Proposed Mitigated Negative Declaration

Pebble Beach CSD, Cypress FPD, and Carmel Highlands FPD Fire Defense Plans

June 4, 2018







NOTICE OF INTENT TO ADOPT AMITIGATED NEGATIVE DECLARATION

In compliance with the California Environmental Quality Act (CEQA), the Pebble Beach Community Services District (Pebble Beach CSD), Cypress Fire Protection District (Cypress FPD), and Carmel Highlands Fire Protection District (Carmel Highlands FPD) have undertaken environmental review for the Pebble Beach CSD updated Fire Defense Plan, and the Cypress FPD, and Carmel Highlands FPD Fire Defense Plans, and intend to adopt a Mitigated Negative Declaration. The Pebble Beach CSD, the Cypress FPD, and the Carmel Highlands FPD invite all interested persons and agencies to comment on the Pebble Beach CSD, Cypress FPD, and Carmel Highlands FPD Fire Defense Plans Mitigated Negative Declaration.

Lead Agencies: Pebble Beach Community Services District, Cypress Fire Protection District, and

Carmel Highlands Fire Protection District

Project Location: Unincorporated Monterey County: The Cypress FPD, the Carmel Highlands FPD,

and the Pebble Beach CSD are located in unincorporated Monterey County along the central coast between the cities of Pacific Grove, Monterey and Del Rey Oaks to the north, and Malpaso Creek to the south, approximately five miles south of the Carmel River. The district boundaries generally extend inland by about three

miles.

Project Description: The project is implementation of the Cypress FPD Fire Defense Plan and the

Carmel Highlands FPD Fire Defense Plan, and an update of the Pebble Beach CSD Fire Defense Plan. The three plans provide a system of consistent emergency access identification by designating existing roads and trails as fire roads and fire road / fuel breaks within each district and recommending standards for their maintenance through preventive fuel hazards reduction, vegetation management, and fire road / fuel break maintenance activities that would be routinely conducted

comprehensive policy standards for maintaining existing- and newly-designated fuel breaks and fire roads that would not otherwise be maintained pursuant to the

California Department of Forestry & Fire Protection - San Benito-Monterey Unit

defensible space requirements of Public Resources Code Section 4291.

in various locations within each of the districts. The three plans provide

Public Review Period: Begins – June 12, 2018

Ends – July 11, 2018

Proposed Mitigated Negative Declaration is Available for Public Review at these

se http://www.pbcsd.org/

Locations: http://cypressfire.org/

http://carmelhighlandsfire.org/

Address Where Written Comments May be Sent:

Cypress Fire Protection District, Carmel Highlands Fire Protection District, Pebble

Beach Community Services District

c/o California Department of Forestry & Fire Protection - San Benito-Monterey

Unit 2221 Garden Road, Monterey CA 93940

2221 Garden Road, Monterey CA 93940, and online at:

Public Hearing: Hearing dates to be determined for each District's Board of Directors

Proposed Mitigated Negative Declaration

In Compliance with the California Environmental Quality Act (CEQA)

Project Name Pebble Beach Community Services District, Cypress Fire

Protection District, and Carmel Highlands Fire Protection

District Fire Defense Plans

Lead Agencies Pebble Beach Community Services District (CSD)

Cypress Fire Protection District (FPD)

Carmel Highlands Fire Protection District (FPD)

Project Proponents Pebble Beach Community Services District

Mike Niccum, General Manager

831.647.5604

Cypress Fire Protection District

Carmel Highlands Fire Protection District

Kim Bernheisel, Fire Captain, Fuels Management

831.375.9644

Project Location Unincorporated Monterey County: The Cypress FPD, the

Carmel Highlands FPD, and the Pebble Beach CSD are located in unincorporated Monterey County along the central coast between the cities of Pacific Grove, Monterey and Del Rey Oaks to the north, and Malpaso Creek to the south, approximately five miles south of the Carmel River. The project area generally extends inland by about three

miles.

Project Description The project is implementation of the Cypress FPD Fire

Defense Plan and the Carmel Highlands FPD Fire Defense Plan, and an update of the Pebble Beach CSD Fire Defense

Plan. The three plans provide a system of consistent emergency access identification by designating existing roads and trails as fire roads and fire road / fuel breaks within each district and recommending standards for their maintenance through preventive fuel hazards reduction,

vegetation management, and fire road / fuel break

maintenance activities that would be routinely conducted in various locations within each of the districts. The three plans provide comprehensive policy standards for maintaining existing- and newly-designated fuel breaks and fire roads that would not otherwise be maintained pursuant to the defensible space requirements of Public Resources Code Section 4291.

Public Review Period

June 12, 2018 – July 11, 2018

Written Comments To

Kim Bernheisel, Fire Captain

California Department of Forestry & Fire Protection -

San Benito-Monterey Unit

2221 Garden Road Monterey CA 93940

Proposed Findings for the Pebble Beach Community Services District Fire Defense Plan

The Pebble Beach Community Services District is the custodian of the documents and other material that constitute the record of proceedings upon which this decision is based.

The initial study indicates that the project has the potential to result in significant adverse environmental impacts. However, the mitigation measures identified in the initial study would reduce the impacts to a less than significant level. There is no substantial evidence, in light of the whole record before the lead agency (Pebble Beach Community Services District) that the project, with mitigation measures incorporated, may have a significant effect on the environment. See the following project-specific mitigation measures:

Mitigation Measures for the Pebble Beach CSD Fire Defense Plan Biological Resources

BIO-1 Prior to implementation of the Pebble Beach CSD plan update the following new policy and standard best management practices and avoidance measures for the identification and protection of special-status plant resources shall be incorporated into the Pebble Beach CSD fire defense plan:

Policy II. C: Protection of Sensitive Plant and Wildlife Species

Standard #1. Special-Status Plant Surveys. Prior to the onset of project activity, the qualified biologist will conduct surveys to ensure that potential impacts to protected plant species are avoided. The project biologist is authorized to halt work, modify project activities, and identify additional buffer zones or other areas where no activities will occur for the purposes of avoiding impacts to protected species.

In areas identified as suitable habitat for special-status plant species, no work shall proceed without first implementing the following protective measures:

- a. Prior to the start of activities the qualified biologist will conduct surveys for special-status plant species in all areas where proposed mowing activity will occur. The surveys will target the special-status plant species with potential to occur on the project site, and the survey will be performed within 14 days prior to the start of project activities. If discovered, special-status plant species will be flagged and a 50-foot exclusion area surrounding the plants, within which no work shall occur, will be marked and observed. The qualified biologist will monitor the work occurring near the exclusion area to ensure work activities do not disturb special-status plant species;
- b. The qualified biologist will monitor all project activities that are undertaken within areas that are potentially occupied by special-status plant species.

- c. Hazardous fire fuels will not be removed using herbicides within 50 feet of areas that are potentially occupied by special-status plant species;
- d. Disturbances that have the potential to impact protected plant species will be avoided by implementing the following additional measure, subject to approval by the project biologist:

Mowing activities will maintain a minimum vegetation height of four (4) inches. Ladder fuel reduction in these areas will be conducted by hand. Understory trimming will maintain a minimum 18 inches from ground height unless a lower height is approved by the project biologist based on the results of the pre-activity surveys for protected plant species.

Standard #2. Environmental Awareness Training. The qualified biologist will conduct environmental awareness training for all treatment crews and contractors. The training will be conducted prior to implementation of the maintenance activities and on the arrival of any new worker. Training will include:

- a. A brief review of special-status species and other sensitive species/resources that may exist in the project area. The training will include the life history of each species, field identification, habitat requirements, locations of sensitive biological resources, limits of the project area, and legal status of each species.
- b. Materials concerning the following topics: sensitive resources, resource avoidance, possible consequences for violations of State or Federal environmental laws, and contact information for a qualified biologist if it is believed a special-status species has been encountered. These reference materials will be on hand at the site at all times.
- c. Additional training will be conducted as needed, including morning "tailgate" sessions, to update crews as they advance into sensitive areas. Persons completing training will sign a form stating that they attended and understand all the conservation and protection measures. A record of all personnel trained during maintenance activities will be maintained, and this record will be made available for compliance verification.

Standard #3 Invasive Species. The spread of invasive species will be avoided to the greatest extent possible by adhering to the following measures:

- a. All vehicles used for the maintenance activities will be cleaned and free of weeds when brought into the project area to prevent the spread and/or introduction of invasive plant species and pathogens.
- b. Vegetation contaminated with weed seeds will be segregated and disposed of or treated as appropriate.
- c. During work activities, all trash will be placed in secure containers with secure lids, removed from the work area, and disposed of properly.
- d. The biological monitor will verify that the spread of invasive exotic plant species is being avoided to the maximum extent possible. As part of the work plan, invasive plants in the project area will be removed when appropriate. Methods of removal may involve hand work or regulated use of herbicides.

Standard #4. Equipment and Site Maintenance.

- a. No petroleum product, chemical, silt, fine soil, or any substance or material deleterious to special-status species will be allowed to pass into or be placed where it could enter a stream channel. Any spills of hazardous materials in habitat suitable for special-status species will be cleaned up and/or removed immediately by CAL FIRE and/or District personnel. Any such spills that could adversely affect listed species will be reported to the CDFW and/or USFWS.
- b. All staging areas and fueling or maintenance of vehicles and equipment will occur at least 65 feet from any water body or riparian habitat.
- c. Emergency spill cleanup gear (spill containment and absorption materials) and fire-suppression equipment will be available on-site at all times.
- d. Any leaks, drips, and other spills will be cleaned up immediately to avoid soil or groundwater contamination. Cleanup of a spill on soil will include the removal of contaminated soil using the emergency spill cleanup gear. Any contaminated soil and disposable gear used to clean up a hazardous materials spill will be properly disposed of following State and Federal hazardous material disposal regulations.
- e. All vehicle maintenance and washing will be conducted offsite.

- f. All trash, debris, fencing, and flagging will be removed from the project area after completion of work activities.
- g. Spilled dry materials will be swept up immediately.
- h. Speed limit on unpaved roads in the project area will not exceed 10 miles per hour.
- i. All work activities will begin no sooner than 15 minutes after sunrise and will be completed no later than 15 minutes after sunset.

Standard #5. Compliance Reporting. At the conclusion of project activities, the qualified biologist will prepare a compliance report and submit it to the District and CAL FIRE within 60 calendar days of the date of the completion. This report will detail:

- a. Dates and results of surveys conducted, prior to project activity, including any recommendations for avoidance of special-status species or habitats.
- b. Documentation of employee environmental education.
- c. Dates and a brief description of maintenance activities that occurred.
- d. Dates and a brief description of biological monitoring conducted.
- e. A description of any special-status species observed and measures utilized to avoid impacts.
- f. A brief description of the success or failure of avoidance and/or monitoring measures in protecting sensitive biological resources.
- g. Any other pertinent information, including project maps, site photographs, etc.
- BIO-2 Prior to implementation of the Pebble Beach CSD plan update, the following new policy and standard best management practices and avoidance measures for the identification and protection of special-status plant resources will be incorporated into the Pebble Beach CSD fire defense plan:

Policy Section II. C Protection of Special-Status Plan and Wildlife Species

Standard #6. Special-Status Wildlife Surveys. Appropriately-timed premaintenance surveys will be conducted by a qualified biologist to determine the presence of special-status wildlife in the vicinity of the project area. These surveys can be conducted simultaneously with surveys for special-status plant species.

Standard #7. California Red-Legged Frog. This measure is divided into three potential impact scenarios: 1) the proposed maintenance activities are proposed at least two miles from a recorded observation of California red-legged frog, 2) the proposed maintenance activities are proposed within two miles of a recorded observation of California red-legged frog but a minimum of 300 feet from potential aquatic habitat (pond, wetland, or stream), or 3) the proposed maintenance activities are proposed within 300 feet of potential California red-legged frog aquatic habitat (pond, wetland, or stream). If the following measures cannot be met, take of California red-legged frog may be unavoidable and work will not occur in that area.

- 1. If proposed maintenance activities are proposed at least two miles from a recorded observation of California red-legged frog, impacts are not likely to occur and no additional measures are proposed.
- 2. If proposed maintenance activities are proposed within 2 miles of a recorded observation of California red-legged frog, but within 300 feet of potential aquatic habitat (pond, wetland, or stream) the following measures are proposed:
 - a. Immediately prior to initiation of project activities, a qualified biologist will conduct surveys for California red-legged frog within and adjacent to the project area.
 - b. An exclusion area a minimum of 300 feet from potential habitat will be delineated using a non-permanent method (e. g. flagging, chalk, tape). No work will occur within the exclusion area. If necessary, the qualified biologist may recommend an exclusion area greater or less than 300 feet, depending on the types of habitat present.
 - c. The qualified biologist will notify the project foreman regarding the exclusion area. If necessary, the project foreman will ensure that the exclusion area markings are replaced if damaged or lost.

- 3. If proposed maintenance activities are proposed within 300 feet of potential California red-legged frog aquatic habitat (pond, wetland, or stream), impacts may be avoided through implementation of the following measures:
 - a. Work may only take place during the dry season (between May 1 and October 15). Activities may not occur during rain events or within 24 hours following a rain event of more than 0. 5 inch in 24 hours.
 - b. Within 300 feet of suitable habitat for California red-legged frog, a qualified biologist will be present during all project activities and will monitor all work activities to ensure that no California red-legged frog are subject to take. The qualified biologist will have the authority to stop any aspect of the maintenance activities that could result in unauthorized take of listed species.
 - c. Within 300 feet of suitable habitat for California red-legged frog, a qualified biologist will conduct surveys immediately prior to initiation of project activities.
 - d. Workers who detect any suspected California red-legged frog onsite will immediately stop work that could result in take of the species and report their findings to the qualified biologist for positive identification. If the qualified biologist determines that the animal is a California red-legged frog, the USFWS will be contacted to discuss the appropriate action.
 - e. If an injured or dead California red-legged frog is found during project implementation, activities in the immediate vicinity of the animal will cease and a qualified biologist will inspect the area for additional animals prior to resuming work. The USFWS will be notified within 1 working day.

Standard #8. Monarch Butterfly. Maintenance activities proposed within 100 feet of known or potential monarch butterfly overwintering habitat will occur when monarch butterflies are not present, approximately between August and October.

Standard #9. Legless Lizard. In areas where coastal dune scrub plants such as bush lupine and mock heather are present, the following measures to avoid or minimize impacts to legless lizards will be implemented:

- 1. Not less than three months prior to the start of maintenance activities, a qualified biologist shall place cover boards in impact areas with suitable habitat (coastal dune scrub) for legless lizards. The cover boards shall be at least four feet by four feet and constructed of untreated plywood placed flat on the ground. The cover boards shall be checked by the biologist once per week for each week after placement up until the start of vegetation removal. All legless lizards and coast horned lizards found under the cover boards shall be captured and placed in five-gallon buckets for transportation to relocation sites. If areas are left undisturbed for a period of three months or longer, the cover boards will replaced and relocation efforts will be repeated prior to the re-initiation of ground disturbance activities.
- 2. All relocation sites proposed by the qualified biologist shall be approved by the implementing entity and shall consist of suitable habitat. Relocation sites shall be as close to the capture site as possible but far enough away to ensure the animal(s) is/are not harmed by construction of the project. Relocation shall occur on the same day as capture. CNDDB Native Species Field Survey Forms shall be submitted to the CDFW for all special-status species observed.
- 3. During all initial ground vegetation removal activities, a qualified biologist shall be on the site to recover any legless lizards that may be excavated/unearthed. If the animals are in good health, they shall be immediately moved to relocation sites. If they are injured, the animals shall be released to a wildlife recovery specialist until they are in a condition to be released into relocation sites.

Standard #10. Obscure and Western Bumble Bees. If the qualified biologist encounters obscure or western bumble bee during survey or monitoring activities, a CNDDB Native Species Field Survey Form shall be submitted to the CDFW for all observations.

Standard #11. Smith's Blue Butterfly. Any vegetation removal or disturbance within 50 feet of known Smith's blue butterfly habitat and/or potential habitat supporting the species' host plants [seacliff buckwheat (Erigonum parvifolium) or coast buckwheat (Eriogonum latifolium)] shall be avoided.

Standard #12. Steelhead. No construction activities will occur within streams known to support steelhead, including any aquatic feature found within the Carmel River Hydrologic Unit or Santa Lucia Hydrologic Unit (Critical Habitat).

Standard #13. Nesting Birds and Raptors. To avoid impacts to nesting birds on and adjacent to the maintenance area, if noise generation, ground disturbance, vegetation removal, or other activities begin during the nesting bird season (January 1 to September 15), or if maintenance activities are suspended for at least two weeks and recommence during the nesting bird season, then the qualified biologist will conduct a pre-construction survey for nesting birds. The survey will be performed within suitable nesting habitat areas on and adjacent to the maintenance area to ensure that no active nests would be disturbed during project implementation. This survey will be conducted no more than one week prior to the initiation of disturbance or construction activities.

If no active bird nests are detected during the survey, then maintenance activities can proceed as scheduled. However, if an active bird nest of a native species is detected during the survey, then a plan for bird nest avoidance will be prepared by the qualified biologist to determine and clearly delineate an appropriately sized, temporary protective buffer area around each active nest, dependent upon the type of nesting bird species, existing site conditions, and type of disturbance or construction activities. Typically, the protective buffer area around an active bird nest is 75-250 feet, determined at the discretion of the qualified biologist.

To ensure that no inadvertent impacts to an active bird nest will occur, no disturbance and/or construction activities will occur within the protective buffer area(s) until the juvenile birds have fledged (left the nest), and there is no evidence of a second attempt at nesting, as determined by the qualified biologist.

Standard #14. Roosting and Nesting Bats. Prior to maintenance activities, the qualified biologist will conduct a focused survey for bats and potential roosting sites, including structures, within 250 feet of the disturbance footprint. These surveys will be conducted no more than 15 days prior to the start of vegetation trimming or tree limbing activities. The surveys can be conducted by visual identification and assumptions can be made by the biologist on what species is present due to observed visual characteristics along with habitat use, or the bats can be identified to the species level with the use of a bat echolocation detector such as an "Anabat" unit.

If no roosting sites or bats are found, no further mitigation is required.

If bats or roosting sites are found, the following measures will be implemented:

1. If bats are found roosting outside of the nursery season (May 1 through October 1), they will be evicted as described in measure (b) below. If bats are found roosting during the nursery season, they will be monitored to

determine if the roost site is a maternal roost. This could occur by either visual inspection of the roost bat pups, if possible, or by monitoring the roost after the adults leave for the night to listen for bat pups. If the roost is determined to not be a maternal roost, then the bats will be evicted as described under (b) below. Because bat pups cannot leave the roost until they are mature enough, eviction of a maternal roost cannot occur during the nursery season. Therefore, if a maternal roost is present, a 250-foot buffer zone (or different size if determined in consultation with the CDFW) will be established around the roosting site within which no fire fuel reduction activities will occur until after the nursery season.

- 2. If a non-breeding bat hibernaculum is found in a dead tree or snag scheduled for removal, the individuals will be safely evicted, under the direction of a qualified bat biologist and in consultation with the CDFW. Methods could include: carefully opening the roosting area in a tree or snag by hand to expose the cavity, and opening doors/windows on structures or creating openings in walls to allow light into the structures. Removal of any trees or snags and demolition of any structures will be conducted no earlier than the following day (i. e. , at least one night will be provided between initial roost eviction disturbance and tree removal/structure demolition). This action will allow bats to leave during dark hours, which increases their chance of finding new roosts with a minimum of potential predation.
- BIO-3 Prior to implementation of the Pebble Beach CSD plan the following standard best management practices and avoidance measures for the identification and protection of sensitive natural communities will be incorporated into the Pebble Beach CSD fire defense plan with the new Policy II. C: Protection of Sensitive Plant and Wildlife Species.

Standard # 15. Sensitive Natural Communities. In areas where maintenance activities will occur along fire breaks, trails, and roads within sensitive natural communities, the limits of each fire break, trail, or road shall be delineated with clearly visible flagging or fencing, with areas beyond the fire break, trail, or road boundary marked for avoidance. The flagging and/or other marking shall be maintained in place for the duration of maintenance activities at each location until work is completed. Flagging and/or other markings shall be checked weekly by the qualified biologist or designated site representative and repaired or replaced as needed.

BIO-4 Prior to implementation of the Pebble Beach CSD plan the following standard best management practices and avoidance measures for the identification and protection of aquatic resources will be incorporated into the Pebble Beach CSD fire defense plan with the new Policy II. C: Protection of Sensitive Plant and Wildlife Species:

Standard #16. Aquatic Resources. Any work near a sensitive wetland or aquatic feature or on slopes greater than 30 percent will be modified to buffer the channel/feature and to avoid erosion and soil movement. Silt fencing will be installed where needed between the work area and any waterbodies, including ponds, wetlands, and riparian areas, to protect areas from erosion. As soon as work has been completed in that part of the site, the fencing will be removed.

Noise

N-1 Prior to implementation of the Pebble Beach CSD update, the following policy standard shall be incorporated into the plan:

Policy V Sensitive Receptors.

Standard #1 – Exposure to Unacceptable Noise. The following measures shall be incorporated into each plan:

- All internal combustion engine-driven equipment will be equipped with mufflers that are in good condition and appropriate for the equipment;
- Stationary noise-generating equipment (i.e. wood chippers) will be located as far as possible from sensitive receptors during their use.

Proposed Findings for the Cypress Fire Protection District Fire Defense Plan

The Cypress Fire Protection District is the custodian of the documents and other material that constitute the record of proceedings upon which this decision is based.

The initial study indicates that the project has the potential to result in significant adverse environmental impacts. . However, the mitigation measures identified in the initial study would reduce the impacts to a less than significant level. . There is no substantial evidence, in light of the whole record before the lead agency (Cypress Fire Protection District) that the project, with mitigation measures incorporated, may have a significant effect on the environment. See the following project-specific mitigation measures.

Mitigation Measures for the Cypress Fire Protection District Fire Defense Plan

Biological Resources

BIO-1 Prior to implementation of the Cypress FPD fire defense plans, the following new policy and standard best management practices and avoidance measures for the identification and protection of special-status plant resources shall be incorporated into the Cypress FPD fire defense plan:

Policy II. C: Protection of Sensitive Plant and Wildlife Species

Standard #1. Special-Status Plant Surveys. Prior to the onset of project activity, the qualified biologist will conduct surveys to ensure that potential impacts to protected plant species are avoided. The project biologist is authorized to halt work, modify project activities, and identify additional buffer zones or other areas where no activities will occur for the purposes of avoiding impacts to protected species.

In areas identified as suitable habitat for special-status plant species, no work shall proceed without first implementing the following protective measures:

a. Prior to the start of activities the qualified biologist will conduct surveys for special-status plant species in all areas where proposed mowing activity will occur. The surveys will target the special-status plant species with potential to occur on the project site, and the survey will be performed within 14 days prior to the start of project activities. If discovered, special-status plant species will be flagged and a 50-foot exclusion area surrounding the plants, within which no work shall occur, will be marked and observed. The qualified biologist will monitor the work occurring near the exclusion area to ensure work activities do not disturb special-status plant species;

- b. The qualified biologist will monitor all project activities that are undertaken within areas that are potentially occupied by special-status plant species.
- c. Hazardous fire fuels will not be removed using herbicides within 50 feet of areas that are potentially occupied by special-status plant species;
- d. Disturbances that have the potential to impact protected plant species will be avoided by implementing the following additional measure, subject to approval by the project biologist:

Mowing activities will maintain a minimum vegetation height of four (4) inches. Ladder fuel reduction in these areas will be conducted by hand. Understory trimming will maintain a minimum 18 inches from ground height unless a lower height is approved by the project biologist based on the results of the pre-activity surveys for protected plant species.

Standard #2. Environmental Awareness Training. The qualified biologist will conduct environmental awareness training for all treatment crews and contractors. The training will be conducted prior to implementation of the maintenance activities and on the arrival of any new worker. Training will include:

- a. A brief review of special-status species and other sensitive species/resources that may exist in the project area. The training will include the life history of each species, field identification, habitat requirements, locations of sensitive biological resources, limits of the project area, and legal status of each species.
- b. Materials concerning the following topics: sensitive resources, resource avoidance, possible consequences for violations of State or Federal environmental laws, and contact information for a qualified biologist if it is believed a special-status species has been encountered. These reference materials will be on hand at the site at all times.
- c. Additional training will be conducted as needed, including morning "tailgate" sessions, to update crews as they advance into sensitive areas. Persons completing training will sign a form stating that they attended and understand all the conservation and protection measures. A record of all personnel trained during maintenance activities will be maintained, and this record will be made available for compliance verification.

Standard #3 Invasive Species. The spread of invasive species will be avoided to the greatest extent possible by adhering to the following measures:

- a. All vehicles used for the maintenance activities will be cleaned and free of weeds when brought into the project area to prevent the spread and/or introduction of invasive plant species and pathogens.
- b. Vegetation contaminated with weed seeds will be segregated and disposed of or treated as appropriate.
- c. During work activities, all trash will be placed in secure containers with secure lids, removed from the work area, and disposed of properly.
- d. The biological monitor will verify that the spread of invasive exotic plant species is being avoided to the maximum extent possible. As part of the work plan, invasive plants in the project area will be removed when appropriate. Methods of removal may involve hand work or regulated use of herbicides.

Standard #4. Equipment and Site Maintenance.

- a. No petroleum product, chemical, silt, fine soil, or any substance or material deleterious to special-status species will be allowed to pass into or be placed where it could enter a stream channel. Any spills of hazardous materials in habitat suitable for special-status species will be cleaned up and/or removed immediately by CAL FIRE and/or District personnel. Any such spills that could adversely affect listed species will be reported to the CDFW and/or USFWS.
- b. All staging areas and fueling or maintenance of vehicles and equipment will occur at least 65 feet from any water body or riparian habitat.
- c. Emergency spill cleanup gear (spill containment and absorption materials) and fire-suppression equipment will be available on-site at all times.
- d. Any leaks, drips, and other spills will be cleaned up immediately to avoid soil or groundwater contamination. Cleanup of a spill on soil will include the removal of contaminated soil using the emergency spill cleanup gear. Any contaminated soil and disposable gear used to clean up a hazardous materials spill will be properly disposed of following State and Federal hazardous material disposal regulations.
- e. All vehicle maintenance and washing will be conducted offsite.

- f. All trash, debris, fencing, and flagging will be removed from the project area after completion of work activities.
- g. Spilled dry materials will be swept up immediately.
- h. Speed limit on unpaved roads in the project area will not exceed 10 miles per hour.
- i. All work activities will begin no sooner than 15 minutes after sunrise and will be completed no later than 15 minutes after sunset.

Standard #5. Compliance Reporting. At the conclusion of project activities, the qualified biologist will prepare a compliance report and submit it to the District and CAL FIRE within 60 calendar days of the date of the completion. This report will detail:

- a. Dates and results of surveys conducted, prior to project activity, including any recommendations for avoidance of special-status species or habitats.
- b. Documentation of employee environmental education.
- c. Dates and a brief description of maintenance activities that occurred.
- d. Dates and a brief description of biological monitoring conducted.
- e. A description of any special-status species observed and measures utilized to avoid impacts.
- f. A brief description of the success or failure of avoidance and/or monitoring measures in protecting sensitive biological resources.
- g. Any other pertinent information, including project maps, site photographs, etc.
- BIO-2 Prior to implementation of the Cypress FPD fire defense plan, the following new policy and standard best management practices and avoidance measures for the identification and protection of special-status plant resources will be incorporated into the Cypress FPD fire defense plan:

Policy Section II. C Protection of Special-Status Plan and Wildlife Species

Standard #6. Special-Status Wildlife Surveys. Appropriately-timed premaintenance surveys will be conducted by a qualified biologist to determine the presence of special-status wildlife in the vicinity of the project area. These surveys can be conducted simultaneously with surveys for special-status plant species.

Standard #7. California Red-Legged Frog. This measure is divided into three potential impact scenarios: 1) the proposed maintenance activities are proposed at least two miles from a recorded observation of California red-legged frog, 2) the proposed maintenance activities are proposed within two miles of a recorded observation of California red-legged frog but a minimum of 300 feet from potential aquatic habitat (pond, wetland, or stream), or 3) the proposed maintenance activities are proposed within 300 feet of potential California red-legged frog aquatic habitat (pond, wetland, or stream). If the following measures cannot be met, take of California red-legged frog may be unavoidable and work will not occur in that area.

- 1. If proposed maintenance activities are proposed at least two miles from a recorded observation of California red-legged frog, impacts are not likely to occur and no additional measures are proposed.
- 2. If proposed maintenance activities are proposed within 2 miles of a recorded observation of California red-legged frog, but within 300 feet of potential aquatic habitat (pond, wetland, or stream) the following measures are proposed:
 - a. Immediately prior to initiation of project activities, a qualified biologist will conduct surveys for California red-legged frog within and adjacent to the project area.
 - b. An exclusion area a minimum of 300 feet from potential habitat will be delineated using a non-permanent method (e. g. flagging, chalk, tape). No work will occur within the exclusion area. If necessary, the qualified biologist may recommend an exclusion area greater or less than 300 feet, depending on the types of habitat present.
 - c. The qualified biologist will notify the project foreman regarding the exclusion area. If necessary, the project foreman will ensure that the exclusion area markings are replaced if damaged or lost.

- 3. If proposed maintenance activities are proposed within 300 feet of potential California red-legged frog aquatic habitat (pond, wetland, or stream), impacts may be avoided through implementation of the following measures:
 - a. Work may only take place during the dry season (between May 1 and October 15). Activities may not occur during rain events or within 24 hours following a rain event of more than 0. 5 inch in 24 hours.
 - b. Within 300 feet of suitable habitat for California red-legged frog, a qualified biologist will be present during all project activities and will monitor all work activities to ensure that no California red-legged frog are subject to take. The qualified biologist will have the authority to stop any aspect of the maintenance activities that could result in unauthorized take of listed species.
 - c. Within 300 feet of suitable habitat for California red-legged frog, a qualified biologist will conduct surveys immediately prior to initiation of project activities.
 - d. Workers who detect any suspected California red-legged frog onsite will immediately stop work that could result in take of the species and report their findings to the qualified biologist for positive identification. If the qualified biologist determines that the animal is a California red-legged frog, the USFWS will be contacted to discuss the appropriate action.
 - e. If an injured or dead California red-legged frog is found during project implementation, activities in the immediate vicinity of the animal will cease and a qualified biologist will inspect the area for additional animals prior to resuming work. The USFWS will be notified within 1 working day.

Standard #8. Monarch Butterfly. Maintenance activities proposed within 100 feet of known or potential monarch butterfly overwintering habitat will occur when monarch butterflies are not present, approximately between August and October.

Standard #9. Legless Lizard. In areas where coastal dune scrub plants such as bush lupine and mock heather are present, the following measures to avoid or minimize impacts to legless lizards will be implemented:

- 1. Not less than three months prior to the start of maintenance activities, a qualified biologist shall place cover boards in impact areas with suitable habitat (coastal dune scrub) for legless lizards. The cover boards shall be at least four feet by four feet and constructed of untreated plywood placed flat on the ground. The cover boards shall be checked by the biologist once per week for each week after placement up until the start of vegetation removal. All legless lizards and coast horned lizards found under the cover boards shall be captured and placed in five-gallon buckets for transportation to relocation sites. If areas are left undisturbed for a period of three months or longer, the cover boards will replaced and relocation efforts will be repeated prior to the re-initiation of ground disturbance activities.
- 2. All relocation sites proposed by the qualified biologist shall be approved by the implementing entity and shall consist of suitable habitat. Relocation sites shall be as close to the capture site as possible but far enough away to ensure the animal(s) is/are not harmed by construction of the project. Relocation shall occur on the same day as capture. CNDDB Native Species Field Survey Forms shall be submitted to the CDFW for all special-status species observed.
- 3. During all initial ground vegetation removal activities, a qualified biologist shall be on the site to recover any legless lizards that may be excavated/unearthed. If the animals are in good health, they shall be immediately moved to relocation sites. If they are injured, the animals shall be released to a wildlife recovery specialist until they are in a condition to be released into relocation sites.

Standard #10. Obscure and Western Bumble Bees. If the qualified biologist encounters obscure or western bumble bee during survey or monitoring activities, a CNDDB Native Species Field Survey Form shall be submitted to the CDFW for all observations.

Standard #11. Smith's Blue Butterfly. Any vegetation removal or disturbance within 50 feet of known Smith's blue butterfly habitat and/or potential habitat supporting the species' host plants [seacliff buckwheat (Erigonum parvifolium) or coast buckwheat (Eriogonum latifolium)] shall be avoided.

Standard #12. Steelhead. No construction activities will occur within streams known to support steelhead, including any aquatic feature found within the Carmel River Hydrologic Unit or Santa Lucia Hydrologic Unit (Critical Habitat).

Standard #13. Nesting Birds and Raptors. To avoid impacts to nesting birds on and adjacent to the maintenance area, if noise generation, ground disturbance, vegetation removal, or other activities begin during the nesting bird season (January 1 to September 15), or if maintenance activities are suspended for at least two weeks and recommence during the nesting bird season, then the qualified biologist will conduct a pre-construction survey for nesting birds. The survey will be performed within suitable nesting habitat areas on and adjacent to the maintenance area to ensure that no active nests would be disturbed during project implementation. This survey will be conducted no more than one week prior to the initiation of disturbance or construction activities.

If no active bird nests are detected during the survey, then maintenance activities can proceed as scheduled. However, if an active bird nest of a native species is detected during the survey, then a plan for bird nest avoidance will be prepared by the qualified biologist to determine and clearly delineate an appropriately sized, temporary protective buffer area around each active nest, dependent upon the type of nesting bird species, existing site conditions, and type of disturbance or construction activities. Typically, the protective buffer area around an active bird nest is 75-250 feet, determined at the discretion of the qualified biologist.

To ensure that no inadvertent impacts to an active bird nest will occur, no disturbance and/or construction activities will occur within the protective buffer area(s) until the juvenile birds have fledged (left the nest), and there is no evidence of a second attempt at nesting, as determined by the qualified biologist.

Standard #14. Roosting and Nesting Bats. Prior to maintenance activities, the qualified biologist will conduct a focused survey for bats and potential roosting sites, including structures, within 250 feet of the disturbance footprint. These surveys will be conducted no more than 15 days prior to the start of vegetation trimming or tree limbing activities. The surveys can be conducted by visual identification and assumptions can be made by the biologist on what species is present due to observed visual characteristics along with habitat use, or the bats can be identified to the species level with the use of a bat echolocation detector such as an "Anabat" unit.

If no roosting sites or bats are found, no further mitigation is required.

If bats or roosting sites are found, the following measures will be implemented:

1. If bats are found roosting outside of the nursery season (May 1 through October 1), they will be evicted as described in measure (b) below. If bats are found roosting during the nursery season, they will be monitored to determine if the roost site is a maternal roost. This could occur by either

visual inspection of the roost bat pups, if possible, or by monitoring the roost after the adults leave for the night to listen for bat pups. If the roost is determined to not be a maternal roost, then the bats will be evicted as described under (b) below. Because bat pups cannot leave the roost until they are mature enough, eviction of a maternal roost cannot occur during the nursery season. Therefore, if a maternal roost is present, a 250-foot buffer zone (or different size if determined in consultation with the CDFW) will be established around the roosting site within which no fire fuel reduction activities will occur until after the nursery season.

- 2. If a non-breeding bat hibernaculum is found in a dead tree or snag scheduled for removal, the individuals will be safely evicted, under the direction of a qualified bat biologist and in consultation with the CDFW. Methods could include: carefully opening the roosting area in a tree or snag by hand to expose the cavity, and opening doors/windows on structures or creating openings in walls to allow light into the structures. Removal of any trees or snags and demolition of any structures will be conducted no earlier than the following day (i. e. , at least one night will be provided between initial roost eviction disturbance and tree removal/structure demolition). This action will allow bats to leave during dark hours, which increases their chance of finding new roosts with a minimum of potential predation.
- BIO-3 Prior to implementation of the Cypress FPD plan the following standard best management practices and avoidance measures for the identification and protection of sensitive natural communities will be incorporated into the Cypress FPD fire defense plan with the new Policy II. C: Protection of Sensitive Plant and Wildlife Species.

