

# **Carmel Highlands Fire Protection District Fire Defense Plan**



Adopted: March 2017  
Revised March 2018

Mission statement: The purpose of the Carmel Highlands Fire Protection Districts Fire Defense Plan is to provide a framework for the district to implement fuel reduction projects as well other measures to reduce the threat of wildfire within the Carmel Highlands Fire Protection District by Carmel Highlands Fire Protection District.

## **INTRODUCTION**

The Carmel Highlands Fire Protection District (DISTRICK) and the California Department of Forestry and Fire Protection (CAL FIRE) propose a landscape hazardous fuel reduction project in the form of a Fire Defense Plan. The Plan addresses the threat of wildland fire within and around the Carmel Highlands Fire Protection District by identifying and prioritizing those actions determined by CAL FIRE to provide the greatest fire protection within the wildland-urban interface (WUI).

The goal of the Carmel Highlands Fire Defense Plan (CHFDP) is to reduce the threat to life, property and resources resulting from wildland fire within the DISTRICK. This will be accomplished by reducing surface fuels, ladder fuels, canopy density and will create conditions that improve fire suppression effectiveness. The degree of improvement is directly proportional to the reduction of surface and ladder fuels, and canopy cover density. With improved fuel conditions, fire suppression actions will require fewer resources. Lower fire line heat intensities and flame lengths will allow direct attack by fire crews with improved line construction rates. Reduced canopy closure increases the effectiveness of the aerial application of retardant, reduces the potential for crown fire initiation and spread, and makes spot fires easier to detect and suppress with the additional benefit of improved forest health and reduced tree mortality. Reduced fire intensity results in less fire caused damage to the community and provides for safer access and egress of residents and fire suppression personnel. The likelihood that fires will be contained and controlled when they are still small is improved, which reduces suppression costs, improves firefighter safety, and improves the ability of firefighters to protect communities and resources.

The DISTRICK is the southern-most district in Battalion 2 of the San Benito Monterey Unit (BEU) with the northern border just south of the Carmel River stretching 5 miles down to Victorine Ranch and 3 miles from the coast line to the ridge of the west facing slope encompassing 6000 acres in the wildland-urban interface.

The DISTRICK has many large homes under a tall canopy of closed cone coniferous forest with areas of maritime chaparral and coastal scrub, as well as small remnants of coastal prairie in the common areas. The majority of the district is rated Very High as identified in the Monterey County Community Wildfire Protection Plan (MCCWPP) for Fire Hazard Severity Zone and the CDF-FRAP map of Communities at Risk from wildfire.

The Monterey County Community Priority for the DISTRICK is rated as High in the following categories: Risk of Wildfire Occurrence, Community, Priority Area and Treatment Designation in Both SRA and LRA. The BEU Strategic Fire Plan and the Monterey County CWPP for this Priority Area support the CHFDP.

Defensible space remains a very high priority in the Carmel Highlands due to the housing density within the wildland urban interface. The area is characterized by narrow winding roads with poor access and egress embedded in heavy fuels. The first line of defense for every property owner in Carmel Highlands is to maintain their property in accordance with state and local fire standards for defensible space and building materials. "Fire Safe California" Residential Fire Inspections are a key element in educating Carmel Highlands residents to take personal action to keep their families and homes safe from wildfire. The battalion has an aggressive LE-100 program utilizing engine companies and employing Retired Annuitant Fire Captains to educate homeowners and to ensure compliance throughout the districts. The district has added a Fuels officer who administers the LE-100 program along with the hazard tree permit program required by Monterey County.

The CHFDP will be designated by the following zones, Aurora Del Mar, Carmel Meadows, Corona, Mal Paso, Mt. Devon, Red Wolf, Spindrift, Upper Ridges, Victorine Ranch, Walden, Yankee Point and will include undeveloped vacant parcels and all open space.

The plan will establish a network of fire roads along with the enhanced access and egress of existing roads. Long-term maintenance and monitoring of fuel reduction efforts within the zones is important in maintaining reduced fuel loads in critical threat areas and identifying new or additional projects necessary for reducing overall community wildfire risk. Many of these areas have had a variety of fuel reduction work in the past and will be incorporated into the plan.

The details of the CHFDP are being developed in cooperation with several adjacent agencies and stakeholders; Monterey Peninsula Regional Parks District, CAL FIRE, Cal Am, Cal Trans, Monterey County, PG&E, California State Parks, California Highway Patrol, Monterey County Sheriff's office, Homeowner associations and the residents of Carmel Highlands. Through collaboration we will achieve these goals.

In overseeing implementation of this Plan, the Fire Department will consider and limit by specified procedures the effects that fire hazard reduction work has on the environment, endangered species, and other natural resources. As the lead agency designing this plan we are legally required to abide by the rules of CEQA. Due to the size and scope of this plan and the required level of analysis it will have to incorporate we feel the analysis can only be accomplished in the form of a contract with an environmental consulting agency. This plan will focus the analysis area to be both cost effective and timely.

The Carmel Highlands Fire Defense Plan is a "living" policy document and once completed shall be reviewed and updated every other year by the DISTRICT for approval by the DISTRICT Board of Directors in public session.

TABLE OF  
CONTENTS

	Page
<b>I.</b> Emergency Access Roads System	1
A. Fire Road Standards	
B. Fire Road/Fuel Break Standards	
C. Road Identification Markers	
D. Road Grading Requirements	
E. Maintenance Schedule	
F. Fire Road Improvement Projects	
<b>II.</b> Protection of Environmentally Sensitive Plant Species	3
A. Preservation	
B. Authority to Stop Work	
<b>III.</b> Target/Treatment Areas	4
A. Corona, Mt. Devon, Walden, Mal Paso	
B. Victorine Ranch	
C. Yankee Point, Spindrift, Aurora Del Mar	
D. Upper Ridges	
E. Red Wolf	
F. Point Lobos, Carmel Meadows	
<b>IV.</b> Undeveloped, Vacant or Open Space Parcels	7
A. Vacant Lot Program	
B. Open Space Fire Hazard Reduction	
C. Fuel Reduction Standards	
<b>V.</b> Appendices	11
A. Fire Defense Plan Fuel Treatment Zone Location Maps	
B. Highlands Fire District Vegetation Fuel Type Map	
C. Highlands Fire District Satellite Property Boundary Map	
D. Highlands Fire District Topographic Map	
E. Point Lobos State Reserve Project Map	
F. Public Resources Code 4291	
G. Ordinance No. <u>2008-06 11-2008</u>	
H. Fire Road Map	
I. Prioritized Fire Defense Work Projects	

## I. Emergency Access Roads System

A network of roads shall be created, inspected, and maintained to provide safe and ready ingress and egress for emergency equipment in and around Carmel Highlands. This road system shall consist of Fire Roads and combination Fire Road/Fuel Breaks as described below. Any gated fire road shall have a Knox box or state lock. Existing gates will be inspected to ensure compliance. Non-compliant gates will be upgraded to meet the minimum standards.

### A. Fire Road Standards

The requirements for a fire road are:

- Minimum 12-foot roadbed width

- Minimum 13 ½ foot vertical clearance over entire width and length, including any turnouts or turnarounds

- Minimum 30 foot turn radius. No “islands” at intersections

- Drainage and erosion measures conforming to current engineering practices

- Minimum 12-foot gate width, fully open

- Locked gates shall have a Knox Box or Fire Department padlock (state)

### B. Fire Road / Fuel Break Standards

Fire Road /Fuel Breaks are intended to provide a break in the canopy and ladder fuels of the Forest so that a crown fire may drop to the forest floor where ground fire crews may successfully suppress the fire. Fire retardant dropped from aircraft will penetrate the canopy and is therefore more effective. Fuel reduction treatments may be accomplished by Hand, Mechanical, Grazing, Burning or Herbicide application. Fuel reduction prescriptions will be modified as needed to minimize erosion and promote overall stand health and longevity. Any work near a stream channel or on slopes greater than 30% will be modified to buffer the channel and to minimize erosion and soil movement.

In addition to the requirements and in I A Fire Road Standards, all fuels within 30 feet of both road/ trail edges on roads which have been identified as Fire Road/ Fuel Break shall be modified or removed as follows:

- Cut and remove all brush

- Remove all dead standing trees

- Remove all dead fallen material

- Remove all dead tree limbs within 10 feet of ground level

- Remove all other tree limbs within 5 feet of ground level

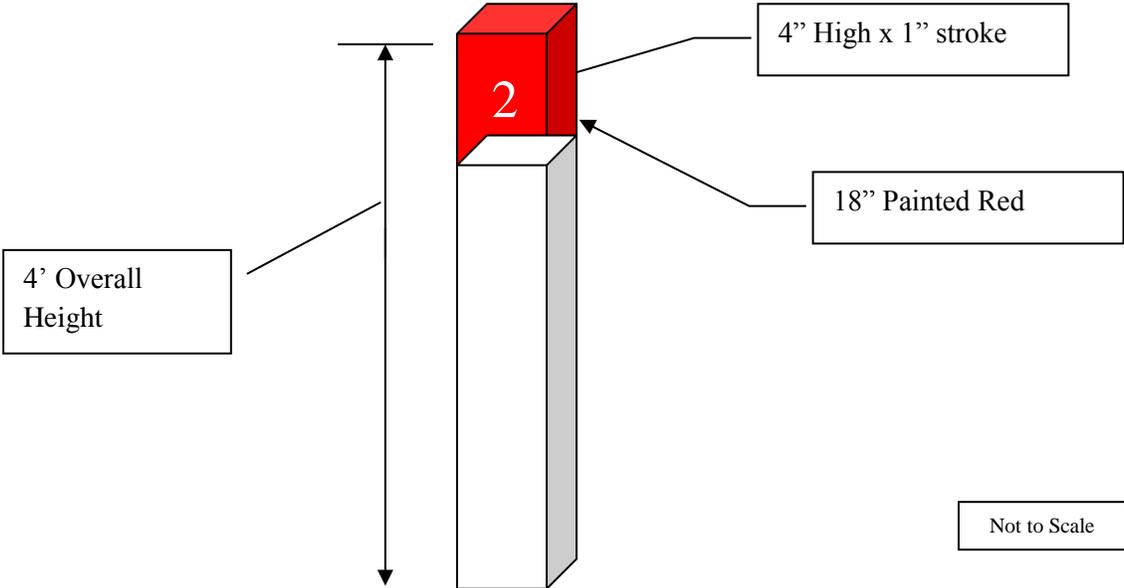
All cut material shall be chipped and spread or removed from the area Fuel Breaks shall be constructed to Fire Road/Fuel Break standards, with the additional requirements that all trees less than 6 inches in diameter at breast height shall be removed, except as described above in this section. The Fuel Break width is to be the greatest on steeper slopes. An occasional tree shall be retained in the Fuel Break area to reduce the visual and an esthetic impact.

Shaded Fuel Breaks shall extend no more than 300 feet, slope distance, from the edge of the fire road or pavement. The management objective within this Shaded Fuel Break is to accelerate the natural pruning and thinning process of the forest stand and to promote long-term stand health and vigor.

The first 150 feet of the Shaded Fuel Break shall have an average tree spacing of approximately 16 feet or more. From 150 feet from the road edge to 300 feet from the road edge, average tree spacing shall incrementally be adjusted by thinning operations to approximately 12 feet or more. Trees should be thinned as individuals; however, retention of clumps or groups of trees will be encouraged to promote an aesthetically pleasing stand. In conjunction with thinning, trees over 10 feet in height should be pruned so that the foliage on the lower 1/3 of the bole is removed. In no case should more than 50% of the existing crown canopy be removed. An uneven aged canopy is preferred. Ground fuels shall be maintained at a height of less than 18 inches.

C. Road Identification Markings

At the direction of the Fire Department, all emergency access roads shall be numbered and identified with a numbered road sign meeting the following minimum requirements: Minimum 4” high and 1” stroke white numbers routed on all sides at the top of a 6” x 6” post exposed at least four feet above ground level. The top 18” of the post shall be painted red.



D. Road Grading Requirements

In order to curtail erosion on Fire Roads or Fire Road/Fuel Breaks within the Fire Defense Plan areas, the property owner/responsible party shall establish and maintain water bars at regular intervals on the roads prior to the start of winter rains. If erosion occurs, gullies in the roads shall be filled with suitable imported material to repair the roads.

Grading of road surfaces will be limited to a level that does not reduce the overall elevation of the fire road, or in such a way as to cause the surface of the Fire Road to convey significantly more water than it would have prior to grading.

E. Maintenance Schedule

DISTRICT shall inspect all emergency Fire Roads and Fuel Breaks for compliance to the standards in I A through C, above by May 1 of each year, prioritize the maintenance needs, develop a plan and coordinate said maintenance.

F. Fire Road and Fuel Break Improvement Projects

- Corona to Red Wolf connector on State Parks property (Head of Gibson Creek)
- Corona to upper Crest Road
- Mal Paso Creek to upper Crest
- Establish Fire Road system with signage
- Maintain and improve recently constructed Soberanes Fire roads and fuel breaks
- Victorine Ranch Hwy 1 east to the ridge top and parallel to Mal Paso Creek.

**II.** Protection of Environmentally Sensitive Plant Species

A. Preservation

This section is intended to clarify standard operating procedures for safeguarding threatened, endangered or environmentally sensitive plant and wildlife species and their habitat in the Carmel Highlands area without unduly compromising the effectiveness of fire hazard reduction standards. These standards are supported by the CEQA analysis for the project area.

DISTRICT will perform a CEQA analysis report in and around Carmel Highlands where fire hazard reduction work will be completed (The standards will be listed after analysis is completed).

When fire hazard reduction work must be undertaken within areas that contain such species, the DISTRICT shall coordinate efforts to avoid cutting, removing or adversely affecting the site.

