

APPENDIX B

Escondido Canyon Park and Latigo Trailhead Focused Fire Protection Plan

APPENDIX B

ESCONDIDO CANYON PARK AND LATIGO TRAILHEAD FOCUSED FIRE PROTECTION PLAN Modified Redesign Alternative



Prepared for:

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Mountains Recreation Conservation Authority**

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**Escondido Canyon Park and Latigo Trailhead
Focused Fire Protection Plan
Modified Redesign Alternative**

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ATTACHMENT

1. Select Project Area Photographs

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1.0 INTRODUCTION

This Fire Protection Plan (FPP) has been prepared as an evaluation of the adverse environmental effects that the proposed Malibu Parks Public Access Enhancement Plan - Public Works Plan improvement project, Modified Redesign Alternative at Escondido Canyon Park and Latigo Trailhead may have from wildland fire. It further evaluates methods for reducing those effects to ensure that the above referenced project does not unnecessarily expose people or structures to a significant risk of loss, injury, or death involving wildland fires.

This FPP utilizes a "systems approach" for specifying fire protection measures. The measures consist of the components of fuel modification, water supply, fire protection systems, access (ingress/egress), and emergency response. The "Master" FPP provides additional details regarding wildfire risk assessment, fire history, fire behavior modeling and construction and fire protection features that will be provided at this park site.

This Focused Fire Protection Plan has been revised for inclusion in the Final Environmental Impact Statement with the most notable revision being the removal of all proposed uses including campsites, parking areas, restrooms, and water storage facilities at Escondido Canyon Park, except trail improvements and the removal of campsites and the water storage tank at Latigo Trailhead. Additionally, the Modified Redesign Alternative removes the optional emergency fire shelters from both facilities. Escondido Canyon Park uses will be consistent with current uses while Latigo Trailhead replaces campsites with day-use, picnic facilities and all facilities will be within a relatively close proximity to parking areas and roadways. The resulting improvement configuration and use at Latigo Trailhead prompted Los Angeles County Fire Department to indicate that emergency fire shelters would not be necessary. The project's pre-plan, fire restrictions, adherence to "Ready, Set, Go," for early off-site relocation, and restrictions that prohibit visitors during weather that is most likely to facilitate ignition and spread of fire, are considered adequate for the proposed uses at these two facilities.

2.0 PROJECT DESCRIPTION

Escondido Canyon Park will not receive improvements, other than to trails that pass through the area, as part of this Alternative. Figure 1 provides details regarding proposed trail improvements at Escondido Canyon Park and facility improvements at Latigo Trailhead according to the Modified Redesign Alternative. As proposed, the 2.4-acre Latigo Trailhead project sites will include the following improvements:

Latigo Trailhead

- Parking facility (4 vehicles)

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- Self-contained restroom
- Improved water availability
- Fire hydrant(s)

Specific details regarding the proposed facility improvements can be found in the Modified Redesign Alternative Environmental Impact Report Project Description, FEIR – Volume 4). Select project area photographs are provided in Attachment 1. The following sections provide summaries of the site’s environmental setting, wildfire risk, and provided risk minimizing features.

3.0 ENVIRONMENTAL SETTING

3.1 Location

Escondido Canyon Park is located within the City of Malibu at 27200 Winding Way. Latigo Trailhead is located at 5837 Latigo Canyon Road. Escondido Canyon Park is located approximately 1 mile east of Kanan Dume Road in Malibu. Escondido Canyon Park consists of open land that is vegetated with a variety of native and nonnative plant and tree species. Latigo Trailhead is located directly adjacent Latigo Canyon Road and includes similar vegetation characteristics. The network of trails in the area results in a relatively short distance, approximately 0.5 mile, between Escondido Canyon Park and the Latigo Trailhead. Both Escondido Canyon Park and Latigo Trailhead are surrounded by privately owned land with residential and undeveloped land dominating the landscape

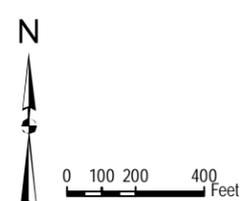
3.2 Access

Escondido Canyon Park

Escondido Canyon Park is accessible by the public via pedestrian access along an established trail easement on the road shoulder of East Winding Way from a 17-space parking lot located on Winding Way at Pacific Coast Highway (PCH), approximately 1 mile south of the park boundary. A dirt trail then takes access from the terminus of Winding Way onto the park property. Emergency access to the Park is provided via Winding Way through a locked gate at the terminus of Winding Way. This configuration will not be altered by the Modified Redesign Alternative which includes no improvements at Escondido Canyon Park.

Latigo Trailhead

Latigo Trailhead is accessed by Latigo Canyon Road, approximately 0.8 mile from its intersection with PCH. A short, chain link gated driveway enters the property and provides direct access to the proposed improvement area.



SOURCE: DigitalGlobe 2008, MRCA 2009

- | | |
|-------------------------|---------------------------------------|
| Proposed Camping Area | Trail Corridors |
| Proposed Parking Area | Primary Trail (see P&S Project Plans) |
| Proposed Facilities | Primary Trail (Existing) |
| Fuel Modification Zones | Connector Trail (Existing) |
| Malibu City Limits | Backbone Trail |
| Park Boundaries | Other Existing Trail |

FIGURE 1
Escondido Canyon Park and Latigo Trailhead

**Escondido Canyon Park and Latigo Trailhead
Focused Fire Protection Plan
Modified Redesign Alternative**

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Escondido Canyon Park and Latigo Trailhead Focused Fire Protection Plan Modified Redesign Alternative

3.3 Topography

Escondido Canyon Park

Escondido Canyon Park is aligned along Escondido Canyon, characterized by steep canyon walls and a drainage bottom running the length of the park property. In this area, the canyon is aligned in a northwest-southeast alignment and includes gradually increasing slope presence and steepness up-canyon. Slopes reach 65% in portions of the canyon. Elevations in the bottom of the canyon range from 700 feet above mean seal level (amsl) in the northwestern section of the park to 100 feet amsl at the southeastern-most point of the park.

