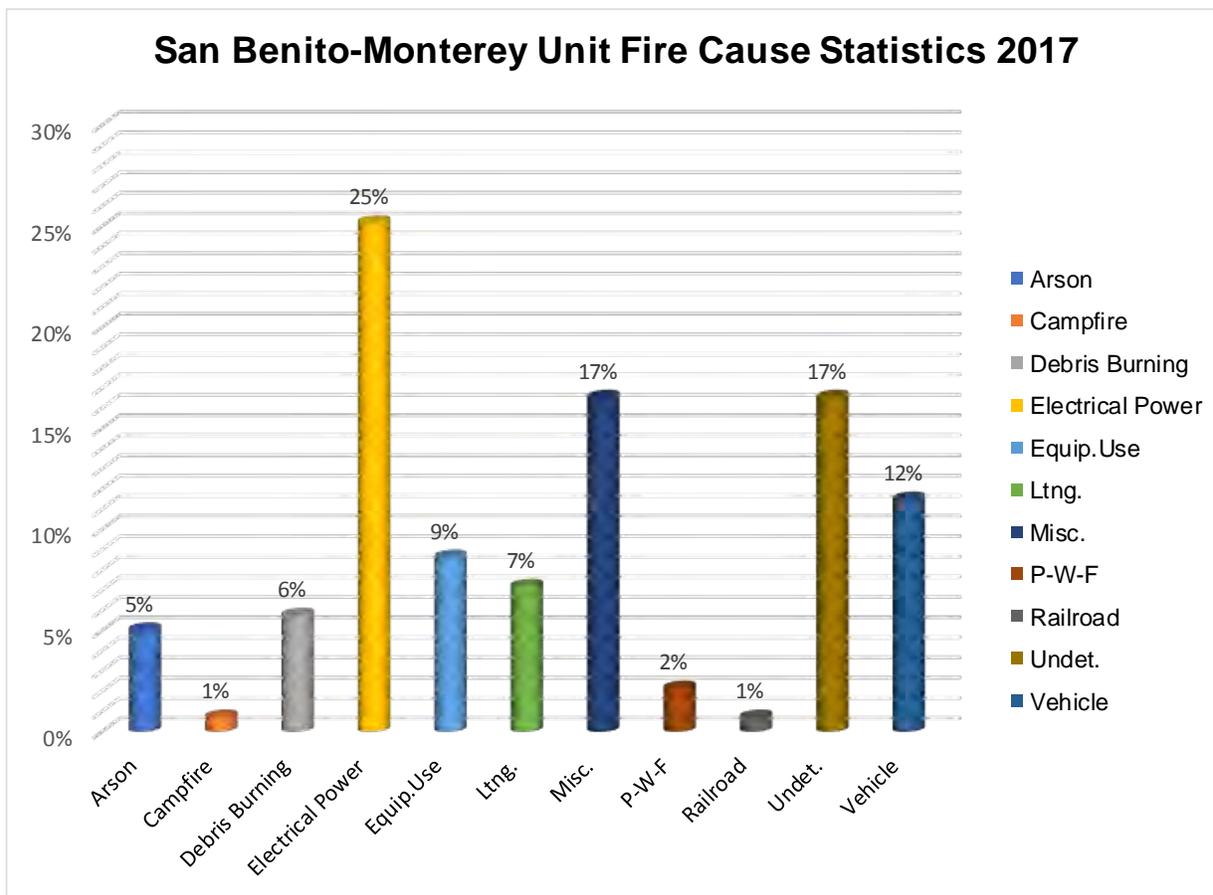
Project Name: Stone Canyon Ranch VMP

Description: The site is the first of two or three separate burn projects located all on the Stone Canyon Ranch, approximately 8,000 acres in total. This project is in the planning phase and will tie in with Battalion 5's VMP projects on the Gabilan Mountain Range.

Community: Private ranch located in San Benito County Northwest of the Pinnacles National Park between Highway 25 and the Monterey County line.