#### B. Authority to stop work

The property owner and DISTRICT representatives each will have authority to stop hazard reduction work in progress if they believe environmentally sensitive species could or are being damaged or endangered in unwarranted fashion. To do so, they will notify the Fuels Reduction Captain or Fire Marshal of the area of concern. The Fuels Reduction Captain will place security tape around the designated plant species or the area specified by the property owner or DISTRICT representative. The Fuels Reduction Captain will give orders not to disturb the identified area.

Hazard reduction work will not proceed until the Fire Chief or the Fire Chief's designated representative has reviewed alternative hazard reduction options with the property owner and Fuels Reduction Captain representative, and the parties have reached agreement on a specific plan of action.

### III. Target Treatment Areas

#### A. Corona, MT Devon, Walden, Mal Paso

Residential area Fuel modification on developed property shall be consistent with the requirements of Public Resources Code 4291. Areas along the Hwy 1 corridor shall comply with the vacant lot/open space and road corridor standards outlined in IV-C-2 and IV-C- 3. Where the parcel falls within a designated "Shaded Fuel Break" section the standards of IV-C-4 shall apply. The Roadway standard will comply with section IV-C-5. Within 20 feet of roadway edges, the Fire Road/Fuel Break standard of section I-B shall apply except that low densities of soft shrubs or isolated hard shrubs with adequate clearance from overtopping trees may be left. On slopes over 30% the fuel modification standards specified in the "Shaded Fuel Break" section below shall apply. The effectiveness of the "Corona Fuel Break" will be dependent on fuel treatment in the adjacent State Parks property to the north of Corona road along Gibson Creek.

Where habitable structures border the undeveloped State Park land, fuel reduction zones shall be established extending 100 to 300 feet in ground measurement immediately below such structures as determined by the Fire Chief. The varying fuel reduction widths are intended to reduce the straight-line effect of the fuel reduction zone areas and to account for the variable threat effects created by topography and avoidance of sensitive plant communities. Fuel reduction is to be the greatest on steeper slopes and/or below structures with greatest exposure to the effects of radiant heat due to topography and structural components. The maintenance plan for treated areas within Corona, MT Devon, Walden and Mal Paso will be established after the various prescriptions are finalized.

## B. Victorine Ranch

Fuel modification on developed property shall be consistent with the requirements of Public Resources Code 4291. Modification of ornamental vegetation outside of the 100' defensible space zone will be adjusted with property owner input on a case by case basis to maintain effectiveness. Areas along the Hwy 1 corridor shall comply with the vacant lot/open space and road corridor standards outlined in IV-C-2 and IV-C-3. Fuel reduction shall be provided for a minimum of 100 feet around the exterior boundary of the property to the same standard as IV-C-1, a. through f. In cases where the width or depth of the parcel may be less than 100 feet, the fuel reduction will be made to the opposing property line. Where the parcel falls within a designated shaded fuel break the standards of IV-C-4 shall apply. The Roadway standard will comply with section IV-C-5. The maintenance plan for treated areas within Victorine Ranch will be established after the various prescriptions are finalized.

## C. Yankee Point, Spindrift, Aurora Del Mar

Fuel modification on developed property shall be consistent with the requirements of Public Resources Code 4291. Modification of ornamental vegetation outside of the 100' defensible space zone will be adjusted with property owner input on a case by case basis to maintain effectiveness. Along roadways bordering the Highway 1 corridor, fuels shall be modified as follows: Within 20 feet of roadway edges the road corridor standards outlined in IV-C-2 and IV-C- 3 shall apply. Parcels providing screening along the scenic highway corridor will be evaluated on a case by case basis to maintain a functional aesthetically pleasing appearance. The maintenance plan for treated areas within Yankee Point, Spindrift and Aurora Del Mar will be established after the various prescriptions are finalized.

## D. Upper Ridges

The priority will be to enhance and maintain new fire roads/ fuel breaks recently utilized during the Soberanes fire suppression effort. Where open space parcels fall within a designated "Shaded Fuel Break" the standards of IV-C-4 shall apply. The Roadway standard will comply with section IV-C-5. The Fire Road/Fuel Break standard of section I-B shall apply except that low densities of soft shrubs or isolated hard shrubs with adequate clearance from overtopping trees may be left. On slopes over 30% the fuel modification standards specified in the "Shaded Fuel Break" section below shall apply. The maintenance plan for treated areas within the Upper Ridges Fuel Break will be established after the various prescriptions are finalized.

## E. Red Wolf

Fuel modification on developed property from Riley Ranch Road to Red Wolf Road shall be consistent with the requirements of Public Resources Code 4291. Modification of ornamental vegetation outside of the 100' defensible space zone will be adjusted with property owner input on a case by case basis to maintain effectiveness. Areas along the Hwy 1 corridor shall comply with the vacant lot/open space and road corridor standards outlined in IV-C-2 and IV-C- 3. Fuel reduction shall be provided for a minimum of 100 feet around the exterior boundary of the property to the same standard as IV-C-1, a. through f. In cases where the width or depth of the parcel may be less than 100 feet, the fuel reduction will be made to the opposing property line. Where the parcel falls within a designated shaded fuel break the standards of IV-C-4 shall apply. The proposed connector from Red Wolf road to Upper Corona Road above Gibson creek is a priority. Opening the connector will provide a critical access and egress travel route and strategic location for tactical operations in the event of an advancing fire like the Soberanes. To open the road will require the treatment of fuels on the adjacent State Parks property. The Roadway standard will comply with section IV-C-5. The maintenance plan for any treated areas within the State Park property will be established after the various prescriptions are developed. Specifications for State Parks property will be addressed in section F.

## F. Point Lobos Reserve, Carmel Meadows (West and East side of Hwy 1)

The DISTRICT will outline recommended treatments for the following sections of State Park property: Highway 1 Corridor, Gibson Creek, Red Wolf Road, and several spot treatment areas within the park. Carmel Meadows is bordered by state park property on the North, West and South sides. The Northern boundary of the State Park property abuts the southern private properties of the Carmel Meadows subdivision and will benefit from an increased defensible space buffer. The specific fuel treatment prescriptions will be shaped by State Parks, CALFIRE and the CEQA analysis. Any fuel reduction prescription will ultimately be modified to address the Best Management Practices (BMP) for the many complex plant and animal communities throughout the park. It is anticipated that some treatments will be tested and evaluated for effectiveness potentially requiring multiple entries to achieve the desired future conditions. Through collaboration and BMP's we will work toward our mutual goals.

The proposed Red Wolf to Corona Road Connector and fuel break will be addressed in the future after the State Park Road and Trail plan is completed. The maintenance plan for any treated areas within the State Park property will be established after the various prescriptions are developed.

## **IV. Undeveloped, Vacant or Open Space Parcels and Shaded Fuel Breaks**

### **A. Vacant Lot Program**

The following fire safety requirements shall apply to vacant residential parcels or other undeveloped parcels as determined by the Fire Chief:

1. Vacant lots of less than one acre shall be maintained to Fuel Reduction Standard #1 as outlined in Section C, below.
2. Vacant parcels one acre and larger shall be maintained to Fuel Reduction Standard #2 as outlined in Section C, below.
3. The DISTRICT Fire Marshal shall be responsible for identifying annually, before June 1, each undeveloped parcel to which these requirements shall apply.

### **B. Open Space Fire Hazard Reduction**

The Fire Chief, or the Fire Marshal as designated by the Fire Chief of the DISTRICT, shall meet at least annually, by May 1, with the DISTRICT Board and Fuels Committee, to discuss open space parcels, their hazards and potential mitigation actions.

1. A complete list of open space parcels, regardless of jurisdiction, shall be created by May 1<sup>st</sup> each fire season. This list shall include:
  - a. Assessor's Parcel Number
  - b. Property Owner or Responsible agency
  - c. Physical location
  - d. Size in acres
  - e. Special concerns
  - f. Fuel Reduction standard
  - g. Expected completion date of fire hazard mitigations.
2. A complete listing and status of these parcels shall be kept on file at the district.

### **C. Fuel Reduction Standards**

The following fuel reduction standards apply to all vacant parcels as determined by the Fire Chief:

1. Standard #1 -- Undeveloped parcels less than one acre

Fuel reduction shall be provided on 100% of the parcel as follows:

- a. Cut all dry grass to a maximum height of 4 inches
- b. Remove all dead standing trees within 100 feet of a structure if they pose a threat to that structure
- c. Remove all dead fallen material within the defensible space
- d. Remove that portion of any dead tree limb within 10 feet of the ground
- e. Remove all tree limbs within six feet of the ground. Limb removal shall not exceed 1/3 the height of any tree
- f. Remove all cut material from the parcel, or chip and spread on-site

2. Standard #2 -- Undeveloped parcels one acre and larger

Fuel reduction shall be provided for a minimum of 100 feet around the exterior boundary of the property to the same standard as IV-C-1, a. through f. In cases where the width or depth of the parcel may be less than 100 feet, the fuel reduction will be made to the opposing property line. Where the parcel falls within a designated shaded fuel break the standards of IV-C-4 shall apply.

3. Standard #3 - Environmentally Sensitive/Scenic Designated Parcels

The owners of designated open space may request that specific parcels be excluded from the adopted fuel reduction standards. A request for this variance shall be submitted to the Fire Department in writing no later than March 1<sup>st</sup> of each calendar year explaining the reason for the request.

In specific cases where the property owner and the DISTRICT are unable to agree on fuel reduction standards, the Board of Directors shall make the final determination.

4. Standard #4 - Shaded Fuel Break

The depth and/or distance of a Shaded Fuel Break shall be determined on a case-by-case basis. The fuel modification within that area shall conform to the following:

- a. Non-irrigated grass or other herbaceous vegetation that dries and cures should be mowed or cut to a maximum height of 4"
- b. Remove all dead trees
- c. Remove all tree limbs within six feet of ground level
- d. Where located on slopes in excess of 30%, remove all tree limbs within ten feet of ground level
- e. Limb removal shall not exceed 50% of the height of any tree
- f. Remove all dead tree limbs within 16 feet of ground level. Prune out dead wood from retained shrubs and trees

- g. All cut material shall be lopped to within 12” or less of ground level, or chipped and spread, or removed from the area
- h. Shrubs should have average horizontal separation of twice their height. Groups of shrubs can be retained but should have extra clearance around them to maintain average separation
- i. Tree canopies should be separated by at least 10 feet measured edge to edge within the first 50 feet. The first 150 feet of the Shaded Fuel Break shall have an average tree spacing of approximately 16 feet or more. From 150 feet from the road edge to 300 feet from the road edge, average tree spacing shall incrementally be adjusted by thinning operations to approximately 12 feet or more. Shrubs should not be retained directly under tree canopies unless there is vertical separation of at least three times the height of the shrub between the top of the shrub and the lowest tree limb
- j. The remaining ground fuels shall be maintained at a height of less than eighteen (18) inches

5. Standard #5 – Roadways

- a. Remove all dead, diseased, and dying trees that present a direct hazard to the road or impede fire equipment
- b. Remove all woody vegetation less than 12” DBH within 10 feet of both sides of the road under the drip line of retained trees
- c. Thin the other vegetation 30 feet on both sides of the road (roughly a 60% brush reduction average, with pockets of retention in a mosaic form to prevent erosion and provide screening where appropriate)
- d. Remove all dead, diseased, and dying trees that, in the opinion of a qualified representative, present an indirect hazard to the road
- e. Prune all remaining trees to 16’ above ground. However, no tree shall be pruned greater than 50% of the live crown
- f. Material produced through felling or brushing shall be treated as follows:
  - 1. Stabilize larger material, such as tree boles
  - 2. Chip material within 35’ of the road where feasible
  - 3. Lop and scatter material not chipped to a minimum of 35’ from the road
  - 4. Keep chips, slash, and debris less than 4” in height above the ground level
  - 5. Place chips, slash, and debris in a location where it will not dislodge and enter any watercourse

6. Standard # 6 Broadcast and Pile Burning

Broadcast and pile burning may be used as a first entry or maintenance fuel reduction management tool. Broadcast burning is appropriate for open areas such as Point Lobos, Red Wolf and Upper Corona. Pile burning will be used in areas where management of sensitive micro sites may require a less invasive strategy and where smoke management issues present a problem.

7. Standard #7 Application of herbicides.

Treatment of invasive plants and grasses will be necessary for both the eradication and suppression before, during and after fuel treatments. The presence of aggressive nonnative plants and grasses present a significant problem to both native sensitive plant communities and the desired end condition post fuel treatment.

Nothing in the Carmel Highlands Fire Protection District Fire Defense Plan may be construed to alter or amend the requirements of federal, state, or county laws and regulations.