Standard # 15. Sensitive Natural Communities. In areas where maintenance activities will occur along fire breaks, trails, and roads within sensitive natural communities, the limits of each fire break, trail, or road shall be delineated with clearly visible flagging or fencing, with areas beyond the fire break, trail, or road boundary marked for avoidance. The flagging and/or other marking shall be maintained in place for the duration of maintenance activities at each location until work is completed. Flagging and/or other markings shall be checked weekly by the qualified biologist or designated site representative and repaired or replaced as needed.

BIO-4 Prior to implementation of the Cypress FPD plan the following standard best management practices and avoidance measures for the identification and protection of aquatic resources will be incorporated into the Cypress FPD fire defense plan with the new Policy II. C: Protection of Sensitive Plant and Wildlife Species:

Standard #16. Aquatic Resources. Any work near a sensitive wetland or aquatic feature or on slopes greater than 30 percent will be modified to buffer the channel/feature and to avoid erosion and soil movement. Silt fencing will be installed where needed between the work area and any waterbodies, including ponds, wetlands, and riparian areas, to protect areas from erosion. As soon as work has been completed in that part of the site, the fencing will be removed.

Cultural Resources

CULT-1 Prior to implementation of the Cypress FPD fire defense plan, the following policy standards shall be added to the plan:

Policy IV-E Protection of Cultural and Paleontological Resources.

Standard #1 – Prior to the onset of site-specific plan activities within treatment areas, a records search and archaeological field survey shall be conducted by an archaeologist meeting the Secretary of Interior's Professional Qualifications Standards in prehistoric or historical archaeology. The archival research and field surveys shall be conducted consistent with the performance criteria outlined in the CALFIRE Archaeological Program.

Standard #2 – If significant archaeological resources are identified within the work area of any site-specific fire maintenance, hazardous fuel reduction, or vegetation management activity within a target treatment area, the following action shall be taken:

- 1. Modify the treatment activity to avoid the identified resource, or
- 2. If the resource cannot be avoided, work shall not commence within 50 meters of the known resource boundary until it is evaluated by the qualified professional archaeologist and an appropriate mitigation plan is developed and implemented, consistent with the performance criteria outlined in the CALFIRE Archaeological Program. Such measures may include preservation in place, excavation, documentation, curation, data recovery or other appropriate measures.

Standard #3 - If any prehistoric or historic artifacts, or other indicators of archaeological resources are found once implementation of site-specific fire road maintenance, fuel hazard reduction, or vegetation management activities are underway, all ground-disturbing work in the immediate vicinity will stop. An archaeologist meeting the Secretary of Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, will be retained by the district to evaluate the finds and recommend appropriate mitigation measures for the inadvertently discovered cultural resources. The district will consider the mitigation recommendations of the qualified archaeologist and implement a measure or measures that the district deems feasible and appropriate, consistent with the CAL FIRE Archaeology Program. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery or other appropriate measures.

Standard #4 - If any paleontological resources (i.e., fossils) are found once ground-disturbing activities are underway, all work in the immediate vicinity will stop. A qualified paleontologist will be retained by the district to evaluate the finds and recommend appropriate mitigation measures to avoid or minimize impacts to the newly-discovered paleontological resources. The district will consider the mitigation recommendations of the qualified paleontologist and implement a measure or measures that the school district deems feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation or other appropriate measures.

Standard #5 - If human remains are discovered during implementation of fire road maintenance, fuel hazard reduction, and vegetation management activities, all work must stop in the immediate vicinity of the find, the County Coroner will be notified, according to Section 7050.5 of the California Health and Safety Code. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission, and the procedures outlined in CEQA Guidelines Section 15064.5(d) and (e) shall be followed.

Standard #6 - Best Management Practices for Prescribed Burning - Cultural Resources. Site-specific prescribed broadcast or pile burning activity will employ the following avoidance and minimization measures:

• The district or its contractors will ensure that recorded cultural resource sites are provided with appropriate protection during any prescribed burn. This may include conducting a pre-burn site assessment prior to any initial prescribed burn action on a site. The locations of any previously unrecorded cultural resources exposed by burning actions will be mapped and documented. All activities will be planned and executed in such a way as to cause the least amount of impact on cultural sites.

- The district or its contractors will exclude any cultural sites within
 prescribed burn areas by constructing hand lines within the burn area or
 clearly delineating the boundaries of the burn area such that all cultural
 resources are fully excluded. This exclusion will be prior to conducting the
 prescribed burn, and the hand lines removed immediately following to
 minimize potential risk of resource vandalism.
- Any digging, surface disturbance, or displacement of soil and vegetation
 within cultural sites must be avoided. Any mechanical equipment used
 prior to, during, or following the prescribed burn must be excluded from
 the cultural site. Foot traffic should be minimized on the cultural site such
 that the least amount of potential impact is caused.
- During prescribed burns, onsite personnel will closely monitor fire movement near cultural resources and ensure that fires do not cross into fire-sensitive cultural resource areas.
- All onsite personnel should be adequately informed and knowledgeable of the location of known cultural sites within and around the prescribed burn area. Personnel will also be sufficiently knowledgeable of proper treatment actions that can be applied at cultural sites.

Geology and Soils

GEO-1 Prior to implementation of the Cypress FPD fire defense plan, Section I-B., Road Grading Requirements, will be modified to include the following language:

Prior to the onset of site-specific plan activities within treatment areas all soil disturbing activities will employ adequate erosion/sediment control and water quality construction best management practices (BMPs) during grading activities. All such BMPs shall be in place prior to the commencement of fire road maintenance, fuel hazard reduction, and vegetation management activities and shall be maintained in good operating condition through the duration of the work. In addition to the BMPs identified in the discussion of storm water discharge, erosion and siltation (Section 9, Hydrology and Water Quality), the following avoidance and minimization measures shall be implemented:

Mechanical treatments will be utilized only on slopes of less than 30 percent to avoid soil disturbances from heavy equipment use.

Prior to implementation of any proposed vegetation removal activity, the recommended treatment area shall be screened for potential landslide activation risk using the following procedure:

- District staff shall refer to the most currently available landslide mapping from the California Geological Survey for the Study and/or Monterey County Geographic Information System slope steepness mapping for the Study Area.
- 2) If all of the following criteria are satisfied then no further action to address potential landslide activation would be required:
- The area to be treated within the recommended treatment area is located in an area listed as "stable", "few landslides", or equivalent;
- The average slope steepness of the recommended treatment area is less than 30 percent;
- There is no visible evidence of landslide activity (e.g., scarps, crooked trees, landslide-generated debris piles) within the recommended treatment area, as documented by a field reconnaissance; and
- There are no habitable structures within 100 feet of the toe of the slope downgradient of the recommended treatment area.
- 3) District staff will determine on a case-by-case basis whether to retain a qualified professional (e.g., engineering geologist or geotechnical engineer) to conduct a geotechnical reconnaissance to evaluate the potential impacts of fuel reduction activities or vegetation type conversion on future landslide potential if:
 - Habitable structure(s) are located within 100 feet of the toe of the slope downhill of the treatment area, and
 - The prescribed treatment would include the use of heavy equipment or machinery and significant ground disturbing activities (i.e., this requirement would not apply to methods such as hand treatment, weed-eating, or chemical treatment), and one or more of the following conditions is identified:
 - a. The treatment area is listed as "unstable", "many landslides" on applicable slope stability mapping, or
 - b. The average slope steepness of the treatment area is greater than 30 percent; or

c. There is visible evidence of landslide activity (e.g., scarps, crooked trees, and slide-generated debris piles) within the treatment area, as documented by a field reconnaissance,

All recommendations of the qualified professional (which may include avoidance of the proposed activity) shall be documented in writing, provided to the District, and implemented.

Hazards and Hazardous Materials

- HAZ-1 The following language will be incorporated into Cypress FPD Fire Defense Plan Policy IV-C, Standard #7 Application of herbicides:
 - Herbicides will be applied only by a licensed pesticide applicator.
 - Herbicide application will be avoided during windy conditions (sustained winds above 5-10 miles per hour).

Noise

N-1 Prior to implementation of the Cypress FPD plan, the following policy standard shall be incorporated into the fire defense plan:

Policy V Sensitive Receptors.

Standard #1 – Exposure to Unacceptable Noise. The following measures shall be incorporated into each plan:

- All internal combustion engine-driven equipment will be equipped with mufflers that are in good condition and appropriate for the equipment;
- Stationary noise-generating equipment (i.e. wood chippers) will be located as far as possible from sensitive receptors during their use.

Proposed Findings for the Carmel Highlands Fire Protection District Fire Defense Plan

The Carmel Highlands Fire Protection District is the custodian of the documents and other material that constitute the record of proceedings upon which this decision is based.

The initial study indicates that the project has the potential to result in significant adverse environmental impacts. . However, implementation of mitigation measures identified in the initial study would reduce the impacts to a less than significant level. . There is no substantial evidence, in light of the whole record before the lead agency (Carmel Highlands Fire Protection District) that the project, with mitigation measures incorporated, may have a significant effect on the environment. See the following project-specific mitigation measures.

Mitigation Measures for the Carmel Highlands Fire Protection District Fire Defense Plan

Biological Resources

BIO-1 Prior to implementation of the Carmel Highlands FPD fire defense plans, the following new policy and standard best management practices and avoidance measures for the identification and protection of special-status plant resources shall be incorporated into the Carmel Highlands FPD fire defense plan:

Policy II. C: Protection of Sensitive Plant and Wildlife Species

Standard #1. Special-Status Plant Surveys. Prior to the onset of project activity, the qualified biologist will conduct surveys to ensure that potential impacts to protected plant species are avoided. The project biologist is authorized to halt work, modify project activities, and identify additional buffer zones or other areas where no activities will occur for the purposes of avoiding impacts to protected species.

In areas identified as suitable habitat for special-status plant species, no work shall proceed without first implementing the following protective measures:

a. Prior to the start of activities the qualified biologist will conduct surveys for special-status plant species in all areas where proposed mowing activity will occur. The surveys will target the special-status plant species with potential to occur on the project site, and the survey will be performed within 14 days prior to the start of project activities. If discovered, special-status plant species will be flagged and a 50-foot exclusion area surrounding the plants, within which no work shall occur, will be marked and observed. The qualified biologist will monitor the work occurring near the exclusion area to ensure work activities do not disturb special-status plant species;

- b. The qualified biologist will monitor all project activities that are undertaken within areas that are potentially occupied by special-status plant species.
- c. Hazardous fire fuels will not be removed using herbicides within 50 feet of areas that are potentially occupied by special-status plant species;
- d. Disturbances that have the potential to impact protected plant species will be avoided by implementing the following additional measure, subject to approval by the project biologist:

Mowing activities will maintain a minimum vegetation height of four (4) inches. Ladder fuel reduction in these areas will be conducted by hand. Understory trimming will maintain a minimum 18 inches from ground height unless a lower height is approved by the project biologist based on the results of the pre-activity surveys for protected plant species.

Standard #2. Environmental Awareness Training. The qualified biologist will conduct environmental awareness training for all treatment crews and contractors. The training will be conducted prior to implementation of the maintenance activities and on the arrival of any new worker. Training will include:

- a. A brief review of special-status species and other sensitive species/resources that may exist in the project area. The training will include the life history of each species, field identification, habitat requirements, locations of sensitive biological resources, limits of the project area, and legal status of each species.
- b. Materials concerning the following topics: sensitive resources, resource avoidance, possible consequences for violations of State or Federal environmental laws, and contact information for a qualified biologist if it is believed a special-status species has been encountered. These reference materials will be on hand at the site at all times.
- c. Additional training will be conducted as needed, including morning "tailgate" sessions, to update crews as they advance into sensitive areas. Persons completing training will sign a form stating that they attended and understand all the conservation and protection measures. A record of all personnel trained during maintenance activities will be maintained, and this record will be made available for compliance verification.

Standard #3 Invasive Species. The spread of invasive species will be avoided to the greatest extent possible by adhering to the following measures:

- a. All vehicles used for the maintenance activities will be cleaned and free of weeds when brought into the project area to prevent the spread and/or introduction of invasive plant species and pathogens.
- b. Vegetation contaminated with weed seeds will be segregated and disposed of or treated as appropriate.
- c. During work activities, all trash will be placed in secure containers with secure lids, removed from the work area, and disposed of properly.
- d. The biological monitor will verify that the spread of invasive exotic plant species is being avoided to the maximum extent possible. As part of the work plan, invasive plants in the project area will be removed when appropriate. Methods of removal may involve hand work or regulated use of herbicides.

Standard #4. Equipment and Site Maintenance.

- a. No petroleum product, chemical, silt, fine soil, or any substance or material deleterious to special-status species will be allowed to pass into or be placed where it could enter a stream channel. Any spills of hazardous materials in habitat suitable for special-status species will be cleaned up and/or removed immediately by CAL FIRE and/or District personnel. Any such spills that could adversely affect listed species will be reported to the CDFW and/or USFWS.
- b. All staging areas and fueling or maintenance of vehicles and equipment will occur at least 65 feet from any water body or riparian habitat.
- c. Emergency spill cleanup gear (spill containment and absorption materials) and fire-suppression equipment will be available on-site at all times.
- d. Any leaks, drips, and other spills will be cleaned up immediately to avoid soil or groundwater contamination. Cleanup of a spill on soil will include the removal of contaminated soil using the emergency spill cleanup gear. Any contaminated soil and disposable gear used to clean up a hazardous materials spill will be properly disposed of following State and Federal hazardous material disposal regulations.
- e. All vehicle maintenance and washing will be conducted offsite.

- f. All trash, debris, fencing, and flagging will be removed from the project area after completion of work activities.
- g. Spilled dry materials will be swept up immediately.
- h. Speed limit on unpaved roads in the project area will not exceed 10 miles per hour.
- i. All work activities will begin no sooner than 15 minutes after sunrise and will be completed no later than 15 minutes after sunset.

Standard #5. Compliance Reporting. At the conclusion of project activities, the qualified biologist will prepare a compliance report and submit it to the District and CAL FIRE within 60 calendar days of the date of the completion. This report will detail:

- a. Dates and results of surveys conducted, prior to project activity, including any recommendations for avoidance of special-status species or habitats.
- b. Documentation of employee environmental education.
- c. Dates and a brief description of maintenance activities that occurred.
- d. Dates and a brief description of biological monitoring conducted.
- e. A description of any special-status species observed and measures utilized to avoid impacts.
- f. A brief description of the success or failure of avoidance and/or monitoring measures in protecting sensitive biological resources.
- g. Any other pertinent information, including project maps, site photographs, etc.
- BIO-2 Prior to implementation of the Carmel Highlands FPD fire defense plan, the following new policy and standard best management practices and avoidance measures for the identification and protection of special-status plant resources will be incorporated into the Carmel Highlands FPD fire defense plan:

Policy Section II. C Protection of Special-Status Plan and Wildlife Species

Standard #6. Special-Status Wildlife Surveys. Appropriately-timed premaintenance surveys will be conducted by a qualified biologist to determine the presence of special-status wildlife in the vicinity of the project area. These surveys can be conducted simultaneously with surveys for special-status plant species.

Standard #7. California Red-Legged Frog. This measure is divided into three potential impact scenarios: 1) the proposed maintenance activities are proposed at least two miles from a recorded observation of California red-legged frog, 2) the proposed maintenance activities are proposed within two miles of a recorded observation of California red-legged frog but a minimum of 300 feet from potential aquatic habitat (pond, wetland, or stream), or 3) the proposed maintenance activities are proposed within 300 feet of potential California red-legged frog aquatic habitat (pond, wetland, or stream). If the following measures cannot be met, take of California red-legged frog may be unavoidable and work will not occur in that area.

- 1. If proposed maintenance activities are proposed at least two miles from a recorded observation of California red-legged frog, impacts are not likely to occur and no additional measures are proposed.
- 2. If proposed maintenance activities are proposed within 2 miles of a recorded observation of California red-legged frog, but within 300 feet of potential aquatic habitat (pond, wetland, or stream) the following measures are proposed:
 - a. Immediately prior to initiation of project activities, a qualified biologist will conduct surveys for California red-legged frog within and adjacent to the project area.
 - b. An exclusion area a minimum of 300 feet from potential habitat will be delineated using a non-permanent method (e. g. flagging, chalk, tape). No work will occur within the exclusion area. If necessary, the qualified biologist may recommend an exclusion area greater or less than 300 feet, depending on the types of habitat present.
 - c. The qualified biologist will notify the project foreman regarding the exclusion area. If necessary, the project foreman will ensure that the exclusion area markings are replaced if damaged or lost.
- 3. If proposed maintenance activities are proposed within 300 feet of potential California red-legged frog aquatic habitat (pond, wetland, or stream), impacts may be avoided through implementation of the following measures:

- a. Work may only take place during the dry season (between May 1 and October 15). Activities may not occur during rain events or within 24 hours following a rain event of more than 0.5 inch in 24 hours.
- b. Within 300 feet of suitable habitat for California red-legged frog, a qualified biologist will be present during all project activities and will monitor all work activities to ensure that no California red-legged frog are subject to take. The qualified biologist will have the authority to stop any aspect of the maintenance activities that could result in unauthorized take of listed species.
- c. Within 300 feet of suitable habitat for California red-legged frog, a qualified biologist will conduct surveys immediately prior to initiation of project activities.
- d. Workers who detect any suspected California red-legged frog onsite will immediately stop work that could result in take of the species and report their findings to the qualified biologist for positive identification. If the qualified biologist determines that the animal is a California red-legged frog, the USFWS will be contacted to discuss the appropriate action.
- e. If an injured or dead California red-legged frog is found during project implementation, activities in the immediate vicinity of the animal will cease and a qualified biologist will inspect the area for additional animals prior to resuming work. The USFWS will be notified within 1 working day.

Standard #8. Monarch Butterfly. Maintenance activities proposed within 100 feet of known or potential monarch butterfly overwintering habitat will occur when monarch butterflies are not present, approximately between August and October.

Standard #9. Legless Lizard. In areas where coastal dune scrub plants such as bush lupine and mock heather are present, the following measures to avoid or minimize impacts to legless lizards will be implemented:

1. Not less than three months prior to the start of maintenance activities, a qualified biologist shall place cover boards in impact areas with suitable habitat (coastal dune scrub) for legless lizards. The cover boards shall be at least four feet by four feet and constructed of untreated plywood placed flat on the ground. The cover boards shall be checked by the biologist once per

week for each week after placement up until the start of vegetation removal. All legless lizards and coast horned lizards found under the cover boards shall be captured and placed in five-gallon buckets for transportation to relocation sites. If areas are left undisturbed for a period of three months or longer, the cover boards will replaced and relocation efforts will be repeated prior to the re-initiation of ground disturbance activities.

- 2. All relocation sites proposed by the qualified biologist shall be approved by the implementing entity and shall consist of suitable habitat. Relocation sites shall be as close to the capture site as possible but far enough away to ensure the animal(s) is/are not harmed by construction of the project. Relocation shall occur on the same day as capture. CNDDB Native Species Field Survey Forms shall be submitted to the CDFW for all special-status species observed.
- 3. During all initial ground vegetation removal activities, a qualified biologist shall be on the site to recover any legless lizards that may be excavated/unearthed. If the animals are in good health, they shall be immediately moved to relocation sites. If they are injured, the animals shall be released to a wildlife recovery specialist until they are in a condition to be released into relocation sites.

Standard #10. Obscure and Western Bumble Bees. If the qualified biologist encounters obscure or western bumble bee during survey or monitoring activities, a CNDDB Native Species Field Survey Form shall be submitted to the CDFW for all observations.

Standard #11. Smith's Blue Butterfly. Any vegetation removal or disturbance within 50 feet of known Smith's blue butterfly habitat and/or potential habitat supporting the species' host plants [seacliff buckwheat (Erigonum parvifolium) or coast buckwheat (Erigonum latifolium)] shall be avoided.

Standard #12. Steelhead. No construction activities will occur within streams known to support steelhead, including any aquatic feature found within the Carmel River Hydrologic Unit or Santa Lucia Hydrologic Unit (Critical Habitat).

Standard #13. Nesting Birds and Raptors. To avoid impacts to nesting birds on and adjacent to the maintenance area, if noise generation, ground disturbance, vegetation removal, or other activities begin during the nesting bird season (January 1 to September 15), or if maintenance activities are suspended for at least two weeks and recommence during the nesting bird season, then the qualified

biologist will conduct a pre-construction survey for nesting birds. The survey will be performed within suitable nesting habitat areas on and adjacent to the maintenance area to ensure that no active nests would be disturbed during project implementation. This survey will be conducted no more than one week prior to the initiation of disturbance or construction activities.

If no active bird nests are detected during the survey, then maintenance activities can proceed as scheduled. However, if an active bird nest of a native species is detected during the survey, then a plan for bird nest avoidance will be prepared by the qualified biologist to determine and clearly delineate an appropriately sized, temporary protective buffer area around each active nest, dependent upon the type of nesting bird species, existing site conditions, and type of disturbance or construction activities. Typically, the protective buffer area around an active bird nest is 75-250 feet, determined at the discretion of the qualified biologist.

To ensure that no inadvertent impacts to an active bird nest will occur, no disturbance and/or construction activities will occur within the protective buffer area(s) until the juvenile birds have fledged (left the nest), and there is no evidence of a second attempt at nesting, as determined by the qualified biologist.

Standard #14. Roosting and Nesting Bats. Prior to maintenance activities, the qualified biologist will conduct a focused survey for bats and potential roosting sites, including structures, within 250 feet of the disturbance footprint. These surveys will be conducted no more than 15 days prior to the start of vegetation trimming or tree limbing activities. The surveys can be conducted by visual identification and assumptions can be made by the biologist on what species is present due to observed visual characteristics along with habitat use, or the bats can be identified to the species level with the use of a bat echolocation detector such as an "Anabat" unit.

If no roosting sites or bats are found, no further mitigation is required.

If bats or roosting sites are found, the following measures will be implemented:

1. If bats are found roosting outside of the nursery season (May 1 through October 1), they will be evicted as described in measure (b) below. If bats are found roosting during the nursery season, they will be monitored to determine if the roost site is a maternal roost. This could occur by either visual inspection of the roost bat pups, if possible, or by monitoring the roost after the adults leave for the night to listen for bat pups. If the roost is determined to not be a maternal roost, then the bats will be evicted as described under (b) below. Because bat pups cannot leave the roost until they are mature enough, eviction of a maternal roost cannot occur during

- the nursery season. Therefore, if a maternal roost is present, a 250-foot buffer zone (or different size if determined in consultation with the CDFW) will be established around the roosting site within which no fire fuel reduction activities will occur until after the nursery season.
- 2. If a non-breeding bat hibernaculum is found in a dead tree or snag scheduled for removal, the individuals will be safely evicted, under the direction of a qualified bat biologist and in consultation with the CDFW. Methods could include: carefully opening the roosting area in a tree or snag by hand to expose the cavity, and opening doors/windows on structures or creating openings in walls to allow light into the structures. Removal of any trees or snags and demolition of any structures will be conducted no earlier than the following day (i. e. , at least one night will be provided between initial roost eviction disturbance and tree removal/structure demolition). This action will allow bats to leave during dark hours, which increases their chance of finding new roosts with a minimum of potential predation.
- BIO-3 Prior to implementation of the Carmel Highlands FPD plan the following standard best management practices and avoidance measures for the identification and protection of sensitive natural communities will be incorporated into the Carmel Highlands FPD fire defense plan with the new Policy II. C: Protection of Sensitive Plant and Wildlife Species.
 - Standard # 15. Sensitive Natural Communities. In areas where maintenance activities will occur along fire breaks, trails, and roads within sensitive natural communities, the limits of each fire break, trail, or road shall be delineated with clearly visible flagging or fencing, with areas beyond the fire break, trail, or road boundary marked for avoidance. The flagging and/or other marking shall be maintained in place for the duration of maintenance activities at each location until work is completed. Flagging and/or other markings shall be checked weekly by the qualified biologist or designated site representative and repaired or replaced as needed.
- BIO-4 Prior to implementation of the Carmel Highlands FPD plan the following standard best management practices and avoidance measures for the identification and protection of aquatic resources will be incorporated into the Carmel Highlands FPD fire defense plan with the new Policy II. C: Protection of Sensitive Plant and Wildlife Species:

Standard #16. Aquatic Resources. Any work near a sensitive wetland or aquatic feature or on slopes greater than 30 percent will be modified to buffer the channel/feature and to avoid erosion and soil movement. Silt fencing will be installed where needed between the work area and any waterbodies, including ponds, wetlands, and riparian areas, to protect areas from erosion. As soon as work has been completed in that part of the site, the fencing will be removed.

Cultural Resources

CULT-1 Prior to implementation of the Carmel Highlands FPD fire defense plan, the following policy standards shall be added to the plan:

Policy IV-E Protection of Cultural and Paleontological Resources.

Standard #1 – Prior to the onset of site-specific plan activities within treatment areas, a records search and archaeological field survey shall be conducted by an archaeologist meeting the Secretary of Interior's Professional Qualifications Standards in prehistoric or historical archaeology. The archival research and field surveys shall be conducted consistent with the performance criteria outlined in the CALFIRE Archaeological Program.

Standard #2 – If significant archaeological resources are identified within the work area of any site-specific fire maintenance, hazardous fuel reduction, or vegetation management activity within a target treatment area, the following action shall be taken:

- 1. Modify the treatment activity to avoid the identified resource, or
- 2. If the resource cannot be avoided, work shall not commence within 50 meters of the known resource boundary until it is evaluated by the qualified professional archaeologist and an appropriate mitigation plan is developed and implemented, consistent with the performance criteria outlined in the CALFIRE Archaeological Program. Such measures may include preservation in place, excavation, documentation, curation, data recovery or other appropriate measures.

Standard #3 - If any prehistoric or historic artifacts, or other indicators of archaeological resources are found once implementation of site-specific fire road maintenance, fuel hazard reduction, or vegetation management activities are underway, all ground-disturbing work in the immediate vicinity will stop. An archaeologist meeting the Secretary of Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, will be retained by the district to evaluate the finds and recommend appropriate mitigation measures for the inadvertently discovered cultural resources. The district will

consider the mitigation recommendations of the qualified archaeologist and implement a measure or measures that the district deems feasible and appropriate, consistent with the CAL FIRE Archaeology Program. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery or other appropriate measures.

Standard #4 - If any paleontological resources (i.e., fossils) are found once ground-disturbing activities are underway, all work in the immediate vicinity will stop. A qualified paleontologist will be retained by the district to evaluate the finds and recommend appropriate mitigation measures to avoid or minimize impacts to the newly-discovered paleontological resources. The district will consider the mitigation recommendations of the qualified paleontologist and implement a measure or measures that the school district deems feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation or other appropriate measures.

Standard #5 - If human remains are discovered during implementation of fire road maintenance, fuel hazard reduction, and vegetation management activities, all work must stop in the immediate vicinity of the find, the County Coroner will be notified, according to Section 7050.5 of the California Health and Safety Code. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission, and the procedures outlined in CEQA Guidelines Section 15064.5(d) and (e) shall be followed.

Standard #6 - Best Management Practices for Prescribed Burning - Cultural Resources. Site-specific prescribed broadcast or pile burning activity will employ the following avoidance and minimization measures:

- The district or its contractors will ensure that recorded cultural resource sites are provided with appropriate protection during any prescribed burn. This may include conducting a pre-burn site assessment prior to any initial prescribed burn action on a site. The locations of any previously unrecorded cultural resources exposed by burning actions will be mapped and documented. All activities will be planned and executed in such a way as to cause the least amount of impact on cultural sites.
- The district or its contractors will exclude any cultural sites within
 prescribed burn areas by constructing hand lines within the burn area or
 clearly delineating the boundaries of the burn area such that all cultural
 resources are fully excluded. This exclusion will be prior to conducting the
 prescribed burn, and the hand lines removed immediately following to
 minimize potential risk of resource vandalism.

- Any digging, surface disturbance, or displacement of soil and vegetation
 within cultural sites must be avoided. Any mechanical equipment used
 prior to, during, or following the prescribed burn must be excluded from
 the cultural site. Foot traffic should be minimized on the cultural site such
 that the least amount of potential impact is caused.
- During prescribed burns, onsite personnel will closely monitor fire movement near cultural resources and ensure that fires do not cross into fire-sensitive cultural resource areas.
- All onsite personnel should be adequately informed and knowledgeable of the location of known cultural sites within and around the prescribed burn area. Personnel will also be sufficiently knowledgeable of proper treatment actions that can be applied at cultural sites.

Geology and Soils

GEO-1 Prior to implementation of the Carmel Highlands FPD fire defense plan, Section I-B., Road Grading Requirements, will be modified to include the following language:

Prior to the onset of site-specific plan activities within treatment areas all soil disturbing activities will employ adequate erosion/sediment control and water quality construction best management practices (BMPs) during grading activities. All such BMPs shall be in place prior to the commencement of fire road maintenance, fuel hazard reduction, and vegetation management activities and shall be maintained in good operating condition through the duration of the work. In addition to the BMPs identified in the discussion of storm water discharge, erosion and siltation (Section 9, Hydrology and Water Quality), the following avoidance and minimization measures shall be implemented:

Mechanical treatments will be utilized only on slopes of less than 30 percent to avoid soil disturbances from heavy equipment use.

Prior to implementation of any proposed vegetation removal activity, the recommended treatment area shall be screened for potential landslide activation risk using the following procedure:

 District staff shall refer to the most currently available landslide mapping from the California Geological Survey for the Study and/or Monterey County Geographic Information System slope steepness mapping for the Study Area.

- 2) If all of the following criteria are satisfied then no further action to address potential landslide activation would be required:
- The area to be treated within the recommended treatment area is located in an area listed as "stable", "few landslides", or equivalent;
- The average slope steepness of the recommended treatment area is less than 30 percent;
- There is no visible evidence of landslide activity (e.g., scarps, crooked trees, landslide-generated debris piles) within the recommended treatment area, as documented by a field reconnaissance; and
- There are no habitable structures within 100 feet of the toe of the slope downgradient of the recommended treatment area.
- 3) District staff will determine on a case-by-case basis whether to retain a qualified professional (e.g., engineering geologist or geotechnical engineer) to conduct a geotechnical reconnaissance to evaluate the potential impacts of fuel reduction activities or vegetation type conversion on future landslide potential if:
 - Habitable structure(s) are located within 100 feet of the toe of the slope downhill of the treatment area, and
 - The prescribed treatment would include the use of heavy equipment or machinery and significant ground disturbing activities (i.e., this requirement would not apply to methods such as hand treatment, weed-eating, or chemical treatment), and one or more of the following conditions is identified:
 - a. The treatment area is listed as "unstable", "many landslides" on applicable slope stability mapping, or
 - b. The average slope steepness of the treatment area is greater than 30 percent; or
 - c. There is visible evidence of landslide activity (e.g., scarps, crooked trees, and slide-generated debris piles) within the treatment area, as documented by a field reconnaissance,

All recommendations of the qualified professional (which may include avoidance of the proposed activity) shall be documented in writing, provided to the District, and implemented.

Hazards and Hazardous Materials

- HAZ-1 The following language will be incorporated into Carmel Highlands FPD Fire Defense Plan Policy IV-C, Standard #7 Application of herbicides:
 - Herbicides will be applied only by a licensed pesticide applicator.
 - Herbicide application will be avoided during windy conditions (sustained winds above 5-10 miles per hour).

Noise

N-1 Prior to implementation of the Carmel Highlands FPD plan the following policy standard shall be incorporated into the fire defense plan:

Policy V Sensitive Receptors.

Standard #1 – Exposure to Unacceptable Noise. The following measures shall be incorporated into each plan:

- All internal combustion engine-driven equipment will be equipped with mufflers that are in good condition and appropriate for the equipment;
- Stationary noise-generating equipment (i.e. wood chippers) will be located as far as possible from sensitive receptors during their use.

INITIAL STUDY

PEBBLE BEACH CSD, CYPRESS FPD, AND CARMEL HIGHLANDS FPD FIRE DEFENSE PLANS

PREPARED FOR

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List of Acronyms

BMP Best Management Practices

Cal-EPA California Environmental Protection Agency

CAL FIRE California Department of Forestry and Fire Protection

CAL FIRE BEU San Benito – Monterey Unit of CAL FIRE

Cal/OSHA California Division of Occupational Safety and Health

CDFW California Department of Fish and Wildlife

CESA California Endangered Species Act

CEQA California Environmental Quality Act

CNDDB California Natural Diversity Database

CNPS California Native Plant Society

CSD Community Services District

EIR Environmental Impact Report

EPA Environmental Protection Agency

ESA Endangered Species Act

ESHA Environmentally Sensitive Habitat Areas

FPD Fire Protection District

GHG Greenhouse Gases

GIS Global Information System

LUP Land Use Plan

MBTA Migratory Bird Treaty Act

NOAA National Oceanic and Atmospheric Administration

NPDES National Pollutant Discharge Elimination System

PM Particulate Matter

PRC Public Resources Code

ROG Reactive Organic Gases

RWQCB Regional Water Quality Control Board

SWPPP Storm Water Pollution Prevention Plan

USACE United States Army Corps of Engineers

USFWS United States Fish and Wildlife Service

USGS United States Geological Survey

A. BACKGROUND

Project Title	Pebble Beach CSD, Cypress FPD, and
	Carmel Highlands FPD Fire Defense Plans
Co-Lead Agency Contacts	Mike Niccum, General Manager
and Phone Numbers	Pebble Beach Community Services District
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	Kim Bernheisel, Fire Captain, Fuels
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	831.375.9644
Date Prepared	June 4, 2018
Study Prepared by	EMC Planning Group Inc.
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	Sally Rideout, EMPA, Principal Planner
	Janet Walther, MS, Senior Biologist
	Shoshana Wangerin, Assistant Planner
Project Location	Pebble Beach and Carmel Area, Monterey
	County
Project Sponsor Name and Address	Mike Niccum, General Manager
	Pebble Beach Community Services District
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	Pebble Beach, CA 93953
	Kim Bernheisel Fire Captain, Fuels
	Management
	Cypress Fire Protection District;
	Carmel Highlands Fire Protection District,
	2221 Garden Road, Monterey CA 93940.
General Plan Designation	Monterey County General Plan, Del Monte
	Forest Area LUP, Carmel Area Land Use
	Plan, Greater Monterey Peninsula Area
	Plan, Carmel Valley Master Plan, Big Sur
	Coast Land Use Plan.
Zoning	Monterey County Code Title 20 and Title 21

INTRODUCTION

The project is the implementation of the Cypress Fire Protection District (Cypress FPD) Fire Defense Plan and the Carmel Highlands Fire Protection District (Carmel Highlands FPD) Fire Defense Plan, and an update of the Pebble Beach Community Services District (Pebble Beach CSD) Fire Defense Plan. The three fire defense plans are policy documents intended to provide a consistent policy approach and guidance. This overview provides a summary of the plans and approach to environmental analysis pursuant to the California Environmental Quality Act (CEQA).

BACKGROUND

Continued drought, punctuated by the 2008 Basin Fire and the 2016 Soberanes Fire, has highlighted the hazards associated with wildland fire and the importance of preventive measures within the wildland-urban interfaces within the districts, and other areas of Monterey County. The Pebble Beach CSD plan has been in effect since 1988, and has been updated several times over the years, most recently in 2017. The Cypress FPD and Carmel Highlands FPD plans were adopted in 2018, and will be updated pending the results of this analysis.

PURPOSE

Systematic fuel reduction programs have been undertaken over the years by CAL FIRE through implementation of the Strategic Fire Plan for California (2010), which was recently amended in 2016 (California Fire Plan). The San Benito – Monterey Unit of CAL FIRE (CAL FIRE BEU), with the cooperation of key stakeholders, updated its unit strategic fire plan in 2015, with the intention of meeting the goals set by both the stakeholders and the California Fire Plan. The CAL FIRE BEU plan includes pre-fire management strategies intended to reduce fire suppression losses and costs, especially during periods of severe fire weather.