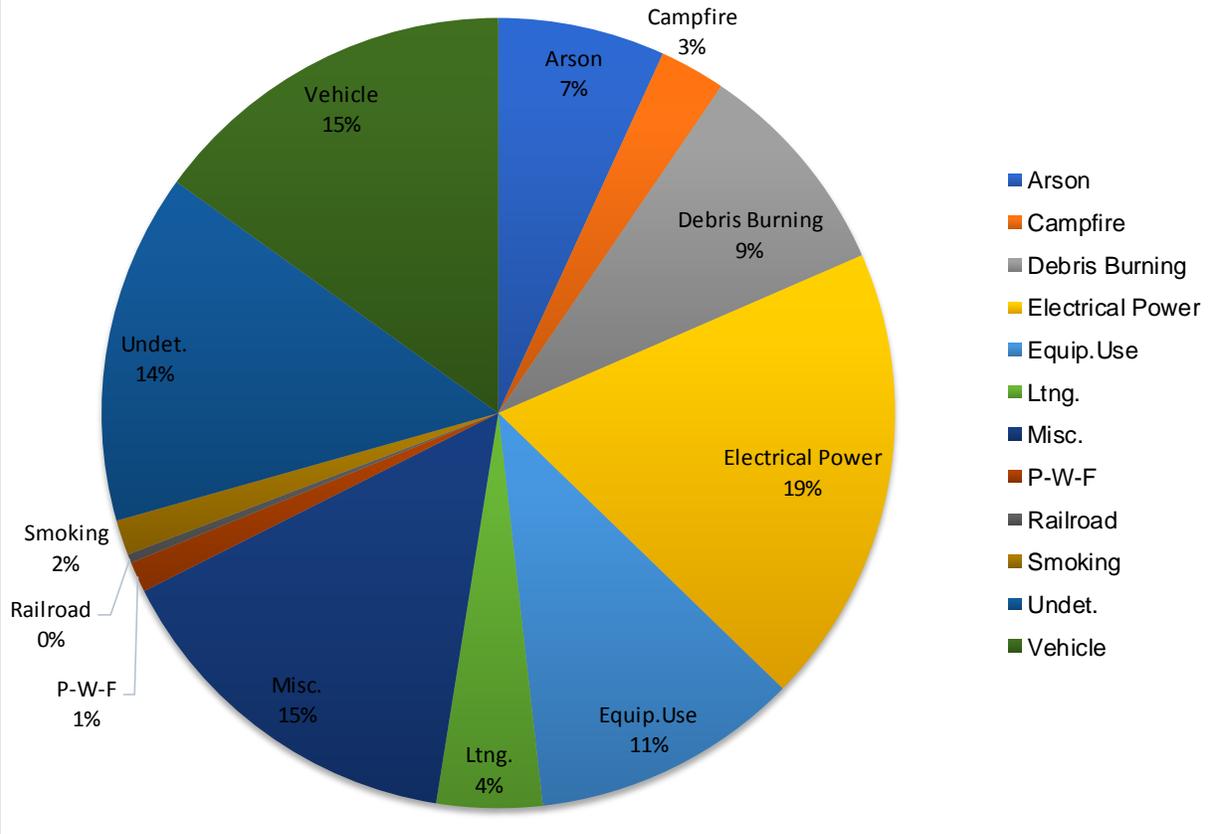
Project Collaborators: CAL FIRE / Private landowners

**APPENDIX B: IGNITION DATA**



Fire Cause	Number of fires from 2017	Percentage by Cause
Arson	7	5%
Campfire	1	1%
Debris Burning	8	6%
Electrical Power	35	25%
Equipment Use	12	9%
Lightning	10	7%
Miscellaneous	23	17%
Playing with Fire	3	2%
Railroad	1	1%
Undetermined	23	17%
Vehicle	16	12%
<b>Total</b>	<b>139</b>	<b>100%</b>

## Cause Totals: 2012 to 2017



### Fire Cause    Number of fires from 2012 - 2017

Arson	38
Campfire	15
Debris Burning	50
Electrical Power	105
Equipment Use	61
Lightning	24
Miscellaneous	84
Playing with Fire	7
Railroad	2
Smoking	8
Undetermined	80
Vehicle	84

**Total = 558**

### Percentage by Cause

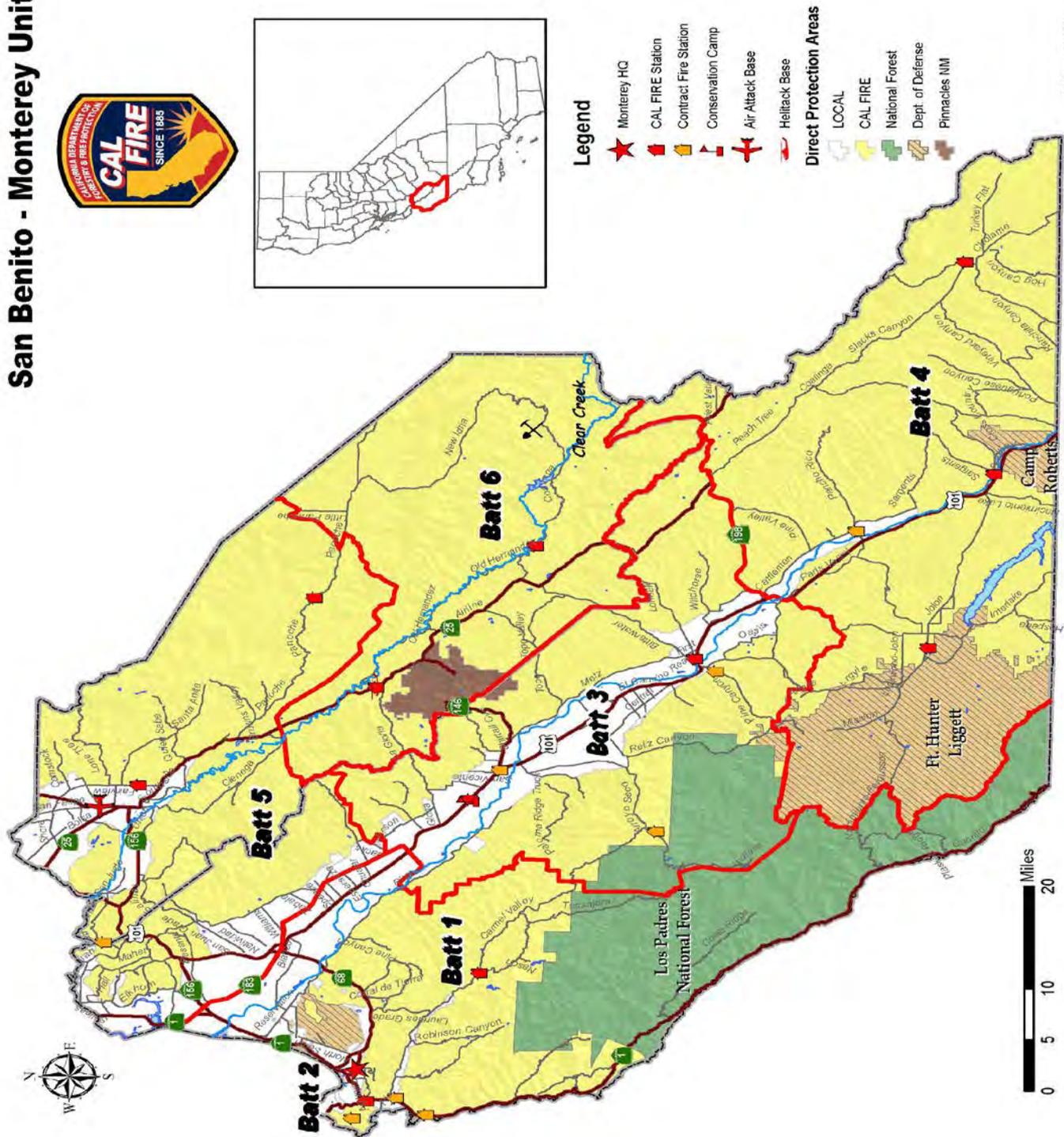
Arson	7%
Campfire	3%
Debris Burning	9%
Electrical Power	19%
Equipment Use	11%
Lightning	4%
Miscellaneous	15%
Playing with Fire	1%
Railroad	0%
Smoking	2%
Undetermined	14%
Vehicle	15%