## V. Appendices

- A. Fire Defense Plan Fuel Treatment Zone Location Maps
- B. Highlands Fire District Vegetation Fuel Type Map
- C. Highlands Fire District Satellite Property Boundary Map
- D. Highlands Fire District Topographic Map
- E. Point Lobos State Reserve Project Location Map  
November 2016
- F. Public Resources Code 4291
- G. Fire District Ordinance NO. 2008-06 11-2008
- H. Fire Road Maps
- I. Prioritized Fire Defense Plan Projects by Fiscal Year

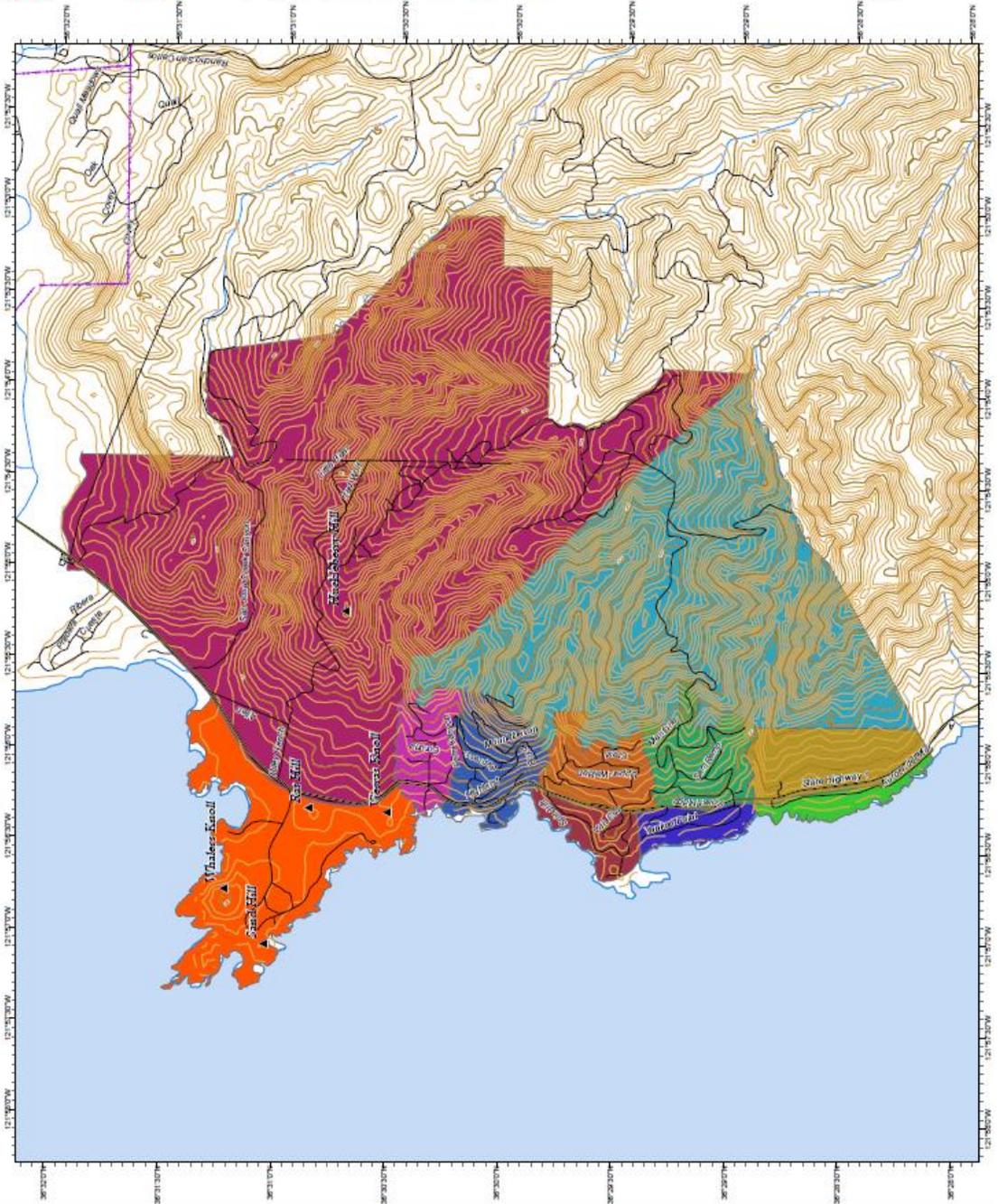
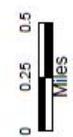
## Appendix A

**Central Highlands  
Fuel Modification  
Project Planning**



- Highway
- Road
- Powerline
- Stream
- Zone**
- Walden
- Aurora Del Mar
- Corona
- Mt. Paso
- Mt. Devon
- Point Lobos
- Red Wolf
- Spindrift
- Upper Ridges
- Victorine Ranch
- Yankee Point

Josephine Parkland  
BEJ Unit Forester  
September 14, 2016  
Title: Albion MAD 1983  
Contour Interval = 40'



1:9,000

**Carmel Highlands  
Fuel Reduction  
Project Planning**

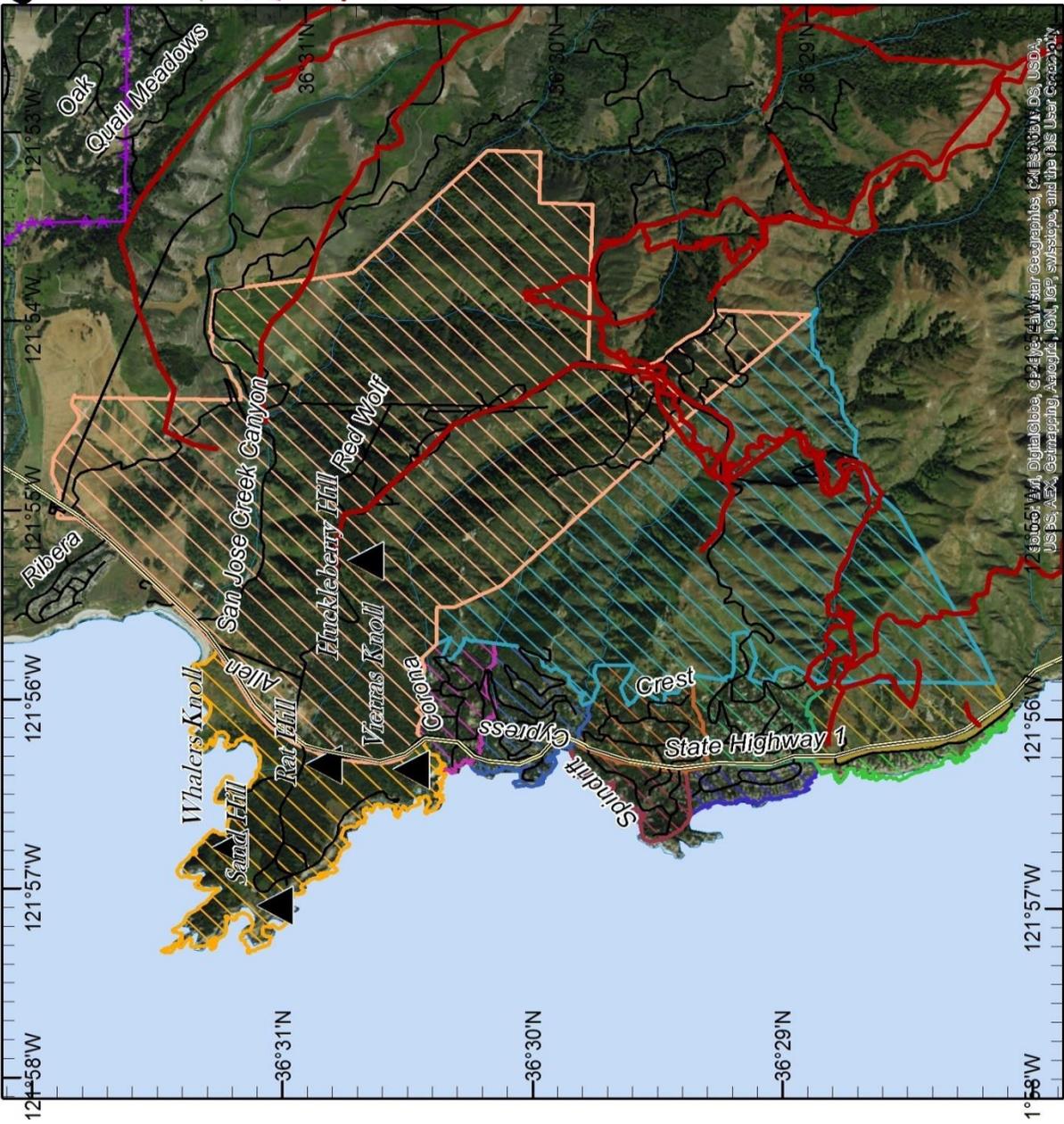


- Highway
- Road
- Powerline
- Stream
- Existing Fuelbreak

**Zone**

- Walden
- Aurora Del Mar
- Corona
- Mal Paso
- Mt. Devon
- Point Lobos
- Red Wolf
- Spindrift
- Upper Ridges
- Victorine Ranch
- Yankee Point

Jonathan Pangburn  
BEU Unit Forester  
November 11, 2016  
Teale Albers NAD 1983  
Contour interval = 40'



Source: ESRI, DigitalGlobe, GeoEye, Earthstar Geographics, CNR AeroVista, USGS, AeroGRID, IGN, ICG, and the US User Community

**Carmel Highlands  
Fuel Reduction  
Project Planning  
Aurora Del Mar**



- Highway
- Road
- Powerline
- Stream
- Existing Fuelbreak

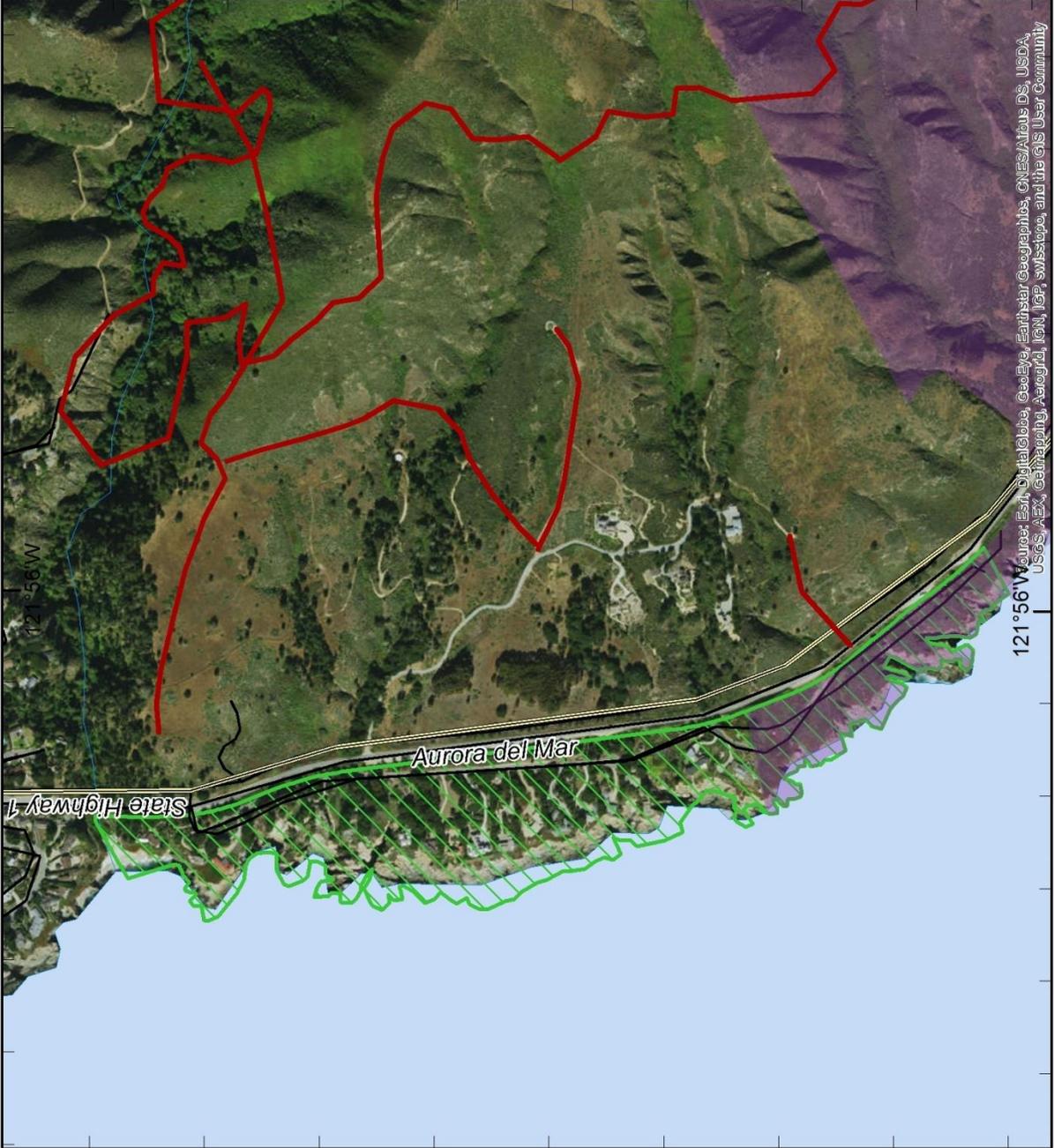
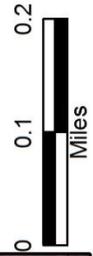
**Park Ownership**

- Regional Park
- State Park

**Zone**

- Aurora Del Mar

Jonathan Pangburn  
BEU Unit Forester  
November 119, 2016  
Teale Albers NAD 1983  
Contour interval = 40'



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Geoplanning, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