The purpose of the updated and new and updated district fire defense plans ("plans" or "fire defense plans") is to address the threat of wildland fire within the three districts by systematically identifying and prioritizing actions determined by CAL FIRE to provide the greatest fire protection along the wildland-urban interface within each of the three districts. The goal of each plan is to reduce the threat to life, property and resources resulting from wildland fire within each district consistent with the California Fire Plan and with the CAL FIRE BEU Strategic Fire Plan. The three district plans are a subset of the CAL FIRE BEU Strategic Fire Plan.

All three fire district plans seek to provide the highest measure of fire prevention by maintaining existing roads, trails and fuel breaks as part of a consistently identified network of established emergency access routes. With improved fuel conditions, fire suppression actions will require fewer resources. Reduced fire intensity results in less fire 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, increases firefighter safety, and improves the ability of firefighters to protect communities and resources.

PROJECT APPROACH

In light of the recent losses and exposure to threats experienced by the community during the Basin and Soberanes fires, the respective Boards of Directors for each of the three districts have found that consistent fire defense strategies are warranted to minimize threats in the future while limiting related adverse impacts to the environment, endangered species, and other natural resources. The approach to environmental review of the proposed Pebble Beach CSD plan update and new Cypress FPD and Carmel Highlands FPD plans is being coordinated to provide a cost-effective and timely review of the areas that would be covered by the plan policies. The fire district plans are policy documents that set forth standards for fire road maintenance and fuel management activities, and the actions that are necessary to implement them. This initial study is being prepared to analyze the three plans and support the appropriate CEQA document required for plan implementation. Each district would act as Lead Agency for CEQA purposes for in adopting and implementing their respective plan. This initial study analyzes the impacts to the environment that would result from implementation of the policies within each district's plan and to develop appropriate policy mitigation measures as needed to provide procedures that will avoid or minimize identified significant, or potentially significant, impacts to a less-than-significant level. The mitigation measures would then be incorporated into the final policy documents prior to the respective district's implementation of its plan.

ENVIRONMENTAL SETTING

The three districts are located along the central coast between San Luis Obispo County to the south and Santa Cruz and Santa Clara counties to the north. The Pacific Ocean abuts the western side of the unit and the Diablo Mountains and the San Joaquin Valley lie to the east. The Los Padres National Forest lies along the coast south of the Carmel Highlands encompassing the Ventana Wilderness and the Silver Peak Wilderness. The three districts that are the subject of this analysis are located in the CAL FIRE BEU Battalion 2 service area, and cover a majority of the developed coastal area from the cities of Pacific Grove and Monterey south to Mal Paso Creek and the Victorine Ranch in unincorporated Monterey County, approximately five miles south of the Carmel River. All three districts contain high fire hazard areas and span several Monterey County planning areas, for which area and land use plans provide policy guidance for activities within their boundaries. Figure 1, Location Map, presents the regional location of the three districts. Figure 2, District Boundaries, shows the boundaries of each of the three districts and the coastal zone. Figure 3, Area Land Use Plans, shows the boundaries of Monterey County area plans that overlap with the Pebble Beach CSD, Cypress FPD, and Carmel Highlands FPD service area boundaries.

Several public parkland areas are located within the Cypress FPD and Carmel Highlands FPD boundaries that are under the control and jurisdiction of other agencies. The following public parklands are found within the Cypress FPD boundary:

- Jack's Peak (Monterey County Parks);
- A portion of Palo Corona Regional Park (Monterey Peninsula Regional Park District);
- Frog Pond Wetland Preserve (Monterey Peninsula Regional Park District);
- Hatton Canyon (California Department of Parks and Recreation); and
- Carmel River State Beach (California Department of Parks and Recreation).

The following public parklands are found within the Carmel Highlands FPD boundary:

- A portion of Palo Corona Regional Park (Monterey Peninsula Regional Park District);
- Point Lobos State Natural Reserve (California Department of Parks and Recreation);
- Point Lobos Ranch Park Property (California Department of Parks and Recreation);
 and
- Garrapata State Park (California Department of Parks and Recreation).

The locations of regional- and state--controlled parklands are shown on Figure 4, Public Parklands.

Figure 5, Fire Hazards Severity Zones, presents an overlay of district boundaries with state-designated areas of High Fire Severity. In general, the cultivated valley floors along the Carmel River would have the lowest fire hazard risks (urban/agricultural), lower grassland slopes would contain moderate fire hazards, and the steeper brush land and wooded slopes within each district will have a high and extreme fire hazard risk.

Pebble Beach CSD

The Pebble Beach CSD is the northern of the three districts encompassing Pebble Beach (Del Monte Forest) and is bounded on the north by the City of Pacific Grove and on the south by the City of Carmel-by-the-Sea, and on the east by the City of Monterey and the Cypress FPD boundaries. Pebble Beach CSD is identified as a "Priority Community" by the state's Fire and Resource Assessment Program (California Department of Forestry and Fire Protection 2010). The district encompasses about 5,300 acres) of coastal parcels including residential, recreational, and open space lands. The Pebble Beach community is largely built out, with approximately 150 vacant legal lots of record.

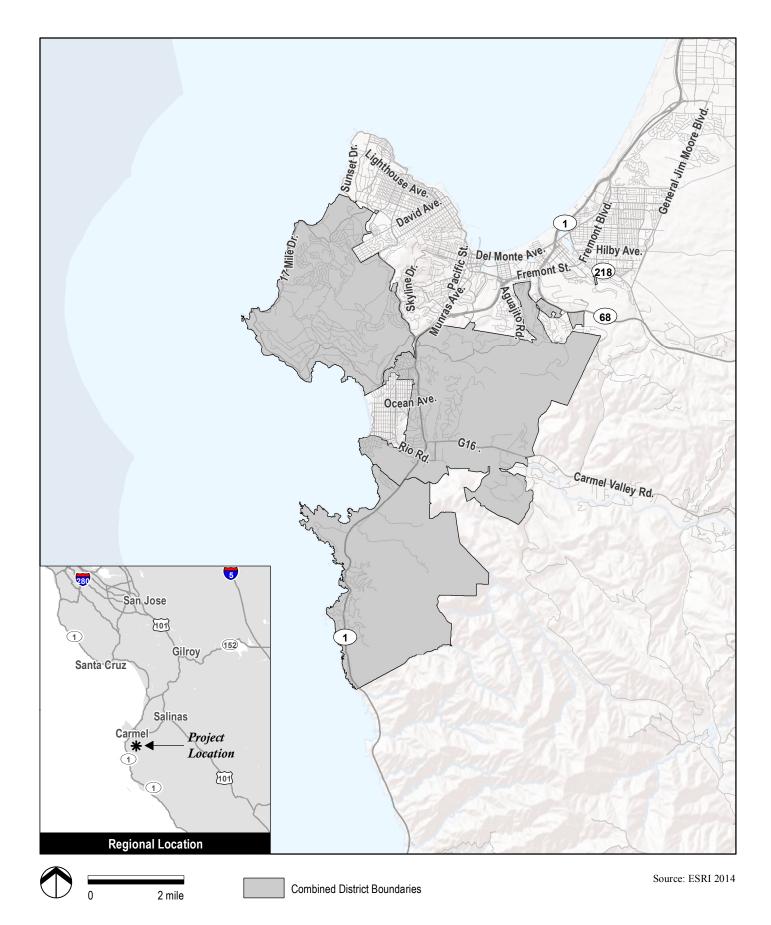


Figure 1 Location Map









Pebble Beach CSD, Cypress FPD, and Carmel Highlands FPD Fire Defense Plans Initial Study
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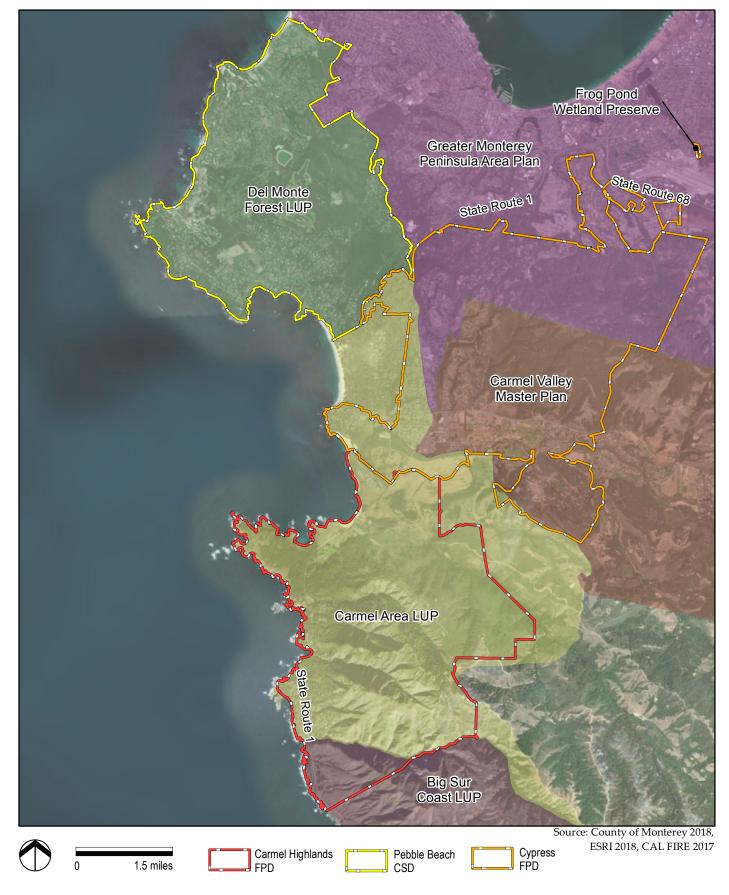


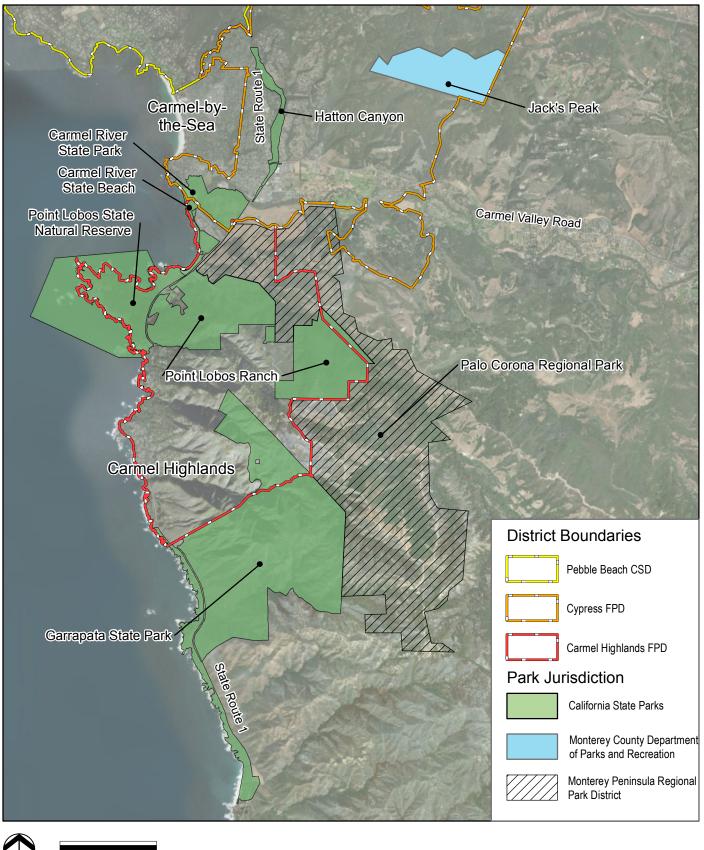
Figure 3

Area Land Use Plans











Source: County of Monterey 2018, ESRI 2018, CAL FIRE 2017

Public Parklands









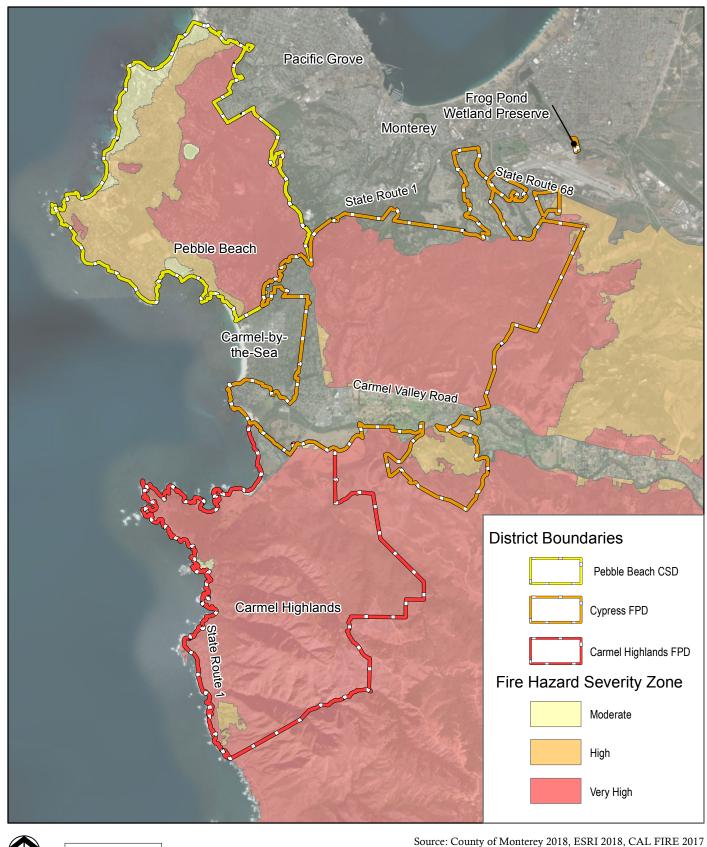
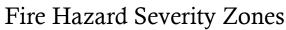




Figure 5











The Pebble Beach CSD Fire Department enforces a defensible space program pursuant to the California Public Resources Code, Section 4291 et seq., which mandates 100 feet of vegetation reduction/treatment around all buildings in a hazardous fuel area. As part of its defensible space program, the Pebble Beach CSD Fire Department inspects an average of about 85 percent of all residences in Pebble Beach each year and all vacant lots (Mike Niccum, personal communication with consultant, August 8, 2017). In addition, the existing Pebble Beach CSD Fire Defense Plan (2012) provides maps of open space fire defense areas, and contains policies and guidelines for fire protection services staff. The existing plan addresses the use, maintenance, and designation of emergency access routes, protection of environmentally sensitive plant species, standards for maintenance of fire and fuel breaks, and guidelines for wildland area fire defense. The Pebble Beach CSD is in the process of executing sensitive resource management area easements on parcels that are not currently included in its existing fire defense plan. The locations of pending easements to be added into the Pebble Beach CSD plan are identified in Figure 6, Pebble Beach CSD Boundary.

Cypress FPD

The Cypress FPD is centrally-located within the CAL FIRE BEU Battalion 2 service boundary, and is identified by the CAL FIRE Fire and Resource Assessment Program as a Priority Community on the Map of Communities at Risk From Wildfire (California Department of Forestry and Fire Protection 2010). This district is the largest of the three, and is bordered on the west by the Pacific Ocean, the City of Carmel-by-the-Sea, and Pescadero Canyon; on the north by the City of Monterey, State Route 1 and State Route 68; on the east by unincorporated Monterey County east of Jacks Peak and three miles into Carmel Valley; and on the south by Ribera Road, a portion of the former Odello artichoke fields just south of Carmel River, and the southern boundary of the Quail Meadows subdivision. The district encompasses 7,320 acres in the wildland-urban interface including neighborhoods in and adjacent to Carmel Woods, High Meadows, Hatton Canyon, Aguajito, Josselyn Canyon, Jacks Peak, Carmel Hills, Mission Fields, Carmel Views, the Pacific Meadows and Del Mesa senior communities north of Carmel Valley Road, and the Quail Meadows Subdivision south of Carmel Valley Road. The plan identifies eleven target treatment areas within these neighborhoods based on sensitive populations, fuel load and accessibility. Figure 7, Cypress FPD Boundary, presents the district boundary and target treatment areas. The Cypress FPD enforces the defensible space requirements of California Public Resources Code, Section 4291 et seq.

Carmel Highlands FPD

The Carmel Highlands FPD is the southern-most district in the CAL FIRE BEU Battalion 2 service area and encompasses 6,000 acres of the wildland-urban interface including lands in and adjacent to Point Lobos State Preserve, Monastery Beach, and the Carmel Highlands

area neighborhoods of Ribera Road (Carmel Riviera), Red Wolf Road, Corona, Mount Devon, Spindrift, Walden, Yankee Point, Mal Paso, Upper Ridges, Aurora Del Mar, and the Victorine Ranch. The northern border is located just south of the Carmel River stretching southerly along State Route 1 to south of the Aurora Del Mar subdivision and the Victorine Ranch and inland by about three miles. The Carmel Highlands FPD plan identifies six target treatment areas based on accessibility and fuel load conditions. Figure 8, Carmel Highlands FPD Boundary, presents the boundary of the district and six target treatment areas.

The Carmel Highlands FPD is characterized by many 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. Developed areas within the Carmel Highlands community are identified by the CAL FIRE Fire and Resource Assessment Program as a Priority Community and as a Community at Risk From Wildfire (California Department of Forestry and Fire Protection 2010). Much of the district is further identified by Monterey County's Community Wildfire Plan (2010) as a "Very High" Fire Hazard Severity Zone.

The Cypress FPD enforces the defensible space requirements of California Public Resources Code, Section 4291 et seq.

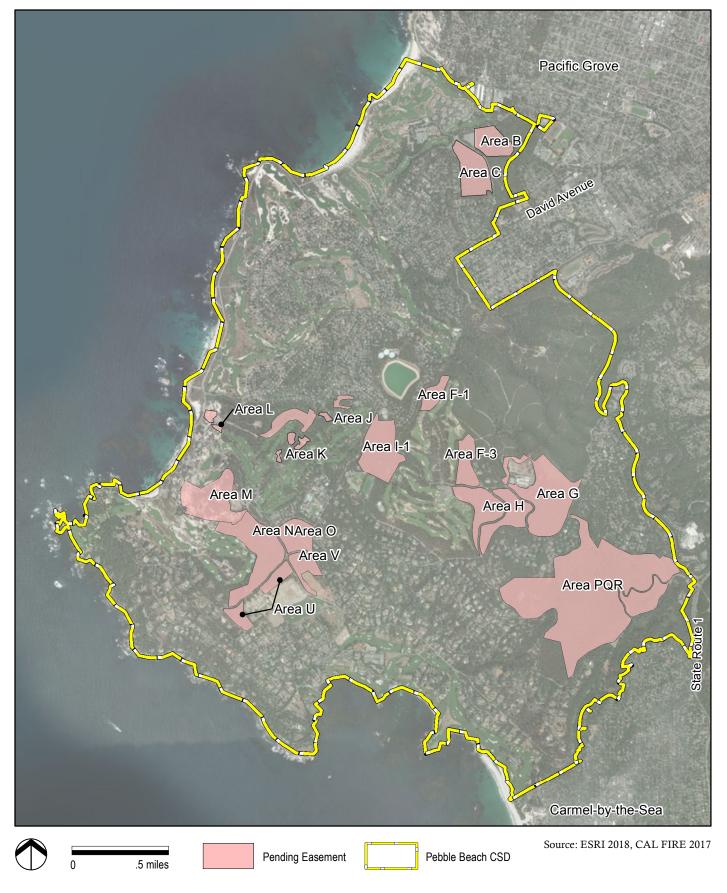


Figure 6

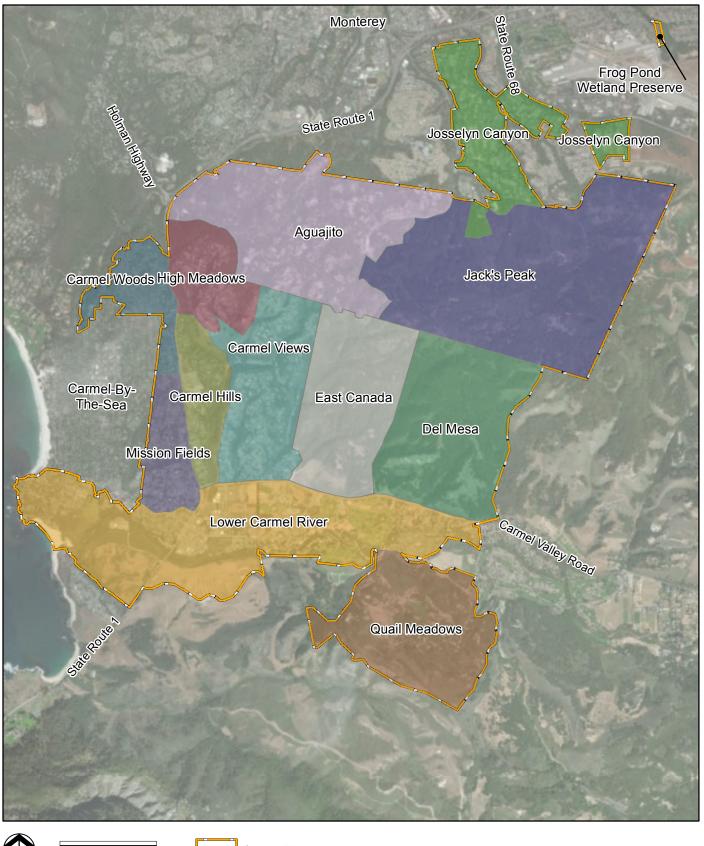














Cypress FPD

Source: ESRI 2018, CAL FIRE 2017

Figure 7









.9 miles





Figure 8











DESCRIPTION OF PROJECT

The three plans focus on setting standards for preventive fuel hazards reduction, vegetation management, and maintenance of fire road access activities that would be routinely conducted within each of the Cypress FPD and Carmel Highlands FPD boundaries, including identified target treatment areas, and on or adjacent to the sensitive resource management area easements (easements) within the Pebble Beach CSD boundary that are not already covered under the existing Pebble Beach CSD plan.

Within the Cypress FPD and Carmel Highlands FPD, site-specific best management practices that would be undertaken consistent with the goals and policies of the fire defense plans are being developed in cooperation and consultation with several adjacent agencies and stakeholders; Monterey Peninsula Regional Parks District, CAL FIRE, California American Water Company, Caltrans, Monterey County, Pacific Gas and Electric Company, California State Parks, California Highway Patrol, Monterey County Sheriff's office, Monterey City Fire, Homeowner associations and the residents of the two districts.

Site-specific fuel treatment prescriptions on and adjacent to public lands will be developed and implemented through coordination with Monterey Peninsula Regional Parks District, CAL FIRE, Caltrans, Monterey County Parks Department, and California State Parks. Fuel reduction prescriptions will ultimately be modified to include agreed upon Best Management Practices (BMP) for the many complex plant and animal communities throughout these areas. Adjacent agencies and stakeholders for identified target treatment areas within the two districts are identified in Section III of the respective Cypress FPD and Carmel Highlands FPD plans. The Pebble Beach CSD plan update is included as Appendix A, the Cypress FPD plan is included as Appendix B, and the Carmel Highlands FPD plan is included as Appendix C.

Policies and Standards

The Cypress FPD and Carmel Highlands FPD fire defense plans designate existing public and private roads as fire roads or fire roads/fuel breaks and provide policy guidance and standards for their maintenance. Maintenance activities include vegetation management to reduce surface fuels, ladder fuels, and tree canopy density adjacent to developed areas, to create conditions that improve the effectiveness of fire suppression activities. The proposed Cypress FPD and Carmel Highlands FPD fire defense plans and Pebble Beach CSD defense plan update provide comprehensive policy standards for maintaining existing- and newly-designated fuel breaks and fire roads that would not otherwise be maintained pursuant to the defensible space requirements of Public Resources Code Section 4291. The Pebble Beach CSD plan includes broad policy language addressing the protection of sensitive environmental resources such as biological, cultural, and aesthetic resources during implementation of these maintenance activities.

The plans also provide a method of consistently identified and maintained fire roads/fuel breaks to facilitate access during a wildfire incident for "out-of-district" firefighters called in to protect unfamiliar neighborhoods within the incident area. The Cypress FPD and Carmel Highlands FPD plans establish an emergency access road system that includes fire roads, fuel breaks, and combinations of the two, which are systematically identified using the signage and numeric methods originated by the Pebble Beach CSD plan (refer to Policy I.D. Road Identification Markings in the Pebble Beach CSD plan, and related Policy I.C in the Cypress FPD and Carmel Highlands FPD plans). Existing fire roads within the Cypress FPD and Carmel Highlands FPD include established neighborhood streets, public and private paved roadways, and unpaved public and private access roads within the respective boundaries of Cypress FPD and Carmel Highlands FPD. A number of unimproved (unpaved) access roads and fuel breaks created during the Soberanes Fire would be utilized and maintained by the Carmel Highlands FPD. The locations of fire road / fuel break created during the Sobranes Fire are shown on Figure 8.

The Pebble Beach CSD plan update utilizes existing emergency fire roads and fuel break systems established by the existing plan. Specific activities in or adjacent to the Pebble Beach CSD open space easements consist primarily of annual perimeter mowing and maintenance of existing fire roads and fuel breaks. Implementation of fuel hazard reduction, road maintenance, and vegetation management activities will be undertaken consistent with the existing policy requirements of the Pebble Beach CSD fire defense plan for open space, vacant or undeveloped parcels and with the plan policies that protect environmentally sensitive resources.

A summary of policies and standards for each plan are presented in Table 1, Summary of Proposed Fire Defense Plan Policies and Standards by District. Area-specific policies and standards to guide activity and address fuel loads within the easement areas within the Pebble Beach CSD and within "target treatment areas" identified in the Cypress FPD and Carmel Highlands FPD plans are summarized in Table 2, Summary of Target Area-specific Policy Standards Cypress FPD and Carmel Highlands FPD.

In all three districts, maintenance activities are prioritized by areas with sensitive populations and/or high fuel loads. Figure 9, Examples of Maintained Fire Roads and Fuel Breaks, presents photographic examples of existing fire roads and fuel breaks that are currently identified and maintained consistent with the Pebble Beach CSD plan policies. Plan activities for each of the three plans, vegetation management/fuel hazard reduction and grading associated with fire road maintenance, are summarized in the following paragraphs.

Table 1 Summary of Fire Defense Plan Policies and Standards by District

Policy/Standard	Pebble Beach CSD	Cypress FPD	Carmel Highlands FPD		
FIRE ROADS ¹	Fire Roads are identified in BLUE¹. Fire Roads are intended as access routes for fire equipment and personnel to the interior of the forested areas for early fire suppression, as well as egress routes if the early suppression efforts are unsuccessful.	All Fire Roads are identified in Blue ¹ . Fire Roads are intended as access routes for fire equipment and personnel to the interior of the forested areas for early fire suppression, as well as egress routes if the early suppression efforts are unsuccessful.			
I-A Fire Road Standards	Minimum 30 foot turn radius. No "islands" at intersections Drainage and erosion measures conforming to current enominates and erosion measures.	num 13 ½ foot vertical clearance over entire width and length, including any turnouts or turnarounds num 30 foot turn radius. slands" at intersections age and erosion measures conforming to current engineering practices			
FIRE ROADS/FUEL BREAKS	Fire Road/Fuel Breaks are identified in RED. In addition to the purpose of Fire Roads described above, 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 fire crews may successfully suppress a wildland fire. Fire Road/Fuel Breaks are identified in RED, unless otherwise noted¹. In addition purpose of Fire Roads described above, Fire Road/Fuel Breaks are intended to break in the canopy and ladder fuels of the Forest so that a crown fire may drop forest floor where fire crews may successfully suppress a wildland fire.				
I-B Fire Road / Fuel Break Standards	In addition to the requirements in I A, above, for Fire Roads, all fuels within 20 feet of both road edges on roads which have been identified as Fire Road/Fuel Breaks shall be modified or removed as follows: Cut and remove all brush. (Chip to within 4" of the ground) 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 reduction treatments may be accomplish. Herbicide application. Fuel reduction prescriptions will be modified a overall stand health and longevity. Any work near a stream channel or on slopes the channel and to minimize erosion and soil r. In addition to the requirements in I-A Fire Roa road/ trail edges on roads which have been id modified or removed as follows: Cut and remove all brush. Remove all dead standing trees. Remove all dead fallen material.	s needed to minimize erosion and promote greater than 30% will be modified to buffer movement. d Standards, all fuels within 30 feet of both		

Policy/Standard	Pebble Beach CSD	Cypress FPD	Carmel Highlands FPD
	I-C. Haul Road Fire Road/Fuel Break (designated as Fire Road/Fuel Break 9): Fuel treatments along the Haul Road Fire Road/Fuel Break shall conform to the requirements of Fire Roads and Fire Road/Fuel Breaks in sections I-A and I-B plus the requirements for a Shaded Fuel Break as described in section IV-C-4.		
I-C Road Identification Markings	(This is Policy I-D in the Pebble Beach CSD plan) 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		
I-D Road Grading Requirements	(This is Policy I-E in the Pebble Beach CSD plan) Property owner/responsible party shall establish and main occurs, gullies in the roads shall be filled with suitable imp Grading of road surfaces will be limited to a level that does the Fire Road to convey significantly more water than it we	orted material to repair the roads. s not reduce the overall elevation of the fire road	
I-E Maintenance Schedule	(This is Policy I-F in the Pebble Beach CSD plan): The Pebble Beach Fire Department shall inspect all emergency Fire Roads and Fire Road/Fuel Breaks for compliance to the standards in A through E, above, by July 1 of each year and report their findings to the Pebble Beach CSD General Manager	The DISTRICT shall inspect all emergency Fi the standards in I A through C, above by May needs, develop a plan and coordinate said ma	1 of each year, prioritize the maintenance

Policy/Standard	Pebble Beach CSD	Cypress FPD	Carmel Highlands FPD
I-F Fire Road and Fuel Break Improvement Projects	 This is Policy I-G in the Pebble Beach CSD plan: At the eastern end of existing Fire Road/Fuel Break 23 on the sewer easement, emergency access shall be maintained that connects to Fire Road/Fuel Break 22 over the existing ungraded four-wheel drive route. This connecting access shall remain ungraded and maintained only by the mowing of dry grass as necessary. Minimal grading and fill retention to effect a safe turn from the eastern end of the current Fire Road/Fuel Break 23 and sewer easement onto the ungraded slope shall be allowed. Fire Road 24 was acquired in the name of the Pebble Beach CSD on behalf of the Del Monte Forest Foundation that connects Carmel Woods to Pescadero Canyon. This connecting access shall remain ungraded and maintained only by the mowing of dry grasses at least once annually. 	Establish Fire Road system with signage Barnet Segal and Old Capitol site fire roads ² Fire road at Aguajito road behind Raymond Way Hatton Canyon fuel reduction, road maintenance and fire roads Roach and Martin Canon fire roads Pacific Meadows and Del Mesa Carmel fire roads and fuel reduction Quail Meadows fuel reduction and fire road Jacks Peak Fuel reduction and fire roads Carmel Views fuel reduction grant Outlook drive access and egress connector to High Meadows drive fuel reduction and road improvement Pescadero Canyon fire road 24 improvement and fuel reduction High Meadows and Via Mar Monte fuel reduction Carmel Knolls and Rancho Rio Vista fuel reduction Maintain and improve recently constructed Soberanes Fire roads and fuel breaks	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-A Preservation	The property owner shall designate a person who has knowledge of the property, terrain, natural habitat, protected species, and access to coordinate with fire department inspection personnel. The property owner's designated person shall be responsible for notifying the Open Space Advisory Committee at least two weeks before the planned fire hazard reduction work. Open Space Advisory Committee may appoint one of its members to provide such onsite inspection of the work as it deems necessary, or notify the property owner to employ at his/her own expense, another biologist or	DISTRICT will perform a CEQA analysis repo fire hazard fuel reduction work will be complet is completed).	

Policy/Standard	Pebble Beach CSD	Cypress FPD	Carmel Highlands FPD
	naturalist acceptable to Open Space Advisory Committee. All protected species in the work area shall be identified for the Pebble Beach CSD Fire Department.		
	(Pebble Beach CSD uses "Pebble Beach CSD Fire Department" instead of DISTRICT") When fire hazard reduction work must be undertaken within areas that contain such species, the DISTRICT shall coordinate efforts to avoid removing or adversely affecting the site.		
II-B Authority to stop work	The property owners and Open Space Advisory Committee 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 onsite fire official of the area of concern. The fire official will place yellow security tape around the designated plant species or the area specified by the property owner or Open Space Advisory Committee 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 Open Space Advisory Committee representative, and the parties have reached agreement on a specific plan of action.	The property owner and DISTRICT represental reduction work in progress if they believe envibeing damaged or endangered in unwarranted Reduction Captain or Fire Marshal of the area place security tape around the designated plat property owner or DISTRICT representative. The notito disturb the identified area. Hazard reduction work will not proceed until the representative has reviewed alternative hazard and Fuels Reduction Captain representative, a specific plan of action.	ronmentally sensitive species could or are d fashion. To do so, they will notify the Fuels of concern. The Fuels Reduction Captain will not species or the area specified by the The Fuels Reduction Captain will give orders the Fire Chief or the Fire Chief's designated d reduction options with the property owner
III Target Treatment Areas	Refer to Table 2		
IV-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.		tion C, below.
	3. The Pebble Beach CSD Fire Marshal shall be responsible for identifying annually, before July 1, each undeveloped parcel to which these requirements shall apply and update the listing of these parcels in Appendix G of this Fire Defense Plan.	3. The DISTRICT Fire Marshal shall be respore each undeveloped parcel to which these requi	

Policy/Standard	Pebble Beach CSD	Pebble Beach CSD Cypress FPD Carmel Highland			
IV-B Open Space Fire Hazard Reduction	The Fire Chief, or the Fire Marshal as designated by the Fire Chief of the Pebble Beach Fire Department, shall meet at least annually, by July 1, with representatives of the Del Monte Forest Foundation Conservancy ³ and Pebble Beach Company, 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 and shared between the parties. This list shall include:	The Fire Chief, or the Fire Marshal as designal meet at least annually, by May 1, with the DIS discuss open space parcels, their hazards and 1. A complete list of open space parcels, regal 1st each fire season. This list shall include:	STRICT Board and Fuels Committee, to		
	a. Assessor's Parcel Number				
	b. Property (Owner or Responsible agency			
	c. Physical l	ocation			
	d. Size in ac				
	e. Special concerns				
	f. Fuel Reduction standard				
	g. Expected	completion date of fire hazard mitigations.			
	A complete listing of these parcels appears in Appendix H.	2. A complete listing and status of these parcels shall be kept on file at the district.			
IV-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 stru	3.			
	c. Remove all dead fallen material within the defensible sp				
	d. Remove that portion of any dead tree limb within 10 fee	•			
	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	2. Standard #2 Undeveloped parcels one ad Fuel reduction shall be provided for a minimur the property to the same standard as IV-C-1, a depth of the parcel may be less than 100 feet, opposing property line. Where the parcel falls standards of IV-C-4 shall apply.	n of 100 feet around the exterior boundary of a. through f. In cases where the width or the fuel reduction will be made to the		

proper	he fuel reduction will be made to the opposing				
	erty line.				
Design The or Space parcel standa to the of each request In special Space Depar standa Comm	andard #3 - Environmentally Sensitive/Scenic inated Parcels where of designated open space or the Open e Advisory Committee may request that specific is be excluded from the adopted fuel reduction ards. A request for this variance shall be submitted in Fire Department in writing no later than March 1st ich calendar year explaining the reason for the est. The excitic cases where the property owner, Open is advisory Committee, and the Pebble Beach Fire retirent are unable to agree on fuel reduction ards, the Board of Directors of the Pebble Beach munity Services District shall make the final mination.	Fire Department in writing no later than March 1st of each calendar year exploration reason for the request. In specific cases where the property owner and the DISTRICT are unable to reduction standards, the Board of Directors shall make the final determination. Fire			
4. Sta	andard #4 - Shaded Fuel Break	4. Standard #4 - Shaded Fuel Break			
be det modifie	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	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"			
a. Nor		b. Remove all dead trees			
	ries and cures should be mowed or cut to a num height of 4"	c. Remove all tree limbs within six feet of grou	nd level		
b. Rer	move all dead trees	d. Where located on slopes in excess of 30%, ground level	remove all tree limbs within ten feet of		
c. Ren excep	move all tree limbs within six feet of ground level, ot:	e. Limb removal shall not exceed 50% of the h $$			
1. W	 Where located on slopes in excess of 30%, remove all tree limbs within ten feet of ground level. Limb removal shall not exceed 1/3 the height of any 	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" spread, or removed from the area	or less of ground level, or chipped and		
d. Rer	move all dead tree limbs within 10 feet of ground Prune out dead wood from retained shrubs and	h. Shrubs should have average horizontal sep shrubs can be retained but should have extra separation			

Policy/Standard	Pebble Beach CSD	Cypress FPD	Carmel Highlands FPD
	e. All cut material shall be lopped to within 12" or less of ground level, or chipped and spread, or removed from the area f. 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. g. Tree canopies should be separated by at least 10 feet measured edge to edge within the first 50 feet if possible. 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 h. The remaining ground fuels shall be maintained at a height of less than eighteen (18) inches.	first 50 feet. The first 150 feet of the Shaded Fuel Break shall have an average tree space 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 canopicunless 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 of impede fire equipment	
		b. Remove all woody vegetation less than 12" DBH within 10 feet of both sides of the roa 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 tree representative, present an indirect hazard to the	
		e. Prune all remaining trees to 16' above grouthan 50% of the live crown	und. However, no tree shall be pruned greater
		f. Material produced through felling or brushin	ng shall be treated as follows:
		Stabilize larger material, such as tree boles	
		2. Chip material within 35' of the road where f	
		3. Lop and scatter material not chipped to a n	
		4. Keep chips, slash, and debris less than 4"5. Place chips, slash, and debris in a location	· ·
		watercourse	where it will not dislouge and enter any

Policy/Standard	Pebble Beach CSD	Cypress FPD	Carmel Highlands FPD
		6. Standard # 6 Broadcast and Pile Burning	
		Broadcast and pile burning may be used as a management tool. Broadcast burning is approxed Wolf and Upper Corona. Pile burning will sensitive micro sites may require a less invasi issues present a problem.	opriate for open areas such as Point Lobos, be used in areas where management of
		7. Standard #7 Application of herbicides.	
		Treatment of invasive plants and grasses will suppression before, during and after fuel treat nonnative plants and grasses present a significommunities and the desired end condition po	ments. The presence of aggressive cant problem to both native sensitive plant

SOURCES: Pebble Beach Community Services District 2017, Cypress Fire Protection District 2018, Carmel Highlands Fire Protection District 2018. NOTES:

- 1. Fire Roads are color-coded as Blue; Fire Road / Fuel Breaks are color-coded as Red in the plans. Fire Road 24 is shown on the Cypress Fire District plan graphics. For consistency All Fire Road and Fire Road / Fuel Break color-coding in the Cypress FPD plan will be revised to reflect the color-coding indicated in Appendix F of this initial study. Fire Road 11 in the Pebble Beach CSD plan was inadvertently left off the plan map for the Navajo Tract identified as Appendix D, and will be revised as shown in Appendix G of this initial study.
- 2. Barnett and Old Capitol roads are outside of district jurisdictional boundaries and have been removed from the Cypress FPD plan.
- 3. Name of entity has been updated.