Latigo Trailhead

The Latigo Trailhead property is a relatively small property adjacent to the south side of Latigo Canyon Road. Situated along Latigo Canyon, the property contains a drainage bottom that spans its length from east to west. Elevations on this property range from approximately 360 to 400 feet amsl, with slopes reaching up to 43% rising out of the property's drainage bottom.

3.4 Flammable Vegetation

Escondido Canyon Park

Escondido Canyon Park is in its entirety naturally vegetated with native and non-native plant species. The majority of the park area can be characterized as relatively undisturbed coastal sage scrub habitat. However, Escondido Creek winds its way through the park along which riparian woodland is the dominating habitat. In addition, areas containing a mix of native and non-native grassland occur in various areas of the park. The majority of the park property is designated as an Environmentally Sensitive Habitat Area in the County of Los Angeles Malibu Local Coastal Program Land Use Plan (County LUP) for the Malibu and Santa Monica Mountains area.

Latigo Trailhead

Vegetation occurring at the Latigo Trailhead is generally consistent with Escondido Canyon Park. An oak/sycamore riparian area occurs directly adjacent to Latigo Canyon Road while slopes to the south include coastal sage scrub of varying densities and stages of recovery from past wildfires.

3.5 Climate

The project area includes a Mediterranean-like climate; that is, warm, dry summers and wetter winters. Precipitation typically occurs between December and March. The prevailing wind is from the west with fall Santa Ana winds from the northeast that may gust to 70 miles per

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hour (mph). The project area's climate, as with most of southern California, has a large influence on the fire risk as drying vegetation (fuel moisture for 1-hour fuels of less than 5% is possible) during the summer months becomes fuel available to advancing flames should an ignition be realized. A notable weather/wind related phenomenon for Escondido Canyon and the other north-south trending canyons of Malibu is that typical Santa Ana winds do not have the same direct effect on rate of spread as they do in other southern California locations. A northeast Santa Ana typically results in a fire that burns down the steep slopes in a slower manner. A wind out of the north, however, could result in very fast moving wildfire as the winds funnel and accelerate through the canyon alignments.

4.0 RISK ASSESSMENT

4.1 Fire Behavior Modeling

FlamMap fire behavior modeling was conducted for the Plan area and surrounding Malibu/Santa Monica Mountains region and is summarized in the project's Master FPP. More focused fire behavior modeling utilizing BehavePlus 4.0.0 was conducted for this site. A general discussion of the BehavePlus analysis, including weather input variables, is presented in the project's Master FPP (Section 3.3). Fuel model typing was conducted in the field for Escondido Canyon Park and Latigo Trailhead concurrent with site hazard evaluations. Based on field analysis, two different fire scenarios were evaluated, including:

- **Scenario 1:** Fire originating in canyon, burning uphill toward existing structures
- **Scenario 2:** Fire burning down-canyon toward proposed facilities.

The unique terrain and fuel models used for BehavePlus modeling in Escondido Canyon Park and Latigo Trailhead are presented in Table 1, and the results of modeling efforts are provided in Table 2. Locations of BehavePlus model runs are presented graphically in Figure 2. Based on the BehavePlus analysis, maximum flame lengths for Scenario 1 reach 49.8 feet during 97th percentile weather conditions (with wind speeds of 69 mph (documented maximum gust speed observed in the region during the 2007 Canyon Fire), with fireline intensities reaching 27,788 BTU/feet/sec. Under Scenario 2, flame lengths reach 51.4 feet and fireline intensities reaching 29,790 BTU/feet/second during 97th percentile weather conditions and the same wind speed values. Spotting distances for both scenarios reach 3.3 miles during fall, Santa Ana weather conditions. The results from all BehavePlus fire behavior modeling scenarios are presented in Table 2.

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**Table 1
Fire Behavior Model Variables**

| Scenario | Fuel Model | Slope | Aspect |
|----------|-----------------------------|-------|--------|
| 1 | SCAL 18, coastal sage scrub | 30% | West |
| 2 | SH7, sumac | 25% | South |

**Table 2
BehavePlus Fire Behavior Model Results**

| Scenario | Flame Length (feet) | Fireline Intensity (BTU/feet/second) | Spotting Distance (miles) |
|--|---------------------|--------------------------------------|---------------------------|
| <i>Scenario 1: Coastal Scrub On West-Facing, 30% Slope</i> | | | |
| On-shore (50th percentile) | 16.6 | 2,551 | 0.4 |
| Santa Ana (97th percentile with 69mph gusts) | 49.8 | 27,788 | 3.3 |
| <i>Scenario 2: Sumac On South-Facing, 25% Slope</i> | | | |
| On-shore (50th percentile) | 13.4 | 1,601 | 0.4 |
| Santa Ana (97th percentile with 69mph gusts) | 51.4 | 29,790 | 3.3 |

NOTE: The results presented in Table 2 depict values based on inputs to the BehavePlus software. Changes in slope, weather, or pockets of different fuel types are not accounted for in this analysis. Model results should be used as a basis for planning only, as actual fire behavior for a given location will be affected by many factors, including unique weather patterns, small-scale topographic variations, or changing vegetation patterns.