**Carmel Highlands  
Fuel Reduction  
Project Planning  
Corona**



- Highway
- Road
- Powerline
- Stream
- Existing Fuelbreak

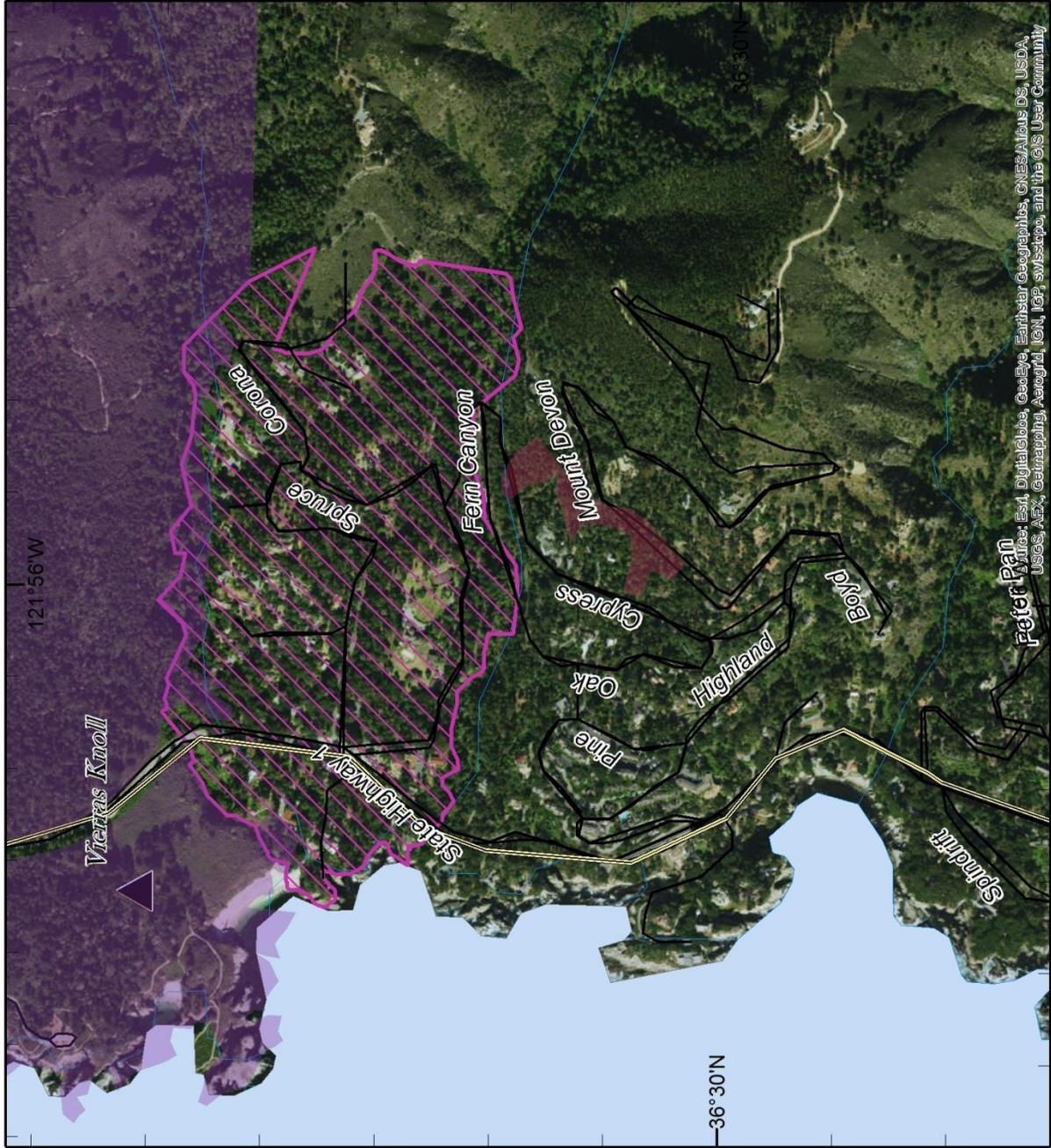
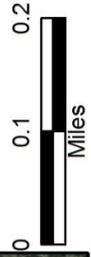
**Park Ownership**

- Regional Park
- State Park

**Zone**

- Corona

Jonathan Pangburn  
BEU Unit Forester  
November 119, 2016  
Teale Albers NAD 1983  
Contour interval = 40'



**Peter Pan**  
Uses: AEX, Geotipping, Aerial, IGN, IOP, swisstopo, and the GIS User Community

**Carmel Highlands  
Fuel Reduction  
Project Planning  
Mal Paso**



- Highway
- Road
- Powerline
- Stream

Existing Fuelbreak

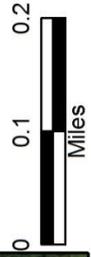
**Park Ownership**

- Regional Park
- State Park

**Zone**

- Mal Paso

Jonathan Pangburn  
BEU Unit Forester  
November 119, 2016  
Teale Albers NAD 1983  
Contour interval = 40'



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, ICG, swisstopo, and the GIS User Community

**Carmel Highlands  
Fuel Reduction  
Project Planning  
Mt. Devon**



- Highway
- Road
- Powerline
- Stream
- Existing Fuelbreak

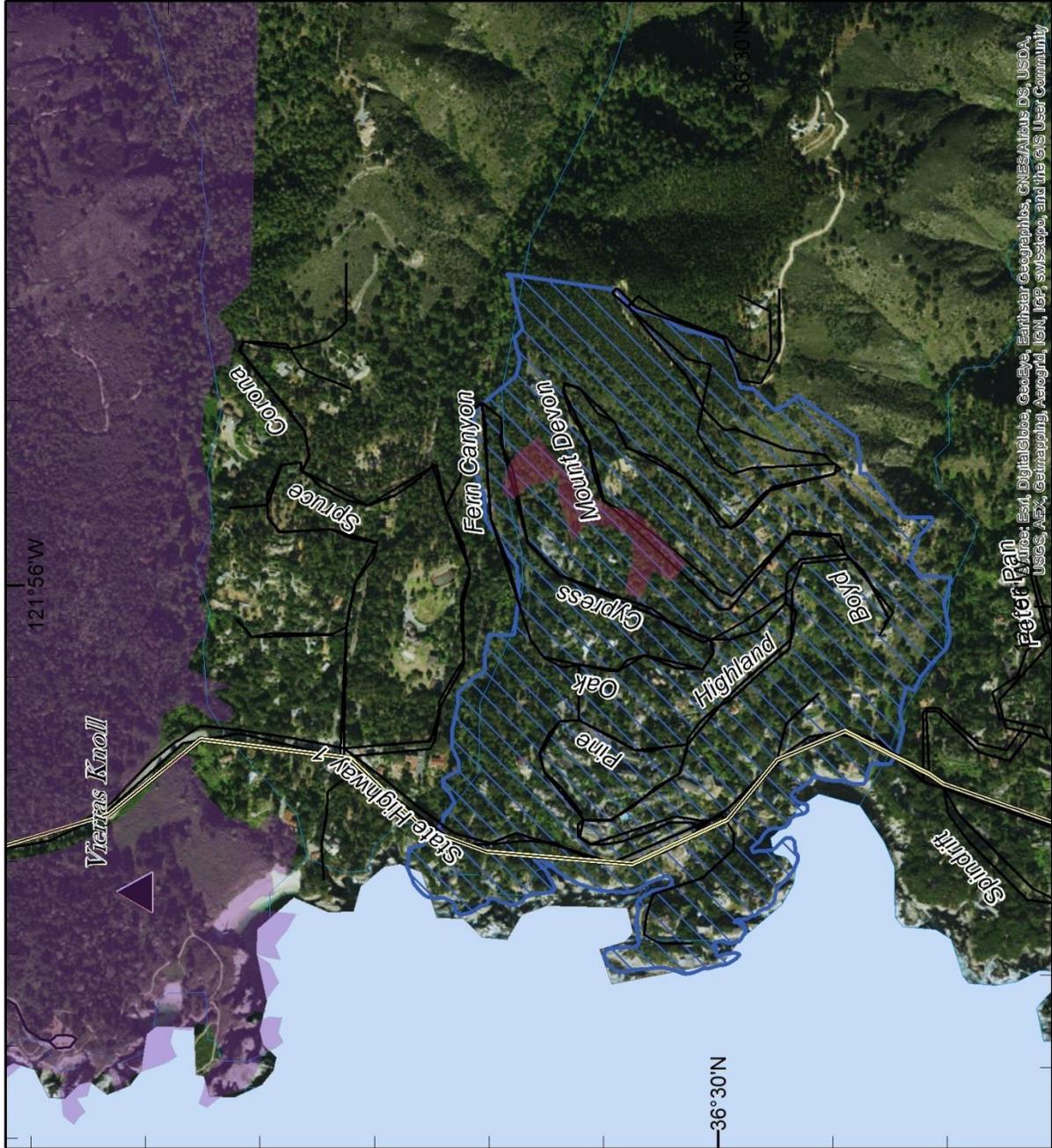
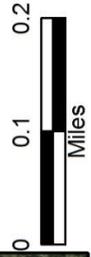
**Park Ownership**

- Regional Park
- State Park

**Zone**

- Mt. Devon

Jonathan Pangburn  
BEU Unit Forester  
November 119, 2016  
Teale Albers NAD 1983  
Contour interval = 40'



**Camel Highlands  
Fuel Reduction  
Project Planning  
Point Lobos**



- Highway
- Road
- Powerline
- Stream
- Existing Fuelbreak

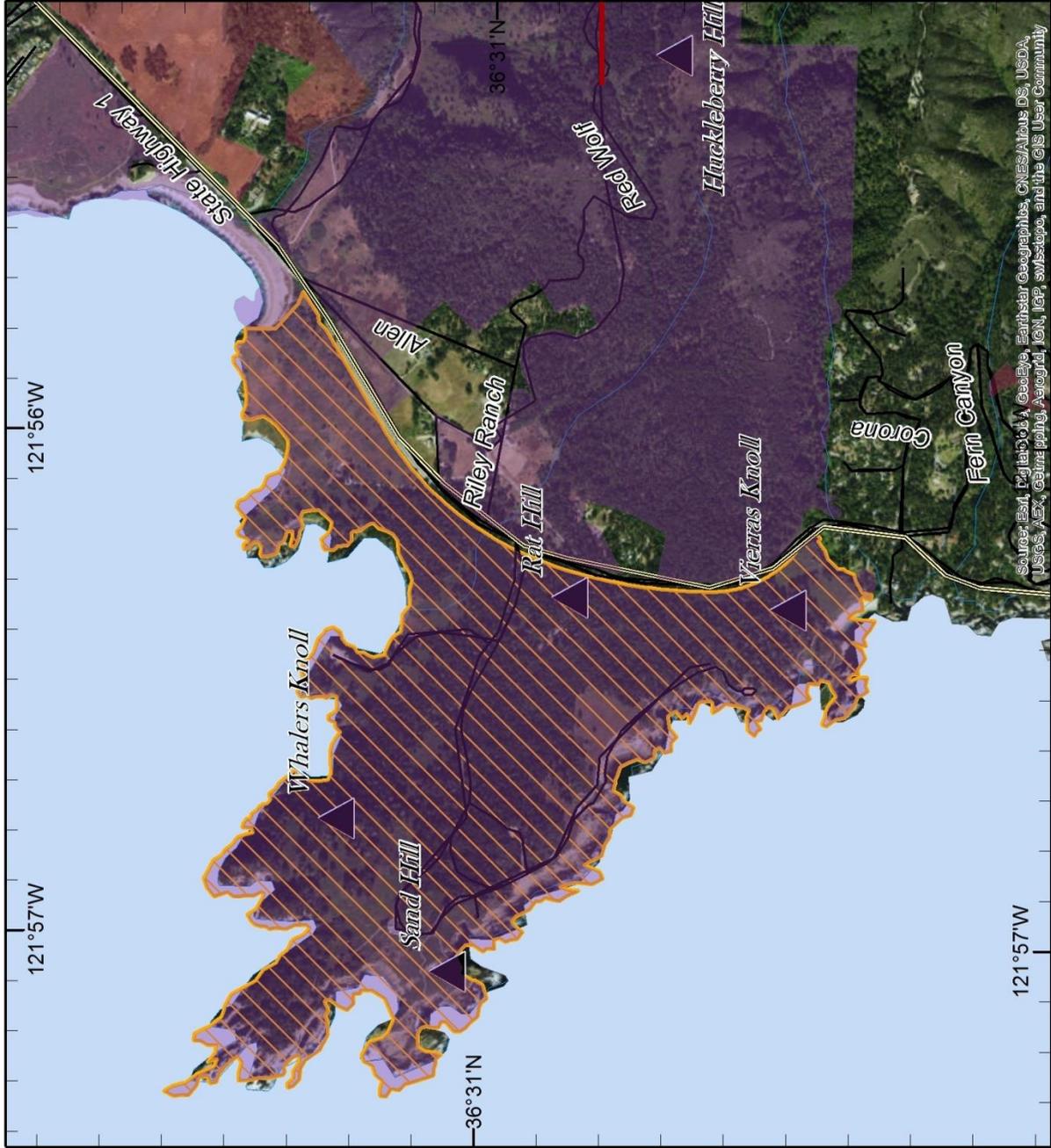
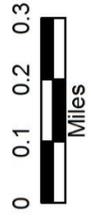
**Park Ownership**

- Regional Park
- State Park

**Zone**

- Point Lobos

Jonathan Pangburn  
BEU Unit Forester  
November 119, 2016  
Teale Albers NAD 1983  
Contour interval = 40'



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, IGP, swisstopo, and the GIS User Community