Table 2 Summary of Target Treatment Area Policy Standards - Cypress FPD and Carmel Highlands FPD

Policy/Standard	Target Treatment Areas		
	Cypress FPD	Carmel Highlands FPD	
Residential area Fuel modification on developed property shall be consistent with the requirements of Public Resources Code 4291.	All	All	
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.	All	Corona, MT Devon, Walden, Mal Paso, Victorine Ranch, Yankee Point, Spindrift, Aurora Del Mar, Red Wolf,	
Areas along Hwy and road corridors shall comply with the vacant lot/open space and road corridor standards outlined in IV-C-2 and IV-C-3.	All	Corona, MT Devon, Walden, Mal Paso, Victorine Ranch, Red Wolf,	
Within 20 feet of roadway edges bordering the Highway 1 corridor, fuels shall be modified according to the road corridor standards outlined in IV-C-2 and IV-C- 3 shall apply	Aguajito, Carmel Hills, Hatton Canyon, Carmel Views, Carmel Woods,	Yankee Point, Spindrift, Aurora Del Mar	
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.	Josselyn Canyon, Mission Fields	Victorine Ranch, Upper Ridges, Red Wolf	
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.	All	Corona, MT Devon, Walden, Mal Paso, Victorine Ranch, Upper Ridges, Red Wolf,	
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	Aguajito, Carmel Hills, Hatton Canyon, Carmel Views, Carmel Woods, Del Mesa & Pacific Meadows, East Canada, High Meadows, Jacks Peak, Quail Meadows	Corona, MT Devon, Walden, Mal Paso, Victorine Ranch, Upper Ridges	
On slopes over 30% the following fuel modification standards for "Shaded Fuel Break" shall apply. Where habitable structures border undeveloped public (including State Parks) and private 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.	Aguajito, Carmel Hills, Hatton Canyon, Carmel Views, Carmel Woods, Del Mesa & Pacific Meadows, East Canada, High Meadows, Jacks Peak, Quail Meadows	Corona, MT Devon, Walden, Mal Paso, Victorine Ranch, Upper Ridges	

Policy/Standard	Target Treatment Areas		
	CFPD	CHFPD	
On slopes over 30% the following fuel modification standards for "Shaded Fuel Break" shall apply. 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.	Aguajito, Carmel Hills, Hatton Canyon, Carmel Views, Carmel Woods, Del Mesa & Pacific Meadows, East Canada, High Meadows, Jacks Peak, Quail Meadows	Corona, MT Devon, Walden, Mal Paso, Victorine Ranch	
-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 Monitor progress of CFD Grants	All	All	

SOURCE: Pebble Beach Community Service s District, 2017, Cypress Fire Protection District, March 2018, Carmel Highlands Fire Protection District, March 2018.





Fire Road



(3) Fire Road/Fuel Beak



4 Fire Road/Fuel Break

Source: EMC Planning Group 2017, Pebble Beach CSD 2010

Figure 9
Site Photographs







Fuel Hazard Reduction/Vegetation Management

Specific maintenance activities along each fire road and fuel break consistent with plan policies will include removal of ladder fuels and overgrown vegetation (fuel hazard reduction). All maintenance activities to remove hazards and maintain fire road access will be undertaken consistent with plan standards. Fuel hazard reduction activities will be undertaken as an initial step, with routine vegetation management continuing thereafter on an annual basis. Fuel hazard reduction activities would occur specific to defensible space management zones or identified high-priority fire management areas. Treatment in areas with low fuel loads would consist of clearing downed trees or other obstructions from the existing fuel breaks/fire roads. Fuel hazard reduction and vegetation management treatments may be accomplished by hand, mechanical equipment, grazing, prescribed burning, or herbicide application. Prescribed burning is not proposed within the Pebble Beach CSD boundary.

Tree Removal

Each plan includes standards for tree removal when necessary. In all three districts, Policy IV-C, Fuel Reduction Standards, Standard#1 and #2 (undeveloped parcels of less than one acre), measures b-c, call for removal of all dead standing trees within 100 feet of a structure if they pose a threat to that structure, removal of portions of any dead tree limb within 10 feet of the ground, and removal of all tree limbs within six feet of the ground. Limb removal shall not exceed 1/3 the height of any tree. Fuel reduction standards within shaded fuel breaks (Policy IV-C, Standard #4) in all three districts also include trimming standards for trees located on slopes greater than 30 percent, and provides limitations on the extent of trimming of individual trees and overall tree canopies.

Pebble Beach CSD

Within the Pebble Beach CSD boundary, Policy I-B, Fire Road / Fuel Break Standards calls for removal of all dead standing or fallen trees, dead tree limbs within 10 feet of ground level, and all other tree limbs within 5 feet of ground level.

Cypress FPD and Carmel Highlands FPD

Within the Cypress FPD and Carmel Highlands FPD districts, Policy I-B, Fire Road / Fuel Break Standards calls for removal of all dead standing or fallen trees, dead tree limbs within 10 feet of ground level, and all other tree limbs within 5 feet of ground level. Fuel break standards in this policy state that all trees less than six inches in diameter at breast height will be removed and within shaded fuel breaks, the average tree spacing will be 16 feet or more within the first 150 feet from road edge, and 12 feet or more between 150 feet and 300 feet from the road edge. Policy IV-C #5 additionally calls for the removal of all dead, diseased, and dying trees that present direct or, in the opinion of a qualified representative, indirect hazard to fire roads that would affect or impede emergency equipment access.

Prescribed Burns

The Monterey County Community Wildfire Protection Plan (Monterey Fire Safe Council 2015) (Wildfire Protection Plan) reports that preplanned prescribed burning is conducted throughout Monterey County, by private land owners, by CAL FIRE as part of its Vegetation Management Program, and on land administered by the Bureau of Land Management, Department of Defense, and the United States Forest Service. According to the information presented in the Wildfire Protection Plan, burning under desirable conditions restores fire to the ecosystem and is normally one of the most cost effective methods for strategically reducing hazardous fuels by 50 to 80 percent, and is the preferred alternative to unplanned wildfire events occurring under severe fire weather conditions (page 63). Generally CAL FIRE conducts broadcast burns through issuance of a Vegetation Management Program permit, with the details identified in contracts between the landowner, other agencies, and the applicable Fire Protection District or Fire Department, as well as a within a Burn Plan, required by the permit.

Depending on site conditions, piling and burning is a form of prescribed fire that can be more feasible and cost effective than chipping or hauling material to landfills. Project location and setting determines which approach is the most environmentally friendly and effective alternative. Piling and burning can generally be safely conducted during the winter rainy season. CAL FIRE's Vegetation Management Plan provides a means for landowners to contract with CAL FIRE for hazardous fuel reduction and prescribed burn projects (pp 63-64).

Fire Road/ Fuel Break Maintenance and Grading

Within the each district, proposed fire road and fuel break maintenance activities would occur on existing fire roads. Maintenance of existing fire roads and fire road / fuel breaks will occasionally require grading to maintain a roadway surface capable of allowing emergency apparatus such as fire trucks and machinery during a wildfire. All grading necessary to maintain emergency access is subject to the Monterey County (County Code Section 16.08) thresholds for earth movement that would trigger the need for a grading permit. Each plan states that grading of road surfaces, when necessary, will be limited to a level that does not reduce the overall elevation of the fire road or cause the surface of the fire road to convey substantially more runoff than would otherwise occur under existing conditions prior to grading. Maintenance activities will include best management practices to minimize erosion. Any work near a stream channel or on slopes greater than 30 percent will be modified to buffer the channel and to minimize erosion and soil movement.

The plans assume that property owners of existing private unpaved roads and responsible parties are responsible for establishing and maintaining water bars at regular intervals 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.

Project Schedule

Each district would annually inspect the emergency access road system to identify and prioritize maintenance activities along fire roads and/or fuel breaks. Annual inspections by will be conducted by district personnel annually in the spring and early summer months.

OTHER PUBLIC AGENCIES WHOSE APPROVAL IS REQUIRED

- Monterey County
 - Grading Permit. If fire road maintenance grading exceeds Monterey County Grading Ordinance standards requiring a permit.
 - Coastal Development Permit. If existing fire roads are expanded or new fuel breaks/access roads are created within the coastal zone, or if removal of healthy trees with a diameter greater than six inches is necessary.
- U. S. Fish and Wildlife Service.
 - If proposed fuel hazard reduction, fire road maintenance, or vegetation management activities will cause take of federally listed species or their habitats, Incidental Take Authorization may be required.
- U. S. Army Corps of Engineers.
 - If proposed fuel hazard reduction, fire road maintenance, or vegetation management activities are undertaken within 100 feet of a jurisdictional wetland or water feature, a permit may be required.
- California Department of Fish and Wildlife
 - If proposed fuel hazard reduction, fire road maintenance, or vegetation management activities will cause take of state listed species or their habitats, Incidental Take Authorization may be required.
 - If proposed fuel hazard reduction, fire road maintenance, or vegetation management activities are undertaken within 100 feet of a riparian, wetland, or water feature, a permit may be required.

Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080. 3. 1? If so, has consultation begun?

No California Native American tribes traditionally and culturally affiliated with the project area have requested consultation pursuant to Public Resources Code section 21080. 3. 1.

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the

Pebble Beach CSD, Cypress FPD, and Carmel Highlands FPD Fire Defense Plans Initial Study

environmental review process. (See Public Resources Code section 21083. 3. 2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097. 96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082. 3(c) contains provisions specific to confidentiality.

B. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

Aesthetics		Greenhouse Gas Emissions	Population/Housing
Agriculture and Forestry Resources		Hazards & Hazardous Materials	Public Services
Air Quality		Hydrology/Water Quality	Recreation
Biological Resources		Land Use/Planning	Transportation/Traffic
Cultural Resources		Mineral Resources	Tribal Cultural Resources
Geology/Soils		Noise	Utilities/Service Systems
Mandatory Findings of Significance	✓	None with Mitigation Incorporated	

C. DETERMINATION

PEBBLE BEACH COMMUNITY SERVICES DISTRICT

	the basis of this initial evaluation:
	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
✓	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (1) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (2) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.
	May 31, 2018
Mil	ke Niccum, General Manager Date

Pebble Beach Community Services District

C. DETERMINATION

CYPRESS FIRE PROTECTION DISTRICT

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the
environment, and a NEGATIVE DECLARATION will be prepared.
I find that although the proposed project could have a significant effect on the
environment, there will not be a significant effect in this case because revisions in the
project have been made by or agreed to by the project proponent. A MITIGATED
NEGATIVE DECLARATION will be prepared.
I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (1) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (2) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Donel Geisen, President

Cypress Fire Protection District

Date

/31/2018

C. DETERMINATION

CARMEL HIGHLANDS FIRE PROTECTION DISTRICT

On	the basis of this initial evaluation:
	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
✓	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (1) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (2) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.
	Tance Somei 6.4,18

Date

Lynne Semeria, President

Carmel Highlands Fire Protection District

D. EVALUATION OF ENVIRONMENTAL IMPACTS

Notes

- 1. A brief explanation is provided for all answers except "No Impact" answers that are adequately supported by the information sources cited in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e. g., the project falls outside a fault rupture zone). A "No Impact" answer is explained where it is based on project-specific factors as well as general standards (e. g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2. All answers take account of the whole action involved, including off-site as well as on-site, cumulative as well a project-level, indirect as well as direct, and construction as well as operational impacts.
- 3. Once it has been determined that a particular physical impact may occur, then the checklist answers indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4. "Negative Declaration: Less-Than-Significant Impact with Mitigation Measures Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less-Than-Significant Impact." The mitigation measures are described, along with a brief explanation of how they reduce the effect to a less-than-significant level (mitigation measures from section XVII, "Earlier Analyses," may be cross-referenced).
- 5. Earlier analyses are used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier document or negative declaration. [Section 15063(c)(3)(D)] In this case, a brief discussion would identify the following:
 - a. "Earlier Analysis Used" identifies and states where such document is available for review.
 - b. "Impact Adequately Addressed" identifies which effects from the checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and states whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c. "Mitigation Measures"—For effects that are "Less-Than-Significant Impact with Mitigation Measures Incorporated," mitigation measures are described which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

- 6. Checklist references to information sources for potential impacts (e. g. , general plans, zoning ordinances, etc.) are incorporated. Each reference to a previously prepared or outside document, where appropriate, includes a reference to the page or pages where the statement is substantiated.
- 7. "Supporting Information Sources"—A source list is attached, and other sources used or individuals contacted are cited in the discussion.
- 8. This is the format recommended in the CEQA Guidelines as amended January 2011.
- 9. The explanation of each issue identifies:
 - a. The significance criteria or threshold, if any, used to evaluate each question; and
 - b. The mitigation measure identified, if any to reduce the impact to less than significant.

1. AESTHETICS

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than- Significant Impact	No Impact
a.	Have a substantial adverse effect on a scenic vista? (9-11,13-17, 20,21,26-32)			✓	
b.	Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway? (9-11,13-17,20-22,26-28)			√	
c.	Substantially degrade the existing visual character or quality of the site and its surroundings? (9-11,13-17,20-22,26-32)			√	
d.	Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area? (26-28)				✓

Comments:

a. Scenic vistas within all three districts are identified in the *Del Monte Forest Area Land Use Plan* (Monterey County 2012), the *Carmel Area Land Use Plan* (Monterey County 1983), the *Greater Monterey Peninsula Area Plan* (Monterey County 1984), *Carmel Valley Master Plan* (Monterey County 1996), and the *Big Sur Coast Land Use Plan* (Monterey County 1985). These plans are focused primarily on development but also contain a number of policies that limit grading, tree and vegetation removal to protect and preserve the aesthetic value of scenic vistas along State Route 1, State Route 68, and Carmel Valley Road, and other identified scenic resources. Forest-crested hills provide a highly scenic backdrop for residents and travelers on roadways and other public vantage points within the cities of Monterey, Pacific Grove, and Carmel-bythe-Sea, and unincorporated areas of the Del Monte Forest and Carmel Valley, and as such, are key scenic resources with a high visual quality and aesthetic value.

Pebble Beach CSD

Nearly all of the proposed sensitive resource management conservation easements (easements) that will be included in the updated Pebble Beach CSD plan are within either the 17-Mile Drive viewshed identified in the *Del Monte Forest Area Land Use Plan*, or are within the viewshed of Point Lobos State Natural Reserve, approximately 2. 5 miles to the south across Carmel Bay. Key visual resources within these scenic vistas are the coastland with its expansive views and the natural beauty of the Del

Monte Forest. The *Del Monte Forest Area Land Use Plan* encourages improvements and facilities that complement the forest's natural scenic assets and enhance the public's enjoyment of them. Policy 30 states that the natural forested character of Del Monte Forest shall be retained to the maximum feasible degree, and all tree removal, and forest management activities within native forest areas shall conform to *Del Monte Forest Area Land Use Plan* policies regarding water and marine resources, environmentally sensitive habitat areas, and scenic visual resources. Policy 31 requires consideration of fuel management requirements and aesthetic values in any tree removal. Policy 35 allows trimming of trees to reduce fire hazards provided their overall health is not jeopardized.

Fuel modifications on developed parcels are subject to consistency with the defensible space requirements of Public Resources Code 4291 and Pebble Beach CSD Ordinance 19. Implementation of the proposed fire road maintenance, fuel reduction, and vegetation management activities consistent with the policies of the Pebble Beach CSD fire defense plan would alter the visual character of the easements, but would not substantially affect the overall visual character and aesthetic value of scenic vistas available from within Del Monte Forest or from Point Lobos Reserve. The locations of the proposed easements are shown on Figure 5.

Easement PQR is located within Pescadero Canyon on the north side of 17-Mile Drive and descriptions of plan activities that will have the potential to affect the visual character of this easement are found in Policy III-B. 1 (refer to Table 2). This policy establishes perimeter fire protection zones, requires fuel modification within 20 feet of all roadways bordering the easement, and calls for compliance with shaded fuel break standards identified in Policy III-B. 2 on slopes greater than 30 percent. These standards apply to the existing fire roads and fire/road fuel breaks that are identified in the Pebble Beach CSD fire defense plan. Fire Road 21 and Fire Road/Fuel Break 21 and 23 will be maintained as shaded fuel breaks. Policy III-B. 1 allows for a greater shrub understory than would otherwise be required by strict adherence to the roadway standards identified in the plan Policy I-B.

Section IV, Undeveloped, Vacant or Open Space Parcels, Policy IV-C Standard #1 and Standard #2 provide fuel reduction standards (refer to Table 1) for the remaining easements, dependent on size. Policy IV-C Standard #3 sets forth procedures to exclude certain environmentally sensitive/scenic designated parcels from compliance with all or some of the adopted fuel reduction standards upon written request by the owner describing the reasons for the request. Fire road maintenance and fuel management activities on all other easements would be subject to compliance with policy standards for routine maintenance and vegetation management activities for vacant and undeveloped parcels identified in the fire defense plan Section IV-C.

Specific activities identified in the easement areas consist of annual perimeter mowing and maintenance of existing fire roads and fuel breaks, which may result in perceivable changes to the visual character of each easement. Removal of healthy trees is not proposed. These changes would not be noticeable in the overall viewshed or perceptible from a great distance since the easements would remain undeveloped and the majority of existing tree canopy and vegetation on them would not be removed. Therefore, the aesthetic value of the overall visual character of the easements and their visual contribution to scenic vistas would remain substantially intact. Implementation of proposed maintenance activities consistent with the Pebble Beach CSD fire defense plan policies would maintain the overall scenic quality of the easement areas. Therefore, no impact to scenic vistas in these areas would occur.

Cypress FPD

According to the County of Monterey map of Scenic Highway Corridors and Visual Sensitivity Greater Monterey Peninsula (Monterey County 2010), there are no designated critical viewsheds within the Cypress FPD boundary. However, areas identified as generally visually sensitive are identified on the map and in the Greater Monterey Peninsula Area Plan (Monterey County 1984) that are located within the northern portion of the Cypress FPD. These areas are east of State Route 1 and generally located between the two major highways, State Route 1 and State Route 68 and the ridgelines south of them. Visual quality of these areas is categorized as "sensitive" and "highly sensitive". Many of the target treatment areas identified in Section III of the Cypress FPD plan are located within these visually sensitive areas. Public open space areas and parks that contribute to the scenic backdrop of the northern portion of the Cypress FPD consist of Jacks Peak Park and Hatton Canyon. The Greater Monterey Peninsula Area Plan Policy 17. 4. 13 calls for continued maintenance of identified fuel modification zones within many of the areas categorized as visually sensitive.

Scenic vistas for the portion of the Cypress FPD that is west of State Route 1 and generally bordering Carmel Valley Road are identified in the *Carmel Valley Master Plan*. Although the *Carmel Valley Master Plan* does not identify specific scenic vistas, visually sensitive areas are defined as those that are generally visible from Carmel Valley Road and Los Laureles Grade. Landforms within the Cypress FPD boundary are not visible from Los Laureles Grade. Therefore, no impacts would occur that affect the visual quality of these views and no further discussion of scenic vistas/resources visible from this roadway are required.

The master plan identifies the "mosaic of native vegetation, landforms, and water systems" as aesthetically valuable scenic resources that contribute to the visual character of visually sensitive areas (page 7). The following *Carmel Valley Master Plan* policies are relevant to the discussion of potential impacts to scenic vistas along Carmel Valley Road.

Policy 7. 2. 1. 1 (CV) calls for the preservation of soil stability and wildlife habitat by maintaining the chaparral plant community in its natural state to the maximum extent feasible consistent with fire safety standards.

Policy 7. 2. 2. 5 discourages the removal of healthy, native oak, madrone, and redwood trees and requires permit approval for the removal of any of these tree species with a trunk diameter in excess of six (6) inches, measured two (2) feet above ground level.

Policy 17. 4. 16 includes a statement that proposed trail easements in high and extreme fire hazard areas shall be designed to provide effective firebreak zones and shall be designed to allow access to area roads for emergency vehicle access.

Policy 26. 1. 24 limits grading that would result in hillside scarring and prescribes avoiding cuts and fills where possible and where cuts and fills are unavoidable, by creating slopes that shall be revegetated. Permanent non-revegetated scarring of hillsides is strongly discouraged and should occur only if no other reasonable alternative is available.

Policy 26. 1. 25 calls for minimization of natural landform alteration caused by cutting, filling, and grading. This policy also requires minimization of vegetation removal and where it is unavoidable calls for the maximum possible restoration including botanically appropriate landscaping.

Scenic vistas for the southern portion of the Cypress FPD, west of State Route 1, are identified in the *Carmel Area Land Use Plan* and extend south generally from Carmel Point to the Carmel Riviera Subdivision. Scenic vistas include Carmel Point, the lagoon, and the Carmel River State Beach, which is framed by sweeping views of distant hillsides, ridgetops, and frontal meadows. The viewshed is defined as the area visible from "major public use areas", which includes Scenic Road and State Route 1. Policy 2. 2. 4. 6 of the *Carmel Area land Use Plan* requires the forested corridor along State Route 1 to be maintained as a scenic resource and natural screen for existing and new development.

Fuel modification on developed parcels within the Cypress FPD is subject to consistency with the defensible space requirements of Public Resources Code 4291 and Cypress FPD Ordinance 2008-06. Implementation of the proposed fire road maintenance, fuel hazard reduction, and vegetation management activities consistent with Cypress FPD plan policy standards will occur in areas identified as visually sensitive on the Monterey County map of Scenic Highway Corridors and Visual Sensitivity for the Greater Monterey Peninsula. Section III of the proposed Cypress FPD plan identifies 11 target treatment areas, some of which are located within these identified visually sensitive areas. The Josselyn Canyon target treatment area is not identified in any plan as visually sensitive.

The Cypress FPD plan Policy II-B grants authority to property owners and Cypress FPD representatives to stop hazard reduction work in progress if they believe environmentally sensitive species could be or are being damaged or endangered in unwarranted fashion, but the plan is silent with regard to the protection of sensitive visual resources. Future fire road maintenance, fuel hazard reduction, and vegetation management activities consistent with the policies of the Cypress FPD fire defense plan would alter the visual character of the fire roads and fuel breaks within visually sensitive areas of the district, including Jacks Peak Park, and Hatton Canyon State Park. These alterations would be most noticeable to users of the two parks.

Consultation with Monterey County Parks Department will be necessary prior to initiation of work in Jacks Peak Park to develop appropriate implementation activities consistent with the proposed fire defense plan and applicable County policies for maintenance of park facilities and the protection of environmentally sensitive resources, including visual resources. Similarly, consultation with California Department of Parks and Recreation (California State Parks) would also be required prior to initiation of work within the state-owned Hatton Canyon State Park. The California Department of Parks and Recreation has its own process for addressing the risks of wildland fire and evaluating the environmental consequences of doing so. In addition, the California Department of Parks and Recreation would be the lead agency for the purposes of CEQA and would evaluate the environmental impacts of any activity proposed on state lands once a program is developed.

The Cypress FPD plan Section III, calls for coordination with these entities and other adjacent stakeholders prior to implementation of the district's recommended site-specific activities that could affect scenic resources under the control of public stakeholder agencies. The purpose of agency coordination is to identify sensitive environmental resources within these lands, to develop an appropriate program to maintain emergency access routes, and implement fuel hazard reduction and

vegetation management activities that are consistent with site-specific agency policies, procedures, and Best Management Practices that avoid or minimize potential impacts to these publicly-owned aesthetic contributors to scenic vistas, while affording the maximum feasible reduction of risks of wildland fire. No work shall commence on lands under the control of other public agencies without first consulting with the agency stakeholders identified in Section III.

Plan activities that have the potential to affect the visual character of highly sensitive visual resources not owned by Monterey County or California Department of Parks and Recreation are found in Policy III-A (refer to Table 2). This policy states that fuel modification of ornamental species vegetation outside of the 100-foot defensible space otherwise required by Public Resources Code 4291 may be required on a case by case basis. The standards for vegetation management within local street rights-of-way would be subject to the standards for vacant lots and roadway corridors provided in Section IV-C. 2 and IV-C. 3 (refer to Table 1), which allows fuel modification within 20 feet of all roadways consistent with the standards identified in Policy I-B, and on slopes greater than 30 percent calls for compliance with shaded fuel break standards identified in Policy IV-B. 2.

Implementation of area-specific activities within each target treatment area (refer to Table 2) may result in perceivable changes to the visual character but would not be perceptible from a great distance since removal of healthy trees and grading of new roads and fuel breaks is not proposed. All activities would occur on existing fire roads and fuel breaks and the majority of existing vegetation cover would not be removed from them. As a result the aesthetic value of the overall visual character of scenic resources within the Cypress FPD and their visual contribution to scenic vistas would remain substantially intact.

Therefore, no significant impact to scenic vistas resulting from implementation of the Cypress FPD fire defense plan in would occur.

Carmel Highlands FPD

Scenic vistas for much of the Carmel Highlands FPD are identified in the *Carmel Area Land Use Plan* and include the shoreline between the Carmel Riviera Subdivision and Malpaso Creek, and inland areas in Carmel Highlands, similarly framed by sweeping views of hillsides, ridgetops, and frontal meadows. The viewshed is defined as the area visible from "major public use areas", which include State Route 1 and Point Lobos State Natural Reserve (page 8). In addition to Policy 2. 2. 4. 6 (refer to previous policy discussion for the Cypress FPD), Policy 2. 3. 4. 10 states that redwood forest and chaparral habitat on lands exceeding 30 percent slopes should remain undisturbed due to potential erosion impacts and loss of visual amenities.

The *Big Sur Coast Land Use Plan* identifies all lands within sight of State Route 1 and public viewing areas as critical viewshed. A portion of the Carmel Highlands FPD that is adjacent to State Route 1 between Mal Paso Creek and the Victorine Ranch consists of a portion of Garrapata State Park, and is located within the *Big Sur Coast Land Use Plan* north section critical viewshed. The following *Big Sur Coast Land Use Plan* policies are relevant to the project:

Policy 3. 2. 3. A. 4 regulates new roads, grading, excavation, and landform alteration within the critical viewshed, and identifies permitting requirements for development.

Policy 3. 2. 5. H identifies exceptions to permitting for certain coastal-dependent uses including natural resource management needs such as removing non-native trees.

Policy 5. 4. 2. 13 sets forth permit requirements and exceptions for major vegetation removal. According to this policy, removal of hazardous trees posing an imminent danger to life or property subject to verification by the California Department of Forestry, thinning of small (less than 12" diameter) or dead trees from density forested areas, especially as needed to reduce unsafe fuel accumulations adjacent to existing occupied buildings; and, prescribed burning, crushing, lopping or other methods of brush clearing which do not materially disturb underlying soils, are not considered major vegetation removal.

Implementation of maintenance and vegetation management activities consistent with the Carmel Highlands FPD plan policies in the Mal Paso and Victorine Ranch Target Treatment Areas would not conflict with the *Big Sur Coastal Land Use Plan* policies for critical viewshed. Fuel modifications on developed parcels are subject to consistency with the defensible space requirements of Public Resources Code 4291 and Carmel Highlands FPD Ordinance 11-2008. In addition, the Carmel Highlands FPD plan provides standards for fuel modifications on vacant parcels of greater than one acre and for parcels that are designated open space, or have been found to be environmentally sensitive.

The Carmel Highlands FPD boundary encompasses lands within the Point Lobos State Reserve, the Point Lobos Ranch, and a portion of Garrapata State Park. The Carmel Highlands FPD plan Policy II-B grants authority to property owners and Carmel Highlands FPD representatives to stop hazard reduction work in progress if they believe environmentally sensitive species could or are being damaged or endangered in unwarranted fashion, but the plan is silent with regard to the protection of aesthetic resources.

Similar to the Cypress FPD plan, implementation of the proposed Carmel Highlands FPD plan will require coordination with the California Department of Parks and Recreation for implementing plan activities that may impact environmentally sensitive resources, including visual resources, within the affected state park lands. Consultation with the California Department of Parks and Recreation will be necessary prior to the Carmel Highlands FPD initiating any roadway maintenance, fuel hazard reduction, or vegetation management activities within the park facilities. The purpose of consultation will be to develop appropriate program of fuel reduction, road maintenance, and vegetation management activities on state lands, consistent with California Department of Parks and Recreation policies and procedures for the protection of park resources. The California Department of Parks and Recreation has its own process for addressing the risks of wildland fire and evaluating the environmental consequences of doing so. In addition, the California Department of Parks and Recreation would be the lead agency for the purposes of CEQA and would evaluate any activity proposed on state lands once a program is developed.

Consultation with the Monterey Peninsula Regional Park District will also be necessary prior to initiation of any plan activity in the Palo Corona Regional Park, located near the northern boundary of the district. The Carmel Highlands FPD plan Section II-B and Section IV-C-3 provide a policy option for property owners of vacant or designated open space parcels to "opt out" of compliance with fire plan policies.

The Carmel Highlands FPD plan Section III, calls for coordination with these entities and other adjacent stakeholders prior to implementation of the district's recommended site-specific activities that could affect scenic resources under the control of public stakeholder agencies. The purpose of agency coordination is to identify sensitive environmental resources, including scenic resources, within these lands, to develop an appropriate program to maintain emergency access routes, and implement fuel hazard reduction and vegetation management activities that are consistent with site-specific agency policies, procedures, and Best Management Practices that avoid or minimize potential impacts to these publicly-owned aesthetic contributors to scenic vistas, while affording the maximum feasible reduction of risks of wildland fire. No work shall commence on lands under the control of public agencies without first consulting with the agency stakeholders identified in Section III.

For these reasons, significant impacts to scenic resources resulting from implementation of the Carmel Highlands FPD plan are avoided or minimized to a less-than-significant level. No mitigation is required.

b. Implementation of road maintenance, fuel hazard reduction and vegetation management activities are proposed adjacent to and along roadway shoulders within rights-of-way and/or viewshed of several scenic roadways.

Pebble Beach CSD

Within the Pebble Beach CSD boundary, a number of easements are located along 17-Mile Drive, which is identified by the *Del Monte Forest Area Land Use Plan* as an important destination of high aesthetic value. As noted above in the discussion of scenic vistas, specific activities identified in the easement areas consist of annual perimeter mowing and maintenance of existing fire roads and fuel breaks, which may result in perceivable changes to the visual character of each easement. Removal of healthy trees is not proposed, but implementation of these activities consistent with the Pebble Beach CSD plan standards will change the visual character along the easement perimeters and fire roads from a natural to more manicured appearance.

The changes in visual character would be minimal and immediately after the activity is completed would be most apparent to viewers in proximity to the treated area. Residents adjacent to the easements would be the most frequent viewers of the change to visual character of the easement perimeters, fire roads and fuel breaks; however, the changes are dispersed throughout the larger viewing area and would not be perceived as significant. The largest number of viewers that would be exposed to the changes are tourists that traverse 17-Mile Drive infrequently and for relatively short durations. The change in the visual character of the easements and 17-Mile Drive right-of-way adjacent to them is less than significant since the easements would remain undeveloped and the majority of existing vegetation on them would not be removed. No mitigation is required.

Cypress FPD and Carmel Highlands FPD

Implementation of the Cypress FPD plan and subsequent implementation of the roadway maintenance, fuel reduction, and vegetation management activities consistent with plan policies has the potential to impact the aesthetic value of visual character and quality of scenic resources of State Route 1, State Route 68, and Carmel Valley Road, which are identified as scenic roadway corridors. Implementation of the Carmel Highlands FPD plan has the potential to impact the aesthetic value of the visual character and quality of scenic resources within State Route 1.

State Route 1 between the San Luis Obispo County line north to State Route 68 is identified in the California Scenic Highway Mapping System as an Officially Designated State Scenic Highway and All American Road and State Route 68 between State Route 1 in Monterey to the Salinas River is an Officially Designated State Scenic Highway. Carmel Valley Road is identified by Monterey County as a proposed scenic route (County of Monterey 2018).

Implementation of the proposed fire road maintenance activities, fuel reduction and vegetation management activities in areas outside of public rights-of-way, but within view of motorists traveling on designated or proposed scenic roadways, are identified in the Cypress FPD and Carmel Highlands FPD fire plans Section III, Target Treatment Areas and in Sections IV-C-2 and Section IV-C-3. As noted above, Policy 2. 2. 4. 6 of the *Carmel Area land Use Plan* requires the forested corridor along State Route 1 to be maintained as a scenic resource and natural screen for existing and new development. The Carmel Highlands FPD fire defense plan identifies significant fuel hazards in some areas along the scenic State Route 1 corridor.

Implementation of the project activities, including staging of personnel and equipment may be observable by travelers along each of the corridors, including Carmel Valley Road; however, the proposed activities are short lived in each target treatment area. The changes to the visual character of areas visible from the scenic corridors would be similar to those identified in the discussion in item a, and would not be expected to result in a substantial permanent adverse change in the overall aesthetic value of the scenic resources within view of the roadways. The project does not include development and the overall aesthetic value and visual character of surrounding topography and the vegetated areas of Monterey Pine and Oak Woodland forests, Eucalyptus groves, chaparral, coastal scrub, grasslands, riparian forest, and scrub plant communities would remain intact.