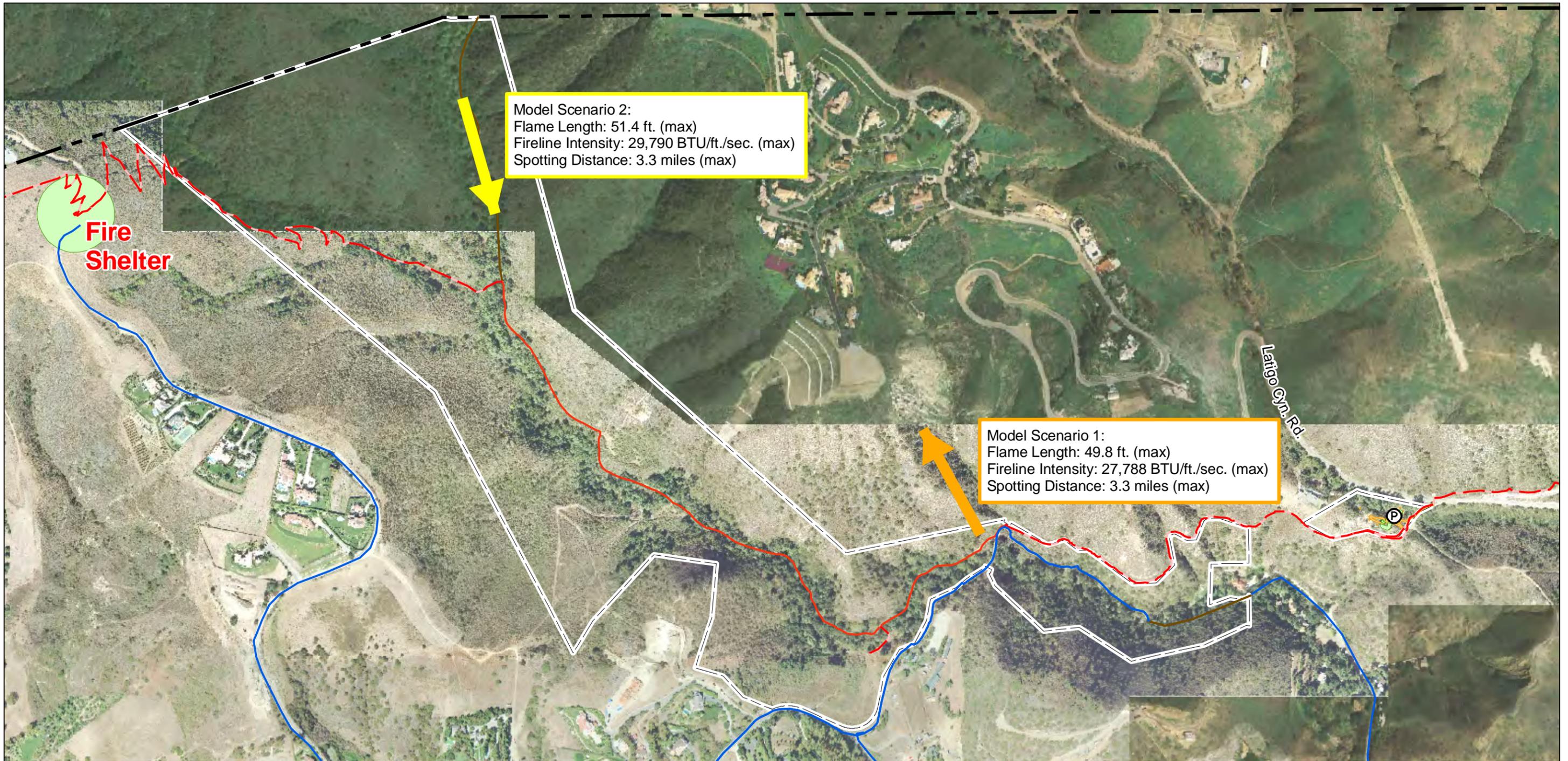
4.2 Result – Exposure to Wildland Fire

Given the climatic, vegetation, wildland-urban interface location, and topography characteristics along with the fire history, ignition sources and fire behavior modeling results previously discussed in this FPP, the project site is determined to be potentially vulnerable to wildfire igniting on, burning onto or spotting onto the site. Based on this information and the recorded history of fires in the area, along with the persistence of naturally vegetated open space within and surrounding the Escondido Canyon Park and Latigo Trailhead, it is expected that wind-driven wildfires could occur near, and/or on, this site in the future.

Under the most severe fall weather conditions, fire can move rapidly through the canyon fuels. The most common type of fire anticipated in the vicinity of the project area is a fire burning from the north into Escondido Canyon. Worst-case flame lengths were calculated at approximately 51.4 feet in sumac vegetation on south-facing slopes, with maximum spotting distances of 3.3 miles. Similarly, worst case weather conditions are anticipated to produce nearly 49.8 foot tall flames in the coastal sage scrub vegetation type found on site.

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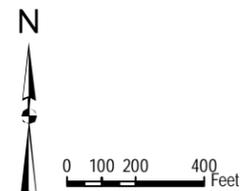


Model Scenario 2:
 Flame Length: 51.4 ft. (max)
 Fireline Intensity: 29,790 BTU/ft./sec. (max)
 Spotting Distance: 3.3 miles (max)

Model Scenario 1:
 Flame Length: 49.8 ft. (max)
 Fireline Intensity: 27,788 BTU/ft./sec. (max)
 Spotting Distance: 3.3 miles (max)

Fire Shelter

Latigo Cyn. Rd.