**Carmel Highlands  
Fuel Reduction  
Project Planning  
Red Wolf**



**CAL FIRE**

- Highway
- Road
- Powerline
- Stream
- Existing Fuelbreak

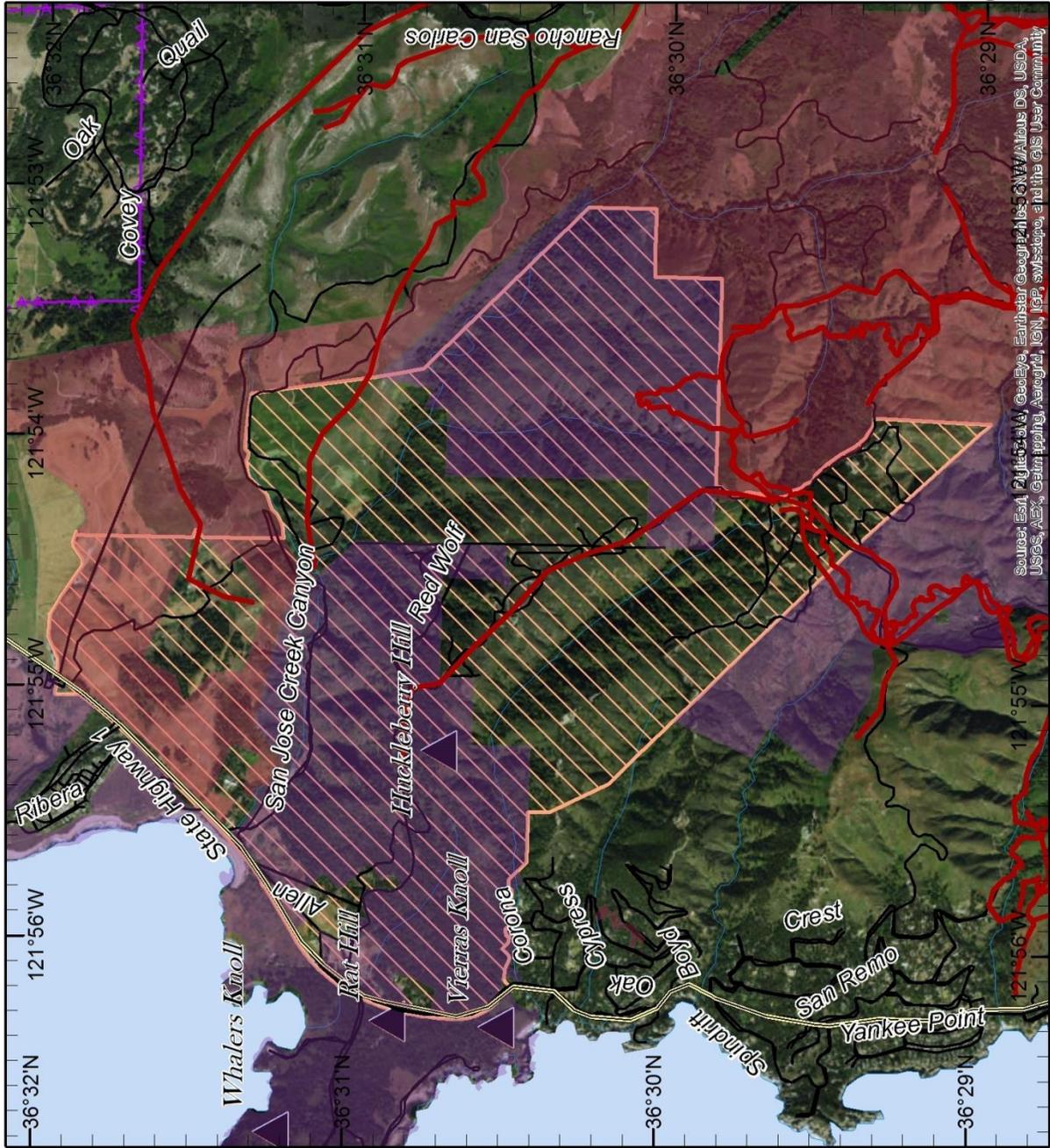
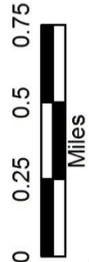
**Park Ownership**

- Regional Park
- State Park

**Zone**

- Red Wolf

Jonathan Pangburn  
BEU Unit Forester  
November 119, 2016  
Teale Albers NAD 1983  
Contour interval = 40'



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNR/Airbus DS, USDA, USGS, AeroGRID, IGN, IGP, swisstopo, and the GIS User Community

**Carmel Highlands  
Fuel Reduction  
Project Planning  
Spindrift**



- Highway
- Road
- Powerline
- Stream
- Existing Fuelbreak

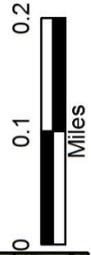
**Park Ownership**

- Regional Park
- State Park

**Zone**

- Spindrift

Jonathan Pangburn  
BEU Unit Forester  
November 119, 2016  
Teale Albers NAD 1983  
Contour interval = 40'



**Carmel Highlands  
Fuel Reduction  
Project Planning  
Upper Ridges**



- Highway
- Road
- Powerline
- Stream
- Existing Fuelbreak

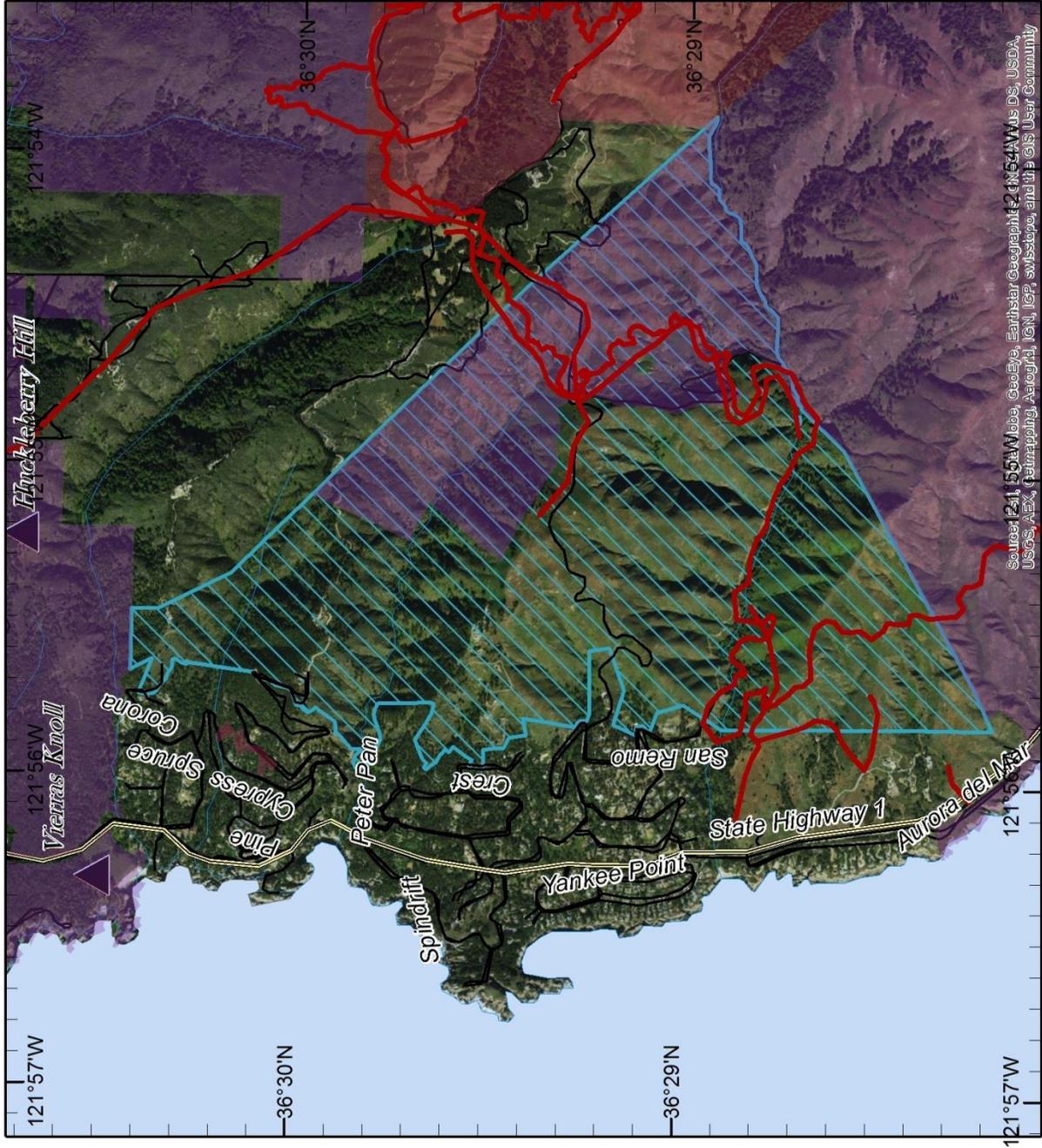
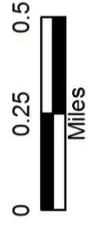
**Park Ownership**

- Regional Park
- State Park

**Zone**

- Upper Ridges

Jonathan Pangburn  
BEU Unit Forester  
November 119, 2016  
Teale Albers NAD 1983  
Contour interval = 40'



Source: Esri, DeLorme, GeoEye, Earthstar Geographics, CNR/Airphoto, USDA, USGS, Aero, GEBCO, IGN, IGP, swisstopo, and the GIS User Community

**Carmel Highlands  
Fuel Reduction  
Project Planning  
Victorine Ranch**



- Highway
- Road
- Powerline
- Stream
- Existing Fuelbreak

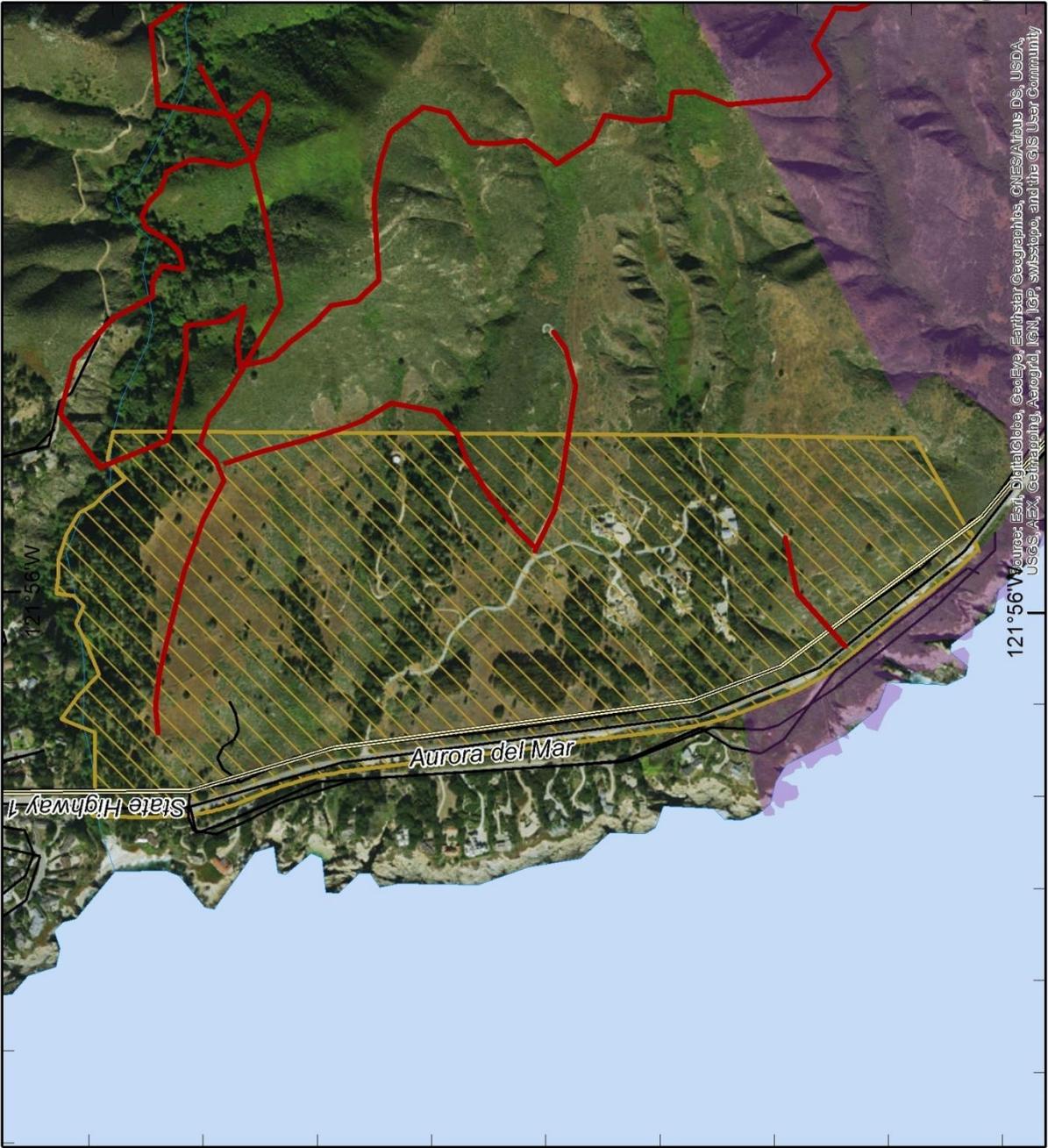
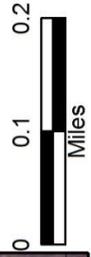
**Park Ownership**

- Regional Park
- State Park

**Zone**

- Victorine Ranch

Jonathan Pangburn  
BEU Unit Forester  
November 119, 2016  
Teale Albers NAD 1983  
Contour interval = 40'



121°56'W  
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, JGP, Swisstopo, and the GIS User Community

**Carmel Highlands  
Fuel Reduction  
Project Planning  
Walden**



- Highway
- Road
- Powerline
- Stream
- Existing Fuelbreak

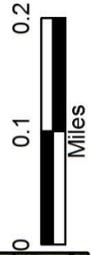
**Park Ownership**

- Regional Park
- State Park

**Zone**

- Walden

Jonathan Pangburn  
BEU Unit Forester  
November 119, 2016  
Teale Albers NAD 1983  
Contour interval = 40'



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, JPL, Swisstopo, and the GIS User Community

**Carmel Highlands  
Fuel Reduction  
Project Planning  
Yankee Point**



- Highway
- Road
- Powerline
- Stream
- Existing Fuelbreak

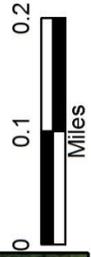
**Park Ownership**

- Regional Park
- State Park

**Zone**

- Yankee Point

Jonathan Pangburn  
BEU Unit Forester  
November 119, 2016  
Teale Albers NAD 1983  
Contour interval = 40'