The Cypress FPD and Carmel Highlands FPD plans further state that areas within 20 feet of the State Route 1 edge of pavement will be subject to the fuel modification standards identified in Sections IV-C-2 and Section IV-C-3. This standard implies that lands in the public right-of-way under the control of the California Department of Transportation (Caltrans) would be subject to compliance with the standards. Consultation with Caltrans will be necessary prior to initiation of work in the State Route 1 or State Route 68 rights-of-way.

The Carmel Highlands FPD is currently assisting Caltrans with program development to reduce fuel hazards in the State Route 1 right-of-way consistent with Caltrans policies and procedures for the protection of environmentally sensitive resources in designated scenic roadways. Further, Section IV-C-3 of the Carmel Highlands FPD plan allows owners of designated open space or scenic parcels to be excluded from complying with the adopted fire defense plan, and it is presumed that Caltrans will provide direction to Carmel Highlands FPD to avoid areas with high visual sensitivity as part of the agency stakeholder coordination required by the district's plan Section III.

Although tree removal is not proposed, modification of areas with dense fuel loads, as identified in Cypress FPD and Carmel Highlands FPD Policy III-C-3, would be the most noticeable change perceptible to viewers using the roadways. Implementation of fire defense plan fuel reduction and vegetation management activities would result in the same types of changes to roadway shoulders that typically occur during Caltrans' annual brush clearing activities. The Cypress FPD plan Section II-B and Section IV-C-3 also provides a policy option for property owners of vacant or designated open space parcels to "opt out" of compliance with fire plan policies.

The purpose of agency coordination would be to develop appropriate fuel hazard reduction, road maintenance, and vegetation management activities that would reduce hazardous fuel loads and provide emergency access consistent with Caltrans policies for the protection of environmentally sensitive resources, including visual resources that contribute to identified scenic roadway corridors. Agency coordination required by the plan Section III ensures that the proposed plan would not conflict with Caltrans policies for the protection of scenic resources within identified scenic roadways, and would ensure that proposed fuel reduction and vegetation management activities within the State Route 1 and State Route 68 scenic corridors would not impact scenic resources to the extent that the aesthetic value of the roadways would be significantly compromised. For these reasons, and the reasons identified in Item a, above, the project would not result in significant impacts to scenic resources within any designated scenic roadway. No additional mitigation is required.

c. Implementation of fire road maintenance, fuel hazard reduction, and vegetation management activities within shaded fuel breaks pose the greatest potential for changes in the visual character of the treatment and areas within the Cypress FPD and Carmel Highlands FPD that may be perceived by viewers as significantly adverse. A regularly maintained shaded fuel break could extend up to 300 feet from road edges, and would be routinely cleared of dead trees and limbs, as well as trimming of the understory. Fuel ladders would be reduced and as a result the visual character of dense natural vegetation would give way to a more open and "manicured" separation between understory and tree canopy within the shaded fuel break area. This visual effect would be most noticeable immediately after initial fuel hazard reduction and/or vegetation management activities are conducted, when traveling along the fire roads and from viewing areas within and directly adjacent to the shaded fuel breaks. However, because the project does not include development, removal of healthy trees, or creation of and grading of new roads, the overall visual character of visually sensitive hillsides would remain substantially similar to existing conditions when viewed from State Route 1, State Route 68, Carmel Valley Road, and other public viewing areas.

Although the topography and natural vegetation within target treatment and/or easement areas form the backdrop of scenic vistas visible from public roadways, implementation of fire road maintenance, fuel hazard reduction, and vegetation management activities consistent with the respective fire defense plan policies would not substantially affect the visual quality of these areas. As a result, although the proposed plan activities would slightly alter visual character along existing and newly designated fire roads and fuel breaks, the overall aesthetic value of scenic vistas and visual quality of each district would remain intact. The impact to the overall visual quality of each district would be less than significant.

d. All proposed fire road maintenance, fuel hazard reduction, and vegetation management activities identified in the Pebble Beach CSD plan update and Cypress FPD and Carmel Highlands FPD plans would be conducted during daylight hours. These activities would occur in specific areas dispersed throughout each district, which are either open space or developed with low density residential uses. It is possible that the thinning of dense vegetation may create an opportunity for existing sources of night lighting or glare during the day to be visible from distant locations; however, the majority of tree canopy and vegetation cover would remain largely intact and the project would not substantially reveal existing sources of light or glare that would result in significant impacts to day or nighttime views within or in the vicinity of the project area. No mitigation is required.

2. AGRICULTURE AND FOREST RESOURCES

In determining whether impacts on agricultural resources are significant environmental effects and in assessing impacts on agriculture and farmland, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than- Significant Impact	No Impact
a.	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use? (12,24,26-28)				✓
b.	Conflict with existing zoning for agricultural use, or a Williamson Act contract? (12,25, 26-28)				✓
c.	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? (9-11,13-17, 26-29)				√
d.	Result in the loss of forest land or conversion of forest land to non-forest use? (9-11,13-17, 26-32)				✓
e.	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forest land to non-forest use? (9-11,13-17, 26-32)				√

Comments:

a. Two parcels designated by the Farmland Mapping and Monitoring Program of the California Resources Agency (California Department of Conservation) as prime farmland and unique farmland are located within the Cypress FPD boundary east of State Route 1 and south of the Carmel River on a portion of the former Odello Ranch. The parcels are in active row crop production. The remainder of land within all three districts is categorized as "Urban and Built-Up Land" or "Other Land" (California Department of Conservation 2016a).

The two parcels designated as prime and unique farmland are bounded by farm roads and are not located within fire defense priority areas or target treatment areas of the Cypress FPD plan. Implementation of the proposed fire road maintenance, hazardous fuel reduction, and vegetation management activities consistent with Cypress FPD policy standards within this area would not affect the use of the land or cause a loss of farmland. Therefore, there would be no impacts to farmland resources.

- b. There are no parcels subject to Williamson Act Conservation contracts located within the project boundary (California Department of Conservation 2016b). Therefore, no conflicts with the Williamson Act would occur. The two parcels designated as prime and unique farmland, discussed above, are designated as Coastal Agricultural Preserve and Medium Density Residential by the Monterey County general plan, as shown on the County's Geographic Information System zoning maps (Monterey County 2018). Coastal Agricultural Preserve zoning sets forth development standards that preserve and enhance the use of the prime, productive and unique farmlands in the County of Monterey. Implementation of the proposed fire road maintenance, hazardous fuel reduction, and vegetation management activities consistent with Cypress FPD policy standards would not conflict with the agricultural zoning. Therefore, no indirect impacts to agricultural resources resulting from changes in agricultural zoning or conflicts with Williamson Act conservation easements would occur.
- c. According to the County's general plan Land Use Element, there are no parcels designated or zoned for timberland production in Monterey County (Monterey County 2010, p. LU-2). Therefore, no impacts to commercial timberland would result from implementation of each fire defense plan.

The California Public Resources Code Section 12220 (g), defines "forest land" as land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits. Forest lands meeting this definition are found in

all three fire districts, and implementation of the proposed maintenance activities consistent with the fire defense plan policies within each district would occur within and adjacent to forest land areas.

Monterey County policies that address and support conducting fire road/fuel break, hazardous fuels reduction and vegetation management activities within identified forest lands are found in the area and land use plans identified Section 1, Aesthetics. These policies support fuel reduction and fire road maintenance activities within each district. The proposed activities, consistent with each district's respective standards would not affect the physical characteristics of forest land areas or zoning. The existing tree canopy and vegetation within the district boundaries would remain intact.

Pebble Beach CSD

Within the Pebble Beach CSD boundary, *Del Monte Forest Area Land Use Plan* Policy 35 allows trimming of trees to reduce fire hazards provided their overall health is not jeopardized. Fuel modifications on developed parcels are subject to consistency with the defensible space requirements of Public Resources Code 4291 and Pebble Beach CSD Ordinance 19.

Cypress FPD and Carmel Highlands FPD

Within the boundaries of the Cypress FPD and Carmel Highlands FPD, fuel modifications on developed parcels are subject to consistency with the defensible space requirements of Public Resources Code 4291, Cypress FPD Ordinance 2008-06, and Carmel Highlands FPD Ordinance 11-2008. Implementation of proposed maintenance, fuel reduction and vegetation management activities consistent with the Cypress FPD and Carmel Highlands FPD plans have the potential to impact forestland resources, the protection of which are the responsibility of other public agencies including California State Parks, the Monterey Regional Parks District, Monterey County Parks Department, City of Carmel-by-the-Sea, and Caltrans. Implementation of project activities consistent with the proposed Cypress FPD and Carmel Highlands FPD plan policies has the potential to conflict with these other agencies' respective policies for the protection of forestland resources, which would be a potentially significant impact. Consultation with the agency prior to implementation of plan activities is needed to develop site-specific fuel reduction activities, identify parties responsible for implementing them to avoid jurisdictional conflicts, and minimize potential impacts to forestland resources within: Jack's Peak Park, Palo Corona Regional Park, Carmel River State Beach, Hatton Canyon, Point Lobos State Natural Reserve, Point Lobos Ranch Park Property, and Garrapata State Park.

Coordination with stakeholder agencies is included in each of the Cypress FPD and Carmel Highlands FPD plans Section III. In addition, Section IV-C. 3 of the respective plans sets forth policy provisions and procedures for owners of vacant or environmentally sensitive public and private parcels to opt out of all or some of the district's respective fuel reduction and maintenance standards. Interagency coordination as called for in Section III of the plans reduces the potential for project implementation to result in impacts to forestland resources that are the responsibility of other public agencies, and will also avoid regulatory conflicts from plan implementation. The purpose of consultation is to identify sensitive environmental resources, including forestland resources, within and adjacent to public lands, and to develop appropriate Best Management Practices for implementing recommended fuel reduction and vegetation management activities consistent with agency policies and procedures to avoid or minimize impacts to forestland resources. Implementation of project activities consistent with the provisions of the respect fire defense plan Section III, ensures that no significant impacts to forestland resources will occur.

d,e. Implementation of proposed fire road / fuel break maintenance, hazardous fuels reduction, and vegetation management activities consistent with the three districts' respective fire defense plans would not result in a significant change to designated forest resources within any district and would not result in the conversion of agricultural or forest lands to other uses. Therefore, no impacts would occur to important farmland or forestland resources.

3. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than- Significant Impact	No Impact
a.	Conflict with or obstruct implementation of the applicable air quality plan? (1,6, 26-28,37,38,47)				✓
b.	Violate any air quality standard or contribute substantially to an existing or projected air quality violation? (1,6,11,26-28,34,35,37,39)				✓
c.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)? (1,6,26-28,34,37)			√	
d.	Expose sensitive receptors to substantial pollutant concentrations? (6,26-28,34,37)			✓	
e.	Create objectionable odors affecting a substantial number of people? (26-28)				✓

Comments:

This section is based primarily on Monterey Bay Air Resources District (formerly Monterey Bay Unified Air Pollution Control District, hereinafter "air district") guidance and methodologies for preparation of environmental documents.

a. Consistency with the Air Quality Management Plan. The Pebble Beach CSD, Cypress FPD, and Carmel Highlands FPD are located within the North Central Coast Air Basin (air basin), which is under the jurisdictional authority of the Monterey Air Resources District (air district). The project does not include development and would not conflict with the air district's regional Air Quality Management Plan. The air district adopted the 2012-2015 Air Quality Management Plan on March 15, 2017. Projects related directly to population growth generate population-related emissions (e. g., motor vehicles, residential heating and cooling emissions). Population-related emissions have been estimated in the air quality management plan; population-

related projects that are consistent with these forecasts are consistent with the plan. Projects not related directly to population growth are considered to be consistent with the plan. Because the project is not population-accommodating rather than growth-related, it would not conflict with the plan.

- b/d. **Air Quality Standards.** The project site is located in the North Central Coast Air Basin, which is currently in non-attainment status with state standards for ozone and suspended particulate matter (PM₁₀). State standards are promulgated by the California Air Resources Board as mandated by the California Clean Air Act. The air district has developed criteria pollutant emissions thresholds, which are used to determine whether or not the project would violate an air quality standard or contribute to an existing violation during operations and/or construction. Based on the air district's CEQA guidelines, a project would have a significant air quality impact if it would:
 - Emit 137 pounds per day or more of an ozone precursor air pollutant (volatile organic compounds or nitrogen oxides);
 - Directly emit 550 pounds per day or more of carbon monoxide;
 - Generate traffic that significantly affects levels of service (result in a significant localized source of emission of carbon monoxide);
 - Emit 82 pounds per day or more of suspended particulate matter on-site, which is equivalent to general construction activity over an area of at least 8. 1 acres per day, or grading/excavation over an area of at least 2. 2 acres per day; or
 - Emit 82 pounds per day or more of suspended particulate matter from vehicle travel on unpaved roads.

Operational Impacts. Particulate matter pollution consists of very small liquid and solid particles floating in the air. Particulate matter is a mixture of materials that can include smoke, soot, dust, salt, acids, and metals. Particulate matter also forms when gases emitted from motor vehicles and industrial sources undergo chemical reactions in the atmosphere. Natural sources of particulates include sea spray, forest fires, volcanic debris, etc. (Monterey County 2008). Implementation of the fire road maintenance, fuel reduction, and vegetation management activities consistent with the districts' respective plan policies has the potential to generate smoke from prescribed burning and dust and equipment exhaust emissions in proximity to sensitive receptors. Dust and equipment exhaust emissions would be similar to short term emissions that typically occur during construction projects and would occur within all three districts.

Smoke Emissions. Smoke emissions would be generated by prescribed broadcast or pile burning as a method of fuel hazard reduction activity on fire road / breaks within the Cypress FPD and Carmel Highlands FPD. Prescribed burning is not proposed by the Pebble Beach CSD Plan. Compliance with Cypress FPD and Carmel Highlands FPD Policy IV-C. 6, Fuel Reduction Standards, Standard #6, states that broadcast and pile burning may be used as a first entry or maintenance fuel reduction management tool. 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. The Carmel Highlands FPD plan identifies the target treatment areas of Point Lobos, Red Wolf and Upper Corona as suitable candidate areas for broadcast burning.

Prescribed burns in the form of broadcast or pile burning are subject to compliance with Title 17 of the California Code of Regulations Subchapter 2, Section 80160, Special Requirements for Prescribed Burning and Prescribed Fires in Wildland and Wildland/Urban Interface Areas (California Air Resources Board 2018a), and the air district's Rule 438 (California Air Resources Board 2018b). Title 17, Section 80160 requires air district smoke management programs to identify rules and regulations or other enforceable mechanisms that require registration of all planned annual or seasonal burn projects and the submittal of smoke management plans for all burn projects greater than 10 acres in size or that are estimated to produce more than one ton of particulate matter. Smoke management plans must identify, at a minimum, the location, types, and amounts of material to be burned; expected duration of the fire from ignition to extinction; identification of responsible personnel, including telephone contacts; and identification and location of all smoke sensitive areas.

The air district permits the use of controlled burning for the purposes of managing wildlands in accordance with state regulations and District Rule 438. Rule 438 requires, among other items, the preparation of a smoke management plan and prohibits the recurrent use of fire hazard reduction burns to resolve a fire hazard. Controlled broadcast burns are allowed when conducted or ordered by a public fire agency for reducing vegetation that has been determined to pose a fire risk to the public and cannot be abated by any other means, and provided that all other components of Rule 438 are met. As part of its review, the air district requires the submission of data to support an acceptable range of weather, moisture, fuel and fire behavior parameters. Smoke emissions from controlled burning can include carbon monoxide and particulate matter and broadcast burning is not allowed by Rule 438 unless no other alternative is available and only in the most hazardous of conditions identified by the district Fire Chief in consultation with the air district.

Rule 438 Figure 1, identifies portions of the Monterey Peninsula and Carmel Valley as "Smoke Sensitive Areas" and Part 8 of the rule generally prohibits open burning, but allows for exemptions for managed burning of rangeland, forest, and wildlife areas. Part 8 sets forth specific regulations for conducting burns including limitations on the number of days that burning can occur and placing limits on the total number of burns to no more than 25 burns per burn day. The Cypress FPD and Carmel Highlands FPD are agencies authorized to issue permits under the air district Rule 438 and regularly coordinate with the air district. If the broadcast and pile burning treatments are determined necessary pursuant to the requirements of Rule 438, each district will conduct them in accordance with all requirements of Rule 438 Part 8 requirements for all burning activity that can affect the Monterey Peninsula and Carmel Valley Smoke Sensitive Areas. Compliance with Rule 438 Part 8 will reduce potential for significant smoke emissions to less than significant and no mitigation is required.

Dust and Equipment Exhaust Emissions. The air district defines fugitive dust as including "wind-blown dust from disturbed soil surfaces, construction sites, ag tilling activities, aggregate processing operations and dust raised by vehicles traveling on paved and unpaved roads" (Monterey Bay Air Resources District 2008, page 3-4). Construction activities (e. g. , excavation, grading, on-site vehicles) which directly generate 82 pounds per day or more of PM₁₀ would have a significant impact on local air quality when they are located nearby and upwind of sensitive receptors. (Monterey Bay Air Resources District 2008, pages 5-3 – 5-4).

Short-term construction emissions are typically generated by the use of heavy equipment, the transport of materials, and personnel commute trips. Implementation of the fire road maintenance, fuel hazard reduction, and to a lesser extent, vegetation management activities within each district have the potential to generate dust and equipment exhaust emissions similar to construction emissions.

Project activities would include temporary and periodic use of equipment to mow, trim, and dispose of hazardous fuels, maintain existing fire roads/fuel breaks as needed, and managing vegetation growth within fuel breaks. Minor grading activities would be necessary to maintain access on designated fire roads. Project activities would occur within each target treatment area on an annual basis over a period of several days as identified in the districts' respective plans. Dust and equipment exhaust emissions would occur on an intermittent and temporary basis and would not be a substantial source of emissions. As such emissions generated by the implementation of project activities in a given area consistent with the respective fire defense plan policies would be "short-term" in the sense that they would be

limited to the actual periods of activity in specific locations. The project does not include grading or other soil disturbances on more than 8. 1 acres per day, which would exceed the air district standard for dust emissions. Therefore, the dust and equipment exhaust emissions generated by the project will be less than significant.

- c. The air basin is in nonattainment with state standards for ozone precursors such as reactive organic gases (ROG) and PM₁₀. Implementation of project activities would contribute incrementally to ozone precursor emissions (equipment exhaust) and PM₁₀ emissions. However, dust and exhaust, and in rare instances, smoke emissions generated by the project would not exceed air district standards and would not occur in any one location for an extended length of time. Therefore, the project's emissions would not be cumulatively considerable. No mitigation is required.
- d. Although air pollution can affect all segments of the population, certain groups are more susceptible to its adverse effects than others. Children, the elderly, and the chronically or acutely ill are the most sensitive population groups. These sensitive receptors are commonly associated with specific land uses such as residential areas, schools, parks, retirement homes, and hospitals. In addition, certain air pollutants, such as carbon monoxide, only have significant effects if they directly affect a sensitive population. Project activities that generate dust and equipment exhaust emissions would take place within and in proximity to residential communities and neighborhoods in all three districts, including the assisted living and retirement communities of Pacific Meadows and Del Mesa in Carmel Valley (Cypress FPD), which are considered sensitive receptors. Since the project would not generate substantial dust and equipment exhaust emissions and sources of project emissions would not be present in one location for extended periods of time, sensitive receptor exposures would be brief and prolonged exposures would not occur. Coordination with the air district for conducting permitted prescribed burning treatments as identified in the discussion of item b, above, would reduce potential impacts from an increase in smoke to a less-than-significant level.

Some vegetation management activities, such as prescribed burning and mechanical treatments to remove understory vegetation and non-native plants to reduce the risks of wildfire would result in short term impacts to local and regional air pollution in the short-term. Dust, equipment exhaust, and smoke emissions would be far less than the emissions generated by a wildfire that could result if such vegetation were left untreated. Any air pollutant emissions generated by the vegetation management and fuel reduction activities emissions identified in each of the three district plans would have only short-term negative impacts, whereas the amounts of air pollution created by wildfires would have more significant, longer-term impacts to health and safety of

- both sensitive receptors in the immediate vicinity as well as those located at greater distances downwind from the three plan boundaries due to prevailing wind patterns and the volume of air pollutants sent into the air by a large wildfire event.
- e. Project activities would generate odors from equipment exhaust, which would be short term and occur only during site-specific activity. These temporary odor emissions would be noticeable only in the immediate vicinity of activity. Therefore, no significant impact would occur.

4. BIOLOGICAL RESOURCES

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than- Significant Impact	No Impact
a.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service? (1,9-11,13-17,19,26-32,42-46,50)		✓		
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service? (1,9-11,13-17,19,26-32,42-46,50)		✓		
c.	Have a substantial adverse effect on federally protected wetlands, as defined by section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.), through direct removal, filing, hydrological interruption, or other means? (,9-11,13-17,19,26-32,42,44)		✓		
d.	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? (1,9-11,13-17,26-32,42)		•		
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? (1,9-11,13-17,26-32,42)				✓
f.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? (1,9- 11,13-17, 42)				✓

Comments:

The project consists of different treatment options for fire road maintenance, fuel hazard reduction and vegetation management, each involving activity that could result in a greater level of ground disturbance than others. Special-status species and protected habitats may be adversely impacted as a result of treatment actions.

The discussion in this section is based on a review of aerial photography, existing biological resource information, and biological inventory databases and information in local land use plans. Maps showing the results of database inventory queries for known occurrences of special status plant and wildlife species and aquatic features within each district are included in Appendix D. A search of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) was conducted for the Monterey, Seaside, Soberanes Point, Mount Carmel, and Carmel Valley U. S. Global Survey (USGS) quadrangles in order to evaluate potentially occurring special-status plant and wildlife species within the districts. Records of occurrence for special-status plants were reviewed for those same USGS quadrangles in the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants. A U. S. Fish and Wildlife Service (USFWS) threatened and endangered species list was also generated for Monterey County. These lists are included as Appendix E.

A review of the National Wetlands Inventory (U. S. Fish and Wildlife Service 2018) and the Geographic Information System (GIS) data for wetlands and water features maintained by Monterey County (Monterey County 2017) was conducted to identify where the proposed clearing and maintenance activities may occur within or adjacent to jurisdictional aquatic features.

Measures to protect sensitive biological resources within all three districts are identified in the *Del Monte Forest Area Land Use Plan* (Monterey County 2012), the *Carmel Area Land Use Plan* (Monterey County 1983), the *Greater Monterey Peninsula Area Plan, Carmel Valley Master Plan*, and the *Big Sur Coast Land Use Plan* (Monterey County 1985). These plans are focused primarily on development but also contain a number of policies that limit grading, tree and vegetation removal, and regulate invasive species removal and buffers for aquatic resources.

Special-status Species

a. Special-status species in this report are those listed as Endangered, Threatened, or Rare, or as Candidates for listing by the USFWS or CDFW under the state and/or federal Endangered Species Acts. The special-status designation also includes CDFW Species of Special Concern and Fully Protected species, CNPS Rare Plant Rank 1B and 2B species, and other locally rare species that meet the criteria for listing as described in Section 15380 of the CEQA Guidelines. Special-status species are generally rare, restricted in distribution, declining throughout their range, or have a critical, vulnerable stage in their life cycle that warrants monitoring.

Pebble Beach CSD

The Pebble Beach CSD begins at the City of Pacific Grove and extends to the southern border of Pebble Beach. The district encompasses an approximately eight-square-mile area (5,300 acres) of coastal parcels including residential, recreational, and open space lands. The Pebble Beach (Del Monte Forest) community is largely built out; however biological communities including Monterey pine forest, central maritime chaparral, Monterey pygmy forest, Monterey cypress forest, grassland, coastal dune scrub, riparian, and wetland habitats are potentially present within the project areas. Policies for the protection of biological resources within the Pebble Beach CSD boundary are identified in the *Del Monte Forest Area Land Use Plan* (2012) and the *Greater Monterey Peninsula Area Plan* (2010). Policies specific to biological resources detail requirements for protecting and enhancing natural resources, including those related to freshwater resources (wetlands, streams, creeks, etc.), marine resources (intertidal areas, roosting and haul-out sites, etc.), coastal zone Environmentally Sensitive Habitat Areas (ESHA), forests, trees, and natural landforms. The following policies are potentially applicable to the project:

- Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values. (Del Monte Land Use Plan (LUP) Policy 8)
- Contiguous areas of land in open space uses shall be maintained wherever possible to protect environmentally sensitive habitat areas and associated wildlife values.
 (Del Monte LUP Policy 11)
- Non-native and/or invasive plant species should be removed, and such removal is encouraged. (Del Monte LUP Policy 15)
- Riparian plant communities shall be protected by establishing a setback/buffer of at least 100 feet as measured from the outer edge of riparian vegetation. (Del Monte LUP Policy 23)
- A setback/buffer of at least 100 feet as measured from the edge of wetlands and from the mean high water line of the ocean shall be provided. (Del Monte LUP Policy 25)
- The natural forest soil cover shall be retained in place to the maximum extent possible. (Del Monte LUP Policy 34)
- Exceptions to the State Forest and Fire Law may be necessary where ESHA is present and/or where prior restrictions (including in Forest Management Plans) dictate otherwise (Del Monte LUP Policy 45)

- Environmentally sensitive habitat areas shall remain undeveloped except for resource-dependent development that will not significantly disrupt habitat values. (Del Monte LUP Policy 71)
- A 100-foot setback from all wetlands, as identified by a qualified biologist, shall be provided and maintained in open space use. No landscape alterations will be allowed in this setback area unless accomplished in conjunction with a restoration and enhancement plan prepared by a qualified biologist and approved by the California Department of Fish and Game. (Greater Monterey Peninsula Area Plan Policy GMP-3. 6)

Cypress FPD

The Cypress FPD begins at the southern end of Pebble Beach and extends from Pescadero Canyon, along Highways 1 and 68, neighboring the city of Carmel-by-the-Sea on the north, east and south, stretching from the beaches to approximately three miles east of the mouth of Carmel Valley to the south, encompassing 7,320 acres. Habitat communities present include coastal scrub, chaparral, Gowen cypress woodland, coast live oak woodland, riparian woodland, Monterey pine forest, grassland, redwood forest, Monterey cypress forest, coastal strand, riparian, and wetlands.

Policies for the protection of biological resources within the Cypress FPD boundary are identified in the *Greater Monterey Peninsula Area Plan* (2010), *Carmel Valley Master Plan* (2013), and *Carmel Area Land Use Plan* (1986). Policies specific to biological resources detail requirements for protecting and enhancing natural resources, including those related to freshwater resources (wetlands, streams, creeks, etc.), marine resources (intertidal areas, roosting and haul-out sites, etc.), ESHA, forests, trees, and natural landforms. The following policies are potentially applicable to the project:

- A 100-foot setback from all wetlands, as identified by a qualified biologist, shall be provided and maintained in open space use. No landscape alterations will be allowed in this setback area unless accomplished in conjunction with a restoration and enhancement plan prepared by a qualified biologist and approved by the California Department of Fish and Game. (Greater Monterey Peninsula Area Plan Policy GMP-3. 6)
- Alteration of hillsides and natural landforms caused by cutting, filling, grading, or vegetation removal shall be minimized through sensitive siting and design of all improvements and maximum feasible restoration including botanically appropriate landscaping. Where cut and fill is unavoidable on steep slopes, disturbed areas shall be revegetated. (Carmel Valley Master Plan Policy CV-3. 4)
- Eradication plans for weedy species shall be incorporated. (Carmel Valley Master Plan Policy CV-3. 10 d)

- The chaparral community shall be maintained in its natural state to the maximum extent feasible in order to preserve soil stability and wildlife habitat and also be consistent with fire safety standards. (Carmel Valley Master Plan Policy CV-3. 10 e)
- Riparian plant communities shall be protected by establishing setbacks consisting of a 150-foot open space buffer zone on each side of the bank of perennial streams and 50 feet on each side of the bank of intermittent streams, or the extent of riparian vegetation, whichever is greater. The setback requirement may be modified if it can be demonstrated that a narrower corridor is sufficient to protect existing riparian vegetation. (Carmel Area Land Use Plan, Riparian Corridors and Other Terrestrial Wildlife Habitats, Policy 1)
- Except where necessary to alleviate a hazardous situation, snag removal should be avoided in areas of Monterey pine, coast live oak, or coast redwood which are retained in open space use. (Carmel Area Land Use Plan, Riparian Corridors and Other Terrestrial Wildlife Habitats, Policy 8)
- A setback of 100 feet from the edge of all coastal wetlands shall be provided and maintained in open space use. (Carmel Area Land Use Plan, Wetlands and Marine Habitats, Policy 1)

Carmel Highlands FPD

The Carmel Highlands FPD begins just south of the Carmel River, and stretches five miles down the coast to Victorine Ranch and three miles inland from the coast line to the ridge of the west facing slope, encompassing approximately 6,000 acres. Habitat communities present include coastal scrub, chaparral, coast live oak woodland, riparian woodland, Monterey pine forest, grassland, redwood forest, Monterey cypress forest, coastal strand, riparian, and wetlands. Policies for the protection of biological resources within the Carmel Highlands FPD boundary are identified in the Carmel Area Land Use Plan (1986) and Big Sur Coast Land Use Plan (1996). Policies specific to biological resources detail requirements for protecting and enhancing natural resources, including those related to freshwater resources (wetlands, streams, creeks, etc.), marine resources (intertidal areas, roosting and haul-out sites, etc.), ESHA, forests, trees, and natural landforms. The following policies are potentially applicable to the project:

Riparian plant communities shall be protected by establishing setbacks consisting of a 150-foot open space buffer zone on each side of the bank of perennial streams and 50 feet on each side of the bank of intermittent streams, or the extent of riparian vegetation, whichever is greater. The setback requirement may be modified if it can be demonstrated that a narrower corridor is sufficient to protect existing riparian vegetation. (Carmel Area Land Use Plan, Riparian Corridors and Other Terrestrial Wildlife Habitats, Policy 1)

- Except where necessary to alleviate a hazardous situation, snag removal should be avoided in areas of Monterey pine, coast live oak, or coast redwood which are retained in open space use. (Carmel Area Land Use Plan, Riparian Corridors and Other Terrestrial Wildlife Habitats, Policy 8)
- A setback of 100 feet from the edge of all coastal wetlands shall be provided and maintained in open space use. (Carmel Area Land Use Plan, Wetlands and Marine Habitats, Policy 1)
- Setbacks of 150' on each side of the streambank shall be required for all streams to protect riparian plant communities unless a narrower corridor can be demonstrated to be sufficient to protect existing vegetation and provide for restoration of previously disturbed vegetation. (Big Sur LUP, Terrestrial Plant, Riparian, and Wildlife Habitats. Policy 4)
- Monterey County encourages residents and public agencies to undertake restoration of Big Sur's natural environment by removal of exotic plants such as Scotch and French Broom, Eucalyptus, Kikiyu grass, Vinca, Pampas grass, Gorse, and other non-native invasive species providing such removal does not increase potential erosion problems. (Big Sur LUP, Terrestrial Plant, Riparian, and Wildlife Habitats. Policy 10)

Special-status species documented within the plan areas and vicinity, their listing status and suitable habitat description, and their potential to occur within the plan areas are listed in tables included in Appendix E: Special-Status Plant and Wildlife Species with Potential to Occur Within the Plan Areas and Vicinity. Discussion of special-status plant and wildlife species with potential to occur on the project site (or otherwise requiring special explanation) are presented in the following subsections.

Special-status Plants

Implementation of fire road maintenance, hazardous fuel removal, and vegetation management activities consistent with the policies of all three fire defense plans have the potential to adversely affect special status species. Special-status plant species known to occur within each district are shown in Table 3, Special-Status Plant Species Known to Occur or to Have Historically Occurred in Each District, along with their respective blooming periods. These are known special-status species occurrences maintained in the CNDDB within the district boundaries; additional species may be observed during site-specific surveys.

Table 3 Special-Status Plant Species Known to Occur or to Have Historically Occurred in Each District

Species	Blooming Period	Cypress FPD	Carmel Highlands FPD	Pebble Beach CSD
Angel's hair lichen (Ramalina thrausta)	None (Recognizable all year)	,	-	✓
Beach layia (<i>Layia carnosa</i>)	March - July	-	-	✓
Carmel Valley bush-mallow (<i>Malacothamnus palmeri</i> var. <i>involucratus</i>)	May - October	✓	-	√
Coastal dunes milkvetch (Astragalus tener var. titi)	March - May	-	-	√
Eastwood's goldenbush (Ericameria fasciculata)	July - October	√	√	√
Fragrant fritillary (<i>Fritillaria liliacea</i>)	February - April	√	-	√
Gowen cypress (Cupressus goveniana ssp. goveniana)	Evergreen (Recognizable all year)	-	√	✓
Hickman's cinquefoil (Potentilla hickmanii)	April - August	-	-	✓
Hickman's onion (<i>Allium hickmanii</i>)	April - May	~	-	√
Hooker's manzanita (Arctostaphylos hookeri ssp. hookeri)	February – April (Recognizable all year)	✓	✓	√
Hutchinson's larkspur (<i>Delphinium hutchinsoniae</i>)	March - June	-	√	✓
Jolon clarkia (<i>Clarkia jolonensis</i>)	April - June	√	√	✓
Kellogg's horkelia (Horkelia cuneata var. sericea)	April - September	√	✓	✓
Maple-leaved checkerbloom (Sidalcea malachroides)	April - August	-	-	√
Marsh microseris (<i>Microseris paludosa</i>)	April - June	√	✓	✓
Menzies's wallflower (Erysimum menziesii)	March - June	-	-	√
Monterey clover (Trifolium trichocalyx)	April - June	-	-	√
Monterey cypress (Hesperocyparis macrocarpa)	Evergreen (Recognizable all year)	-	✓	√

Species	Blooming Period	Cypress FPD	Carmel Highlands FPD	Pebble Beach CSD
Monterey gilia (Gilia tenuiflora ssp. arenaria)	April - June	-	-	√
Monterey pine (<i>Pinus radiata</i>)	Evergreen	√	✓	-
Monterey spineflower (Chorizanthe pungens var. pungens)	April - June	√	✓	*
Northern curly-leaved monardella (<i>Monardella sinuata</i> ssp. <i>nigrescens</i>)	April - September	√	-	√
Pacific Grove clover (<i>Trifolium polyodon</i>)	April - June	-	✓	√
Pine rose (Rosa pinetorum)	May - July	-	✓	√
Pink Johnny-nip (Castilleja ambigua ssp. insalutata)	May - August	-	√	√
Pinnacles buckwheat (Eriogonum nortonii)	May - June	-	✓	-
Sandmat manzanita (Arctostaphylos pumila)	February – May (Recognizable all year)	~	✓	~
Saline clover (<i>Trifolium hydrophilum</i>)	April - June	-	-	√
San Francisco collinsia (Collinsia multicolor)	March - May	-	-	√
Seaside bird's-beak (Cordylanthus rigidus ssp. littoralis)	May - October	√	-	-
Tidestrom's lupine (Lupinus tidestromii)	April - June	-	-	✓
Twisted horsehair lichen (Bryoria spiralifera)	None (Recognizable all year)	-	✓	-
Yadon's rein orchid (<i>Piperia yadonii</i>)	May - August	~	✓	~

Source: CDFW CNDDB 2018, EMC Planning Group 2018

Pebble Beach CSD

The locations of the proposed sensitive resource area conservation easements (easements) are shown on Figure 7. Of these, only the proposed easement area PQR is located within a Target/Treatment Area identified in Section III of the Pebble Beach CSD fire defense plan update (Pescadero Canyon).

Locations of known special-status plant species within the Pebble Beach CSD boundary are shown on Figure D-1 of Appendix D. Special-status plant species observed on each of the proposed easements are identified in the *Pebble Beach Company Project Environmental Impact Report* (Monterey County 2012).