SOURCE: DigitalGlobe 2008, MRCA 2009

- Proposed Camping Area
 - Proposed Parking Area
 - Proposed Facilities
 - Fuel Modification Zones
 - Malibu City Limits
 - Park Boundaries
- Trail Corridors**
- Primary Trail (see P&S Project Plans)
 - Primary Trail (Existing)
 - Connector Trail (Existing)
 - Backbone Trail
 - Other Existing Trail

FIGURE 2
 BehavePlus Analysis Map

**Escondido Canyon Park and Latigo Trailhead
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5.0 PROJECT EMERGENCY RESPONSE, INFRASTRUCTURE AND FIRE PROTECTION FEATURES

The Malibu region experiences periodic wildfire and the Plan area has burned, including the 2007 Canyon, Corral, and Malibu Fires and the 2008 Bluff Fire (refer to Figure 4 of the Master FPP). It can be reasonably anticipated that Escondido Canyon Park and Latigo Trailhead will be exposed to wildfire in the future. As such, this FPP provides a summary of existing and proposed infrastructure and special measures to provide for fire protection.

5.1 Emergency Response

The Project Site is located within the City of Malibu and unincorporated Los Angeles County, which receive fire protection and emergency services from the Los Angeles County Fire Department (LACoFD). LACoFD is under contract to Cal Fire for State Responsibility Area (SRA) fire protection. LACoFD provides initial response to SRA fires, and Cal Fire provides response when necessary based on size and type of fire. Regionally, the LACoFD provides fire, emergency medical, and rescue services from 22 battalions and 170 stations. The Department serves over 4 million residents throughout 58 cities and all unincorporated portions of Los Angeles County. The Project Site lies within the jurisdiction of Battalion 5, which consists of 12 stations. All of the proposed trail system and parking improvements within and adjacent to Escondido Canyon Park are located within the City of Malibu. The City of Malibu is served directly by four LACoFD fire stations (Stations 70, 71, 88, and 99); however, additional stations within the LACoFD are available to service the City if necessary. Additionally, the Ventura County Fire Department (VCFD) and the National Park Service (NPS) are available indirectly to provide fire services to the City if needed.

Escondido Canyon Park

LACoFD Station No. 71 located at 28722 PCH is the closest fire station at 1.9 miles from Escondido Canyon Park. The response time of arrival is expected to be within 5 minutes, roughly the same as the average 4.8-minute response time for urban areas achieved by the LACoFD, based on 2006 statistics (County of Los Angeles 2008). Fire Station No. 88, located at 23720 Malibu Road, is approximately 5.6 miles from the Project Site entrance and estimated response time is expected to be less than 10 minutes. Additionally, Fire Station 99 at 32550 PCH is roughly 6.5 miles from the entrance and Fire Station 70 is roughly 8 miles from the site. There are no new improvements (other than to trails) planned for this facility, so response would be primarily for medical calls associated with trail use.

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Latigo Trailhead

LACoFD response to Latigo Trailhead would require longer response times, exceeding the standard 5-minute goal. However, there would be no structures on the site, medical emergencies would be the majority of calls, and MRCA trained Rangers would be available in a medical or fire emergency and would be able to provide fast initial response. LACoFD Station 71 is 4.4 miles from Latigo Trailhead, Station 88 is 4.7 miles, Station 70 is 7 miles, and Station 99 is 9.0 miles from the trailhead. Each of these distances would result in response at or just above the 5-minute response level.

Typical brush-fire response at Escondido Canyon Park and/or Latigo Trailhead would include the following:

- 5 Engines, 1 Dozer, 3 Copters/ 2 Flycrews, 4 Camp Crews, 3 Superintendents, 2 Battalion Chiefs, 1 Patrol
 - The flycrews land on the incident with a Division Superintendent and attack the active flank, advancing to the head of the fire.
 - Ground crews arrive on scene and are designated to anchor the fire at the point of origin and improve the fire line from the flycrews scratch line, to an impassible fire break. Hazards are addressed, snags relieved, possible rolling material trenched, and dog legs widened.
 - Battalion Chiefs assume Incident Commander responsibilities, in accordance with the Helicopter Coordinator (HELCO) and previous on-scene commanders.

It is expected that the initial arriving BC would evaluate the need for additional resources based on several factors.

In addition to the LACoFD and neighboring NPS, Los Angeles City and Ventura fire fighting capabilities, the Santa Monica Mountains Conservancy (Conservancy) and Mountains Recreation and Conservation Authority (MRCA) assist local fire departments in fighting wildland fires in protecting the array of resources on and off its own properties. The response time for initial attack is anticipated to be within a few minutes of fire notification and as such, the MRCA will likely be the first or second responder to wildfire starts on or near their properties. The MRCA:

- Maintains constant communication and mutual aid agreements with the Los Angeles County Fire Department, the Los Angeles City Fire Department, the Ventura County Fire Department, California State Parks, and the National Park Service, to promote cooperative efforts to prevent and defend against wildfire.