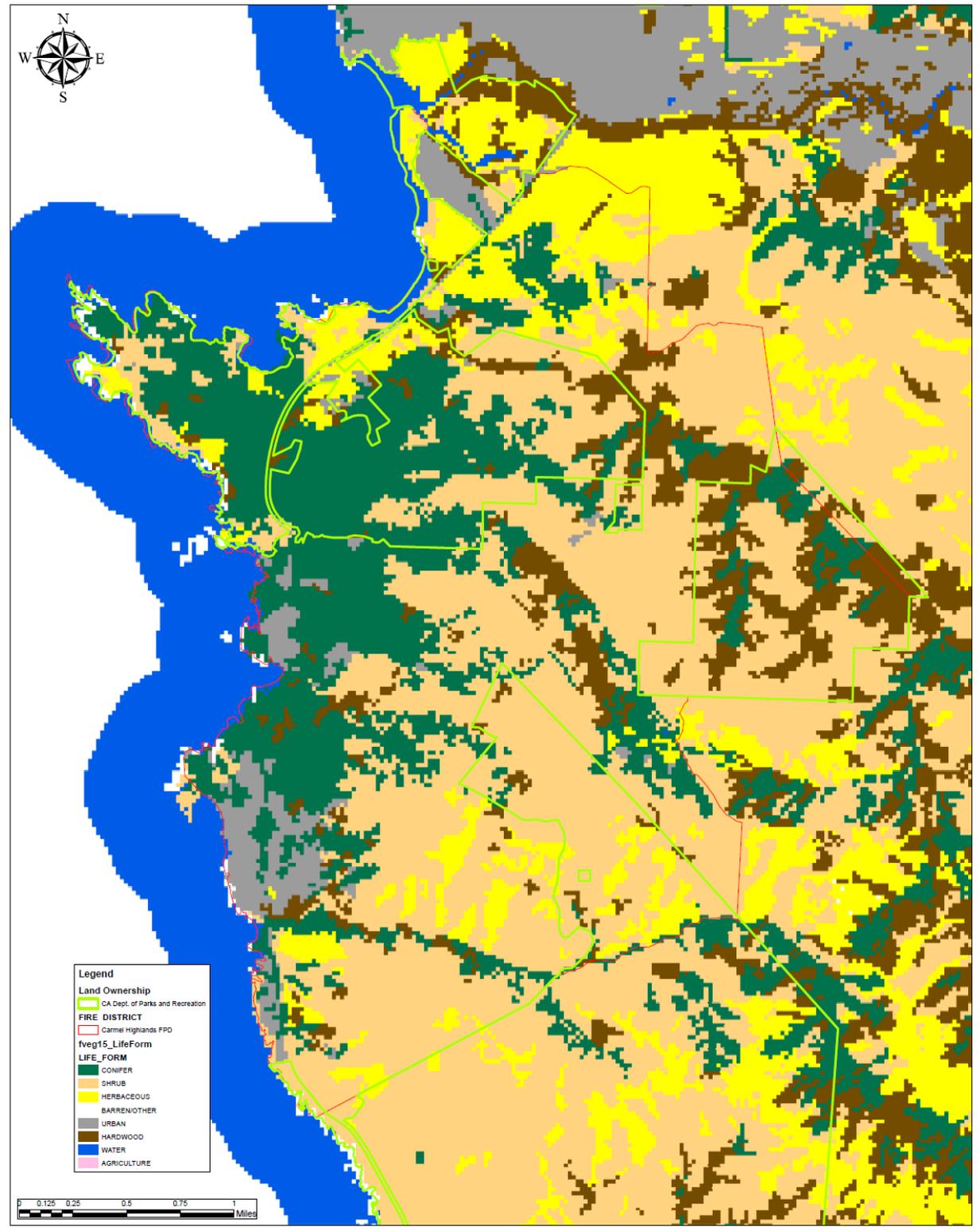
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, IGP, swisstopo, and the GIS User Community

# Appendix B



## Carmel Highlands

## San Benito-Monterey Unit

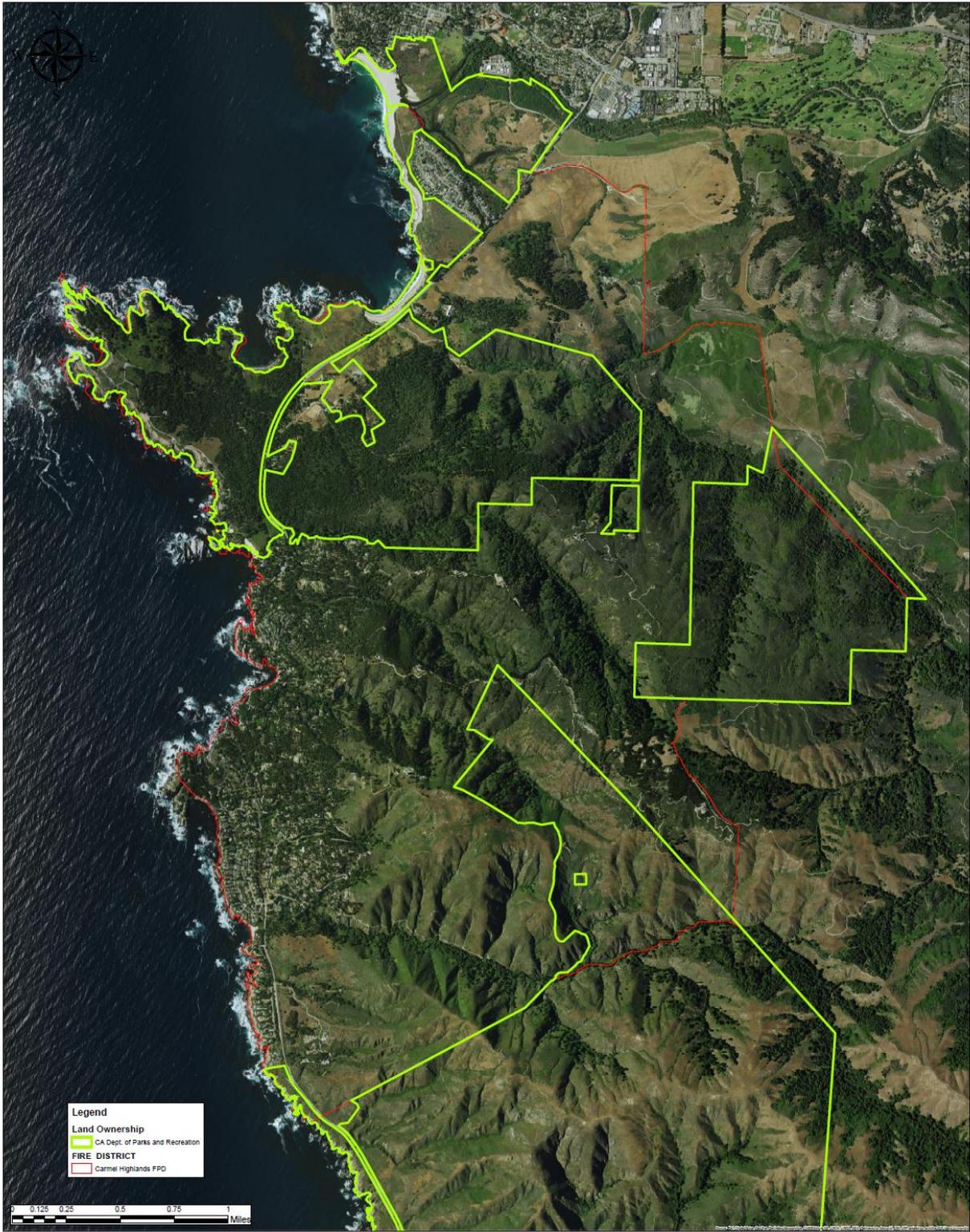


# Appendix C



Carmel Highlands

San Benito-Monterey Unit



# Appendix D



## San Benito-Monterey Unit

## Carmel Highlands



# Appendix E



## APPENDIX F

### California Public Resources Code 4291 - 4299

4291. (a) A person who owns, leases, controls, operates, or maintains a building or structure in, upon, or adjoining a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered with flammable material, shall at all times do all of the following:

(1) Maintain defensible space no greater than 100 feet from each side of the structure, but not beyond the property line unless allowed by state law, local ordinance, or regulation and as provided in paragraph (2). The amount of fuel modification necessary shall take into account the flammability of the structure as affected by building material, building standards, location, and type of vegetation. Fuels shall be maintained in a condition so that a wildfire burning under average weather conditions would be unlikely to ignite the structure. This paragraph does not apply to single specimens of trees or other vegetation that are well-pruned and maintained so as to effectively manage fuels and not form a means of rapidly transmitting fire from other nearby vegetation to a structure or from a structure to other nearby vegetation. The intensity of fuels management may vary within the 100-foot perimeter of the structure, the most intense being within the first 30 feet around the structure. Consistent with fuels management objectives, steps should be taken to minimize erosion.

(2) A greater distance than that required under paragraph (1) may be required by state law, local ordinance, rule, or regulation. Clearance beyond the property line may only be required if the state law, local ordinance, rule, or regulation includes findings that such a clearing is necessary to significantly reduce the risk of transmission of flame or heat sufficient to ignite the structure, and there is no other feasible mitigation measure possible to reduce the risk of ignition or spread of wildfire to the structure. Clearance on adjacent property shall only be conducted following written consent by the adjacent landowner.

(3) An insurance company that insures an occupied dwelling or occupied structure may require a greater distance than that required under paragraph (1) if a fire expert, designated by the director, provides findings that such a clearing is necessary to significantly reduce the risk of transmission of flame or heat sufficient to ignite the structure, and there is no other feasible mitigation measure possible to reduce the risk of ignition or spread of wildfire to the structure. The greater distance may not be beyond the property line unless allowed by state law, local ordinance, rule, or regulation.

(4) Remove that portion of any tree that extends within 10 feet of the outlet of a chimney or stovepipe.

(5) Maintain any tree, shrub, or other plant adjacent to or overhanging a building free of dead or dying wood.

(6) Maintain the roof of a structure free of leaves, needles, or other vegetative materials.

(7) (a) Prior to constructing a new building or structure or rebuilding a building or structure damaged by a fire in an area subject to this section, the construction or rebuilding of which requires a building permit, the owner shall obtain a certification from

the local building official that the dwelling or structure, as proposed to be built, complies with all applicable state and local building standards, including those described in subdivision (b) of Section 51189 of the Government Code, and shall provide a copy of the certification, upon request, to the insurer providing course of construction insurance coverage for the building or structure. Upon completion of the construction or rebuilding, the owner shall obtain from the local building official, a copy of the final inspection report that demonstrates that the dwelling or structure was constructed in compliance with all applicable state and local building standards, including those described in subdivision (b) of Section 51189 of the Government Code, and shall provide a copy of the report, upon request, to the property insurance carrier that insures the dwelling or structure.

(b) A person is not required under this section to manage fuels on land if that person does not have the legal right to manage fuels, nor is a person required to enter upon or to alter property that is owned by any other person without the consent of the owner of the property.

(c) (1) Except as provided in Section 18930 of the Health and Safety Code, the director may adopt regulations exempting a structure with an exterior constructed entirely of nonflammable materials, or, conditioned upon the contents and composition of the structure, the director may vary the requirements respecting the removing or clearing away of flammable vegetation or other combustible growth with respect to the area surrounding those structures. (2) An exemption or variance under paragraph (1) shall not apply unless and until the occupant of the structure, or if there is not an occupant, the owner of the structure, files with the department, in a form as the director shall prescribe, a written consent to the inspection of the interior and contents of the structure to ascertain whether this section and the regulations adopted under this section are complied with at all times.

(d) The director may authorize the removal of vegetation that is not consistent with the standards of this section. The director may prescribe a procedure for the removal of that vegetation and make the expense a lien upon the building, structure, or grounds, in the same manner that is applicable to a legislative body under Section 51186 of the Government Code.

(e) The Department of Forestry and Fire Protection shall develop, periodically update, and post on its Internet Web site a guidance document on fuels management pursuant to this chapter. Guidance shall include, but not be limited to, regionally appropriate vegetation management suggestions that preserve and restore native species, minimize erosion, minimize water consumption, and permit trees near homes for shade, aesthetics, and habitat; and suggestions to minimize or eliminate the risk of flammability of nonvegetative sources of combustion such as woodpiles, propane tanks, wood decks, and outdoor lawn furniture.

(f) As used in this section, "person" means a private individual, organization, partnership, limited liability company, or corporation.

4291.1. (a) Notwithstanding Section 4021, a violation of Section 4291 is an infraction punishable by a fine of not less than one hundred dollars (\$100), nor more than five hundred dollars (\$500). If a person is convicted of a second violation of Section 4291 within five years, that person shall be punished by a fine of not less than two hundred fifty dollars (\$250), nor more than five hundred dollars (\$500). If a person is convicted

of a third violation of Section 4291 within five years, that person is guilty of a misdemeanor and shall be punished by a fine of not less than five hundred dollars (\$500). If a person is convicted of a third violation of Section 4291 within five years, the department may perform or contract for the performance of work necessary to comply with Section 4291 and may bill the person convicted for the costs incurred, in which case the person convicted, upon payment of those costs, shall not be required to pay the fine. If a person convicted of a violation of Section 4291 is granted probation, the court shall impose as a term or condition of probation, in addition to any other term or condition of probation, that the person pay at least the minimum fine prescribed in this section.

(b) If a person convicted of a violation of Section 4291 produces in court verification prior to imposition of a fine by the court, that the condition resulting in the citation no longer exists, the court may reduce the fine imposed for the violation of Section 4291 to fifty dollars (\$50).

4291.3. Subject to any other applicable provision of law, a state or local fire official, at his or her discretion, may authorize an owner of property, or his or her agent, to construct a firebreak, or implement appropriate vegetation management techniques, to ensure that defensible space is adequate for the protection of a hospital, adult residential care facility, school, aboveground storage tank, hazardous materials facility, or similar facility on the property. The firebreak may be for a radius of up to 300 feet from the facility, or to the property line, whichever distance is shorter.

4292. Except as otherwise provided in Section 4296, any person that owns, controls, operates, or maintains any electrical transmission or distribution line upon any mountainous land, or forest-covered land, brush-covered land, or grass-covered land shall, during such times and in such areas as are determined to be necessary by the director or the agency which has primary responsibility for fire protection of such areas, maintain around and adjacent to any pole or tower which supports a switch, fuse, transformer, lightning arrester, line junction, or dead end or corner pole, a firebreak which consists of a clearing of not less than 10 feet in each direction from the outer circumference of such pole or tower. This section does not, however, apply to any line which is used exclusively as telephone, telegraph, telephone or telegraph messenger call, fire or alarm line, or other line which is classed as a communication circuit by the Public Utilities Commission. The director or the agency which has primary fire protection responsibility for the protection of such areas may permit exceptions from the requirements of this section which are based upon the specific circumstances involved.