The Pebble Beach CSD plan Policy III-B. 1 establishes perimeter fire protection zones, requires fuel modification within 20 feet of all roadways bordering the Pescadero Canyon easement, and calls for compliance with shaded fuel break standards identified in Policy III-B. 2 on slopes greater than 30 percent. Policy III-B. 1 allows for a greater shrub understory than would otherwise be required by strict adherence to the roadway standards identified in the plan Policy I-B. These standards apply to the existing fire roads and fire/road fuel breaks identified in Appendix C of the proposed plan. Fire Road 21 and Fire Road/Fuel Break No. 21 and No. 23 would be maintained as shaded fuel breaks.

Hazardous fuel reduction standards for open space parcels are found in Section IV, Undeveloped, Vacant or Open Space Parcels. Policy IV-C provides fuel reduction standards for vacant and open space parcels (refer to the project description). Policy IV-C. 3 sets forth procedures to exclude certain environmentally sensitive/scenic designated parcels from compliance with all or some of the adopted hazardous fuel reduction standards upon written request and reasons for the request by the parcel owner. Fire road maintenance and hazardous fuel management activities on easements outside of the target treatment areas would be subject to compliance with policy standards for routine maintenance and management activities for vacant and undeveloped parcels identified in the fire defense plan Section IV-C.

The Pebble Beach CSD plan includes provisions for coordinating efforts to avoid cutting or removing sensitive plan species when hazardous fuel reduction work must be undertaken within areas that contain them. Policy II, Protection of Environmentally Sensitive Plant Species, provides clarification of standard procedures for safeguarding threatened or endangered environmentally sensitive plant species in open space areas of Del Monte Forest. Policy II-A provides for the Del Monte Forest Open Space Advisory Committee to designate a qualified biologist or appoint a member to coordinate with Pebble Beach CSD fire department and identify all protected species in the work area at least two weeks prior to the onset of work within the sensitive resource area conservation easements. Policy II-B grants authority to the Open Space Advisory Committee's designee to halt hazard reduction work if sensitive species could or are being damaged. Under this policy, "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 Open Space Advisory Committee representative, and the parties have reached agreement on a specific plan of action. "

In areas where further action plans are required, additional avoidance and minimization measures are necessary prior to conducting the fuel reduction work.

Cypress FPD and Carmel Highlands FPD

Maintenance and fuel management activities allowed by the Cypress FPD plan consist of designating and marking fire roads and fuel breaks, roadway maintenance, and vegetation management consistent with the plan standards for fire roads and fuel breaks. Although no new roads or fuel breaks are proposed, implementation of fire road maintenance (including grading), fuel hazard reduction, and vegetation management activities consistent with the proposed fire defense plan policies has the potential to impact sensitive plant species that are present within each district.

Locations of known special-status plant species within the Cypress FPD boundary are shown on Figure D-2 and within the Carmel Highlands FPD boundary on Figure D-3 of Appendix D.

Both the Cypress FPD and Carmel Highlands FPD fire defense plans Section II, Protection of Environmentally Sensitive Plan Species include Policy II-B, which allows property owners and district representatives the authority to stop work if they believe environmentally sensitive species could or are being damaged by the project activities. Any work area in question would be cordoned off and hazard reduction work would not proceed until the Fire Chief or the Fire Chief's designated representative for the respective district has reviewed and developed a specific plan of action.

The proposed Cypress FPD and Carmel Highlands FPD fire defense plans do not include policy standards and procedures to address special-status plant species within the respective districts. As such there are no provisions or avoidance measures in the proposed plans that can be implemented to avoid or minimize potential impacts to special-status plant species. Designating fire roads and identifying fuel breaks would not immediately result in significant impacts to special-status plant species; however, future implementation of the fire road maintenance, hazardous fuel reduction, and vegetation management activities has the potential to significantly affect special-status plant species through their removal, or substantial pruning or trimming, siltation from maintenance activities on unpaved roads, etc. This would be a potentially significant impact. Implementation of the mitigation measures identified later in this section would add procedural standards and policy for avoiding impacts

to special-status plant species and plant communities based on site-specific road maintenance, fuel reduction and vegetation management activities. These measures would include requirements for pre-project biological surveys and assessments to identify populations of special-status plant species that could be impacted by site-specific activities, and implementation standards to reduce potential impacts to less than significant.

Implementation of the following mitigation measures, the agency coordination requirements in Section III of the Cypress FPD and Carmel Highlands FPD plans, ensures that appropriate avoidance and minimization measures are in place and would be implemented that reduce potentially significant impacts to protected plant species within each district to less than significant.

Mitigation Measures

BIO-1 Prior to implementation of the Pebble Beach CSD plan update, and the Cypress FPD and Carmel Highlands FPD fire defense plans, the following new policy and standard best management practices and avoidance measures for the identification and protection of special-status plant resources shall be incorporated into the Pebble Beach CSD, Cypress FPD, and Carmel Highlands FPD fire defense plans:

Policy II. C: Protection of Sensitive Plant and Wildlife Species

Standard #1. Special-Status Plant Surveys. Prior to the onset of project activity, the qualified biologist will conduct surveys to ensure that potential impacts to protected plant species are avoided. The project biologist is authorized to halt work, modify project activities, and identify additional buffer zones or other areas where no activities will occur for the purposes of avoiding impacts to protected species.

In areas identified as suitable habitat for special-status plant species, no work shall proceed without first implementing the following protective measures:

a. Prior to the start of activities the qualified biologist will conduct surveys for special-status plant species in all areas where proposed mowing activity will occur. The surveys will target the special-status plant species with potential to occur on the project site, and the survey will be performed within 14 days prior to the start of project activities. If discovered, special-status plant species will be flagged and a 50-foot exclusion area surrounding the plants, within which no work shall occur, will be marked and

- observed. The qualified biologist will monitor the work occurring near the exclusion area to ensure work activities do not disturb special-status plant species;
- b. The qualified biologist will monitor all project activities that are undertaken within areas that are potentially occupied by special-status plant species.
- Hazardous fire fuels will not be removed using herbicides within 50 feet of areas that are potentially occupied by special-status plant species;
- d. Disturbances that have the potential to impact protected plant species will be avoided by implementing the following additional measure, subject to approval by the project biologist:
 - Mowing activities will maintain a minimum vegetation height of four (4) inches. Ladder fuel reduction in these areas will be conducted by hand. Understory trimming will maintain a minimum 18 inches from ground height unless a lower height is approved by the project biologist based on the results of the pre-activity surveys for protected plant species.

Standard #2. Environmental Awareness Training. The qualified biologist will conduct environmental awareness training for all treatment crews and contractors. The training will be conducted prior to implementation of the maintenance activities and on the arrival of any new worker. Training will include:

- a. A brief review of special-status species and other sensitive species/resources that may exist in the project area. The training will include the life history of each species, field identification, habitat requirements, locations of sensitive biological resources, limits of the project area, and legal status of each species.
- b. Materials concerning the following topics: sensitive resources, resource avoidance, possible consequences for violations of State or Federal environmental laws, and contact information for a qualified biologist if it is believed a special-status species has been encountered. These reference materials will be on hand at the site at all times.

c. Additional training will be conducted as needed, including morning "tailgate" sessions, to update crews as they advance into sensitive areas. Persons completing training will sign a form stating that they attended and understand all the conservation and protection measures. A record of all personnel trained during maintenance activities will be maintained, and this record will be made available for compliance verification.

Standard #3 Invasive Species. The spread of invasive species will be avoided to the greatest extent possible by adhering to the following measures:

- a. All vehicles used for the maintenance activities will be cleaned and free of weeds when brought into the project area to prevent the spread and/or introduction of invasive plant species and pathogens.
- b. Vegetation contaminated with weed seeds will be segregated and disposed of or treated as appropriate.
- c. During work activities, all trash will be placed in secure containers with secure lids, removed from the work area, and disposed of properly.
- d. The biological monitor will verify that the spread of invasive exotic plant species is being avoided to the maximum extent possible. As part of the work plan, invasive plants in the project area will be removed when appropriate. Methods of removal may involve hand work or regulated use of herbicides.

Standard #4. Equipment and Site Maintenance.

a. No petroleum product, chemical, silt, fine soil, or any substance or material deleterious to special-status species will be allowed to pass into or be placed where it could enter a stream channel. Any spills of hazardous materials in habitat suitable for special-status species will be cleaned up and/or removed immediately by CAL FIRE and/or District personnel. Any such spills that could adversely affect listed species will be reported to the CDFW and/or USFWS.

- b. All staging areas and fueling or maintenance of vehicles and equipment will occur at least 65 feet from any water body or riparian habitat.
- c. Emergency spill cleanup gear (spill containment and absorption materials) and fire-suppression equipment will be available onsite at all times.
- d. Any leaks, drips, and other spills will be cleaned up immediately to avoid soil or groundwater contamination. Cleanup of a spill on soil will include the removal of contaminated soil using the emergency spill cleanup gear. Any contaminated soil and disposable gear used to clean up a hazardous materials spill will be properly disposed of following State and Federal hazardous material disposal regulations.
- e. All vehicle maintenance and washing will be conducted offsite.
- f. All trash, debris, fencing, and flagging will be removed from the project area after completion of work activities.
- g. Spilled dry materials will be swept up immediately.
- h. Speed limit on unpaved roads in the project area will not exceed 10 miles per hour.
- All work activities will begin no sooner than 15 minutes after sunrise and will be completed no later than 15 minutes after sunset.

Standard #5. Compliance Reporting. At the conclusion of project activities, the qualified biologist will prepare a compliance report and submit it to the District and CAL FIRE within 60 calendar days of the date of the completion. This report will detail:

- Dates and results of surveys conducted, prior to project activity, including any recommendations for avoidance of special-status species or habitats.
- b. Documentation of employee environmental education.
- c. Dates and a brief description of maintenance activities that occurred.

- d. Dates and a brief description of biological monitoring conducted.
- e. A description of any special-status species observed and measures utilized to avoid impacts.
- f. A brief description of the success or failure of avoidance and/or monitoring measures in protecting sensitive biological resources.
- g. Any other pertinent information, including project maps, site photographs, etc.

Special-status Wildlife

Special-status wildlife species known to occur within each district are shown in Table 4. Mapped locations of known special-status wildlife species occurrences within the districts are included in Appendix D as follows: Figure D-4 (Pebble Beach CSD), Figure D-5 (Cypress FPD), and Figure D-6 (Carmel Highlands FPD). Further discussion regarding each species is included below. These are known special-status species occurrences maintained in the CNDDB within the district boundaries; additional species may be observed during site-specific surveys.

Table 4 Special-Status Wildlife Species Known to Occur in Each District

Species	Cypress FPD	Carmel Highlands FPD	Pebble Beach CSD
Black swift (Cypseloides niger)	-	√	-
California black rail (Laterallus jamaicensis coturniculus)	-	-	√
California brown pelican (Pelecanus occidentalis californicus)	-	✓	-
California red-legged frog (Rana draytonii)	√	✓	✓
Globose dune beetle (Coelus globosus)	√	-	✓
Hoary bat (Lasiurus cinereus)	-	✓	-
Monarch butterfly (Overwintering) (Danaus plexippus)	√	✓	√
Northern California legless lizard (Anniella pulchra)	√	√	√
Obscure bumble bee (Bombus caliginosus)	√	√	√
Smith's blue butterfly (Euphilotes enoptes smithi)	-	√	-

Species	Cypress FPD	Carmel Highlands FPD	Pebble Beach CSD
Steelhead (Oncorhynchus mykiss irideus)	√		-
Townsend's big-eared bat (Corynorhinus townsendii)	-	√	-
Western bumble bee (Bombus occidentalis)	√	-	✓

Source: CDFW CNDDB 2018, EMC Planning Group 2018

California Red-legged Frog

The California red-legged frog is a federally-listed Threatened species and California Species of Special Concern. California red-legged frog occurs in lowlands and foothills primarily in perennial or ephemeral ponds, pools, and streams where water remains long enough (14-28 weeks) for breeding and metamorphosis of tadpoles. Specific breeding sites include streams, creeks, ponds, marshes, sag ponds, deep pools, backwater areas, dune ponds, lagoons, and estuaries. Habitats with the highest densities of California red-legged frog often contain dense emergent or shoreline riparian vegetation closely associated with fairly shallow (< 0.5 meter) to deep (> 0.5 meter), still, or slow-moving water (U. S. Fish and Wildlife Service 2002).

California red-legged frog may disperse from their aquatic breeding habitats to upland habitats during the dry season. They prefer upland habitats that provide moisture to prevent desiccation and protection from predators, including downed logs, woody vegetation, boulders, moist leaf litter, or other refugia during the dry season. In areas where upland habitats do not contain structure, they take refuge in burrows. However, if there is sufficient water at their breeding location, they may remain in aquatic habitats year-round instead of moving to adjacent uplands.

During wet seasons, frogs can move long distances between habitats, traversing upland areas or ephemeral drainages. Dispersal distances are typically less than 0. 5 km (0. 3 mile), with a few individuals moving 2. 0-3. 6 kilometers (1. 2-2. 2 miles) (Bulger et al. 2003). Seeps and springs in open grasslands can function as foraging habitat or refugia for wandering frogs (Jennings and Hayes 1994).

All three districts contain recorded observations of California red-legged frog. Disturbance to aquatic and upland habitat may result in the harassment, habitat removal, or direct mortality of California red-legged frog. If a California red-legged frog were killed, injured, or harassed this would also constitute a 'take' under the Endangered Species Act (ESA) and California Endangered Species Act (CESA), and incidental take permits from the USFWS and CDFW would be required to proceed

with work. An unauthorized "take" represents a potentially significant impact. Implementation of mitigation measure BIO-2, in addition to the agency coordination requirements in Section III of the Cypress FPD and Carmel Highlands FPD plans, ensures that appropriate avoidance and minimization measures are in place and would be implemented that reduce potentially significant impacts to California red legged frog to less than significant.

Globose Dune Beetle

The Globose dune beetle once occurred commonly in the coastal strand community from central to southern California as well as Baja California, Mexico, in the vicinity of Ensenada. The great majority of this species frequents the canopied substrate beneath various coastal chaparral herbs and shrubs. The larvae and adults of the species live and feed on dead vegetable matter accumulated in the litter in sand under plants.

This species is known to occur within the Cypress FPD and Pebble Beach CSD; however it is limited to open sandy areas where fire maintenance activities are not proposed. No protective measures are recommended.

Monarch Butterfly (Overwintering habitat)

Adult monarch butterflies migrate from August to October, and winter along the California coast and in central Mexico from November to September. Monarch butterflies roost in wind-protected tree groves (such as eucalyptus) with nectar and water sources nearby. The monarch caterpillar host plants are milkweeds (*Asclepias* spp.).

Although this species is not special-status, overwintering habitat for monarch butterflies is considered a sensitive resource and is protected by the state. Known overwintering areas are found in each of the three districts. Monarch butterflies could also feed in the project areas. No tree removal is proposed as part of the maintenance activities, however vegetation removal will occur. The removal of a small amount of potential feeding habitat in the project area is not likely to impact monarch butterfly feeding, if they occur in the project vicinity, as there will be an abundance of feeding area still available. However, disturbance to overwintering habitat may cause a disruption in migratory patterns or the butterfly life cycle and should be avoided. Implementation of the standards contained in mitigation measure BIO-2, in addition to the agency coordination requirements in Section III of the Cypress FPD and Carmel Highlands FPD plans, ensures that appropriate avoidance and minimization measures are in place and would be implemented that reduce this potentially significant impact to a less-than-significant level.

Northern California Legless Lizard

Anniella pulchra is traditionally split into two subspecies: Anniella pulchra pulchra (silvery legless lizard) and Anniella pulchra nigra (black legless lizard), but these subspecies are no longer recognized. The form of Anniella from the coast of Monterey Bay in Monterey County was formerly recognized as the subspecies Anniella pulchra nigra (black legless lizard), but it is actually just a dusky form of Anniella pulchra. Some herpetologists and state agencies, including the CDFW, still recognize this subspecies, so it is included here.

The dusky population recognized as *black legless lizard* occurs in beach dunes on the Monterey Peninsula and on the southern coast of Monterey Bay (south of the Salinas River) in Monterey County. This species typically occurs in moist warm loose soil with plant cover and moisture is essential. Leaf litter under trees and bushes in sunny areas and dunes stabilized with species such as bush lupine and mock heather are preferred habitat. Legless lizards can often be found under surface objects such as rocks, boards, driftwood, and logs.

Soil types within parts of each district are considered suitable for legless lizards, and support patches of dune scrub plants preferred as habitat. If legless lizards are present within the project areas, vegetation removal and other disturbance activities could result in the loss of individual animals. This would be a significant adverse environmental impact. Implementation of the standards contained in mitigation measure BIO-2, in addition to the agency coordination requirements in Section III of the Cypress FPD and Carmel Highlands FPD plans, ensures that appropriate avoidance and minimization measures are in place and would be implemented and would reduce this impact to a less-than-significant level.

Obscure and Western Bumble Bees

Obscure and western bumble bees have been reported throughout Monterey County and are found in a variety of habitats. The two bumble bee species do not technically have any legal protective status under the State or federal Endangered Species Acts, however records on their distribution in the western United States are now being more closely monitored through the CNDDB and other databases because of a dramatic decline in numbers and distribution over the past two decades. Their presence in the districts, either foraging or nesting, requires no additional protective measures, however implementation of the standards contained in mitigation measure BIO-2 requiring the reporting of any observations shall be implemented.

Smith's Blue Butterfly

Smith's blue butterfly is federally listed as endangered and is found along the coastal dunes just south of the Salinas River in the north (Monterey County) to San Carpoforo Creek in the south (San Luis Obispo County). The larvae (caterpillar form) feed on two species of buckwheat: the seacliff buckwheat (*Erigonum parvifolium*), generally found in the southern portion of their range, and the coast buckwheat (*Eriogonum latifolium*), generally found in the northern portion of their range. Populations of Smith's blue butterfly within Monterey County utilize both species of buckwheat.

The Smith's blue butterfly is a weakly flying species; therefore, long distance dispersal is believed to occur only rarely. Since the Smith's blue butterfly spends the majority of its time in short flights within patches of buckwheat, any area of non-habitat, such as active construction areas, bare areas, large blow-outs on sand dunes, or extensive dense patches of vegetation that do not contain buckwheat (such as non-native mats of ice plant), act as barriers to dispersal. Adult Smith's blue butterflies can find basic requirements (mating, nectaring, and egg-laying sites) within a very small area (less than three acres).

There are known occurrences of Smith's blue butterfly within the Carmel Highlands FPD. Due to the species' relatively small habitat requirements and dependency on its host plants, any disturbance to individual Smith's blue butterflies, larvae, or their host plants is considered a significant adverse environmental impact and would require Incidental Take Authorization from the USFWS. Implementation of the standards contained in mitigation measure BIO-2, in addition to the agency coordination requirements in Section III of the Cypress FPD and Carmel Highlands FPD plans, ensures that appropriate avoidance and minimization measures are in place and would be implemented that would reduce this impact to a less-than-significant level.

Steelhead

The Federally threatened (South-Central California Coast Evolutionary Significant Unit) and State Species of Special Concern steelhead is an anadromous fish that relies on streams, rivers, estuaries, and marine habitats during its lifecycle. Adult steelhead migrate from the ocean up streams and rivers where they lay eggs (spawn) in areas with small- to medium-sized gravel in riffles with good oxygen flow. The eggs take from 1.5 to 4 months to hatch. Hatchlings remain in the gravel until their yolk is absorbed, and then emerge and actively feed. Young steelhead typically remain in freshwater creeks and rivers from one to four years before migrating to the ocean where they spend two to three years before returning to their natal stream to spawn. Spawning typically occurs between December and June.

Steelhead are known to occur within the Cypress FPD, including the Carmel River and its' tributaries. Disturbance to steelhead habitat may result in the harassment, habitat removal, or direct mortality of steelhead, a federally listed Threatened and California Species of Special Concern. If steelhead were killed, injured, or harassed this would also constitute a 'take' under the ESA, and an incidental take permit from NOAA Fisheries would be required to proceed with work. An unauthorized "take" represents a potentially significant impact. Implementation of the standards contained in mitigation measure BIO-2, in addition to the agency coordination requirements in Section III of the Cypress FPD and Carmel Highlands FPD plans, ensures that appropriate avoidance and minimization measures are in place and would be implemented would reduce this impact to a less-than-significant level.

Nesting Birds and Raptors

Many bird species are migratory and fall under the jurisdiction of the Migratory Bird Treaty Act (MBTA), protections for birds of prey, and/or are considered CDFW Fully Protected Species. On December 22, 2017, the U. S. Department of the Interior issued an opinion that would limit the applicability of the MBTA to affirmative and purposeful acts that cause the take of migratory birds, such as hunting and poaching, and thus does not apply to acts that result in only incidental or accidental deaths of migratory birds, possibly including construction and operational activities. However, an opinion does not carry the authority to create new or revise existing regulations, and the current legal protection of migratory birds remains as stated in the MBTA.

Protected nesting birds, including raptor species, also have potential to nest on and adjacent to the maintenance areas during the nesting bird season (January 1 through September 15). If nesting birds protected by state and federal regulations are present on or adjacent to the maintenance areas during vegetation removal or disturbance, the project activities may directly result in loss of active nests, or indirectly result in nest abandonment and thereby cause loss of fertile eggs or nestlings. This would be a significant adverse environmental impact. Implementation of the standards contained in mitigation measure BIO-2, in addition to the agency coordination requirements in Section III of the Cypress FPD and Carmel Highlands FPD plans, ensures that appropriate avoidance and minimization measures are in place and would be implemented that would reduce this impact to a less-than-significant level.

Roosting and Nesting Bats

Two bat species (Townsend's big-eared bat and hoary bat) are known to occur within the Carmel Highlands FPD, and potential habitat is found within all three districts.

Townsend's big-eared bat is designated as a California Species of Special Concern. Townsend's big-eared bats occur in a variety of habitats throughout California, but they are most commonly associated with scrub, mixed conifer forest, and pinon-juniper or pine forest habitat. They do not form large night roosting aggregations as some other bat species. Instead, they appear in smaller numbers (generally singly) in caves, rock shelters, open buildings, mines, and sometime bridges.

Hoary bat is designated as a California Species of Special Concern. This species is solitary, typically roosting in foliage of riparian trees such as cottonwoods and sycamores, though eucalyptus trees are also known to be used. Roosting trees can occur at the edge of clearings, heavy forests, open wooded glades, and shade trees along urban streets and in city parks.

Potential habitat for bats occurs in mature trees, rock formations, and developed structures present within or adjacent to the maintenance areas. If special-status bats are present on the project site, maintenance activities could result in the loss of individual animals. This would be a significant adverse environmental impact. Implementation of the standards contained in mitigation measure BIO-2, in addition to the agency coordination requirements in Section III of the Cypress FPD and Carmel Highlands FPD plans, ensures that appropriate avoidance and minimization measures are in place and would be implemented that would reduce this impact to a less-than-significant level.

The proposed fire defense plans do not include policy standards and procedures to address special-status wildlife species within the respective districts. As such there are no provisions or avoidance measures in the proposed plans that can be implemented to avoid or minimize potential impacts to special-status species. Designating fire roads and identifying fuel breaks would not immediately result in significant impacts to protected wildlife species; however, future implementation of the fire road maintenance, fuel hazard reduction, and vegetation management activities have the potential to significantly affect special-status wildlife species through direct loss or impacts to habitat. This would be a potentially significant impact.

Implementation of the mitigation measures identified in this section would add procedural standards and policy for avoiding impacts to special-status wildlife species based on site-specific fire road maintenance, hazardous fuel reduction, and vegetation management activities. These measures would include requirements for pre-project biological surveys and assessments to identify populations of special-status wildlife species that could be impacted by site-specific activities, and implementation standards to reduce potential impacts to less than significant.

Implementation of the following mitigation measure, in addition to the agency coordination requirements in Section III of the Cypress FPD and Carmel Highlands FPD plans, ensures that appropriate avoidance and minimization measures are in place and would be implemented that reduce potentially significant impacts to special-status wildlife species to less than significant.

Mitigation Measures

BIO-2 Prior to implementation of the Pebble Beach CSD plan update and Cypress FPD, and Carmel Highlands FPD fire defense plans, the following new policy and standard best management practices and avoidance measures for the identification and protection of special-status plant resources will be incorporated into the Pebble Beach CSD, Cypress FPD, and Carmel Highlands FPD fire defense plans:

Policy Section II. C Protection of Special-Status Plan and Wildlife Species

Standard #6. Special-Status Wildlife Surveys. Appropriately-timed pre-maintenance surveys will be conducted by a qualified biologist to determine the presence of special-status wildlife in the vicinity of the project area. These surveys can be conducted simultaneously with surveys for special-status plant species.

Standard #7. California Red-Legged Frog. This measure is divided into three potential impact scenarios: 1) the proposed maintenance activities are proposed at least two miles from a recorded observation of California red-legged frog, 2) the proposed maintenance activities are proposed within two miles of a recorded observation of California red-legged frog but a minimum of 300 feet from potential aquatic habitat (pond, wetland, or stream), or 3) the proposed maintenance activities are proposed within 300 feet of potential California red-legged frog aquatic habitat (pond, wetland, or stream). If the following measures cannot be met, take of California red-legged frog may be unavoidable and work will not occur in that area.

- 1. If proposed maintenance activities are proposed at least two miles from a recorded observation of California red-legged frog, impacts are not likely to occur and no additional measures are proposed.
- 2. If proposed maintenance activities are proposed within 2 miles of a recorded observation of California red-legged frog, but within 300 feet of potential aquatic habitat (pond, wetland, or stream) the following measures are proposed:

- a. Immediately prior to initiation of project activities, a qualified biologist will conduct surveys for California red-legged frog within and adjacent to the project area.
- b. An exclusion area a minimum of 300 feet from potential habitat will be delineated using a non-permanent method (e. g. flagging, chalk, tape). No work will occur within the exclusion area. If necessary, the qualified biologist may recommend an exclusion area greater or less than 300 feet, depending on the types of habitat present.
- c. The qualified biologist will notify the project foreman regarding the exclusion area. If necessary, the project foreman will ensure that the exclusion area markings are replaced if damaged or lost.
- 3. If proposed maintenance activities are proposed within 300 feet of potential California red-legged frog aquatic habitat (pond, wetland, or stream), impacts may be avoided through implementation of the following measures:
 - a. Work may only take place during the dry season (between May 1 and October 15). Activities may not occur during rain events or within 24 hours following a rain event of more than 0. 5 inch in 24 hours.
 - b. Within 300 feet of suitable habitat for California red-legged frog, a qualified biologist will be present during all project activities and will monitor all work activities to ensure that no California red-legged frog are subject to take. The qualified biologist will have the authority to stop any aspect of the maintenance activities that could result in unauthorized take of listed species.
 - c. Within 300 feet of suitable habitat for California red-legged frog, a qualified biologist will conduct surveys immediately prior to initiation of project activities.
 - d. Workers who detect any suspected California red-legged frog onsite will immediately stop work that could result in take of the species and report their findings to the qualified biologist

- for positive identification. If the qualified biologist determines that the animal is a California red-legged frog, the USFWS will be contacted to discuss the appropriate action.
- e. If an injured or dead California red-legged frog is found during project implementation, activities in the immediate vicinity of the animal will cease and a qualified biologist will inspect the area for additional animals prior to resuming work. The USFWS will be notified within 1 working day.

Standard #8. Monarch Butterfly. Maintenance activities proposed within 100 feet of known or potential monarch butterfly overwintering habitat will occur when monarch butterflies are not present, approximately between August and October.

Standard #9. Legless Lizard. In areas where coastal dune scrub plants such as bush lupine and mock heather are present, the following measures to avoid or minimize impacts to legless lizards will be implemented:

- 1. Not less than three months prior to the start of maintenance activities, a qualified biologist shall place cover boards in impact areas with suitable habitat (coastal dune scrub) for legless lizards. The cover boards shall be at least four feet by four feet and constructed of untreated plywood placed flat on the ground. The cover boards shall be checked by the biologist once per week for each week after placement up until the start of vegetation removal. All legless lizards and coast horned lizards found under the cover boards shall be captured and placed in five-gallon buckets for transportation to relocation sites. If areas are left undisturbed for a period of three months or longer, the cover boards will replaced and relocation efforts will be repeated prior to the re-initiation of ground disturbance activities.
- 2. All relocation sites proposed by the qualified biologist shall be approved by the implementing entity and shall consist of suitable habitat. Relocation sites shall be as close to the capture site as possible but far enough away to ensure the animal(s) is/are not harmed by construction of the project. Relocation shall occur on the same day as capture. CNDDB Native Species Field Survey Forms shall be submitted to the CDFW for all special-status species observed.

3. During all initial ground vegetation removal activities, a qualified biologist shall be on the site to recover any legless lizards that may be excavated/unearthed. If the animals are in good health, they shall be immediately moved to relocation sites. If they are injured, the animals shall be released to a wildlife recovery specialist until they are in a condition to be released into relocation sites.

Standard #10. Obscure and Western Bumble Bees. If the qualified biologist encounters obscure or western bumble bee during survey or monitoring activities, a CNDDB Native Species Field Survey Form shall be submitted to the CDFW for all observations.

Standard #11. Smith's Blue Butterfly. Any vegetation removal or disturbance within 50 feet of known Smith's blue butterfly habitat and/or potential habitat supporting the species' host plants [seacliff buckwheat (*Erigonum parvifolium*) or coast buckwheat (*Eriogonum latifolium*)] shall be avoided.

Standard #12. Steelhead. No construction activities will occur within streams known to support steelhead, including any aquatic feature found within the Carmel River Hydrologic Unit or Santa Lucia Hydrologic Unit (Critical Habitat).

Standard #13. Nesting Birds and Raptors. To avoid impacts to nesting birds on and adjacent to the maintenance area, if noise generation, ground disturbance, vegetation removal, or other activities begin during the nesting bird season (January 1 to September 15), or if maintenance activities are suspended for at least two weeks and recommence during the nesting bird season, then the qualified biologist will conduct a pre-construction survey for nesting birds. The survey will be performed within suitable nesting habitat areas on and adjacent to the maintenance area to ensure that no active nests would be disturbed during project implementation. This survey will be conducted no more than one week prior to the initiation of disturbance or construction activities.

If no active bird nests are detected during the survey, then maintenance activities can proceed as scheduled. However, if an active bird nest of a native species is detected during the survey, then a plan for bird nest avoidance will be prepared by the qualified biologist to determine and clearly delineate an appropriately sized, temporary protective buffer area around each active nest, dependent upon the type of nesting bird species, existing site conditions, and type of disturbance or construction activities. Typically, the protective buffer area around an active bird nest is 75-250 feet, determined at the discretion of the qualified biologist.

To ensure that no inadvertent impacts to an active bird nest will occur, no disturbance and/or construction activities will occur within the protective buffer area(s) until the juvenile birds have fledged (left the nest), and there is no evidence of a second attempt at nesting, as determined by the qualified biologist.

Standard #14. Roosting and Nesting Bats. Prior to maintenance activities, the qualified biologist will conduct a focused survey for bats and potential roosting sites, including structures, within 250 feet of the disturbance footprint. These surveys will be conducted no more than 15 days prior to the start of vegetation trimming or tree limbing activities. The surveys can be conducted by visual identification and assumptions can be made by the biologist on what species is present due to observed visual characteristics along with habitat use, or the bats can be identified to the species level with the use of a bat echolocation detector such as an "Anabat" unit.

If no roosting sites or bats are found, no further mitigation is required.

If bats or roosting sites are found, the following measures will be implemented:

1. If bats are found roosting outside of the nursery season (May 1 through October 1), they will be evicted as described in measure (b) below. If bats are found roosting during the nursery season, they will be monitored to determine if the roost site is a maternal roost. This could occur by either visual inspection of the roost bat pups, if possible, or by monitoring the roost after the adults leave for the night to listen for bat pups. If the roost is determined to not be a maternal roost, then the bats will be evicted as described under (b) below. Because bat pups cannot leave the roost until they are mature enough, eviction of a maternal roost cannot occur during the nursery season. Therefore, if a maternal roost is present, a 250-foot buffer zone (or different size if determined in

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- consultation with the CDFW) will be established around the roosting site within which no fire fuel reduction activities will occur until after the nursery season.
- 2. If a non-breeding bat hibernaculum is found in a dead tree or snag scheduled for removal, the individuals will be safely evicted, under the direction of a qualified bat biologist and in consultation with the CDFW. Methods could include: carefully opening the roosting area in a tree or snag by hand to expose the cavity, and opening doors/windows on structures or creating openings in walls to allow light into the structures. Removal of any trees or snags and demolition of any structures will be conducted no earlier than the following day (i. e. , at least one night will be provided between initial roost eviction disturbance and tree removal/structure demolition). This action will allow bats to leave during dark hours, which increases their chance of finding new roosts with a minimum of potential predation.

Sensitive Natural Communities.

- b. Sensitive natural communities are of limited distribution statewide or within a county or region, and are often vulnerable to environmental effects of disturbance. These communities are listed and monitored by the CDFW and may or may not contain special-status species or their habitats. The following sensitive natural communities are found within the districts:
 - Central dune scrub
 - Central maritime chaparral
 - Monterey cypress forest
 - Monterey pine forest
 - Monterey pygmy cypress forest
 - Valley needlegrass grassland
 - Northern Bishop pine forest

The plant communities found within each district are indicated on Figures D-1 – D-3 in Appendix D. The proposed maintenance activities will occur within existing fire breaks, trails, and roads, some of which occur within sensitive natural communities. The loss of sensitive natural communities is considered a significant adverse environmental impact. Implementation of the following mitigation measure in addition to the agency coordination requirements in Section III of the Cypress FPD

and Carmel Highlands FPD plans, ensures that appropriate avoidance and minimization measures are in place and would be implemented that reduce potentially significant impacts to sensitive natural communities to less than significant.

Mitigation Measures

Prior to implementation of the updated Pebble Beach CSD plan and new Cypress FPD and Carmel Highlands FPD plans the following standard best management practices and avoidance measures for the identification and protection of sensitive natural communities will be incorporated into the Pebble Beach CSD, Cypress FPD, and Carmel Highlands FPD fire defense plans with the new Policy II. C: Protection of Sensitive Plant and Wildlife Species.

Standard # 15. Sensitive Natural Communities. In areas where maintenance activities will occur along fire breaks, trails, and roads within sensitive natural communities, the limits of each fire break, trail, or road shall be delineated with clearly visible flagging or fencing, with areas beyond the fire break, trail, or road boundary marked for avoidance. The flagging and/or other marking shall be maintained in place for the duration of maintenance activities at each location until work is completed. Flagging and/or other markings shall be checked weekly by the qualified biologist or designated site representative and repaired or replaced as needed.

Wetlands and Waterways

c. Aquatic features may be considered jurisdictional by one or more of the following agencies: the U. S. Army Corps of Engineers (USACE), CDFW, and the Regional Water Quality Control Board (RWQCB).

Section 404 of the Clean Water Act of 1972 regulates the discharge of dredge and fill material into "Waters of the U. S." including wetlands. Certain natural drainage channels and wetlands are considered jurisdictional "Waters of the U. S." The USACE determines the extent of its jurisdiction as defined by ordinary high water marks on channel banks. Wetlands are habitats with soils that are intermittently or permanently saturated, or inundated.

The CDFW has jurisdiction over the bed and bank of natural drainages according to provisions of Sections 1601 through 1603 of the California Fish and Game Code. The extent of jurisdiction is determined through a combination of the channel banks and riparian vegetation.

Under the California Porter-Cologne Water Quality Control Act, the applicable RWQCB may necessitate Waste Discharge Requirements for the fill or alteration of "Waters of the State," which according to California Water Code Section 13050 includes "any surface water or groundwater, including saline waters, within the boundaries of the state."

Mapped locations of known special-status wildlife species occurrences within the districts are included in Appendix D as follows: Figure D-4 (Pebble Beach CSD), Figure D-5 (Cypress FPD), and Figure D-6 (Carmel Highlands FPD). These habitats, along with their associated vegetation communities, such as herbaceous wetland and riparian forest/scrub, will be outside of the areas receiving treatment. Impacts will be avoided or minimized by prohibiting work within 50 feet of wetlands or water bodies, by limiting work through modified procedures within 50-200 feet of these features. Implementation of the best management practices identified in the discussion of Hydrology (Section 9) during project activities further minimizes impact to aquatic features within the districts.