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- Conducts a formal Fire Academy, certifying MRCA wildland fire fighting personnel to Federal and State standards. This program also trains state and regional firefighters, including the Local Fire departments and resource agencies. The MRCA academy provides continuing education, including; advanced training in wildland fire behavior, EMS, and urban interface fire fighting.
- Deploys its own fire fighting equipment, including one four-wheel drive Type II fire engine, one Type I Class A foam engine, one four-wheel drive Type III engine with Compressed Air Foam System, two Type III engines, one water tender, two mobile command units, 40+ chainsaws, two four-wheel drive Type IV engines equipped with Compressed Air Foam System and a minimum of 300 gallons of water and eight four-wheel drive Type IV engines equipped with a minimum of 200 gallons of water. In addition, MRCA stores water and portable high pressure firefighting pumps for fire fighting purposes at these facilities. In addition, MRCA provides helicopter-landing zones on its properties for Ventura County Fire Department, Los Angeles County Fire Department, and Los Angeles City Fire Department helicopters.

Based on the available fire fighting resources on site and in the vicinity of the site, adequate resources are available to respond to typical wildfire and medical emergencies for suppression and life safety activities anticipated in the vicinity of this site. This is especially the case because, as described in detail in later sections of this FPP, during the periods where the probability of extreme or catastrophic wildfire occurring would be highest (Red Flag Warning Periods), activities at Escondido Canyon Park and Latigo Trailhead would be suspended, negating the potential incremental increase in wildfire risks (refer to Master FPP risk analysis) associated with the proposed park uses and human presence on the site.

5.2 Water Supply

No water improvements are proposed for Escondido Canyon Park. Latigo Trailhead will receive a pressurized water source for hydrants and to supply recreational day use areas.

5.3 Fire Access Roads

Fire access roads occur as follows:

- **Escondido Canyon Park:**
 - PCH to Winding Way (total distance to park PCH = 4,050 linear feet).
 - PCH to Delaplane Road to Winding Way (total distance to park from PCH = 5,600 linear feet).

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- **Latigo Trailhead:**

- PCH to Latigo Canyon Road (total distance from PCH = 4,125 feet linear feet to Latigo Trailhead access drive.

Dead Ends

No roads are proposed for construction for these two park areas. Proposed parking areas at Latigo Trailhead will offer wide, paved areas for turnaround. . Latigo Canyon Road is not a dead end road.

Width

No new roads are proposed for either Escondido Canyon Park or Latigo Trailhead. Existing access roadway widths are:

Escondido Canyon Park

Winding Way: Averages 20 feet wide to the park boundary. Thereafter, the road narrows to an approximately 12 foot wide average.

Latigo Trailhead

Latigo Canyon Road: 22 feet unobstructed by parking for the northwestern and north central parking areas, respectively.

Grade and Departure Angle

No new roads are proposed for either location.

Escondido Canyon Park

Existing grades for primary access at Escondido Canyon Park vary from flat for long stretches, to gently sloping, to nearly 20% for short segments at the furthest reaches of the access road beyond Winding Way's intersection with the park's gate. The average grade is less than 15%.

Departure angles comply with fire code requirements of less than 7%.

Latigo Trailhead

Existing grades for primary access at Latigo Trailhead average less than 7%.

Departure angles comply with fire code requirements of less than 7%.

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Bridges

There are no vehicular bridges currently, or proposed, to provide access for Escondido Canyon Park or Latigo Trailhead.

Surface

No new roads are proposed. All existing access roadway and driveway surfaces are asphalt concrete pavement capable of supporting travel by minimum 75,000 pound apparatus.

5.4 Building Construction

There are no new structures planned for Escondido Canyon Park or Latigo Trailhead other than non-combustible, self-contained restrooms at Latigo Trailhead that will meet code requirements.

5.5 Fire Protection Systems:

As there is no new permanent, habitable building construction proposed for Escondido Canyon Park or Latigo Trailhead, there are no fire protection systems (interior fire sprinklers) proposed.

5.6 Defensible Space:

The fuel modification areas provided for the proposed improvements at Latigo Trailhead are presented in Figure 1. The fuel modification program will focus on:

- **Parking Restroom Facility, and Day Use Sites at Latigo Trailhead:** A total of 20 feet of fuel modification in one zone will be provided. The fuel modification area adjacent to all sides of these improvements will consist of thinning zones where existing vegetation is removed to represent a 75% thinning (from existing conditions) for the extent of the 20-foot-wide zone. Thinning will include removal of highly flammable plant species, dead and dying plant material, creating horizontal and vertical spacing, mowing grasses and understory plants to 3-inch height, and creating a highly interrupted, non-continuous fuel zone, including removal of high Btu producing elements. Plant species and maintenance requirements will be consistent with those in LACoFD's Zone A and B as described in the Master FPP, with the exception of irrigation that will not be provided on this site.
- **Fire Access Road Zone:** This zone extends 20 feet (twice code requirements) from the edge of any proposed public or private roadway (excluding driveways), and may be used as access for firefighting apparatus or resources. Note: a select number of parking locations and roads at Latigo Trailhead will include 10 foot fuel buffers (consistent with LACoFD) to avoid/minimize native vegetation impacts.

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Specific Requirements – Fire Access Road Zone:

- Clear and remove flammable growth for a minimum of 20 feet on each side of Fire Access Roads (Fire Code Section 317.10) or to property or easement line (or similar measure required by LACoFD consistent with Fire Code allowances);
- Fire access roads, driveways, and turnarounds shall be maintained in accordance with Fire Code. Fire Access Roads shall have unobstructed vertical clearance (Fire Code Section 503.2.1) of a minimum of 13 feet 6 inches.
- Landscaping and native plants within the 20-foot Fire Access Road Zone shall be appropriately spaced and maintained to provide safe egress in wildland fire environments, including removal of high Btu producing elements.