4293. Except as otherwise provided in Sections 4294 to 4296, inclusive, any person that owns, controls, operates, or maintains any electrical transmission or distribution line upon any mountainous land, or in forest-covered land, brush-covered land, or grass-covered land shall, during such times and in such areas as are determined to be necessary by the director or the agency which has primary responsibility for the fire protection of such areas, maintain a clearance of the respective distances which are specified in this section in all directions between all vegetation and all conductors which are carrying electric current:

(a) For any line which is operating at 2,400 or more volts, but less than 72,000 volts, four feet.

(b) For any line which is operating at 72,000 or more volts, but less than 110,000 volts, six feet.

(c) For any line which is operating at 110,000 or more volts, 10 feet. In every case, such distance shall be sufficiently great to furnish the required clearance at any position of the wire, or conductor when the adjacent air temperature is 120 degrees Fahrenheit, or less. Dead trees, old decadent or rotten trees, trees weakened by decay or disease and trees or portions thereof that are leaning toward the line which may contact the line from the side or may fall on the line shall be felled, cut, or trimmed so as to remove such hazard. The director or the agency which has primary responsibility for the fire protection of such areas may permit exceptions from the requirements of this section which are based upon the specific circumstances involved.

4294. A clearing to obtain line clearance is not required if self-supporting aerial cable is used. Forked trees, leaning trees, and any other growth which may fall across the line and break it shall, however, be removed.

4295. A person is not required by Section 4292 or 4293 to maintain any clearing on any land if such person does not have the legal right to maintain such clearing, nor do such sections require any person to enter upon or to damage property which is owned by any other person without the consent of the owner of the property.

4296. Sections 4292 and 4293 do not apply if the transmission or distribution line voltage is 750 volts or less.

4296.5. (a) Any person or corporation operating a railroad on forest, brush, or grass-covered land shall, if ordered by the director or the agency having primary responsibility for fire protection of the area, destroy, remove, or modify so as not to be flammable any vegetation or other flammable material defined by regulation of the director to be a fire hazard on the railroad right-of-way. The director shall adopt regulations establishing fire prevention hazard reduction standards for broad geographic areas by fuel type, slope, and potential for ignition from hot or flaming exhaust, carbon particles, hot metal, burning signal devices, burning tobacco, and other similar potential sources of ignition.

(b) The order to destroy, remove, or modify vegetation or other flammable material shall specify the location of the hazard to be destroyed, removed, or modified within the right-of-way, the width of the hazard which shall not exceed the width of the right-of-way, and the time within which compliance with the order is required.

(c) The director or the agency having primary responsibility for fire protection of the area shall allow a reasonable period of time for compliance with an order to destroy, remove, or modify vegetation or other flammable material.

4297. Upon the showing of the director that the unrestricted use of any grass-covered land, grain-covered land, brush-covered land, or forest-covered land is, in the judgment of the director, a menace to life or property due to conditions tending to cause or allow the rapid spread of fires which may occur on such lands or because of the inaccessible character of such lands, the Governor through the director, may, by a proclamation,

which declares such condition and designates the area to which, and the period during which the proclamation shall apply, require that such area be closed to hunting and fishing and to entry by any person except a person that is within one of the following classes:

- (a) Owners and lessees of land in the area.
- (b) Bona fide residents in the area.
- (c) Persons engaged in some bona fide business, trade, occupation, or calling in the area and persons employed by them in connection with such business, trade, occupation, or calling.
- (d) Authorized agents or employees of a public utility entering such area for the purpose of operating or maintaining public utility works or equipment within the area.
- (e) Members of any organized firefighting force.
- (f) Any federal, state or local officer in the performance of his duties.
- (g) Persons traveling on public roads or highways through the area.

4298. The proclamation by the Governor shall be released to the wire news services in the state, and shall be published at least once in a newspaper of general circulation in each county which contains any lands covered by the proclamation. Notice of closure shall also be posted on trails or roads entering the area covered by the proclamation. The closure shall be effective upon issuance of the proclamation by the Governor. Each notice shall clearly set forth the area to be subject to closure and the effective date of such closure. The closure shall remain in full force and effect until the Governor shall by order terminate it. The notice of such termination shall follow the same procedure by which such closure was effected. The order of termination shall be effected upon issuance.

4299. A person who violates Section 4297 or 4298 is guilty of a misdemeanor and shall be punished by a fine of not less than one hundred dollars (\$100) nor more than two thousand dollars (\$2,000) or by imprisonment in the county jail for not less than 10 days nor more than 90 days or both the fine and imprisonment. All state and county law enforcement officers shall enforce orders of closure.

# Appendix G

## Fire District Ordinance

ORDINANCE NO. 11-2008

### **AN ORDINANCE PROVIDING FOR FIRE PROTECTION AND FIRE HAZARD ABATEMENT REGULATIONS**

THE BOARD OF DIRECTORS OF THE CARMEL HIGHLANDS FIRE PROTECTION DISTRICT DOES ORDAIN AS FOLLOWS:

1. Fire Protection and Abatement Regulations Established. The attached Fire Protection and Abatement Ordinance, establishing regulations for fire protection and abatement by the District, is hereby adopted, to read in its entirety as set forth on the attached six (6) pages, and incorporated herein by this reference thereto.

2. Summary of Ordinance. This ordinance finds and determines that certain unique characteristics of the geographical area of the District require special measures for the prevention and suppression of fires. It promulgates regulations for fire prevention and abatement within the District, which regulations are designed to establish a) vegetation management and other maintenance standards for the purposes of fire protection, b) a means for abatement of potentially serious and existing fire hazards and c) procedures for enforcing those measures. This ordinance provides for the abatement of existing fire hazards that are determined to be public nuisances that endanger the public safety, and potentially serious hazards which, if not mitigated, are expected to become hazardous public nuisances, under the provisions of **Health & Safety Code 13800 et seq. 14875** and the currently adopted edition of the California Fire Code. A true and certified copy of the full text of this ordinance is available for inspection at the District offices.

3. Findings of Fact and Declaration of Intent. The Board has received public testimony and has discussed and reviewed various staff memoranda discussing the geographical and vegetation characteristics of the District and descriptions of the potential for devastating fires within the District due to its forested nature and the history of wildfires within the District. In light of the above testimony and memoranda, the Board makes the following findings of fact within the District:

a) Significant numbers of residential structures have been developed in very high fire hazard areas. Unique geographic features and terrain, along with steep grades and inadequate turning radii on numerous private streets within the District impede appropriate access for fire suppression purposes. Climatic conditions such as low precipitation and on and offshore winds increase the danger and spread of fire. Prevailing coastal fog during the fire season limits visibility for ground as well as airborne fire suppression resources. State Highway 1, with immediately adjacent existing residential and commercial development, high fire hazard open space and forest intermix areas, as well as public policies which encourage high numbers of visitors to the Coastal Zone, all increase the risk of fire within the boundaries of the District.

b) The water systems for fire protection in very high fire hazard areas of the District in themselves are not sufficiently reliable or adequate to combat wildfires and structural conflagrations that result from wildfires. Even if adequate and reliable water is available, the lack of defensible firefighting spaces wherein vegetative fuels have been cleared or reduced creates inherent difficulties in preventing wildfires from moving to residential structures.

c) Significant and devastating wildfires have previously occurred in some areas of the District while many other areas have not burned for many years. Therefore, there are large areas of forest consisting of thick vegetation within and in close proximity to residential areas which further contribute to fire hazards if those areas are not managed and thinned to eliminate or reduce fuel loads to safe levels.

d) One of the most effective means to prevent disastrous wildfires and to protect the integrity of the forest in the District is through a program of vegetative fuels management. By a reasonable program to selectively reduce highly flammable vegetation, defensible fire protection spaces can be created to reduce the exposure of life and property to the risk of a major fire, while at the same time preserving the unique natural characteristics of the forest within the District.

#### 4. Environmental Assessment.

a) Pursuant to the California Environmental Quality Act (CEQA), California Public Resources Code 21000 et seq. and the CEQA Guidelines promulgated thereunder, b California Administrative Code, 15000 et seq., the Board of Directors finds and declares that this ordinance is exempt from the requirements of CEQA for the following reasons:

1) This ordinance is not a "project" within the meaning of 15378 of the CEQA Guidelines, because it has no potential for resulting in a physical change in the environment. It promulgates regulations for fire prevention and abatement, which are designed to establish vegetation management and other maintenance standards for the purposes of fire protection, a means for abatement of potentially serious and existing fire hazards and procedures for enforcing those measures. This ordinance further incorporates and complies with policies of the Safety Element of the Monterey County General Plan which was adopted after appropriate CEQA review. This ordinance does not change the above policies and will have no effect not already resulting from previously adopted ordinances, policies and statutes.

2) This ordinance is categorically exempt from CEQA under 15304 of the CEQA Guidelines because, at the most, it can only result in minor alterations in the condition of vegetation. Any such alterations will not involve any trees, including mature scenic trees, except those necessary for forestry and fire management purposes, based upon accepted forestry principles.

3) This ordinance is further categorically exempt from CEQA under 15307 of the CEQA Guidelines because it is a regulatory action taken by the District to assure maintenance and enhancement of a natural resource. By

preventing wildfires or at least assisting in containing such fires, the forest of the District will be maintained and ultimately enhanced by promoting continued healthy growth of the forest.

4) This ordinance is further categorically exempt from CEQA under 15308 of the CEQA Guidelines because it is a regulatory action taken by the District in the exercise of its authority pursuant to Government Code 65858, to assure the maintenance and protection of the environment by preventing, containing and mitigating wildfires in the District.

b) The Fire Chief is hereby authorized and directed to file, within five (5) working days of the adoption date of this ordinance, a "Notice of Exemption" with the County Clerk, according to the procedures and requirements set forth in 15062 of the CEQA Guidelines.

5. Severability. If any provision, section, subsection, paragraph, sentence, clause or phrase of this ordinance, or any part thereof, or the application thereof to any person or circumstance, is for any reason held to be invalid or unconstitutional, such decision shall not affect the validity of remaining portions of this Ordinance, or any part thereof. The Board of Directors declares that it would have passed and adopted the Ordinance and each provision, section, subsection, paragraph, sentence, clause or phrase thereof, irrespective of the fact that any one or more provisions, sections, subsections, paragraphs, sentences, clauses or phrases, or the application thereof to any person or circumstance, be declared invalid or unconstitutional.

6. Publication. Following adoption, this Ordinance shall be published once in The Herald, a newspaper published in the County of Monterey and circulated in the District.

7. Effective Date. This Ordinance shall take effect and be in force thirty (30) days from and after its final passage.

PASSED AND ADOPTED at a regular meeting of the Board of Directors of the Carmel Highlands Fire Protection District duly held on January 20, 2009 by the following vote:

AYES: BOARD MEMBERS:

NOES: BOARD MEMBERS:

ABSENT: BOARD MEMBERS:

## COMBUSTIBLE AND FLAMMABLE MATERIALS ABATEMENT ORDINANCE

### Sections:

1. Purpose.
2. Unique Characteristics of the District.
3. Public Nuisance Declared.
4. Establishment of Standards for Maintenance of Property.
5. Designation of Fire Hazard.
6. Abatement.
7. Violation.

### 1. Purpose.

The purpose of this ordinance is to provide regulations for fire prevention and abatement of hazardous nuisances within the District. These regulations are intended to establish maintenance standards for fire protection and measures for enforcing the abatement of public nuisances that endanger the public safety due to potentially serious and existing fire hazards under provisions of **13800 et seq. and 14875 of the Health & Safety Code** and the currently adopted edition of the 2007 California Fire Code.

### 2. Unique Characteristics of the District.

In accordance with **Health & Safety Code 13801**, this Board finds that the following unique characteristics within the District require special measures for the prevention of fires:

a) Significant numbers of residential structures have been developed in very high fire hazard areas. Unique geographic features and terrain, along with steep grades and inadequate turning radii on numerous private streets within the District impede appropriate access for fire suppression purposes. Climatic conditions such as low precipitation and on and offshore winds increase the danger and spread of fire. Prevailing coastal fog during the fire season limits visibility for ground as well as airborne fire suppression resources. State Highway 1, with immediately adjacent existing residential and commercial development, high fire hazard open space and forest intermix areas, as well as public policies which encourage high numbers of visitors to the Coastal Zone, all increase the risk of fire within the boundaries of the District.

b) The water systems for fire protection in very high fire hazard areas of the District by themselves are not sufficiently reliable or adequate to combat wild fires and structural conflagrations that result from wildfires. Even if adequate and reliable water is available, the lack of defensible firefighting spaces wherein vegetative fuels have been cleared or reduced creates inherent difficulties in preventing wildfires from moving to residential structures.

c) Significant and devastating wildfires have previously occurred in some areas of the District. Therefore, there are large areas of forest consisting of thick re-growth within and in close proximity to residential areas, which further contribute to fire hazards if those areas are not managed and thinned to eliminate or reduce fuel loads to safe levels.

### 3. Public Nuisance Declared.

As the local responsible fire jurisdiction, this Board finds that an effective means to prevent disastrous wildfires and to protect the integrity of the forest in the District is through a program of vegetative fuels management. By a reasonable program to selectively reduce highly flammable vegetation, defensible fire protection spaces can be created to reduce the exposure of life and property to the risk of a major fire, while at the same time preserving the unique natural characteristics of forest within the District.

The Board, therefore, finds, determines and declares the following to be public nuisances:

a) Weeds or any accumulation of waste paper, hay, grass, straw, litter or combustible or flammable waste material, waste petroleum products or rubbish of any kind allowed to remain upon any roof or in any court, yard, vacant lot or open space.

b) Any fire hazard after such has been identified as such by the Fire Chief and notice of that fire hazard has been provided to the owner, agent, lessee or other person occupying or having charge or control of the property.

c) Any potentially serious fire hazard, which has been identified by the Fire Chief or, upon recommendation of the Fire Chief, has been identified by the Board, and notice of that potentially serious fire hazard has been provided to the owner, agent, lessee or other person occupying or having charge or control of the property. For the purposes of this Ordinance, the term potentially serious fire hazard shall mean those existing conditions which, if allowed to continue to exist and if not abated, would reasonably be expected to develop into a fire hazard. Property maintained in violation of any Standards established pursuant to Section 4 of this Ordinance shall be considered a Potentially Serious Fire Hazard when so identified by the Fire Chief and this Board.

d) The violation of or failure to comply with any order to correct or eliminate an existing or a potentially serious fire hazard.