**Total = 100%**

**EXHIBITS: MAPS**

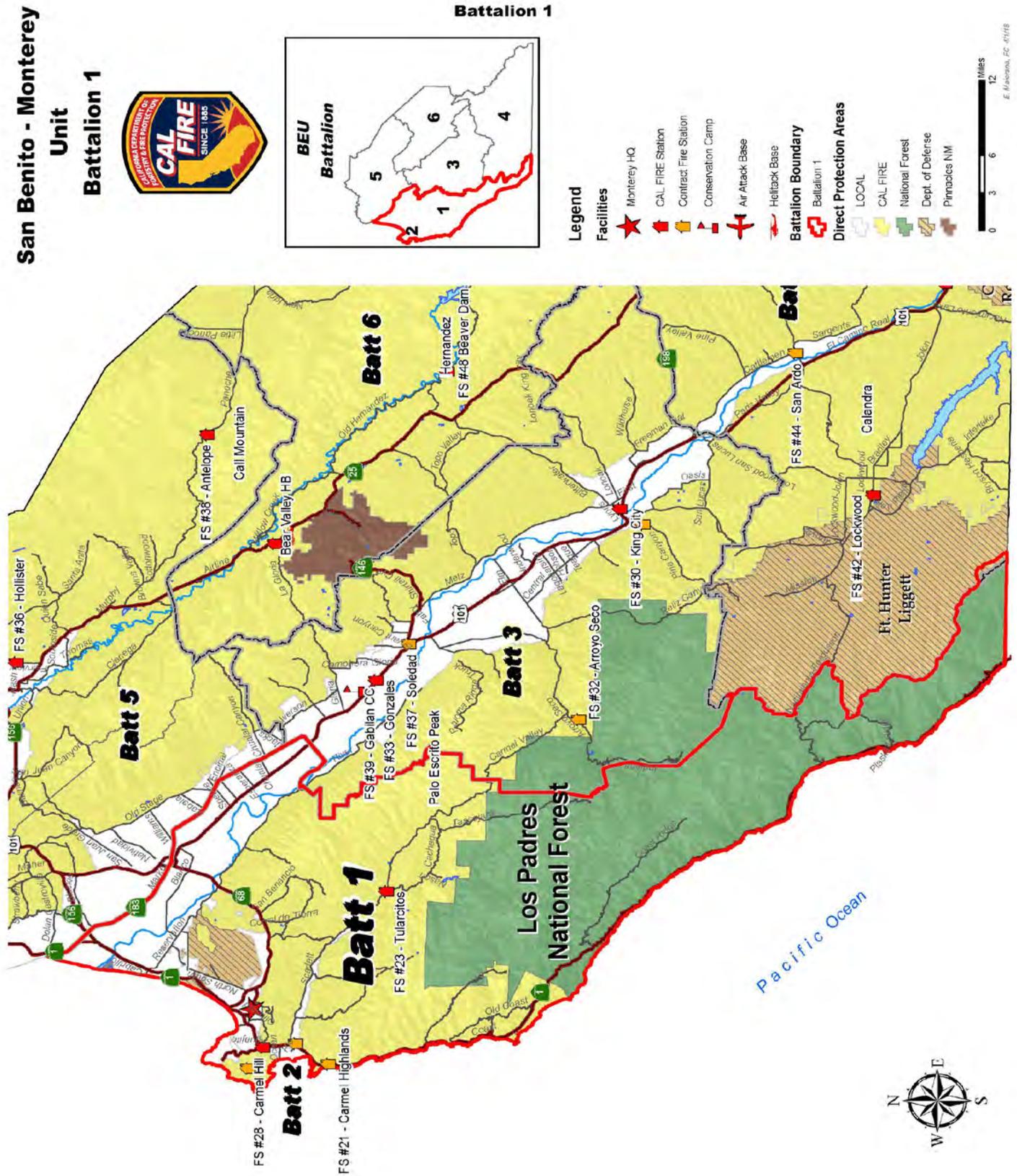
Figure A: Unit Map

**San Benito - Monterey Unit**



E:\maps\25\_4718

Figure B: Battalion Maps



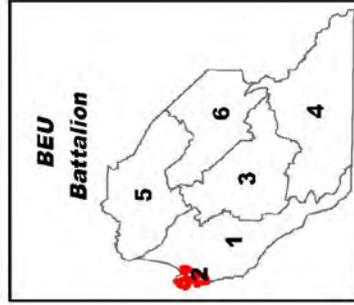
# San Benito - Monterey

## Unit

### Battalion 2



### Battalion 2

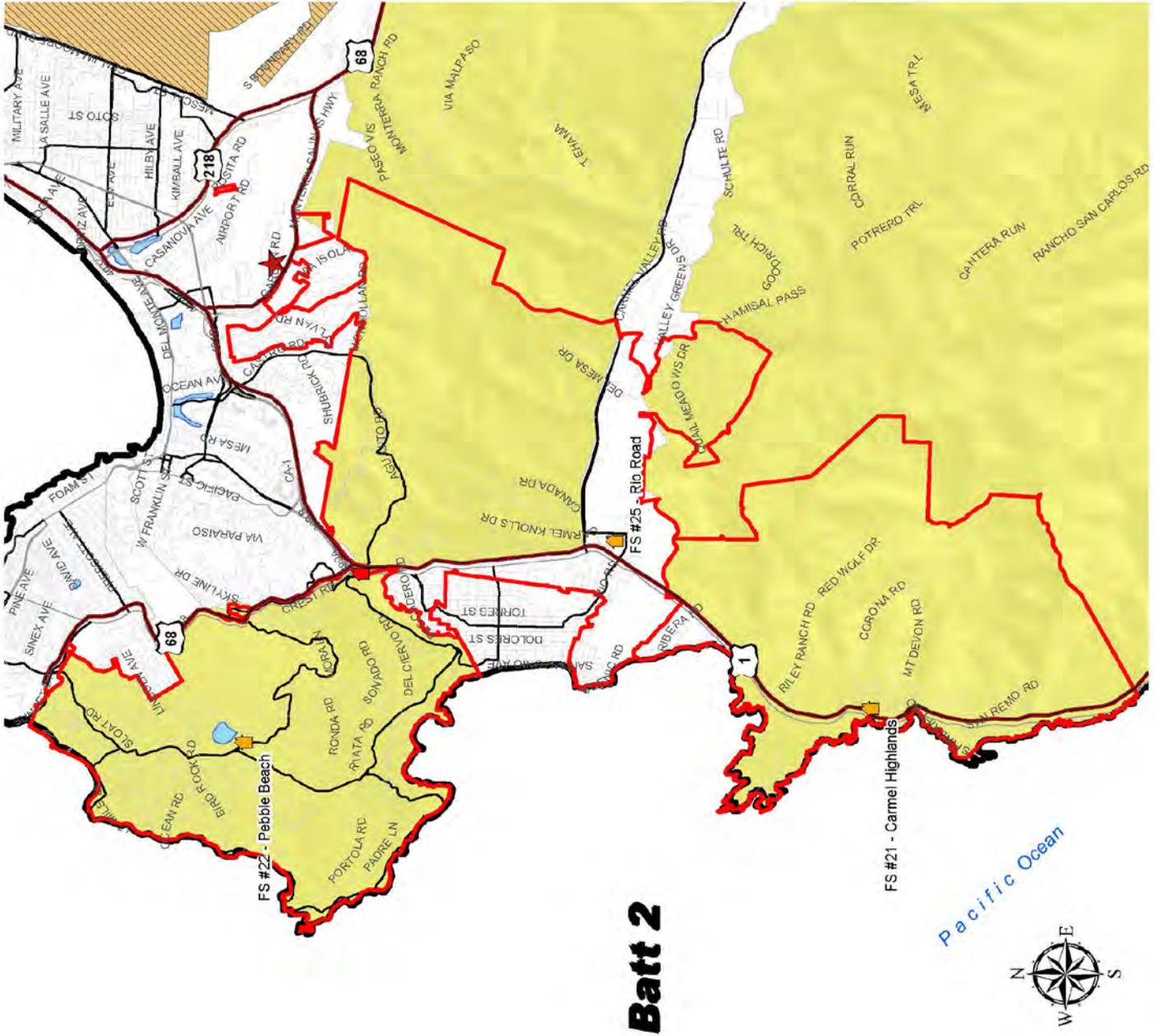


#### Legend

- Monterey HQ
- CAL FIRE Station
- Cooperative Fire Station
- Conservation Camp
- Air Attack Base
- Helitack Base
- Battalion Boundary**
- Battalion 2
- Direct Protection Areas**
- LOCAL
- CAL FIRE
- National Forest
- Dept. of Defense
- Pinnacles NMI