5.7 Vegetation Management:

An annual vegetation management plan for each park will be prepared by Conservancy/MRCA with special focus provided for road interface areas, parking area adjacency, and day-use sites. All Fuel Modification Zone maintenance will be completed at least annually by May 15 of each year and more often as needed for fire safety, as determined by the appropriate fire agency. MRCA will provide on-going/as-needed fuel modification zone maintenance that will include:

- Pruning of foliage to reduce fuel load, vertical continuity, and removal of plant litter and dead wood.
- Removal or thinning of undesirable combustible vegetation and replacement of dead or dying landscaping.
- Chipping removed material to at least 4 inches diameter and distributing on site in fuel modification areas to reduce likelihood of weed growth.
- Pruning lower branches of trees and tree-form shrubs to one-third of their height (or 6 feet from the lowest hanging branches) to help prevent fire from spreading upward into the crown.
- Maintaining ground cover at a height not to exceed 18 inches. Annual grasses and weeds shall be maintained at a height not to exceed 3 inches.
- Removing accumulated plant litter and dead wood. Debris and trimmings produced by thinning and pruning should be removed from the site or chipped and evenly dispersed in the same area to a maximum depth of 5 inches.
- Complying with these FPP requirements on a year-round basis. Annual inspections are conducted following the natural drying of grasses and fine fuels, between the months of April and June, depending on precipitation during the winter and spring months.

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- Preparation of Plan area-specific fuel modification plans will commence and be completed prior to site preparation work. The fuel modification plans will be prepared by a qualified fire protection planner and will include CAD-generated drawings of the improvements and specific fuel modification requirements for each improvement. Final approval of the fuel modification plans will be provided by the appropriate fire agency.

Neighboring property owners, especially those to the south of Escondido Canyon Park provide defensible space around structures as required by LACoFD and state law (Public Resources Code, Section 4291). This practice should continue so that the combined fuel reduction efforts will improve the overall fire safety and reduce risk in the project area.

Construction period vegetation management will be consistent with requirement of LACoFD and the Master FPP, Section 5.2.1.

6.0 SITE SPECIFIC FIRE PROTECTION MEASURES

The following customized measures have been developed based on the proposed Latigo Trailhead enhancements, the assessed wildfire risk, and the planned day-use of the sites. Existing uses at Escondido Canyon Park are anticipated to continue and are also incorporated into the measures that follow.

1. Notification and enforcement of all standard park rules and regulations per existing policies of the Santa Monica Mountains Conservancy/MRCA will continue to occur. Most notably:
 - a. Escondido Canyon Park and Latigo Trailhead will be closed sunrise to sunset.
 - b. No smoking or fires.
 - c. No alcoholic beverages.
 - d. No littering or dumping.
 - e. No unauthorized vehicle use.
 - f. Possession of firearms, bow and arrow prohibited.
 - g. Violations subject to \$1,000 fine and/or 6 months in County jail.
2. No person shall make or maintain, nor aid and abet others in making or maintaining, a campfire or any other open fire in the park or at the Trailhead.
3. No camping is allowed at either ECP or Latigo Trailhead.

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4. Fire protection equipment shall be provided and maintained either at facilities or within Ranger patrol vehicles, as appropriate including, at a minimum:
 - a. A 6 inch water line would provide fire hydrant water supply at Latigo Trailhead facility to provide a dependable water supply for fire protection.
 - b. A portable and air-powered quick attack firefighting system will be carried in patrol vehicles
 - c. Portable self-contained fire extinguisher at each day-use facility at Latigo Trailhead
 - d. Self-contained restrooms at Latigo Trailhead will be constructed of non-combustible materials.
5. Escondido Canyon Park and Latigo Trailhead shall be closed to all recreational use, or other functions during any Red Flag Warning day/period, Flash Flood/Flood Warnings or Urban/Small Stream Advisory as declared for the Santa Monica Mountains area by the National Weather Service, a division of the National Oceanic Atmospheric Administration (NOAA). Signs shall be posted and park areas shall be patrolled to notify park users and to enforce restrictions on park use and notification provided that violation of the Red Flag Warning day closure policy may be punishable by fines up to \$1,000.00. Written warnings of the park closure and use cancellation policy shall be provided to potential visitors and prospective program and event sponsors prior to contracting for park use.
6. A ranger(s) will make regular patrols of Escondido Canyon Park and Latigo Trailhead. See Patrols text (DEIR, Chapter 2.0).

6.1 Relocation Planning

Wildfire emergency response procedures will be focused on the day-use activities that would occur at Latigo Trailhead, but are applicable to Escondido Canyon Park based on its current uses. Off-site relocation from the area may be required during a wildfire emergency. Supporting this effort, the Barwood building at Ramirez Canyon Park currently serves as the Western Sector Emergency Operations Center for the MRCA, with full computer and radio dispatch capabilities in the event of an emergency. Trained dispatch personnel would be on-site at the Barwood building during a wildfire emergency. This Plan area resource provides an additional layer of support for the relocation strategy by offering heightened access to important wildfire information and for determining which relocation option to employee. Among the Barwood building communications and information support capabilities:

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- VHF Base radio – high powered stationary radio with a fixed repeater in Upper Ramirez Canyon
- Satellite phone
- VHF Hand held radios (numerous)
- GIS mapping center
- Phone System
- Inforad Emergency Paging System.