### 4. Establishment of Standards for Maintenance of Property.

The Board hereby establishes the following standards for maintenance of property, in addition to those found in the California Fire Code:

a) No owner, agent, lessee or other person occupying or having charge or control of any property, building, lot or premises within the District shall permit the accumulation of weeds, waste paper, hay, grass, straw, litter or combustible or flammable waste material, waste petroleum products or rubbish of any kind to remain upon any roof or in any court, yard, vacant lot or open space.

b) The clearance requirements of the State Forest and Fire Law Public Resources Code 4291 shall be regularly and consistently adhered to by property owners and individuals in charge of structures; and all combustible and flammable materials as referred to in 4 a) shall be removed; and all weeds, grass, vines, stubble, brush or other growth, when same endangers property or is susceptible to fire, shall be cut down and removed by the owner or occupant of the property. Weeds," as used in this Ordinance, include the following:

1) Dangerous, rank, obnoxious or wild vegetation and indigenous grasses which bear or may bear seeds of a downy or buoyant nature and which may cause uncontrollable proliferation of vegetative growth.

2) Weeds and grasses which may attain such growth as to become, when dry, a fire menace to adjacent improved or unimproved property.

3) Accumulation of garden refuse, cuttings and other combustible vegetative debris.

c) In determining the type, width and configuration of fire breaks, fuel breaks and fire roads necessary to provide adequate defensible firefighting space between fire hazards and endangered property, the Fire Chief shall consider height, type and continuity of the vegetative fuel, wind conditions, slope, geographical considerations, types of exposures threatened and environmental factors. The safety of life and improved property shall be the primary object in considering the foregoing factors.

d) Any standards for maintenance of property which have been heretofore or shall be hereafter adopted by this Board by resolution after noticed public hearing.

5. Designation of Fire Hazard.

a) Existing fire hazards may be designated by the Fire Chief pursuant to paragraph 1 of this Ordinance.

b) Potentially serious fire hazards may be designated by the Fire Chief or by the Board upon recommendation of the Fire Chief. Prior to such designation by the Board, upon recommendation of the Fire Chief, the Board or its representative shall consult with the affected property owner(s), hold not less than one 1) noticed public hearing and conduct such other investigations as it deems necessary.

c) Whenever weeds or other combustible and flammable materials accumulate to the point that they become a public nuisance, or whenever a fire hazard or a potentially serious fire hazard exists, and thus constitutes a nuisance, the Fire chief or the Fire Chief's designated representative shall give notice to the owner of the property on which the nuisance exists that unless the nuisance be abated within ten (10) days by the destruction or removal of the combustible or flammable material, the work of abating the nuisance will be done by District authorities or a contractor designated by the District and the expense thereof assessed upon the lots and lands from which combustible and flammable materials have been destroyed or removed.

d) Within ten (10) days of receipt of an order to abate a fire hazard or a potentially serious fire hazard, a property owner may appeal to the District's Board of Directors the determination that the fire hazard material on or about his or her property constitutes a public nuisance. The Board shall consider the appeal at its next scheduled meeting or hold a special meeting to hear the appeal. Failure to render a decision **within 31 days** shall constitute a granting of the appeal. The decision of the Board shall be final when announced.

6. Abatement.

a) Removal by District Authorities. If the combustible or flammable materials constituting a nuisance have not been removed within **ten (10)** days of the giving of notice thereof as provided in Section 5 c) above, or in the event of an appeal under Section 5 d) above within ten (10) days of the decision of the Board confirming a previous determination, then the Fire Chief or other persons acting pursuant to his direction, such as deputies, assistants or District employees, contracting agents, or other representatives may enter upon the private property on which the nuisance exists for the purpose of abating the existing or the potentially serious fire hazard. The Fire Chief shall determine, and have the authority to employ, the most cost effective method of abating the nuisance, taking into consideration the health and safety of all affected parties. It shall be unlawful for any person, owner, agent or person in possession of any premises to refuse to allow the Fire Chief or District employees or contracting agents to enter upon the premises for the purpose of abating the nuisance. At the discretion of the Board, the District Legal Counsel may be directed to bring civil suit to enforce the order pursuant to Section 7 b) herein in lieu of removal by District authorities.

b) Charging Cost of Abating the Nuisance. Within thirty (30) days after abatement of the nuisance by the District, the District shall notify the owner of the property as shown on the last equalized assessment roll of the cost of the abatement, plus a fee for administrative expenses not to exceed the sum of Five Hundred Dollars (\$500.00).

c) The owner may file a written protest objecting to the amount of the assessment with the District Secretary within thirty 30 days. The District Secretary shall set the matter for a public hearing by the Board of Directors. The decision of the Board shall be final. If the amount due the District is not paid within thirty 30 days of the decision of the Board, the District Board may by resolution confirm the amount due to the District and, as so confirmed, the amount shall become a special assessment against the parcel in question and shall constitute a lien on the property for the amount of the assessment. A copy of the resolution shall be presented to the Auditor of Monterey County, on or before the tenth 10th day of August following such confirmation, so that the Auditor may enter the amounts of the respective parcels of lands as they appear on the current assessment roll and the Tax Collector may include the amount of the assessment on bills for taxes levied against the respective lots and parcels of land.

7. Violations.

a) Violation is Misdemeanor. The violation of any provision of this Ordinance or any order of the District Board or its authorized

representative to correct or abate an existing or potentially serious fire hazard shall be a misdemeanor. Any person violating any provision of this Ordinance or any order to correct an existing or potentially serious fire hazard shall be deemed guilty of a separate offense for each and every day during any portion such a violation is committed, continued or permitted by such a person, and shall be punished accordingly.

b) Civil Enforcement.

1) The District Legal Counsel may bring civil suit or other action to enforce any order of the District Board or to enjoin any violation of this Ordinance or to abate any public nuisance as declared by this Ordinance. Any person against whom such civil action is filed shall be liable for the costs thereof, which shall include but not be limited to, the costs of investigation, court costs, attorney's fees and costs of monitoring compliance.

2) This remedy by civil action to enforce this Ordinance is in addition to any other remedies available under this Ordinance or other statute and does not replace or support any other remedy but is cumulative thereto.

c) Citations. The Fire Chief or his or her authorized representative shall be authorized to issue citations for any violation of this Ordinance or an order to correct or abate an existing or potentially serious fire hazard.

PUBLISHED BY THE MONTEREY PENINSULA HERALD COMPANY

PROOF OF PUBLICATION  
STATE OF CALIFORNIA  
County of Monterey

I am a citizen of the United States and a resident of the County aforesaid. I am over the age of eighteen years, and not a party to or interested in the above entitled matter. I am the principal clerk of the printer of The Herald, a newspaper of general circulation, printed and published daily and Sunday in the City of Monterey, County of Monterey, and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of Monterey, State of California; that the notice, of which the annexed is a printed copy set in type not smaller than 6 point, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates,

This space is for the County Clerk's Filing Stamp

## **Appendix H**

### Fire Road Map

## Appendix I

### Prioritized Fire Defense Work Projects

- Establish Fire Road system with signage
- Maintain and improve recently constructed Soberanes Fire roads and fuel breaks
- Establish homeowner groups by geographic fuel break area
- Corona, Mt. Devon, Walden, fuel breaks
- Mal Paso Creek Control line and fuel break
- Yankee Point, Spindrift, Aurora Del Mar fuel breaks
- Upper Ridges fuel break
- Red Wolf fuel break
- Point Lobos, Carmel Meadows fuel break
- Foothill Fuel Break
- Highway 1 fuel break
- Corona to Red Wolf fire road connector on State Parks property (Head of Gibson Creek)
- Victorine Ranch fuel break
- Victorine Ranch fire road from Hwy 1 east to the ridge top and parallel to Mal Paso Creek

#### A. Corona, MT Devon, Walden

Completed, current and future fuel reduction treatments and projects:  
Ladder fuel and hazard tree removal along with annual mowing of grasses along upper Corona road. Designation, maintenance and expansion of the fire road network. Proposed fuel treatment on adjacent State Parks property to the north of Corona road along Gibson Creek. Establish connector fire road fuel break between Corona and Red Wolf roads. Establish homeowner groups. Number, sign and map the fire road network. Continuation of the residential chipping program and residential tree permit assistance program.

Corona, MT Devon, Walden Zone Fire Roads-TBD

Maintenance schedule (yearly)

Check access and egress of fire roads prior to fire season

Brush and mow fire roads

Monitor progress of active fuel reduction projects

## B. Victorine Ranch

Completed, current and future fuel reduction treatments and projects: Hazard tree removal, hand and mechanical fuel reduction along fire roads and near powerlines. Maintain fire road from Hwy 1 east to the ridge top and parallel to Mal Paso Creek. Fuel reduction behind the Victorine Ranch subdivision and adjacent to the canyon. Establish homeowner groups. Number, sign and map the fire road network. Continuation of the residential chipping program, Residential tree permit assistance program.

Victorine Ranch Fire Roads -TBD

Maintenance schedule (yearly)

Check access and egress of fire roads each spring

Brush and mow fire roads prior to fire season

Monitor progress of active fuel reduction projects

## C. Yankee Point, Spindrift, Aurora Del Mar

Completed, current and future fuel reduction treatments and projects: Hazard tree removal, hand and mechanical fuel reduction along Hwy 1 and near powerlines. Establish homeowner groups. Number, sign and map the fire road network. Continuation of the residential chipping program, Residential tree permit assistance program.

Yankee Point, Spindrift, Aurora Del Mar Fire Roads

No roads currently planned

Maintenance schedule (yearly)

Check access and egress of fire roads each spring

Brush and mow fire roads prior to fire season

Monitor progress of active fuel reduction projects

## D. Upper Ridges

Completed, current and future fuel reduction treatments and projects: Mastication, goat grazing for fuel reduction and hazard tree removal. Hazard tree removal, hand and mechanical fuel reduction along fire roads and near powerlines. Establish homeowner groups. Number, sign and map the fire road network. Continuation of the residential chipping program, Residential tree permit assistance program.

## Upper Ridges Fire Roads-TBD

### Maintenance schedule (yearly)

Check access and egress of fire roads each spring  
Brush and mow fire roads prior to fire season  
Monitor progress of active fuel reduction projects

## E. Red Wolf

### Completed, current and future fuel reduction treatments:

Hand and Mechanical fuel reduction goat grazing and hazard tree removal work along Riley Ranch and Red wolf roads.

Establish connector fire road fuel break between Corona and Red Wolf roads  
Hazard tree removal, hand and mechanical fuel reduction along fire roads and near powerlines. Establish homeowner groups. Number, sign and map the fire road network. Continuation of the residential chipping program, Residential tree permit assistance program.

### Red Wolf Zone Fire Roads

Establish connector fire road fuel break between Corona and Red Wolf roads

### Maintenance schedule (yearly)

Check access and egress of fire roads each spring  
Brush and mow fire roads prior to fire season  
Monitor progress of active fuel reduction projects

## F. Point Lobos Reserve, Carmel Meadows (West and East side of Hwy 1)

### Completed, current and future fuel reduction treatments and projects:

Continuation and expansion of hand work and hazard tree removal work along Hwy 1. Introduce hand and mechanical fuel reduction and goat grazing in other areas and along Gibson creek. Complete encroachment permit for defensible space around Carmel Meadows. Establish homeowner groups Number, sign and map the fire road network. Continuation of the residential chipping program, Residential tree permit assistance program.

### Point Lobos Carmel Meadows Zone Fire Roads-TBD

### Maintenance schedule (yearly)

Check access and egress of fire roads each spring  
Brush and mow fire roads prior to fire season  
Monitor progress of active fuel reduction projects

## G. Foothill Fuel Break

Completed, current and future fuel reduction treatments and projects:  
Ladder fuel and hazard tree removal along with annual mowing of grasses along lower ridges behind subdivisions with a combination of hand, mechanical and grazing treatments. Enhance and expand depth of fuel reduction with property owners along the fuel break. Establish fire roads. Establish homeowner groups. Continuation of the residential chipping program and residential tree permit assistance program.

### Foothill Fuel Break Fire Roads-TBD

Maintenance schedule (yearly);  
Check access and egress of fire roads each spring  
Brush and mow fire roads prior to fire season  
Monitor progress of active fuel reduction projects  
Monitor progress of CFD Grants

## H. Highway 1 Fuel Break

Completed, current and future fuel reduction treatments and projects:  
Ladder fuel and hazard tree removal along with annual mowing of grasses along Hwy 1 from Gibson Creek to Victorine Ranch. Enhance and expand depth of fuel reduction with property owners along the highway. Establish homeowner groups. Continuation of the residential chipping program and residential tree permit assistance program.

### Highway 1 Fuel Break Fire Roads

No roads currently planned

Maintenance schedule (yearly)  
Check access and egress of fire roads each spring  
Brush and mow fire roads prior to fire season  
Monitor progress of active fuel reduction projects  
Monitor progress of CFD Grants

## I. Mal Paso Creek

Completed, current and future fuel reduction treatments include:  
Maintain existing hand line and fuel break along Mal Paso Creek from the bridge to upper Mal Paso canyon, Maintain existing hand and bull dozer line and fuel break along the southern rim of Mal Paso Creek from the bridge to upper Mal Paso canyon. Continuation of the residential chipping program and residential tree permit assistance program.

## Mal Paso Creek Fuel Break Fire Roads-TBD

Maintenance schedule (yearly):

Check access and egress of fire roads each spring

Brush and mow fire roads prior to fire season

Monitor progress of active fuel reduction projects

Monitor progress of CFD Grants