Impacts to wetlands/waterways under CDFW, USACE, and RWQCB regulatory agency jurisdiction due to project implementation would be considered significant. Compliance with the applicable land use and area plan policies identified above will help to avoid or reduce the impact of project activities. Additionally, implementation of the following mitigation measure, in addition to the agency coordination requirements in Section III of the Cypress FPD and Carmel Highlands FPD plans, ensures that appropriate avoidance and minimization measures are in place and would be implemented that reduce potentially significant impacts to wetlands and jurisdictional waters to less than significant.

Mitigation Measures

BIO-4 Prior to implementation of the Pebble Beach CSD plan update and new Cypress FPD and Carmel Highlands FPD plans the following standard best management practices and avoidance measures for the identification and protection of aquatic resources will be incorporated into the Pebble Beach CSD, Cypress FPD, and Carmel Highlands FPD fire defense plans with the new Policy II. C: Protection of Sensitive Plant and Wildlife Species:

Standard #16. Aquatic Resources. Any work near a sensitive wetland or aquatic feature or on slopes greater than 30 percent will be modified to buffer the channel/feature and to avoid erosion and soil movement. Silt fencing will be installed where needed between the work area and

any waterbodies, including ponds, wetlands, and riparian areas, to protect areas from erosion. As soon as work has been completed in that part of the site, the fencing will be removed.

Wildlife Movement

d. No barriers to movement would be created as a result of this project. The project consists of clearing vegetation. No new permanent structures would be built. Creeks and water features would be avoided.

Local Policies

e. The project would not conflict with any local policies or ordinances protecting biological resources. Some small trees may be thinned to create spaces between trees in dense forested areas. Native trees less than two inches in diameter when measured at breast height would be removed if it is the only reasonable means to meet the maintenance objectives in specific areas. Hazard and diseased trees would be felled as necessary. The removal of any tree greater than six inches in diameter is not proposed. As discussed in Section 1, Aesthetics and Section 10, Land Use and Planning, the project will not conflict with County requirements for the removal of trees from inland or coastal areas, and will not conflict with local policies for the protection of sensitive biological resources. No significant impact would occur.

Conservation Plans

f. The project area does not fall under the purview of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

5. CULTURAL RESOURCES

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than- Significant Impact	No Impact
a.	Cause a substantial adverse change in the significance of a historical resource as defined in section 15064. 5? (5,9-11,13-17, 26-32)				✓
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to section 15064. 5? (5,9-11,13-17,26-32)		✓		
c.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? (5,9-11,13-17,26-32)		✓		
d.	Disturb any human remains, including those interred outside of dedicated cemeteries? (5,9-11,13-17,26-32)		✓		

Comments:

a,b,c,d. The project consists of different treatment options for fire road maintenance, hazardous fuels reduction and vegetation management, each involving activity that could result in a greater level of ground disturbance than others. Archaeological deposits, built environment buildings and structures, human remains, or paleontological resources may be adversely impacted as a result of treatment actions. Examples of such impacts could include destruction of archaeological deposits, damage to buildings or structures, displacement of fossil resources, or the disturbance of human remains. Some of the impacts may be considered significant under CEQA if the affected resources qualify as historical resources under Public Resources Code §21084. 1, or as unique archaeological resources under Public Resources Code §21083. 2.

Historic Resources

Numerous buildings and structures that may be considered historic on a local or state level are present within each district. Where such structures are located within a proposed target treatment area, the removal, alteration or destruction of that resource may cause an impact that could affect the significance of the historic resource. The project does not include construction, alteration, or demolition of structures and would not negatively affect any significant or potentially significant historic resource.

The project would not result in an adverse change to the significance of a historical resource because no historical resources would be affected by the project. No further discussion is required.

Archaeological and Paleontological Resources

All areas within the three district boundaries have experienced prehistoric occupation by humans. Project activities within all three districts will occur on parcels that are located in areas of moderate to high archaeological sensitivity identified in the county of Monterey General Plan EIR Exhibit 4. 10. 2 Archaeological Sensitivity (County of Monterey 2010). One significant paleontological location is present within the boundary of Point Lobos State Reserve (County of Monterey 2010, Exhibit 4. 10. 1), which is within the Carmel Highlands FPD boundary.

Implementation of proposed maintenance, fuel reduction and vegetation management activities consistent with the Cypress FPD and Carmel Highlands FPD plans have the potential to impact archaeological and/or paleontological resources, the protection of which are the responsibility of other public agencies including California State Parks, the Monterey Regional Parks District, Monterey County Parks Department, City of Carmel-by-the-Sea, and Caltrans. Implementation of project activities consistent with the proposed Cypress FPD and Carmel Highlands FPD plan policies has the potential to conflict with these other agencies' respective policies for the protection of archaeological and paleontological resources, which would be a potentially significant impact. Consultation with the agency prior to implementation of plan activities is needed to develop site-specific fuel reduction activities, identify parties responsible for implementing them to avoid jurisdictional conflicts, and minimize potential impacts to archaeological and paleontological resources within: Jack's Peak Park, Palo Corona Regional Park, Carmel River State Beach, Hatton Canyon, Point Lobos State Natural Reserve, Point Lobos Ranch Park Property, and Garrapata State Park.

Coordination with stakeholder agencies prior to the commencement of project activities within or adjacent to parklands is included in the Cypress FPD and Carmel Highlands FPD plans, Section III. In addition, Section IV-C. 3 of the respective plans sets forth policy provisions and procedures for owners of vacant or environmentally sensitive public and private parcels to opt out of all or some of the district's respective fuel reduction and maintenance standards. Interagency coordination as called for in Section III of the plans reduces the potential for project implementation to result in impacts to archaeological and paleontological resources that are the responsibility of other public agencies, and will also avoid regulatory conflicts from plan implementation. The purpose of consultation is to identify sensitive

environmental resources, including cultural resources, within and adjacent to public lands, and to develop appropriate Best Management Practices for implementing recommended fuel reduction and vegetation management activities consistent with agency policies and procedures to avoid or minimize impacts to cultural resources. Implementation of project activities consistent with the provisions of the respect fire defense plan Section III, ensures that no significant impacts to cultural resources will occur.

Resource management and avoidance of significant environmental impacts are primary goals of the project; however, none of the plans include policies for the protection of archaeological and paleontological resources. Several treatment options are recommended to achieve project objectives, and each is geared to fire road maintenance and different fuel hazard reduction and vegetation management approaches. Hand labor would pose the lowest risk of impacts to cultural resources due to the small scale of activity and minimal ground disturbance. Hand labor includes minor pruning, weed-pulling, herbicide application, and shrub removal and trimming. It is possible that removal of the root systems could include disturbance of soils around the roots, which could disturb intact archaeological deposits, if present. Enhanced herbivory (grazing) poses a low risk of ground disturbance, although the creation of animal trails may result in some soil displacement and erosion that could impact intact archaeological deposits. The risks of disturbance from prescribed burning of larger areas (broadcast burning) or burning piles of cut brush (pile burning) are low with little-to-no risk of ground disturbance, as ignition is done by hand application. However, burning at high intensity can alter the structural and geochemical characteristics of some types of prehistoric artifacts, thereby affecting their information potential. This fuel reduction treatment would rarely be undertaken, and only in identified portions of the Carmel Highlands FPD boundary. Mechanical treatments involve minor grading of existing unpaved fire roads/fuel breaks, mowing, reduction of over story, mechanical cutting, mulching, chipping, and hauling materials from the site. This level of activity would pose the highest risk of disruption to archaeological or paleontological resources if present within the area of work.

Fuel hazard reduction and vegetation management projects that are undertaken within a State Responsibility Area or that involve grant funding from CAL FIRE are subject to compliance with the CAL FIRE Archaeology Program. This program provides cultural resource surveys, technical assistance, project review, and training to CAL FIRE staff and other resource professionals. The purpose of the CAL FIRE Archaeology Program is to identify and manage archaeological, historical, and tribal cultural resources located within project areas under CAL FIRE jurisdiction and to

develop methods to protect these resources from project-related impacts. This is accomplished through regulations, policies and procedures requiring consultation with Native Americans, cultural resource surveys of project areas, evaluation of potential impacts, and the incorporation of protection measures prior to project approval.

Pebble Beach CSD

Policies for the protection of cultural and paleontological resources within the Pebble Beach CSD boundary are identified in the *Del Monte Forest Area Land Use Plan* (2012). Policies specific to cultural resources include identification and evaluation of cultural resources during project planning (Policy 57), surveying for such resources (Policy 58), consideration of avoidance of resources (Policy 59 and 60), preservation and mitigation measures where avoidance is not possible (Policy 61), prohibition of unauthorized collection of artifacts (Policy 62), and limitation of public access to known archaeological or paleontological sites (Policy 63).

Impacts to cultural and paleontological resources resulting from construction and development, including implementation of the fire plan were analyzed in the Pebble Beach Company Project EIR (2011), which found that no impacts to cultural or paleontological resources would occur as a result of or fire prevention activities adjacent to the newly designated open space parcels. However, the EIR determined that there is always the possibility that ground-disturbing activities could adversely affect unknown archaeological or paleontological sites, which would be a potentially significant impact.

The Pebble Beach Company Project EIR includes mitigation measures CR-B1, which requires worker awareness training by a qualified archaeologist and paleontologist prior to the onset of any ground-disturbing activity; and CR-B2, which requires work to be halted if buried resources including, but not limited to, "shellfish remains, chipped stone or groundstone, historic debris, building foundations, and bone" are encountered (Monterey County 2011, page 3.5-11). The measure requires work to be halted and not resume until the find is evaluated by a professional archaeologist and appropriate mitigation measures are formulated and implemented. An additional mitigation measure, CR-B3 outlines protective measures should human remains be encountered during site disturbance activities. Implementation of fire road maintenance, fuel hazard reduction, and vegetation management activities will comply with these mitigation measures, which ensures that implementation of the updated Pebble Beach CSD plan would not significantly affect significant archaeological or paleontological resources. No additional mitigation is required.

Cypress FPD and Carmel Highlands FPD

Neither plan includes policy provisions or implementation procedures to avoid or minimize impacts to potentially significant archaeological or paleontological resources. Each plan should be modified to include policy that outlines procedures that avoid or minimize potential impacts to archaeological and paleontological resources that may occur through implementation of site-specific activities within the target treatment areas. Resource identification and avoidance is the approach preferred by CAL FIRE. In addition, because there is always the possibility that ground-disturbing activities could adversely affect unknown and potentially significant subsurface cultural or paleontological resources, including human remains, policy mitigation is also needed to identify procedures that avoid or minimize impacts from incidental disturbance to potentially significant and undiscovered cultural and paleontological resources. Implementation of the following mitigation measures, in addition to the Best Management Practices developed through agency coordination requirements in Section III of the Cypress FPD and Carmel Highlands FPD plans, ensures that appropriate avoidance and minimization measures are in place and would be implemented to protect significant archaeological resources that may be present within district boundaries. Implementation of these measures consistent with plan policies will ensure that impacts to significant archaeological or paleontological resources within the Cypress FPD and Carmel Highlands FPD that would result from plan implementation are avoided or minimized to a less-than-significant level.

Mitigation Measure

CULT-1 Prior to implementation of the Cypress FPD and Carmel Highlands FPD fire defense plans, the following policy standards shall be added to each plan:

Policy IV-E Protection of Cultural and Paleontological Resources.

Standard #1 – Prior to the onset of site-specific plan activities within treatment areas, a records search and archaeological field survey shall be conducted by an archaeologist meeting the Secretary of Interior's Professional Qualifications Standards in prehistoric or historical archaeology. The archival research and field surveys shall be conducted consistent with the performance criteria outlined in the CALFIRE Archaeological Program.

Standard #2 – If significant archaeological resources are identified within the work area of any site-specific fire maintenance, hazardous fuel reduction, or vegetation management activity within a target treatment area, the following action shall be taken:

- 1. Modify the treatment activity to avoid the identified resource, or
- 2. If the resource cannot be avoided, work shall not commence within 50 meters of the known resource boundary until it is evaluated by the qualified professional archaeologist and an appropriate mitigation plan is developed and implemented, consistent with the performance criteria outlined in the CALFIRE Archaeological Program. Such measures may include preservation in place, excavation, documentation, curation, data recovery or other appropriate measures.

Standard #3 - If any prehistoric or historic artifacts, or other indicators of archaeological resources are found once implementation of site-specific fire road maintenance, fuel hazard reduction, or vegetation management activities are underway, all ground-disturbing work in the immediate vicinity will stop. An archaeologist meeting the Secretary of Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, will be retained by the district to evaluate the finds and recommend appropriate mitigation measures for the inadvertently discovered cultural resources. The district will consider the mitigation recommendations of the qualified archaeologist and implement a measure or measures that the district deems feasible and appropriate, consistent with the CAL FIRE Archaeology Program. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery or other appropriate measures.

Standard #4 - If any paleontological resources (i. e. , fossils) are found once ground-disturbing activities are underway, all work in the immediate vicinity will stop. A qualified paleontologist will be retained by the district to evaluate the finds and recommend appropriate mitigation measures to avoid or minimize impacts to the newly-discovered paleontological resources. The district will consider the mitigation recommendations of the qualified paleontologist and implement a measure or measures that the school district deems feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation or other appropriate measures.

Standard #5 - If human remains are discovered during implementation of fire road maintenance, fuel hazard reduction, and vegetation

management activities, all work must stop in the immediate vicinity of the find, the County Coroner will be notified, according to Section 7050. 5 of the California Health and Safety Code. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission, and the procedures outlined in CEQA Guidelines Section 15064. 5(d) and (e) shall be followed.

Standard #6 - Best Management Practices for Prescribed Burning - Cultural Resources. Site-specific prescribed broadcast or pile burning activity will employ the following avoidance and minimization measures:

- The district or its contractors will ensure that recorded cultural resource sites are provided with appropriate protection during any prescribed burn. This may include conducting a pre-burn site assessment prior to any initial prescribed burn action on a site. The locations of any previously unrecorded cultural resources exposed by burning actions will be mapped and documented. All activities will be planned and executed in such a way as to cause the least amount of impact on cultural sites.
- The district or its contractors will exclude any cultural sites within
 prescribed burn areas by constructing hand lines within the burn
 area or clearly delineating the boundaries of the burn area such
 that all cultural resources are fully excluded. This exclusion will be
 prior to conducting the prescribed burn, and the hand lines
 removed immediately following to minimize potential risk of
 resource vandalism.
- Any digging, surface disturbance, or displacement of soil and vegetation within cultural sites must be avoided. Any mechanical equipment used prior to, during, or following the prescribed burn must be excluded from the cultural site. Foot traffic should be minimized on the cultural site such that the least amount of potential impact is caused.
- During prescribed burns, onsite personnel will closely monitor fire movement near cultural resources and ensure that fires do not cross into fire-sensitive cultural resource areas.

 All onsite personnel should be adequately informed and knowledgeable of the location of known cultural sites within and around the prescribed burn area. Personnel will also be sufficiently knowledgeable of proper treatment actions that can be applied at cultural sites.

Implementation of Mitigation Measure CULT-1, in addition in addition to the Best Management Practices developed through agency coordination requirements in Section III of the Cypress FPD and Carmel Highlands FPD plans, ensures that appropriate avoidance and minimization measures are in place and would be implemented to protect known or unanticipated and unknown cultural and paleontological resources that may be present within the Cypress FPD and Carmel Highlands FPD target treatment areas and should they be uncovered during implementation of proposed fire road maintenance, hazardous fuel reduction, and vegetation management activities. Implementation of these measures will ensure that impacts to potentially significant cultural and paleontological resources resulting from plan implementation are less than significant.

6. GEOLOGY AND SOILS

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than- Significant Impact	No Impact
a.	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	(1) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42? (9-17)				√
	(2) Strong seismic ground shaking? (9-17)				✓
	(3) Seismic-related ground failure, including liquefaction? (9-17)				✓
	(4) Landslides? (9-17)				✓
b.	Result in substantial soil erosion or the loss of topsoil? (9-17,26-32)		✓		
C.	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? (9-17,26-32)		✓		
d.	Be located on expansive soil, creating substantial risks to life or property? (9-17,26-28)				✓
e.	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? (26-28)				√

Comments:

a. Monterey County is located in one of the most seismically active regions in the world. The San Andreas Fault traverses the eastern portion of the County, and many areas are susceptible to seismic hazards such as strong ground shaking, liquefaction, and

earthquake-induced landslides (Monterey County 2008). However, the project would not increase exposures to the risks of seismic activity. Implementation of the fire road maintenance, fuel hazard reduction, and vegetation management activities consistent with the fire defense plan policies do not include construction or permanent placement of large concentrations of people in areas at risk of seismic hazards. Therefore, the project would not increase exposures of people or structures to substantial adverse effects, including the risk of loss, injury, or death from seismic activity. No impact would occur.

b,c. The topography of each district is varied. Several fire roads in each district cross or are located adjacent to drainages in canyons and riparian areas. Others traverse areas with steep slopes. No new fire roads are proposed as part of the project; minor grading on existing fire roads and fuel breaks would be conducted periodically to maintain adequate access as part of the fire road maintenance activities proposed in all three plans. Fuel reduction activities may result in increased slope instability.

Slope instability can cause landslides, which can generate large quantities of easily-erodible material and therefore can impact runoff water quality and degrade downgradient habitats (e. g. , gravel bed streams). Factors that affect slope instability are slope steepness, soil type, underlying geologic material type and structure, vegetation, subsurface water content, and grading. Within each district, plan implementation will affect soils and subsurface water content through fuel and vegetation modification and grading activities, which could result in ground disturbances that can lead to erosion and increase potential for landslide activity. There are many different types of landslides, from shallow soil slips to deep-seated rotational failures and block slides. Shallow landslides and soil slips are often related to saturation of the shallow soils and surficial erosion processes. These types of landslides will be avoided or minimized by implementation of BMPs identified in Section 9, Hydrology and Water Quality, of this initial study.

Resource management and avoidance of significant environmental impacts are primary goals of the project, and each plan includes policies for maintaining slope stability and preventing erosion. Several treatment options are proposed to achieve project objectives, and each is geared to fire road maintenance and different fuel hazard reduction and vegetation management approaches. Hand labor consisting of minor pruning, weed-pulling, herbicide application, and shrub removal and trimming would pose the lowest risk for increasing slope instability and erosion due to the small scale of this type of activity and minimal ground disturbance. It is possible that removal of the root systems could include disturbance of soils around the roots, which could increase the likelihood of erosion from soil disturbance.

Enhanced herbivory (grazing) poses a low risk of ground disturbance, although the creation of animal trails may result in some soil displacement and erosion in localized areas. Mechanical treatments involve minor grading of existing unpaved fire roads/fuel breaks, mowing, reduction of over story, mechanical cutting, mulching, chipping, and hauling materials from the site. Grading would pose the highest risk of erosion and increasing the risks of landslide due to slope instability.

Each district plan includes policies to inspect fire roads annually and limit grading of road surfaces to a level that does not reduce the overall elevation of the fire road, or in such a way as to cause the road surface to convey significantly more water than it would under existing conditions. It is possible that grading activity beyond normal wear and tear may occasionally be required to repair roadbeds damaged by winter storms. A grading permit issued by the County of Monterey is required pursuant to the Monterey County Code Section 16. 08, when the total volume of cut and fill material is 100 cubic yards or more, and may be required for a lesser amount if it would affect a drainage course or create a slope steeper than two horizontal to one vertical or a cut slope higher than five feet. If additional grading is necessary, the district within which additional grading is required will obtain the required permit and comply with the County's conditions of grading permit approval. In all instances grading activity will comply with relevant area plan policies that address grading and erosion.

Fire road maintenance activities within the Pebble Beach CSD boundary are subject to compliance with several *Del Monte Forest Area Land Use Plan* (2012) policies that require design features and best management practices during soil disturbing activity to control erosion/sediments, and protect water quality (policies 3 and 4)to be in place prior to project activity. Policies identified in the Greater Monterey Peninsula Area Plan and Carmel Area Land Use Plan that require minimization of grading and use of BMP to control erosion are relevant to the fire road maintenance activities within the Cypress FPD boundary. Carmel Area Land Use Plan and Big Sur Land Use Plan policies that require minimization of grading activities and use of measures that control erosion are relevant to the proposed fire road maintenance activities within the Carmel Highlands FPD.

Policy I-A Fire Road Standards, requires implementation of drainage and erosion control methods that conform to most current engineering standards. Policy I-B Fire Road / Fuel Break Standards requires modifications to fuel reduction prescriptions as needed to minimize erosion and promote overall stand health and longevity. This plan policy also requires work near a stream channel or on slopes greater than 30 percent to be modified to buffer the channel and to minimize erosion and soil

movement. Section I. D in the Cypress FPD and Carmel Highlands FPD plans outlines requirements for grading activities to maintain fire roads. However, these policies do not provide specific measures for the protection of existing structures (including wildland-urban interface residences) from potential increased risks of landslides and slope instability, resulting from the proposed activities. This is a potentially-significant impact that can be mitigated to a less-than-significant level through the implementation of the following mitigation measure:

Mitigation Measure

GEO-1 Prior to implementation of the Cypress FPD and Carmel Highlands FPD fire defense plans, Section I-B., Road Grading Requirements, will be modified to include the following language:

Prior to the onset of site-specific plan activities within treatment areas all soil disturbing activities will employ adequate erosion/sediment control and water quality construction best management practices (BMPs) during grading activities. All such BMPs shall be in place prior to the commencement of fire road maintenance, fuel hazard reduction, and vegetation management activities and shall be maintained in good operating condition through the duration of the work. In addition to the BMPs identified in the discussion of storm water discharge, erosion and siltation (Section 9, Hydrology and Water Quality), the following avoidance and minimization measures shall be implemented:

- Mechanical treatments will be utilized only on slopes of less than
 30 percent to avoid soil disturbances from heavy equipment use.
- Prior to implementation of any proposed vegetation removal activity, the recommended treatment area shall be screened for potential landslide activation risk using the following procedure:
 - District staff shall refer to the most currently available landslide mapping from the California Geological Survey for the Study and/or Monterey County Geographic Information System slope steepness mapping for the Study Area.
 - 2) If all of the following criteria are satisfied then no further action to address potential landslide activation would be required:

- The area to be treated within the recommended treatment area is located in an area listed as "stable", "few landslides", or equivalent;
- The average slope steepness of the recommended treatment area is less than 30 percent;
- There is no visible evidence of landslide activity (e. g., scarps, crooked trees, landslide-generated debris piles) within the recommended treatment area, as documented by a field reconnaissance; and
- There are no habitable structures within 100 feet of the toe of the slope downgradient of the recommended treatment area.
- 3) District staff will determine on a case-by-case basis whether to retain a qualified professional (e. g., engineering geologist or geotechnical engineer) to conduct a geotechnical reconnaissance to evaluate the potential impacts of fuel reduction activities or vegetation type conversion on future landslide potential if:
 - Habitable structure(s) are located within 100 feet of the toe of the slope downhill of the treatment area, and
 - The prescribed treatment would include the use of heavy equipment or machinery and significant ground disturbing activities (i. e., this requirement would not apply to methods such as hand treatment, weed-eating, or chemical treatment), and one or more of the following conditions is identified:
 - a. The treatment area is listed as "unstable", "many landslides" on applicable slope stability mapping, or
 - b. The average slope steepness of the treatment area is greater than 30 percent; or
 - There is visible evidence of landslide activity (e. g., scarps, crooked trees, and slide-generated debris piles) within the treatment area, as documented by a field reconnaissance,

 All recommendations of the qualified professional (which may include avoidance of the proposed activity) shall be documented in writing, provided to the District, and implemented.

It should be noted that the potential for increased risks of slope instability and erosion over the long term would be increased when major wildfires occur within any of the district boundaries. Therefore, implementation of the updated Pebble Beach CSD plan and the Cypress FPD and Carmel Highlands FPD plans as mitigated would likely reduce region-wide long-term risks of slope instability related to potential post-fire conditions.

d,e. The project does not include construction and would not increase risks of property damage from construction on expansive soils, or the use of septic systems; therefore, no impacts related to construction and the use of septic systems would occur.

7. Greenhouse Gas Emissions

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than- Significant Impact	No Impact
a.	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? (1,26-28,13,14,18)			✓	
b.	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? (1,26-28,13,14,18)				✓

Comments:

a. The proposed plans will reduce hazardous fuel loads and provide emergency access within each of the district, which reduces the potential and magnitude of carbon dioxide emissions from wildland fire events. Emissions from wildland fires are a significant source of greenhouse gases (GHG) in the form of carbon monoxide and carbon dioxide emissions, methane and other gases. Selective fuel hazard reduction reduces the land area and fuel loads that, if combusted during a wildland event would otherwise contribute substantial amounts of GHG emissions that can affect climate change. The CAL FIRE Forest Health Program encourages the reduction of GHG emissions in a number of ways including managing long-term storage of carbon in forest trees and soils, and minimizing the loss of forest carbon from large, high intensity wildfires (California Department of Forestry and Fire Protection 2018).

Implementation of fire road maintenance, fuel hazard reduction, and vegetation management activities within each district consistent with the respective district plan policies would generate incremental GHG emissions volumes. As with the project-related generation of dust and criteria air pollutant emissions, GHG emissions generated by site-specific activities within district target treatment areas would be temporary similar to emissions that would be expected from a small construction project. Work crews generally consist of a 12-member hand crew, one transport truck, mower, chipper, haul truck and rubber tracked low horsepower masticators. Hand crews may employ mechanized hand equipment such as chainsaws and weed trimmers. Work would be conducted in a specific target treatment area over a period of several days. As such, GHG emissions generated by these activities would be short lived and would not be expected to generate substantial concentrations of GHG emissions. These activities contribute to a net reduction of potential GHG emissions

- that would otherwise occur from the consumption of high fuel loads during large intensity wildfires within each district. GHG emissions volumes generated by project activities consistent with the policies and standards identified in the three districts' plans are not cumulatively considerable and are less than significant.
- b. In 2006, the California State Legislature passed Assembly Bill 32, the "California Global Warming Solutions Act". Governor Schwarzenegger signed the bill into law, requiring California to reduce greenhouse gas emission to 1990 levels by 2020. In acknowledgment that California forests will play an important role in achieving AB 32 goals, the Forest Climate Action Team was assembled in August 2014 with the primary purpose of developing a Forest Carbon Plan. Under the leadership of CAL FIRE, the California Environmental Protection Agency (Cal-EPA), and The Natural Resources Agency, the Forest Climate Action Team is comprised of Executive level members from many of the State's natural resources agencies, state and federal forest land managers, and other key partners directly or indirectly involved in California forestry. A draft Forest Carbon Plan was released in January 2017, and, although not yet adopted, provides insight and guidance on the consistency of the districts' proposed fuel modification treatments with state law, goals and policies for the reduction of greenhouse gases.

Climate change projections identified in the draft Forest Carbon Plan suggest that California forests will be under increasing threat from large severe wildfire and tree mortality, the implication of which could jeopardize the State's effort to reduce GHG emissions. The plan notes that research has overwhelmingly shown that restoring the health of forests in California improves forest resilience and stability and at the same time reduces negative impacts to the ecosystem services upon which California relies (page 18). Policy and investment decisions should take into the account the opportunity that exists to reduce those potential impacts and secure long-term stable carbon storage in California's forests.

The Forest Carbon Plan points to fuels reduction treatments and other similar stand-density reduction treatments to restore forest health and resiliency and increase carbon storage over the long term. Fuel treatments in densely stocked and unhealthy stands can vary in method, forest structure outcome, and therefore forest carbon impacts in both the short and long term. The methods and prescriptions are site-specific and are often determined by, among other things, existing conditions, desired conditions, cost, resource needs, impediments, and size of area to be treated. A number of treatment methods could be employed, including prescribed and managed fire, and understory and overstory thinning to reduce fuel loads and promote overall forest health.

Implementation of fire maintenance, fuel hazard reduction, and vegetation management activities consistent with the policies and standards of the Pebble Beach CSD, Cypress FPD, and Carmel Highlands FPD plans would not conflict with state requirements and policies intended to reduce greenhouse gases. No further discussion is required.

8. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than- Significant Impact	No Impact
a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? (26-28)			✓	
b.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? (26-28)			✓	
c.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? (26-28)		✓		
d.	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962. 5 and, as a result, create a significant hazard to the public or the environment? (40)				✓
e.	For a project located within an airport land-use plan or, where such a plan has not been adopted, within two miles of a public airport or a publicuse airport, result in a safety hazard for people residing or working in the project area? (26-28)				✓
f.	For a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area? (26-28)				√
g.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (26-28)				✓
h.	Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? (26-28)			✓	

Comments:

a,b. Fuel reduction and vegetation management activities within all three districts will involve the use of herbicides to control hazards and require fuel for mechanical equipment and vehicles.

Pesticides are regulated under the Federal Insecticide, Fungicide and Rodenticide Act by the U. S. Environmental Protection Agency (EPA). This includes labeling and registration of pesticides as to how they may be used. The U. S. EPA delegates pesticide enforcement activities in California to the California Department of Pesticide Regulation, under Title 3 of the California Code of Regulations and the California Food and Agriculture Code. The Monterey County Agricultural Commissioner's office issues pesticide applicator licenses and requires the completion of pesticide use reports for pesticides applied in the County. In addition, the office investigates pesticide-related injuries and illnesses and oversees enforcement of worker training in pesticide management.

Like hazardous materials, pesticides must be properly stored and transported in accordance with applicable local, state, and federal requirements. Within each district, pesticides used in fuel reduction and vegetation management activities are stored at the district facility.

Worker health and safety in California is regulated by the California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA). California standards for workers dealing with hazardous materials (including pesticides and herbicides) and for preventing workplace injuries3 are contained in CCR Title 8 and include practices for all industries (i. e. , General Industrial Safety Orders). Cal/OSHA conducts on-site evaluations and issues notices of violation to enforce necessary improvements to health and safety practices.

Implementation of the vegetation management activities proposed in each district plan would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or through a reasonably foreseeable upset or accident involving hazardous materials. Potentially significant impacts related to handling hazardous materials during fire road maintenance, fuel reduction, and vegetation management activities are reduced to a less-than-significant level through compliance with applicable regulations for the storage, use, and disposal of hazardous materials.

c. Implementation of the proposed fuel hazard reduction and vegetation management activities within each district will include application of herbicides within one-quarter mile of a school.

Pebble Beach CSD

One school facility, the Stevenson School, is located at 3152 Forest Lake Road within Del Monte Forest. Vegetation management activities involving the use of herbicides within one-quarter mile of this school facility could occur on the following open space parcels: Preservation Area F-1, Area I-1, Area J, Area K, portions of Area L located east of Sloat Road, and Area O. The use of herbicides for vegetation management as part of the Pebble Beach CSD plan is subject to compliance with the district's existing integrated pest management plan and would not increase risks of exposure of school populations to herbicides.

Cypress FPD

Within the Cypress FPD, implementation of the proposed plan could involve the use of pesticides within one-quarter mile of several Carmel Unified School District and Monterey Peninsula Unified School District schools. Carmel River Elementary School is located near the Carmel River Lagoon in the Mission Fields target treatment area; Carmel Middle School is located just south of the Carmel Views target treatment area, and Carmel High School is located in proximity to the target treatment areas of High Meadows, Hatton Canyon, Carmel Views, and Carmel Woods. La Mesa Elementary School and Santa Catalina School (private) are located in proximity to the Josselyn Canyon target treatment area. Foothill Elementary School is located adjacent to the Jacks Peak target treatment area.

Carmel Highlands FPD

The Bay School Parent Co-Op Preschool is located within the Carmel Highlands FPD boundary on the west side of State Route 1, just south of the Carmel Riviera residential subdivision. This school is not located within the Mount Devon target treatment area.

Within all three districts, applications of pesticides, when deemed appropriate, would occur primarily by hand methods, but could also be applied by trucks spraying along roadways. Spraying during windy conditions could result in exposures to school children within one-quarter mile of the areas to be treated with pesticides. Implementation of the following policy mitigation measures will ensure that potential exposure to pesticides is reduced to a less-than-significant level.

Mitigation Measures

HAZ-1 The following language will be incorporated into Cypress FPD and Carmel Highlands FPD Policy IV-C, Standard #7 Application of herbicides:

- Herbicides will be applied only by a licensed pesticide applicator.
- Herbicide application will be avoided during windy conditions (sustained winds above 5-10 miles per hour).
- HAZ-2 The following language will be incorporated into Pebble Beach CSD plan Policy IV-C:

Standard #5 Application of herbicides:

- Herbicides will be applied only by a licensed pesticide applicator.
- Herbicide application will be avoided during windy conditions (sustained winds above 5-10 miles per hour).

Because pesticide applications would be applied only during low wind conditions, potential impacts to school populations within one-quarter mile of the site would be less than significant impact. No additional mitigation is required.

- d. Government Code Section 65962. 5 requires that the Department of Toxic Substances Control compile and regularly update a list of hazardous waste facilities and sites. A search of the Envirostor revealed that the project site is not located in an area included on a list of hazardous facilities and sites and will not result in impacts associated with exposure of the public to related hazards.
- e,f. Portions of the Cypress FPD within which fire road maintenance, fuel hazard reduction, and vegetation management activities would occur are located within the Comprehensive Land Use Plan for Monterey Peninsula Airport. No other private air strips are located within any of the districts. The implementation of treatments within these districts would not result in increased exposures to airport hazards and would not interfere with air traffic routes.
- g. All three fire defense plans maintain existing emergency routes that are already in place. The project includes implementation of systematic identification and maintenance standards for designated fire roads and fuel breaks within all three districts that are easily recognizable by out-of-district emergency personnel during a wildfire incident. The project also provides a vegetation management program along fire roads and fuel breaks that will enhance long term emergency access and egress. Therefore the project would not interfere with emergency evacuation routes and no impact would occur.

- h. The purpose of the district plans are to reduce the risks from wildfires in identified high hazard areas through fuel reduction actions that are conducted in a manner that mitigates adverse environmental effects and implements resource and habitat management goals. State policies regarding wildland fire safety are administered by the State Office of the Fire Marshall and CAL FIRE. Contractors are required to comply with the following legal requirements in areas identified by CAL FIRE as a "wildland area that may contain substantial forest fire risks and hazards" or a "very high fire hazard severity zone", as shown on CAL FIRE Fire Hazard Severity Maps:
 - Earthmoving and portable equipment with internal combustion engines would be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (Public Resources Code (PRC) Section 4442).
 - Appropriate fire suppression equipment would be maintained during the highest fire danger period from April 1 to December 1 (PRC Section 4428).
 - On days when a burning permit is required, flammable materials would be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor would maintain the appropriate fire suppression equipment (PRC Section 4427).
 - On days when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines would not be used within 25 feet of any flammable materials (PRC Section 4431).

For all three districts, the project would reduce the threats of wildland fire through implementation of a vegetation management plan and maintenance of fuel breaks and fire roads. No significant impacts would occur.

9. HYDROLOGY AND WATER QUALITY

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than- Significant Impact	No Impact
a.	Violate any water quality standards or waste discharge requirements? (26-28,46)				✓
b.	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e. g., would the production rate of preexisting nearby wells drop to a level which would not support existing land uses or planned uses for which permits have been granted? (26-28)				√
c.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in <i>substantial erosion or siltation on- or off-site?</i> (3, 26-28,46)			√	
d.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface run-off in a manner which would result in <i>flooding on- or off-site?</i> (3,26-28,46)			✓	
e.	Create or contribute run-off water, which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted run-off? (26-28, 46)				✓
f.	Otherwise substantially degrade water quality? (26-28,46)			✓	
g.	Place housing within a 100-year flood hazard area as mapped on Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? (26-28)				✓
h.	Place within a 100-year flood hazard area structures which would impede or redirect flood flows? (26-28)				√

i.	Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam? (26-28)		✓
j.	Be subject to inundation by seiche, tsunami, or mudflow? (26-28)		✓

Comments:

Water Quality Standards/Waste Discharge Requirements

a,c,d-f The project does not include construction that would generate wastewater or increase impervious surfaces that would be a new source for discharge of polluted runoff. As noted throughout this document, implementation of plan activities that could affect the environment are short lived and similar to impacts that generally would occur during a construction project. Implementation of the proposed fire road maintenance activities will include minor grading of existing roads in all three districts to maintain unpaved roadway surfaces capable of supporting emergency vehicles. Grading activities could result in the discharge of sediment and point source automobile-related waste products from improperly maintained equipment into the storm water systems within the developed areas of each district.