6.1.1 Wildfire Emergency Pre-Plan

The MRCA has pre-planned for wildfire emergencies and will continue to update the off-site relocation component of that pre-plan for Escondido Canyon Park and Latigo Trailhead. Subject areas that are addressed in this FPP and that shall be included in the emergency preparedness planning for Escondido Canyon Park and Latigo Trailhead include:

- Staff training (by MRCA, LACoFD)
- Facility Protection (as defined in this FPP)
- Grounds Protection (fuel modification zones)
- Fire Prevention during Red Flag Warning periods
- Emergency Supplies (fire extinguishers, First-aid and AED kits, etc.)
- Telephones/Communications
- Web based communication tactics – text messages, e-tools for information, education, and critical notifications
- Command List
- MRCA Emergency Operations Plan
- Annual Review and Update
- Emergency Notification Procedures
- Advisement of Potential Fire Danger
- Emergency Relocation/Evacuation Plan.

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6.1.2 Relocation Scenario

The following relocation scenario is provided for illustration of decision making procedures. The term “relocation” is used instead of “evacuation” as the term indicates an orderly, pre-planned process where people are relocated off-site. Orderly movement of people is the result of planning, training, education, and awareness, all of which will be proactively implemented by MRCA.

Early relocation from the Escondido Canyon Park and Latigo Trailhead to off-site areas away from wildland fuels is the pre-plan that will be implemented during a wildfire emergency. Supporting this pre-plan is the closure of these facilities on declared Red Flag Warning days/periods, the Escondido Canyon Park and Latigo Trailhead will be closed to visitors. This closure removes visitors from the Plan area corresponding with the periods that have historically produced the largest and most dangerous wildfires. Additionally, there are no campsites at these facilities and day-use sites are located in close proximity to parking areas and egress ways. However, because southern California’s fire season is now considered to be a nearly year round event, wildfire may occur when persons are at the site on non-Red Flag Warning days, perhaps during high fire season. Fires in the absence of high winds and low humidity during these periods would be expected to have much less aggressive behavior, but still require provisions for early relocation out of the area. The following sections discuss emergency relocation of Escondido Canyon Park and Latigo Trailhead visitors.

Relocation of the site’s staff and visitors in the event of a wildfire would depend on the fire’s location and behavior. Relocation can be achieved via the following optional routes:

- **Escondido Canyon Park.** Visitors will relocate via trails to the south toward the PCH-adjacent parking area. Once in their vehicles, they will proceed onto PCH.
- **Latigo Trailhead Day Use Sites.** Picnic users in the Latigo Trailhead day use areas are at most a 3 to 4 minute walk from the parking area. Visitors would return to the parking area and drive south on Latigo Canyon Road to PCH and out of the area. It is unlikely that visitors in this area would ever need to relocate to the west along the proposed trail toward Escondido Canyon Park given the distance and potential exposure.

As identified in this FPP, in case of wildfire, early relocation out of the area is the pre-planned objective. Early notification of the MRCA Command and administrators and subsequently of staff and visitors is critical to the timely and safe relocation to designated off-site relocation areas. As indicated in numerous recent wildfires in southern California, including the 2009 Jesusita wildfire in Santa Barbara and the 2007 San Diego County fires, early notification

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combined with an organized relocation strategy and implementation is an effective means of moving people out of harm's way.

On at least an annual basis, MRCA firefighting personnel will conduct fire relocation drills at Escondido Canyon Park and Latigo Trailhead to train staff on efficient and effective relocation of people in these areas during a wildfire. MRCA fire fighters will observe and participate in this annual drill and will have the authority to revise the procedure as necessary to provide the most efficient and safest relocation process. In addition, MRCA will hold regular relocation drills with timed facility sweeps for visitor "round up." The sweeps are estimated to take a maximum 25 minutes and include trails and day use areas at the facilities (excluding remote trails). Continued property sweep training will be included in the overall MRCA fire safety training program.

If relocation of Escondido Canyon Park and Latigo Trailhead visitors is required, the following procedures will be followed. (NOTE: Relocation of the Escondido Canyon Park and Latigo Trailhead visitors, at average daily population, (estimated 33 people (existing Escondido Canyon Park) and 12 people (Latigo Trailhead) in up to 21 vehicles) may require in excess of 30 minutes, based on the typical time from notification of a fire to leaving the area).

Relocation of Escondido Canyon Park and Latigo Trailhead day-use visitors will typically occur during large, distant wildfire events that, due to weather patterns and difficulty in gaining control, could threaten the area. Under this scenario, MRCA fire fighters and administrators would evaluate the wildfire event and determine at which point relocation would occur, with a conservative trigger threshold (i.e., relocations will be required well before fire is threatening the greater Malibu area). If a fire ignites within the Plan area or immediately near Escondido Canyon Park or Latigo Trailhead, MRCA rangers, fire fighters and administrators would act quickly to remove visitors from harm's way by directing them to the parking areas and providing further direction, based on the proximity of the fire, weather conditions, and road conditions.

As mentioned, on declared Red Flag Warning days/periods, when wildfire potential is high and fire behavior is unpredictable, Escondido Canyon Park and Latigo Trailhead will be closed to visitors. On non-Red Flag Warning days, when wildfire potential is lower and wildfire behavior is more predictable and controllable, visitors will be allowed. On a non-Red Flag Warning day, should a wildfire occur that allowed time to relocate, visitors would be quickly relocated off-site with the assistance of MRCA's internal pre-plan which includes Ranger delivered warnings, visitor "round up" and accounting, and disbursement without the need for local law enforcement assistance, as described below.