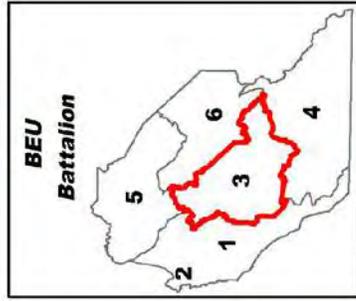
E. Moberg, CC #1/18



## Batt 2

# San Benito - Monterey Unit

## Battalion 3



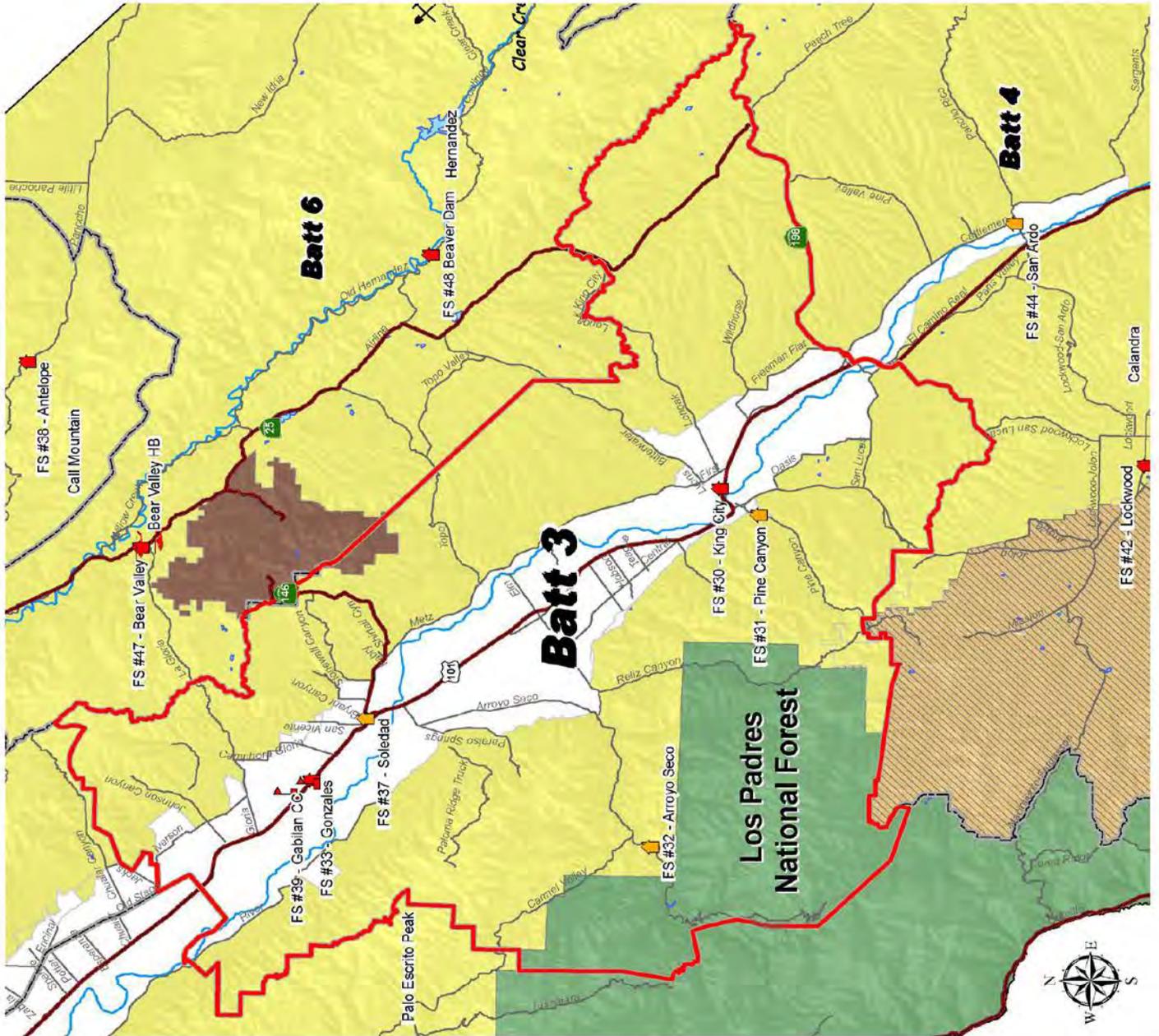
Battalion 3

### Legend

- BEU Facilities**
- ★ Monterey HQ
- 🚒 CAL FIRE Station
- 🚒 Cooperative Fire Station
- 🏠 Conservation Camp
- ✈️ Air Attack Base
- 🚒 Helitack Base
- Battalion Boundary**
- 🔴 Battalion 3
- Direct Protection Areas**
- 🏠 LOCAL
- 🌲 CAL FIRE
- 🌲 National Forest
- 🏢 Dept. of Defense
- 🏢 Pinnacles NM