The State Water Resources Control Board National Pollutant Discharge Elimination System (NPDES) Program was adopted to control and enforce storm water pollutant discharge reduction per the Clean Water Act. The Central Coast RWQCB issues and enforces the NPDES permits for discharges to waterbodies in Monterey County. Plan activities will be implemented in a manner consistent with the policies and standards identified in each district's plan. Compliance with the State NPDES General Construction Permit requires preparation and implementation of a storm water pollution prevention plan (SWPPP) that uses storm water Best Management Practices to control runoff, erosion and sedimentation from the site both during and after construction. The SWPPP has two major objectives: (1) to help identify the sources of sediments and other pollutants that affect the quality of storm water discharges; and (2) to describe and ensure the implementation of practices to reduce sediment and other pollutants in storm water discharges.

All three plans include policy I-A Fire Road Standards, which require the use of drainage and erosion measures that conform to current engineering practices. Examples of typical construction best management practices in SWPPPs include temporary mulching, seeding, or other suitable stabilization measures to protect

uncovered soils; storing materials and equipment to ensure that spills or leaks cannot enter storm drain systems or surface water; developing and implementing a spill prevention and cleanup plan; installing traps, filters, or other devices at drop inlets to prevent contaminants from entering storm drains; and using barriers, such as straw bales or plastic, to minimize the amount of uncontrolled runoff that could enter drains or surface water. Additional measures may be necessary if the extent of grading activity requires a grading permit from the County of Monterey (refer to the discussion in Section 6, Geology and Soils).

The three plans further require property owners to install water bars at regular intervals prior to the start of winter rains and to limit grading of road surfaces to a level that does not reduce the overall elevation of the road or cause an increase in storm water runoff (Policy I-E in the Pebble Beach CSD plan and Policy I-D in the Cypress FPD and Carmel Highlands FPD plans).

Pebble Beach CSD

Plan activities within Pebble Beach are also subject to compliance with the Del Monte Forest Area Land Use Plan policies for the control of erosion and work near aquatic features and drainages. Compliance with these policy requirements, Monterey County Code requirements, and the requirements of the NPDES program ensure that impacts from proposed fire road maintenance, fuel hazard reduction, and vegetation management activities within the easement areas do not result in the movement of unwanted material into waters.

Cypress FPD and Carmel Highlands FPD

For activities conducted within the Cypress FPD and Carmel Highlands FPD boundaries, Policy I-B further requires any work near a stream channel or on slopes greater than 30 percent will be modified to buffer the channel and to minimize erosion and soil movement. Policy IV-C, Standard #5. c requires the retention of mosaic stands of vegetation within 30 feet of roadways to reduce risks of erosion; Standard #5. f. 5 prohibits the placement of woodchips, slash, and other natural debris (leaf litter, cuttings) in a location where it could be dislodged and enter a watercourse. Compliance with these requirements in addition to the requirements of the NPDES program ensure that impacts from the proposed fire road maintenance, fuel hazard reduction, and vegetation management activities do not result in the movement of unwanted material into waters within or outside the project area. Modification of work near streams and on slopes of greater than 30 percent may include, but not be limited to the BMP listed previously.

If implementation of proposed fire road maintenance, fuel hazard reduction, and vegetation management activities will disturb more than one acre of land from within any of the three district boundaries, the respective district will be required to file a notice of intent to be covered under the NPDES General Permit for Storm Water Discharges Associated with Construction Activity for discharges of storm water from construction activities. As part of the required permitting, the district will provide control measures that are consistent with the permit and consistent with recommendations and policies of the RWQCB.

Erosion and Siltation

Implementation of fire road maintenance, fuel hazard reduction, and vegetation management activities consistent with the policies and standards of each district plan in addition to the requirements of the NPDES program would not result in significant erosion and/or siltation of area drainages that would modify existing drainages to the extent that drainage patterns, streams or channels would be altered to the extent that on or off-site flooding could occur. Compliance with these requirements ensures that plan activities do not result in the movement of unwanted material into waters within or outside the project area. The impacts from soil erosion and siltation are less than significant.

Groundwater

- b. The project does not include development that would increase demand for groundwater, and would not contribute to depletion of groundwater that adversely impacts groundwater supply or that results in a substantial lowering of the groundwater table. No further discussion is required.
- g-j. The project does not include development and would not place people or housing within a 100-year flood hazard area, an area subject to inundation as a result of a dam failure or in an area susceptible to inundation by seiche, tsunami, or mudflows.

10. LAND USE AND PLANNING

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than- Significant Impact	No Impact
a.	Physically divide an established community? (26-28)				√
b.	Conflict with any applicable land-use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? (3,4,7,8,9-11,13-20,26-32,34,35)				√
c.	Conflict with any applicable habitat conservation plan or natural community conservation plan? (9-11,13-20,26-28)				✓

Comments:

- a. Implementation of the proposed fire road maintenance, fuel hazard reduction, and vegetation maintenance activities within all three districts consistent with the respective fire defense plan policies and standards would not physically divide an established community. The project does not included development and implementation of fuel modification activities will occur on existing roads and existing or newly designated fuel breaks. No adverse impact will occur.
- b. As noted throughout this initial study, implementation of the updated Pebble Beach CSD plan, and the proposed Cypress FPD and Carmel Highlands FPD plans will not conflict with applicable land use plans, policies, or regulations with agencies having jurisdiction over lands within the district boundaries.

Implementation of plan activities will occur within the jurisdiction of unincorporated Monterey County in areas regulated by the Monterey County General Plan and its related coastal and inland area plans: the *Del Monte Forest Area Land Use Plan* (Monterey County 2012), the *Carmel Area Land Use Plan* (Monterey County 1983), the *Greater Monterey Peninsula Area Plan* (Monterey County 1984), *Carmel Valley Master Plan* (Monterey County 1996), and the *Big Sur Coast Land Use Plan* (Monterey County 1985). Figure 3, Area Land Use Plans, shows the boundaries of Monterey County area plans that overlap with the Pebble Beach CSD, Cypress FPD, and Carmel Highlands FPD service area boundaries.

In addition, four public agencies have jurisdictional authority over public parklands that are located in the Cypress FPD and Carmel Highlands FPD boundaries. As reported previously in the discussion of aesthetic resources (Section 1), the Cypress FPD and Carmel Highlands FPD district boundaries overlap with land that is under the control of California Department of Parks and Recreation (California State Parks), the Monterey County Parks Department, and the Monterey Peninsula Regional Park District. The locations of lands under the control of the California Department of Parks and Recreation (California State Parks), Monterey County Parks Department and the Monterey Peninsula Regional Park District within the Cypress FPD and Carmel Highlands FPD districts are shown in Figure 4, Public Parklands.

Section III of the Cypress FPD and Carmel Highlands FPD plans provide a mechanism for consultation with state and regional agencies that have jurisdictional authority over parklands within the two districts. Section III calls for coordination with these entities and other adjacent stakeholders prior to implementation of the district's recommended site-specific activities that could affect environmental resources under the control of public stakeholder agencies. The purpose of agency coordination is to identify sensitive environmental resources within these lands, to develop an appropriate program to maintain emergency access routes, and implement fuel hazard reduction and vegetation management activities that are consistent with site-specific agency policies, procedures, and Best Management Practices that avoid or minimize potential impacts to public environmental resources, while affording the maximum feasible reduction of risks of wildland fire. No work shall commence on lands under the control of other public agencies without first consulting with the agency stakeholders identified in Section III.

For these reasons, significant impacts to scenic resources resulting from implementation of the Carmel Highlands FPD plan are avoided or minimized to a less-than-significant level. No mitigation is required.

Pebble Beach CSD

All activity proposed by the Pebble Beach CSD plan update is subject to compliance with policies and procedures to protect environmental resources that are contained within the *Del Monte Forest Area Land Use Plan*. The proposed Pebble Beach CSD plan update implements Policy 31, which requires consideration of fuel management requirements in any tree removal; Policy 35, which allows trimming of trees to reduce fire hazards provided their overall health is not jeopardized; and is subject to compliance with Policy 14, which states that native vegetation removal and land disturbance shall be restricted to the minimum amount necessary. Grading necessary to maintain unpaved fire roads and fire road / fuel breaks is subject to compliance

with Monterey County Code Section 16. 08, which sets forth thresholds and requirements for grading permits. Implementation of proposed fire road maintenance, fuel hazard reduction, and vegetation management activities consistent with the policies and standards of the proposed Pebble Beach CSD fire defense plan update will not conflict with the *Del Monte Forest Area Land Use Plan* or applicable county codes.

Cypress FPD

Implementation of fire road maintenance, fuel hazard reduction, and vegetation management activities within the Cypress FPD would not conflict with policies for the protection of environmental resources that are contained in the *Carmel Area Land Use Plan* (Monterey County 1983), the *Greater Monterey Peninsula Area Plan* (Monterey County 1984), *Carmel Valley Master Plan* (Monterey County 1996). The proposed Cypress FPD fire defense plan implements fire hazard reduction policies within all three documents that support and assist the efforts of fire protection agencies and district to identify and minimize fire safety hazards to the public. All grading necessary to maintain fire roads and fire road / fuel breaks is subject to the thresholds and requirements of Monterey County Code Section 16. 08 (refer to the discussion in Section 6, Geology and Soils).

Implementation of the proposed fuel reduction, vegetation management, and maintenance of fire road access activities, consistent with the Cypress FPD's policy standards and public agency coordination required by the plan Section III, would not conflict with the *Carmel Area Land Use Plan*, the *Greater Monterey Peninsula Area Plan*, and *Carmel Valley Master Plan* policies. No significant impact would occur.

Carmel Highlands FPD

Implementation of fire road maintenance, fuel hazard reduction, and vegetation management activities within the Carmel Highlands FPD would not conflict with policies for the protection of environmental resources in the *Carmel Area Land Use Plan* (Monterey County 1983) and the *Big Sur Coast Land Use Plan* (Monterey County 1985), or with the policies and procedures of public agencies with jurisdictional authority over state and regional park lands. The proposed Carmel Highlands FPD plan implements the policies of both land use plans that support and assist the efforts of the various fire protection agencies and districts to identify and minimize fire safety hazards to the public. All grading necessary to maintain fire roads consistent with the standards of the fire defense plan is subject to compliance with Monterey County Code Section 16.08, which identifies thresholds and permit requirements for grading activities. Section III of the plan requires coordination with public agency stakeholders prior to implementation of the plan's recommended treatments on

- public land, as noted throughout this document. Therefore, the proposed fuel reduction activities, vegetation management, and maintenance of fire road access, consistent with the Carmel Highlands FPD's policy standards, would not conflict with the Carmel Area Land Use Plan or Big Sur Coast Land Use Plan policies for this district. No significant impact would occur.
- c. As discussed in Section 4, Biological Resources, implementation of the fire defense plans will not conflict with any habitat conservation plan or natural community conservation plan, within any district boundary.

11. MINERAL RESOURCES

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than- Significant Impact	No Impact
a.	Result in loss of availability of a known mineral resource that would be of value to the region and the residents of the state? (9-11,13-17,48)				✓
b.	Result in the loss of availability of a locally important mineral resource recovery site delineated in a local general plan, specific plan, or other land-use plan? (9-11,13-17,48)				√

Comments:

a,b. The Del Monte Forest is the site of the former Del Monte Quarry sand and gravel mining operation, which is no longer active. Some portions of the quarry and related processing complexes are now developed and occupied by homes, golf courses and the Spanish Bay resort complex. According to information contained in the 2007 Monterey County General Plan Draft Environmental Impact Report, the only location on the Monterey Peninsula that is identified by the Department of Conservation Division of Mines and Geology as an "Area of Identified Mineral Resource Significance" is a sand mining operation near the City of Marina. The implementation of proposed road maintenance, fuel hazard reduction, and vegetation maintenance activities consistent with the fire defense plan policies and standards would not result in the loss of known mineral resources or resource recovery sites identified in local plans and of value to the region and residents of the State of California. No impact to significant mineral resources would occur.

12. Noise

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than- Significant Impact	No Impact
a.	Result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or in applicable standards of other agencies? (9-11,13-17,18,23,26-28)		✓		
b.	Result in exposure of persons to or generation of excessive ground-borne vibration or ground borne noise levels? (9-11,13-17,26-28)				√
c.	Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? (26-28)				✓
d.	Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? (9-11,13-17,26-28)		√		
e.	For a project located within an airport land-use plan or, where such a plan has not been adopted, within two miles of a public airport or public-use airport, expose people residing or working in the project area to excessive noise levels? (26-28)				✓
f.	For a project located within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels? (26-28)				✓

Comments:

a,d. Implementation of proposed road maintenance, fuel hazard reduction, and vegetation maintenance activities consistent with the three fire defense plan policies and standards would result in localized and temporary increases in noise levels during site-specific activity involving the use of mechanical equipment in proximity to sensitive receptors. This would be a potentially significant impact. The proposed activities will at times require the use of equipment such as a bulldozer for road maintenance, chain saws, vehicles, wood chippers, a small horsepower masticator,

mowers, and trimmers for fuel hazard reduction and vegetation management activities. The need for mechanical equipment would be greatest during initial fuel hazard reduction activity, and will, on occasion, be conducted near sensitive receptors such as residences and schools, and near the Del Mesa and Pacific Meadows retirement communities (Cypress FPD). Noise-generating activities in all three districts will be undertaken only during daylight hours. The project will result in temporary and short term noise increases that are expected to be generally similar to noise that would be generated by a construction project. The periodic increase in noise levels could be perceived as a nuisance to the residents of adjacent neighborhoods and retirement facilities. None of the plans include policy standards for mitigating unacceptable noise exposures.

Depending upon location, site-specific activity and equipment usage requirements, combined average-hourly noise levels at a construction site typically range from approximately 65 to 89 decibels at 50 feet. Industry standards assume an average noise attenuation rate of six decibels per doubling of distance from the source. Assuming a noise level of 89 decibels, noise generating plan activities occurring in proximity to noise-sensitive receptors could be reduced to approximately 60 decibels within approximately 1,500 feet of the receptor. However, as noted in all three plans, a number of fuel modification activities will occur within 100 feet of sensitive receptors, which could result in significant short-term noise exposure impacts.

Noise generation in unincorporated areas of Monterey County is regulated by the Monterey County Code Section 10. 60. 040, which prohibits the generation of "any loud and unreasonable sound" on any day of the week from 10:00 PM to 7:00 AM. In addition, construction standards within the Del Monte Forest restrict building activity to Mon-Sat, 8:00 a. m. $-6:00~\rm p.$ m. , with no work allowed on Sundays and federal holidays. Other than compliance with these code and land use provisions, the three district plans do not include provisions for attenuation of unacceptable noise generated by plan activity. Implementation of the following policy mitigation measure ensures that short term noise impact exposures are avoided or minimized to a less-than-significant level.

Mitigation Measure

N-1 Prior to the implementation of the Pebble Beach CSD update, and the Cypress FPD and Carmel Highlands FPD plans, the following policy standard shall be incorporated into each plan:

Policy V Sensitive Receptors.

Standard #1 – Exposure to Unacceptable Noise. The following measures shall be incorporated into each plan:

- All internal combustion engine-driven equipment will be equipped with mufflers that are in good condition and appropriate for the equipment;
- Stationary noise-generating equipment (i. e. wood chippers) will be located as far as possible from sensitive receptors during their use.

With implementation of Mitigation Measure N-1 the potential for significant short term noise exposures are reduced to a less-than-significant-level.

- b. The use of heavy equipment that would result in excessive ground vibration is not proposed by any district plan. No construction requiring the use of earth movers, pile drivers, pavers or other vibration-generating heavy equipment would be utilized during any plan activity. No impacts related to exposures to groundborne vibration would occur.
- c. The implementation of proposed road and vegetation maintenance activities, consistent with the fire defense plan policies, would not create a permanent increase in noise levels because these activities would occur periodically and at varying times of the year. Additionally, mechanical equipment would be used less often than hand crews. Therefore, noise generated by the project would not be permanent and no impact would occur.
- e. The Monterey Regional Airport is located near the northern boundary of the Cypress FPD district. However, proposed fire road maintenance, fuel hazard reduction, and vegetation management activities conducted within the district boundary would not involve a change in land use and do not involve an increased risk of exposures to airport noise. No impact would occur.
- f. The proposed fire road maintenance and fuel management activities, consistent with the fire defense plan policies, would not be within the vicinity of a private airstrip and would not expose people residing or working in the area to excessive noise levels. No impact would occur.

13. POPULATION AND HOUSING

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than- Significant Impact	No Impact
a.	Induce substantial population growth in an area, either directly (e. g., by proposing new homes and businesses) or indirectly (e. g., through extension of roads or other infrastructure)? (26-28)				✓
b.	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? (26-28)				√
c.	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? (26-28)				✓

Comments:

a-c. The project does not involve development and would not displace housing or people within any district boundary. Therefore, no impacts to population and housing would occur.

14. PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than- Significant Impact	No Impact
a.	Fire protection? (26-28)				✓
b.	Police protection? (26-28)				✓
c.	Schools? (26-28)				✓
d.	Parks? (26-28)				✓
e.	Other public facilities? (26-28)				✓

Comments:

a-e. The project does not include development that would increase demand for or require the construction of new fire protection, law enforcement, school, parks or other public facilities.

The purpose for the Pebble Beach CSD plan update and the Cypress FPD and Carmel Highlands FPD fire defense plans is to address the threat of wildland fire within the three districts by systematically identifying and prioritizing actions determined by CAL FIRE to provide the greatest fire protection along the wildland-urban interface within each district. The plans are policy documents intended to provide a consistent policy approach and guidance that does not require additional equipment or a substantial increase in personnel on a permanent basis to the extent that existing facilities would need to be modified. The plans would improve each district's fuel modification programming to reduce the risks of wildland fires and could potentially reduce the amount of fire personnel needed in an emergency since fuel loads would be reduced and access would be clearly marked.

Therefore, no impacts to public services would occur.

15. RECREATION

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than- Significant Impact	No Impact
a.	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? (26-28)				✓
b.	Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment? (26-28)				✓

Comments:

a,b. The project does not include development that would increase demand for parks or recreational facilities. Therefore no impacts would occur.

16. TRANSPORTATION/TRAFFIC

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than- Significant Impact	No Impact
a.	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? (26-28)				✓
b.	Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? (26-28)				✓
c.	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? (26-28)				✓
d.	Substantially increase hazards due to a design feature (e. g., sharp curves or dangerous intersections) or incompatible uses (e. g., farm equipment)? (26-28)				✓
e.	Result in inadequate emergency access? (26-28)				✓
f.	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decreased the performance or safety of such facilities? (26-28)				√

Comments:

a. The implementation of proposed fuel reduction activities, vegetation management, and maintenance of fire road access, consistent with the fire defense plan policies, would not conflict with any policies established for the performance of the County's circulation system because of the temporary and periodic nature of the proposed

maintenance activities and related vehicle use during those activities. The standards and policies within the fire defense plans would comply with the County's general plan policy S-4. 9, which states that roadways shall be maintained in accordance with County Code Chapter 18. 56. Further, the fire defense plans would specifically conform to County Code Section 18. 56. 060, which discusses emergency access for wildland fire equipment and Section 18. 56. 090, which discusses fuel modification standards. Therefore, there would be no impact to an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system.

- b. See question a) above. The proposed fuel reduction activities, vegetation management, and maintenance of fire road access, consistent with the fire defense plan policies, would not conflict with an applicable congestion management program and vehicles associated with project activity would not have a permanent effect on levels of service for roads within the fire district boundaries. Therefore, there would be no impact.
- c,d. See question a) above. The implementation of the proposed fuel reduction activities, vegetation management, and maintenance of fire road access, consistent with the fire defense plan policies, would have no impact on air traffic patterns and would not result in a hazard due to a design feature or incompatible use because the proposed plans do not include development or construction that would change existing street/roadway patterns.
- e. All three fire defense plans maintain existing emergency routes that are already in place. The project includes implementation of systematic identification and maintenance standards for designated fire roads and fuel breaks within all three districts that are easily recognizable by out-of-district emergency personnel during a wildfire incident. The project also provides a vegetation management program along fire roads and fuel breaks that will enhance long term emergency access and egress. Therefore the project would enhance emergency access routes. No significant impact would occur.
- f. The project does not include development and would not increase demand for or affect the safety of public transit, bicycle, or pedestrian facilities. No impact to these facilities will occur.

17. TRIBAL CULTURAL RESOURCES

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than- Significant Impact	No Impact
a.	Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
(1)	Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources code section 5020. 1(k), or (5,9-11,13- 17,26-32)				✓
(2)	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024. 1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024. 1, the lead agency shall consider the significance of the resource to a California Native American tribe. (5,9-11,13-17,26-32)				√

Comments:

a. The CEQA statute as amended by Assembly Bill (AB) 52 (Public Resources Code Sections 21073 and 21074) define "California Native American tribe" and "tribal cultural resources." A California Native American tribe is defined as a Native American tribe located in California that is on the contact list maintained by the Native American Heritage Commission. "Public Resources Code Section 21080. 3. 1 outlines procedures for tribal consultation as part of the environmental review process.

No California Native American tribes traditionally and culturally affiliated with the project area requested consultation with the any of the districts pursuant to PRC section 2100. 3. 1.

18. UTILITIES AND SERVICES SYSTEMS

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than- Significant Impact	No Impact
a.	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? (26-28)				✓
b.	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? (26-28)				✓
c.	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? (26-28)				✓
d.	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? (26-28)				✓
e.	Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments? (26-28)				✓
f.	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid-waste disposal needs? (26-28)			✓	
g.	Comply with federal, state, and local statutes and regulations related to solid waste? (26-28)			✓	

Comments:

- a-e. The project does not include development that would increase demand for utilities, water or wastewater services, or storm drain facilities. No impact to these utilities and services systems would occur.
- f,g. All three district plans include policies and standards for removal of brush and leaf litter off-site to area landfills. Policy I-B requires all cut material to be chipped and

spread or removed from the area of work. Fuel reduction standards (Policy IV-C. 1. f and Policy IV-C. 4. g) require all cut material to be removed from parcels or chipped and spread on the site. This material may also be disposed of by broadcast or pile burning on the site consistent with Policy IV. 6 and with state and local air district requirements for prescribed burn permits (refer to discussion in Section 3, Air Quality). All materials not disposed of on-site would be taken to the Monterey Regional Waste Management District (Monterey Peninsula Landfill) located north of the City of Marina for treatment and reuse as compost.

19. MANDATORY FINDINGS OF SIGNIFICANCE

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than- Significant Impact	No Impact
a.	Does the project have the potential to degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; substantially reduce the number or restrict the range of an endangered, rare, or threatened species; or eliminate important examples of the major periods of California history or prehistory? (1,2,6, 9-11,13-17,26-32,42-45)		•		
b.	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects) (1,2,6,9-11,13-17,26-32,34-36,37,42-45,50)			✓	
c.	Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly? (6,26-28,34-36)		✓		

Comments:

- a. Implementation of fire road maintenance, fuel hazard reduction, and vegetation management activities consistent with each of the district plan policies and standards could result in potentially significant impacts to biological resources, cultural resources, exposures to air pollutants and unacceptable noise. With implementation of the avoidance and minimization measures identified in the mitigation measures described herein, all potentially significant impacts are mitigated to a less-than-significant level. As mitigated, the project would not result in significant impacts either individually or cumulatively.
- b. The project would generate dust particulates and GHGs from equipment exhaust and prescribed burning that will contribute to cumulative air quality impacts and emissions that can affect the climate. As discussed herein, the project contribution to

- cumulative air quality impacts is not cumulatively considerable. The project's net contribution to cumulative GHG emissions would be fewer emissions than could otherwise be generated by a high intensity wildfire and are therefore, less than significant.
- c. The project has the potential to result in short-term unacceptable noise and herbicide exposures to sensitive receptors associated with implementation of fire road maintenance, fuel hazard reduction, and vegetation management activities consistent with the policies and standards of all three district plans. However, with implementation of mitigation measure HAZ-1 and mitigation measure N-1 presented in this initial study, the project will not have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly.

E. Sources

- 1. California Department of Forestry and Fire Protection. 2018. CAL FIRE, California Fire Plan Webpage. Last modified January 23, 2018. http://cdfdata. fire. ca. gov/fire_er/fpp_planning_cafireplan
- 2. California Department of Forestry and Fire Protection. Fire Prevention Webpage.

 Accessed February 5, 2018. http://calfire. ca. gov/fire_prevention/fire_prevention
- 3. California Department of Forestry and Fire Protection. Fire and Resources Assessment Program. 2010. Map of Communities At Risk From Wildfire http://frap. fire. ca. gov/data/frapgismaps/pdfs/comrisk_map. pdf
- 4. California Department of Forestry and Fire Protection. 2010. Fire and Resources Assessment Program. Map of Priority Communities. Accessed February 12, 2018 http://frap. fire. ca. gov/data/assessment2010/maps/PL_33_1. pdf
- 5. California Department of Forestry and Fire Protection. Archaeology Program 2018. http://calfire. ca. gov/resource_mgt/archaeology-index
- 6. California Department of Forestry and Fire Protection. 2017. With California Natural Resources Agency, Cal/EPA. *Draft California Forest Carbon Plan: Managing our Forest Landscapes in a Changing Climate*. Sacramento CA. http://fire. ca. gov/fcat/downloads/California%20Forest%20Carbon%20Plan%20Draft%20for%20Public%20Review_Jan17. pdf
- 7. California Department of Forestry and Fire Protection. Forest Health Grants California Climate Investments (CCI). Accessed May 5, 2018 at http://www.fire.ca. gov/resource_mgt/resource_mgt_foresthealth_grants
- 8. California State Board of Forestry and Fire Protection. 2016. 2010 Strategic Fire Plan for California. http://bof. fire. ca. gov/hot_topics_resources/fireplanrevison_final_04_06_16
- 9. County of Monterey. 2012. *Pebble Beach Company Project Final EIR, State Clearinghouse No: 2011041028*. Accessed February 8, 2018. http://www.co. monterey.ca. us/government/departments-i-z/resource-management-agency-rma-/planning/current-major-projects
- 10. County of Monterey. April 1983. *Carmel Area Local Coastal Program Land Use Plan*. Accessed February 8, 2018. ttp://www.co. monterey. ca. us/government/departments-i-z/resource-management-agency-rma-/planning/current-major-projects/carmel-canine-sports-complex/general-plan-land-use-plans

- 11. County of Monterey March 2010. *Monterey County General Plan Final Environmental Impact Report*. Salinas, CA. http://www.co. monterey.ca. us/government/departments-i-z/resource-management-agency-rma-/planning/resources-documents/2010-general-plan
- 12. County of Monterey "Monterey County GIS Basemap." Accessed on February 20, 2018. http://gis. co. monterey. ca. us/Html5Viewer/Index. html?configBase=http://gis. co. monterey. ca. us/Geocortex/Essentials/external/REST/sites/Base_Map_Out/viewers/BaseMapViewer/virtualdirectory/Resources/Config/Default
- 13. County of Monterey. 2010. 2010 Monterey County General Plan. Salinas, CA. http://www.co. monterey. ca. us/government/departments-i-z/resource-management-agency-rma-/planning/land-use-regulations
- 14. County of Monterey. November 1985. *Big Sur Coast Land Use Plan*. Salinas, CA. http://www.co. monterey.ca. us/government/departments-i-z/resource-management-agency-rma-/planning/current-major-projects/carmel-canine-sports-complex/general-plan-land-use-plans
- 15. County of Monterey. May 2012. *Del Monte Forest Area Land Use Plan*. Salinas, CA. http://www.co. monterey. ca. us/government/departments-i-z/resource-management-agency-rma-/planning/current-major-projects/carmel-canine-sports-complex/general-plan-land-use-plans
- 16. County of Monterey. November 1996. *Carmel Valley Master Plan*. Salinas, CA. http://www.co. monterey.ca. us/government/departments-i-z/resource-management-agency-rma-/planning/current-major-projects/carmel-canine-sports-complex/general-plan-land-use-plans
- 17. County of Monterey. December 1984. *Greater Monterey Peninsula Area Plan*. Salinas, CA. http://www.co. monterey.ca. us/government/departments-i-z/resource-management-agency-rma-/planning/current-major-projects/carmel-canine-sports-complex/general-plan-land-use-plans
- 18. County of Monterey. Monterey County Code. Section 10. 60. 040 Regulation of nighttime noise. Accessed on February 27, 2018. https://library.municode.com/ca/monterey_county/codes/code_of_ordinances?nodeId=TIT10HESA_CH10. 60NOCO_10. 60. 040RENINO
- 19. County of Monterey. Monterey County Code Chapter 16. 08 GRADING. Accessed on February 27, 2018. https://library. municode. com/ca/monterey_county/codes/code_of_ordinances?nodeId=TIT16EN_CH16. 08GR

- 20. County of Monterey. 2018. Department of Parks and Recreation. Jacks Peak Park Webpage. Accessed March 1, 2018 http://www.co. monterey.ca. us/government /departments-i-z/resource-management-agency-rma-/parks/policies
- 21. County of Monterey. 2018. *Scenic Highway Corridors and Visual Sensitivity map for the Greater Monterey Peninsula*. Accessed February 26, 2018. 2018)http://www.co.monterey.ca.us/home/showdocument?id=45898
- 22. California Department of Transportation Scenic Highway Mapping System Scenic Route Webpage Monterey Countyhttp://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/
- 23. United States Department of Transportation Federal Highway Administration. "Construction Noise Handbook." Updated August 24, 2017. https://www.fhwa.dot.gov/Environment/noise/construction_noise/handbook/handbook09.cfm
- 24. California Department of Conservation. 2016a. "Monterey County Important Farmland 2014." ftp://ftp. consrv. ca. gov/pub/dlrp/FMMP/pdf/2014/mnt14_no. pdf
- 25. California Department of Conservation. 2016b. "Monterey County Williamson Act FY 2015/2016." ftp://ftp. consrv. ca. gov/pub/dlrp/wa/Monterey_no_15_16_WA. pdf Source
- 26. Pebble Beach Community Services District. March 2017. Fire Defense Plan for Pebble Beach. Pebble Beach, CA. http://pbcsd. org/Important_Notices/2017/2017_Fire_Defense_Plan. pdf
- 27. Carmel Highlands Fire Protection District. March 2018. Carmel Highlands Fire Protection District Fire Defense Plan. Carmel-by-the-Sea, CA.
- 28. Cypress Fire Protection District. March 2018. *Draft Cypress Fire Protection District Fire Defense Plan*. Carmel-by-the-Sea, CA. http://cypressfire.org/wp-content/uploads/FIRE-DEFENSE-PLAN-Cypress-Approved-Sept-17-revise-3. 18. pdf
- 29. California Department of Parks and Recreation. 2018. Carmel Area State Parks General Plan Webpage. Accessed March 1, 2018. http://www.parks.ca.gov/?page_id=26868
- 30. Monterey Peninsula Regional Park District. 2018. Palo Corona Webpage. Accessed March 5, 2018 at https://mprpd. specialdistrict. org/palo-corona-regional-park
- 31. Monterey Peninsula Regional Park District. 2018. Palo Corona Regional Park General Development Plan Webpage. 2018. Accessed March 5, 2018 at http://palocorona.org/

- 32. Monterey Peninsula Regional Park District. 2018. Frog Pond Wetland Preserve Webpage. Accessed May 2, 2018, at https://www.mprpd.org/frog-pond-wetland-preserve
- 33. Monterey Bay Air Resources District (Formerly Monterey Bay Unified Air Pollution Control District). 2016. 2012-2015 Air Quality Management Plan. Monterey CA Accessed March 5, 2018 at http://www.mbuapcd.org.
- 34. Monterey Bay Air Resources District (Formerly Monterey Bay Unified Air Pollution Control District). February 2008. *CEQA Air Quality Guidelines*. Accessed March 5, 2018 at http://www.mbuapcd.org
- Monterey Bay Air Resources District (Formerly Monterey Bay Unified Air Pollution Control District). 2018. Smoke Management Webpage. Accessed April 30, 2018 at http://mbard.org/programs-resources/planning/smoke-management/prescribedburn-permits/
- 36. California Air Resources Board. 2018. Rule 438 Accessed April 30, 2018, at: https://www.arb.ca.gov/DRDB/MBU/CURHTML/R438. PDF
- 37. California Code of Regulations. Title 17 Subchapter 2, Smoke Management Guidelines for Agricultural and Prescribed Burning. §80160. Special Requirements for Prescribed Burning and Prescribed Fires in Wildland and Wildland/Urban Interface Areas. Accessed May 7, 2018 at https://www.arb.ca.gov/smp/regs/RevFinRegwTOC.pdf
- 38. Monterey Firesafe Council. 2016. November 2010. *Monterey County Community Wildfire Protection Plan*. Salinas CA. https://www.co. monterey.ca. us/cob/BOS%20 Supplemental_addendum/December%2014,%202010/MCCWPP_November%202010 _v2%20-%20FINAL%2012-10-10. pdf
- 39. California Air Resources Board. 2015. *Climate Change and Forestry in California*. Aug 24, 2015. https://www.arb.ca.gov/cc/forestry/forestry.htm
- 40. California Department of Toxic Substances Control, Envirostor online database. Accessed May 5, 2018 at: https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=Carmel+California
- 41. Niccum, Mike. General Manager Pebble Beach Community Services District. Personal Communication with Consultant DATE,
- 42. California Department of Fish and Wildlife (CDFW). 2018. *California Natural Diversity Database*. Records of occurrence for Marina, Monterey, Soberanes Point, Mount Carmel, and Seaside quadrangle maps. Sacramento, CA. https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data.

- 43. California Native Plant Society (CNPS). 2018. *Inventory of Rare and Endangered Plants*. Records of occurrence for Marina, Monterey, Soberanes Point, Mount Carmel, and Seaside quadrangle maps. Sacramento, CA. http://www.cnps. org/inventory.
- 44. U. S. Fish and Wildlife Service (USFWS). 2018. *Endangered Species Program*. Species list for Monterey County. Washington, D. C. http://www.fws.gov/endangered/.
- 45. U. S. Fish and Wildlife Service (USFWS). 2018. National Wetlands Inventory. https://www.fws.gov/wetlands/data/google-earth.html
- 46. California Environmental Protection Agency. 2018. Central Coast Regional Water Quality Control Board Webpage. *Central Coast Region, Construction Storm Water*. https://www.waterboards.ca.gov/centralcoast/water_issues/programs/stormwater/construction_new.shtml
- 47. Monterey Bay Air Resources District. March 2017. 2012-2015 Air Quality Management Plan. Monterey, CA. http://mbard.org/district/.
- 48. Monterey County. 2008. *Draft Environmental Impact Report Monterey County* 2007 *General Plan.* September 2008. www. co. monterey. ca.

 us/planning/gpu/2007_GPU_DEIR_Sept_2008/2007_GPU_DEIR_September_2008.

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All documents indicated with bold numbers are available for review at the respective Lead Agencies during normal business hours: Pebble Beach Community Services District, 3101 Forest Lake Road, Pebble Beach, CA 93953 Phone: (831) 373-1274; Cypress Fire Protection District, 3775 Rio Rd, Carmel-by-the-Sea, CA 93923 Phone: (831) 624-4511; Carmel Highlands Fire Protection District, 73 Fern Canyon Rd, Carmel-by-the-Sea, CA 93923. Phone: (831) 624-2374.

All documents listed above are available for review at EMC Planning Group Inc., 301 Lighthouse Avenue, Suite C, Monterey, California 93940, (831) 649-1799 during normal business hours.