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In the event of a notification of wildfire and the decision to relocate:

- Staff will conduct a sweep of the facility and of the trail system within the vicinity of the Escondido Canyon Park and Latigo Trailhead to notify hikers/pedestrians of the relocation decision. Hikers will be briefed at check in and by signage regarding wildfire danger and responses. MRCA Rangers will broadcast an alarm/siren (vehicle mounted or portable public address system) so hikers on trails beyond the immediate vicinity of the park and Trailhead are alerted and return to their vehicle. Communication with remote hikers (there are no campers at these facilities) will be via a vehicle mounted or portable siren/warning signal, e-alerts and/or when possible, trail sweeps by MRCA Rangers. In addition, another resource available for notification that has been used in the past, MRCA's Interagency Pre-Plan includes coordination with LA County Sheriff's Office for helicopter assistance with notification and/or rescue of remote trail users during emergency situations.
- Visitors will be directed to their vehicles. Visitors without vehicle transportation will carpool with other visitors or with MRCA staff. Visitors with special needs will be provided assistance by MRCA rangers, as necessary, so that relocation occurs in a safe and efficient manner.
- Vehicles will exit the site via the primary site access points and eventually onto PCH.
- The vehicles will drive either east or west on PCH, as directed by MRCA fire personnel and/or law enforcement, depending on location of fire front and direction of fire movement. Staff and visitors will be directed by law enforcement as to the designated safe areas.

7.0 CONCLUSION

This Focused FPP has been prepared as an evaluation of the adverse environmental effects that the proposed Malibu Parks Public Access Enhancement Plan - Public Works Plan improvement project, Modified Redesign Alternative at Escondido Canyon Park and Latigo Trailhead may have from wildland fire. It further evaluates methods for reducing those effects to ensure that the above referenced project does not unnecessarily expose people or structures to a significant risk of loss, injury, or death involving wildland fires. There would be no facility improvements at Escondido Canyon Park as part of the Modified Redesign Alternative with the exception of trail improvements.

This FPP utilizes a "systems approach" for specifying fire protection measures. The measures consist of the components of fuel modification, structural protection, water supply, fire protection systems, access (ingress/egress), well-planned emergency response, and early

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evacuation of staff and visitors. In addition, the plan memorializes the MRCA's existing pre-planning and fire action plans as well as the recommended and required actions that will be enforced on Escondido Canyon Park and Latigo Trailhead as part of the area-wide fire reduction efforts. This FPP provides details regarding the general fire protection features as well as the site specific, restrictive policies that will govern the parks with regards to fire protection.

The requirements and recommendations provided in this FPP have been designed specifically for the current uses at Escondido Canyon Park which will not be altered and the proposed improvements adjacent or within the wildland urban interface zone at Latigo Trailhead. Because this project proposes primarily recreation improvements with minimal structural additions, the requirements for fire safety are customized for these uses and, in most cases, are not specifically covered under existing Fire or Building codes. Where possible, the codes are applied or used as guidance. Where infeasible or not applicable, alternative measures are provided that will reduce the likelihood of ignitions, such as prohibitions on fires, and park closures on Red Flag Warning days/periods, , amongst others. An important additional consideration, fuel modification zones, will be diligently provided at Latigo Trailhead improvement areas and will be maintained on an on-going basis and inspected annually, maintaining the plants at very high levels of ignition resistance and removing all dead and dying materials and maintaining appropriate horizontal and vertical spacing within the zones. In addition, plants that establish or are introduced to the fuel modification zones that are not on the approved plant list will be removed.

Ultimately, it is the intent of this FPP to guide the fire protection efforts for Escondido Canyon Park and Latigo Trailhead in a comprehensive manner. Implementation of the measures detailed in this FPP will reduce the risk of wildfire, will improve the ability to safely relocate people from the area during wildfire events and will improve the ability to fight fires on the properties and protect park property and neighboring resources irrespective of the cause or location of ignition.

It must be noted that during extreme fire conditions, there are no guarantees that a given structure will not burn. Precautions and minimizing actions identified in this report are designed to reduce the likelihood that fire will impinge upon Escondido Canyon Park and Latigo Trailhead assets or threaten its staff or visitors or that vegetation ignition result from Park activities. There are no guarantees that fire will not occur in the area or that fire will not damage property or cause harm to persons or their property. Implementation of the required enhanced construction features provided by the applicable codes and the fuel modification requirements provided in this FPP will reduce the site's vulnerability to wildfire. It will also help accomplish the goal of this FPP to assist firefighters in their efforts to reduce the risk to park visitors.

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8.0 MAINTENANCE AND LIMITATIONS

In order to ensure that the proposed park improvements and uses minimize risks associated with wildfire, all components of the fire protection system must be maintained and in place. This FPP, when approved, provides the direction and nexus for that maintenance to occur. Specifically, the MRCA will conduct at least annual inspections of the fuel modification areas, fire protection systems, and infrastructure to ensure that they meet the requirements specified in this FPP.

ATTACHMENT 1
Select Project Area Photographs



Photograph 1. View of access road to Escondido Canyon Park. Improvements are planned for the area directly adjacent the roadway at this semi-disturbed location.



Photograph 2. View of area proposed for parking improvements and in the distance, a riparian corridor accessed from Escondido Park and the proposed campsites.



Photograph 3. View of trail and area proposed for campsites in Escondido Canyon Park.



Photograph 4. View of area near proposed campsites along existing trail.



Photograph 5. View of trail to the northeast toward Latigo Canyon road and trailhead.



Photograph 6. View of area proposed for campsite improvements at Latigo Canyon trailhead.



Photograph 7. View of to the south toward the Pacific Ocean from the upper parking /campsite improvement area.



Photograph 8. View of area proposed for parking improvements at Latigo Trailhead.



Photograph 9. View toward the east at access off of Latigo Canyon Road, east of the proposed campsites.