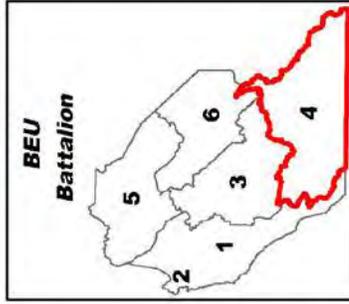


E. Moreno, FC, 4/1/18



# San Benito - Monterey Unit

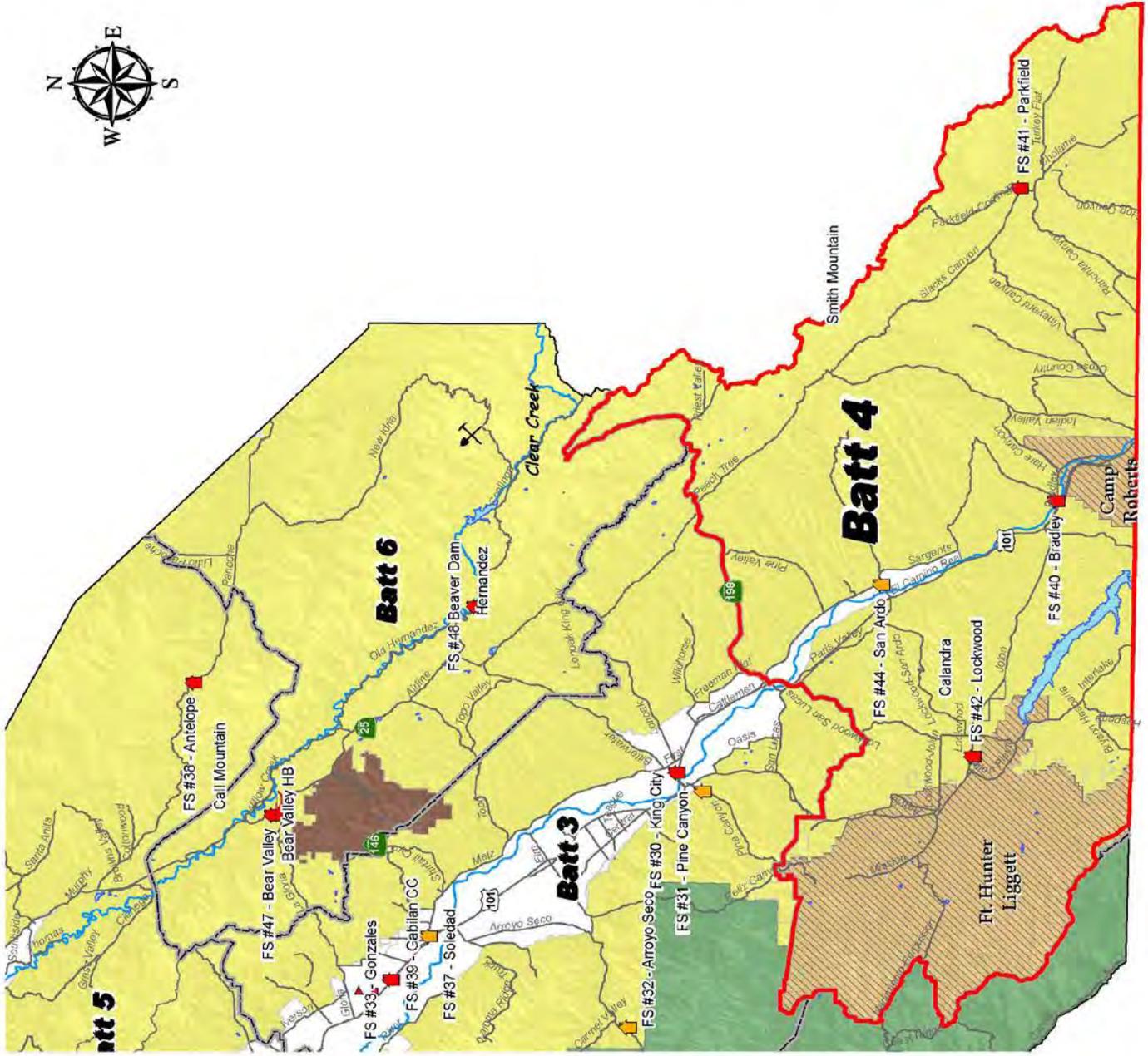
## Battalion 4



## Battalion 4

### Legend

- BEU Facilities**
- Monterey HQ
  - CAL FIRE Station
  - Cooperative Fire Station
  - Conservation Camp
  - Air Attack Base
  - Helitack Base
- Battalion Boundary**
- Battalion 4
- Direct Protection Areas**
- LOCAL
  - CAL FIRE
  - National Forest
  - Dept. of Defense
  - Pinnacles NM
- Miles 0 3 6 12
- E. Moreno, FC 5/1/18

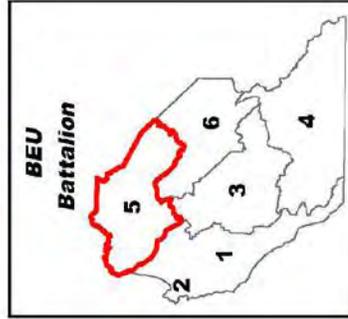


# San Benito - Monterey

## Unit Battalion 5

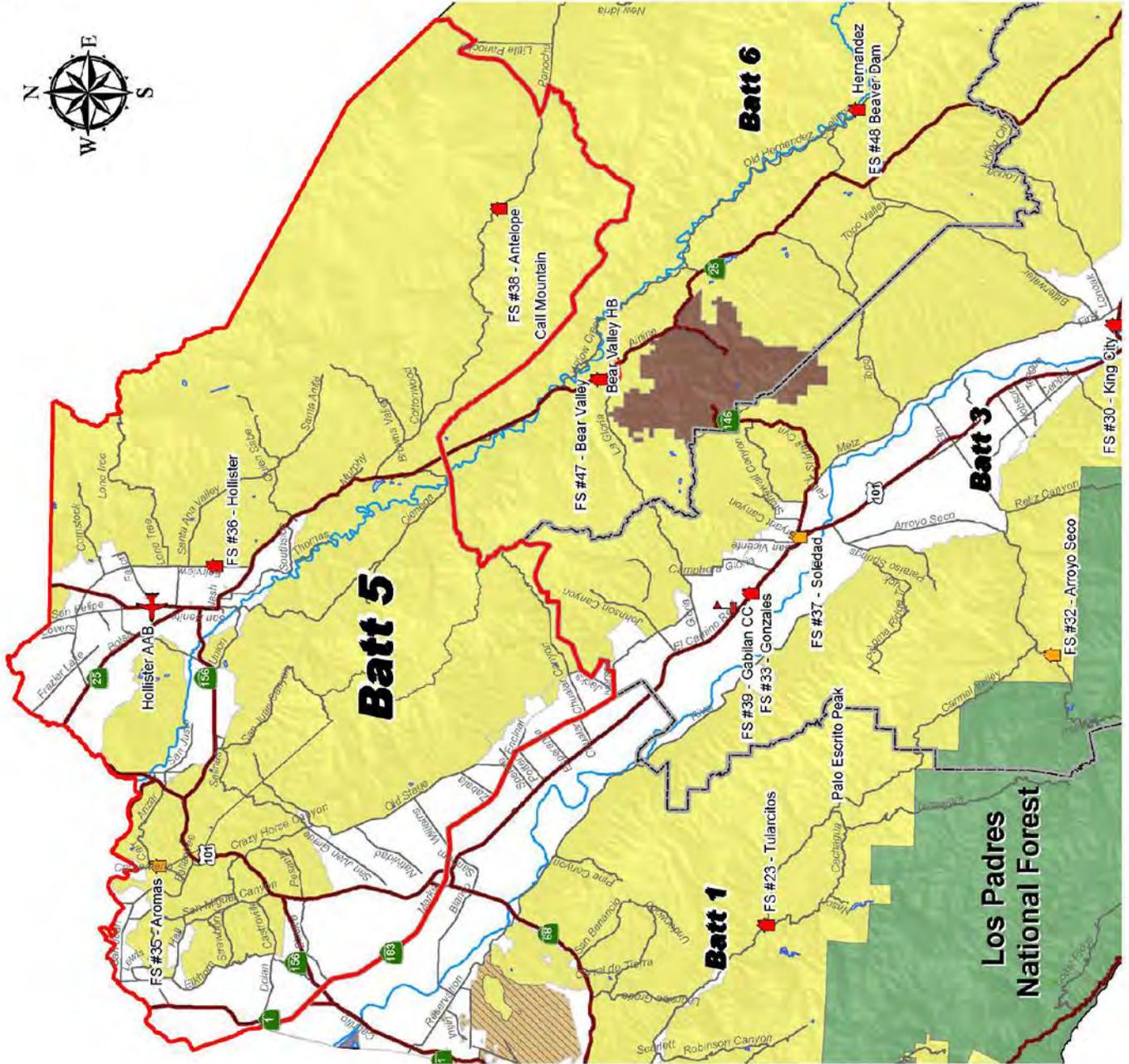


### Battalion 5



#### Legend

- BEU Facilities**
- ★ Monterey HQ
- CAL FIRE Station
- Cooperative Fire Station
- Conservation Camp
- ✈ Air Attack Base
- ✈ Helitack Base
- ▭ Battalion Boundary
- ▭ Battalion 5
- ▭ Direct Protection Areas
- ▭ LOCAL
- ▭ CAL FIRE
- ▭ National Forest
- ▭ Dept. of Defense
- ▭ Pinnacles NM

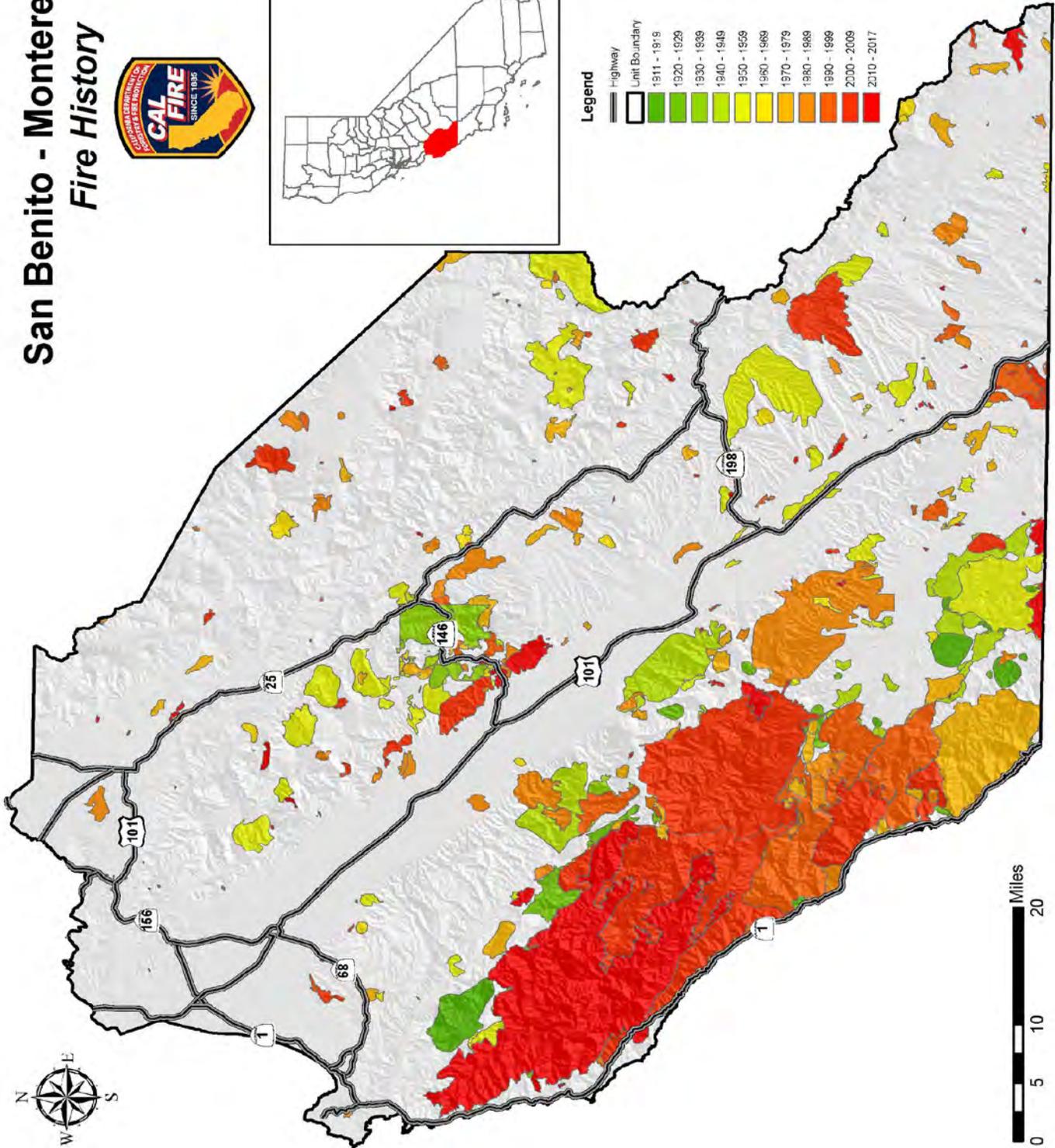




# San Benito - Monterey Unit Fire History



## Fire History



© 2018 CAL FIRE

## **SUPPLEMENT:**

### **ANNUAL ACCOMPLISHMENTS REPORTING (2017)**

#### **Fire Planning:**

The Unit continues to assemble a Unit-wide Pre-Attack Plan. Community members, fire safe councils, and homeowner groups have come together to assist Unit personnel in gathering information, collecting data and making maps of their respective areas, to compile a resource to educate residents and visitors in the event of an emergency, as well as assist responding emergency personnel. We have draft maps for several communities, as well as ongoing information collection for several more.

#### **Wildland Fire Prevention Engineering:**

In 2017, the San Benito-Monterey Unit was successful in providing 4291 Public Resource Code inspections, fire prevention, and fuel reduction education to communities in assists with the Defensible Space Inspectors.

CalMAPPER has been instrumental in collecting data, tracking, fiscal reporting, emergency response, planning, and assessment, for fuel reduction projects in the San Benito-Monterey Unit.

#### **Education and Information:**

In conjunction with fire districts and other groups such as fire safe councils, Resource Management has completed multiple community fuel reduction projects. CAL FIRE is committed to working with fire safe councils and other local groups to seek new grant funding or other sources to create a more fire safe environment for the citizens.

#### **Vegetation Management:**

The San Benito-Monterey Unit has an active and successful Vegetation Management Program, with many planned, active, and ongoing projects. In 2017, progress was limited due to incident activity, especially the fire siege in the North Bay. However, the San Benito-Monterey Unit was successful in completing a portion of the LaMacchia North VMP in the Gabilan Range, as well as additional fuel reduction in the Carmel Valley Regional Shaded Fuel Break around the communities of Carmel Views (Carmel Valley), Del Mesa (Carmel Valley), Pacific Meadows (Carmel Valley), and Tularcitos Ridge (Cachagua); the Cachagua-Jamesburg) Community Chipping; Cachagua Road Fuel Reduction; Bryson-Hesperia and San Antonio Valley Fuel Breaks; Lockwood and San Antonio Valley Community Chipping; Aromas Fuel Reduction and Community Chipping; and the San Juan Canyon Shaded Fuel Break (San Juan Bautista).

The San Benito-Monterey Unit works closely with many organizations within our Unit to achieve our goals in reducing the risk of wildfire. These organizations include the Fire Safe Council for Monterey County, the San Benito Fire Safe Council, the US Forest Service, the Bureau of Land Management, the California Conservation Corps, the Pacific Gas and Electric Company, the Resource Conservation District of Monterey County and the Monterey Bay Air Resources District. Our cooperators are an integral part of the overall Vegetation Management Program.

The San Benito-Monterey Unit has proposed broadcast burn projects in the Gabilan Range (LaMacchia North VMP, Thompson Valley VMP, and Church Ranch VMP) and Diablo Range (Rock Springs VMP, Indian Valley VMP, Sky Rose VMP, Work Ranch VMP), as well as a portion of the Sierra de Salinas Range. Implementation of these projects is dependent upon weather and fire activity. The Garlinger VMP was successfully burned in November 2016; a portion of LaMacchia North VMP was burned in November 2017, too.

The San Benito-Monterey Unit has proposed a maintenance program for historic fuel breaks and truck trails, such as the West Side Fuel Break, Thompson Truck Trail, Ranchita Canyon Truck Trail, and the Paloma Truck Trail. Work has begun on these projects to secure property owner access and environmental compliance.

**Other Fire Prevention Projects in SRA:**

The San Benito-Monterey 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 watershed, habitat, social and other values of functioning ecosystems. In 2017, the San Benito-Monterey Unit continued to foster inter-agency relations, collaboration, and abiding by the goals and objectives set forth in the Strategic Fire Plan for California. The Gabilan Conservation Camp crews actively continued collaboration with neighboring agencies. In addition, the SRAFPF allowed for a more proactive role in community fuel reduction, especially with neighborhood chipping programs. The neighborhood chipping program helped with the treatment and disposal of vegetative material created during defensible space creation and maintenance by the property owner in multiple communities, such as Bryson-Hesperia, Lockwood, San Antonio Valley, Aromas, Prunedale, Bradley, Parkfield, San Juan Canyon, Cachagua, Jamesburg, Tassajara, Carmel Valley, and Monterey.

  
\_\_\_\_\_  
**Unit Chief**  
Brennan Blue

4-25-18  
\_\_\_\_\_  
**Date**